

BOARD AND COMMITTEE MEETINGS SCHEDULE December 3-4, 2020 President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL

Thursday, December 3, 2020

8:00 a.m. to 8:55 a.m. Breakfast

9:00 a.m. to 9:10 a.m. Chairman Meeting Remarks

9:10 a.m. to 10:20 a.m. Campus Update

Senior Vice President David Nelson, Dr. Michael Lauzardo; Senior Vice President Charlie Lane, Provost Joe Glover, Vice President D'Andra Mull;

UF Police Chief Linda Stump-Kurnick

Break (~10 minutes)

~10:30 a.m. to 11:45 a.m. Committee on Academic, Faculty and Student Success, Public Relations

and Strategic Communications

(Patel (Chair), Heavener, Hosseini, Kuntz, O'Keefe, Pope, Rosenberg)

11:45 a.m. to 1:00 p.m. Lunch

1:00 p.m. to 1:45 p.m. Committee on Advancement

(Zucker (Chair), Cole, Doré, Heavener, Johnson, Powers, Rosenberg)

~1:45 p.m. to 2:30 p.m. <u>Committee on Audit and Compliance</u>

(Powers (Chair), Brandon, Cole, Doré, Johnson, Pope)

Break (~10 minutes)

~2:40 p.m. to 3:00 p.m. Dean Sabyasachi "Saby" Mitra, Warrington College of Business

Break (~10 minutes)

~3:10 p.m. to 4:10 p.m. Advancing UF in Data Science and Artificial Intelligence

Vice President David Norton, Dean Cammy Abernathy, Dean Julie

Johnson, Dean David Richardson, Dr. Betsy Shenkman

~4:10 p.m. to 5:00 p.m. Career Readiness

Provost Joe Glover, Vice President D'Andra Mull, Senior Director for

Career Services Ja'Net Glover

6:00 p.m. to 8:00 p.m. Board Dinner at Florida Ballpark at Alfred A. McKethan Field

2800 Hull Road, Gainesville FL 32608

Friday, December 4, 2020

8:00 a.m. to 8:55 a.m. Breakfast

9:00 a.m. to 10:00 a.m. Student Survey Update with Chief Information Officer Elias Eldayrie and

Associate Provost for Undergraduate Affairs Angela Lindner

Break (~10 minutes)

~10:10 a.m. to 11:10 a.m. Committee on Facilities and Capital Investments

(Brandon (Chair), Hosseini, Johnson, Kuntz, O'Keefe, Rosenberg, Zucker)

Break (~10 minutes)

~11:20 a.m. to 12:20 p.m. Committee on Finance, Strategic Planning and Performance Metrics

(Kuntz (Chair), Brandon, Doré, Heavener, O'Keefe, Patel, Powers)

12:20 p.m. to 1:20 p.m. Lunch

1:20 p.m. to 1:50 p.m. Committee on Governance, Government Relations and Internal Affairs

(Hosseini (Chair), Brandon, Cole, Heavener, Patel, Zucker)

~1:50 p.m. to 2:20 p.m. Values Initiative with Dean Diane McFarlin

Break (~10 minutes)

~2:30 p.m. to 3:30 p.m. Board of Trustees' Meeting

(Full Board)



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS

AGENDA

Thursday, December 3, 2020 ~10:30 a.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL

Committee Members:

5.6 5.7

Rahul Patel (Chair), James W. Heavener, Morteza "Mori" Hosseini, Thomas G. Kuntz, Daniel T. O'Keefe, Trevor J. Pope, Jason J. Rosenberg Call to Order and WelcomeRahul Patel, Chair 1.0 2.0 Review and Approval of Minutes......Rahul Patel, Chair 3.0 June 4, 2020 MPRSC June 5, 2020 AFSAE November 17, 2020 AFSSPRSC 4.0 Action ItemsRahul Patel, Chair AFSSPRSC1 Tenure Upon Hire AFSSPRSC2 New Degree AFSSPRSC3 **Degree Program Termination** AFSSPRSC4 **Degree Program Changes** AFSSPRSC5 **AFSSPRSC Committee Charter** 5.0 5.1 Thomas Mitchell, Vice President, Advancement and Nancy Paton, Vice President, Strategic Marketing and Communications 5.2 Communications & Marketing Strategy UpdateNancy Paton 5.3 Admissions UpdateZina Evans, Vice President for Enrollment 5.4 Faculty Senate Update Sylvain Dore, Faculty Senate Chair Student Body President UpdateTrevor Pope, Student Body President 5.5

Student Affairs UpdateD'Andra Mull, Vice President, Student Affairs

Centers/InstitutesJoseph Glover 5.7.1 New Center: Center for Coastal Solutions (CCS) (College of Engineering)

| | | 5.7.2 New Center: Center for Genetic Epidemiology and Bioinformatics (GeneBio) (College of Medicine) |
|-----|-------|---|
| | | 5.7.3 Name Change: Center for World Arts to Center for Arts, Migration and Entrepreneurship (College of the Arts) |
| | | 5.7.4 Name Change: Institute for Sustainable food Systems to Food Systems Institute (IFAS) |
| | | 5.7.5 Name Change: Center for Respiratory Research and Rehabilitation to Center for Breathing Research and Therapeutics (BREATHE) (College of Public Health and Health Professions) |
| | | 5.7.6 Name Change: Center for Neuropsychological Studies to Brain Injury |
| | 5.8 | Rehabilitation and Neuroresilience (BRAIN) Center (College of Medicine) Program Changes |
| 6.0 | New B | usinessRahul Patel, Chair |
| 7.0 | Adjou | nRahul Patel, Chair |



COMMITTEE ON MARKETING, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS Meeting Minutes June 4, 2020

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, Florida Time Convened: 2:45 p.m.

Time Adjourned: 3:24 p.m.

Committee and Board members present:

Robert G. Stern (Chair), Leonard H. Johnson, Daniel T. O'Keefe, Rahul Patel, Marsha D. Powers, and Anita G. Zucker. Board Chair Morteza Hosseini, Board Vice Chair Thomas G. Kuntz, Trustee Jason J. Rosenberg, Trustee Sylvain Dore and Trustee Trevor Pope

Others present:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; D'Andra Mull, Vice President for Student Affairs; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations; Thomas Mitchell, Vice President for Advancement; David Nelson, Senior Vice President for Health Affairs and President of UF Health, David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs and other members of the University community.

1.0 Call to Order and Welcome

Committee Chair Stern welcomed everyone to the meeting. He reviewed the meeting agenda which included: an update of the performance metrics regarding Q1; a high-level overview of the COVID 19 communications strategy; an overview of the spring 2020 reputation campaign; and an update on the Brand Strategy.

2.0 Verification of Quorum

Board Staff called the roll and noted those Trustees who were in attendance.

2.0 Review and Approval of Minutes

Committee Chair Stern asked for a motion to approve the minutes from the March 26, 2019, and May 6, 2020, which was made by Trustee Zucker and a second, which was made by Trustee

Powers. Committee Chair Stern asked for further discussion, and then for all in favor of the motion and any opposed, and the motion was approved unanimously.

4.0 Discussion Items

4.1 Key Performance Indicators

Chair Stern stated all the progress we're going to review with you today as well the rising momentum of our brand and positioning strategy development are integrated initiatives all driving to our central goal—to advance the reputation of our university.

I'll turn to Nancy who will briefly describe the significant progress we're making against our set forth key performance indicators.

Vice President Paton thanked the committee for their continued support. She then provided a review of the first quarter Key Performance Indicators (KPIs) beginning with the executive dashboard.

Organic search volume increased in Q1 from Q4.

Earned media share of voice increased to 15.4% from 14.9% from Q4 and we have moved our position to number three from number four against peers.

The Conversation activity increased in the first quarter to 781,239 from 457,661 in quarter four.

Positive earned media sentiment decreased due to an increase in neutral posts/mentions, not an increase in negative posts.

Social media share of voice decreased by 15.2%. Social media sentiment increased by 153% from quarter four VP Paton stated this is an important metric as it indicates the university's storytelling and engagement efforts are creating a higher level of advocacy.

VP Paton stated that she was very pleased with the performance results on the KPI.

She then reviewed the detailed KPI dashboards for earned media, social media and web performance.

In earned media, reach numbers increased from 558.6M to 924.4M indicating the level of high influence of the media outlets in which we're seeing success in telling our stories. Important to note that the number of articles, while important on an ongoing basis for team productivity, is not as critical as the reach.

Media value generated indicates the advertising value of the articles. Media value increased from \$3M in the fourth quarter to \$4.75M in quarter one.

In the first quarter, UF is strengthened its performance in earned media share of voice, with an increase of 17.2% from quarter four. This performance moved UF up to third amongst peer group.

The Conversation reach increased slightly from 457.7K to 781.2K. UF is currently in second place among peers.

On social media platforms, UF continues to be a leader in higher education. In this first quarter, UF has moved from third to second place among peers on each institutional social media channel in terms of engagement metrics. This dominant presence indicates that the university is not only increasingly relevant to younger audiences but to all audiences. UF also remains a leader in the social space outside the higher education sector.

Website metrics indicated a visitor increase by 16.4% in from quarter one to quarter four. VP Paton stated the website is growing as a trusted source of information and advice.

Bounce rates have decreased this quarter by 5.4% and the average time on page also jumped up by 1.3% in quarter one.

Out-of-state users generate 30.8% of the traffic while in-state users generate 69.2%. Georgia is number one with Washington State coming in second place.

VP Paton stated the most important thing when reviewing the Campaign Dashboard is to understand if the message, the stories that UF is telling, and the channels the university is advertising on are generating desired results with targeted audiences.

With a goal of improving University of Florida's awareness and reputation, two marketing campaigns were launched during Spring 2020. As these campaigns are still in market, the first quarter statistics are indicative of results for one month.

The private and public peer group targets (specifically Top 15 universities) had the highest engagement with digital display, seeing an average CTR of 2.9% a significant increase over the total fall results of 0.34%. VP Paton stated the way in which the university is sharing stories is having a greater impact.

LinkedIn generated strong engagement across our targeted peer audiences. Average CTR was 61%, which was 146% higher than the CTR generated by the fall campaign (0.1%). 45% of impressions and clicks generated were by senior-level higher ed audiences.

NPR also generated strong awareness among our target audiences. Performance exceeded fall impression results demonstrating that the campaign reached our desired audience of higher education leaders.

4.2 **COVID Communications**

Chair Stern thanked Vice President Paton. He stated these quarterly performance metrics indicate that the university is on a trajectory of growth in important channels that reach key audiences. And, that the messaging is resonating with people so much so that they enter into an engaged relationship with the university.

Chair Stern reinforced Strategic Communications and Marketing's role in keeping audiences informed with critical resources and content. The team has anticipated different scenarios and created a cohesive messaging strategy.

VP Paton stated that the SCM focus initially was on quickly and effectively delivering critical information to the campus community about how the university was responding to the pandemic.

The team created a website to house major operational announcements, FAQs and a page dedicated to daily updates on positive COVID-19 cases among students, faculty and staff. The COVID-19 website went live on Feb. 18. From Feb. 18 to today, the main COVID page has received 317,301 views.

A newly established integrated campus communicators group has been established that meets weekly to integrate information and communications related to COVID-19.

UF Strategic Communications and Marketing is identifying faculty experts to pitch to national media as thought leaders and trusted sources.

VP Paton stated that communications focus has expressed gratitude to the UF community for its response to the pandemic and highlighted inspirational stories about student, faculty and staff contributions and efforts. And overall messaging has focused on:

- Inform and keep safe
- Finish strong
- Express gratitude
- Build great will

Communications strategy will be moving forward over the next months to creating and implementing a comprehensive communications plan focused on UF's reopening efforts.

Initiated a redesign of the COVID-19 website aimed at improving access and streamlining content and preparing for our reopening-related communications. The university's updated COVID-19 debuted yesterday, June 3.

There has been a continued focus on positioning faculty experts in national media and positioned our leadership in statewide media expressing points of view on the optimism surrounding UF's and higher ed's future post-pandemic.

To gauge the effectiveness of current efforts and provide foundational guidance to future communications strategy, a review of SCM's COVID-19 communications effectiveness was conducted.

Based on the metrics reviewed, UF has mitigated reputational risk, delivered important information and created positive brand moments throughout the COVID-19 pandemic.

Of the peer group of Top Public Universities, UF ranked 5th for faculty expert coverage in high profile news outlets.

• These outlets have cited our faculty experts on a range of COVID-19 topics, from biostatistics to political science to educational technology.

UF experts have generated vast exposure; articles featuring experts have seen more than 4.5M engagements on social media (almost twice as many as the total number of engagements for the second half of 2019 - 2.4M)

UF's crucial research, particularly around DIY ventilators, masks, and at-home tests have been featured by influential individuals on social media and high-profile news outlets alike. This coverage has driven hundreds of thousands of engagements on social media.

UF's thoughtful and creative approach to social media has set the standard among Top Public universities for engaging audiences.

UF has generated almost double the number of engagements on average on its social media posts than any of the Top 5 Public Institutions. These impressive engagement numbers have been spread across UF's primary channels, Facebook, Instagram, and Twitter.

Our COVID-19 web resources have provided the UF community with valuable and trustworthy information; COVID-specific resource pages have driven more than 990k sessions.

Chair Stern thanked VP Paton, stating the COVID communications have played an important role in guiding the university through this pandemic.

4.3 Spring Reputation Campaign

Chair Stern stated VP Paton would walk the committee through the underlying strategy of the reputation campaign and exciting new initiatives planned for the important spring voting season.

VP Paton thanked Chair Stern. The 2019-20 strategy centers on implementing innovative media tactics aimed at advancing the University's reputation and rankings goals.

Overarching Goal: Advance UF's Reputation and Rankings

- Strategy:
 - o Leverage the power and reach of UF's earned and owned channels
 - o Utilize channels that reach our specific audiences, i.e. LinkedIn
 - Tell stories that demonstrate our academic excellence, research impact, student outcomes and campus experience
 - Innovate our strategy through the creation of new channels that effectively reach and engage both internal and external audiences
 - Creation of "Unstoppable Minds" UF's podcast series

VP Paton stated the cornerstone of the Spring Campaign is the podcast series which features stories that directly correlate with reputation drivers in an authentic and intimate way that resonates with listeners. These stories highlight members of the UF community who have overcome adversity and persevered in the face of seemingly insurmountable odds.

4.4 Brand Strategy Update

Chair Stern mentioned that the March Board of Trustees meeting presentation from Simpson Scarborough offered important comparisons from our peers and mentioned the presentation was sent out to the trustees. Chair Stern stated the brand campaign is the number one initiative. VP Paton provided an update on the strategy development's next phrase.

Moving forward, research will be conducted to determine current reputation and positioning among university-affiliated audiences, statewide and national geographic and influencer representatives.

The survey will launch in the field the week of July 6.

Chair Hosseini asked VP Paton how we are doing with the 100 new colleges added to the US News and World Report voting. VP Paton answered that we have targeted the new colleges and via digital advertising and social media. Trustee O'Keefe asked what the messaging to the 100 colleges is. VP Paton stated we are targeting messaging on academic excellence, academic innovation, student success and university impact. Trustee Patel stated the university needs to centralize messaging, that departments and colleges are sending out different messages and we need to be one UF. Chair Stern agreed that we need to be centralized and be one UF. Chair Hosseini stated it is very important for the numbers to increase so our reputation scores increase, and the university moves to Top 5. VP Paton stated all indicators show our reputation score should increase.

5.0 New Business

There was no new business to come before the committee.

6.0 Adjourn

Committee Chair Stern adjourned the meeting at 3:24 p.m.



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT AFFAIRS & EXPERIENCE Meeting Minutes

June 5, 2020

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL Time Convened: 9:28 a.m.

Time Adjourned: 10:34 a.m.

Committee and Board members present:

Jason J. Rosenberg (Committee Chair), David L. Brandon, Sylvain Dore, James W. Heavener, Morteza Hosseini (Board Chair), Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Trevor Pope, Marsha D. Powers, Robert G. Stern and Anita G. Zucker.

Others present:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; D'Andra Mull, Vice President for Student Affairs; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations; Thomas Mitchell, Vice President for Advancement; David Nelson, Senior Vice President for Health Affairs and President of UF Health, David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs and other members of the University community.

1.0 Call to Order and Welcome

Committee Chair Rosenberg welcomed everyone in attendance and called the meeting to order at 9:28 a.m.

2.0 Verification of Quorum

Vice President Liaison Glover confirmed a quorum with all members present.

3.0 Review and Approval of Minutes

Committee Chair Rosenberg asked if there were any additions and/or corrections to the minutes. Hearing none, he asked for a motion to approve the minutes from the March 26, 2020 and May

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14, 2020 meetings, which was made by Trustee Brandon and a second by Trustee Johnson. Committee Chair Rosenberg asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

4.0 Action Items

AFSAE1 Tenure Upon Hire

Provost Glover presented twelve highly accomplished faculty members who have been hired by the University subject to being awarded tenure upon hire, which requires approval of the Board of Trustees. The give faculty members were:

- Dr. Christopher R. Butson-Professor, Department of Neurology, College of Medicine
- Dr. Robert F. Cox, Professor and School Director, Rinker School of Construction Management, College of Design, Construction and Planning
- Ms. Barbara Evans, Professor of Law and Chair with a joint appointment as Professor of Engineering
- Ms. Rachel Arnow-Richman, Professor of Law and Rosenthal Chair of Labor and Employment Law, Levin College of Law
- Dr. Jennifer L. Hunt, Professor and Chair, Department of Pathology, Immunology and Laboratory, College of Medicine

Committee Chair Rosenberg asked for any questions or further discussion. He then asked for a motion to approve Committee Action Item AFSAE1 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Brandon, and second which was made by Trustee Johnson. Committee Chair Rosenberg asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

AFSAE2 Annual Tenure Awards

Provost Glover indicated that the list of individuals in your materials have gone through the university's process including being recommended by the Dean, the Academic Personnel Board and the Provost. In addition, the faculty have had the opportunity to withdraw their packet.

Committee Chair Rosenberg asked for any questions or further discussion. He then asked for a motion to approve Committee Action Item AFSAE2 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Brandon, and second which was made by Trustee Johnson. Committee Chair Rosenberg asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

AFSAE3 Honorary Degrees

Committee Chair Rosenberg presented the two individuals for the Honorary Degrees as follows:

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- Brian May, Doctor of Science, College of Liberal Arts and Sciences
- Eugene Brigham, Doctor of Commerce, Warrington College of Business

Committee Chair Rosenberg asked for any questions or further discussion. He then asked for a motion to approve Committee Action Item AFSAE3 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Brandon, and second which was made by Trustee Johnson. Committee Chair Rosenberg asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

AFSAE4 Degree Program Changes

Committee Chair Rosenberg indicated that there were three requests for programs from two Colleges which are listed below:

- The Warrington College of Business is requesting to decrease the number of required credits in the M.S. in Management from 32 to 30 credits. This reduction in credit hours would allow students with a bachelor's degree in business to pursue the M.S. degree.
- The Warrington College of Business is requesting to decrease the number of required credits in the M.S. in Entrepreneurship from 36 to 32 credits. The reduction in credits will provide the students opportunities for greater experiential learning outside of class.
- The College of Health and Human Performance is requesting to modify the common prerequisites for the B.S. in Applied Physiology & Kinesiology by eliminating the Fitness Wellness track and offer a single curriculum that would align with the Exercise Physiology track.

Committee Chair Rosenberg asked for any questions or further discussion. He then asked for a motion to approve Committee Action Item AFSAE4 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Brandon, and second which was made by Trustee Johnson. Committee Chair Rosenberg asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

AFSAE5 Degree Program Termination

The College of Liberal Arts and Sciences is requesting to terminate the Ph.D. in German which was suspended in 2008 as a cost-cutting measure and no students have enrolled in the program since that date. The Faculty Senate approved this request at its March 19, 2020 meeting.

Committee Chair Rosenberg asked for any questions or further discussion. He then asked for a motion to approve Committee Action Item AFSAE5 for recommendation to the

Board for its approval on the Consent Agenda, which was made by Trustee Johnson, and second which was made by Trustee Kuntz. Committee Chair Rosenberg asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

5.0 Discussion Items

5.1 Admissions Update

Zina Evans, Vice President for Enrollment Management gave an admissions update.

5.2 Student Body President Update

Trevor Pope, Student Body President gave an update on what was happening with the student body.

5.3 Faculty Senate Update

Sylvain Dore, Chair of the Faculty Senate gave a senate update.

5.4 U.S. News Metrics Update

Cathy Lebo, Assistant Provost gave an update on the US News and World Report metrics.

5.5 Program Changes

5.5.1 Name Change: B.S. in Tourism, Event and Recreation Management to B.S in Tourism, Hospitality & Event Management (College of Health and Human Performance)

6.0 New Business

There was no new business to come before the committee.

7.0 Adjournment

There being no further discussion, the meeting was adjourned at 10:34 a.m.





COMMITTEE ON ACADEMIC, FACULTY
AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC
COMMUNICATIONS
Pre-Meeting Minutes
Virtual Meeting
November 17, 2020
Time Convened: 2:32 p.m.

Time Adjourned: 2:56 p.m.

Committee and Board members present:

Rahul Patel (Committee Chair), Richard P. Cole, Sylvain Dore, James W. Heavener, Morteza "Mori" Hosseini (Board Chair), Leonard H. Johnson, Trevor J. Pope, and Jason J. Rosenberg

Others present:

Joseph Glover, Provost and Senior Vice President for Academic Affairs; Zina Evans, Vice President for Enrollment Management and Associate Provost; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; D'Andra Mull, Vice President for Student Affairs; Nancy Paton, Vice President for Strategic Communications and Marketing; members of the University community and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Rahul Patel welcomed everyone in attendance and called the meeting to order at 2:32 p.m. He noted that this was an information meeting only and that there would be no voting.

2.0 Roll Call

Board Staff conducted a roll call of all Committee and Board members present.

3.0 Review Agenda for December 3, 2020 Meeting

The following items were addressed by the Committee:

3.1 Review Draft Minutes

Committee Chair Patel noted that we will have minutes from the June 4, 2020 Committee on Marketing, Public Relations and Strategic Communications and the June 5, 2020 Committee on Academic, Faculty and Student Affairs and Experience pre-meetings to review and approve at the December BOT meeting.

3.2 Review Action Items

Committee Chair Patel asked Provost Glover to go through the Action items:

3.3.2 AFSSPRSC1 Tenure Upon Hire

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Provost Glover indicated there is one Tenure Upon Hire case for this meeting, the new Dean for the College of Medicine. He indicated she was hired after an extensive search and that she has had a distinguished career.

3.2.2 AFSSPRSC2 New Degree

Provost Glover indicated that the College of Agricultural and Life Sciences is requesting a new Ph.D. in Plant Breeding. It has gone through all the appropriate University approvals and once approved by the Board of Trustees it will then go to the Board of Governors for approval.

3.2.3 AFSSPRSC3 Degree Program Termination

Provost Glover stated that the College of Public Health and Health Professions is asking to terminate the Ph.D. in Health Services Research since it was replaced with another Ph.D. He stated this program has not had any new enrollment since Fall 2017 and that all students have since graduated from the program.

3.2.4 AFSSPRSC4 Degree Program Changes

Provost Glover indicated that the College of Design, Construction and Planning is asking to remove a 3 credit MAC 1140 course from the B.S. in Sustainability in the Built Environment to keep the semester at 15 credits and the degree at 120 credits. There will still be a 4-credit mathematics requirement for this degree.

3.3 Review Discussion Items

Committee Chair Patel stated that he would go through each of the discussion items and indicated what would be discussed in each one but that we would not go through any of the presentations during this premeeting.

3.3.1 Al Strategic Initiative

Committee Chair Patel stated that the discussion would revolve around how the University is leveraging and using everything around AI. Specifically, how AI is being used to help elevate our brand and what we are doing on the ground. Vice President Mitchell has been working with Provost Glover and Vice President Paton on a strategy to maximize the impact of our AI strategy on our brand awareness.

3.3.2 Communications and Marketing Strategy Update

Committee Chair Patel indicated that Vice President Paton would give an update separate from what is being done for AI to increase our brand awareness. She will give an update on the key performance indicators and update on the university communications and marketing strategy inclusive of the brand and positioning research.

3.3.3 Admissions Update

Vice President Zina Evans will give an update on the admissions number and will also include what initiatives are in place to attract the best and brightest students.

3.3.4 Faculty Senate Update

Faculty Senate Chair Sylvain Dore will give an update on faculty matters.

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3.3.5 Student Body President Update

Student Body President Trevor Pope will give an update on student matters.

3.3.6 Student Affairs Update

Vice President D'Andra Mull will give an update on what's happening in Student Affairs area.

3.3.7-3.3.12 Centers/Institutes

These are discussion items that include the creation of two new Centers and name changes to four Centers and/or Institutes.

3.3.13-3.3.14 Program Changes

There are two items that indicate the name change for a degree and of a school.

Trustee Pope inquired if details about the Spring semester will be shared at the upcoming meetings. Provost Glover indicated that this information will be shared during the campus update. Trustee Dore inquired if there would be an update on graduate student experience and Committee Chair Patel indicated that he had received his inquiry regarding the committee charter including graduate students and it was noted that when there is a reference to students that it includes undergraduate and graduate.

Committee Chair Patel indicated that there will be two other reports related to the committee but will be presented out of the committee at Board Chair Hosseini's request. Vice President Elias Eldayrie will give a presentation on Student Surveys and Director Ja'Net Glover will give a presentation on Career Readiness. She will present on what we are doing to make sure students are prepared for getting jobs in the areas they are studying. Provost Glover indicated he would share the recent data that was obtained from the Board of Governors on the jobs report.

Trustee Richard Cole inquired whether there would be an update on recruiting of minority students, and it was indicated that it would be part of Vice President Evans' update on during the Admissions Update. Chair Hosseini added they are specifically working on this area and more information will follow.

4.0 New Business

There was no new business to come before the committee.

5.0 Adjournment

There being no further discussion, the meeting was adjourned at 2:56 p.m.



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC1 December 3, 2020

SUBJECT: Tenure Upon Hire

BACKGROUND INFORMATION

The Chairs and Deans have recommended to the Provost and Senior Vice President for Academic Affairs that one newly appointed faculty member be granted tenure commencing with their appointment. This individual meets the criteria set forth in the University's tenure and permanent status policy and has been recommended by the Provost to receive tenure. Attached is a Summary of the Tenure Upon Hire case.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the Tenure Upon Hire case listed on the attached Summary for recommendation to the Board of Trustees for its approval on the Consent Agenda. While any administrative appointment is noted, tenure is granted only for the faculty appointments.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is required.

Supporting Documentation Included: See attached summary.

Submitted by: Joseph Glover, Provost and Senior Vice President for Academic Affairs

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



Tenure Upon Hire Summary December 2020

Dr. Colleen G. Koch – College of Medicine Dean and Professor, Department of Anesthesiology

Dr. Colleen Koch earned her Masters in Business Administration from the Weatherhead School of Management at Case Western Reserve University in 2010, her M.S. in Clinical Research Design and Statistical Analysis at the University of Michigan School of Public Health in 2001, her M.D. from the University of Cincinnati College of Medicine in 1987 and her B.A.from Marquette University in 1983. Her prior institution was The Johns Hopkins University School of Medicine. Dr. Koch is a cardiothoracic anesthesiologist who has authored more than 115 publications and is nationally known for her clinical outcomes research in cardiac surgery, transfusions and quality of life.



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC2 December 3, 2020

SUBJECT: New Degree

BACKGROUND INFORMATION

The proposed Ph.D. in Plant Breeding in the College of Agricultural and Life Sciences will fill a demand for breeding research and for educating new plant breeding graduates. It will create a framework and administrative structure to leverage resources, faculty, courses and student recruitment which attract federal and private funding and increase the number of graduate STEM degrees awarded at UF. The program will prepare breeders proficient to work in both academia and industry. The Ph.D. in Plant Breeding in the College of Agricultural and Life Sciences (CIP Code 01.1104) was approved by the Curriculum Committee and then by the Faculty Senate at their September 17, 2020 meeting.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the Ph.D. in Plant Breeding (CIP Code 01.1104) in the College of Agricultural and Life Sciences for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is required.

| Supporting Documentation Included: | See attached proposal. |
|---------------------------------------|--|
| Submitted by: Joseph Glover, Provos | t and Senior Vice President for Academic Affairs |
| Approved by the University of Florida | a Board of Trustees, December 4, 2020 |
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



Board of Governors, State University System of Florida REQUEST TO OFFER A NEW DEGREE PROGRAM

In Accordance with BOG Regulation 8.011

(Please do not revise this proposal format without prior approval from Board staff)

| University of Florida | Fall 2021 | |
|--|--------------------------------------|--------------------|
| Institution Submitting Proposal | Proposed Implementation Te | rm |
| College of Agricultural and Life Sciences | Horticultural Sciences, Agror | |
| Name of College(s) or School(s) | Environmental Horticulture | , valion, |
| Plant Breeding | Name of Department(s)/Divis | ion(s) |
| Academic Specialty or Field | Doctor of Philosophy (Ph.D.) | |
| 01.1104 | Complete Name of Degree | |
| Proposed CIP Code (2020 CIP) | | |
| The submission of this proposal constitutes a constitute is approved, the necessary financial resources have been met prior to the initiation of the prog | and the criteria for establishing ne | w programs |
| in an arministration of the second se | W, Mohn | NOU 3 202 |
| Date Approved by the University Board of Trustees | President ^l s Signature | Date |
| | 20 2 2 7 | |
| | Joseph Gloven | 10-30-2020 |
| Board of Trustees Chair's Signature Date | Provost's Signature | 10-30-2020 Date |

PROJECTED ENROLLMENTS AND PROGRAM COSTS

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1 - Appendix A. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 3 in Appendix A. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

| Implementation Timeframe | нс | FTE | E&G Cost per FTE | E&G Funds | Contract & Grants Funds | Auxiliary/ Philanthropy Funds | Total Cost |
|-----------------------------|----|------|---------------------|--------------|-------------------------------|-------------------------------------|-------------|
| Year 1 | 5 | 3.5 | \$34,473 | \$120,657 | \$33,278 | \$0 | \$273,935 |
| Year 2 | 10 | 7.25 | 1 | | | | |
| Year 3 | 15 | 11 | | | | | |
| Year 4 | 20 | 14.5 | | | | | |
| Year 5 | 20 | 14.5 | \$23,174 | \$336,027 | \$210,063 | \$0 | \$1,026,090 |

Note: This outline and the questions pertaining to each section **must be reproduced** within the body of the proposal to ensure that all sections have been satisfactorily addressed. Tables 1 through 4 are to be included as Appendix A and not reproduced within the body of the proposals because this often causes errors in the automatic calculations.

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Form Updated September 2020

Introduction

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including majors, concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The University of Florida is one of the most active and innovative land-grant universities in plant breeding and variety licensing in the country. The university employs 27 faculty positions, breeding 50 plant species in four academic departments (Agronomy, Horticultural Sciences, Environmental Horticulture, and the School of Forest Resources and Conservation - SFRC) within the Institute of Food and Agricultural Sciences (UF/IFAS). However, we are the largest land-grant university in the country without a formal plant breeding graduate education program. Furthermore, a plant breeding graduate degree program is currently not offered in the state of Florida.

The interdisciplinary Ph.D. degree in Plant Breeding is proposed to fill the demand for breeding research and for educating new plant breeding graduates. The program will create a framework and administrative structure to leverage resources, faculty, courses, and student recruitment, which will attract federal and private funding and increase the number of graduate STEM degrees awarded at UF. It will be administered by the UF/IFAS College of Agricultural and Life Sciences (CALS) to provide a comprehensive plant breeding education. Our integrated curriculum will equip students with traditional and contemporary breeding methodologies, including molecular techniques (e.g. genomic prediction and genome editing), quantitative genetics, and analysis of breeding trials. Our curriculum was developed upon consultation with industry, non-profit, and academic sectors. The CALS plant breeding graduate program will prepare breeders proficient to work in both academia and industry, and thus supply the large demand that exists for plant breeders.

The proposed Ph.D. degree will require a minimum of 90 credit hours beyond the bachelor's degree. To graduate in the program, students are required to have a minimum of 40 credits of coursework toward their major. This coursework will include required courses (20 credits) which will provide a strong foundation in experimentation, data analysis and plant breeding; followed by a minimum of 20 additional credits selected from an array of electives. Approved elective courses will be drawn both from within CALS as well as existing UF areas of expertise outside of CALS in genetics, statistics, biology, molecular biology, bioinformatics, and genomics.

Over the past 30 years, 113 alumni have graduated from CALS graduate degree programs offered by the four departments mentioned above; however, none of them graduated with a formal plant breeding degree even though they all worked in plant breeding projects. Many of these graduates are now leading or employed in productive and innovative plant breeding programs in the public and private sector in the USA and internationally. Appendix F lists numerous examples of plant breeding graduates successfully employed in academia, industry, government and research institutions nationally and globally.

We expect extensive student interest in this interdisciplinary STEM program. Dozens of inquiries from prospective students are received by each of the 27 UF plant breeders every year, and there is an extraordinary demand from the private sector for highly-qualified, specialized plant breeders (see Appendix E).

B. Please provide the date when the pre-proposal was presented to CAVP (Council of Academic Vice Presidents) Academic Program Coordination review group. Identify any concerns that the CAVP review group raised with the pre-proposed program and provide a brief narrative explaining how each of these concerns has been or is being addressed.

The pre-proposal was presented to the CAVP Academic Program Coordination review group on February 22, 2019. No concerns were raised.

C. If this is a doctoral level program please include the external consultant's report at the end of the proposal as Appendix D. Please provide a few highlights from the report and describe ways in which the report affected the approval process at the university.

In the fall of 2019, four external reviewers who are highly recognized in the discipline of plant breeding were asked by Dr. Elaine Turner, Dean of the College of Agricultural and Life Sciences (CALS), to provide feedback on the Plant Breeding Ph.D. program full proposal. These were:

Reviewer 1: Dr. William Tracy, Professor of Agronomy at the University of Wisconsin-Madison, former Department Chair. Dr. Tracy is a member of the graduate faculty of the interdepartmental graduate training program in Plant Breeding and Genetics, which is very similar in design and objectives to our proposed program.

Reviewer 2: Dr. Wayne Smith, Professor of Cotton Breeding and Associate Department Head, Department of Soil and Crop Sciences at Texas A&M University, and Vice-Chair of the Plant Breeding Coordinating Committee (PBCC) Executive Committee.

Reviewer 3: Dr. B. Todd Campbell, Research Geneticist, USDA-ARS, Coastal Plains Soil, Water, and Plant Research Center and former President of the National Association of Plant Breeders (NAPB).

Reviewer 4: Dr. Rex Bernardo, Professor and Endowed Chair of corn breeding at the University of Minnesota, and former Associate Director of Graduate Studies and former Director of Graduate Studies in Applied Plant Sciences at the University of Minnesota.

The four external reviewer reports are in Appendix D. All reviewers were positive and supportive, strongly endorsing the proposed University of Florida Ph.D. program.

Regarding the overall merit of the proposed program, the reviewers emphasized that UF has, perhaps, the strongest public cultivar development program in the US, with a very strong faculty. Mobilizing this group toward a unified graduate curriculum and program will quickly move UF plant breeding into the top five programs if not the top three in the nation. The reviewers noted that the present lack of a plant breeding graduate program has been a missed opportunity for UF to become one of the leading Ph.D. plant breeding programs at present.

Regarding the demand for Ph.D. plant breeders in the Southeast region, the United States and the world, the reviewers emphasized that "Demand for PhD plant breeders has been strong since the 1970 PVP act (Plant Variety Protection Act) and especially since the 1994 PVP act and the advent of patented genetic products and procedures since 1985." Despite the consolidation of the seed industry, the demand for plant breeders remains strong, and industry may be the primary employer in the future. There are numerous reports of insufficient graduates to fill the needs of the industry. In the last 10-15 years, we have seen a large, increased investment by private industry to build plant breeding capacity. During this time, plant breeding has evolved and become even more multi-disciplinary in nature, as reflected in the construction of the degree program proposal.

Regarding the importance of such a program in the Southeast region, the United States and the world, reviewers commented that the University of Florida is strategically located to play a vital role in U.S. crop improvement, given its research programs on plants that are of economic importance in the Southeast U.S. One reviewer noted the unique ability to study breeding of subtropical and tropical crops and the adaptation of temperate crops such as blueberries and strawberries to those conditions. Another reviewer emphasized that there are a number of crops/plants unique to Florida that are not addressed elsewhere in the region or country. Thus, the proposed program is not only locally important, but will fill a national and international gap in the plant breeding area.

Regarding the potential of the program to provide the educational needs of future plant breeders, one reviewer emphasized that UF has a strong and knowledgeable group of plant breeding faculty. Another reviewer emphasized that the academic program as outlined is adequate to meet the educational needs of future plant breeders. A few recommendations were suggested by the reviewers which are addressed in the last paragraph of this section. Overall, reviewers agreed that the program will provide a high quality education for future plant breeders.

Regarding the ability of plant breeding faculty and administration at UF to build a successful program, reviewers emphasized that the proposal addresses the administration of the program extremely well. They emphasized that UF is a leading land-grant university in this area with excellent faculty and

administrators who will ensure a successful program. The breadth and diversity of the existing plant breeding effort at UF (e.g.-diversity of crops and plants already with plant breeding efforts) is leveraged to build a strong interdisciplinary plant breeding program that offers students unique and diverse educational opportunities. Reviewers also stressed that UF faculty are very productive in releasing cultivars and in academic research, which are key to the success of the proposed program.

Regarding the financial and other resources available, one reviewer emphasized that potential resources listed in the proposal exceed those of any other institution he knows of, except, perhaps, Texas A&M University. Another reviewer noted that creating this very strong plant breeding degree program requires little to no initial investment. Overall, reviewers thought this section was well explained and documented.

Regarding advice for achieving program success based on experience at their own institution, reviewers were unanimously confident that UF will be successful with this graduate program. One reviewer highly praised the program's interdisciplinary educational approach of balancing traditional plant breeding methods and successfully incorporating modern methods such as genomics and bioinformatics in the curriculum and program. Their suggestions and recommendations were incorporated in the present proposal, more specifically:

- The reviewers emphasize the need to expose students to management, professional development and financial courses, while recognizing the limitations of number of credits courses to achieve the needed training. This proposal is addressing this topic with a special journal club that focuses on management decisions, professional development and financial aspects of being a plant breeder in the public and private sectors.
- The reviewers also recommend that the faculty work toward developing and supporting a strong student cohort and community approach which is addressed by offering core classes and journal clubs built in the program with this objective.
- One reviewer suggested a clarification on our distance delivery which is addressed and already incorporated to Section I part F (page 6).
- Additional statistical courses have been added as electives as suggested by one reviewer.
- For the time being, the program will only accept students in the fall semesters.
- One reviewer recommended that courses focus primarily on principles and concepts rather than
 knowledge specific to crop types or species. In this proposal the core courses, as well as the electives
 focus on concepts that are broadly applicable. However, the electives "Breeding Perennial Cultivars"
 and "Genetic and Breeding of Vegetable Crops" are more targeted due to the specific and very different
 nature of these crops.
- One final recommendation was regarding the leadership of the program, especially in the first years of
 establishment. This will be addressed with UF administration to ensure the rotation length is not too
 short for each program director and that the leadership time is recognized for the faculty leading the
 program.
 - D. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support (see link to the SUS Strategic Plan on the-resource-page-for-new-program-proposal).

The proposed degree program is consistent with the current State University System's (SUS) 2025 Strategic Planning Goals, which focus on excellence, productivity and strategic priorities for a knowledge economy. Specifically, the proposed degree program directly supports the strategic goals as follows:

I. Excellence. The Board of Governors continues to expect the state universities to provide academic programs of the highest quality, to produce world class, consequential research, and to reach out and engage Florida's communities and businesses in a meaningful and measurable way.

The proposed Plant Breeding (PB) doctoral program will create a new highly renowned STEM program. The new program will strengthen the reputation of the academic programs at the University of Florida and thus the state. Plant Breeding is a well-recognized field both nationally and internationally. A few AAU and land-grant Universities offer a doctoral program in this area, and none are located in the state of Florida. Faculty at UF are well recognized in different sub-areas of plant breeding and formalizing the PB program will create greater visibility and increase recruitment of top state, national and international students further strengthening the reputation of this UF program and aligning it with state pre-eminence goals. The PB Ph.D. degree will provide a strong basis for conducting research that examines new potential crops for a local need with a global impact, as well as the continued improvement of crops that support Florida's rural

economies. UF Plant Breeders, as a part of the land-grant mission, are already engaged with a diverse group of stakeholders and industries ranging from nursery and landscape, fruits and vegetables, and forestry for pulp and lumber. This program will strengthen relationships with Florida stakeholders through increased awareness of our programs and by providing graduates to work in our industries.

II. Productivity. Florida must become more competitive in the national and global economy. To accomplish this, the state must increase the educational attainment levels of its citizens and the state universities must respond by awarding more degrees in specific high demand programs, particularly the STEM disciplines.

Currently all plant breeding faculty are preparing the next generation of doctoral level plant breeders. However, this is done across multiple departments that have different curriculum and graduation requirements. The creation of the new PB Ph.D. program will streamline the requirements for graduation by formalizing the program, ensuring high quality, increasing efficiency and streamlining the degree requirements. A streamlined program will be more attractive to potential students and increase the number of degrees awarded. UF/IFAS plant breeders are inventors of new cultivars with high productivity. In the last 10 years more than 300 new plant varieties have been released. We expect that by formalizing the new program more funding and more highly-qualified Ph.D. students will contribute to increasing the productivity in the development of new plant cultivars, and in engaging Florida's agricultural and natural resources industries.

Through mentorship of CALS graduate students, UF/IFAS plant breeders are already contributing to UF's diversity goal of preparing the next generation, where currently 43% of students are women and 8% are Hispanic/Latino. The new Ph.D. program will boost the cultural, ethnic, gender, and socio-economic diversity by recruiting under-represented students in STEM (including women and returning adults). The PB program will further support faculty in their recruitment of students from around the world, supporting the global impact of our plant breeding programs and highlighting the potential for UF to become a global leader in plant breeding given the unique diversity of crops in Florida.

III. Strategic priorities. The Board of Governors acknowledges that simply producing more with greater efficiencies is not inherently strategic, so this plan also has a focus on Strategic Priorities within each of the tripartite missions that need to be prioritized to better align university outputs with state economic and workforce needs.

UF/IFAS plant breeding research programs have long enjoyed a strong partnership with Florida's agricultural and natural resources industries. By being strategically located in the center of production of their respective crops, breeders located in Gainesville and at UF/IFAS Research and Education Centers (RECs) throughout the state have become integral components of these industries. The agronomic, horticultural, and ornamental varieties they develop are used by farmers, ranchers, and homeowners in Florida, the nation, and the world.

Offering a diverse educational and interdisciplinary program will increase the number of students and faculty engaged in collaborative research and plant breeding efforts worldwide. A Ph.D. program in plant breeding will increase the cultural, ethnic, gender, and socio-economic diversity of students, faculty and staff reflecting the breadth of thought essential for state, national and world preeminence. The Florida Department of Economic Opportunity projects that life scientist jobs will increase by 12.5% in the next eight years. This category includes the occupations of soil and plant scientists (8.4% growth) and biological scientist (9.3% growth). Plant breeders fall into both plant scientist and biological scientist categories.

Additionally, plant breeding faculty have a strong track-record of successful grantsmanship and will continue to attract external funding from federal and private organizations, therefore promoting more collaboration with private industry on research projects. The external support coming from industry through plant breeding royalties has increased by \$1 million each year since 2013. The external funding and royalty income are being re-invested to increase fellowships and research, thus increasing the productivity and reputation of UF plant breeding.

E. If the program is to be included in a category within the Programs of Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion. The Programs of Strategic Emphasis Categories are:

| Critical Workforce: | | | | | |
|-----------------------|---|--|--|--|--|
| | Education | | | | |
| | Health | | | | |
| | Gap Analysis | | | | |
| Economic Development: | | | | | |
| | Global Competitiveness | | | | |
| \boxtimes | Science, Technology, Engineering, and Math (STEM) | | | | |

Please see the Programs of Strategic Emphasis (PSE) methodology for additional explanations on program inclusion criteria at the resource page for new program proposal.

The new degree proposed should be included in the Science, Technology, Engineering, and Math (STEM) Program of Strategic Emphasis as described in the SUS Strategic Plan, further classified as STEM CIP (Classification of Instructional Programs) 01.11 Plant Sciences and, more specifically, as 01.1104 Agricultural and Horticultural Plant Breeding.

The proposed program will focus on the application of genetics and genetic engineering to the improvement of agricultural plant health, the development of new plant varieties, and the selective improvement of agricultural plant populations. Doctoral students in this program will be educated in genetics, genetic engineering, population genetics, agronomy, plant protection, and biotechnology as well as biological sciences related to plant reproduction, molecular biology and genomics. This new STEM Ph.D. degree will provide qualified students with core scientific skills necessary for success in plant breeding (as opposed to broader agronomic or horticultural skills), which in turn will strengthen our ability to recruit the top students to UF.

F. Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.

Courses for the plant breeding Ph.D. program will be offered on main campus with the goal of both face-to-face and live on-line delivery. The majority of classes will be delivered from main campus but made available to students on and off main campus through on-line technologies that will allow graduate students located at RECs to pursue their studies close to their crop's center of production. This increases opportunities for students to engage with and advance their education combined with a full immersion from stakeholders in the production systems and the associated advantages and challenges of producing food, feed, and fiber for the local, national and global economies. The following approved special purpose centers may be used:

| Site 0601 – Ft Lauderdale REC | Site 4801 – Mid Florida REC |
|------------------------------------|-------------------------------|
| Site 1101 – Southwest Florida REC | Site 5001 – Everglades REC |
| Site 1304 – Tropical REC | Site 5301 – Citrus REC |
| Site 2001 – North Florida REC | Site 5501 – Hastings REC |
| Site 2904 – Gulf Coast REC | Site 5601 – Indian River REC |
| Site 2905 – UF/IFAS Plant City REC | Site 5701 – West Florida REC |
| Site 4202 – Plant Science REC | Site 6101 – North Florida REC |

Institutional and State Level Accountability

II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

An unmet need for plant breeding skill development in both traditional and genomic methodologies is

widely recognized. The need to educate future plant breeders in specialty crops, the integration of molecular tools, and the fact that graduate education has become concentrated in a small number of universities focused on a few major row crops (e.g., corn and soybeans) were highlighted by The National Plant Breeding Coordinating Committee (http://cuke.hort.ncsu.edu/gpb/pr/pbccmain.html) as major issues facing plant breeding nationally and internationally.

In a national survey, Guner and Wehner (2003) indicate that the majority of plant breeders were being trained at the University of Wisconsin-Madison, North Carolina State University, University of Nebraska-Lincoln, Cornell University, University of Minnesota-St. Paul, Iowa State University, and Texas A&M University which focus on a small number of major crops. Their geographic distribution and breeding focus result in an imbalance in graduate student training in western and southeastern regions of the United States. These regions contain unique environments (i.e. southern California and Florida) that produce specialty crops not found in other areas of the U.S. The University of Florida has highly regarded breeding programs for a diversity of crops, including several specialty crops of regional and international importance (e.g., oranges, strawberries, blueberries). This is largely owed to Florida's tropical and subtropical environments which allow breeding and production of specialty crops that cannot be grown in other areas of the U.S. These facts further emphasize the University of Florida's unique situation and bring an enormous opportunity for UF to become a leader in Plant Breeding education among its peer institutions.

We have assessed the needs for more people to be educated in Plant Breeding using different sources and approaches. At a regional level, and according to the Florida Department of Economic Opportunity, it is forecasted that life scientist jobs will increase by 12.5% in the next eight years. This category includes the occupations of soil and plant scientist (8.4% growth) and biological scientist (9.3% growth). Plant breeders fall into both plant scientist and biological scientist categories. Moreover, the Bureau of Labor and Statistics (https://www.bls.gov/home.htm) estimates a national growth of 8.8% in plant science careers, and within this group, a growth of 17.8% in research and development. Following these expected increases in job opportunities, a 2015 survey of private and U.S. university plant-breeding programs reported that the number of domestic private sector positions for Ph.D.-level plant breeders is one third larger than the number of domestic academic positions. When international plant breeding positions are considered, nearly three times as many private sector positions are available (Sylak-Glassman et al., 2016). When the private sector was asked if they had enough qualified applicants for plant breeding positions, most of the responses indicated that there were not enough well-qualified applicants.

This result is supported by a statement from The National Association of Plant Breeders (https://www.plantbreeding.org/) publicizing a lack of qualified plant breeders, especially in specialty crops like fruits and vegetables. To build on this survey carried out by Sylak-Glassman et al. (2016), we have reached out to industry representatives of different crops nationally and internationally. We collected letters of support from nine companies engaged in the local, national and global production of row crops, fruits and vegetables (see Appendix E). The general consensus is that there is demand for Ph.D. level plant breeders, and they supported the creation of a formal graduate program in plant breeding in CALS. Finally, the USDA Roadmap for Plant Breeding (USDA Plant Breeding Working Group, 2015) emphasizes that stakeholders have continued to call for increased USDA involvement in the preparation of plant breeding professionals.

Altogether, we observe a strong need for more professionals at the regional, national and international level, and an opportunity to position the University of Florida at the forefront of plant breeding education and research. The proposed program will address these issues by increasing the number of Ph.D. degrees in plant breeding awarded at UF and improving UF's visibility at the state, national, and international levels. As a result, UF's plant breeding programs will more easily compete for federal and private funds.

B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

We expect extensive student interest in this interdisciplinary STEM program. Each of the 27 UF plant breeders receives dozens of inquiries from prospective students every year, and there is extraordinary demand from the private sector for high-quality plant breeders. In the last 30 years, 113 plant breeding alumni have graduated from four UF/IFAS departments (Horticultural Sciences, Environmental Horticulture, Agronomy and School of Forest Resources and Conservation). However, none of them

graduated with a formal plant breeding degree. No students are currently enrolled in similar programs in the state of Florida.

Moreover, the National Plant Breeding Coordinating Committee (http://cuke.hort.ncsu.edu/gpb/pr/pbccmain.html) points out that education of plant breeders has become concentrated in a small number of universities focused on major row crops. The University of Florida is located in a sub-tropical location with a unique emphasis on specialty crops. The climate of Florida and broad research programs in UF/IFAS position the proposed program to lead plant breeding education and research related to specialty crops both nationally and globally.

We have surveyed current and former University of Florida students as well as AAU land-grant institutions that offer comparable doctoral programs to assess the demand for a Ph.D. in Plant Breeding. Among 34 public and 26 private AAU and land-grant universities only six offer comparable doctoral programs and only one is located in the Southeast.

We surveyed three out of the six universities with similar graduate degrees in plant breeding: University of Wisconsin-Madison, University of California-Davis, Texas A&M University, and Cornell University. While UC-Davis does not have a graduate degree titled "Plant Breeding", we nevertheless include it for comparison, as it is known for training plant breeders and resides in a state with a large specialty crop industry, similar to Florida. In general, the representatives from these institutions all indicated either a stable number of students going into their programs or an increase in interest in their program, given by the number of students applying. Each year, these programs each have 5-8 new students, which is similar to the projected number of students in this proposed CALS graduate program. Cornell University indicated they only accept 10% of the applicants, which suggests they receive 50-80 applications per year. The University of Wisconsin-Madison indicated they have graduated 337 students from their program since their founding in 1968 and that "the program is still running strong".

In addition, we sent a survey to 49 graduate students enrolled as of June 2018 in graduate programs in four UF/IFAS departments (Agronomy, Horticultural Sciences, School of Forest Resources and Conservation, Environmental Horticulture) pursuing degrees related to plant breeding. The response rate was 86% and students were asked, if given the option, to choose which three Ph.D. degree titles would be more beneficial for their career plans. Forty-eight percent of the students indicated that they would prefer a Ph.D. in Plant Breeding with formal and structured graduate education tailored to all relevant aspects of plant breeding that would prepare career-ready plant breeders. Forty-five percent of the students surveyed indicated they would prefer a Ph.D. in their current major (e.g. Agronomy or Horticultural Sciences) with a concentration in plant breeding while only 7% of the students preferred to keep the same degree title as currently awarded by these four departments.

C. If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). In Appendix C, provide data that support the need for an additional program.

There are no similar programs at either private or public institutions in the state of Florida.

D. Use Table 1 - Appendix A (1-A for undergraduate and 1-B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 30 credit hours per year and graduate FTE will be calculated as 24 credit hours per year. Describe the rationale underlying enrollment projections. If students within the institution are expected to change majors to enroll in the proposed program at its inception, describe the shifts from disciplines that will likely occur.

We anticipate that the majority of our students will register as full-time students, generally taking 24 credits per year (0.75 FTE). We expect that students who graduated from a preceding degree program at other Florida public universities, out-of-state residents and international residents will account for the initial applicants to our doctoral program. In addition, we expect that we will also attract other students from state and local industries, such as working professionals who want to advance in their careers. This expectation stems from the strong partnerships that UF plant breeding faculty have with Florida's agricultural and natural resources industries.

We expect to focus our recruitment efforts on attracting high-quality students who have completed degrees from other Florida or out-of-state universities, with special attention to underrepresented minorities, low-income or first-generation college students. Over time, students from other universities within the state, as well as out-of-state residents and international students and those from industry will be drawn to our program and will account for the majority of our students. We base this on the results of surveys of current and former students, as well as our survey of other comparable programs across the country.

We also anticipate that students who have recently graduated from one of the four departments (Horticultural Sciences, Environmental Horticulture, SFRC and Agronomy) that offer a degree related to plant breeding might apply to our program in this first year. However, we will not allow current Ph.D. students enrolled in any of the four UF departments mentioned above to transfer to our proposed plant breeding doctoral program for the first five years of our program. The program will only accept 5-6 students a year in the first five cycles, which should result in other top applicants being re-directed to other UF departmental graduate programs.

Furthermore, several plant breeding faculty have participated in the interdisciplinary Plant Molecular and Cellular Biology (PMCB) Graduate Program, established 30 years ago and well-recognized nationwide as a center of excellence for plant biology faculty focusing on genetic, molecular, and cellular research. Similar to PMCB recruitment strategy, the PB program will launch a proactive recruitment plan to identify and attract top state, national and international students to the University of Florida and aligning it with state pre-eminence goals. In conjunction with UF/IFAS Communications, the UF/IFAS Plant Breeders Working Group is establishing a marketing and branding campaign, including a revamped website, innovative media outreach, wide-ranging advertising campaign, among others.

We will identify prospective applicants using well-known student prospects databases such as the State of Florida Graduate Candidate Identification System (GCIS), GRE Search, National Name Exchange (NNE), FAMU Feeder Fellows, National McNair Fellowship among others. Moreover, we also anticipate actively engaging with UF recruiting initiatives, in special those spearheaded by CALS, the Office of Graduate Diversity Initiatives (OGDI) and the Office of Graduate International Outreach (OGIO). These collaborations will include participating in graduate recruitment fairs; partnering with foundations, community and student support organizations; providing scholarships and assistantships for underrepresented students; and providing students with opportunities to participate in retention and professional development workshops. In addition, we will make use of the powerful plant breeding faculty connection with UF alumni who are well positioned in academia and private industry sectors. These practicing professionals will be an excellent resource for recruitment of new students.

With this increased visibility, we expect more support and recognition from the industry, peer universities and funding agencies. We envision this new graduate program to have a global reach and thus competing with other national and international plant breeding universities for top students. This recruiting investment for the new graduate program will attract more student applications to CALS overall and in particular to other graduate programs and departments at UF.

E. Indicate what steps will be taken to achieve a diverse student body in this program. If the proposed program substantially duplicates a program at FAMU or FIU, provide, (in consultation with the affected university), an analysis of how the program might have an impact upon that university's ability to attract students of races different from that which is predominant on their campus in the subject program. The university's Equal Opportunity Officer shall review this section of the proposal and then sign and date Appendix B to indicate that the analysis required by this subsection has been completed.

The proposed program does not duplicate any program at FAMU or FIU.

By creating a diverse, robust educational and interdisciplinary area of excellence our goal is to support an exceptional academic environment where students, faculty, and staff members with diverse experiences and backgrounds can achieve their goals.

Plant Breeders at UF are already contributing to UF's diversity goal: as of June 2018, there were 43% women and 8% Hispanic/Latino studying plant breeding through graduate programs within the four UF departments. Faculty have and will continue to attract students from around the world, supporting the global impact of our plant breeding programs and highlighting the potential to become a global leader in

plant breeding given the diversity of crops in Florida.

To help ensure racial and ethnic diversity inclusion and equity we intend to actively work on recruiting efforts with several UF offices including the recently created position of Chief Diversity Officer, the Office of Graduate Diversity Initiatives (OGDI) and the Office of Graduate International Outreach (OGIO). These collaborations will include participating in graduate recruitment fairs; partnering with foundations, community and student support organizations; providing scholarships and assistantships for underrepresented students; and providing students with opportunities to participate in retention and professional development workshops.

We will also leverage resources and make use of opportunities focused on international outreach and student success offered by the OGIO. With Florida's geographical location, Latin America has been identified as a target for OGIO's recruitment efforts, through the formation of agreements with sponsoring agencies to enroll Latin American graduate students with government funding. We also hope to further increase female enrollment in this important STEM discipline. Our faculty have served as advisors to the UF Plant Science Council, where women have served as presidents, vice-presidents and other leadership roles. Besides their annual spring workshop, professional development activities and discussions, they recently organized a Women in STEM discussion panel that highlighted the experiences of women working in the plant sciences.

III. Budget

A. Use Table 3 - Appendix A to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 4 - Appendix A to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)

The University of Florida is one of the most active and innovative land-grant universities in plant breeding and cultivar licensing in the country. The university employs 27 plant breeding faculty in four academic departments (Agronomy, Horticultural Sciences, Environmental Horticulture, and the SFRC) who are breeding 50 different plant species. Faculty within these departments contribute to the three-fold land grant mission of teaching, research and extension within the Institute of Food and Agricultural Sciences (IFAS), as well as academic units within the College of Agricultural and Life Sciences (CALS) at the University of Florida.

The primary costs of the Ph.D. program will be faculty and staff salaries and benefits. The faculty reallocated E&G is calculated based upon 1% of teaching of all teaching faculty salaries/benefits funded through E&G. As a result of UF's preeminence faculty hiring efforts, we expect that at least one tenure track faculty member will be hired in the next five years and housed in either HOS, ENH, SFRC, or Agronomy. This person will be expected to contribute to our new graduate teaching and advising efforts. We expect that by Year 5, this new faculty member "New Hire 1" will contribute 0.13 FTE toward the new plant breeding program. The faculty continuing E&G in Year 5 represents a cumulative value across all plant breeding teaching faculty contributing to the new program.

We also anticipate hiring an academic advisor to work half-time. This position is needed to coordinate all academic (recruitment, advising, course scheduling, among others) and administrative activities associated with successfully managing this new graduate program. The A&P continuing E&G in Year 5 represents the half-time salary and benefits for the academic advisor.

Additional funds are available to support the proposed program through the Plant Breeding Graduate Initiative (PBGI). This initiative represents an annual funding opportunity provided by UF/IFAS Research and the Florida Foundation Seed Producers, a Direct Support Organization (DSO) that supports the plant breeding research programs. UF/IFAS Research currently provides \$60,000 per cohort per year, which is matched with \$60,000 from the plant breeders and provides three new graduate student assistantships each year. We are predicting that with the anticipated success of the program, the plant breeders will expand their support by Year 5 for a total of \$90,000 per cohort year. Furthermore, we anticipate that the program will obtain support for one new Graduate Student Funding Award from the UF Graduate School in each of the first five years.

In the last 10 years, the 27 plant breeding faculty have secured approximately \$81 million in federal and

private funding. As the program grows in the number of students, we project an increase in the allocation of C&G funds secured by the plant breeders and used to support the enrollment growth.

As shown in Tables 3 and 4 in Appendix A, the funding for the program will primarily come from the reallocation of existing resources. Our estimates are conservative. We assumed a total increase in faculty and staff salaries and benefits of only three percent over the next five years. We assumed zero increase in state operating funds over the five-year period. Based on projected enrollment trends (Table 1-B), the E&G cost per student FTE decreases from \$34,473 in Year 1 to \$23,174 in Year 5. Total projected E&G costs for Year 1 are \$120,657 and for Year 5 are \$336,027. The visibility provided by the graduate program will also increase UF/IFAS chances to obtain industry support targeting education of new plant breeders.

B. Please explain whether the university intends to operate the program through continuing education, seek approval for market tuition rate, or establish a differentiated graduate-level tuition. Provide a rationale for doing so and a timeline for seeking Board of Governors' approval, if appropriate. Please include the expected rate of tuition that the university plans to charge for this program and use this amount when calculating cost entries in Table 3.

We do not intend to operate the program through continuing education on a cost-recovery basis, seek approval for market tuition rate, or establish differentiated graduate-level tuition. The expected rate of tuition and fees will be based on the University's standard costs and projected estimates, which is \$528.69 per credit hour for the 2019-2020 academic year for Florida residents.

C. If other programs will be impacted by a reallocation of resources for the proposed program, identify the impacted programs and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

We anticipate that the Ph.D. program will have no negative impacts on existing undergraduate or graduate programs but will rather have a variety of positive impacts across all the departments involved. Students will not be allowed to transfer from current departmental Ph.D. degrees into the plant breeding Ph.D. program for the first five years, thus ensuring the new program will avoid any potential negative impact on existing programs due to migration of current Ph.D. students. This program will create a curriculum that can be advertised and promoted. With this increased visibility, we expect more support and recognition from the industry and funding agencies. We envision this new graduate program to have a global reach and thus competing with other national and international plant breeding universities for top students while avoiding competition within and among other CALS graduate programs. This will also provide an opportunity for our best undergraduate students to pursue graduate studies at UF instead of enrolling in other universities.

This program is expected to recruit top students with interest in plant breeding (maximum of 5 students per year in the first cycle). This net increase in CALS students will increase the number of students taking graduate classes already offered by plant breeders and other faculty within each department. This program, with current support of the Plant Breeders Working Group (PBWG) and UF/IFAS Research via the Plant Breeding Graduate Initiative, will ensure graduate assistantships for 3-4 students annually, therefore achieving more than 60-80% of the recruitment goal through internal scholarships, while the remaining support will be covered by individual plant breeding programs at UF.

UF/IFAS plant breeders are housed in different departments and different research and education centers across the state. This interdisciplinary program will unify faculty working in breeding and formalize an educational program that is currently underway. The Ph.D. program will increase strong, collaborative research teams involving multiple faculty, Ph.D. students, master's students, and undergraduates. Thus, undergraduate involvement in these teams will prepare them for research careers and graduate programs in related fields. The interdisciplinary nature of the program will provide opportunities for undergraduates to perform high quality research under the mentoring of graduate students.

Because the curriculum of the program relies on current coursework being taught in the involved departments, most faculty will not see a change in their responsibilities, or their time assigned to the new program. In the meanwhile, the department may see an increase in Ph.D. students taking these courses in a regular basis. The proposed program attempts to minimize the effects of the reallocation of teaching resources by re-allocating only 1% per teaching faculty FTE to the new program. A few members of the faculty will be devoting more time and energy to the graduate program because of the need to lead the new program. However, a rotational leadership is proposed, which will minimize the time faculty devote to the program in the long-term.

We do not anticipate the use of adjunct faculty or additional funding for doctoral students to provide teaching assistance. Our doctoral students will be well-prepared to teach undergraduate courses under the supervision of an experienced faculty member, assuring quality educational delivery to undergraduates. This doctoral program, based on advanced methods of plant breeding with an interdisciplinary focus, will generate knowledge for new courses and content in the undergraduate programs across CALS, enriching the current offerings and providing the most current and relevant information for research careers.

The new doctoral program will be positioned to attract additional funding and resources, both internally and externally, which will have broad benefits for all aspects of the program.

D. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).

Given the distinctive nature of this doctoral degree program, we anticipate primarily positive effects to related programs and departments. Most of the courses in the proposed curriculum currently exist and are service courses for numerous graduate programs in the biological sciences. Consequently, they will not be impacted by the additional student numbers generated after the program is approved. This program will create a curriculum that can be advertised and promoted. With this increased visibility, we expect more support and recognition from the industry and funding agencies. The newly created program will invest in recruiting top students interested in plant breeding. The recruitment investment as well as the establishment of this new program will attract more students to consider the plant breeding programs in CALS and also other graduate programs in CALS.

We expect that this effort will increase the net number of applicants to CALS. The program will only accept a maximum of 5 students each year in the first five cycles, which should in turn result in other top applicants being re-directed to the departmental graduate programs. We have seen this kind of cross-departmental benefit from the recruiting efforts of the PMCB (Plant Molecular and Cellular Biology) graduate program in the past.

We conducted a survey of all plant breeding faculty in each of the four departments to determine how many of their alumni graduated with a focus on plant breeding since the beginning of their careers at UF. The results showed that, out of a total of 241 graduate students under the supervision of plant breeders, 113 students (46%) completed programs focused on plant breeding. The other 128 students (54%) focused on other traditional areas of specialization in their respective departments such as agronomy, horticulture, floriculture, pest management, plant physiology, nutrition, weed science, plant management, crop production, molecular and cellular biology and landscape management. This demonstrates that the 27 plant breeding faculty are not exclusively focused on preparing students as plant breeders, and their departments will not be negatively affected by the creation of this degree program.

E. Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

Initially the program will be internally funded through royalty proceeds from plant breeding faculty via the UF/IFAS Plant Breeders Working Group (PBWG) and Plant Breeding Graduate Initiative (PBGI). However, as soon as the program is approved, we are strongly committed to identifying sources of extramural funding, a crucial element required to support graduate student research and competitive assistantships that will attract and retain outstanding students. The plant breeders are actively engaged in grantsmanship and have had success securing funding from both public and private sources. The list of federal funding agencies includes the National Science Foundation (NSF), US Department of Energy

(DOE) and US Department of Agriculture – National Institute of Food and Agriculture (USDA-NIFA), while the list of private institutions includes many of the main breeding companies in several different crops.

We have conducted a survey with all UF plant breeders to estimate the amount of plant breeding related external support that they have received in the last 10 years (both public and private). The average total support comes to \$3 million per breeder. In addition, we have spoken with industry representatives from different crops important for the state's agriculture. While no funding is currently committed at this stage, we have obtained several letters of support indicating significant interest in maintaining the collaboration with UF and in the creation of the program. Furthermore, the Plant Breeders Working Group has recently initiated, with the support of UF/IFAS Advancement, a campaign to communicate the impact that UF plant breeding has had for Florida and the world. We expect that this campaign will lead to private giving, which could in part be directed to support plant breeding students. Finally, the PBWG and UF/IFAS Research have established an initiative to continually fund students studying plant breeding. The Plant Breeding Graduate Initiative annually funds 3-4 graduate assistantships. The number of funded assistantships is expected to increase in the future.

The breeders have also identified additional federal programs to which we could apply for support of our plant breeding graduate program:

- Global Partnership Initiative for Plant Breeding Capacity Building (http://km.fao.org/gipb/)
- USDA-CSREES Agriculture and Food Research Initiative
 (http://www.csrees.usda.gov/fo/agriculturalandfoodresearchinitiativeafri.cfm)
- USDA-CSREES National Vegetable Crop Initiative (http://www.csrees.usda.gov/newsroom/newsletters/update08/042308.html)
- USDA-NIFA Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship (NNF) Grants Program (https://www.nifa.usda.gov/funding-opportunity/food-and-agricultural-sciences-national-needs-graduate-and-postgraduate)

IV. Projected Benefit of the Program to the University, Local Community, and State

Use information from Tables 1 and 3 - Appendix A, and the supporting narrative for "Need and Demand" to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

A cross-departmental, interdisciplinary Ph.D. program in Plant Breeding will benefit the University of Florida and the SUS as it will support their missions by providing premier graduate education and increasing scholarship, research, and innovation. Specifically, the program supports the SUS 2025 Strategic Plan by increasing research activity and the number of graduates with interdisciplinary STEM education and credentials, expanding commercialization activities that will attract more research funding from federal and private sources, and promoting more collaboration with the private industry sectors. There is no such program in the state, thus this could be added to the list of specializations that the state and UF will be providing. This new degree will create a framework and administrative structure to leverage resources, faculty, courses, and student recruitment, which we expect will attract more federal and private funding.

The contribution that plant breeding has brought to local communities has been very evident in Florida. In 2019, 90% of the strawberry acreage and 100% of the blueberry acreage in Florida is occupied by UF-bred varieties. It was only in the last decade that Florida became a leader in blueberry production, in part because the UF/IFAS blueberry breeding program developed new varieties well adapted to Florida. We aim to build from these proven successes by continuing to grow current industries and creating new agricultural commodities in Florida.

Currently, plant breeders continue working at the community level to understand and solve the challenges of our stakeholders through better varieties. This results in producer profitability and industry sustainability. These industries in turn support other aspects of the local economy including packaging, food processing, transportation and finance.

Our proposed degree program will enrich UF's land-grant core mission by being among the top plant breeding programs in the nation and the world. Other benefits include the following:

Quantitative:

- Increasing the number of highly qualified graduate students to align UF with other peer APLU landgrant universities by addressing local, state, and national needs and demands in plant breeding.
- Increasing the cultural, ethnic, gender, socio-economic and international diversity of students, especially those under-represented in STEM discipline (i.e. women, African Americans, etc.) to reflect the breadth of thought essential for state, national, and world preeminence.
- Increasing the number of high-impact scholarly publications and creative works generated.
- Attracting more federal and private graduate funding, grants for student research programs, and increasing graduate student mentored undergraduate research.
- Increasing private and public funding from UF intellectual property, endowments, and federal sources.
- Boosting intellectual property income and the number of commercial products developed by plant breeders, which will have a local and statewide economic impact and generate employment opportunities.

Qualitative:

- Fostering the development of the "talent pipeline" that must exist to create the multi-disciplinary
 expertise needed to build the knowledge and innovation economy envisioned by the Florida Board of
 Governors
- Increasing the visibility of faculty will increase their national and international leadership and recognition, expanding UF's competitive advantage for extramural funding and standing among AAU universities, particularly among those with similar programs.
- Augmenting the numbers of successful and proud UF alumni donating to endowments, offering internships and employment opportunities, and engaging in student recruitment.
- Developing the knowledge base needed to create improved policies and transformative programs that benefit plant breeding stakeholders in an increasingly dynamic and global society and economy.
- Providing expert professional leadership and capacity in the public, private, and nonprofit sectors to address critical problems and needs of local stakeholders.

V. Access and Articulation - Bachelor's Degrees Only

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a separate request to the Board of Governors for an exception along with notification of the program's approval. (See criteria in Board of Governors Regulation 6C-8.014)

Not applicable, this is not a bachelor's degree.

B. List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see link to the Common Prerequisite Manual on the resource page for new program proposal). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as "limited access.

If the proposed prerequisites are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional "track" of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

Not applicable, this is not a bachelor's degree.

C. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that Florida College System transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in Board of Governors Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

Not applicable, this is not a bachelor's degree.

D. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see link to the Statewide Articulation Manual on the resource page for new program proposal). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

Not applicable, this is not a bachelor's degree.

Institutional Readiness

VI. Related Institutional Mission and Strength

A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan (see link to the SUS Strategic Plan on the resource page for new program proposal).

The SUS Strategic Plan has set goals to increase the number of graduates with degrees in STEM fields. More specifically, the UF Strategic Plan listed Biological Sciences as an area of emphasis. Plant Breeding is an integrative science that requires knowledge of biology, genetics, chemistry, statistics, and computer science. Additionally, it draws support from many STEM disciplines within CALS including Agronomy, Horticultural Science, Plant Pathology, Entomology & Nematology, Forestry, Biology, Genetics, Plant Molecular & Cellular Biology, and Applied Statistics. Well educated plant breeders must be able to draw on information and expertise in these fields and incorporate the art of selection for desirable attributes in the final product of released varieties.

As indicated in sections above, national and international groups have recognized that prior investments in preparation of plant breeders in the 1970s and 1980s are being lost to retirement and program closures. The University of Florida is unique in having a diversity of plant breeding research programs focused on specialty horticultural, ornamental, and unique agronomic and forage crops. With this focus, a UF degree in plant breeding is well positioned to fill the need for plant breeders with diverse experiences that few, if any, other institutions can accomplish. The abundance of resources available for graduate students at UF provides an exceptionally wide spectrum of research opportunities that are not available at typical mid-western land-grant institutions that are narrowly focused on two or three major cereal crops.

In addition to adding a relevant and valuable STEM graduate program that supports one of the major agricultural sectors in the state of Florida, this program will help meet SUS metrics such as higher numbers of graduate degrees in STEM, and an increase in the number of patents, licenses and options executed. These increases will result from UF/IFAS plant breeding programs' development of plant cultivars that are patented and/or licensed to be grown over thousands of acres which return royalties to the UF/IFAS system in support of the research and education programs.

B. Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

The new interdisciplinary program will take advantage of existing institutional strengths by building upon the robust group of plant breeding research programs currently ongoing at UF, and by coordination across a wide array of academic courses in plant breeding and genetics, and support disciplines that are already in place but are scattered across a number of academic units. This new interdisciplinary program will help to focus faculty around a common core of academic work and strengthen our ability to recruit the best students into our program. The vitality of the current faculty is indicated by a steady climb in royalty

income generated by released UF/IFAS cultivars, which approached \$15 million in 2018. The UF/IFAS Plant Breeders Working Group has committed part of these resources to support this graduate program.

The faculty involved in the proposed interdisciplinary plant breeding program are from diverse backgrounds, and most have contributed their expertise in plant breeding through leadership roles in professional societies, including service as editors of major refereed journals in the field. These faculty associated with the plant breeding program are nationally and internationally recognized, and have an impressive list of achievements and awards, including presidents and fellows of the Crop Science Society of America, the American Society of Horticultural Science, and the National Association of Plant Breeders. In addition, plant breeding faculty at UF have a rich history of educating students who become well positioned in academia and private industry sectors. These practicing professionals will be an excellent resource for recruitment of new students.

C. Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology in table format of the activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.

Previous internal reviews of four UF/IFAS departments of Agronomy, Horticultural Sciences, Environmental Horticulture and School of Forest Resources and Conservation have recognized that plant breeding and genetics faculty were strengths of these units but have pointed out that programs were fragmented and sometimes lacked focused interaction with other departments.

The UF/IFAS Plant Breeders Working Group (PBWG) has met annually since the early-1990s to discuss and review issues relevant to cultivar development, and matters concerning educating graduate students in plant breeding. At the 2007 PBWG annual meeting a committee was organized to begin the process of consideration of an interdepartmental graduate program. At that time the planning committee consisted of Drs. Dave Clark and Maria Gallo as co-chairs, Barry Tillman, Eilene Kabelka, Kevin Kenworthy, and Ken Quesenberry. A draft proposal was developed in 2009, but it was never formally submitted due to changes in requirements and committee members.

Considering the increasing demand for plant breeders and their roles in addressing future societal challenges, the interdisciplinary graduate program was added as one of the goals in the 2016-2019 Plant Breeders Working Group strategic plan. Our vision is to be a global leader in plant breeding education, research and germplasm/cultivar development and our mission is to ensure the viability of agriculture through exceptional plant breeding programs. One of the strategic goals is solely dedicated to establishing a graduate degree program in plant breeding. The expected key outcomes are to increase enrollment of high quality domestic and international graduate students and improve program visibility by delivering next generation breeders to institutions and key agricultural companies.

Several action steps were defined as a measure of success for this strategic goal. These included: (i) identify core plant breeding competencies, using the previously proposed curriculum as a resource; (ii) identify and hire a staff member to shepherd the proposed degree program to final approval; (iii) develop and submit the degree program proposal to CALS and university curriculum committees; and (iv) implement a new Ph.D. graduate program.

In January 2018, Ms. Eliana Kampf was hired as a graduate program coordinator. A Plant Breeding Committee (PBC) consisting of Dr. Patricio Munoz, Dr. Marcio Resende, and Ms. Eliana Kampf, under the supervision of the PBWG Executive Committee, initiated the development of the pre-proposal. The PBC conducted surveys of current students, alumni, industry, and other universities. The PBC also met with the CALS dean and UF/IFAS Research dean several times during Spring and Summer 2018. These leaders in agricultural teaching and research were very supportive of this initiative and have assisted immensely with documentation and with proposal development. The PBC also met with faculty from the UF/IFAS Department of Family, Youth and Community Sciences to gain insights from their pre-proposal development process (their Ph.D. degree program in Youth Development and Family Science was approved in 2017).

In August 15, 2018 the first draft of the pre-proposal was reviewed by PBWG members during the 2018 UF/IFAS Plant Breeders Working Group Annual Meeting and further developed during Fall 2018. During Fall 2018 the PBC and the PBWG executive committee met with the chairs of the four departments involved, and all chairs fully supported the creation of a plant breeding degree. The pre-proposal was signed by Dr. Rob Gilbert (Agronomy Chair), Dr. Red Baker (School of Forest Resources and

Conservation Director), Dr. Chris Chase (Horticultural Sciences Interim Chair) and Dr. Dean Kopsell (Environmental Horticulture Chair) and in November 2018 it was reviewed by Dr. Turner (CALS Dean).

The pre-proposal was then sent to the Provost's Office and in December 2018, the pre-proposal was endorsed by Dr. Chris J. Hass, Associate Provost for Academic and Faculty Affairs, who praised the group for a "well-written, substantive and enticing pre-proposal." In February 2019 the pre-proposal was approved by the Council of Academic Vice Presidents (CAVP) Academic Program Coordination review group with no concerns.

Planning Process

| | rianning Process | | | | | |
|---------------------------|---|--|--|--|--|--|
| Date | Participants | Planning Activity | | | | |
| 2007 | Plant Breeding Working Group Annual Meeting members | Committee formed for proposal development | | | | |
| 2008 | Drs. Dave Clark and Maria Gallo as co-chairs, Barry Tillman, Eilene Kabelka, Kevin Kenworthy, and Ken Quesenberry | Proposal development | | | | |
| Fall 2008 | Dr. Kirby Barrick, Dean of the College of Agricultural and Life Sciences and Dr. Mark McLellan Dean for Research and Director Florida Agricultural Experiment Station | Review of proposal draft | | | | |
| 2016 | PBWG | 2016-2019 PBWG Strategic Plan created | | | | |
| Jan. 2018 | PBWG Executive Committee | Plant Breeding Graduate Program coordinator hired | | | | |
| Spring and Summer 2018 | Dr. Patricio Munoz, Dr. Marcio Resende, and Ms. Eliana Kampf | Development of a new pre- proposal following the 2016 streamlined guidelines | | | | |
| Spring and Summer 2018 | Dr. Elaine Turner, College of Agricultural and Life Sciences (CALS) dean and Dr. Jackie Burns, UF/IFAS Research dean | Review of pre-proposal and suggested revisions | | | | |
| Summer 2018 | Drs. Rob Gilbert (Agronomy), Red Baker (SFRC), Chris Chase (Horticultural Sciences), Dean Kopsell (Environmental Horticulture) | Pre-proposal presentation to the chairs of these 4 departments | | | | |
| Fall 2018 | Drs. Rob Gilbert (Agronomy), Red Baker (SFRC), Chris Chase (Horticultural Sciences), Dean Kopsell (Environmental Horticulture) | Pre-proposal signed by chairs of these 4 departments | | | | |
| Nov. 2018 | Dr. Turner, CALS Dean | Pre-proposal final review | | | | |
| Dec. 2018 | Dr. Chris J. Hass, Associate Provost for Academic Affairs | Pre-proposal review | | | | |
| Feb. 2019 | Council of Academic Vice Presidents (CAVP) Academic Program Coordination review group | Pre-proposal approval (no concerns) | | | | |

In Spring-Fall 2019 the PBC, with the support of the PBWG Executive Committee, worked toward this full proposal. In November 2019 this full proposal was presented to the PBWG Executive Committee for review and then to the CALS Dean's Office for review. The full proposal was submitted to the CALS Curriculum Committee in November 2019, which approved our proposal pending few changes. These changes have been fully addressed and incorporated to this present proposal version.

Events Leading to Implementation

| Date | Implementation Activity | | |
|-------------|--|--|--|
| Nov. 2018 | Pre-proposal vetted by Dr. Turner, CALS Dean | | |
| Dec. 2018 | Pre-proposal approved by Associate Provost for Academic Affairs | | |
| Feb. 2019 | Pre-proposal approved by Council of Academic Vice Presidents (CAVP) Academic Program Coordination review group with no major concerns. | | |
| Nov. 2019 | Full Proposal submitted to CALS Curriculum Committee | | |
| Spring 2020 | UF Graduate School Technical review | | |
| Spring 2020 | Graduate Council Review and Discussion | | |
| Spring 2020 | Graduate Council approval | | |

| Spring/Summer 2020 | University Curriculum Committee Information Item | | |
|--------------------|--|--|--|
| Spring/Summer 2020 | Faculty Senate Steering Committee approval | | |
| Spring/Summer 2020 | Faculty Senate review and approval | | |
| Fall 2020 | UF Academic Affairs Approval | | |
| Fall 2020 | Board of Trustees review and approval | | |
| Spring 2021 | Submission for February 2021 consideration by the Board of Governors | | |
| Fall 2021 | Plant Breeding Ph.D. Program implementation | | |

VII. Program Quality Indicators - Reviews and Accreditation

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations. Please include evidence that teacher preparation programs meet the requirements outlined in Section. 1004.04, Florida Statutes, if applicable.

This section is based on the 2009-2016 State Board of Governors (BOG) Academic Program Reviews (conducted every 7 years) for plant breeding related Ph.D. degrees in three CALS departments, one school and one interdisciplinary program; respectively, the Agronomy (AGR), Horticultural Sciences (HOS), and Environmental Horticulture (ENH) Departments, the School of Forest Resources and Conservation (SFRC), and the Plant Molecular and Cellular Biology (PMCB) Graduate Program.

Previous reviews of these four UF/IFAS units (AGR, HOS, ENH and SFRC) have recognized that plant breeding and genetics faculty were strengths of these units but pointed out that programs were fragmented and sometime lacked focused interaction with other departments. Despite being the largest land-grant university without a formal plant breeding graduate program, UF/IFAS has the largest number of plant breeding faculty of any university in the nation, we have one of the largest cultivar development programs, and we are one of the few universities working with specialty crops. The proposed interdisciplinary program will unify UF/IFAS faculty working in breeding and formalize a program that is already underway. This program will create a curriculum that can be advertised and promoted. The increased national and international visibility is expected to generate more support from industry and funding agencies and increase the number and quality of our graduate students.

Some of the departments have also indicated the need to recruit more highly qualified graduate students. For example, the SFRC Advisory Board conducted a full SWOT review and recommended focusing recruiting on quality and diversity of applicants, as part of making UF a "Top 10 University." HOS and ENH pointed out the steep competition for high caliber students from other peer universities. Likewise, PMCB has listed recruitment and securing enrollment of top graduate students among their top five impediments. The proposed program will invest in recruiting, enrolling and graduating highly competitive plant breeding graduate students. We expect that this effort will increase the net number of applicants to CALS. The recruitment investment will bring more students to consider not only plant breeding programs but also other departments and programs in CALS. The program will only accept 5-6 students per year in the first cycle, which should in turn result in other top applicants being re-directed to other UF departmental graduate programs. We have seen this kind of cross-departmental benefit from the recruiting efforts of the PMCB graduate program in the past. This increase in CALS students will also increase the number of students taking graduate classes already offered by plant breeders and other faculty within each department.

Another common issue identified by these departments is the limited funding for fellowships and assistantships to support graduate students. HOS and ENH pointed out that their graduate assistants are mainly supported by funding from individual faculty members' research programs, meaning that faculty with limited resources will be less active in graduate education. PMCB notes that limited internal funding to support a competitive stipend means the best applicants frequently accept offers from competing universities that offer better benefits. The new plant breeding program, with current support of the Plant Breeders Workgroup (PBWG) and UF/IFAS Research via the Plant Breeding Graduate Initiative intends to address this limitation by providing funds to early career faculty who are still building their research programs. The Plant Breeding Graduate Initiative (PBGI) will ensure assistantships for 3-4 students annually and thus more than 60-80% of the recruitment goal will be achieved with internal assistantships.

Agronomy's last external review in 2012 identified opportunities to more closely involve off-campus faculty in graduate education. HOS and ENH also pointed out in their 2015 BOG report that the lack of online/distance courses hinders the participation of off-campus faculty and students. The HOS graduate program has few online courses and even though some classes are available via video conferencing to students located in Research and Education Centers, further efforts are needed to offer courses via distance education. The Environmental Horticulture program also needs more online graduate level course offerings. SFRC plans to add graduate level courses to supplement all Ph.D. students' choice of courses and will increase their distance education portfolio in a strategic manner to support graduate education. SFRC faculty are spread throughout the state, limiting their collaboration. One of the goals in the 2016-2019 Plant Breeders Working Group Strategic Plan is to expand online instruction with creditbased courses, short courses, and webinars. This plan is currently being implemented and four out of the six proposed core courses will be available for online delivery in 2020. The proposed plant breeding program will improve efficiency of graduate education by unifying on-campus and off-campus faculty already working together in plant breeding and formalizing a program currently underway but with more emphasis in online delivery to further integrate off-campus faculty. Synergy and collaborative research and extension between the RECs and the main campus is an added strength.

The Department of Agronomy emphasizes that future research endeavors will be increasingly interdisciplinary, specifically requiring partnerships with statistics, food science, economics, environmental horticulture, environmental engineering, hydrology, agricultural engineering, and microbiology. SFRC also works with a diversity of departments around UF to identify appropriate courses for Ph.D. students to provide a high quality, holistic education. HOS, ENH and AGR take note of their critical mass of renowned plant breeders and geneticists specializing in field production of vegetables and fruit crops, forages, plant breeding, molecular genetics, crop physiology and management. Research programs are internationally recognized and are highly successful in securing national competitive funding and provide an excellent opportunity to educate students in crop breeding with the latest tools of the field. Another of the strengths of the new plant breeding degree program will be its interdisciplinary emphasis and ability to educate well rounded breeders that succeed in academia and industry. This will be achieved by focusing on traditional and advanced methods that will incorporate different disciplines and experts from the university.

The program will also continue to facilitate development of professional competencies among its students, developing the professional skills sought by industry and academia. For example, the Plant Breeders Working Group (PBWG) provides financial support of the Plant Science Council (PSC), a University of Florida graduate student organization for students involved in plant sciences (https://www.ufplants.org/). The PSC has held an annual symposium since 2017 with invited speakers from industry to boost professional development and engagement of graduate students with a broader audience.

Plant breeding faculty in the involved departments and units have excellent collaboration and on-going research projects with private industry. The impact of research discoveries linked to the proposed program will expand since between 30-70% of net royalties from licensed cultivars are returned to UF/IFAS plant breeding research programs. With a robust graduate program there are more opportunities for students to connect their research with producers and industry (R&D) and become the next face of innovation in plant breeding. Graduate students in this new program will have an opportunity to gain from a diverse array of research programs and the program's research expertise and student development will make our graduates highly competitive in the job market.

VIII. Curriculum

A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor's degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

Student Learning Outcome (SLO) 1 Knowledge

Explain and apply fundamental theories and principles of plant breeding, genetics and genomics, plant biochemistry, plant transformation technologies and computational genetics.

Assessment Method:

• Evaluation of the student's program of study and completion of IDP (Individual Development Plan).

- Successful defense of qualifying exam by the end of the student's second year.
- Successful defense of dissertation approved by the supervisory committee using a facultydeveloped rubric.

Targeted outcome: 90% of all students in the program to successfully pass and/or attain all these assessment milestones.

SLO 2 Knowledge

Apply genetic inheritance theory to crops of interest. Having an understanding of a targeted crops life cycle, mode of reproduction and trait inheritance will determine the best strategies for trait improvement.

Assessment Methods:

- Evaluation of the student's program of study and completion of IDP (Individual Development Plan).
- Successful defense of qualifying exam by the end of the student's second year.
- Successful defense of dissertation recognized by the supervisory committee using a faculty-developed rubric.

Targeted outcome: 90% of all students in the program to successfully pass and/or attain all these assessment milestones.

SLO 3 Skills

Use critical thinking to review scientific literature, evaluate, plan, analyze, and design experiments related to plant breeding and cultivar development.

Assessment Methods:

- Preparation of one or more manuscripts judged ready for publication in peer-refereed research journals, at professional conferences, and/or at industry field days.
- Successful defense of dissertation recognized by the supervisory committee using a faculty-developed rubric.

Targeted outcome: 90% of the students will meet these criteria.

SLO 4 Skills

Communicate effectively and clearly in written and oral form plant breeding ideas, technical data and design information to students, scientists, and the public.

Assessment Methods:

- Number of students giving oral and poster talks at state, national and international scientific meetings.
- Written and oral presentations required for advancement to Ph.D. candidacy
- First author publications and publications co-authored with advisors and/or collaborators.
- Annual written evaluations by advisor and supervisory committee

Target Outcome: 90% of the students will meet these criteria.

SLO 5 Skills

Prepare and complete plant breeding research of sufficient quality to be published in peer reviewed journals, at professional conferences, and/or at industry field days.

Assessment Methods:

 One or more manuscripts ready for submission in peer-refereed research journals, at professional conferences, and/or at industry field days.

Target Outcome: 90% of the students will meet these criteria.

SLO 6 Professional Behavior

Students will interact with peers, faculty, and staff with honesty, respect, ethical behavior, cultural sensitivity, fellowship and cooperation.

Assessment Methods:

- Consistent adherence during the degree program to the University of Florida's Honor Code (evidenced by student permanent file).
- Observations and feedback by faculty advisor and supervisory committee during class activities, seminars, research work, dissertation defense and participation in the faculty's department seminar program and professional societies.
- Annual written evaluations by advisor and supervisory committee
- Completion of IDP (Individual Development Plan)

Targeted Outcome: 90% of active students will have no additions to their permanent file indicating concern with this SLO.

B. Describe the admission standards and graduation requirements for the program.

Admission will require a recognized baccalaureate or graduate degree from a regionally accredited U.S. institution or a comparable degree from an international institution. The process will consider the verbal and quantitative GRE scores and a minimum undergraduate GPA for students without an M.S. degree. Additional requirements include a minimum of three letters of reference, a statement of purpose, and a resume, which the plant breeding admissions committee will use to assess the student's qualifications for admission to the program and potential for research scholarship. International students must comply with current UF standards for admission to the Graduate School, including requirements for English language competency and financial responsibility.

Applicants should have a B.S. or M.S. in agricultural, horticultural, forestry, biological or chemical sciences with desirable advanced undergraduate coursework in genetics, statistics, plant breeding, and biochemistry. However, outstanding students from a broad range of science and engineering disciplines will be considered. Prior completion of a master's degree from a regionally accredited institution or international equivalent is desirable, preferably in a field of study that provides the student with a solid grounding in the scientific method and plant sciences.

The plant breeding doctoral degree requires a minimum of 90 credit hours beyond a bachelor's degree and includes required courses, elective courses and dissertation research. To graduate in the program, students are required to have a minimum of 40 credits of coursework toward their major. All students are required to take 20 credits from required courses (listed in VIII section C Table 1) and choose a minimum of 20 additional credits from the list of elective courses (listed in VIII section C Table 2) or as determined by the supervisory committee.

The curriculum was designed to provide the student with a strong background in the scientific method, data collection and analysis of data during the first semester, and plant breeding during the second semester. This ensures that students will be prepared to take specialized courses and have the ability to formulate their dissertation studies.

Doctoral students must complete an Individual Development Plan (IDP), conduct independent research satisfactorily and maintain a 3.0 GPA. Students must establish a supervisory committee by the end of the first year, comprised of at least three plant breeding faculty members, including the chair, and one external faculty member. Written and oral qualifying exams are required for all candidates for a Ph.D. degree. It is recommended that the qualifying exams will be completed by the end of the second year. Successful completion of the qualifying exams will be determined by the student's supervisory committee, as each student and exam will be unique. The student is considered to have satisfactorily passed the qualifying exam when the decision of the supervisory committee is unanimously affirmed. If the examination is unsatisfactory, the supervisory committee may permit a second examination or deny the student from continuing in the program.

For completion of their degree, all doctoral students must have at least one first author publication submitted to a peer-reviewed journal in their research field before graduation; students will be strongly encouraged to publish before graduating. This requirement may be waived under extenuating circumstances, as approved by the supervisory committee and the program's leadership (graduate coordinator and/or director). Students are required to participate every year in the Plant Breeders Working Group annual meetings.

Doctoral students should also pass a final examination, administered by the student's supervisory committee. The examination format is at the discretion of the supervisory committee and consistent with

the UF Graduate School policies. The graduate supervisory committee will assess the written dissertation and will examine the student's overall comprehension and knowledge in a final defense of the dissertation.

C. Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.

The Plant Breeding Ph.D. degree will require a minimum of 90 post-baccalaureate credit hours and will include required courses, elective courses and dissertation research. To graduate in the program, students are required to have a minimum of 40 credits of coursework toward their major. All students are required to take 20 credits from required courses (Table 1) and choose a minimum of 20 additional credits from the list of elective courses (Table 2) or as determined by the supervisory committee. Students admitted with a M.S. degree may transfer up to 30 credits toward their elective courses requirement from a regionally accredited institution or international equivalent, subject to existing UF Graduate School policies.

The required courses STA 6093 Introduction to Applied Statistics for Agricultural and Life Sciences (3 credits), AGR 5266C Field Plot Techniques (3 credits), AGR 5321C Genetic Improvement of Plants (3 credits) and HOS 6XXX2 Survey of Breeding Tools & Methods (3 credits) must be taken during the first fall and spring semesters. AGR6325L Plant Breeding Techniques (1 credit) and PCB 6555 Introduction to Quantitative Genetics (3 credits), also required courses for the major, can be taken anytime during the students' graduate studies. In addition, students are required to take four credits of HOS 6XXX1 Journal Colloquium, which can also be taken any fall or spring semester during the students' graduate studies. Students are required to maintain at least a B (3.00 truncated) in all required courses toward the major.

Furthermore, students must also choose a minimum of 20 additional credits from the list of elective courses provided in VIII section C Table 2. Students entering the doctoral program with a completed master's degree may transfer up to 30 hours of graduate credits toward their elective courses requirement from a regionally accredited institution or international equivalent, subject to existing UF Graduate School policies.

If similar level course(s) were taken prior to the doctoral degree, a petition must be submitted by the student's supervisory committee chair to exclude and/or replace specific courses. The petition needs to be approved by the program graduate coordinator and submitted to CALS and the Graduate School, when deemed necessary.

In summary, all students must take the 20 credits of required courses listed in Table 1 and choose a minimum of 20 additional credits from the list of elective courses listed in Table 2. The doctoral supervisory committee may determine additional elective courses according to the area of plant breeding specialization.

Table 1. List of required courses

| Required Courses | Credit Hours |
|--|--------------|
| AGR 5266C Field Plot Techniques | 3 |
| AGR 5321C Genetic Improvement of Plants | 3 |
| AGR 6325L Plant Breeding Techniques* | 1 |
| PCB 6555 Introduction to Quantitative Genetics** | 3 |
| HOS 6XXX ¹ Journal Colloquium*** | 4 |
| HOS 6XXX ² Survey of Breeding Tools & Methods | 3 |
| STA 6093 Introduction to Applied Statistics for Agricultural and Life Sciences | 3 |
| TOTAL | 20 |

^{*} Students can take AGR 6325L any spring semester of odd years in coordination with their supervisory committee.

Table 2. List of elective courses.

| Elective Courses | Credit Hours | |
|------------------|--------------|--|
|------------------|--------------|--|

^{**} Students can take PCB 6555 any fall semester of even years in coordination with their supervisory committee.

^{***} Students can take HOS 6XXX¹ Journal Colloquium (1 credit) any fall and spring semester to be counted toward the total 4 credits required during their graduate studies.

| AGR 5307 Molecular Genetics for Crop Improvement | 3 |
|--|---|
| AGR 6322 Advanced Plant Breeding | 3 |
| AGR 6XXX Plant Chromosomes and Genomes | 3 |
| AGR 5444 Ecophysiology of Crop Production | 2 |
| BCH 5045 Graduate Survey of Biochemistry | 4 |
| NEM 5004C Graduate Survey of Nematology | 3 |
| ENY 5006 Graduate Survey of Entomology | 2 |
| ENY 5006L Graduate Survey of Entomology Laboratory | 1 |
| GMS 6231 Genomics and Bioinformatics | 3 |
| HOS 5242 Genetic and Breeding of Vegetable Crops | 3 |
| HOS 6201 Breeding Perennial Cultivars | 3 |
| HOS 6236 Molecular Marker-Assisted Plant Breeding | 3 |
| HOS 6932 Horticultural Physiology | 3 |
| PCB 5065 Advanced Genetics | 4 |
| PCB 5530 Plant Molecular Biology and Genomics | 3 |
| PCB 6685 Population Genetics | 4 |
| PLP 5005C General Plant Pathology | 4 |
| PLP 6291 Plant Disease Diagnosis | 3 |

Please note that HOS 6XXX¹ Journal Colloquium, HOS 6XXX² Survey of Breeding Tools & Methods and AGR 6XXX Plant Chromosomes and Genomes are currently offered as special topics courses in the Graduate Catalog but are expected to be approved by the Academic Approval Tracking System and have their own prefixes and course numbers assigned before the start of this new graduate degree program.

| Dissertation Research | Credit hours |
|----------------------------|--------------|
| PLS 7979Advanced Research | variable |
| PLS 7980 Doctoral Research | variable |

D. Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

The plant breeding doctoral degree requires a minimum of 90 credit hours beyond a bachelor's degree and includes required courses, elective courses, and dissertation research. Below is an example reflecting four years of full-time study.

| Term | Course | Credits |
|---------------|--|----------|
| Fall Year 1 | STA 6093 Introduction to Applied Statistics for Agricultural and Life Sciences | 3 |
| | AGR 5266C Field Plot Techniques | 3 |
| | HOS 6XXX ¹ Journal Colloquium | 1 |
| | PLS 7979 Advanced Research or Elective Courses | 2 |
| | Total | 9 |
| Caring Voor 1 | ACD 5224C Canatia Improvement of Plants | 3 |
| Spring Year 1 | AGR 5321C Genetic Improvement of Plants | 3 |
| | HOS 6XXX1 Journal Colloquium | 1 |
| | HOS 6XXX ² Survey of Breeding Tools & Methods | 3 |
| | PLS 7979 Advanced Research or Elective Courses | 2 |
| | Total | 9 |
| Summer Year | PLS 7979 Advanced Research or Elective Courses | 6 |
| 1 | Total | 6 |
| Fall Year 2 | HOS 6XXX¹ Journal Colloquium | 1 |
| ran rour z | PLS 7979 Advanced Research or Elective Courses | 8 |
| | Total | 9 |
| Spring Year 2 | AGR 6325L Plant Breeding Techniques | 1 |
| Spring real 2 | HOS 6XXX ¹ Journal Colloquium | <u> </u> |
| | | 7 |
| | PLS 7979 Advanced Research or Elective Courses | |
| | Total | 9 |
| Summer Year | PLS 7979 Advanced Research or Elective Courses | 6 |

| 2 | Total | 6 |
|---------------|--|----|
| | | |
| Fall Year 3 | PCB 6555 Introduction to Quantitative Genetics | 3 |
| | PLS 7980 Doctoral Research or Elective Courses | 6 |
| | Total | 9 |
| | | |
| Spring Year 3 | PLS 7980 Doctoral Research or Elective Courses | 9 |
| | Total | 9 |
| | | |
| Summer Year | PLS 7980 Doctoral Research | 6 |
| 3 | Total | 6 |
| | | |
| Fall Year 4 | PLS 7980 Doctoral Research | 9 |
| | Total | 9 |
| | | |
| Spring Year 4 | PLS 7980 Doctoral Research | 9 |
| | Total | 9 |
| | | |
| Summer Year | PLS 7980 Doctoral Research | 6 |
| 4 | Total | 6 |
| | Overall Number of Credits | 96 |

E. Provide a one- or two-sentence description of each required or elective course.

Required Courses:

AGR 5266C Field Plot Technique (3 credits, letter graded)

Techniques and procedures used in design and analysis of field plot, greenhouse, and laboratory research experiments. Application of research methodology, the analysis and interpretation of research results. Prerequisite: STA3023.

AGR 5321C Genetic Improvement of Plants (3 credits, letter graded)

Genetic basis for crop improvement including methods for improving crop yield, pest resistance, and adaptability. Emphasis on manipulating genetic variability in self- and cross-pollinated annual and perennial crop plants. Prerequisite: AGR 3303.

AGR 6325L Plant Breeding Techniques (1 credit, letter graded)

Examination of various breeding techniques used by agronomic and horticultural crop breeders in Florida. Field and lab visits to active plant breeding programs, with discussion led by a specific breeder each week. Hands-on experience in breeding programs. Prerequisite: AGR 3303 or equivalent. Co-requisite: AGR 6322.

HOS 6XXX1 Journal Colloquium (1 credit, letter graded)

Course will focus on critical discussion and presentation of contemporary plant breeding topics. A forum for students to explore the role of research, research paradigms, critical issues, emerging events, and scholarly writings through interactions with speakers, faculty and each other.

HOS 6XXX2 Survey of Breeding Tools & Methods (3 credits, letter graded)

A complete survey of methods and strategies commonly used in plant breeding and cultivar development. Course will cover, in a modular fashion, methodologies from traditional plant breeding methods to molecular methods. Lectures and/or hands-on activities will be taught by experts currently using these methods. Prerequisite: AGR 5321 or equivalent.

PCB 6555 Introduction to Quantitative Genetics (3 credits, letter graded)

Intended for students of all disciplines who are interested in genetic principles and biometric evaluation of characters that exhibit continuous variation in natural populations or breeding programs. Prerequisite: STA 6166.

STA 6093 Introduction to Applied Statistics for Agricultural and Life Sciences (3 credits, letter graded)

Provides students with a conceptual and practical understanding of the application of statistics in the agricultural and life sciences. A combination of lectures, programming demonstrations, data exercises using the programming language R, group activities, and primary literature will be used.

Elective Courses:

AGR 5307 Molecular Genetics for Crop Improvement (3 credits, letter graded)

Lectures and laboratory demonstrations for a thorough understanding of concepts and applied aspects of plant molecular and cellular biology. Discussion of current research in plant biotechnology and functional genomics. Prerequisite: AGR 3303.

AGR 6322 Advanced Plant Breeding (3 credits, letter graded)

Theory and use of biometrical genetic models for analytical evaluation of qualitative and quantitative characteristics, with procedures applicable to various types of plant species. Prerequisite: AGR 3303, AGR 4231, AGR 6311, and STA 6167.

AGR 6XXX Plant Chromosomes and Genomes (3 credits, letter graded)

This course is designed to introduce students to plant chromosome structures, inheritance, and the basic genomic tools to analyze plant genomes. Concepts to be introduced include plant DNA organization in chromosome structure, principles and technologies of cytogenetics, plant genomic DNA structure and function, transcriptome, DNA sequencing technologies/applications, basic tools for nucleotide sequence analysis, and plant genomic database exploring. Prerequisites AGR3303 Genetics or PCB 3063 Genetics

AGR 5444 Ecophysiology of Crop Production (3 credits, letter graded)

Physiological, ecological, and environmental responses that impact growth, development, and yield formation of cultivated crops. Prerequisites AGR 3005 or equivalent.

BCH 5045 Graduate Survey of Biochemistry (4 credits, letter graded)

Introduction to plant, animal, and microbial biochemistry for graduate students who have not had biochemistry. Integration and regulation of biochemical processes stressed; limited discussion of some biochemical techniques. Prerequisite: inorganic chemistry, organic chemistry, biology.

ENY 5006 Graduate Survey of Entomology (2 credits, letter graded)

Insect structure, function, development, classification, ecological niches, and control of those harmful to plants and animals. Corequisite: ENY 5006L.

ENY 5006L Graduate Survey of Entomology Laboratory (1 credit, letter graded)

Practical experience working with insects, using laboratory equipment, dissecting insects, and preparing laboratory reports. Collection required. Corequisite: ENY 5006.

GMS 6231 Genomics and Bioinformatics (3 credits, letter graded)

Principles of genomic characterization and bioinformatic analysis of eukaryotes. Prerequisite: STA 6166 and PCB 5065 or consent of instructor.

HOS 5242 Genetics and Breeding of Vegetable Crops (3 credits, letter graded)

Traditional and molecular breeding methods for vegetable crops and the influence of scientific research, government policies, and consumer preferences on vegetable crop improvement. Prerequisite: AGR 3303 or equivalent.

HOS 6201 Breeding Perennial Cultivars (3 credits, letter graded)

Methods of breeding perennial fruit and ornamental cultivars using mutations, cell and tissue culture, polyploidy, recurrent selection, and wide hybridization. Conservation and domestication of wild plants. Prerequisite: AGR 3303.

HOS 6236 Molecular Marker-Assisted Plant Breeding (3 credits, letter graded)

Providing an overview of terminology, methodology, and applied examples of utilizing molecular markers in a plant breeding program. Prerequisite: STA 6093 and AGR 5321C or equivalents.

HOS 6932 Horticultural Physiology (3 credits, letter graded)

This advanced course covers basic concepts and processes of plant physiology, including water relations, nutrient absorption, photosynthesis, respiration, carbohydrate partitioning, nutrition, and hormones. In order to deliver meaningful mastery of these contents, this course utilizes a combination of lectures and active-learning activities.

NEM 5004C Graduate Survey of Nematology (3 credits, letter graded)

Morphology, anatomy, development, feeding habits, life cycles, disease cycles, and control of nematodes

that parasitize plants and animals. Role of plant parasitic nematodes in disease complexes and as vectors of plant viruses. "Free-living" nematodes that inhabit oceans, fresh water, and soil.

PCB 5065 Advanced Genetics (4 credits, letter graded)

Examines genetic principles including gene and gene function; recombination and linkage; molecular markers, multipoint linkage analysis, and positional cloning; and quantitative, population, developmental, and non-Mendelian genetics. For graduate students in any life science discipline. Prerequisite: AGR 3303 or PCB 3063 and BCH 4024 or BCH 5045.

PCB 5530 Plant Molecular Biology and Genomics (3 credits, letter graded)

Integrated overview of the fundamental mechanisms enabling plant growth, development, and function, and approaches to study these at molecular level. Topics include replication, repair, transcription, translation, cell cycle, transformation, gene tagging, structural genomics, proteomics, and metabolomics.

PCB 6685 Population Genetics (4 credits, letter graded)

Provides a comprehensive introduction to the mathematical theory of allele and genotype frequency dynamics within and between populations and will serve as a springboard to more advanced topics in evolutionary biology. Topics covered include deterministic and stochastic processes in evolution and an introduction to classical quantitative genetics theory.

PLP 5005C General Plant Pathology (4 credits, letter graded)

Microorganisms and environmental factors that cause disease in plants. Symptoms and losses caused by plant diseases. Principles of plant disease development, diagnosis, and control. Genetics and epidemiology of plant diseases. Prerequisite: Course in biology or botany.

PLP 6291 Plant Disease Diagnosis (3 credits, letter graded)

Methods used in diagnosing plant diseases caused by fungi, bacteria, viruses, and abiotic conditions. Prerequisite: PLP 3002C/PLP 5005C, PLP 6262C.

Dissertation Research:

PLS 7979 Advanced Research (1-12 credits, S/U graded)

Research for doctoral students before admission to candidacy. Designed for students with a master's degree in the field of study or for students who have been accepted for a doctoral program. Not appropriate for students who have been admitted to candidacy.

PLS 7980 Research for Doctoral Dissertation (1-15 credits, S/U graded)

Research for Doctoral Dissertation.

F. For degree programs in the science and technology disciplines, discuss how industrydriven competencies were identified and incorporated into the curriculum and indicate whether any industry advisory council exists to provide input for curriculum development and student assessment.

Our integrated curriculum will equip students with traditional and contemporary breeding methodologies, including molecular techniques (ex: genomic prediction and editing), quantitative genetics, and analysis of breeding trials. Our curriculum was developed upon consultation with industry, non-profit, and academic sectors. While there are currently no specific guidelines for industry-driven competencies, our faculty interact regularly with industry stakeholders and many of our students who were educated in plant breeding have secured jobs in the private sector. Industry representatives from different crops provided their input with regards to the curriculum and one multinational offered to participate as a member of an advisory board (see support letters). We plan to implement a program advisory board with internal and external academic representatives as well as stakeholders including the private sector. The board will meet every other year to review and update the strategic plan for the program, including a review of the curriculum.

G. For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate. For degree programs in medicine, nursing, and/or allied health, please identify the courses that meet the requirements in Section 1004.08, Florida Statutes for required patient safety instruction.

No accreditation will be sought for this proposed graduate program. The American learned societies with interest in this program include: Crop Science Society of America (CSSA, crops.org), American Society for Horticultural Science (ASHS, ashs.org), National Association of Plant Breeders (NAPB, plantbreeding.org), Plant Breeding Coordinating Committee (PBCC, plantbreeding.org/content/pbcc), and their equivalent international societies, such as the CGIAR (cgiar.org, formerly known as the Consultative Group on International Agricultural Research), the European Association for Research on Plant Breeding (EUCARPIA, eucarpia.org), International Society for Horticultural Science (ISHS, ishs.org) and the Global Partnership Initiative for Plant Breeding Capacity Building (GIPB, fao.org/in-action/plantbreeding/en). While we expect that our students and faculty will interact closely with these societies, none of these societies accredit academic programs in the area of plant breeding.

H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why?

There are no learned societies or accrediting organizations for corresponding bachelor's or master's programs in the area of plant breeding.

I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 3 in Appendix A. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.

This program is primarily delivered in the classroom with some courses delivered online. Thus, the delivery will be a hybrid of traditional and distance delivery methods to graduate students residing on the main campus of the University of Florida and at the UF/IFAS Research and Education Centers (RECs) located throughout Florida using existing faculty from the Departments of Agronomy, Environmental Horticulture and Horticultural Sciences, and the School of Forest Resources and Conservation.

The delivery system for courses in this program will be a mix of traditional delivery to students present on main campus and nontraditional delivery by distance learning to students across the state in the different RECs. The long-term aim is to have all courses include an online component. Some of the courses, such as PCB 6555 Introduction to Quantitative Genetics, are currently being offered fully online while AGR 5321C Genetic Improvement of Plants is scheduled to be offered online in Spring 2020. All courses currently offer the possibility of distance learning through synchronous online delivery. This proven method has worked well and received positive feedback from students and faculty located across the state at the RECs. Since approximately 60% of plant breeding faculty are based at six RECs located across the state from Marianna to Homestead, it is crucial that students advised by off-campus faculty and conducting research at these locations be able to attend classes remotely with the aid of technology.

No specialized services are needed for the proposed delivery system nor do we expect it to require greater than normal financial support. It is not anticipated that the proposed PB graduate program will involve other universities and no such queries have been submitted. Collaboration with other universities in the state is limited since we are proposing the first plant breeding graduate program in Florida.

IX. Faculty Participation

A. Use Table 2 in Appendix A to identify existing and anticipated full-time (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).

Table 2 lists the 27 graduate faculty, from the four UF/IFAS departments, who will participate in the PB

interdisciplinary graduate program and will serve as chairs or members of supervisory committees of students. UF/IFAS plant breeders are housed in four different departments and different research and education centers across the state and this PB interdisciplinary program will unify faculty working in breeding. Even though PB faculty will not be budgeted by the proposed PB program, each faculty maintains their budgeted department in one of the four units mentioned before (HOS/ ENH, AGR or SFRC) all these faculty will be fully contributing in the PB program. Supervisory committee external members will be chosen from University of Florida graduate faculty members not affiliated with the PB program. We anticipate that by Year 5 of the program, we will have one additional new hire at the assistant professor level in one of the four academic departments (Agronomy, Horticultural Sciences, Environmental Horticulture, SFRC) involved in the creation of this new graduate degree.

Because the curriculum of the program relies on current coursework being taught in the involved departments, most faculty will not see a change in their responsibilities, or their time assigned to the new program. In the meantime, the department may see an increase in Ph.D. students taking these courses on a regular basis. The proposed program attempts to minimize the effects of the reallocation of teaching resources by re-allocating only 1% per teaching faculty FTE to the new program. A few members of the faculty will be devoting more time and energy to the graduate program because of the need to lead the new program. However, a rotational leadership is proposed, which will minimize the time faculty devote to the program in the long-term.

B. Use Table 3-Appendix A to display the costs and associated funding resources for existing and anticipated full-time faculty (as identified in Table 2-Appendix A). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

One of the primary costs of the Ph.D. program will be faculty and staff salaries and benefits. The reallocated E&G base is calculated based upon the percentage of faculty and staff salaries/benefits funded through E&G for the effort proposed on Table 3. We are also assuming an annual salary increase of 3% for faculty and staff. Based on projected enrollment trends (Table 1-B), the E&G cost per student FTE decreases from \$34,473 in Year 1 to \$23,174 in Year 5. Total projected E&G costs for Year 1 are \$120,657 and for Year 5 are \$336,027.

C. Provide in the appendices the abbreviated curriculum vitae (CV) for each existing faculty member (do not include information for visiting or adjunct faculty).

This information is provided in Appendix C.

D. Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.

As mentioned before, the proposed Ph.D. degree will be an interdisciplinary degree involving four IFAS units (AGR, HOS, ENH and SFRC) and will be administrated under the Horticultural Sciences Department where most of the plant breeders are housed. While statistics and academic indicators have not been generated for the subset of faculty working in plant breeding in each of these departments, we nevertheless collected productivity and quality indicators across these departments and among the PBWG to demonstrate that breeding faculty are active in research, teaching and extension. Plant breeding faculty are nationally and internationally recognized and have an impressive list of achievements and awards commensurate with their peers at top-tier institutions.

The table below shows the total number of faculty, the number of plant breeding faculty and their corresponding percentage in each of these four IFAS units. These faculty have research, teaching and extension responsibilities, thus fulfilling the land-grant mission.

| | Total Faculty | Plant Breeders | Percentage of Total Departmental Faculty in Plant Breeding |
|----------------------------------|---------------|-------------------|--|
| Agronomy (AGR) | 30 | 7 | 23% |
| Environmental Horticulture (ENH) | 34 | 3 | 9% |

| Horticultural Sciences HOS) | 58 | 15 | 26% |
|-----------------------------------|----|----|-----|
| School Forest Res. & Cons. (SFRC) | 73 | 2 | 3% |

The average Ph.D. students enrolled over the past six years across these departments was 32 for AGR, 63 for HOS and ENH combined (since their Ph.D. degree is jointly administered by ENH and HOS), and 42 for SFRC-Forest Resources and Conservation (FRC) major. All these departments had a significant increase in student enrollment during this period. From 2013to 2018, AGR increased their Ph.D. enrollment by 32%; HOS combined with ENH had an increase of 20%; and SFRC-FRC major had an increase of 45%.

Plant breeders in these four departments have chaired and successfully graduated a total of 128 graduate students, with 50 graduates in AGR, 66 in HOS and ENH, and 22 in SFRC.

In the last 10 years, plant breeding faculty have secured external support of approximately \$60 million in federal and private funding, bringing the average total support to nearly \$3 million per breeder. Such external funding includes research grants from the National Institutes of Health, National Science Foundation, and the United States Department of Agriculture and contracts through private industry. The development of cultivars and varieties by IFAS plant breeders not only contribute to augment Florida's agricultural industry but its positive impact have also significantly increased globally. For instance, in the last 10 years, more than 300 new cultivars have been developed by the University of Florida and cultivars for each of our 50 crops continue to grow year after year. Licensing of these cultivars has generated royalties that have seen an increase of \$1 million per year each of the last seven years, with \$14 million generated in 2018. With one of the most aggressive royalty re-investments initiatives of the nation, between 30-70% of this revenue is returned to research programs dedicated to developing cultivars and educating students. This re-investment initiative has positively impacted the quantity and quality of research carried by plant breeding faculty in UF/IFAS.

Graduate students working with plant breeding faculty regularly publish their research in top-rated peer-reviewed agriculture, horticulture, forestry and plant breeding journals, including: *Crop Science, Journal of the American Society of Horticultural Sciences, Horticulture Research, Plant Breeding, Molecular Breeding, Genetics, G3, Plant Molecular Biology, Plant Genome, Theoretical and Applied Genetics, The Plant Cell, and Proceedings of the National Academy of Sciences.* This clearly demonstrates the capacity of plant breeders to successfully prepare the new generation of plant breeders.

In their last academic program review, HOS generated an average of 77 scientific publications per year, ENH reported a similar number and AGR produced an annual average of 86 publications. SFRC reported a total of 140 publications in 2015. Faculty scholarly activity has increased steadily when HOS reported over 120 scientific publications in 2018. The impact of publications measured by the i10-index (number of publications with at least 10 citations) for HOS and ENH with a weighted average (by faculty tenure level) was 41, and 18, respectively.

Total Enrollment by Department and Degree for the Period of 2013-2018, Fall term (Source: OIPR – Office of Institutional Planning and Research)

| | | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----------------|-------|------|------|------|------|------|------|
| HOS + ENH | Total | 99 | 91 | 96 | 99 | 122 | 118 |
| | Ph.D. | 61 | 57 | 62 | 55 | 70 | 73 |
| | M.S. | 38 | 34 | 34 | 44 | 52 | 45 |
| AGR | Total | 44 | 53 | 68 | 68 | 74 | 72 |
| | Ph.D. | 25 | 30 | 37 | 35 | 32 | 33 |
| | M.S. | 19 | 23 | 31 | 33 | 42 | 39 |
| SFRC- FRC | Total | 89 | 98 | 114 | 127 | 128 | 123 |
| | Ph.D. | 31 | 36 | 44 | 45 | 51 | 45 |

| M.S. | 58 | 62 | 70 | 82 | 77 | 78 |
|------|----|----|----|----|----|----|
|------|----|----|----|----|----|----|

Graduate Degrees Granted by Department from 2013-2019 (Source: GIMS)

| | | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-------|-------|---------|---------|---------|---------|---------|---------|
| HOS | Ph.D. | 7 | 9 | 14 | 8 | 8 | 2 |
| поз | M.S. | 13 | 8 | 7 | 10 | 9 | 8 |
| ENH | Ph.D. | 4 | 5 | 2 | 4 | 3 | 4 |
| ENH | M.S. | 8 | 7 | 8 | 5 | 7 | 12 |
| ACD | Ph.D. | 6 | 5 | 6 | 7 | 6 | 6 |
| AGR | M.S. | 11 | 5 | 7 | 17 | 17 | 12 |
| SFRC- | Ph.D. | 3 | 5 | 7 | 3 | 11 | 12 |
| FRC | M.S. | 19 | 25 | 37 | 37 | 44 | 35 |

Academic Fundable Credit Hours (Student Credit Hours, Graduate) (Source: CALS)

| | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------|---------|---------|---------|---------|---------|---------|
| HOS | 1777 | 1435 | 1681 | 998 | 1535 | 1500 |
| ENH | 540 | 503 | 555 | 766 | 851 | 763 |
| AGR | 849 | 1047 | 1022 | 1310 | 1432 | 1345 |
| SFRC-FRC | 1657 | 2129 | 2465 | 2315 | 2521 | 1971 |

Faculty Grant Funding and IDC by Department from 2013-2017 (Source: UF/IFAS Research)

| | | 2013 | 2014 | 2015 | 2016 | 2017 |
|------|----------------|--------------|---------------|--------------|--------------|--------------|
| HOS | Grant Funds | 5,564,603.00 | 5,018,844.44 | 6,338,086.61 | 5,250,075.49 | 5,363,989.50 |
| | IDC | 1,111,325.00 | 1,134,128.40 | 1,598,038.00 | 1,329,821.73 | 1,282,861.45 |
| ENH | Grant Funds | 445,058.00 | 312,450.00 | 519,913.13 | 584,355.73 | 530,238.48 |
| | IDC | 30,737.00 | 43,877.00 | 118,590.80 | 98,377.90 | 112,462.12 |
| ACD | Grant Funds | 1,801,546.00 | 2,862,657.86 | 1,987,456.15 | 5,273,010.76 | 1,109,753.07 |
| AGR | IDC | 414,445.00 | 736,036.67 | 489,030.40 | 568,942.96 | 233,913.37 |
| SFRC | Grant Funds | 9,250,561.00 | 11,438,137.60 | 8,937,291.75 | 6,549,550.41 | 6,083,958.57 |
| | IDC | 1,251,015.00 | 1,816,688.29 | 1,540,241.00 | 1,290,980.68 | 1,169,491.65 |

Plant Breeding Royalty Funding Generated by Department from 2013-2018 (Source: UF/IFAS Research)

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----|----------------|----------------|----------------|----------------|----------------|----------------|
| HOS | \$4,020,156.02 | \$6,300,633.80 | \$6,845,691.01 | \$6,976,180.13 | \$9,185,992.36 | \$8,897,768.39 |
| ENH | \$97,649.32 | \$198,561.96 | \$183,839.57 | \$247,114.71 | \$307,335.72 | \$417,540.58 |

| AGR | \$461,555.62 | \$639,837.49 | \$351,467.66 | \$569,959.38 | \$506,736.57 | \$586,553.67 |
|------|--------------|--------------|--------------|--------------|--------------|--------------|
| SFRC | \$0.00 | \$184.03 | \$127.82 | \$0.00 | \$170.11 | \$166.95 |

Faculty Refereed Publications by Department from 2013-2018 (Source: UF/IFAS Research)

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|------|------|------|------|------|------|------|
| HOS | 81 | 65 | 101 | 75 | 75 | 107 |
| ENH | 20 | 22 | 24 | 25 | 24 | 17 |
| AGR | 60 | 58 | 87 | 78 | 94 | 84 |
| SFRC | 103 | 121 | 140 | 135 | 133 | 166 |

X. Non-Faculty Resources

A. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved.

The Libraries of the University of Florida form the largest information resource system in the state of Florida. The libraries hold 6,169,930 print volumes, 1,489,569 e-books (books in digital format), 145,280 full-text e-journal titles, and 1,092 electronic databases as of 2018. The George A. Smathers Libraries of the University of Florida, a system of six research libraries, includes libraries for sciences, humanities & social sciences, architecture & fine arts, education, and health sciences. The UF Levin School of Law supports a related, but independent law library. Additional library resources are available in two specialized libraries, the UF Digital Collections and the Special & Area Studies Collection. Books and periodicals, related to plant breeding are located primarily in the Marston Science Library.

The UF Libraries have more than 2,700 volumes and serials available in plant breeding and related fields. Electronic books, journals and many key databases, such as Web of Science, BIOSIS Citation Index, CAB Abstracts, Proquest SciTech Collection and others, are available via the internet to UF students, faculty and staff. Many relevant databases are multidisciplinary and are funded centrally. The UF Libraries expend over \$10.6 million annually on electronic resources. Listed below is a selection of the important journals available through UF Libraries for use by students pursuing a doctorate degree in plant breeding:

- American Journal of Botany (107 volumes, 1284 issues)
- Annual Review of Plant Biology (71 volumes, 71 issues)
- Crop Science (60 volumes, 360 issues)
- Current Opinion in Plant Biology (58 volumes, 58 issues)
- Euphytica (216 volumes, 2592 issues)
- Journal of Experimental Botany (71 volumes, 1420 issues)
- Plant Breeding (139 volumes, 834 issues)
- The Plant Cell (32 volumes, 384 issues)
- Plant Cell and Environment (43 volumes, 516 issues)
- Plant Molecular Biology (104 volumes, 312 issues)
- Plant Physiology (184 volumes, 416 issues)
- Plant Science (302 volumes, 302 issues)
- Proceedings of the National Academy of Sciences of the USA (116 volumes, 5824 issues)
- Scientia Horticulturae (277 volumes, 277 issues)
- Theoretical and Applied Genetics: International Journal of Plant Breeding Research (133 volumes, 1584 issues)
- Trends in Plant Science (25 volumes, 300 issues)

In addition, there are a growing number of open access journals in the field; the content of these journals is freely available to readers. Important titles of open access journals related to plant breeding include:

- Frontiers in Plant Science (11 volumes, 11 issues)
- Genetics (216 volumes, 864 issues)
- G3: Genes, Genomes, Genetics (10 volumes, 120 issues)
- HortScience* (55 volumes, 330 issues)
- Journal of American Society of Horticultural Science* (145 volumes, 870 issues)
- New Phytologist (228 volumes, 1368 issues)
- Plant Biotechnology Journal (18 volumes, 216 issues)
- Plant Genome (13 volumes, 39 issues)
- Plant Journal (104 volumes, 624 issues)

The Libraries hold memberships in a number of consortia, and in institutions such as the Center for Research Libraries, ensuring access to materials not held locally. "UBorrow" service allows UF patrons to easily borrow materials from any other Florida state university or college library. Materials not held in UF collections and unavailable via UBorrow are procured through Interlibrary Loan. Interlibrary Loan requests are fulfilled at no cost to the library patron; participation in this library collection exchange program is paid for by the UF Libraries. All students, faculty, and staff may use Interlibrary Loan services.

With monies allocated through the Provost and the UF budgeting process, the library materials budget is determined by the Dean of Libraries in consultation with the Senior Associate Dean for Scholarly Resources & Research Services and subject specialist librarians. The librarian subject specialists for the agricultural sciences and biological/life sciences, with input from the Plant Molecular & Cell Biology Program, Department of Biology, Department of Horticultural Sciences and the Department of Environmental Horticulture faculty, determine acquisition priorities for the year. Standing subscriptions to journal literature and databases make up the majority of purchasing. Online research guides for all UF disciplines and many specific topics are available from the library website http://library.ufl.edu. Many online tutorials for specific databases are also available. Additionally, the UF Libraries offer consultations, workshops, and events throughout the year.

B. Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3-Appendix A. Please include the signature of the Library Director in Appendix B.

No additional library resources beyond the current allocation and normal growth in holdings already in place to support current programs are necessary to implement or sustain the graduate program in Plant Breeding.

C. Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.

Facilities available to students in the Plant Breeding graduate program will be derived from the multiple academic units and Research and Education Centers (REC) participating, including the four UF/IFAS departments of Agronomy, Horticulture Sciences, and Environmental Horticulture, the School of Forest Resources and Conservation and the six REC units in Wimauma, Lake Alfred, Apopka, Homestead, Belle Glade and Marianna. Overall, these units include all the laboratory, greenhouse and field facilities of the Plant Breeding faculty, classrooms, computer facilities, and core laboratories of the Interdisciplinary Center for Biotechnology Research (ICBR), and Genetics Institute.

The Plant Breeding graduate program has 20 classrooms available for use as well as 7 teaching labs, 27 research labs. Also, there are 28 offices to support administration and core faculty operations. Additionally, plant breeders currently use approximately 414 acres across the state to conduct research trials and breeding activities.

The four departments involved currently provide workspaces for each graduate student enrolled under the supervision of a faculty member in such department.

There are no specific needs for specially equipped classrooms for instruction in this program, except those that are required for students with disabilities. Non special-use classroom space is centrally managed at the University of Florida.

^{*}These journals will become freely available without a subscription as of January 1, 2020.

It is important to emphasize that the proposed courses for this degree, including the new course, will utilize classrooms, teaching and research laboratories, office and other types of space that currently exist and are presently utilized by the above departments and RECs. In summary, our space requirements are currently met, and we do not anticipate additional space needs to implement the proposed program through Year 5.

D. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 3-Appendix A. Do not include costs for new construction because that information should be provided in response to X (E) below.

Two spaces are needed. First, an office for the program administrator large enough to conduct meetings with up to two students and/or faculty members. Second, a common office area for graduate students as they move between Research and Education Centers and the Main Campus, and/or for students housed in Main Campus programs, which have insufficient space to accommodate them. Options for internal reallocation of space within UF/IFAS will be considered to meet these needs.

E. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 3-Appendix A includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

At this point no additional research or instructional spaces are required to successfully implement and grow this proposed program.

F. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.

All plant breeding faculty have full access to classrooms and studios provided by the Center for Online Learning and Technology (COLT) Recording Facilities. Classrooms are fully equipped with multimedia, video conferencing and recording capabilities. This includes Mediasite streaming and video recording, Zoom videoconferencing, a computer enabled podium with 2 microphones and 2 wireless instructor microphones, overhead projection screen, cameras for speakers and audience, USB and HDMI connections for laptop or other device, audience desktop microphones, and portable hand-held or clothing attached microphone/speaker for room projection. COLT also offers fully equipped video and sound recording capabilities available 24/7 to create content for online course or training programs, including greenscreen/bluescreen, overhead camera for tabletop demonstrations, simulated wet lab stand, digital microscope, lightboard, among other state-of-the-art digital technology.

The breeders also have access to an array of equipment and facilities at the different research and extension centers. The equipment is available and currently utilized for breeding research and training purposes in a variety of species. For example, UF plant breeders have cone planters and seed drills that can plant any type of seed for breeding work whether it is corn, peanuts, small grain crops, grasses or other types of forages. Each program will have their own sets of specialized equipment for collecting tissue, soil samples and propagation of perennial plants. Field equipment is available at our research farms that can maintain both annual and perennial crops through the growing season whether it is cultivation, fertigation, irrigation or harvesting. For harvesting research plots or seed increase blocks, the plant breeding programs have updated combines that are specifically designed to harvest small plot research areas with an ability to harvest larger areas. For example, several programs share a Wintersteiger combine that can harvest individual plots for small grains, corn, sesame, soybeans and cow peas. In addition, there is a forage Wintersteiger for harvest of forage breeding lines such as annual ryegrass, alfalfa, clover and bermudagrass. There is a sod harvester available for testing the harvestability of turfgrass plots. The peanut breeding program has a peanut combine modified for individual plot work and smaller thrashers for smaller plots. Once the harvest is complete, drying facilities are available at all research farms. At most RECs, the breeders have access to dedicated breeding rooms assigned to multiple faculty and their staff to process samples. All research centers also have cold storage facilities to store seed until needed for future plantings. Drying capabilities are also available on campus and at research centers.

For sugarcane and tall bioenergy crops, the EREC and the PSREU units have ultra-high pivots dedicated to irrigating these crops. These pivots have injection capabilities to easily apply liquid fertilizer and apply pesticides, if needed. All breeding programs, on campus or at research centers, have ample greenhouse space (some new) available for research projects or maintenance of germplasm. Many greenhouses have grow-lights available to maintain different daylengths. Growth chamber facilities are also available on campus or at research centers.

UF breeding programs have research laboratories with an array of their own equipment or easy access to equipment, ranging from microscopes, thermocyclers, freeze dryers, microbalances and real-time PCR machines. In addition, many breeders have also relied on the UF Interdisciplinary Center for Biotechnology Research to support their research and the training of new students. Many of the breeders are also investors in the UF High Performance Computing - HiPerGator, which is used for analysis of large amount of breeding data.

In summary, plant breeders have all the specialized equipment in the lab, greenhouses, and field for research and instructional purposes that will be used for the implementation of this program. Thus, we do not anticipate additional specialized equipment needs to implement the proposed program through Year 5.

G. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 3-Appendix A.

No additional special categories of resources are needed to implement the program through Year 5.

H. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 3-Appendix A.

It is anticipated that all doctoral students in this program will receive graduate assistantship or fellowship support since financial support is a critical element in recruitment of top applicants and maintenance of a Ph.D. program. The plant breeders are envisioning a unique program that has continuous support from licensing royalties. Since 2010, the UF/IFAS Plant Breeders Working Group (PBWG) and UF/IFAS Research have funded 23 graduate student assistantships through the Plant Breeding Graduate Initiative (PBGI). The proposed program is expected to recruit top students with interest in plant breeding (maximum of 5-6 students per year in the first cycle). With continuing support of the Plant Breeders Workgroup (PBWG) and IFAS-Research, the PBGI will ensure assistantships for 3-4 students annually and thus 60-80% of the recruitment goal will be achieved with internal funding.

We also project an increase in the philanthropy endowments represented by the Plant Breeding Graduate Initiative (PBGI). The PBGI represents an annual funding opportunity provided by UF/IFAS Research and Florida Foundation Seed Producers, a Direct Support Organization (DSO) that supports the plant breeding research programs. IFAS Research currently funds \$60,000 per cohort per year, while the plant breeders provide \$60,000. We are predicting that with the success of the program the plant breeders will expand their support by Year 5 for a total of \$90,000 per year. Furthermore, we are anticipating that the program will obtain support for one Graduate School Funding Award (GSFA) each year for the first five years.

The visibility provided by this new graduate program will increase UF/IFAS opportunities to obtain industry support targeting development of new plant breeders. Moreover, the plant breeding faculty have an excellent track record of obtaining extramural support and the number of grant-supported assistantships has grown steadily. The increased visibility of this new interdisciplinary program would enhance plant breeding faculty's chances of more successfully competing for extramural research project funding.

Also, the addition of this doctoral program will make us competitive for university-wide fellowships that are limited to doctoral students and we plan to take advantage of those opportunities.

I. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

The UF/IFAS Plant Breeding Graduate Program is a field-based applied breeding program which provides students with hands-on experience and exposure to 50 crops that our faculty research and investigate. As part of their plant breeding education, both our on-campus or off-campus students are required to carry out extensive field work research. UF/IFAS provides research support for faculty

members including facilities on the University of Florida campus plus off-campus facilities including 12 Research and Education Centers, five Research and Demonstration Sites (that include two biological stations) and a research forest. We therefore feel that we will be able to provide adequate sites for student research and experiential learning.

Even though we do not require an internship or practicum for doctoral students in the proposed degree program, students are encouraged to pursue an outside internship with industry, governmental agencies, and non-governmental organizations with the duration of at least one month. We have excellent collaborative relationships with industry and other organizations so our students will be able to gain experience in other applied breeding programs especially with potential future employers (private and public).

CITED LITERATURE

- Guner, N. and T. C. Wehner. 2003. Survey of U.S. land-grant universities for training of plant breeding students. Crop Science 43: 1938-1944.
- USDA Plant Breeding Working Group. 2015. USDA Roadmap for plant breeding. https://www.usda.gov/sites/default/files/documents/usda-roadmap-plant-breeding.pdf (accessed 1 August 2019)
- Sylak-Glassman et al. 2016. Examination of plant breeding at U.S. academic institutions and private companies in 2015. IDA Paper P-5331. Institute for Defense Analyses (IDA) Science and Technology Policy Institute, Washington, DC. https://bit.ly/2t3vpGj doi:10.2134/csa2018.63.0701

TABLE 1-B

PROJECTED HEADCOUNT FROM POTENTIAL SOURCES

(Graduate Degree Program)

| Source of Students (Non-duplicated headcount in any given year)* | Year 1 HC | Year 1 FTE | Year 2 HC | Year 2 FTE | Year 3 HC | Year 3 FTE | Year 4 HC | Year 4 FTE | Year 5 HC | Year 5 FTE |
|--|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
| Individuals drawn from agencies/industries in your service area (e.g., older returning students) | 1 | 0.5 | 1 | 0.5 | 1 | 0.5 | 2 | 1 | 2 | 1 |
| Students who transfer from other graduate programs within the university** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Individuals who have recently graduated from preceding degree programs at this university | 1 | 0.75 | 2 | 1.5 | 3 | 2.25 | 4 | 3 | 4 | 3 |
| Individuals who graduated from preceding degree programs at other Florida public universities | 1 | 0.75 | 2 | 1.5 | 2 | 1.5 | 3 | 2.25 | 3 | 2.25 |
| Individuals who graduated from preceding degree programs at non-public Florida institutions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Additional in-state residents*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Additional out-of-state residents*** | 1 | 0.75 | 3 | 2.25 | 5 | 3.75 | 6 | 4.5 | 6 | 4.5 |
| Additional foreign residents*** | 1 | 0.75 | 2 | 1.5 | 4 | 3 | 5 | 3.75 | 5 | 3.75 |
| Other (Explain)*** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Totals | 5 | 3.5 | 10 | 7.25 | 15 | 11 | 20 | 14.5 | 20 | 14.5 |

^{*} List projected annual headcount of students enrolled in the degree program. List projected yearly cumulative ENROLLMENTS instead of admissions.

^{**} If numbers appear in this category, they should go DOWN in later years.

^{***} Do not include individuals counted in any PRIOR category in a given COLUMN.

Table 2 Anticipated Faculty Participation

| Faculty Code | Faculty Name or "New Hire" Highest Degree Held Academic Discipline or Specialty | Rank | Contract Status | Initial Date for Participation in Program | Mos. Contract Year 1 | FTE Year 1 | % Effort for Prg. Year 1 | PY Year 1 | Mos. Contract Year 5 | FTE Year 5 | % Effort for Prg. Year 5 | PY Year 5 |
|-----------------|---|-----------|-----------------|---|----------------------------|---------------|--------------------------|--------------|----------------------------|---------------|--------------------------------|--------------|
| Α | Alan Chambers, Ph.D. | | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Genetics & Breeding | Professor | track | | | | | | | | | |
| Α | Ali Md Babar, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.03 | 0.03 | 12 | 1.00 | 0.03 | 0.03 |
| | Genetics | Professor | track | | | | | | | | | |
| Α | Ann Blount, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Turf Breeding & Genetics | | | | | | | | | | | |
| Α | Bala Rathinasabapathi, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.03 | 0.03 |
| | Breeding & Genomics | | | | | | | | | | | |
| Α | Barry Tillman, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | | | | | | | | | | | |
| Α | David Clark, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.03 | 0.03 | 12 | 1.00 | 0.06 | 0.06 |
| | Breeding & Biotechnology | | | | | | | | | | | |
| Α | Esteban Rios, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.06 | 0.06 |
| | Breeding & Genetics | Professor | track | | | | | | | | | |
| Α | Fredrick Gmitter, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | | | | | | | | | | | |
| Α | Fredy Altpeter, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.03 | 0.03 | 12 | 1.00 | 0.03 | 0.03 |
| | Biotechnology | | | | | | | | | | | |
| Α | Gary Peter, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.03 | 0.03 |
| | Genomics & Cell Biology | | | | | | | | | | | |
| Α | Geoffrey Meru, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Genetics & Genomics | Professor | track | | | | | | | | | |
| Α | German Sandoya M., Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | Professor | track | | | | | | | | | |
| Α | Hardev Sandhu, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Management | Professor | track | | | | | | | | | |
| Α | Harry Klee, Ph.D. | Eminent | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Genetics and Biochemistry | Scholar | | | | | | | | | | |
| Α | Heqiang (Alfred) Huo, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | Professor | track | | | | | | | | | |

Worksheet Table 2 Faculty Participation

Table 2
Anticipated Faculty Participation

| Α | José Chaparro,Ph.D. | Associate | Tenure | Fall 2021 | 12 | 1.00 | 0.03 | 0.03 | 12 | 1.00 | 0.06 | 0.06 |
|---|---------------------------|-----------|------------|-----------|----|------|------|------|----|------|------|------|
| | Breeding & Genetics | Professor | track | | | | | | | | | |
| Α | Jude Grosser, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | | | | | | | | | | | |
| Α | Kevin Kenworthy, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.03 | 0.03 | 12 | 1.00 | 0.03 | 0.03 |
| | Breeding & Genetics | | | | | | | | | | | |
| Α | Manjul Dutt, Ph.D. | Professor | Non-tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | | track | | | | | | | | | |
| Α | Márcio Resende, Ph.D. | Professor | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.06 | 0.06 |
| | Breeding & Genomics | | track | | | | | | | | | |
| Α | Matias Kirst, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Biometrics | | | | | | | | | | | |
| Α | Patricio Munoz, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.09 | 0.09 |
| | Breeding & Genomic | Professor | track | | | | | | | | | |
| Α | Samuel Hutton, Ph.D. | Associate | Tenure | Fall 2021 | 12 | 1.00 | 0.10 | 0.10 | 12 | 1.00 | 0.13 | 0.13 |
| | Breeding & Genetics | Professor | track | | | | | | | | | |
| Α | Seonghee Lee, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Genomics | Professor | track | | | | | | | | | |
| Α | Tong Geon Lee, Ph.D. | Assistant | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Bioinformatics & Genomics | Professor | track | | | | | | | | | |
| Α | Vance Whitaker, Ph.D. | Associate | Tenure | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | Professor | track | | | | | | | | | |
| Α | Zhanao Deng, Ph.D. | Professor | Tenured | Fall 2021 | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.00 | 0.00 |
| | Breeding & Genetics | | | | | | | | | | | |
| С | New Hire 1, PhD | Assistant | Tenure | | 12 | 1.00 | 0.00 | 0.00 | 12 | 1.00 | 0.13 | 0.13 |
| | | Professor | track | | | | | | | | | |
| | Total Person-Years (PY) | | | | | | | 0.25 | | | | 0.74 |

| Faculty | | | | PY Workload by Budget Classification | | | |
|---------|---|-------------------------------------|--------|--------------------------------------|--------|--|--|
| Code | Code Description | Source of Funding | Year 1 | | Year 5 | | |
| Α | Existing faculty on a regular line | Current Education & General Revenue | 0.25 | | 0.61 | | |
| В | New faculty to be hired on a vacant line | Current Education & General Revenue | 0.00 | | 0.00 | | |
| С | New faculty to be hired on a new line | New Education & General Revenue | 0.00 | | 0.13 | | |
| D | Existing faculty hired on contracts/grants | Contracts/Grants | 0.00 | | 0.00 | | |
| E | New faculty to be hired on contracts/grants | Contracts/Grants | 0.00 | | 0.00 | | |

Worksheet Table 2 Faculty Participation

Table 2

Anticipated Faculty Participation

| F | Existing faculty on endowed lines | Philanthropy & Endowments | 0.00 | 0.00 |
|---|---|----------------------------|------|------|
| G | New faculty on endowed lines | Philanthropy & Endowments | 0.00 | 0.00 |
| | teaching outside of regular/tenure-track line course load | Enterprise Auxiliary Funds | 0.00 | 0.00 |
| | | Overall Totals for | 0.25 | 0.74 |

TABLE 3 PROJECTED COSTS AND FUNDING SOURCES

| Budget Line Item | Reallocated Base* (E&G) Year 1 | Enrollment Growth (E&G) Year 1 | New Recurring (E&G) Year 1 | New Non- Recurring (E&G) Year 1 | Contracts & Grants (C&G) Year 1 | Philanthropy/ Endowments Year 1 | Enterprise Auxiliary Funds Year 1 | Subtotal Year 1 | Continuing Base** (E&G) Year 5 | New Enrollment Growth (E&G) Year 5 | Other*** (E&G) Year 5 | Contracts & Grants (C&G) Year 5 | Philanthropy/ Endowments Year 5 | Enterprise Auxiliary Funds Year 5 | Subtotal Year 5 |
|----------------------------------|--------------------------------------|---|-------------------------------------|--|--|---------------------------------------|--|--------------------|---|--|-----------------------------|--|---------------------------------------|--|--------------------|
| Faculty Salaries and Benefits | 36,695 | 0 | 0 | 0 | 0 | 0 | 0 | \$36,695 | 112,140 | 0 | 0 | 0 | 0 | 0 | \$112,140 |
| A & P Salaries and Benefits | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| USPS Salaries and Benefits | 45,642 | 0 | 0 | 0 | 0 | 0 | 0 | \$45,642 | 51,371 | 0 | 0 | 0 | 0 | 0 | \$51,371 |
| Other Personal Services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Assistantships & Fellowships | 38,320 | 0 | 0 | 0 | 33,278 | 120,000 | 0 | \$191,598 | 172,516 | 0 | 0 | 210,063 | 480,000 | 0 | \$862,579 |
| Library | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Expenses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Operating Capital Outlay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Special Categories | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 | 0 | 0 | 0 | 0 | 0 | 0 | \$0 |
| Total Costs | \$120,657 | \$0 | \$0 | \$0 | \$33,278 | \$120,000 | \$0 | \$273,935 | \$336,027 | \$0 | \$0 | \$210,063 | \$480,000 | \$0 | \$1,026,090 |

^{*}Identify reallocation sources in Table 4.

Faculty and Staff Summary

| Total Positions | Year 1 | Year 5 |
|------------------------|--------|--------|
| Faculty (person-years) | 0.25 | 0.74 |
| A & P (FTE) | 0 | 0 |
| USPS (FTE) | 0.5 | 0.5 |

Calculated Cost per Student FTE

| | Year 1 | Year 5 |
|--------------------------|-----------|-----------|
| Total E&G Funding | \$120,657 | \$336,027 |
| Annual Student FTE | 3.5 | 14.5 |
| E&G Cost per FTE | \$34,473 | \$23,174 |

^{**}Includes recurring E&G funded costs ("reallocated base," "enrollment growth," and "new recurring") from Years 1-4 that continue into Year 5.

^{***}Identify if non-recurring.

TABLE 3

PROJECTED COSTS AND FUNDING SOURCES

| Table 3 Column Exp | lanations | |
|--------------------------------|-----------|--|
| Reallocated Base* (E&G) | 1 | E&G funds that are already available in the university's budget and will be reallocated to support the new program. Please include these funds in the Table 4 – Anticipated reallocation of E&G funds and indicate their source. |
| Enrollment Growth (E&G) | 2 | Additional E&G funds allocated from the tuition and fees trust fund contingent on enrollment increases. |
| New Recurring (E&G) | 3 | Recurring funds appropriated by the Legislature to support implementation of the program. |
| New Non-Recurring (E&G) | 4 | Non-recurring funds appropriated by the Legislature to support implementation of the program. Please provide an explanation of the source of these funds in the budget section (section III. A.) of the proposal. These funds can include initial investments, such as infrastructure. |
| Contracts & Grants (C&G) | 5 | Contracts and grants funding available for the program. |
| Philanthropy Endowments | 6 | Funds provided through the foundation or other Direct Support Organizations (DSO) to support the program. |
| Enterprise Auxiliary Funds | 7 | Use this column for continuing education or market rate programs and provide a rationale in section III.B. in support of the selected tuition model. |
| Continuing Base** (E&G) | 9 | Includes the sum of columns 1, 2, and 3 over time. |
| New Enrollment Growth (E&G) | 10 | See explanation provided for column 2. |
| Other*** (E&G) | 11 | These are specific funds provided by the Legislature to support implementation of the program. |
| Contracts & Grants (C&G) | 12 | See explanation provided for column 5. |
| Philanthropy Endowments | 13 | See explanation provided for column 6. |
| Enterprise Auxiliary Funds | 14 | Use this column for continuing education or market rate programs and provide a rationale in section III.B. in support of the selected tuition model. |

TABLE 4

ANTICIPATED REALLOCATION OF EDUCATION GENERAL FUNDS*

| Program and/or E&G account from which current funds will be reallocated during Year 1 | Base before reallocation | Amount to be reallocated | Base after reallocation |
|---|--------------------------|--------------------------|-------------------------|
| Faculty Salaries & Benefits | | | |
| Chartfield XXX 101-1100 E&G Funds | 961,533 | 36,695 | \$924,838 |
| Chartfield IFAS Research Funds** | | | |
| Chartfield IFAS Extension Funds** | | | |
| Assistantships & Fellowships | 38,320 | 38,320 | \$0 |
| Chartfield XXX 101-1100 E&G Funds | | | |
| Chartfield IFAS Research Funds** | | | |
| USPS Salaries and Benefits | 91,285 | 45,642 | \$45,643 |
| Chartfield XXX 101-1100 E&G Funds | | | |
| | | | |
| Totals | \$1,091,138 | \$120,657 | \$970,481 |

^{*} If not reallocating E&G funds, please submit a zeroed Table 4

Signature of Equal Opportunity Officer Date 11/4/19

APPENDIX B.

Signature of Library Director

Signature of the Equal Opportunity Officer and the Library Director.

Date

This appendix was created to facilitate the collection of signatures in support of the proposal. Signatures in this section illustrate that the Equal Opportunity Officer has reviewed section II.E of the proposal and the Library Director has reviewed sections X.A and X.B.

FREDY ALTPETER, Ph.D.

Professor of Molecular Genetics and Biotechnology University of Florida, Institute of Food and Agricultural Sciences Agronomy Department, Plant Molecular and Cellular Biology Program PO Box 110500, 3085 McCarty Hall B, Gainesville, FL 32611

352-273-3418, altpeter@ufl.edu https://agronomy.ifas.ufl.edu/faculty/

EDUCATION

| University of Florida | Crop Biotechnology | Postdoc | 1994-1997 |
|----------------------------------|--------------------------------|-----------------|-----------|
| University of Hohenheim, Germany | Plant Breeding & Biotechnology | Dr. Sc. Agr. | 1994 |
| University of Hohenheim, Germany | Crop Science | Dipl. Ing. Agr. | 1990 |
| Farms and estates in Germany | Crop and Animal Production | Farm Manager | 1989 |

PROFESSIONAL EXPERIENCE

| 2012-present | Professor, Agronomy Department, University of Florida, Gainesville, FL |
|--------------|--|
| 2008-2012 | Associate Professor, Agronomy Department, University of Florida, Gainesville, FL |
| 2001-2008 | Assistant Professor, Agronomy Department, University of Florida, Gainesville, FL |
| 1997-2001 | Research Group Leader, Plant Genome Research Center, IPK, Gatersleben |
| 1994-1997 | Postdoc Research Associate, Dept. of Horticultural Scs., Univ. of Florida, Gainesville, FL |
| 1991-1994 | Graduate Research Assistant, Plant Breeding Dept., Univ. of Hohenheim, Germany |

AREAS OF SPECIALIZATION

- Molecular physiology to unravel regulatory networks controlling photosynthetic efficiency; plant architecture, stress tolerance and biomass quality.
- Translational genomics, genome editing and metabolic engineering to optimize crop performance and sustainably produce value added bio products and fuels.
- Biotechnology and breeding of bioenergy feedstocks, cereal and turf and forage grasses.
- Risk assessment and risk management of genetically modified crops.

AWARDS AND HONORS

| 2018 | Fellow Society for In Vitro Biology |
|-------------|---|
| 2013 & 2018 | UF Research Foundation Professorship for Distinguished Research Program |
| 2018 | UF Term Professorship for Distinguished Academic Program |
| 2014 & 2018 | UF/IFAS High Impact Publication Award |
| 2016 | Gamma Sigma Delta Senior Faculty Award of Merit |
| 2012 | Distinguished Service Award, Society for In Vitro Biology |
| 2009 | Gamma Sigma Delta Junior Faculty Award of Merit |

PROFESSIONAL SERVICE AND EDITORIAL BOARDS

| 2019-present | Associate Editor, Scientific Reports |
|--------------|--------------------------------------|
| 2017-present | Associate Editor, The Plant Genome |

| 2008-present | Associate Editor, Plant Cell Tissue and Organ Culture: Journal of Plant Biotechnology |
|--------------|---|
| 2008-2019 | Subject Editor, Plant Breeding |
| 2004-2009 | Associate Editor, Crop Science |
| 2018-present | Chair elect, C7 Division Crop Science Society of America |
| 2011-2012 | Member Board of Directors, Society for In Vitro Biology (SIVB) |
| 2014-2019 | Member Board of Directors, Society for In Vitro Biology (SIVB) |
| 2011-2012 | Program Chair, SIVB conference |
| 2018-2019 | Program Chair, SIVB conference |
| 2018 | Chair, 2 nd International Conference on Plant Synthetic Biology |
| 2018-2019 | Member, Program Committee International Forage & Turf Breeding Confer. |
| 2010-2012 | Chair, Plant Biology Section, Society for In Vitro Biology (SIVB) |
| 2008-2009 | Chair, Plant Biotechnology Program Committee, SIVB |
| 2007-2008 | Fundraiser & Co-Chair, Plant Biotechnology Program Committee, SIVB |
| 2010-present | Member, Membership Committee, SIVB |

PRESENT JOB RESPONSIBILITIES (20 % Teaching, 80 % Research)

Courses Taught: AGR 5307 Molecular Genetics for Crop Improvement

PCB 5530 Plant Molecular Biology and Genomics

AGR5321 Genetic Improvement of Plants

AGR4320 Plant Breeding

Research Description:

Dr. Altpeter's research program integrates translational genomics, molecular physiology and metabolic engineering for crop improvement and sustainable production of value added products. The approaches include precision genome editing, synthetic biology, and molecular dissection of regulatory networks. These research activities focus on identifying, isolating and engineering limiting factors for genetic improvement of cereals, turf, forage and biomass/bioenergy grasses. Re-designing photosynthesis, plant architecture and stress response pathways will enhance the productivity and persistence of commercially important grasses and will result in a more sustainable use of natural resources.

Alternatively, quality improvement in biofuel feedstocks that are well adapted to stress can significantly increase their value. Metabolic engineering of high biomass crops like sugarcane and miscanthus will drive the emerging bioeconomy by generating next generation biofuels and chemicals. Risk assessment and development of risk management strategies are essential components of this molecular breeding program for grass improvement.

Our most recent research breakthrough marks a paradigm shift in crop breeding by efficient homology directed precision genome editing enabling multiplexed genome editing.

CONTRACTS AND GRANTS Extramural Grants (Directly) Supporting Dr. Altpeter's Research, Career Total:

| PI | Co-PI | Total |
|---------------|---------------|----------------|
| \$7,331,316 | \$140,318,640 | \$147,649,956 |
| (\$6,647,849) | (\$8,916,500) | (\$15,564,349) |

Major funding sources (\$ 13.8M in direct support) include DOE, NSF, USDA-NIFA, US-AID, CPBR, SWFWD, Plant Biotechnology Industry

| Summary of External Grant Funding Received | | | | |
|--|--------------|-------------|-------------|--|
| (Share of Grant Funding Supporting F. Altpeter's Research Program) Year 2013 – 2022 | | | | |
| Role Total Direct Costs Indirect Costs | | | | |
| Principal Investigator | \$2,220,899 | \$1,781,046 | \$439,853 | |
| Co-Principal Investigator | \$8,837,966 | \$5,745,757 | \$3,092,209 | |
| Totals | \$11,058,865 | \$7,526,803 | \$3,532,062 | |

MANAGEMENT AND TRAINING OF HUMAN RESOURCES

Graduate student committees chaired: 18 Undergraduate students trained: 46

Postdoctoral research associates supervised: 25

Visiting scientists hosted: 23

REFEREED JOURNAL ARTICLES

Senior/principal author(s) = underline
Self = bold
Graduate Student in Dr. Altpeter's program = g
Post-Doctoral Associate/Fellow in Dr. Altpeter's program = p
Visiting Scientist in Dr. Altpeter's program = v
Biological Scientist in Dr. Altpeter's program = b

- 1. <u>Zhao Y. (g)</u>, Kim YJ (p.), Karan R. (p), Jung J-H. (p), Pathak B. (b), Wang D (p). Williamson B. (b), Fan C, Yu W., Dong S., Srivastava V., <u>Altpeter F.</u> Generation of a safe harbor locus for transgene stacking in sugarcane. 2019. Plant Mol. Biol. 100: 247-263.
- 2. <u>Zhao Y. (g)</u>, Karan R. (p), <u>Altpeter F.</u> Comparison of CRISPR/Cas9 and cre/lox mediated site specific recombination in sugarcane 2019 (submitted for publication).
- 3. <u>Kannan B. (p)</u>, Jung J.H. (p), Moxley G.W., Lee S.-M., <u>Altpeter F.</u> 2018. TALEN mediated targeted mutagenesis of more than 100 COMT copies/alleles in highly polyploid sugarcane improves saccharification efficiency without compromising biomass yield. Plant Biotech. J. 16: 856-866. http://onlinelibrary.wiley.com/doi/10.1111/pbi.12833/full
- 4. Ko, J. K., Jung, J. H.(p), **Altpeter, F.**, Kannan, B.(p), Kim, H. E., Kim, K. H., Alper, H. S., Um, Y. and Lee, S. M. 2018. Synergistic improvement of ethanol production by targeted mutagenesis of lignin biosynthesis in sugarcane and utilizing an engineered Saccharomyces cerevisiae. Bioresour. Technol. 256: 312-320. https://www.sciencedirect.com/science/article/pii/S0960852418301457?via%3Dihub
- 5. Paudel, D.(g), Kannan, B. (p), Yang X., Harris-Shultz K., Thudi M., Varshney R.K., **Altpeter, F.** and Wang, J. Surveying the genome and constructing a high-density genetic map of napiergrass (*Cenchrus purpureus* Schumach.). 2018. Sci. Rep. 8, 14419 2018. https://www.nature.com/articles/s41598-018-32674-x.
 - Lopez, Y., Kurashev, A., Chase, C., Gallo, M., Sollenberger, L., Altpeter, F. and Wang, J. Developing and validating microsatellite markers in elephantgrass (*Pennisetum purpureum S.*). 2018. Euphytica 214: 185 https://link.springer.com/content/pdf/10.1007%2Fs10681-018-2256-6.pdf
 - 7. Rios, E., Kenworthy, K., Blount, A. R., Quesenberry, K., Unruh, B., Erickson, J., **Altpeter, F.** and Munoz, P. 2017. Breeding apomictic bahiagrass (*Paspalum notatum* Flugge) with improved turf traits. Plant Breeding. 136: 253-260. http://onlinelibrary.wiley.com/doi/10.1111/pbr.12459/epdf
 - 8. Huang, H., Moreau, R. A., Powell, M. J., Wang, Z., Kannan, B. (p), **Altpeter, F.**, Grennan, A. K., Long, S. and Singh, V. 2017. Evaluation of the quantity and composition of sugars and lipid in

- the juice and bagasse of lipid producing sugarcane. Biocat. Agric. Biotechn. 10: 148-155. https://www.sciencedirect.com/science/article/pii/S1878818116305059
- 9. <u>Kim, J. Y.(p)</u>, Nong, G., Rice, J. D., Gallo, M., Preston, J. F. and <u>Altpeter, F.</u> 2017. *In planta* production and characterization of a hyperthermostable GH10 xylanase in transgenic sugarcane. Plant Mol. Biol. 93: 465-478. http://link.springer.com/article/10.1007%2Fs11103-016-0573-5
- Altpeter F., Springer N.M., Bartley L.E., Blechl A.E., Brutnell T.P., Citovsky V., Conrad L.J., Gelvin S.B., Jackson D.P., Kausch A.P., Lemaux P.G., Medford J.I., Orozco-Cárdenas M.L., Tricoli D.M., Van Eck J., Voytas D.F., Walbot V., Wang K., Zhang Z.J., Stewart C.N. 2016. Advancing Crop Transformation in the Era of Genome Editing. Plant Cell. 28: 1510- 1520. http://www.plantcell.org/content/early/2016/06/22/tpc.16.00196.full.pdf+html
- 11. <u>Jung, J. H. (p)</u> and <u>F. Altpeter</u>. 2016. TALEN mediated targeted mutagenesis of the caffeic acid O-methyltransferase in highly polyploid sugarcane improves cell wall composition for production of bioethanol. Plant. Mol. Biol. 92: 131-142. http://link.springer.com/article/10.1007%2Fs11103-016-0499-y.
- 12. Zale, J. (p), J.H. Jung (p), J.Y. Kim, B (p). B. Pathak (b), R. Karan (p), H. Liu, X. Chen, H. Wu (p), J. Candreva, Z. Zhai, J. Shanklin, **F. Altpeter**. 2016. Metabolic engineering of sugarcane to accumulate energy-dense triacylglycerols in vegetative biomass. Plant Biotech. J. 14: 661-669. http://onlinelibrary.wiley.com/doi/10.1111/pbi.12411/epdf.
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- 15. <u>Jung J. H. (p)</u>, B. Kannan (p), H. Dermawan (g), G. W. Moxley and <u>F. Altpeter</u>. 2016. Precision breeding for RNAi suppression of a major 4-coumarate: coenzyme A ligase gene improves cell wall saccharification from field grown sugarcane. Plant Mol. Biol. 92:505-517. http://link.springer.com/article/10.1007%2Fs11103-016-0527-y.
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BOOK CHAPTERS

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- 6. <u>Altpeter, F.</u> and V. Korzun: Rye. In: Biotechnology in Agriculture and Forestry.Transgenic crops IV. Pua, E. C. and Davey M. R. (eds.), Springer, Heidelberg, Germany. 2007. pp. 107-117.
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NUMBER OF ABSTRACTS PRESENTED AT CONFERENCES: 273

NUMBER OF AWARDS and HONORS FOR GRADUATE STUDENTS in DR. ALTPETER'S RESEARCH PROGRAM: 45

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EDUCATION

| Oklahoma State University, USA | Crop Science | Ph.D. | 2005 |
|-----------------------------------|--------------------------|-------|------|
| Bangladesh Agriculture University | Genet and plant breeding | M.S. | 1998 |
| Bangladesh Agriculture University | Agriculture | B.Sc. | 1996 |

PROFESSIONAL EXPERIENCE

| July 2013 - present | Assistant Professor, World Food Crops Breeding and Genetics, Agronomy | |
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| | Department, University of Florida, Gainesville | |
| May 2013-July 2013 | Site Leader and Associate Scientist, DOW Agrosciences, Sidney, IL | |
| Oct 2010 - July 2013 | Associate Scientist, Corn Breeder, DOW Agrosciences, Sidney, IL | |
| Oct 2008 - Oct 2010 | Senior Biologist, Corn Breeder, DOW Agrosciences, Sidney, IL | |
| Aug 2005 - Aug 2008 | Post-doc Research Associate, Wheat Breeding and Genetics, KSU, Manhattan | |

PROFESSIONAL SERVICE

National Small Grain Variety Review Board, Liaison member, Jan 1, 2018-Dec 31, 2019
National Small Grain Variety Review Board, Alternate member, Jan 1, 2016-Dec 31, 2017
American Oat Workers Executive Committee member, 2014-Present
Quaker International Nursery Program Executive Committee member, 2014-present
Member of Expert Working Group on Wheat
Co-PI AgMIP wheat

Associated Editor and Editor: Agronomy Journal and Nature-Scientific Reports **Grant Reviewer:** Natural Sciences and Engineering Research Council of Canada (NSERC); Israeli Ministry of Agriculture & Rural Development

PROFESSIONAL MEMBERSHIP

Crop Science Society of America American Society of Plant Biologists Agronomy Society of America Bangladesh Agriculturists Association

UNIVERSITY GOVERNANCE AND SERVICE

University

Mentor in the University Minority Mentor Program (UMMP), Fall, 2018-present. Poster judge- Graduate Student Research Day 2014, 2017. Faculty advisor-Cupcakes for a Cure UF; fall, 2016 to summer, 2017.

College

Advisory council of operation, Plant Science research and Education Unit, Aug 2019-Dec, 2021 Commencement Marshal for CALS, fall 2013; spring, 2014; fall, 2017

Department/Center

Teaching peer evaluation committee member, 2019

Agronomy Department task force for diversity and inclusion, since 2019.

Agronomy Department seminar coordinator, fall, 2016-summer 2018.

Agronomy graduate student symposium judge, spring 2018.

AGR honors and awards committee since 2018.

Agronomy graduate student symposium coordinate, spring 2017.

Agronomy Department collaboration strategic team committee member, 2014.

FFS Station manager search committee member, 2014.

PEER-REVIEW PUBLICATIONS (Total 40 career total citations-810)

- Shrestha SP, <u>Babar MA</u>, Guo J, Bai G, Mergoum M, Mason RE, Gazen S, Asseng S, Blount A, Baik B, Shahi D, Khan J, Hossain MM, Avci M, and Robbins K. 2019. Identifying novel alleles associated with spike fertility, gain number and harvest index under hot and humid environment in wheat through GWAS analysis. Frontier in Plant Science (Accepted).
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- Khan N[&], Bano A and **Babar MA**. 2016. The root growth of wheat plants, the water conservation and fertility status of sandy soils influenced by plant growth promoting rhizobacteria. Symbiosis. 72:195-205. ([&]visiting PhD student). (citation-18).
- Talukder SK, Prasad PVV, Todd T, **Babar MA**, Poland JA, Bowden RL and <u>Fritz AK</u>. 2015. Effect of cytoplasmic diversity on post anthesis heat tolerance in wheat. Euphytica. 204:383-394.
- **Talukder SK***, **Babar MA***, Vijayalakshmi K, Poland JA, Vara Prasad PV, Bowden RL and <u>Fritz AK</u>. 2014. Mapping QTL for the traits associated with heat tolerance in wheat. BMC Genetics. 15:97-109. (*Co-first author)
- Zheng P, **Babar MA**, Parthasarathy S, Gibson R, Parliament K, Flook J, Patterson T, Friedemann P, Kumpatla S and Thomson S. 2014. A truncated FatB resulting from a single nucleotide insertion is responsible for reducing saturated fatty acids in maize seed oil. Theoretical and Applied Genetics. 127:1537-1547.
- Prasad B, **Babar MA**, Bai G, Xu X and Klatt AR. 2009. Genetic diversity in the US hard red winter wheat cultivars as revealed by microsatellite markers. Australian Journal of Agricultural Research. 60:16-24.
- Prasad B, **Babar MA**, Carver BF, M.L. ML, Raun WR and <u>Klatt AR</u>. 2009. Association of biomass production and canopy spectral reflectance indices in winter wheat. Canadian Journal of Plant Sciences. 89:485-496.
- **Babar MA**, Van Ginkel M, Reynolds MP, Prasad B and Klatt AR. 2007. Heritability correlated response and indirect selection involving spectral reflectance indices and grain yield in wheat. Australian Journal of Agricultural Research. 58:432-442.
- Prasad B, Carver BF, Stone ML, **Babar MA**, Raun WR and Klatt AR. 2007. Potential use of spectral reflectance indices as a selection tool for grain yield in winter wheat under Great Plains conditions. Crop Science. 47:1426-1440.
- Prasad B., Carver BF, Stone ML, **Babar MA**, Raun WR and Klatt AR. 2007. Genetic analysis of indirect selection for winter wheat grain yield using spectral reflectance indices. Crop Science. 47: 1416-1425.
- **Babar MA**, Reynolds MP, Van Ginkel M, Klatt AR, Raun WR and Stone ML. 2006. Spectral reflectance indices as a potential indirect selection criterion for wheat yield under irrigation. Crop Science. 46:578-588.
- **Babar MA**, Reynolds MP, Van Ginkel M, Klatt AR, Raun WR and Stone ML. 2006. Spectral reflectance to estimate genetic variation for in-season biomass, leaf chlorophyll and canopy temperature in wheat. Crop Science. 46:1046-1057.
- **Babar MA**, Van Ginkel M, Klatt AR, Prasad B and Reynolds MP. 2006. The potential of using spectral reflectance indices to estimate yield in wheat grown under reduced irrigation. Euphytica. 150:155-172.
- **Babar MA**, Newaz MA and Jahan MAHS. 2002. Identification of selection parameters for yield improvement in French bean (*Phaseolus vulgaris* L.). Bangladesh Journal of Agricultural Sciences. 29:85-89.
- **Babar MA**, Pandit DB, Barma NCD, Samad MA and Rahman MM. 2001. Genotype-location interaction and stability of some bread wheat genotypes for yield and thousand grain weight. Bangladesh

- Journal of Agricultural Sciences. 28:233-240.
- Jahan MAHS, Amin MR, Barma NCD, **Babar MA** and Bodruzzaman M. 2001. Effect of planting date and forage cutting on the growth and yield of triticale genotypes. Bangladesh Journal of Agricultural Sciences. 28:297-302.
- <u>Barma NCD</u>, Pandit DB, **Babar MA**, Jahan MAHS and Razzaque MA. 2002. Biomass as a selection criteria for improving grain yield in wheat (*Triticum aestivum* L.). Bangladesh Journal of Agricultural Sciences. 29:91-94.
- <u>Barma NCD</u>, Sarker ZI, **Babar MA**, Hakim A and Jahan MAHS. 1998. Combining ability and heterosis in bread wheat. Journal of Biosciences. 6:51-58.

MANUSCRIPTS UNDER REVIEW

- Guo J^{p*}, Pradhan S^{g*}, Shahi D, Khan J, Mcbreen J, Bai G, Murphy JP, and <u>Babar MA</u>. 2019. Increased Prediction Accuracy Using Combined Genomic Information and Physiological Traits in A Soft Wheat Panel Evaluated in Multi-Environments. Nature Scientific Reports.
- Pradhan S^g, <u>Babar MA</u>, Bai G, Khan J, Shahi D, AVCI M, Guo J, McBreen J, Asseng S, Gezan S, Baik B, Blount A, Harrison S. 2019. Genetic Dissection of Heat-responsive Physiological Traits to Improve Adaptation and Increase Yield Potential in Soft Winter Wheat. BMC Genomics. (graduate student)
- Ibrahim AMH, Sutton R, Johnson JW, Mergoum M, Simoneaux B, Harrison SA, Murphy JP, Mason RE, **Babar MA**, Neely C, Opeña G, Jin Y, Kolmer J, Boyles R, Cambron SE, Baik B, Brown-Guedira GL, Marshall D, and Fountain MO. 2019. Registration of 'GA06343-13E2 (TX-EL2)' Soft Red Winter Wheat. Journal of Plant Registration.
- Khan N[&], Bano A and **Babar MA**. 2019. Phytohormone crosstalk under biotic and abiotic stresses and the role of PGPR. Plant physiology and biochemistry. ([&]visiting PhD student).

NON-REFEREED PUBLICATIONS (Career total 63; list of last two years)

- Love B, .. **Babar MA**, Molero G, Reynolds M and J Foulkes. 2019. Raining yield potential through improved harvest index and fruiting efficiency associated with plant hormone signaling in high biomass CIMMYT spring wheat genotypes. 1st International Wheat Congress, July 21-26, Saskatoon, Saskatchewan, Canada.
- Shahi D, ... and <u>Babar MA</u>. 2019. Identifying novel alleles contributing increased spike partitioning index and fruiting efficiency at anthesis plus 7 days in US soft wheat through genome wide association study. Plant and Animal Genomics Conference XXVII, Juanuary12-16, San Diego, CA.
- Guo J, ... and <u>Babar MA</u>. 2019. Genomic Selection for Predicting Spike Fertility and Biomass Partitioning Traits Using Multiple Soft Wheat Populations. Plant and Animal Genomics Conference XXVII, Juanuary12-16, San Diego, CA.
- Shrestha SP, ... and <u>Babar MA</u>. 2019. Genome-wide Association Studies of Spike Fertility, Yield and Other Agronomic Traits to Dissect Heat Tolerance in Soft Wheat. Plant and Animal Genomics Conference XXVII, Juanuary12-16, San Diego, CA.
- Guo J, ... and <u>Babar MA</u>. 2018. Genomic Selection for Predicting Spike Fertility and Biomass Partitioning Traits using multiple soft Wheat Populations. Florida Genetic Symposium. Oct 31-Nov1, UF Cancer & Genetics Research Complex Atrium.

- Shahi D, <u>Babar MA</u>. 2018. Genome Wide Association Studies of Stem and Spike partitioning traits in Spring Wheat (Triticum aestivum L.). Florida Genetic Symposium. Oct 31-Nov1, UF Cancer & Genetics Research Complex Atrium.
- Shrestha SP, ...and <u>Babar MA</u>. 2018. Genome-wide Association Studies of Spike Fertility, Harvest Index, and Yield Related Traits in Soft Wheat Under Hot and Humid Environment of Southeast USA. Florida Genetic Symposium. Oct 31-Nov1, UF Cancer & Genetics Research Complex Atrium.
- Shrestha SP,and <u>Babar MA</u>. 2018. Identifying Traits to Improve Wheat Yield and Quality Under Heat Stress Nutritional Improvements in Sub-Saharan Africa workshop. April 23, IFAS/UF, Gainesville, FL.
- Shahi D, ...and <u>Babar MA</u>. 2018. Advancing Harvest Index in Wheat through Genome Wide Association Analysis of Stem and Spike partitioning traits. ASA, CSSA International Conference International Conference, Nov 4-7, 2018, Baltimore, MD.
- Shrestha SP, ... and <u>Babar MA</u>. **2018**. Identifying Genetic Loci for Traits to Improve Wheat Yield and Grain Number under Post-Anthesis Heat Stress Conditions. ASA, CSSA International Conference International Conference, Nov 4-7, 2018, Baltimore, MD.
- Khan J, ... and <u>Babar MA</u>. 2018. Identifying Noble Genetic Loci for Partitioning Traits to Improve Wheat Yield and Grain Number under Post-Anthesis drought Conditions. ASA, CSSA International Conference International Conference, Nov 4-7, 2018, Baltimore, MD.
- Hossain MM, <u>Babar MA</u>, ... 2018. Identifying Edamame (vegetable soybean) Suitable for Cultivation for the Fresh Food Market of Florida. Southern ASA Conference, Feb 4-6, Jacksonville, FL.
- Khan N, ... and <u>Babar MA.</u> 2018. UPLC-HRMS Based Non-Targeted Metabolomic Profiling in Chickpea Reveals Complex Mechanisms Involved in Drought Tolerance Induced By PGR and PGPR. Southern ASA Conference, Feb 4-6, Jacksonville, FL.
- Newman C, Sumit S and <u>Babar MA</u>. 2018. Genetic variations in grain filling rate and duration in US soft wheat germplasm under post-anthesis heat stress. UF Plant Science Capstone Presentation. April 20, 2018. Fifield Hall, UF.
- Shrestha SP, ... and <u>Babar MA.</u> 2017. Identifying Potential Avenues for Increasing Grain Number under Post Anthesis HEAT Stress Condition. ASA, CSSA, SSSA International Conference International Conference, Oct 22-25, 2017, Tampa, FL.
- Khan J, ... and <u>Babar MA</u>. 2017. Genetic Variability and Association Analysis in US Soft Wheat Panel for Fruiting Efficiency Under Post Anthesis Drought and Supplemental Irrigated Conditions. ASA, CSSA, SSSA International Conference International Conference, Oct 22-25, 2017, Tampa, FL.
- Avci M, ..., <u>Babar MA</u>. 2017. Identifying the Genetic Loci Associated with Fruiting Efficiency and Yield Components in AGS2000/ NC06-19896 DH Population Under Post Anthesis High Temperature Stress Conditions. ASA, CSSA, SSSA International Conference International Conference, Oct 22-25, 2017, Tampa, FL.
- Sarinelli JM, .., **Babar** MA and Brown-Guedira G. 2017. Training Population Selection and Use of Fixed Covariates to Optimize Genomic Predictions in a Historical Southeastern USA Winter Wheat Panel. ASA, CSSA, SSSA International Conference International Conference, Oct 22-25, 2017, Tampa, FL.

- Asseng S,Babar MA, et al . 2017. Global Wheat Production Affected By Increasing Temperature and Elevated CO2. AgMIP-Wheat Advances in Wheat Modeling. ASA, CSSA, SSSA International Conference International Conference, Oct 22-25, 2017, Tampa, FL.
- Shrestha SP, ... and <u>Babar MA</u>. 2017.Genetic Improvement of Harvest Index and Stay-Green Traits in US Soft Wheat Germplasm Under High Temperature Stress Condition. The Southern Regional Branch of ASA, Feb 6, 2017, Mobile, AL.
- Salia I, ... **Babar MA**, Boroujerdi A. 2017. Metabolic Differences in Cellular Structure of Wheat under Drought Conditions. Annual Biomedical Research Conference for Minority Students, November 1-4, 2017, Phoenix, Arizona.
- Blount A, **Babar MA**, ... 2017. Triticale for the Southeastern U.S. for grazing and silage. Easter wheat and southern small grain workers conference, May 1-3, 2017, Purdue University, West Lafayette, Indiana.
- Guedira M, **Babar MA**, Harrison SA, Sutton R, Griffery C, Mergoum M and Gina Brown-Guedira. 2017. Effect of Major Developmental Genes *Vernalization-1* and *Photoperiod-1* on Heading Date and Grain Yield of Winter Wheat in the Southern USA. Easter wheat and southern small grain workers conference, May 1-3, 2017, Purdue University, West Lafayette, Indiana.
- Blount AR, ..., **Babar MA**, Mackowiak CL and Quesenberry KH. 2018. A walk on the wild side: 2018 coolseason forage recommendations for wildlife food plots in North Florida. EDIS publication (SS-AGR-28). http://edis.ifas.ufl.edu/ag139
- Blount AR, ..., **Babar MA**. 2018. Cool-season forage variety recommendations for Florida. EDIS publication (SS-AGR-84). http://edis.ifas.ufl.edu/aa266
- Blount AR, ..., **Babar MA**. 2017. Cool-season forage variety recommendation for Florida. EDIS publication. http://edis.ifas.ufl.edu/aa266.
- Blount A, ..., **Babar MA**. 2017 Cool-season forage variety recommendations. 15 Sep, NFREC Beef and Forage Field Day, Marianna, FL. Proceedings. 6 pp.

VARIETY RELEASE

• **Total 14**; Oat variety- Horizon720 as major developer; 11 wheat varieties as co-developer; Legend 567 oat variety as co-developer; FL01143 Triticale as co-developer.

FUNDING (EXTRA AND INTRAMURAL)

- Total \$1,368,819 (As PI from USDA, Industry, FDACS, and University of Florida)
- Total \$66,722 (As Co-PI; from USDA)
- Royalty total \$122,000

PEER REVIEWER

 Crop Science, Euphytica, Plant Breeding, Australian Journal of Agriculture Research, Field Crops Research, PLOS One, Molecular Breeding, Journal of Plant Registration

PATENTS

- Babar et al. 2016. FL-720 oat. PVP Certificate #201600313
- Babar et al. OAT VARIETY FL0720. June 6, 2016. United States Patent number 15/174,528.
- A.R. Blount, R.D. Barnett, S.A. Harrison, C.L. Mackowiak, M.A. Babar, and J.C. Jones. PVP awarded

- 2016. Plant Variety Protection (PVP) received on FL0567 (Legend 567) oat.
- A.R. Blount, R.D. Barnett, Md. A. Babar, C.L. Mackowiak and J. Jones. PVP pending. Plant Variety Protection (PVP) applied for FL01143 Awnless triticale (2016).

AWARDS

- Plant Variety protection award, 2018, University of Florida/Institute of Food and Agricultural Sciences
- Utility Patent award, 2018, University of Florida/Institute of Food and Agricultural Sciences
- Early Career Scientist Award, 2015, Institute of Food and Agricultural Sciences, University of Florida.
- Innovators' Day Award, DOW Agrosciences, 2013.
- William Outstanding Ph.D. Thesis Award in Plant Science, College of Agriculture and Natural Resources, Oklahoma State University, 2005.
- Outstanding Ph.D. Student Award, Department of Plant and Soil Sciences, Oklahoma State University, 2004.
- Dale-Weibel Memorial Graduate Scholarship, Department of Plant and Soil Sciences, Oklahoma State University, 2003.
- Travel Award, Graduate and Professional Student Government Association, Oklahoma State University, 2004.
- Gold Medal, "Outstanding M.S. Student", 1997; Bangladesh Agricultural University.

GRADUATE STUDENTS AWARDS

- Dipendra Shahi, Agricultural Women's Club Scholarship, College of Agricultural and Life Sciences,
 UF, for the 2019-2020 academic year
- Sumit Shrestha, UF Graduate Student Council Travel Grant, UF GSC, 2018.
- Dipendra Shahi, Paul Robin Harris Memorial Scholarship Award, the Agronomy Department, UF, 2018.
- Sumit Shrestha, Paul Robin Harris Memorial Scholarship Award, the Agronomy Department, UF, 2018.
- Muhsin AVCI, Paul Robin Harris Memorial Scholarship Award, the Agronomy Department, UF, 2017.

PRESENTATIONS (Total 19; Invited Presentation15; Volunteered 4)

- 8 internationals
- 3 nationals
- 2 regionals
- 3 state
- 3 locals

GRADUATE STUDENTS

Major Advisor (6):

- Sumit Pradhan Shrestha (Ph.D.) (completed, August, 2019)
- Mohammad Maksud Hossain (MS) (completed, May, 2019)
- Muhsin AVCI (MS) (completed, July 2018)
- Jahangir Khan (Ph.D.) (Fall, 2015 –Fall, 2019)
- Dipendra Shahi (Ph.D.) (Fall, 2016- summer, 2020)
- Jordan McBreen (MS)

Committee Member (9)

- 6 Ph.D.
- 3 MS

POST-DOC (1)

• Jia Guo (April 2017-Present)

VISITING SCHOLARS

| Name | Country | Program | Funding source |
|---------------------|----------|--|---|
| Essam Adel Elshamey | Egypt | Post-doc visiting scholar (Jan- June, 2016; 6 months) | Higher education ministry of Egypt |
| Naeem Khan | Pakistan | Ph.D. visiting student (April to Oct, 2016; 6 months) | Higher education commission of Pakistan |
| Sadia Latif | Pakistan | Ph.D. visiting student (May to Dec, 2016; 6 months) | Higher education commission of Pakistan |
| Zhiyu Kang | China | Visiting post-doc (Sep, 2016 to August, 2017; 12 months) | China Scholarship Council (CSC) |

AREA OF SPECIALIZATION

- 1) Variety development.
- 2) Genetic inheritance and genomic analysis.
- 3) Metabolic phenotyping.
- 4) High-throughput phenotyping techniques.

RESEARCH INTEREST

My research program involves genetic improvement of two major food crops (wheat and oats) for abiotic stress tolerance, particularly heat stress. Wheat is a major global source for calories and nutrients, but its production is highly limited by heat stress. Global climate change, including high temperature and unpredictable rainfall patterns, coupled with an increasing human population, is creating immense pressure on food security and sustainability. It is crucial for plant breeding programs to understand how wheat responds to high temperature and variable water stress environments, allowing development of varieties that are better adapted to abiotic stress. In fact, breeding for more stress-resilient wheat is a major strategy for achieving sustainable global crop production.

The hot and humid environment occurring throughout the life cycle of wheat produced in Florida provides a set of novel conditions perfectly suited for developing heat tolerant wheat varieties. Capitalizing on this unique research opportunity, the overall goal of my program is to develop new wheat varieties that are able to withstand heat stress while maintaining yield in the Florida environment and other global regions with similar climate conditions. The specific objectives of the program include: 1) identifying traits (such as fruiting efficiency) that are associated with increased productivity under heat stress; 2) understanding the genetic and biochemical mechanisms controlling those traits; and 3) understanding how wheat varieties that contain these improved traits will affect future climate-change scenarios through crop modelling.

An ancillary portion of my program is dedicated to exploring alternative crops for Florida to provide economic sustainability in cropping systems. This area of my program is dedicated to evaluating alternative food crops to those currently produced in Florida, including such crops as edamame (vegetable soybean) and chickpea, to support growers' livelihoods and the statewide food market.

TEACHING INTEREST

The teaching component of the position includes full responsibility (100%) for AGR3303 (Genetics), offered each fall semester; and 80% responsibility for AGR4320 (Plant Breeding, undergraduate section) and AGR5321C (Genetic Improvement of Plants, graduate section) offered each spring semester. For

 $AGR4320/AGR5321C, I have \ responsibility \ for \ developing \ both \ in \ class \ and \ online \ delivered \ content.$

These courses focus on training undergraduate and graduate students in the following areas:

- The principles, theories, and applications of genetics.
- Application of genetic principles for crop improvement.
- Understanding how genetic selection can improve the stress tolerance and other characteristics in crops.
- Selection techniques and methods that can be used in genetic improvement of self- and cross-pollinated crops.
- Molecular breeding techniques and molecular biology methods that can be used for genetic improvement of crops.

ANN R. SOFFES BLOUNT, Ph.D.

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EDUCATION

| B.S. | 1978 | Crop Science | Texas A&M University |
|-------|------|---|-----------------------|
| M.S. | 1980 | Major: Crop Ecology (Forages) | University of Florida |
| | | Minor: Soil Microbiology and N | ematology |
| Ph.D. | 1984 | Plant Breeding & Genetics | University of Florida |
| | | Minor: Soil Microbiology and Nematology | |

PROFESSIONAL EXPERIENCE

| 1980-84 | Graduate Assistant | Agronomy Department University of Florida |
|---------|----------------------|--|
| 1984-88 | Research Associate | Agronomy Department USDA-ARS |
| 1988-98 | Biological Scientist | North FL Research and Education Center-University of Florida |

CURRENT FTE

70% research/30% extension

GRADUATE STUDENTS SUPERVISED/MEMBER

11 Ph.D. students and 12 Masters students

RESEARCH

Breeding efforts focus on physiological aspects (i.e. photoperiod and cold response) of fall-season forage production and complimentary disease, insect and nematode resistances to allow the forages to be productive outside normal growing seasons. The major forage crop effort in the program is breeding improvement in bahiagrass, *Paspalum notatum*, and evaluation of new introductions of perennial peanut, *Arachis glabrata*. Cultivar development and evaluation of other forage species (i.e. limpograss, small grains, ryegrass, clover and bermudagrass) is part of a collaborative effort with state and regional plant breeding programs to adapt new forages to the southern Coastal Plain and Peninsular Florida.

EXTENSION

Extension responsibilities include educational programming and written works on forage selection and management practices for county faculty and producers within the tri-state area of FL, AL and GA. This program supports extension faculty through EDIS publications, in-service training, field days and producer-based meetings addressing local and regional concerns.

SELECTED GERMPLASM AND VARIETIES DEVELOPED

Cultivars and Germplasm Releases (Total: 76 developed or co-developed)

Small Grains: 24 cultivars, 2 germplasm Bahiagrass: 1 cultivar, 2 germplasm

Perennial peanut: 3 cultivars, 2 germplasm

Limpograss: 2 cultivars Ryegrass: 34 cultivars

Soybean: 1 cultivar, 1 germplasm

Red clover: 3 cultivars White clover: 1 cultivar

SELECTED PLANT VARIETY PROTECTION (PVP) AND PLANT PATENTS

Plant Variety Protection (PVP) FL0567 Oat (Legend 567) (2015). A.R. Blount, R.D. Barnett, C.L. Mackowiak, and J.C. Jones

Plant Variety Protection (PVP) Earlyploid ryegrass (2013). A.R. Blount, G.M. Prine, C.L. Mackowiak, J.C. Jones, K.E. Kenworthy, and P.E. Reith

Plant Variety Protection (PVP) UF-Riata bahiagrass (2013). A.R. Blount, P. Mislevy, T.R. Sinclair, and K.H. Quesenberry

Plant Variety Protection (PVP) received on Horizon 201 oat (2009). A.R. Blount and R.D. Barnett.

Plant Variety Protection (PVP) received on Horizon 321 Oat, 2006. A.R. Blount, R.D. Barnett, J.W. Johnson, P.L. Pfahler, B.M. Cunfer, and G.D. Buntin.

SELECTED PUBLICATIONS

Career Summary- Book chapters: 2; Refereed Articles: 185; Non-refereed Articles: 402; International and National Proceedings: 36; Abstracts: 235; Refereed Extension Articles: 45

Esteban Rios, Ann Blount, Phil Harmon, Cheryl Mackowiak, Kevin Kenworthy and KennethQuesenberry. 2015. Ergot resistant tetraploid bahiagrass and fungicide effects on seed yield and quality. Plant Health Progress 04/2015; 16(2):56-62. DOI:10.1094/PHP-RS-14-0051

Krueger, N.C., L.E. Sollenberger, A.R. Blount, J.M.B. Vendramini, N.L.S. Lemos, A.G. Costa, and A.T. Adesogan. 2015. Mixed stocking by cattle and goats for blackberry control in rhizoma peanut-grass pastures. Crop Sci. (in press).

Castillo, M, L. Sollenberger, A. Blount, J. Ferrell, C. Na, and C. Mackowiak. 2014. Seedbed preparation techniques and weed control strategies for strip-planting rhizoma peanut into warm-season grass pastures. Crop Sci. vol 54-4:1868-1875. DOI: 10.2135/cropsci2013.06.0408

Mullenix, M.K., L.E. Sollenberger, A.R. Blount, J.M.B. Vendramini, M.L. Silveira. 2014. Growth habit of rhizoma peanut affects establishment and spread when strip planted in bahiagrass pastures. Crop Science 01/2014; 54:2886-2892.

Blount, A.R. P.L. Pfahler, R.N. Gates and K.H. Quesenberry. 2003. Early plant selection effects on crown traits in 'Pensacola' bahiagrass with selection cycle. Crop Sci. 43:1996-1998.

Blount, A.R., R.N. Pittman, B.A. Smith, R.N. Morgan, W. Dankers, T.M. Momol and R.K. Sprenkel. 2002. A preliminary first report of Peanut Stunt Virus in perennial peanut in north Florida and southern Georgia. Plant Dis. 2002; 86:326; published online as D-2002-0122-01N, 2002.

ALAN H. CHAMBERS, Ph.D.

Assistant Professor, Genetics and Breeding of Tropical Fruits
Tropical Research and Education Center
Horticultural Sciences Department
University of Florida, Institute of Food and Agricultural Sciences
18905 SW 280 St., Homestead, FL 33031-3314
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https://trec.ifas.ufl.edu/faculty/chambers/
www.linkedin.com/in/alanhchambers,

PURPOSE STATEMENT

I am a tropical fruits breeder creating novel cultivars through deep genomic/genetic insights and advanced molecular methods. The primary objective of my program is to increase value to growers and enhance the consumer experience. I am passionately interested in superior agronomic performance, enhanced sensory and nutritional quality, optimized sustainable production, and gaining fundamental insights enabling future genetic gains.

My rapidly expanding program includes mango, banana, papaya, passion fruit, avocado, *Vanilla*, strawberry, and other tropical/subtropical fruits. I am interested in developing domestic and international collaborations towards deploying genetic solutions that will improve access to nutritious, affordable, and abundant food irrespective of geography.

EDUCATION

Ph.D. Horticultural Sciences, University of Florida, August 2010 - December 2013

M.S. Plant Pathology, Cornell University, August 2007 - August 2010

B.S. Genetics and Biotechnology (Psychology minor), Brigham Young University, April 2007

PROFESSIONAL EXPERIENCE

Assistant Professor, University of Florida, Homestead, FL. Aug 2016 - *present*Molecular Biochemist, Agro Discovery, PepsiCo R&D - Nutrition. Hawthorne, NY. Feb 2014 - August 2016

Managing multiple internal and external collaborations supporting PepsiCo raw material innovation Genetic solutions for nutrition, productivity, processability, and sustainability for all major crops in PepsiCo portfolio

Obtained project funding for multiple consumer quality and toolbox development projects

PEER-REVIEWED PAPERS

Hu Y, Resende M, Bombarely A, Brym M, Bassil E, Chambers A. 2019. Genomics-based diversity analysis of *Vanilla* species using a *Vanilla planifolia* draft genome and Genotyping-By-Sequencing. Scientific Reports 9:3416.

Kuhn D, Livingstone D, Richards J, Manosalva P, Van den Berg N, Chambers A. 2019. Application of genomic tools to avocado (*Persea americana*) breeding: SNP discovery for genotyping and germplasm characterization. Scientia Horticulturae 246:1-11.

Chambers A. 2018. Establishing Vanilla Production and a Vanilla Breeding Program in the Southern United States. Handbook of Vanilla Science and Technology. Wiley Blackwell. 165-180.

Chambers A, Moon P, Fu Y, and Choiseul J. 2018. Yield and Fruit Quality of Sixteen Fragaria vesca

- Accessions Grown in Southern Florida. HortScience. 53/10: 1396-1403.
- Moon P, Fu Y, Bai J, Plotto A, Crane J, Chambers A. 2018. Assessment of fruit aroma for twenty-seven guava (Psidium guajava) accessions through three fruit developmental stages. Scientia Horticulturae. 238: 375-383.
- Kuhn D, Livingstone D, Richards J, Manosalva P, Van den Berge N, Chambers A. 2018. Application of genomic tools to avocado (Persea americana) breeding: SNP discovery for genotyping and germplasm characterization. Scientia Horticulturae. 246: 1-11.
- Pillet J, Chambers A, Barbey C, Bao Z, Plotto A, Bai J, Schwieterman M, Johnson T, Harrison B, Whitaker V, Colquhoun T, and Folta K. 2017. Identification of a methyltransferase catalyzing the final step of methyl anthranilate synthesis in cultivated strawberry. BMC Plant Biology. 17/147.
- Saccomanno B, Chambers A, Hayes A, Mackay I, McWilliam S, Trafford S. 2016. Starch granule morphology in oat endosperm. J Cereal Sci 73:46-54.
- Pillet J, Hao-Wei Yu, Chambers A, Whitaker V, Folta K. 2015. Functional identification of candidate flavonoid-pathway genes using transcriptome correlation network analysis in ripe strawberry (*Fragaria* x *ananassa*) fruits. J Ex Bot 66(15):4455-4467.
- Chambers A, Plotto A, Bai J, Stodghill P, Whitaker V, Folta K. 2014. Identification of a strawberry flavor gene using an integrated genetic-genomic-analytical chemistry approach. BMC Genomics 15:217.
- Chambers A, Evans S, Folta K. 2013. Methyl anthranilate and γ-decalactone inhibit strawberry pathogen growth and achene germination. Agric Food Chem 61(51):12625-33.
- Chambers A, Pollard H, Folta K. 2013. Limitations of morphological ploidy estimation methods in *Fragaria*. Journal of Berry Research, 3:135-149.
- Chambers A, Carle S, Wambui N, Chamala S, Bassil N, Whitaker V, Barbazuk B, Folta K. 2013. A genome-enabled, high-throughput, and multiplexed fingerprinting platform for strawberry (*Fragaria* L.). Mol. Breeding 31(3):615-629.
- Chambers A, Whitaker V, Gibbs B, Plotto A, Folta K. 2012. Detection of the linalool-producing *NES1* variant across diverse strawberry (*Fragaria* spp.) accessions. Plant Breeding 131(3):437-443.
- Swingle B, Bao Z, Markel E, Chambers A, Cartinhour S. 2010. Recombineering using RecTE from *Pseudomonas syringae*. Applied and Environmental Microbiology 76(15):4960-4968.
- Bignell D, Seipke R, Huguet-Tapia J, Chambers A, Parry R, Loria R. 2010. *Streptomyces scabies* 87-22 contains a coronafacic acid-like biosynthetic cluster that contributes to plant-microbe interactions. MPMI 23(2):161-175.

LEADERSHIP EXPERIENCE

American Society for Horticultural Sciences, Tropical Fruit Professional Interest Group, Chair, 2018-2019

American Society for Horticultural Sciences, Orchids Professional Interest Group, Secretary, 2018 Florida State Horticultural Society, Krome Section VP 2019, VP-elect 2018

HONORS AND ACHIEVEMENTS

UNC Kenan-Flagler Business Essentials Certificate, August 2015

Eagle Scout Award. Springfield, Virginia, May 1999

ORAL PRESENTATIONS

Application of Plant Genetics and Genomics to Improve Quality and Benefit End Users. Private Company. Cincinnati, OH. Dec 6, 2018.

Trialing and Breeding New Tropical Fruits for Domestic Growers. North Carolina State University Wernsman Seminar Series. Raleigh, NC. Mar 16, 2018.

Tropical Fruit: Where Quality Beats Yield. North Carolina State University Wernsman Seminar Series. Raleigh, NC. Mar 15, 2018.

Domestic production, global innovation. Vanilla 2017. Monroe, NJ. Nov 7, 2017.

Banana Splits From Its Extinction Cycle. American Association of Cereal Chemists. San Diego, CA. Oct 10, 2017.

Overcoming limitations to tropical fruit breeding in southern Florida. American Society for Horticultural Sciences. Waikoloa, HI. Sep 20, 2017.

Yield and Fruit Quality of Commercial and Alpine Strawberry Varieties in Southern Florida. American Society for Horticultural Sciences. Washington D.C. Jul 31, 2018.

Aroma and fruit quality analysis of 20 guava varieties at three stages of fruit development. American Society of Horticultural Science. Waikoloa, HI. Sep 22, 2017.

Marker-Assisted Selection in Tropical Fruits. University of Florida AGR6322 Advanced Plant Breeding. Gainesville, FL. Oct 18, 2018.

The Future of the Florida Citrus Industry. Citrus Engineering Conference. Lake Alfred, FL. Jun 7, 2018.

Vanilla. Orchid Short Course. Gainesville, FL. Apr 20, 2018.

Overcoming limitations to tropical fruit breeding in southern Florida. University of Florida GCREC. Balm, FL. Jun 15, 2017.

Overcoming limitations to tropical fruit breeding in southern Florida. Florida State Horticultural Society. Tampa, FL. Jun 5, 2017 - Jun 5, 2017.

Tropical fruit breeding at UF-TREC: Where Vanilla isn't vanilla. Selby Botanical Gardens. Sarasota, FL. Feb 22, 2017 - Feb 22, 2017.

Vanilla Conservation, Genetics, and Opportunities for Southern Florida. Florida State Horticultural Society. Fort Lauderdale, FL. Jun 11, 2018.

Tropical Fruit Breeding at UF-TREC: A Water Cooler Talk. University of Florida.

- Gainesville, FL. Apr 19, 2018.
- Overcoming limitations to tropical fruit breeding in southern Florida. UF Plant Molecular and Cellular Biology. Daytona, FL. May 6, 2017.
- Tropical fruit breeding at UF-TREC. Ball Horticultural. Gainesville, FL. Apr 10, 2017 Apr 10, 2017.
- Vanilla in Florida: From Wild Species to Potential Markets. University of Florida HOS5555 Tropical Fruit Production and Research. Homestead, FL. Jul 9, 2018.
- Vanilla in Southern Florida: From Native Species to Commercial Considerations. Tropical Fruit and Vegetable Society. Homestead, FL. Jun 27, 2018.
- The tools of tropical fruit breeding. Tropical Fruit and Vegetable Society. Homestead, FL. Aug 30, 2017 Aug 30, 2017.
- Opportunities for tropical fruit improvement at TREC. Tropical Fruit Growers Forum. Homestead, FL. May 8, 2017 May 8, 2017.
- Vanilla: Diversity, Breeding, and Quality. University of Florida TREC. Homestead, FL. Mar 1, 2018.
- Tropical Fruit Concepts. UF TREC Board. Homestead, FL. Jun 21, 2017 Jun 21, 2017.
- Tropical Fruit Concepts. J&C Tropicals. Homestead, FL. May 26, 2017 May 26, 2017.
- Breeding and genetics of tropical fruit crops. University of Florida TREC. Homestead, FL. Apr 13, 2017 Apr 13, 2017.

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EDUCATION

| PhD | Plant Breeding | North Carolina State University | 1993 |
|-----|-----------------------|---------------------------------|------|
| MS | Horticultural Science | University of Florida | 1986 |
| BS | General Agriculture | University of Puerto Rico | 1981 |

PROFESSIONAL EXPERIENCE

| University of Florida | Associate Professor | 2004-present |
|-----------------------|---------------------|--------------|
| USDA-ARS | Research Geneticist | 1997-2004 |
| ForBio Research | Research Scientist | 1993-1996 |

TEACHING EXPERIENCE

Currently responsible for teaching HOS6201 Breeding Perennial Cultivars, FRC3252 Introduction to Tropical and Subtropical Fruit, and FRC3212 Introduction to Citrus Culture and Production.

PUBLICATIONS

Maquilan, M. A., Olmstead, M. A., Olmstead, J. W., Dickson, D. W., Chaparro, J. X. 2018. Genetic analyses of resistance to the peach root-knot nematode (Meloidogyne floridensis) using microsatellite markers. Tree Genetics & Genomes. 14 (4).

Maquilan, M. A., Olmstead, M. A., Dickson, D. W., Chaparro, J. X. 2018. Inheritance of resistance to the peach root-knot nematode (Meloidogyne floridensis) in interspecific crosses between peach (Prunus persica) and its wild relative (Prunus kansuensis). Plant Breeding. 137 (5) 805-813.

Mancero-Castillo, D., Beckman, T. G., Harmon, P. F., Chaparro, J. X. 2018 A major locus for resistance to Botryosphaeria dothidea in Prunus. Tree Genetics & Genomes. 14 (2).

Duval, A., Gezan, S.A., Mustiga, G., Stack, C., Marelli, J.P., Chaparro, J., Livingstone, D., Royaert, S., Motamayor, J. C. 2017. Genetic Parameters and the Impact of Off-Types for Theobroma cacao L. in a Breeding Program in Brazil. Frontiers in Plant Science. 8.

Chavez, Dario J, Beckman, Thomas G, Chaparro, José X. 2016. Identifying the North American Plum Species Phylogenetic Signal Using Nuclear, Mitochondrial, and Chloroplast DNA Markers JASHS.141(6) 623-644.

Rahemi, A., Gradziel, T. M., Chaparro, J. X., Folta, K. M., Taghavi, T., Fatahi, R., Ebadi, A., Hassani, D. 2015 Phylogenetic relationships among the first and second introns of selected Prunus S-RNase genes. Canadian Journal of Plant Science. 95 (6) 1145-1154.

Chavez, D. J., Beckman, T. G., Werner, D. J., Chaparro, J. X. 2014. Genetic diversity in peach Prunus persica (L.) Batsch at the University of Florida: past, present and future. Tree Genetics & Genomes. 10(5) 1399-1417.

Chaparro, J. X., Conner, P. J., Beckman, T. G. 2014. 'GulfAtlas' Peach. Hortscience 49(8) 1093-1094.

Carrillo-Mendoza, O., Chaparro, J.X.; Williamson, J. 2013. Branching and Blind Node Incidence in Interspecific Backcross Families of Peach. 2013. HortScience. 48:1119-1124

Blaker, K.M., Chaparro, J.X., and Beckman, T.G. 2013. Identification of QTLs controlling seed dormancy in peach (*Prunus persica*). Tree Genetics & Genomes. 9 (3) 659-668.

Beckman, T.G., Chaparro, J.X., and Conner, P.J. 2013. 'Gulfsnow' Peach. HortScience. 48:126-127.

Beckman, T.G.,* Chaparro, J.X., and Sherman, W.B. 2012. 'MP-29', a clonal interspecific hybrid rootstock for peach. HortScience. 47:128-131.

Rahemi, A.R., Fatahi, R., Ebadi, A., Taghavi, T., Hassani, D., Gradziel, T., Folta, K., and Chaparro, J.,

2012 Genetic diversity of some wild almonds and related Prunus species revealed by SSR and
EST-SSR molecular markers. Plant Systematics and Evolution. 298:173-192.

Beckman, T.B., Chaparro, J.X., and Sherman, W.B. 2012. Evidence for control of double flowering in peach via a dominant single gene locus. Acta Horticulturae 962: 139-141.

Chaparro, J.X. and Beckman, T.B. 2012. Evidence for a new single gene trait controlling premature defoliation in peach. Acta Horticulturae 962:147-149.

Chaparro, J.X., Carrillo-Mendoza*, O., Sherman, W.B., and Beckman, T.B. 2012. Evaluation of *Prunus kansuensis* as a genetic tester for peach. Acta Horticulturae 962: 151-154.

Blaker, K.M. and Chaparro, J.X. 2012. Detection of seed dormancy quantitative trait loci (QTL) in peach. Acta Horticulturae. 962:143-146.

Rahemi;, A.R., Taghavi, T., Fatahi, R., Ebadi, A., Hassani, D., Chaparro, J., and Gradziel, T. 2011. Seed germination and seedling establishment of some wild almond species. African Journal of Biotechnology. 10:7780-7786.

Rahemi, A.*, Fatahi, R., Ebadi, A., Hasani, D., Chaparro, J., Gradziel, T. and Robinson, T. L. 2011. Establishment and growth parameters of some wild almonds in Iran. Acta Horticulturae. 903: 993-998.

Rahemi, A.*, Fatahi, R., Ebadi, A., Hassani, D., Chaparro, J.X., Ak, B.E., Wirthensohn, M., and Gradziel, T. 2011. The study of seed stratification and germination in Amygdalus species of Iran. Acta Horticulturae. 912: 275-279.

Rahemi, A.,* Fatahi, R., Ebadi, A., Hassani, D., Chaparro, J. X., Ak, B. E., Wirthensohn, M., and Gradziel, T. 2011. Nut morphological characterizations of some wild almonds in Iran. Acta Horticulturae. 912: 405-410.

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EDUCATIONAL BACKGROUND

| Penn State University | Horticulture | Ph.D. | 1994 |
|-------------------------|--------------|-------|------|
| Clemson University | Horticulture | M.S. | 1990 |
| University of Tennessee | Horticulture | B.S. | 1988 |

EMPLOYMENT

| University of Florida | Professor | 2007-present |
|-----------------------|---------------------|--------------|
| University of Florida | Associate Professor | 2001-2007 |
| University of Florida | Assistant Professor | 1995-2001 |
| Penn State University | Ph.D. Candidate | 1990-1994 |
| Clemson University | M.S. candidate | 1988-1990 |

PATENTS

2007 US Patent 7,192,913: Enhancing the Fragrance of an Article 2005 US Patent 7,217,859: Genetic Elements Conferring Flower Petal Specific Transgene Expression 2005 US Patent 7,253,340: Floral organ tissue-specific expression of isopentenyl transferase 2018 US Plant Patent PP 29,820: Solenostemon scutellarioides 'UF14-24-1' 'Flamethrower Salsa Verde' 2017 US Plant Patent PP 28,591: Solenostemon scutellarioides 'UF 13-26-7' 'Inferno' 2017 US Plant Patent PP 28,566: Solenostemon scutellarioides 'UF 13-42-4' 'Ruby Slipper' 2017 US Plant Patent PP 28,517: Solenostemon scutellarioides 'UF 13-48-27' 'French Quarter' 2016 US Plant Patent PP 27,269: Solenostemon scutellarioides 'UF 12-22-1' 'Campfire' 2016 US Plant Patent PP 27,288: Solenostemon scutellarioides 'UF12-82-3' 'Flamethrower Chipotle' 2016 US Plant Patent PP 27,500: Solenostemon scutellarioides 'UF 12-74-3' 'Marquee Special Effect' 2016 US Plant Patent PP 27,499: Solenostemon scutellarioides 'UF 12-73-5' 'Flamethrower Spiced Curry' 2016 US Plant Patent PP 27,076: Solenostemon scutellarioides 'UF 08-5-10' 'Marquee Blonde Bombshell' 2016 US Plant Patent PP 27,077: Solenostemon scutellarioides 'UF 09-8-37' 'Marquee Box Office Bronze' 2016 US Plant Patent PP 27,078: Solenostemon scutellarioides 'UF 08-19-10' 'Marquee Red Carpet' 2016 US Plant Patent PP 27,126: Solenostemon scutellarioides 'UF 10-45-12' 'Coleosaurus' 2016 US Plant Patent PP 27,140: Solenostemon scutellarioides 'UF 12-30-6' 'Lime Time' 2015 US Plant Patent PP 25,653: Solenostemon scutellarioides 'UF 11-74-5' 'Mainstreet Gran Via' 2015 US Plant Patent PP 25,652: Solenostemon scutellarioides 'UF 12-6-2' 'Mainstreet Sunset Boulevard' 2015 US Plant Patent PP 25,626: Solenostemon scutellarioides 'UF 12-35-9' 'Mainstreet Wall Street' 2015 US Plant Patent PP 25,651: Solenostemon scutellarioides 'UF 12-62-2' 'Mainstreet River Walk' 2015 US Plant Patent PP 25,650: Solenostemon scutellarioides 'UF 12-87-9' 'Mainstreet Oxford Street' 2015 US Plant Patent PP 25,627: Solenostemon scutellarioides 'UF 11-74-12' 'Gator Glory' 2013 US Plant Patent PP 23,585: Solenostemon scutellarioides 'UF 08-4-3' 'Wasabi'

2013 US Plant Patent PP 23,586: Solenostemon scutellarioides 'UF 08-17-4' 'Sultana'
2010 US Plant Patent PP 21,602: Solenostemon scutellarioides 'UF 06-04-19' 'Trusty Rusty'
2010 US Plant Patent PP 21,585: Solenostemon scutellarioides 'UF 06-04-06' 'Redhead'
2001 US Plant Patent PP 11,989: Pelargonium domesticum 'PSU 93-30-13' 'Fascination'
2000 US Plant Patent PP 11,697: Pelargonium domesticum 'PSU 93-11-4' 'Dandy'

UF CULTIVAR RELEASES

UF17-73-7 - released in 2019 - commercialized in 2019 by ProvenWinners Co. as 'Colorblaze Wicked Witch' UF17-52-2 - released in 2019 - commercialized in 2019 by ProvenWinners Co. as 'Colorblaze Wicked Hot' UF17-128-17 – released in 2019 - commercialized in 2019 by Dummen Co. as 'Stained Glassworks Eruption' UF17-64-1 - released in 2019 - commercialized in 2019 by Dummen Co. as 'Mainstreet Beale Street' UF17-50-5 – released in 2019 - commercialized in 2019 by Dummen Co. as 'Mainstreet Alligator Alley' UF17-48-3 – released in 2019 - commercialized in 2019 by Dummen Co. as 'Mainstreet Boston' UF16-91-25 - released in 2019 - commercialized in 2019 by Ball Horticultural Co. as 'Heartbreaker' UF16-9-3 – released in 2018 - commercialized in 2018 by ProvenWinners Co. as 'Rediculous' UF15-6-28 - released in 2018 - commercialized in 2018 by Ball Horticultural Co. as 'Flamethrower Serrano' UF15-97-9 – released in 2018 - commercialized in 2018 by Ball Horticultural Co. as 'Flamethrower Salsa Roja' UF15-20-6 - released in 2018 - commercialized in 2018 by Ball Horticultural Co. as 'Pinkplosion' UF16-23-2 - released in 2018 - commercialized in 2018 by ProvenWinners Co. as 'Amazel' UF14-24-1 – released in 2017 - commercialized in 2017 by Ball Horticultural Co. as 'Flamethrower Salsa Verde' UF16-1-20 - released in 2017 - commercialized in 2017 by ProvenWinners Co. as 'Sedona Sunset' UF16-5-6 - released in 2017 - commercialized in 2017 by Dummen Co. as 'Mainstreet Ocean Drive' UF16-14-3 – released in 2017 - commercialized in 2017 by ProvenWinners Co. as 'Colorblaze Cherry Brandy' UF16-14-5 – released in 2017 - commercialized in 2017 by ProvenWinners Co. as 'Colorblaze Kingswood' UF16-27-1 – released in 2017 - commercialized in 2017 by Dummen Co. as 'Mainstreet Chartres Street' UF16-45-18 – released in 2017 - commercialized in 2017 by Dummen Co. as 'Stained Glassworks Crown Jewel' UF16-64-1 - released in 2017 - commercialized in 2017 by Dummen Co. as 'Mainstreet Ruby Road' UF16-72-8 - released in 2017 - commercialized in 2017 by Dummen Co. as 'Mainstreet La Rambla' UF16-88-9 – released in 2017 - commercialized in 2017 by Dummen Co. as 'Stained Glassworks Royalty' UF 13-26-7 – released in 2016 - commercialized in 2016 by Ball Horticultural Co. as 'Inferno' UF 13-42-4 – released in 2016 - commercialized in 2016 by Ball Horticultural Co. as 'Ruby Slipper' UF 13-48-27 - released in 2016 - commercialized in 2016 by Ball Horticultural Co. as 'French Quarter' UF 12-73-5 – released in 2015 - commercialized in 2015 by Ball Horticultural Co. as 'Flame Thrower Spiced Curry' UF 12-74-3 – released in 2015 - commercialized in 2015 by Ball Horticultural Co. as 'Marquee Special Effect' UF 13-6-11 - released in 2015 - commercialized in 2015 by ProvenWinners Co. as 'Velveteen' UF 08-5-10 - released in 2014 - commercialized in 2014 by Ball Horticultural Co. as 'Marquee Blonde Bombshell' UF 08-19-10 - released in 2014 - commercialized in 2014 by Ball Horticultural Co. as 'Marquee Red Carpet' UF 09-8-37 – released in 2014 - commercialized in 2014 by Ball Horticultural Co. as 'Box Office Bronze' UF 10-45-12 – released in 2014 - commercialized in 2014 by Ball Horticultural Co. as 'Coleosaurus' UF 12-30-6 - released in 2014 - commercialized in 2014 by ProvenWinners Co. as 'Lime Time' UF 12-46-2 - released in 2014 - commercialized in 2014 by Dummen Co. as 'Mainstreet Abbey Road' UF 12-85-28 – released in 2014 - commercialized in 2014 by Dummen Co. as 'Mainstreet Broadway' UF 12-86-9 – released in 2014 - commercialized in 2014 by Dummen Co. as 'Mainstreet Fifth Avenue' UF 12-22-1 - released in 2014 - commercialized in 2014 by Ball Horticultural Co. as 'Campfire'

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UF 12-64-1 – released in 2014 - commercialized in 2014 by Ball Horticultural Co. as TBA
UF 12-82-3 – released in 2014 - commercialized in 2014 by Ball Horticultural Co. as 'Flame Thrower Chipotle'
UF 11-23-7 – released in 2013 - commercialized in 2013 by ProvenWinners Co. as 'Ruby Dream'
UF 11-23-31 – released in 2013 - commercialized in 2013 by ProvenWinners Co. as 'Golden Dream'
UF 11-73-8 – released in 2013 - commercialized in 2013 by ProvenWinners Co. as 'Cranberry Bog'
UF 11-77-18 – released in 2013 - commercialized in 2013 by ProvenWinners Co. as 'The Whirlpool'
UF 11-74-5 - released in 2013 - commercialized in 2013 by Dummen Co. as 'Mainstreet Gran Via'
UF 12-6-2 - released in 2013 - commercialized in 2013 by Dummen Co. as 'Mainstreet Sunset Boulevard'
UF 12-9-2 - released in 2013 - commercialized in 2013 by Dummen Co. as 'TBA'
UF 12-35-9 - released in 2013 - commercialized in 2013 by Dummen Co. as 'Mainstreet Wall Street'
UF 12-62-2 – released in 2013 - commercialized in 2013 by Dummen Co. as 'Mainstreet River Walk'
UF 12-87-9 – released in 2013 - commercialized in 2013 by Dummen Co. as 'Mainstreet Oxford Street'
UF 11-74-12 - released in 2013 - commercialized in 2013 by The University of Florida as 'Gator Glory'
UF 10-8-1 – released in 2012 - commercialized in 2012 by ProvenWinners Co. as 'Marooned'
UF 10-61-13 - released in 2012 - commercialized in 2012 by ProvenWinners Co. as 'Spumoni'
UF 10-81-1 - released in 2012 - commercialized in 2012 by ProvenWinners Co. as 'Neptune's Net'
UF 08-4-3 – released in 2011 - commercialized in 2011 by Ball Horticultural Co. as 'Wasabi'
UF 08-17-4 - released in 2011 - commercialized in 2011 by Ball Horticultural Co. as 'Sultana'
UF 08-46-24 – released in 2011 – commercialized in 2011 by Cottage Hill Farms as 'Radiant Panache'
UF 09-6-1 – released in 2011 – commercialized in 2011 by Cottage Hill Farms as 'Lemon Zinger'
UF 09-27-1 - released in 2011 - commercialized in 2011 by Cottage Hill Farms as 'Velour Magic'
UF 09-8-57 – released in 2011 - commercialized in 2011 by ProvenWinners Co. as 'Cocomint'
UF 09-8-87 – released in 2011 - commercialized in 2011 by ProvenWinners Co. as 'Keystone Kopper'
UF 09-18-1 – released in 2011 - commercialized in 2011 by ProvenWinners Co. as 'Burgundy Lace'
UF 07-10-10 - released in 2010 - commercialized in 2010 by ProvenWinners Co. as 'Rebel Rouser'
UF 07-24-5 - released in 2010 - commercialized in 2010 by ProvenWinners Co. as 'Dirty Martini'
UF 08-19-12 - released in 2010 - commercialized in 2010 by ProvenWinners Co. as 'Cordial Cherry'
UF 08-43-23 – released in 2010 - commercialized in 2010 by ProvenWinners Co. as 'Alligator Tears'
UF 06-12-19 - released in 2009 - commercialized in 2009 by ProvenWinners Co. as 'Sunset Strip'
UF 06-13-65 - released in 2009 - commercialized in 2009 by ProvenWinners Co. as 'Radical Wonder'
UF 06-13-132 - released in 2009 - commercialized in 2009 by ProvenWinners Co. as 'Snazzy'
UF 06-21-35 - released in 2008 - commercialized in 2008 by ProvenWinners Co. as 'Limon Blush'
UF 06-04-06 - released in 2008 - commercialized in 2010 Ball Horticultural Co. as 'Redhead'
UF 06-04-19 - released in 2008 - commercialized in 2010 Ball Horticultural Co. as 'Trusty Rusty'
UF 04-33-5 - released in 2006 - commercialized in 2006-7 Ball Horticultural Co. as 'Electric Lime'
UF 04-47-64 - released in 2006 - commercialized in 2006-7 by ProvenWinners Co. as 'Frilly Milly'
UF 04-69-01 - released in 2006 - commercialized in 2006-7 by ProvenWinners Co. as 'Splish Splash'
UF 06-2-78 – released in 2006 - commercialized in 2006-7 by ProvenWinners Co. as 'Pineapple Splash'
UF 06-4-18 – released in 2006 - commercialized in 2006-7 by ProvenWinners Co. as 'Lancelot'
UF 06-21-30 – released in 2006 - commercialized in 2006-7 by ProvenWinners Co. as 'Lemon Sunsation'
UF 06-40-01 - released in 2006 - commercialized in 2006-7 by ProvenWinners Co. as 'Big Red Judy'
UF 03-6-1 – released in 2005 - commercialized in 2005-6 by ProvenWinners Co. as 'Twist n' Twirl'
UF 03-8-10 – released in 2005 - commercialized in 2005-6 by ProvenWinners Co. as 'Royal Glissade'
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RELEVANT RECENT PUBLICATIONS

Kim, J.Y., Swanson, R.T., Alvarez, M.I., Johnson, T.S., Cho, K.H., Clark, D.G., Colquhoun, T.A. 2019 Down Regulation of P-coumarate 3-hydroxylase in Petunia Uniquely Alters the Profile of Emitted Floral Volatiles. Scientific Reports: 9(1):8852.

Cho, K.H., Kim, J.Y., Tester, J.M., Valad, L.K., Alvarez, M.I., Colquhoun, T.A., Laux, V.Y., and Clark, D.G. In press. Strong fluorescence expression of ZsGreen1 in petunia flowers by *Agrobacterium*-mediated transformation. *J. Amer. Soc. Hort. Sci*

Keene, S.A., Johnson, T.S., Sigler, C.L., Kalk, T.N., Genho, P., Clark, D.G., and Colquhoun, T.A. submitted. A survey of the floral volatile profiles of *Hemerocallis* L. species and hybrids. *Phytochemistry*.

Cho, K.H., Laux, V.Y., Kim, J.Y., Wallace-Springer, N., Clark, D.G., Folta, K.M., and Colquhoun, T.A., 2019. Effects of Light Quality on Vegetative Cutting and In Vitro Propagation of Coleus (*Plectranthus scutellarioides*). HortScience 54(5):926-935.

Sun, J., Sigler, C., Beaudoin, G., Joshi, J., Patterson, J., Cho, K., Ralat, M., Gregory, J., Clark, D., Deng, Z., Colquhoun, T., and Hanson A. 2019. Parts-prospecting For a High-efficiency Thiamin Thiazole Biosynthesis Pathway. *Plant Physiology* 179:958-968.

Mennella, J., Colquhoun, T. A., Bobowski, N.K., Olmstead, J.W., Bartoshuk, L., and Clark, D.G. 2017. Farm to Sensory Lab: Taste of Blueberry Fruit by Children and Adults. *Journal of Food Science* 82:1713-1719.

Dewar, P. E., Keene, S. A., Kalk, T. N., Clark, D. G., & Colquhoun, T. A. 2016. Identifying the Drivers of a Foliage Plant Purchasing Decision via Contemporary Psychophysics. *J Hortic*, *3*(177), 2376-0354.

Johnson, T. S., Schwieterman, M. L., Kim, J. Y., Cho, K. H., Clark, D. G., & Colquhoun, T. A. 2016. Lilium floral fragrance: A biochemical and genetic resource for aroma and flavor. *Phytochemistry*, *122*, 103-112.

Thomas A Colquhoun, Michael L Schwieterman, Derek J Snyder, Jennifer J Stamps, Charles A Sims, Asli Z Odabasi, Harry J Klee, Denise M Tieman, James W Olmstead, David G Clark, Linda M Bartoshuk 2016. Laboratory Demonstration of Volatile Enhanced Sweetness. *Chemical Senses* 40:622-623.

Gilbert, J.L., Guthart, M.J., Gezan, S.A., de Carvalho, M.P., Schwieterman, M.L., Colquhoun, T.A., Bartoshuk, L.M., Folta, K.M., Sims, C.A., Clark, D.G., and Olmstead, J.W. 2015. Identifying Breeding Priorities for Blueberry Flavor Using Biochemical, Sensory and Genotype by Environment Analyses. *PLoS ONE* 10(9): e0138494.

Olmstead, M.A., Gilbert, J.L., Colquhoun, T.A., Clark, D.G., Kluson, R., and Moskowitz, H.R. 2015. In pursuit of the perfect peach: consumer-assisted selection of peach fruit traits. *HortScience* 50:1202-1212.

Langer, K.M., Jones, C.R., Jaworski, E.A., Rushing, G.V., Kim, J.Y., Cline, K.C., Clark, D.G., and Colquhoun, T.A. 2014. *PhDAHP1* is required for floral volatile benzenoid/phenylpropanoid biosynthesis in a *Petunia* x *hybrida* cv 'Mitchell Diploid' flower. *Phytochemistry* 103:22-31.

Gilbert, J.L., Schwieterman, M.L., Colquhoun, T.A., Clark, D.G., Moskowitz, H.R., and J.W. Olmstead 2014. Consumer-Assisted Selection of Blueberry Fruit Quality Traits. *HortScience* 49:864-873.

Schwieterman, M.L., Colquhoun, T.A., Bartoshuk, L.M., Jaworski, E.A., Gilbert, J.L., Tieman, D.M., Odabasi, A.Z., Moskowitz, H.R., Folta, K.M., Klee. H.J., Sims, C.A., Whitaker, V.M., and D.G. Clark 2014. Strawberry Flavor: Diverse Chemical Compositions, a Seasonal Influence, and Effects on Sensory Perception. PLOSONE 9(2):e88446.

Colquhoun, T.A., Schwieterman, M.L., Gilbert, J.L., Jaworski, E.A., Langer, K.M., Jones, C.R., Rushing, G., Clark, D.G., and K.M. Folta 2013. Light Modulation of Plant Flavor and Aroma Compounds in Select Fruits and Flowers. *Postharvest Biol. Technol.* 86: 37-44.

Gilbert, J.L., Schwieterman, M.L., Colquhoun, T.A., Clark, D.G., and J.W. Olmstead 2013. Potential for Increasing Southern Highbush Blueberry Flavor Acceptance by Breeding for Major Volatile Components. *HortScience* 48(7): 835–843.

Kessler, D., C. Diezel, D.G. Clark, T.A. Colquhoun and I.T. Baldwin. 2013. Petunia flowers solve the defence/apparency dilemma of pollinator attraction by deploying complex floral blends. *Ecology Letters* 16(3):299-306.

Levin L.A., Langer K.M., Clark D.G., Callaway J.L., Moskowitz H.R. and T.A. Colquhoun. 2012. Using Mind Genomics to Identify Essential Elements of a Flower Product. *HortScience* 47(11):1-8.

Colquhoun T.A., D.M. Marciniak, A.E. Wedde, J.Y. Kim, M.L. Schwieterman, L.A. Levin, A. Van Moerkercke, R.C. Schuurink and D.G. Clark. 2012. A peroxisomally localized acyl-activating enzyme is required for volatile benzenoid formation in a Petunia x hybrida cv. 'Mitchell Diploid' flower. *Journal of Experimental Botany* 63(13):4821-4833.

Tieman D, Bliss P, McIntyre LM, Blandon-Ubeda A, Bies D, Odabasi AZ, Rodríguez GR, van der Knaap E, Taylor MG, Goulet C, Mageroy MH, Snyder DJ, Colquhoun T, Moskowitz H, Clark DG, Sims C, Bartoshuk L, Klee HJ. 2012. The chemical interactions underlying tomato flavor preferences. *Current Biology* 5;22(11):1035-1039

Colquhoun T.A., L.A. Levin, H.R. Moskowitz, V.M. Whitaker, D.G. Clark and K.M. Folta 2012. Framing the perfect strawberry: An exercise in consumer-assisted selection of fruit crops. *Journal of Berry Research* 2:45-61.

AWARDS

Penn State University College of Agricultural Sciences Outstanding Alumnus – 2018
Penn State University Armsby Honors Society – 2018
Society of American Florists Gold Medal Award – 2014
University of Florida Research Foundation Professorship – 2013

ZHANAO DENG, Ph.D.

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EDUCATION

Ph.D., Huazhong Agricultural Univ. (China), 1988. M.S., Huazhong Agricultural Univ. (China), 1985. B.S., Sichuan Agricultural Univ. (China), 1982.

PROFESSIONAL WORK EXPERIENCE

- 2015 Present: Professor, Univ. of Florida (UF), Gulf Coast Res. and Ed. Center (GCREC), Wimauma, FL
- 2009 2015: Associate Professor, UF, GCREC
- 2002 2009: Assistant Professor, UF, GCREC
- 1999 2002: Assistant-In Citrus Molecular Genetics and Biology, UF, Citrus Research and Education Center (CREC), Lake Alfred, FL
- 1998 1999: Postdoctoral Research Associate, UF, CREC
- 1996 1998: Postdoctoral Research Associate, Univ. of Alberta, Department of Agricultural, Food, and Nutritional Sciences, Molecular Biology and Biotechnology Center, Edmonton, AB, Canada
- 1993 1996: Visiting Scholar, UF, CREC
- 1992 1993: Associate Professor, Huazhong Agricultural University (HAU), Department of Horticulture, Wuhan, China
- 1988 1992: Assistant Professor (Lecturer), HAU, Department of Horticulture
- 1982 1988: Graduate Assistant, HAU, Department of Horticulture

SUMMARY OF RESEARCH ACCOMPLISHMENTS

- 1. 90 refereed articles published in more than 20 journals, with some having been cited more than 100 times.
- 2. Nine book chapters published by major international publishers, 34 articles published in conference proceedings and other journals, and 137 published abstracts.
- 3. Developed and released 22 new caladium cultivars, with novel ornamental characteristics, improved tuber yield, disease resistance, and/or stress tolerance; granted 20 plant patents for new caladium cultivars; signed nearly 50 licenses for commercial production; marketed and used across the U.S. and as many as forty foreign countries in the world. These new introductions have increased grower incomes, reduced pesticide use, and improved overall plant performance for consumers.
- 4. Developed and released four triploid sterile, non-invasive Lantana camara cultivars, granted four plant patents for these cultivars, applied for IP protection in Australia and Japan. The cultivars are in commercial production in U.S., Canada, Australia, and Japan. Growers and consumers have sought non-invasive lantana varieties. These cultivars are ideal replacement of the invasive types: The protect native plants species and the environment while allowing growers and consumers to continue enjoying the benefits of lantana being easy to grow and produce, tolerant of tough landscape conditions and stresses, attracting pollinators, butterflies and bees, and saving water.
- 5. Developed and released 12 new gerbera daisy cultivars with improved resistance to powdery mildew and plant performance, granted seven plant patents for these cultivars, and established

- collaborative genetic improvement projects with top-notch horticultural firms in the world.
- 6. Discovered very valuable sources of resistance for major diseases in multiple horticultural crops and developed disease screening techniques. Including sources of resistance to Fusarium tuber rot, Pythium root rot, and Xanthomonas leaf blight in caladium, and sources of strong resistance to powdery mildew, the most destructive disease in gerbera daisy and Coreopsis. These sources of resistance have been induced to new caladium and gerbera cultivars, and also served as very valuable germplasm for commercial and private breeding programs.
- 7. Discovered, located, cloned and/or characterized important resistance/defense genes for major diseases in citrus, gerbera, impatiens and caladium, including the gene locus for citrus tristeza virus (CTV) resistance, strong candidate genes for citrus greening resistance, major quantitative trait loci for powdery mildew resistance in gerbera daisy, resistance genes for downy mildew resistance in impatiens, and defense genes for Pythium root rot resistance in caladium. These findings and molecular tools are fueling the development of a new generation of cultivars that can reduce the use of pesticides and better protect workers and the environment.
- 8. Revealed that production of unreduced female gametes via apomeiosis and apomictic seed production are the primary reproductive biological causes of lantana's strong invasive potential, discovered valuable diploids and tetraploids that lack these biological properties, and developed effective ploidy manipulation and screening strategy to sterilize lantana and other invasive ornamental plants.
- 9. Revealed the modes of inheritance and genetic linkage relationship for six important ornamental foliar traits in caladium, identified major QTL and chromosomal intervals for seven major plant and flower traits in petunia,
- 10. Awarded \$5.9 million research grants, including \$2.3 million from federal competitive grant programs, as PI or Co-PI (fund allocated to Deng).

CULTIVAR RELEASES, PLANT AND UTILITY PATENTS

1. Utility patent (1): Plant genes conferring resistance to citrus tristeza virus (7,126,044).

2. Plant cultivars released (37):

Caladium cultivars (22): 'Firecracker Red', 'Garden White', 'Summer Rose', 'Cranberry Star', 'Passionista', 'Sizzle', '75-14', 'UF-331', 'UF-340', 'UF-404' 'UF-18-49', 'UF-48-5', 'UF-85-8', 'UF-172', 'UF 44-4', 'UF 4412', 'UF 4424', 'UF-R304', 'UF-R813', 'UF-R1012', 'UF-R1022' ('Icicle'), and 'UFR1409'.

Gerbera cultivars (12): 'UF Multi-flora Peach', 'UF Multi-flora Pink Frost', 'UF Enduring White', 'UF Enduring Burgundy', 'UFGE 4141', 'UFGE 7014', 'UFGE 7015', 'UFGE 7023', 'UFGE 7032', 'UFGE 7034', 'UFGE 7031', and 'UFGE 7080'.

Lantana cultivars (4): 'UF-T3', 'UF-T4', 'UF-1011-2' (Bloomify™ Rose), and 'UF-1013A-2A' (Bloomify™ Red).

3. Plant patents (PP) (31):

Caladium plant patents (20): PP20,461 - 'Firecracker Red' caladium; PP20,448 - 'Garden White' caladium; PP20,446 - 'Summer Rose' caladium; PP20,792 - 'Cranberry Star' caladium; PP21,089 - '75-14' caladium; PP21,347 - 'UF-340' caladium; PP22,055 - 'UF331' caladium; PP24,327 - 'UF-48-5' caladium; PP24,431 - 'UF-18-49' caladium; PP24,432 - 'UF-172' caladium; PP24,680 - 'UF 44-4' caladium; PP24,681 - 'UF-85-5' caladium; PP25,598 - 'UF 4424' caladium; PP25,612 - 'UF 4412' caladium; PP26,591 - 'Passionista' caladium; PP26,592 - 'Sizzle' caladium; U.S. PP26,833 - 'Fiesta' caladium; U.S. PP27,154 - 'Cosmic Delight' caladium; U.S. PP27,155 - 'Hearts Desire' caladium; and U.S. PP29,249 - 'Icicle' caladium.

Gerbera plant patents (7): PP23,373 – 'UFGE 7014' gerbera; PP23,488 - 'UFGE 7015' gerbera; PP23,448 - 'UFGE 7032' gerbera; PP23,433 - 'UFGE 7034' gerbera; PP23,373 - 'UFGE 7014' gerbera; PP23,346 - 'UFGE 4141' gerbera; PP24,792 - 'UFGE 7080'; and PP24,793 - 'UFGE 7031'.

Lantana plant patents (4): PP24,057 – 'UF-T3' lantana; PP24,043 – 'UF-T4' lantana; U.S. PP29,267 – 'UF-1011-2' lantana; and U.S. PP29,292 – 'UF-1013A-2A' lantana.

PUBLICATIONS

1. Book chapters (9):

- **Deng, Z.** 2018. Caladium breeding. In: J.V. Huylenbroeck (ed). Handbook of plant breeding: Ornamental crops. Springer International Publishing AG, Switzerland. https://doi.org/10.1007/978-3-319-90698-0_12.
- **Deng, Z.** and K. Bhattarai. 2018. Gerbera breeding. In: J.V. Huylenbroeck (ed). Handbook of plant breeding: Ornamental crops. Springer International Publishing AG, Switzerland. https://doi.org/10.1007/978-3-319-90698-0_17.
- **Deng, Z.** 2016. Breeding for disease resistance in florists' crops, pp 1-31. In: R.J. McGovern and W.H. Elmer (eds.). Handbook of Plant Disease Management. Handbook of Florists' Crops Diseases. Springer International Publishing, Switzerland (invited, in press). DOI: 10.1007/978-3-319-32374-9 4-1.
- **Deng, Z.** 2013. Molecular markers in caladium: Development, characterization and applications. pp. 214-227. In: K.G. Ramawat and J.M. Merillon (eds.). Bulbous Plants Biotechnology. CRC Press, Boca Raton, FL, US (invited).
- **Deng, Z.** 2012. Caladium breeding and genetics: Recent advances. pp. 53-61. In: J.A. Teixeira da Silva (ed.). Floriculture and Ornamental Biotechnology 6 (Special Issues 1). Global Science Books, London, UK (invited).
- Gmitter Jr., F.G., **Z. Deng**, and C. Chen. 2007. Cloning and characterization of disease resistance genes. pp. 287-305. In: Iqrar A. Kahn (ed.). Citrus Genetics, Breeding and Biotechnology. CAB International, Nosworthy Way, Wallingford, Oxfordshire, OX10 8DE, UK.
- **Deng, Z.** 2006. Disease resistance gene analogs: Isolation, identification and applications. pp. 358-366. In: J.A. Teixeira da Silva (ed.). Floriculture, Ornamental and Plant Biotechnology: Advances and Topical Issues (1st Edition). Global Science Books, London, UK.
- **Deng, Z.** 1996. Applications of plant growth regulators in citriculture (in Chinese), pp. 196-208. In: D. Li (ed.). Citriculture. Agriculture Publishing House, Beijing, China.
- **Deng, Z.** 1996. Freezes and freezing prevention in citriculture, p. 209-214. In: D. Li (ed.). Citriculture. Agriculture Publishing House, Beijing, China.
- **2. Refereed publications** (93; ^g and ^p indicate graduate students and postdocs under supervision, respectively):
- Bechtloff, A., C. Reinhardt-Adams, S. Wilson, **Z. Deng**, and C. Wiese. 2019. Insights from Southeastern US nursery growers guide research for sterile ornamental cultivars. J. Environ. Hort. 37(1):9-18.
- ^g Cao, Z., ^p Y. Guo, Q. Yang, Y. He, M. Fetouh, R.M. Warner, and **Z. Deng**. 2019. Genome-wide identification of quantitative trait loci for important plant and flower traits in petunia using a high-density linkage map and an interspecific recombinant inbred population derived from *Petunia integrifolia* and *P. axillaris*. Horticulture Research (in press).
- Peng, Z., g K. Bhattarai, p S. Parajuli, and Z. Deng. 2019. Transcriptome analysis of young ovaries reveals candidate genes involved in gamete formation in Lantana camara. Plants 8(8):263. https://doi.org/10.3390/plants8080263

- Sun, J., C.L Sigler, G.A. Beaudoin, J. Joshi, J.A. Patterson, K.H. Cho, M.A. Ralat, J.F. Gregory, D.G. Clark, **Z. Deng**, T.A. Colquhoun, and A.D. Hanson. 2019. Parts-prospecting for a high-efficiency thiamin thiazole biosynthesis pathway. Plant Physiology. DOI: https://doi.org/10.1104/pp.18.01085.
- Xavier, K., A. KC, N.A. Peres, **Z. Deng**, W.S. Castle, W. Lovett, and G.E. Vallad. 2019. Characterization of Colletotrichum species causing anthracnose of pomegranate in the southeastern U.S. Plant Disease. https://doi.org/10.1094/PDIS-03-19-0598-RE
- ^g Bhattarai, K., ^g W. Wang, ^g Z. Cao, and **Z. Deng**. 2018. Comparative analysis of impatiens leaf transcriptomes reveal candidate genes for resistance to downy mildew caused by plasmopara obducens. International Journal of Molecular Science 19(7). pii: E2057. doi: 10.3390/ijms19072057.
- ^g Cao, Z., Y. Guo, Q. Yang, Y. He, M. Fetouh, R.M Warner, and **Z. Deng**. 2018. Genome-wide search for quantitative trait loci controlling important plant and flower traits in petunia using an interspecific recombinant inbred population of Petunia axillaris and Petunia exserta. G3: Genes, Genomes, Genetics. https://doi.org/10.1534/g3.118.200128.
- Chen, L., L. Wei, L. Katin-Grazzini, J. Ding, X. Gu, Y. Li, T. Gu, R. Wang, X. Lin, **Z. Deng**, R.J. McAvoy, F.G. Gmitter Jr., Z. Deng, Y. Zhao, and Y. Li. 2018. A method for the production and expedient screening of CRISPR/Cas9-mediated non-transgenic mutant plants. Horticulture Research 5:13. Doi:10.1038/s41438-018-0023-4.
- **Deng, Z.** and N.A. Peres. 2018. 'Icicle' A white lance-leaved caladium cultivar for containers and shady landscapes. HortScience 53:1076-1079; doi:10.21273/HORTSCI13073-18.
- Freyre, R., **Z. Deng**, and V.A. Zayas. 2018. Fruitless and semi-dwarf Ruellia simplex R13-5-3, R15-24-17, and R16-1-1. HortScience 53(10):1528-1533.
- Huang, M., M.L. Roose, Q. Yu, D. Du, Y. Yu, Y. Zhang, **Z. Deng**, E. Stover, and F.G. Gmitter Jr. 2018. Construction of high-density genetic maps and detection of QTLs associated with Huanglongbing tolerance in Citrus. Frontiers in Plant Science. https://doi.org/10.3389/fpls.2018.01694.
- ^g Wang, W., Y. He, ^g Z. Cao, and **Z. Deng**. 2018. Induction of tetraploids in impatiens (impatiens walleriana) and characterization of their changes in morphology and resistance to downy mildew. HortScience 53:925-931; doi:10.21273/HORTSCI13093-18.
- g Cao, Z. and **Z. Deng**. 2017. De novo assembly, annotation, and characterization of root transcriptomes of three caladium cultivars with a focus on necrotrophic pathogen resistance/defense-related genes. International Journal of Molecular Sciences 18, 712. DOI:10.3390/ijms18040712.
- ^g Cao, Z., S. Sui, Q. Yang, and **Z. Deng**. 2017. A single gene controls leaf background color in caladium (Araceae) and is tightly linked to genes for leaf main vein color, spotting and rugosity. Horticulture Research 4, Article number 16067. DOI:10.1038/hortres.2016.67.
- **Deng, Z.**, S.B. Wilson, ^p X. Ying, and ^g D.M. Czarnecki II. 2017. Infertile *Lantana camara* cultivars UF-1011-2 and UF-1013A-2A. HortScience 52(4):652-657.
- P Rawat, N, B. Kumar, U. Albrecht, D. Du, M. Huang, Q. Yu, Y. Zhang, Y-P Duan, K.D. Bowman, F.G. Gmitter Jr., and Z. Deng. 2017. Genome resequencing and transcriptome profiling reveal structural diversity and expression patterns of constitutive disease resistance (CDR) genes in Huanglongbing-tolerant *Poncirus trifoliata* and its hybrids. Horticulture Research 4, 17064; doi:10.1038/hortres.2017.64.
- Cai, X. and **Z. Deng**. 2016. Thidiazuron promotes callus induction and proliferation in *Caladium* ×hortulanum Birdsey UF-4609. Propagation of Ornamental Plants 16(3):90-97.
- ^g Cao, Z., S. Sui, Q. Yang, and **Z. Deng**. 2016. Inheritance of rugose leaf in caladium and genetic relationships with leaf shape, main vein color and leaf spotting. Journal of the American Society for Horticultural Science 141(5):527-534.
- ^g Cao, Z., S. Sui, X. Cai, Q. Yang, and **Z. Deng**. 2016. Somaclonal variation in 'Red Flash' caladium: Morphological, cytogenetic and molecular characterization. Plant Cell, Tissue and Organ Culture: Journal of Plant Biotechnology 126(2):269-279. DOI: 10.1007/s11240-016-0996-3.

- **Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2016. 'Cosmic Delight', 'Fiesta', and 'Hearts Desire' Three caladium cultivars. HortScience 51(6):766-771.
- Fetouh, M.I., A. Kareem, G.W. Knox, S.B. Wilson, and **Z. Deng**. 2016. Induction, identification and characterization of tetraploids in Japanese privet (*Ligustrum japonicum*). HortScience 51(11):1371-1377.
- Rosanna, F., **Z. Deng**, G. Knox, and V. Zayas. 2016. Fruitless *Ruellia simplex* R12-2-1 (Mayan Compact Purple). HortScience 51(8):1057-1061.
- **Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2015. 'UF 432' and 'UF 4015' Two lance-leaved caladium cultivars. HortScience 50(7):1099-1103.
- Du, D., N. Rawat, **Z. Deng**, and F.G. Gmitter Jr. 2015. Construction of citrus gene coexpression networks from microarray data using random matrix theory. Horticulture Research 2:15026. doi:10.1038/hortres.2015.26.
- P Rawat, N., S.P. Kiran, D. Du, F.G. Gmitter Jr., and **Z. Deng**. 2015. Comprehensive meta-analysis, co-expression, and miRNA nested network analysis identifies gene candidates in citrus against Huanglongbing disease. BMC Plant Biology 15(1):184. DOI: 10.1186/s12870-015-0568-4.
- Cai, X., ^g Z. Cao, ^p S. Xu, and **Z. Deng**. 2015. Induction, regeneration and characterization of tetraploids and variants in 'Tapestry' caladium. Plant Cell, Tissue and Organ Culture 120:689-700.
- g Smith, S.M. and **Z. Deng**. 2015. Interspecific hybridization between *Coreopsis leavenworthii* and *Coreopsis tinctoria* affected progeny growth, development and reproduction differently. Journal of the American Society for Horticultural Science 140(1):27-37.
- ^g Czarnecki II, D.M., A. Hershberger, C.D. Robacker, and **Z. Deng**. 2014. Ploidy level and pollen stainability of *Lantana camara* cultivars and breeding lines. HortScience 49:1271-1276.
- ^g Cao, Z., **Z. Deng**, and M. McLaughlin. 2014. Interspecific genome size and chromosome number variation sheds new light on species classification and evolution of *Caladium* (Araceae). Journal of the American Society for Horticultural Science 49(4):449-459.
- **Deng, Z.** and B.K. Harbaugh. 2014. Royal Flush[™] 'UF-18-49' A red fancy-leaved caladium for large containers and sunny landscapes. HortScience 49 (8):1113-1115.
- Wilson, S.B., G.W. Knox, **Z. Deng**, K.L. Nolan, and J. Aldrich. 2014. Landscape performance and fruiting of nine heavenly boom selections grown in northern and southern Florida. HortScience 49:706-713.
- **Deng, Z.** and B.K. Harbaugh. 2013. UFGE 7031 and UFGE 7080 gerbera cultivars. HortScience 48(5):659-663.
- **Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2013. UF 4412 and UF 4424 Red lance-leaved caladium cultivars. HortScience 48(2):239-244 (cover page).
- Song, X. and **Z. Deng**. 2013. Powdery mildew resistance in gerbera: Mode of inheritance, quantitative trait locus identification, and resistance responses. Journal of the American Society for Horticultural Science 138(6):470-478.
- ^g Czarnecki II, D.M., S.B. Wilson, G.W. Knox, R. Freyre, and **Z. Deng**. 2012. UF-T3 and UF-T4 Two sterile *Lantana camara* cultivars. HortScience 47(1):132-137.
- **Deng, Z.** and B.K. Harbaugh. 2012. 'Summer Pink' A new pink fancy-leaved caladium. HortScience 47(5):672-674.
- P Gong, L. and Z. Deng. 2012. Selection and application of SSR markers for variety discrimination, genetic similarity and relation analysis in gerbera. Scientia Horticulturae 138:120-127 (http://dx.doi.org/10.1016/j.scienta.2012.02.020).
- g Smith, S.M. and **Z. Deng**. 2012. Pollen-mediated gene flow from *Coreopsis tinctoria* to *Coreopsis leavenworthii* (Asteraceae): Identification and inheritance of morphological markers and determination of gene flow rates as affected by separation distances. Journal of the American Society for Horticultural Science 137(3):173-179.

- Song, X., **Z. Deng**, P. L. Gong, J. Hu, and Q. Ma. 2012. Cloning and characterization of resistance gene candidate sequences and molecular marker development in gerbera (*Gerbera hybrida*). Scientia Horticulturae 145:68-75 (http://dx.doi.org/10.1016/j.scienta.2012.07.027).
- **Deng, Z.** and B.K. Harbaugh. 2011. UF 85-5 A spotted caladium cultivar for use in containers and sunny landscapes. HortScience 46(9):1326-1329.
- **Deng, Z.** and B.K. Harbaugh. 2011. UF 44-4 A dwarf red lance-leaved caladium cultivar. HortScience 46(7):1049-1051.
- **Deng, Z.**, B.K. Harbaugh, and N.A. Peres. 2011. 'UF-172', a pink fancy-leaved caladium cultivar for large containers and landscapes. HortScience 46(1):132-134.
- ^p Gong, L. and **Z. Deng**. 2011. Development and characterization of microsatellite markers for caladiums (*Caladium* Vent.). Plant Breeding 130(5):591-595. (doi:10.1111/j.1439-0523.2011.01863.x).
- **Deng, Z.** and B.K. Harbaugh. 2010. UFGE 4141, UFGE 7014, UFGE 7015, UFGE 7023, UFGE 7032, and UFGE 7034: Six new gerbera cultivars for marketing flowering plants in large containers. HortScience 45(6):971-974.
- Gong, L. and Z. Deng. 2010. EST-SSR markers for gerbera. Molecular Breeding 26:125-132 (DOI 10.1007/s11032-009-9380-x).
- Seijo, T.E., N.A. Peres, and **Z. Deng**. 2010. Characterization of strains of *Xanthomonas axonopodis* pv. *dieffenbachiae* from bacterial blight of caladium and identification of sources of resistance for breeding improved cultivars. HortScience 45(2):220-224.
- Xiang, X., **Z. Deng**, Q. Zheng, C. Chen, and F.G. Gmitter Jr. 2010. Developing specific markers and improving genetic mapping for a major locus *Tyr1* of citrus nematode resistance. Molecular Plant Breeding 7(3): 497-504.
- Xiang, X., **Z. Deng**, C. Chen, F.G. Gmitter Jr., and K. Bowman. 2010. Marker assisted selection in citrus rootstock breeding based on a major gene locus '*Tyr1*' controlling citrus nematode resistance. Agricultural Sciences in China 9(4):557-567. DOI: 10.1016/S1671-2927(09)60129-2.
- g Czarnecki II, D.M. and **Z. Deng**. 2009. Occurrence of unreduced female gametes leads to sexual polyploidization in lantana. Journal of the American Society for Horticultural Science 134(5):560-566.
- **Deng, Z.** and B.K. Harbaugh. 2009. Caladium 75-14, a spotted, fancy-leaved cultivar for containers and sunny landscapes. HortScience 44(3):854-856.
- **Deng, Z.** and B.K. Harbaugh. 2009. Inheritance of leaf blotching in caladium. HortScience 44(1):40-43. Wilson, S.B., G.W. Knox, K.L. Muller, R. Freyre, and **Z. Deng**. 2009. Seed production and viability of eight porterweed selections grown in Northern and Southern Florida. HortScience 44(7):1842-1849.
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- g Czarnecki II, D.M., p M.N. Rao, J.G. Norcini, F.G. Gmitter Jr., and **Z. Deng**. 2008. Genetic diversity and differentiation among natural, production, and introduced populations of the narrowly endemic species *Coreopsis leavenworthii* (Asteraceae). Journal of the American Society for Horticultural Science 133(2):234-241.
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- **Deng, Z.** and B.K. Harbaugh. 2006. 'Garden White' A large white fancy-leaved caladium for sunny landscapes and large containers. HortScience 41(3):840-842.
- **Deng, Z.** and B.K. Harbaugh. 2006. 'UF Multi-flora Peach' and 'UF Multi-flora Pink Frost': Multi-flora gerbera cultivars for landscapes and large pots. HortScience 41(3):843-845.
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- **Deng, Z.** and B.K. Harbaugh. 2006. 'Summer Rose' A fancy-leaved caladium for containers and landscapes. HortScience 41(2):468-470.
- **Deng, Z.** and B.K. Harbaugh. 2006. 'Dynamite Red' A red fancy-leaved caladium for sunny landscapes and containers. HortScience 41(2):471-473.
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- Harbaugh, B.K. and **Z. Deng**. 2006. UF Savanna cultivar group eight colors of heat-tolerant lisianthus for potted plants. HortScience 41(3):850-854.
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- **Deng, Z.**, B.K. Harbaugh, R.O. Kelly, T. Seijo, and R.J. McGovern. 2005. Screening for resistance to pythium root rot among twenty-three caladium cultivars. HortTechnology 15(3):631-634.
- Kelly, R.O., R. Schoellhorn, **Z. Deng**, and B.K. Harbaugh. 2005. Evaluation of pansy cultivars to select the best of class. HortTechnology 15(3):706-715.
- **Deng, Z.** and B.K. Harbaugh. 2004. Technique for in vitro pollen germination and short-term pollen storage in caladium. HortScience 39(2):365-367.
- **Deng, Z.** and F.G. Gmitter Jr. 2003. Cloning and characterization of receptor kinase class disease resistance gene candidates in citrus. Theoretical and Applied Genetics 108:53 -61.
- Weber, C.A., G.A. Moore, **Z. Deng**, and F.G. Gmitter Jr. 2003. Mapping freeze tolerance quantitative trait loci in a *Citrus grandis* × *Poncirus trifoliata* F1 pseudo-testcross using molecular markers. Journal of the American Society for Horticultural Science 128:508-514.
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- **Deng, Z.**, S. Huang, P. Ling, C. Yu, Q. Tao, C. Chen, M.K. Wendell, H.-B. Zhang, and F.G. Gmitter Jr. 2001. Fine genetic mapping and BAC contig development for the citrus tristeza virus resistance gene region in *Poncirus trifoliata* (Raf.). Molecular Genetics and Genomics 265:739-747.
- **Deng, Z.**, Q. Tao, Y.-L. Chang, S. Huang, P. Ling, C. Yu, C. Chen, F.G. Gmitter Jr., and H.-B. Zhang. 2001. Construction of a bacterial artificial chromosome (BAC) library for citrus and identification of BAC contigs containing resistance gene candidates. Theoretical and Applied Genetics 102:1177-1184.
- **Deng, Z.**, S. Huang, P. Ling, C. Chen, C. Yu, C.A. Weber, G.A. Moore, and F.G. Gmitter Jr. 2000. Cloning and characterization of NBS-LRR class resistance-gene candidate sequences in citrus. Theoretical and Applied Genetics 101:814-822.
- Ling, P., L.W. Duncan, **Z. Deng**, D. Dunn, X. Hu, S. Huang, and F.G. Gmitter Jr. 2000. Inheritance of citrus nematode resistance and its linkage with molecular markers. Theoretical and Applied Genetics 100:1010-1017.
- **Deng, Z.**, S. Huang, S.Y. Xiao, and F.G. Gmitter Jr. 1997. Development and characterization of SCAR markers linked to the citrus tristeza virus resistance gene from *Poncirus trifoliata*. Genome 40:697-704.
- Gmitter Jr., F.G., S. Xiao, S. Huang, X. Hu, and **Z. Deng**. 1996. A localized linkage map of citrus tristeza virus resistance gene region. Theoretical and Applied Genetics 92:688-695.
- **Deng, Z.**, W.C. Zhang, and S.Y. Wan. 1993. In vitro induction and protoplast plant regeneration from NaCl-tolerant lines in citrus (in Chinese). Acta Horticulturae Sinica 20:127-132
- Deng, X.X., S.Y. Xiao, **Z. Deng**, and W.C. Zhang. 1993. Interspecific somatic hybrids between *Citrus sinensis* and *C. ichangenesis* (in Chinese). Chinese Journal of Biotechnology 9:128-131.
- **Deng, Z.**, W.C. Zhang, and S.Y. Wan. 1991. High frequency of somatic embryogenesis and plant regeneration from nucellar callus and protoplasts in citrus. Acta Biologiae Experimentalis Sinica 23:135-143.
- **Deng, Z.**, W.C. Zhang, and S.Y. Wan. 1990. Studies on somatic embryogenesis from habituated nucellar callus in citrus (in Chinese). Journal of Fruit Science 8:193-200.
- Deng X.X., **Z. Deng**, and W.C. Zhang. 1990. Induction of embryonic calli and protoplast plant regeneration in *Citrus sinensis* and *Fortunella hindsii* (in Chinese). Chinese Agricultural Bulletin 3:13-15.
- **Deng, Z.**, X.X. Deng, S.Y. Wan, and W.C. Zhang. 1989. A preliminary report on protoplast culture and isolation for solid mutants from NaCl-tolerant calli in citrus (in Chinese). Journal of Fruit Science 6:143-146.
- **Deng, Z.** and W.C. Zhang. 1988. Mutagenic effects of EMS (ethylmethanesulphonate) on chromosomes of pollen mother cells in kumquat (in Chinese). China Citrus 17:5-7.

3. Publications in Conference Proceeding/Journal Publications (34)

- Deng, Z. W. Castle, G. Vallad, S. Agehara, M. Thetford, and J.C. Diaz-Perez. 2018. Pomegranate: An emerging fruit crop in southeast United States. Acta Horticulturae (in press).
- ^g Xu, J. and Z. Deng. 2019. Progress in genetic sterilization of Lantana camara through ploidy manipulation. Proc. Fla. State Hort. Soc. 131:220-223.
 ^g Yu, X., K.V. Xavier, G.E. Vallad, and Z. Deng. 2019. Disease resistance in pomegranates: Importance, sources, breeding approaches, and progress. Proc. Fla. State Hort. Soc. 131: 1-5.
- Liu, J., Z. Cao, Y. You, R. Zhong, and Z. Deng. 2018. Recent progress in caladium breeding and genetic research. Acta Horticulturae Sinica. 45(9):1791-1801. doi: 10.16420/j.issn.0513-353x.2018-0214. http://www.ahs.ac.cn (in Chinese, with English abstract).

- ^g Wang, W., **Z. Deng**, and A. Palmateer. 2015. Impatiens downy mildew: Pathogens, management options, and genetic resistance. Proc. Fla. State Hort. Soc. 128:206-209.
- Freyre, R. and **Z. Deng**. 2013. Breeding *Ruellia* and *Caladium* at the University of Florida. Acta Horticulturae (Proceedings of the XIth International Symposium on Flower Bulbs and Herbaceous Perennials) 1002:223-229.
- Freyre R., A. Moseley, C. Reinhardt-Adams, G.W. Knox, S.B. Wilson, and **Z. Deng**. 2013. Breeding *Ruellia* spp. at the University of Florida. Acta Horticulturae (Proceedings of the VIIth International Symposium on New Floricultural Crops) 1000:423-428.
- Krueger, K., S.B. Wilson, K. Moore, G.W. Knox, and **Z. Deng**. 2013. National ornamental grass trial-University of Florida, Ft. Pierce 1st year results. Proceedings Southern Nursery Association 58:184-186.
- **Deng, Z.** 2012. Fancy-leaved caladium cultivars recently introduced by the UF/IFAS caladium breeding program. Proceedings of the Florida State Horticultural Society 125:307-311.
- Wilson, S.B., R. Freyre, G.W. Knox, and **Z. Deng**. 2012. Characterizing the invasive potential of ornamental plants. Acta Horticulturae 937:1183-1192.
- D'Abreau, M., **Z. Deng**, D. Schwaninger, and N. West. 2011. Rain lilies for central Florida. Proceedings of the Florida State Horticultural Society 124:328.
- **Deng, Z.**, N.A. Peres, and B.K. Harbaugh. 2010. Improving disease resistance in caladium: Progress and prospects. Acta Horticulturae 886:69-76.
- ^p Gong, L., **Z. Deng**, H. Dou, and T. Hanson. 2010. Effects of Carbonpower® on salinity stress tolerance and gene expression in *Arabidopsis*. 36th Proceedings of the Plant Growth Regulator Society of America 2009, pp. 37-40.
- Wilson, S.B., G.W. Knox, **Z. Deng**, and R. Freyre. 2010. Non-invasive alternative to *Stachytarpheta cayennensis* (Nettleleaf porterweed) grown in North and South FL. SNA (Southern Nursery Association) Research Conference 55:64-68.
- **Deng, Z.** and B.K. Harbaugh. 2008. Progress in breeding for disease resistance and stress tolerance in caladium, gerbera and lisianthus. Acta Horticulturae 766:399-403.
- **Deng, Z.** and B.K. Harbaugh. 2008. Caladium breeding: progress in developing lance-leaved cultivars. Proceedings of the Florida State Horticultural Society 121:395-398.
- **Deng, Z.** and B.K. Harbaugh. 2006. New caladium, gerbera and lisianthus cultivars for Florida. Proceedings of the Florida State Horticultural Society 119:409-412
- Xiang, X., Q. Zheng, S. Huang, C. Chen, F.G. Gmitter Jr., and **Z. Deng**. 2005. Development of RLK-derived molecular markers associated with the resistance to citrus canker [Xanthomonas axonopodis pv.Citri (Xac)] Disease (in English with Chinese abstract). Molecular Plant Breeding (published in China) 3:825-828.
- **Deng, Z.**, F.G. Gmitter Jr., S. Huang, P. Ling, C. Yu, C. Chen, M.K. Wendell, and H.-B. Zhang. 2000. Mapping and cloning disease resistance genes in citrus. Proceedings of the International Society of Citriculture 1:75-77.
- Johnson-Flanagan, A.M., **Z. Deng**, N.E. Go, and G.P. Hawkins. 1999. Vern⁻: bringing the gap between winter and spring canola. Proceedings of the 10th International Rapeseed Congress, Canberra, Australia. http://www.regional.org.au/au/gcirc/4/159.htm.
- Gmitter Jr., F.G., **Z. Deng**, and G.A. Moore. 1998. Utilization of DNA markers in citrus breeding programs. Fruits 53:303-306.
- Gmitter Jr., F.G., E.S. Louzada, **Z. Deng**, and S. Huang. 1998. A bacterial artificial chromosome (BAC) library for cloning a citrus tristeza virus-resistance gene. Acta Horticulturae 461:355-359.
- **Deng, Z.**, S. Huang, and F.G. Gmitter Jr. 1996. A simple and quick procedure for preparing genomic DNA from citrus for reliable PCR analysis. Proceedings of the International Society of Citriculture, 1996. 2:841-844.

- Gmitter Jr., F.G., S. Huang, K.M. Crosby, **Z. Deng**, and S. Xiao. 1996. Progress toward isolating the CTV-immunity gene. Proceedings of the International Society of Citriculture, 1996. 2:845-848.
- Deng, X.X., **Z. Deng**, X. Ye, and W.C. Zhang. 1995. Citrus biotechnology research in China. Acta Horticulturae 403:84-89.
- **Deng, Z.**, X.X. Deng, and W.C. Zhang. 1992. A preliminary report of gametosomatic fusion in citrus. Proceedings of the International Society of Citriculture, 1992. 1:170-172.
- Deng, X.X., **Z. Deng**, S. Xiao, and W.C. Zhang. 1992. Pollen-derived plantlets from anther culture of *Ichang papeda* hybrid No. 14 and trifoliate orange. Proceedings of the International Society of Citriculture, 1992. 1:190-192.
- **Deng, Z.**, W.C. Zhang, and S.Y. Wan. 1991. Prospects of plant protoplast manipulation techniques in citrus improvement (in Chinese). Zhejiang Citrus (2):1-3.
- **Deng, Z.**, W.C. Zhang, and S.Y. Wan 1990. In vitro induction, biochemical analysis and protoplast plant regeneration from NaCl-tolerant lines in citrus. Proceedings of the International Citrus Symposium, International Academic Publishers, China. pp.263-270.
- Wan, S.Y., W.C. Zhang, **Z. Deng**, X.X. Deng, and X. Ye. 1990. Ten years in vitro mutation breeding in citrus. Proceedings of the International Citrus Symposium, International Academic Publishers, Beijing, China. pp. 276-278.
- **Deng, Z.**, W.C. Zhang, and S.Y. Wan. 1989. In vitro mutation breeding for salinity tolerance in citrus. Mutation Breeding Newsletter (33):12-14.
- Jin, Y.H., Z. Deng, and W.C. Zhang. 1988. Induction, identification and characterization of tetraploids in citrus (in Chinese). Hubei Agricultural Science (4):20-22.
- Zhang, W.C., S. Xiao, J. Luo, **Z. Deng**, X.X. Deng, and F. Wang. 1988. Investigation and utilization of citrus varietal resources in China. Proceedings of the Sixth International Citrus Congress, Tel Aviv, Israel. pp. 291-294.

PRESENTATIONS at professional conferences

| | Invited | Contributed/selected | Total |
|--------------------|---------|----------------------|-------|
| International | 5 | 48 | 53 |
| National | 4 | 24 | 28 |
| Regional and state | 32 | 34 | 66 |
| Local | 23 | 8 | 31 |
| Others | 7 | | 7 |
| Total | 71 | 114 | 185 |

EXTERNAL GRANTS & CONTRACTS (2003-2018)

| | Deng's Share | From USDA programs (Deng's share) |
|------------------------------|--------------|-----------------------------------|
| As principal investigator | \$3,237,954 | \$369,611 |
| As co-principal investigator | \$2,690,490 | \$1,941,412 |
| Total | \$5,928,444 | \$2,311,023 |

MEMBERSHIP AND ACTIVITIES with ASHS

- ASHS member since 2003.
- Served as chair of three ASHS working groups (Invasive Plant Research 2012-2013; Ornamental Plant Breeding 2010-2011; Asian Horticulture 2007-2008).
- Served as committee member of two ASHS committees (Cross-Commodity Publication Award 2013-2016; Outstanding International Horticulturist Award 2012-2015).
- Organized two workshops at ASHS annual conferences (2008, 2011).
- Moderated three ASHS workshop (2008, 2011, 2014).

- Attended ASHS annual meetings and made more than 43 presentations at ASHS annual meetings.
- Published 50 papers in three ASHS journals.
- Reviewed more than 50 manuscripts for three ASHS journals.

INTERNATIONAL ACTIVITIES

- Awarded the Ding Ying Guest Professorship by the South China Agricultural University.
- Served on the editorial boards for international/foreign journals.
- Organized and chaired one workshop at the 29th International Horticultural Congress.
- Organized and chaired workshops at the International Conference on Plant and Animal Genomes.
- Invited to give 21 talks/lectures to international researchers, professors, graduate students, and growers at six foreign institutes.
- Advise and supervise two international visiting graduate students and seven international visiting scholars.
- Invited to review manuscripts for 15 international journals.
- Collaborated with five international scholars from four countries.
- Invited to give presentations at seven international conferences.
- Participated in and made 44 presentations at some 21 international conferences.

MANJUL DUTT, Ph.D.

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Horticultural Sciences Department
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https://crec.ifas.ufl.edu/faculty/dr-manjul-dutt-faculty-profile-page/

EDUCATION

| Orissa University of Agriculture and Technology | B.Sc. | 01/06/1998 | Agriculture |
|---|-------|------------|------------------------|
| Mahatma Phule Agricultural University | M.Sc. | 06/30/2001 | Horticulture |
| University of Kentucky | M.S. | 04/30/2005 | Plant and Soil Science |
| University of Florida | Ph.D. | 12/18/2006 | Horticultural Sciences |

PERSONAL STATEMENT

Dr. Manjul Dutt received his PhD degree in grapevine biotechnology from the University of Florida. In 2013, he was hired as a Research Assistant Scientist at the University of Florida. His position involves research responsibilities in Citrus Genetics and Biotechnology. The main emphasis of his research is on the development of strategies to combat Huanglongbing, a deadly phloem vectored disease of citrus. His current emphasis is on the development of rootstocks that can withstand this disease. His research is focused on the utilization of Systemic Acquired Resistance (SAR) to develop HLB tolerance. Dr. Dutt was the first to report on successful transgene mediated resistance to HLB in sweet oranges. He has also developed enriched citrus by overexpressing several R2R3 MYB genes affecting the anthocyanin biosynthesis pathway. Dr. Dutt emphasizes the development of genetically modified plants using intragenic technologies to produce a consumer acceptable product. In 2019, Dr Dutt was elected as a Fellow of the Indian Society for Horticultural Sciences for his contribution to citrus improvement.

POSITIONS AND EMPLOYMENT

| 2013 to present | Research Assistant Scientist | Citrus Research and Education Center, UF |
|-----------------|------------------------------------|--|
| 2013 to 2016 | Adjunct Professor of Biology | Polk State College, Winter Haven, Florida |
| 2007-2013 | Post-Doctoral Scholar | Citrus Research and Education Center, UF |
| 2003-2006 | Research Assistant | Department of Horticultural Sciences, UF |
| 2003 | Editorial Assistant | New Crops Opportunities Center, University of Kentucky |
| 2001- 2003 | Research Assistant | Department of Horticulture, University of Kentucky |
| 2000-2001 | Trainee - Horticulture Information | Chordia Technologies (I) Pvt. Ltd., Pune, India |

OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science American Society for Horticultural Science The American Pomological Society National Association of Plant Breeders Indian Society for Horticultural Sciences

COMMITTEE MEMBERSHIPS

Chair, ASHS Plant Biotechnology working group 2014-2015
Secretary, ASHS Tropical Horticultural Crops working group 2013-2015
Secretary, ASHS Citrus working group 2017-18
Chair, ASHS Citrus working group 2018-19
Chair, ASHS Association of Horticulturists from Indian Subcontinent 2019-2020.
Member, Graduate Student Advisory committee, ASHS, 2017-2020.
Member, ASHS Collegiate Activities Committee 2019- 2023.

SELECTED PUBLICATIONS (Last 4 years)

- 1. Liu, Z., X. X. Ge, W. Qiu, J. M. Long, H. H. Jia, W. Yang, M. Dutt, X. M. Wu and W Guo. 2018. Overexpression of a B3 transcription factor *CsFUS3* promotes somatic embryogenesis in Citrus. Plant Science 277: 121-131.
- 2. Dutt, M., L. Erpen, and J.W. Grosser, 2018. Genetic transformation of the 'W Murcott' tangor: comparison between different techniques. Scientia Horticulturae, *242*:90-94.
- 3. Hijaz, F., Y., Nehela, S. E., Jones, M., Dutt, J. W., Grosser, J. A., Manthey and N. Killiny. 2018. Metabolically engineered anthocyanin-producing lime provides additional nutritional value and antioxidant potential to juice. Plant Biotechnology Reports, 12(5):329-346.
- 4. Kaur, P., P. Gonzalez, M. Dutt, and E. Etxeberria. 2018. Identification of sieve elements and companion cell protoplasts by a combination of brightfield and fluorescence microscopy. Applications in Plant Sciences 6(9): e1179.
- 5. Erpen L, Tavano ECR, Harakava R, Dutt M, Grosser JW, Piedade SMS, Mendes BMJ, Mourao Filho FAA (2018) Isolation, characterization, and evaluation of three Citrus sinensis-derived constitutive gene promoters. Plant Cell Reports 37(8): 1113–1125.
- 6. Killiny N, Jones SE, Nehela Y, Hijaz F, Dutt M, Gmitter FG, Grosser JW (2018) All roads lead to Rome: Towards understanding different avenues of tolerance to huanglongbing in citrus cultivars. Plant Physiology and Biochemistry129:1-10.
- 7. Dutt M, Zambon FT, Erpen L, Soriano L, Grosser J. 2018. Embryo-specific expression of a visual reporter gene as a selection system for citrus transformation. PLOS ONE 13 (1):e0190413..pone.0190413
- 8. Erpen L, Devi HS, Grosser JW, Dutt M . 2018. Potential use of the DREB/ERF, MYB, NAC and WRKY transcription factors to improve abiotic and biotic stress in transgenic plants. Plant Cell, Tissue and Organ Culture 132 (1):1-25.
- 9. Dutt, M., L. Erpen, G. Ananthakrishnan, R.H. Brlansky, I. Maiti and J.W. Grosser. 2016. Comparative Expression Analysis of Five Caulimovirus Promoters in Citrus. Plant Cell Organ Tissue Culture 126:229–238.
- 10. Kandel, R, D.R. Bergey, M. Dutt, V. Sitther, Z.T. Li, D. J. Gray and S.A. Dhekney. 2016. Evaluation of a Grapevine-derived Reporter Gene System for Precision Breeding of Vitis. Plant Cell Organ Tissue Culture. 124:599–609.

- 11. Dutt, M., D. Stanton and J.W. Grosser. 2016. Ornacitrus: Development of Genetically Modified Anthocyanin Expressing Citrus with both Ornamental and Fresh Fruit Potential. Journal of the American Society for Horticultural Sciences 141:54-61.
- 12. Orbović, V., M. Ćalović, M. Dutt, J.W. Grosser and G. Barthe. 2015. Production and characterization of transgenic Citrus plants carrying p35 anti-apoptotic gene. Scientia Horticulturae 197:2003-211.
- 13. Dutt M., G. Barthe, M. Irey, J. Grosser. 2015. Transgenic Citrus Expressing an *Arabidopsis* NPR1 Gene Exhibit Enhanced Resistance against Huanglongbing (HLB; Citrus Greening). PLoS ONE 10(9): e0137134.

BOOK CHAPTERS (last 4 years)

- 1. Grosser, J., M. A. Germana, P. Aleza, P. Kaur, N. Wang and M. Dutt. 2019. Citrus Biotechnology. In: M. Talón, F. Gmitter and J.R. Marco Caruso (eds), The genus Citrus, Elsevier.
- 2. Dutt, M. 2019. Transgenic strategies for the management of greening disease (huanglongbing) in citrus. In: K.L. Chadha, S.K. Singh, J. Prakash and V.B. Patel (eds.) Shaping the future of Horticulture. Kruger Brentt publishers, pp. 23-33.
- 3. Omar, A., M. Dutt, F. Gmitter and J.W. Grosser. 2015. Somatic embryogenesis Still a Relevant Technique in Citrus Improvement. In: M. A. Germana and M Lambardi (eds) In vitro plant embryogenesis in higher plants: Methods in Molecular Biology 1359:289-327.

FRED G. GMITTER, JR., Ph.D.

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Email fgg@crec.ifas.ufl.edu; fgmitter@ufl.edu https://crec.ifas.ufl.edu/faculty/dr-fred-gmitter-faculty-profile-page/

EDUCATION

| B. A. | Rutgers - State University of New Jersey | English | 1978 |
|-------|--|--------------|------|
| M. S. | Rutgers - State University of New Jersey | Horticulture | 1981 |
| Ph.D. | University of Florida | Horticulture | 1985 |

POSITIONS HELD

| Professor | University of Florida, IFAS, CREC | 1997- now |
|---------------------|--|-----------|
| Associate Professor | University of Florida, IFAS, CREC | 1991-1997 |
| Assistant Professor | University of Florida, IFAS | 1985-1991 |
| Graduate Assistant | University of Florida, IFAS | 1982-1985 |
| Research Assistant | Rutgers - State University of New Jersey | 1979-1981 |

APPOINTMENT

Research 0.95 FTE; Teaching 0.05 FTE

DEPARTMENTAL AFFILIATION

Horticultural Sciences

Plant Molecular and Cellular Biology (PMCB)

HONORS AND AWARDS

University of Florida Research Foundation Professor; 2011-2014. Florida Fruit and Vegetable Association Researcher of the Year; 2011.

BRIEF DESCRIPTION OF JOB DUTIES

The goal of this position is to provide leadership and expertise for a research program devoted first to the development of new citrus rootstock and scion cultivars for the Florida citrus industry. Classical and contemporary genetic approaches are utilized as appropriate for specific research objectives. Basic breeding and genetic research objectives, along with applications of genomic science techniques, are pursued when information gained can contribute to increased efficiency in achievement of the breeding program objectives, or when the results can lead directly to cultivar improvements.

CULTIVAR PATENTS

Sugar Belle® 'LB8-9', mandarin hybrid. First commercial marketing, 2009; patent granted 2010. ValquariusTm 'SF14W-62', sweet orange, 2010.

Valenfresh[™] 'N7-3', sweet orange, 2010.

'UF 950', mandarin hybrid, 2013.

'UF 914', a grapefruit hybrid free of the compounds responsible for the "grapefruit juice effect", 2015.

'Bingo', mandarin hybrid that is very early maturing, completely seedless, and easy to peel, 2017. '11-1-24', sweet orange, a low seeded, midseason sweet orange, 2017.

PUBLICATIONS

BOOK CHAPTERS (last 6 years)

Chen, C., A. R. Lo Piero, and F. Gmitter Jr. Pigments in citrus. In: Pigments in Fruits and Vegetables; Genomics and Dietetics. Chen, C. (Ed.). Springer, New York. 2015, pp. 165-187.

Omar, A. A., Dutt, M., Gmitter, F. G., and Grosser, J. W. Somatic embryogenesis: still a relevant technique in citrus improvement. In: In Vitro Embryogenesis in Higher Plants, Methods in Molecular Biology. Germana, M. A. and Lambardi, M. (Eds.). Springer, New York. 2016, pp. 289-327.

REFEREED JOURNAL (last 6 years)

Aritua, V., Achor, D., Gmitter, F. G., Albrigo, G., **Wang, N.** Transcriptional and microscopic analyses of citrus stem and root responses to *Candidatus* Liberibacter asiaticus infection. PLoS ONE, 2013, 8(9): e73742, DOI: 10.1371/journal.pone.0073742.

Cancalon, P.F. and **Gmitter Jr., F.G.** New grapefruit and pummelo cultivars with very low furanocoumarin contents are good candidates to provide a solution to the drug interaction problem. Fruit Processing, 2013, 23:126-129.

Chen, C. and Gmitter Jr., F. G. Mining of haplotype-based expressed sequence tag single nucleotide polymorphisms in citrus. BMC Genomics, 2013, 14:746. DOI:10.1186/1471-2164-14-746.

Fan, J., Chen, C., Achor, D.S., Brlansky, R.H., Li, Z-G., and **Gmitter Jr., F.G**. Differential anatomical responses of tolerant and susceptible citrus species to the infection of *'Candidatus* Liberibacter asiaticus'. Physiological and Molecular Plant Pathology, 2013, 83:69-74.DOI:10.1016/j.pmpp.2013.05.002

Germana, M. A., Aleza, P., Carrera, E., Chen, C., Chiancone, B., Constantino, G., Dambier, D., Deng, X., Federici, C. T., Froehlicher, Y., Guo, W., Ibanez, V., Juarez, J., Kwok, K., Luro, F., Machado, M. A., Naranjo, M., A., Navarro, L., Ollitrault, P., Rios, G., Roose, M. L., Talon, M., Xu, Q., and **Gmitter, F.**G. Cytological and molecular characterization of three gametoclones of *Citrus clementina*. BMC Plant Biology, 2013, 13:129. DOI:10.1186/1471-2229-13-129.

Shen, X., Orbovic, V., Dutt, M., Castle, W. S., and Gmitter Jr., F. G. Direct shoot organogenesis in *Murraya paniculata* (L.) Jack: A prerequisite for genetic transformation. HortScience, 2013, 48:938-941.

Chen, C., Bock, C. H., Okie, W. R., Gmitter Jr., F. G., Jung, S., Main, D., Beckman, T. G., and Wood, B. W. Genome-wide characterization and selection of expressed sequence tag simple sequence repeat primers for optimized marker distribution and reliability in peach. Tree Genetics and Genomes, 2014, 10.1007/s11295-014-0759-4.

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EDUCATION

| 1984 | Ph.D. | Univ. Kentucky, Lexington, KY, Agronomy/Plant Breeding & Genetics |
|------|-------|---|
| 1979 | M.S. | Morehead State University, Morehead, KY, Biology |
| 1976 | B.A. | Thomas More College, Fort Mitchell, KY, Biology |

PROFESSSIONAL EXPERIENCE

| | TE EXILENCE |
|--------------|--|
| 2017 | Term Professorship Award |
| 2017 | "Investments for the Future" Award, University of Bordeaux, France |
| 2013 | Elected ASHS Fellow |
| 2009 | 2 nd Step-Professorship, UF |
| 2006-2008 | University of Florida Research Foundation Professorship |
| 2005 | ASHS Outstanding Career Researcher Award |
| 2002-Present | Step-Professorship, UF |
| 2000-Present | Co-Director – Core Citrus Transformation Laboratory, CREC |
| 1999 | UF Provost Faculty Merit Award |
| 1994-Present | Professor, University of Florida, IFAS, CREC |
| 1989-1994 | Associate Professor, University of Florida, IFAS, CREC |
| 1984-1989 | Assistant Professor, University of Florida, IFAS, CREC |
| 1980-1984 | Graduate Research Assistant, University of Kentucky, Dept. of Agronomy |
| 1982-1983 | Laboratory Instructor-Genetics, University of KY, College of Agriculture |
| 1978-1980 | Quality Control Technician, Kahn's Meat Packing Co., Cincinnati, Ohio |
| 1976-1978 | Graduate Research Assistant, Dept. of Biology, Morehead State University |
| 1974-1975 | Undergraduate Research Assistant, Thomas More College Biology Station |

RESEARCH PROGRAM NARRATIVE

My research program in citrus variety improvement addresses all major citrus production problems in Florida, and also strives to develop new cultivars that will provide growers with new marketing opportunities. Using a team-oriented approach, my program is integrated with other members of the IFAS/CREC cultivar improvement team (F. G. Gmitter, W. S Castle, and G. A. Moore) as well as entomologists, pathologists, and physiologists. I have been a consistently productive full professor, as evidenced by a 'Superior' faculty evaluation every full year that I have been employed by UF (29 consecutive years). Our citrus **somatic hybridization** program is the most successful in the world, resulting in somatic hybrid plants from more than 200 parental combinations. Our successes in somatic hybridization have allowed us to initiate rootstock breeding and selection at the tetraploid level (a completely unique approach), resulting in the selection of more than 150 superior individual hybrids called "tetrazygs" to date. Progress has also been made towards the development of rootstocks with improved tolerance of *Diaprepes* root weevil, blight and salinity. More recently, my program has focused on breeding, screening, and field testing new rootstocks (diploid and tetraploid) with focus on development of rootstocks suitable for ACPS (Advanced Citrus Production Systems) and that impart

tolerance or resistance to HLB in grafted scions. Seventeen new UFR rootstocks from our program showing enhanced tolerance of HLB (as compared to commercial rootstocks) were recently fast-track released for use in the Florida Citrus Industry, including 7 tetraploids and 2 diploids developed in my program. Most recently, we have used a high throughput method to screen thousands of hybrid rootstock candidates for ability to impart HLB tolerance to grafted scions, and identified several promising candidates. Numerous tetraploid somatic hybrids that combine elite diploid scion material have been produced and several flowering somatic hybrids are being used as pollen parents in our triploid breeding program (under the direction of F. G. Gmitter). We have built the largest collection of quality monoembryonic diploid females and quality tetraploid pollen parents in the world. More than 20,000 triploid hybrids have been recovered from interploid crosses followed by embryo rescue, with a good percentage of these being fathered by somatic hybrids (in collaboration with FG Gmitter). Progress has also been made in the development of improved acid fruits (lemons and limes) and ornamental citrus; new seedless triploid lemon and lime selections have been approved for release. Somatic cybridization was used to create the recently released 'Summer Gold' grapefruit, that extends the grapefruit harvest season by several months, with fruit sweeter than any commercial grapefruit cultivar. This technology is also being used to transfer mtDNA potentially conferring canker resistance from kumquat to highly susceptible grapefruit cultivars. Because sweet oranges and grapefruit are not amenable to conventional breeding, my program has focused on the generation of somaclonal variation to produce new cultivars. We have the largest field study in the world to evaluate somaclonal variation in woody fruit trees. Several improved processing oranges have been released, including a Hamlin clone with improved juice color, seedless Valencia clones, Valencia clones with higher yields and lbs. solids production, the new very high quality OLL oranges that are showing better tolerance to HLB, and most recently two early-maturing Valencia clones that have potential to replace Hamlin in the juice industry. Working closely with research associate Dr. Manjul Dutt, we have developed an alternative citrus transformation method that utilizes a citrus anthocyanin gene for selection (replacing GFP) and plant recovery via somatic embryogenesis - resulting in transgenic plants containing no bacterial resistance genes (more consumer friendly). Major emphasis is now on the utilization of transgenic approaches to develop cultivars resistant to citrus greening (HLB) and canker. A major effort is underway to transfer proven anti-microbial peptide constructs and constructs that turn on SAR (Systemic Acquired Resistance) to citrus. Initial greenhouse and field challenges of transgenic citrus plants with HLB and canker look quite promising, and two SAR-induction genes are working successfully in multiple cultivars. Transgenic sweet orange trees overexpressing the Valencia β -1,3-glucanase gene also look promising. Our program is now focusing on the development of all-edible plant gene and eventually all-citrus gene transformation in efforts to increase consumer acceptance of GMO citrus.

PUBLICATIONS LAST 5 YEARS

BOOKS CHAPTERS:

- 1. Germana, M.A., Aleza, P., Grosser, J.W., Dutt, M., and Wang, N. Citrus Biotechnology. In: (M. Talon and FG Gmitter, Eds.). In: The Genus Citrus. Elsevier, Cambridge MA. (in press).
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- 3. Forner-Giner, M.A., Continella, A., and Grosser, JW. Citrus Rootstock Breeding and Selection. In: (A. Gentile, Ed.) The Citrus Genome. Springer-Nature. (in press).

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- 3. Calović, M., Q. Yu, V. Orbović, F.G. Gmitter Jr.and J.W. Grosser. 2019. New Somatic Hybrid Mandarin Tetraploids Generated By Optimized Protoplast Fusion and Confirmed by Molecular Marker Analysis and Flow Cytometry. JASHS (in press)
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- 8. Dutt M, Zambon FT, Erpen L, Soriano L, Grosser J. 2018. Embryo-specific expression of a visual reporter gene as a selection system for citrus transformation. PLOS ONE 13 (1):e0190413.pone.0190413
- 9. Erpen L, Devi HS, Grosser JW, Dutt M. 2018. Potential use of the DREB/ERF, MYB, NAC and WRKY transcription factors to improve abiotic and biotic stress in transgenic plants. Plant Cell, Tissue and Organ Culture 132 (1):1-25.
- 10. Donglang, D., X. Du, Y. Qibin, M. Mattia, M. Huang, Y Yu, JW Grosser and FG Gmitter. 2018. LTR retrotransposons from the Citrus x clementina genome characterization and application. Tree Genetics and Genomes 14: 43 https://doi.org/10.1007/s11295-018-1257-x
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- 25. Kandel, R., M. Dutt, J.W. Grosser, D.J. Gray, Z.T. Li, V. Sitther, D.R. Bergey and S.A Dhekney. 2016. Evaluation of plant-based reporter systems for improvement of cold-hardy grape cultivars. Acta Horticulturae 1115, 57-62.
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- 27. Omar, A.A., Dutt, M., Gmitter, F.G., and J.W. Grosser. Somatic Embryogenesis: Still a Relevant Technique in Citrus Improvement. Maria Antonietta Germanà and Maurizio Lambardi (eds.), In Vitro Embryogenesis in Higher Plants, Methods in Molecular Biology, vol. 1359, pp. 289-327, DOI 10.1007/978-1-4939-3061-6_13, © Springer. 2016.
- 28. Orbović V, Grosser JW. Citrus transformation using juvenile explants. Methods Mol. Biol. 1224:245-57. doi: 10.1007/978-1-4939-1658-0_20. 2015.
- 29. Zhang, Y., Barthe, G., J.W. Grosser and N. Wang. Transcriptome analysis of root response to a mysterious disease citrus blight based on the newly assembled Swingle citrumelo draft genome. Submitted to: Molecular Plant-Microbe Interactions.
- 30. Dutt, M., L. Erpen, G. Ananthakrishnan, R.H. Brlansky, I. Maiti and J.W. Grosser. 2016. Comparative Expression Analysis of Five Caulimovirus Promoters in Citrus. Submitted to: Plant Cell Organ Tissue Culture.
- 31. Dutt, M., D. Stanton and J.W. Grosser. 2016. Ornacitrus: Development of Genetically Modified Anthocyanin Expressing Citrus with both Ornamental and Fresh Fruit Potential.

- Journal of the American Society for Horticultural Sciences 141(1):1-8
- 32. Orbović, V., M. Ćalović, M. Dutt, J.W. Grosser and G. Barthe. 2015. Production and characterization of transgenic Citrus plants carrying p35 anti-apoptotic gene. Scientia Horticulturae. 197:203-211. http://dx.doi.org/10.1016/j.scienta.2015.09.038
- 33. Xie, Kai-Dong, Q.M. Xia, X.P. Wang, W.J. Liang, X.M. Wu, J.W. Grosser and W.W. Guo. 2015. Cytogenetic and SSR-marker evidence of mixed disomic, tetrasomic, and intermediate inheritance in a citrus allotetraploid somatic hybrid between 'Nova' tangelo and HB'pummelo. Tree Genetics & Genomes 11:112 DOI 10.1007/s11295-015-0940-4
- 34. Dutt M., G. Barthe, M. Irey, J. Grosser. 2015. Transgenic Citrus Expressing an Arabidopsis NPR1 Gene Exhibit Enhanced Resistance against Huanglongbing (HLB; Citrus Greening). PLoS ONE 10(9): e0137134. doi: 10.1371/journal.pone.0137134.
- 35. Satpute, A.D., Chen, C., Gmitter, F.G. Jr., Ling, P., Yu, Q., Grosser, M.R., Chase, C.D., and J.W. Grosser. 2015. Cybridization of grapefruit with 'Dancy' mandarin leads to improved fruit characteristics. J. Amer. Soc. Hort. Sci. 140(5):427–435.
- 36. Dutt, M., Dhekney S.A., Soriano L., Kandel R., Grosser J.W. 2014. Temporal and spatial control of gene expression in horticultural crops. Horticulture Research 1: 14047.
- 37. Grosser, J.W., D. Kainth and M. Dutt. 2014. Production of colchicine-induced autotetraploids in Pummelo (*Citrus grandis* Osbeck) through indirect organogenesis. HortScience. 49(7): 944-948.
- 38. Xu, S.X., Cai, D.F., Tan, F.Q., Fang, Y.N., Xie, K.D., J.W. Grosser and W.W Guo. 2014. Citrus somatic hybrid: an alternative system to study rapid structural and epigenetic reorganization in allotetraploid genomes. Plant Cell Tis Organ Cult. DOI 10.1007/s11240-014-0551-z
- 39. Xie, K.D., Want, X.P., Biswas, M., Liang, W.J., Xu, Q., J.W. Grosser and W.W. Guo. 2014. 2n megagametophyte formed via SDR contributes to tetraploidization in polyembryonic 'Nadorcott' tangor crossed by citrus allotetraploids. Plant Cell Rep. DOI 10.1007/s00299-014-1643-2
- 40. Zheng B-B, Fang Y-N, Pan Z-Y, Sun L, Deng X-X, Grosser JW, Guo W-W. 2014. iTRAQ-Based Quantitative Proteomics Analysis Revealed Alterations of Carbohydrate Metabolism Pathways and Mitochondrial Proteins in a Male Sterile Cybrid Pummelo. Journal of Proteome Research. 13:2998-3015

NON-REFEREED PUBLICATIONS

- 1. Gmitter, FG, E Stover, R Driggers, G McCollum and JW Grosser. 2018. The Citrus Improvement Pipelines Continue to Provide Growers New Planting Options. Coming in July issue of Citrus Industry Magazine.
- 2. Ferrarezi, RS, JW Grosser, FG Gmitter, E Stover and KD Bowman. 2018. Field Testing of New HLB-Tolerant Scions and Rootstocks. Citrus Industry Magazine (June issue).
- 3. Gmitter, FG, Y. Zhang and J.W. Grosser. 2018. CRISPR, Genome Editing, and Gene Discovery: What Will This Mean for Florida Citrus? Citrus Industry Magazine, 99:12-15.
- 4. Grosser, J.W. and F.G. Gmitter. 2017. New planting options feature improved varieties. Citrus Industry Magazine, February 2016. Vol. 97, No. 2.
- 5. Spyke,P, J. Sherrod and J.W. Grosser. Controlled Release Fertilizer (CRF) Boosts Health of HLB Trees- Part 1. Citrus Industry Magazine, April 2017. Vol. 98, No. 4
- 6. Spyke,P, J. Sherrod and J.W. Grosser. Controlled Release Fertilizer (CRF) Boosts Health of HLB Trees Part 2: Case Studies. Citrus Industry Magazine, May 2017. Vol. 98, No. 5

- 7. Dutt, M. and J.W. Grosser. Engineering HLB Tolerant/Resistant Citrus Progress on Several Fronts. Citrus Industry Magazine, November 2017. Vol. 98, No. 11.
- 8. Dutt, M., E. Nielsen and J.W. Grosser. Finger lime could be new crop for citrus growers. January 2017. Vol. 98, No. 1.
- 9. Grosser, J.W. and F.G. Gmitter. Time to get serious about trialing new scion/rootstock combinations. August 2017. Vol. 98, No. 8.
- 10. Grosser, J.W. The Resilient Citrus Industry is Not Going Away. OP-ED Piece published in the Lakeland Ledger, Nov.24th, 2017.
- 11. Grosser, J.W. and F.G. Gmitter. 2016. New planting options feature improved varieties. By Jude Grosser and Fred Gmitter. Citrus Industry, February 2016, Volume 97 (2), Pages 14-16.
- 12. Grosser, J.W., Z. Viloria and M. Dutt. 2015. New acid citrus selections for Florida. Citrus Industry Magazine. 96-7: pp. 30-33.
- 13. Dutt, M. and J.W. Grosser. 2015. Using genetically modified biotechnology to improve citrus. Citrus Industry Magazine. 96-9: pp. 10-13.
- 14. Grosser, J.W., Gmitter, F.G., and W.S. Castle. 2015. New Sweet Orange cultivars for the Florida Citrus Industry from UF/IFAS/CREC. Citrus Industry Magazine. 96-3:pp.10-18.
- 15. Johnson, E., J.W. Grosser and J.H. Grosser. 2015. Rootstocks and HLB What's happening below ground? 96-10: pp. 8-9.
- 16. Hu, C., F.G. Gmitter, J.W. Grosser and M. Ritenour. Evaluation of postharvest quality of six recently released Citrus cultivars in Florida. Proceedings of FSHS 2015. In Press [HP-15]

HEQIANG 'ALFRED' HUO, Ph.D.

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https://www.alfredlab.com/

https://mrec.ifas.ufl.edu/main-menu/directory/faculty-directory/

EDUCATION

| Huazhong Agricultural University | M.S | 07/1998 | Horticulture |
|----------------------------------|---------|---------|---------------|
| University of Georgia | Ph.D. | 11/2008 | Horticulture |
| University of California-Davis | Postdoc | 11/2013 | Plant Science |

PERSONAL STATEMENT

I have been trained in tissue culture, genetics, genomics and molecular biology for more than 15 years, with specific training and expertise in genome editing, genomics and genetic mapping. The research focuses in my lab include 1) development of Begonia with enhanced heat tolerance and improved insect resistance 2) development of snapdragons with improved anthocyanin synthesis. I have developed strong leadership skills in supervising and mentoring lab personnel and project progresses, and have demonstrated the ability of successfully administering the projects (e.g. recruiting and training research personnel and managing budget), and the skills of managing multiple tasks simultaneously. My strong research expertise and lab management skills made it possible to publish my data in high impact journals like PNAS, PLANT CELL, PLANT JOURNAL and PLANT PHYSIOLOGY.

PROFESSIONAL EMPLOYMENT

| 1998-2003 | Assistant Research Scientist, Guangdong Pomology Institute, China |
|----------------|---|
| 2003-2008 | Graduate Research Assistant, University of Georgia, Athens, GA |
| 2009-2013 | Postdoctoral Researcher, University of California-Davis, CA |
| 2013-2016 | Associate Specialist, University of California-Davis, CA |
| 2017.2-present | Assistant Professor, University of Florida |

PROFESSIONAL MEMBERSHIPS

| | , , |
|-------|---|
| 2017- | Member, American Society for Horticultural Science |
| 2017- | Member, Florida Nursery, Growers and Landscaping Association |
| 2017- | Member, Society of In Vitro Biology |
| 2017- | Ad hoc Reviewer, United States Department of Agriculture (USDA) Grant Proposals |
| | |

HONORS

2007-

| 2007 | Outstanding Research Poster Award Plant Center Retreat, UGA. |
|-----------|--|
| 2003-2008 | Graduate Research Assistantship at University of Georgia. |

Member, American Society of Plant Biologist

EDITORIAL SERVICE

Ad hoc reviewer for more than 20 journals including Plant Physiology, Plant Journal, Journal of Experimental Botany etc.

ONGOING RESEARCH SUPPORT

FL DEPT OF AG AND CONSUMER SER Huo (PI) 1/1/2019-12/31/2020 Development of Hop Cultivars and Their Production Management System for Florida Growers

USDA/NIFA Huo (PI) 2/28/2019-02/27/2023 Genetic and Molecular Dissection of a Shared microRNA Regulatory Complex for Seed Germination and Flowering in Lettuce under High Temperature

SELECTED PEER-REVIEWED RELEVANT PUBLICATIONS

(Selected from 35 peer-reviewed publications and reviews)

- Wei M, Zhuang Y, Li H, Li PH, Shu D, Huo HQ, Huang WZ, Wang SH, The cloning and characterization of Hypersensitive to Salt Stress (HSS) gene highlights the involvement of NAD in stress-induced accumulation of ABA and proline, The Plant Journal (in press)
- Lin MF, Xiang DY, Chen XY and Huo HQ (2019) Role of Characteristic Components of Humulus lupulus in Promoting Human Health, Journal of Agricultural and Food Chemistry, 30:8291
- Pu X, Liu L, Li P, Huo H, Dong X, Xie K, Yang H, Liu L (2019) A CRISPR/LbCas12a-based method for highly efficient multiplex gene editing in Physcomitrella patens, The Plant Journal (doi.org/10.1111/tpj.14478)
- Shao X, Wu S, Dou T, Zhu H, Hu C, Huo HQ et al (2019), Using CRISPR/Cas9 genome editing system to create MaGA20ox2 gene modified semi-dwarf banana, Plant Biotechnology Journal (doi.org/10.1111/pbi.13216)
- Dou TX, Shao XH, Hu CH, Liu SW, Sheng O, Bi FS, Deng GM, Ding LJ, Li CY, Dong T, Gao HJ, He WD, Peng XX, Zhang S, Huo HQ, Yang QS, Yi GJ (2019) Host-induced gene silencing of Foc TR4 ERG6/11 genes exhibits superior resistance to Fusarium wilt of banana, Plant Biotechnology Journal (doi.org/10.1111/pbi.13204)
- Zhu YX, Yin JL, Liang YF, Liu JQ, Jia JH, Huo HQ, Wu ZF, Yang RL, Gong HJ (2019) Transcriptomic
 dynamics provide an insight into the mechanism for silicon-mediated alleviation of salt stress in
 cucumber plants, Ecotoxicology and Environmental Safety, 174:245-254
- Zhao DD, Wang X, Chen JC, Huang ZF, Huo HQ, Jiang CL, Huang HJ, Zhang CX, Wei SH (2019)
 Selection of reference genes for qPCR normalization in buffalobur (Solanum rostratum Dunal),
 Scientific Reports, 9:6948
- He JF, Li P, Huo HQ, Liu LN, Tang T, He MX, Huang JH, Liu L (**2019**) Heterologous expression of HpBHY and CrBKT increases heat tolerance in Physcomitrella patens. **Plant Diversity**
- Sun MT, Jiang FL, Cen BJ, Huo HQ, Wu Z (2019) Antioxidant enzymes act as indicators predicting
 intension of acquired and maintenance of acquired thermotolerance and the relationships
 between basal, acquired and maintenance of acquired thermotolerance of tomato. Scientia
 Horticulturae 247, 130-137
- Yin JL, Jia JH, Lian ZY, Hu YH, Guo J, Huo HQ, Zhu YX, Gong HJ (2019), Silicon enhances the salt tolerance of cucumber through increasing polyamine accumulation and decreasing oxidative damage. Ecotoxicology and Environmental Safety, 169:8-17

- Li P, Yang H, Wang L, Liu HJ, Huo HQ, Zhang CJ, Liu AZ, Zhu AD, Hu JY, Lin YJ, Liu L (2019),
 Physiological and transcriptome analyses reveal short-term responses and formation of memory under drought stress in rice. Frontiers in Genetics, 10
- Zhang X, Huo HQ, Sun XH, Zhu J, Dai HY, Zhang YG (2019) Nanocrystallization of Anthocyanin Extract from Red-Fleshed Apple' QN-5' Improved Its Antioxidant Effect through Enhanced Stability and Activity under Stressful Conditions. Molecules 24 (7), 1421
- Li P, Yang H, Liu GJ, Ma WZ, Li CH, Huo HQ, He JF, Liu L (2018), PpSARK regulates moss senescence and salt tolerance through ABA related pathway. International Journal of Molecular Sciences 19 (9), 2609
- Sun H, Duan YK, Qi XC, Zhang LY, Huo HQ and Gong HJ (**2018**), Isolation and functional characterization of *CsLsi2*, a silicon efflux transporter gene. **Annals of Botany**, 122: 641-648.
- Li P, Yang H, Liu GJ, Ma WZ, Li CH, Huo HQ, He JF, Liu L (2018) PpSARK Regulates Moss Senescence and Salt Tolerance through ABA Related Pathway. International Journal of Molecular Sciences 19(9): 2609
- Zuo CW, Deng GM, Li B, Huo HQ, Li CY, Hu CH, Kuang RB, Yang QS, Dong T, Sheng O, Yi GJ (2018)
 Germplasm screening of Musa spp. for resistance to Fusarium oxysporum f. sp. cubense tropical race 4 (Foc TR4). European Journal of Plant Pathology 151:723–734
- Bertier LD, Ron M, Huo HQ, Bradford KJ, Michelmore RW, High resolution analysis of the
 efficiency, heritability and editing outcomes of CRISPR/CAS9-induced modifications of NCED4 in
 lettuce (Lactuca sativa) (2018) G3: Genes, Genomics, Genetics 8(5):1513-1521
- Xiang Y, Lai F, He G, Li Y, Yang L, Shen W, Huo HQ et al. (2017) Alleviation of Rosup-induced oxidative stress in porcine granulosa cells by anthocyanins from red-fleshed apples. PLoS ONE 12(8): e0184033.
- Végh A, Incze N, Fábián A, Huo HQ, Bradford KJ, Balázs E and Soós V (2017) Comprehensive Analysis of DWARF14-LIKE2 (DLK2) Reveals Its Functional Divergence from Strigolactone-Related Paralogs. Frontiers in Plant Science. 8:1641.
- Sun H, Guo J, Duan Y, Zhang T, Huo HQ and Gong H (**2017**), Isolation and functional characterization of *CsLsi1*, a silicon transporter gene in *Cucumis sativus*. **Physiol Plantarum**, 159: 201–214.
- Li J, Hu X, Huang X, Huo HQ, Li J, Zhang D, Li P, Ouyang K and Chen X (**2017**) Functional identification of an EXPA gene (NcEXPA8) isolated from the tree Neolamarckia cadamba, **Biotechnology & Biotechnological Equipment**, DOI: 10.1080/13102818.2017.1362960
- Li J, Hu X, Huang X, Huo HQ, Li J, Zhang D, Li P, Ouyang K and Chen X (2017) Functional identification of an EXPA gene (NcEXPA8) isolated from the tree Neolamarckia cadamba, Biotechnology & Biotechnological Equipment, DOI: 10.1080/13102818.2017.1362960

SELECTED PREVIOUS RESEARCH PUBLICATIONS (out of around 25)

- Huo HQ, We SH, Bradford KJ, (2016) DELAY OF GERMINATION1 (DOG1) regulates both seed dormancy and flowering time through microRNA pathways, PNAS, 113(15): E2199 Recommended by Faculty 1000
- Huo HQ, Dahal P, Kunusoth K, Claire M, Bradford KJ. (2013), Expression of 9-cis-EPOXYCAROTENOID DIOXYGENASE4 is essential for thermoinhibition of lettuce seed germination, but not for seed development or stress tolerance, The Plant Cell, 25:884-900
- Huo HQ, Henry I., Coppoolse E, Comai L., Bradford, KJ.(2016) Bulk segregant whole genome sequencing in parallel to identify EMS mutations in lettuce, The Plant Journal, 88(3): 345-360.
 Featured by Editor-in-Chief

- Conner JA, Mookkana MA, Huo HQ, Chaea K, Ozias-Akins P, (2015) Parthenogenesis gene of apomict origin elicits embryo formation from unfertilized eggs in a sexual plant. PNAS, 112(36): 11205
- Huo HQ, Bradford KJ (2015), Molecular and Hormonal Regulation of Thermoinhibition of Seed Germination, **Advances in Plant Dormancy**, pp3-33.
- Kong LQ, Huo HQ, Mao PS, (2015) Antioxidant response and related gene expression in aged oat seed. Frontiers in Plant Science, 6: 158
- Yoong FY, O'Brien LK, Truco MJ, Huo HQ, Sideman R, Hayes R, Michelmore RW, Bradford KJ, (2016), Genetic variation for lettuce seed germination thermotolerance is associated with temperature- sensitive regulation of ETHYLENE RESPONSE FACTOR1 (ERF1), Plant Physiology, 170(1):472
- Huo HQ, Conner JA, Ozias-Akins P, (2009) Genetic mapping of apomixis in *Pennisetum* squamulatum using retrotransposon-based markers. Theor Appl Genet 119:199–212
- Huo HQ, Deng XX (1999) Utilization and conservation of embryogenic calluses of citrus. Plant Physiology Communication, 36:181-187
- Huo HQ, Hao YJ, Deng XX (2000) Introduction of embryogenic calluses of Mandarin citrus. Acta
 Biologiae Experimentals Sinica, 32(3) 289-295

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EDUCATION

| Ph.D. 2008 | University of Florida, Horticulture |
|------------|--|
| M.S. 2004 | University of Minnesota, Agronomy |
| B.S. 2000 | Mississippi State University, Agronomy |

PROFESSIONAL EXPERIENCE

| 2018 – present | Associate Professor, Horticultural Sciences Department, Gulf Coast Research and |
|----------------|---|
| | Education Center, University of Florida |
| 2010 – 2018 | Assistant Professor, Horticultural Sciences Department, Gulf Coast Research and |
| | Education Center, University of Florida |
| 2008 – 2010 | Postdoctoral Research Scientist, Horticultural Sciences Department, Gulf Coast |
| | Research and Education Center, University of Florida |
| 2004 – 2008 | Doctoral Dissertation, Horticultural Sciences Department, Gulf Coast Research and |
| | Education Center, University of Florida |
| | Advisor: Prof. J.W. Scott |
| 2000 – 2004 | Master's Thesis, Department of Plant Sciences, University of Minnesota |
| | Advisor: Prof. Jim Orf |

HONORS AND AWARDS

Vance Publishing 2014 Finalist "40 under Forty"

SYNERGISTIC ACTIVITIES

Teaching

| • | AGR6325L | Guest lecturer for Plant Breeding Techniques (Spring, odd years) |
|---|----------|--|
| • | AGR6322 | Guest lecturer for Advanced Plant Breeding (Fall 2014, 2016) |
| • | HOS1014 | Vegetable Gardening. Fall 2005 |
| • | VEC3221C | Guest lecturer for Commercial Vegetable Production (Fall 2014) |

PEER-REVIEWED PUBLICATIONS (past 5 years)

S. Kunwar, Y.-C. Hsu, S.-F. Lu, J.-F. Wang, J.B. Jones, S. Hutton, M. Paret, and P. Hanson. 2019. Characterization of tomato (*Solanum lycopersicum*) accessions for resistance to phylotype I and phylotype II strains of the *Ralstonia solanacearum* species complex (*RSSC*) under high temperature. Plant Breeding. (in press)

Padmanabhan, C., Q. Ma, R. Shekaste-band, K. S. Stewart, S. F. Hutton, J.W. Scott, Z. Fei and K.-S. Ling. Comprehensive transcriptome analysis and functional characterization of *PR-5* for its involvement in tomato *Sw-7* resistance to tomato spotted wilt tospovirus Scientific Reports. 9:7673. https://doi.org/10.1038/s41598-019-44100-x Soyk, S., Z.H. Lemmon, F.J. Sedlazeck, J.M. Jimenez-Gomez, M. Alonge, S. Hutton, J. Van Eck, M.C. Schatz, and Z.B. Lippman. 2019. Duplication of a domestication locus neutralized a cryptic variant that caused a breeding barrier in tomato. Nature Plants (in press).

Gill, U., J.W. Scott, R. Shekasteband, E. Ogundiwin, C. Schuit, D.M. Francis, S.-C. Sim, H. Smith, S.F. Hutton. 2019. *Ty-6*, a major begomovirus resistance gene on chromosome 10, is effective against Tomato yellow leaf curl virus and Tomato mottle virus. Theor. Appl. Genet. https://doi.org/10.1007/s00122-019-03298-0

Smith H.A., C.A. Nagle, C.M. MacVean, G.E. Vallad, and S.F. Hutton. 2018. Comparing host plant resistance, repellent mulches, and at-plant insecticides for management of *Bemisia tabaci* MEAM1 (Hemiptera: Aleyrodidae) and *Tomato yellow leaf curl virus*. J. Econ. Entom. https://doi: 10.1093/jee/toy333

Yan, Z., A. Pérez-de-Castro, M.J. Díez, S.F. Hutton, R.G. Visser, A.M. Wolters, Y. Bai, J. Li. 2018. Resistance to *Tomato yellow leaf curl virus* in tomato germplasm. Front. Plant Sci. 9:1198. doi: 10.3389/fpls.2018.01198.

Lee, T.G., S.F. Hutton, and R. Shekaste-band. 2018. Fine mapping of the *brachytic* locus on the tomato genome. HortScience 143:239-247.

Kunwar, S., F. Iriarte, Q. Fan, E.E. da Silva, L. Ritchie, N.S. Nguyen, J.H. Freeman, R.E. Stall, J.B. Jones, G.V. Minsavage, J. Colee, J.W. Scott, G.E. Vallad, C. Zipfel, D. Horvath, J. Westwood, S.F. Hutton, and M.L. Paret. 2018. Transgenic expression of *EFR* and *Bs2* genes for field management of bacterial wilt and bacterial spot of tomato. Phytopath. 108:1402-1411

Lee, T.G., R. Shekaste-band, N. Menda, L.A. Mueller, and S.F. Hutton. 2018. Molecular markers to select for the *j-2*-mediated jointless pedicel in tomato. HortScience. 53:153-158.

Li, J., J. Chitwood, N. Menda, L. Mueller, and S.F. Hutton. 2018. Linkage between the *I-3* Gene for Resistance to Fusarium Wilt Race 3 and Increased Sensitivity to Bacterial Spot in Tomato. Theor. Appl. Genet. 131:145-155.

Raid, R.N., J.R. Allingham, J.E. Funderburk, T. Skarkinsky, S.F. Hutton, W.W. Turechek, and S. Adkins. 2017. First report of *Tomato chlorotic spot virus* in sweet basil (*Ocimum basilicum*) and purslane (*Portulaca oleracea*) in Florida. Plant Health Progress. 18:126-128.

Hutton, S.F., J.W. Scott, and J.H. Freeman. 2017. Fla. 8970 Hybrid Tomato; Fla. 7781B and Fla. 8872B Breeding lines. HortScience 52:782-783.

Hutton, S.F. and J.W. Scott. 2017. Fla. 7907C; 2017. Fla. 7907C; a Fla. 7907 near-isogenic tomato inbred line containing the begomovirus resistance gene, *Ty-1*. HortScience 52:658-660.

CE. de Jensen, I.E. Badillo-Vargas, G. Frantz, H.C. Mellinger, W. Turechek, S.F. Hutton, J.E. Funderburk, R.A. Naidu, and S. Adkins. 2017. First report of *Tomato chlorotic spot virus* in non-Solanaceous weeds erect spiderling (*Boerhavia erecta*) and Asian spiderflower (*Cleome viscosa*), and sweet chili pepper (*Capsicum chinense*) in Puerto Rico. Plant Health Progress. 18:17-18.

Lee, S., V.M. Whitaker, and S.F. Hutton. 2016. Mini Review: Potential applications of non-host

resistance for crop improvement. Front. Plant Sci. http://dx.doi.org/10.3389/fpls.2016.00997.

Hutton, S.F., Y. Ji, and J.W. Scott. 2015. Fla. 8923; a tomato breeding line with begomovirus resistance gene *Ty-3* in a 70kb *Solanum chilense* introgression. HortScience 50:1257-1259.

Scott, J.W., S.F. Hutton, and J.H. Freeman. 2015. Fla. 8638B and Fla. 8624 tomato breeding lines with begomovirus resistance genes *ty-5* plus *Ty-6* and *Ty-6*, respectively. HortScience 50:1405-1407.

Caro, M., M.G. Verlaan, O.Julian, R. Finkers, A.-M. A Wolters, S.F. Hutton, J.W. Scott, R. Kormelink, R.G.F. Visser, M.J. Diez, A. Perez-de-Castro, Y. Bai. 2015. Assessing the genetic variation of *Ty-1* and *Ty-3* alleles conferring resistance to tomato yellow leaf curl virus in a broad tomato germplasm. Mol. Breed. 35:132.

Yang, X., H. Kundariya, Y.-Z. Xu, A. Sandhu, S.F. Hutton, M. Zhang, S.A. Mackenzie. 2015. MSH1-derived epigenetic breeding potential in tomato. Plant Physiol. 168:222-232.

Menda, N., S. Strickler, J. Edwards, A. Bombarely, D. Dunham, G. Martin, L. Mejia, S. Hutton, M. Havey, D. Maxwell, and L. Mueller. 2014. Analysis of wild-species introgressions in tomato inbreds uncovers ancestral origins. BMC Plant Biol. 14:287.

Yang, X., M. Caro, S.F. Hutton, J.W. Scott, Y. Guo, X. Wang, H. Rashid, D. Szinay, H. de Jong, R.G.F. Visser, Y. Bai, and Y. Du. 2014. Fine Mapping of the Tomato Yellow Leaf Curl Virus Resistance Gene *Ty-2* on Chromosome 11 of Tomato. Molecular Breeding 34:749-760.

Hutton, S.F., J.W. Scott, and G.E. Vallad. 2014. Association of the Fusarium wilt race 3 resistance gene, *I-3*, on chromosome 7 with increased susceptibility to bacterial spot race T4, and characterization of a bacterial spot resistance QTL on chromosome 11 in tomato. J. Amer.Soc. Hort. Sci. 139:282-289.

KEVIN E. KENWORTHY, Ph.D.

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EDUCATION

| 2004 | Doctor of Philosophy in Crop Science, Breeding and Genetics, Oklahoma State University |
|------|--|
| 1996 | Master of Science in Crop Science, Breeding and Genetics, Texas Tech University |
| 1994 | Bachelor of Science in Agronomy, Cum Laude, Texas Tech University |

EXPERIENCE

| 2016-present | Professor, Agronomy Department, University of Florida |
|--------------|--|
| 2010-2016 | Associate Professor, Agronomy Department, University of Florida |
| 2004-2010 | Assistant Professor, Agronomy Department, University of Florida |
| 1999-2004 | Instructor, Tarleton State University |
| 2001-2004 | Graduate Research Assistant, Oklahoma State University |
| 1998-1999 | Research Associate, Texas A&M University |
| 1997-1998 | Manager, Research and Development, Thomas Brothers Grass, Ltd, Granbury, Texas |
| 1995-1996 | Graduate Research Assistant, Texas Tech University |

PROFESSIONAL ACTIVITIES/SERVICE

- 2018 Award of Merit for the Turfgrass Producers of Florida
- 2017 NACTA Educator Award
- Alpha Zeta National Honorary Agricultural Fraternity
- Outstanding Senior in Agronomy 1994-1995
- Soils Team 1993-1995 Treasurer
- Gamma Sigma Delta
- American Society of Agronomy
- Crop Science Society of America
- Florida Turfgrass Association
- Golf Course Superintendents Association of America
- Multi-state Coordinating Committee for Plant Breeding
- Turfgrass Breeders Association
- USDA Turf and Forage Crop Germplasm Committee
- National Grass Variety Review Board

GRADUATE STUDENT ADVISING

| Candidate's Role | Career Total |
|-------------------|--------------|
| Chair Ph.D | 3 |
| Co-Chair Ph.D | 3 |
| Chair Master's | 5 |
| Co-Chair Master's | 2 |
| Member Ph.D | 17 |
| Member Master's | 12 |
| Total | 42 |

TEACHING

Courses Taught at the University of Florida

- AGR 3303 Genetics
- AGR 6325 Plant Breeding Techniques

SUMMARY OF EXTERNAL GRANT FUNDING SINCE 2010

| Role | Total | Direct Costs | Indirect Costs |
|---------------------------|---------|--------------|----------------|
| Principal Investigator | 566,591 | 557,075 | 9,516 |
| Co-Principal Investigator | 238,600 | 186,977 | 51,623 |
| Totals | 872,191 | 811,052 | 61,139 |

PUBLICATIONS SINCE 2013

- 1. <u>Liu W.^g</u>, **K.E. Kenworthy**, G.E. MacDonald, J.B. Unruh, L.E. Trenholm, <u>R.G. Leon</u>. 2019. Application timing affects tolerance of zoysiagrass to fluazifop-p-butyl and safening effect of triclopyr. Crop. Sci. 59:1789-1798.
- 2. <u>Liu W.^g</u>, **K.E. Kenworthy**, G.E. MacDonald, J.B. Unruh, L.E. Trenholm, <u>R.G. Leon</u>. 2019. Transgressive segregation and maternal genetic effects of non–target site fluazifop-P-butyl tolerance in Zoysia spp. Weed Sci. https://doi.org/10.1017/wsc.2019.26
- 3. <u>Liu W.^g</u>, G.E. MacDonald, J.B. Unruh, **K.E. Kenworthy**, L.E. Trenholm, <u>R.G. Leon</u>. 2019. Variation in tolerance mechanisms to fluazifop-P-Butyl among selected zoysiagrass lines. Weed Sci. doi:10.1017/wsc.2019.6.
- 4. Zhang, J.^p, S. Virk, W. Porter, **K. Kenworthy**, D. Sullivan, and <u>B. Schwartz</u>. 2019. Applications of unmanned aerial vehicle based imagery in turfgrass field trials. Front. Plant Sci. doi: 10.3389/fpls.2019.00279.
- 5. Zhang, J.^p, B. Poudel^g, **K. Kenworthy**, J.B. Unruh, D. Rowland, J.E. Erickson and J. Kruse. 2019. Drought responses of above-ground and below-ground characteristics in warm-season turfgrass. Journal of Agronomy and Crop Science. 205:1-12. DOI:10.1111/jac.12301.
- Schwartz, B. M., W. W. Hanna, L.L. Baxter, P.L. Raymer, F. Clint Waltz, A.R. Kowalewski, A. Chandra, A. D. Genovesi, B.G. Wherley, G.L. Miller, S.R. Milla-Lewis, C.C. Reynolds, Y. Wu, D.L. Martin, J.Q. Moss, M.P. Kenna, J. B. Unruh, K.E. Kenworthy, J. Zhang^p and P. Munoz. 2018. 'DT-1', a Drought-Tolerant Triploid Turf Bermudagrass. HortScience53(11):1711-1714. doi: 10.21273/HORTSCI13083-18.
- 7. Schwartz, B., J. Zhang^p, K. Kenworthy, G. Miller, C. Peacock, B. Sladek^g and C. Christensen^g. 2018. Nitrogen Rate and Mowing Height Affect Seasonal Performance of Zoysiagrass Cultivars. Agronomy J. 110: 6: 2114-2123.
- 8. <u>Benda, N.D. [&]</u>, <u>N.C. Flor^g</u>, P.F. Harmon and <u>K.E. Kenworthy</u>. 2017. Response of seashore paspalum genotypes to two isolates of Sclerotinia homoeocarpa. International Turfgrass Society Research Journal 13:454-458. doi:10.2134/itsrj2016.06.0474.

- 9. <u>Christensen, C. ^g</u>, J. Zhang^p, **K.E. Kenworthy**, J. Erickson, J. Kruse and B.M. Schwartz. 2017. Classification of zoysiagrass genotypes on rooting capacity and associated performance during drought. International Turfgrass Society Research Journal 13. DOI: 10.2134/itsrj2016.05.0417
- 10. <u>Flor, N.C.^g</u>, <u>P.F. Harmon</u>, **K.E. Kenworthy**, L. Datnoff, R.N. Raid, and R. Nagata. 2017. Screening St. Augustinegrass genotypes for brown patch and large patch disease resistance. Crop Sci. 57.89-97.
- 11. <u>K.E. Kenworthy</u>, P.E. Reith, G.M. Prine, A.R. Blount, and <u>K.H. Quesenberry</u>[&]. 2017. Registration of 'FL Red' A Later Maturing Tetraploid Annual Ryegrass. Journal of Plant Registrations 11:46-50. doi:10.3198/jpr2016.02.0009crc.
- 12. <u>Patton, A.J.</u>, B.M. Schwartz and **K.E. Kenworthy**. 2017. Zoysiagrass (Zoysia spp.) history, utilization, and improvement in the United States: A review. Crop Sci. 57:37-72.
- 13. Pereira, M. &, E.F. Rios^g, K.E. Kenworthy, K.H. Quesenberry A. Blount, J. Erickson, F. Altpeter and P.R. Munoz. 2017. Comparisons of turf-type bahiagrass (Paspalum notatum Flugge) lines for root and shoot traits under various nitrogen regimes. International Turfgrass Society Research Journal 13. doi: 10.2135/cropsci2016.06.0468.
- 14. <u>Quesenberry, K.H.</u> K.E. Kenworthy and D. Harrison[&]. 2017. Ploidy characterization of Axonopus by meiotic chromosome counts and flow cytometry. International Turfgrass Society Research Journal 13. doi: 10.2135/cropsci2016.10.0906.
- 15. Rios, E.g, K. Kenworthy, A. Blount, K. Quesenberry, B. Unruh, J. Erickson, F. Altpeter, and P. Munoz. 2017. Breeding apomictic bahiagrass (Paspalum notatum Flügge) with improved turf traits. Plant Breeding. doi:10.1111/pbr.12459.
- 16. Xing L.g, S. Gezan, **K. Kenworthy**, J. B. Unruh, and <u>P. Munoz</u>. 2017. Improved genetic parameter estimations in zoysiagrass by implementing post hoc blocking. Euphytica 213(195): 1-10. doi: 10.1007/s10681-017-1984-3.
- 17. Zhang, J.P, Glenn, B.g, Unruh, J.B., Kruse, J., **Kenworthy, K.**, Erickson, J., Rowland, D. and Trenholm, L. 2017. Comparative performance and daily light integral requirement of warm-season turfgrasses in different seasons. *Crop Science*. 57(4):2273-2282.
- 18. Zhang, J. g, Kenworthy, K., Unruh J. B., Erickson, J. and G. MacDonald. 2017. Changes of Leaf Membrane fatty acid composition and saturation level of warm-season turfgrass during drought stress. *Crop Science*. 57(5):2843-2851.
- 19. Zhang, J.^g, K.E. Kenworthy, J.B. Unruh, B.P. Poudel^g, J. Erickson, D.L. Rowland and J. Kruse. 2017. Physiological responses to soil drying by warm-season turfgrass species. Crop Sci. 57:111-118. doi:10.2135/cropsci2016.05.0316.
- 20. <u>Aryal, S. K^g.</u>, <u>W. T. Crow</u>, R. McSorley, R. M. Giblin-Davis, and **K. E. Kenworthy**. 2016. Integrated Pest Management of Nematodes on Bermudagrass Turf. Crop, Forage & Turfgrass Management 2. doi:10.2134/cftm2015.0144.
- 21. <u>Fuentealba, M.P.^g, Zhang, J.^p, **Kenworthy, K.E.**, Erickson, J., Kruse, J., and L. Trenholm. 2016. Transpiration responses of warm-season turfgrass in relation to progressive soil drying. Scientia Horticulturae 198:249-253.</u>

- 22. <u>Kenworthy, K.E.</u>, P.E. Reith[&], G.M. Prine, A.R. Blount and <u>K.H. Quesenberry</u>[&]. 2016. Registration of 'FL PE', a later-maturing diploid annual ryegrass. Journal of Plant Registrations 10(1):5-9.
- 23. Zhang, J.^g, Unruh, J.B., **Kenworthy, K.E.**, Erickson, J., Christensen, C., Kruse, J., and D. Rowland. 2016. Phenotypic plasticity and turf performance of zoysiagrass in response to reduced light intensities. *Crop Science* 56:1-12.
- 24. <u>Aryal^g, S.K.</u>, <u>W.T. Crow</u>, R. McSorley, R.M. Giblin-Davis, D.L. Rowland, B. Poudel^g, and **K.E. Kenworthy**. 2015. Effects of infection by *Belonolaimus longicaudatus* on rooting dynamics among St. Augustinegrass and bermudagrass genotypes. Journal of Nematology 47(4):322-331.
- 25. <u>Fuentealba, M.P.^g</u>, <u>Zhang, J.^p</u>, <u>Kenworthy, K.E.</u>, Erickson, J., Kruse, J., and L. Trenholm. 2015. Root development and profile chracteristics of bermudagrass and zoysiagrass. HortScience 50 (10): 1429-1434.
- 26. <u>Glenn, B.^g, B. Brecke</u>, J.B. Unruh, J. Ferrell, **K. Kenworthy**, and G. MacDonald. 2015. Evaluation of alternative herbicides for southern crabgrass (*Digitaria ciliaris*) control in St. Augustinegrass. Weed Tech. http://dx.doi.org/10.1614/WT-D-14-00094.1.
- 27. <u>Lu, H., R. Nagata</u>, **K. Kenworthy**, R. Cherry, K. Quesenberry[&], and P. Busey. 2015. Registration of 'NUF-76' St. Augustinegrass. J. of Plant Registrations. doi:10.3198/jpr2014.10.0073crc.
- 28. <u>Quesenberry, K.H.</u>[&], W.T. Crow and <u>K.E. Kenworthy</u>. 2015. Effect of *Belonolaimus longicaudatus* on root parameters of St. Augustinegrass cultivars. Nematropica. 45:96-101.
- 29. Rios, E.§, A. Blount, P. Harmon, C. Mackowiak, **K. Kenworthy**, and K. Quesenberry[&]. 2015. Ergot resistant tetraploid bahiagrass and fungicide effects on seed yield and quality. Plant Health Progress. doi:10.1094/PHP-RS-14-0051.
- 30. Rios, E.F.^g, **K.E. Kenworthy**, and <u>P.R. Munoz</u>. 2015. Association of phenotypic traits with ploidy and genome size in annual ryegrass. Crop Sci. doi:10.2135/cropsci2015.01.0039.
- 31. <u>Zhang, J.^p, J.B. Unruh</u>, and <u>K. Kenworthy</u>. 2015. Turf performance of bahiagrass, centipedegrass, and St. Augustinegrass cultivars under a linear gradient irrigation system. HortScience 50(3):491-495.
- 32. <u>Chandra, A.</u>, A.D. Genovesi, B.G. Wherley, S.P. Metz, J.A. Reinert, Y-Z. Wu, P. Skulkaew, M.C. Engelke, D. Hargey, L.R. Nelson, B.M. Schwartz, P.L. Raymer, Y.Q. Wu, D.L. Martin, S.R. Milla-Lewis, G. Miller, **K.E. Kenworthy**, and P. Munoz. 2014. Registration of 'DALSA 0605' St. Augustinegrass. J. of Plant Registrations 9(1):27-34.
- 33. <u>Harris-Shultz, K.R.</u>, S. Milla-Lewis, A.J. Patton, **K. Kenworthy**, A. Chandra, F.C. Waltz, G.L. Hodnett, and D.M. Stelly. 2014. Detection of DNA and ploidy variation within vegetatively propagated zoysiagrass cultivars. J. Amer. Soc. Hort. Sci. 139:547-552.
- 34. <u>Huang, T.^g</u>, O. Kostromytska, **K.E. Kenworthy**, <u>E.A. Buss</u>. 2014. Zoysiagrass genotype responses to *Sphenophorus venatus vestitus (Coleoptera: Curculionidae)* J. Econ. Entomol. 107(4):1535-1542.
- 35. Ma, L.^g, K.E. Kenworthy, H. Lu, R. Cherry. 2014. Genetic variability of reproductive traits in common carpetgrass. HortScience 49(7):856-858.

- 36. <u>Quesenberry, K.</u>[&], P. Munoz, A. Blount, **K. Kenworthy**, W. Crow. 2014. Breeding forages in Florida for resistance to nematodes. Crop and Pasture Science 65:1192–1198.
- 37. <u>Leon, R.G.</u>, J.B. Unruh, B.J. Brecke, and **K.E. Kenworthy**. 2014. *Characterization* of Fluazifop-P-butyl tolerance in zoysiagrass cultivars. Weed Technology 28(2):385-394.
- 38. <u>Flor, N.C.^g</u>, P. Munoz, P. Harmon, <u>K. Kenworthy</u>. 2013. Response of seashore paspalum genotypes to dollar spot disease. International Turfgrass Society Research Journal 12:119-126.
- 39. <u>Kimball, J.A.^g</u>, M.C Zuleta, **K.E. Kenworthy**, V.G. Lehman, K.R. Harris-Shultz, <u>S. Milla-Lewis</u>. 2013. Genetic relationships in *Zoysia* species and the identification of putative interspecific hybrids using simple sequence repeat markers and inflorescence traits. Crop Sci. January. 53(1):285-295.
- 40. <u>Kimball, J.A.^g</u>, M.C. Zuleta, <u>K.E. Kenworthy</u>, H. Lu, <u>S.R. Milla-Lewis</u>. 2013. Molecular markers enable the identification of contaminants in production fields of 'Captiva' St. Augustinegrass. International Turfgrass Society Research Journal 12:267-273.
- 41. Ma, L.^g, H. Lu, R. Cherry, H. McAuslane and **K. Kenworthy**. 2013. Effect of time and testing method in determining St. Augustinegrass resistance to southern chinch bugs (Hemiptera: Blissidae). J. Entomol. Sci. 48(2):161-165.
- 42. <u>Milla-Lewis, S.R.</u>, M.C. Zuleta, G.A. Van Esbroeck, K.H. Quesenberry[&], **K.E. Kenworthy**. 2013. Cytological and molecular characterization of genetic diversity in *Stenotaphrum*. Crop Sci. January. 53(1):296-308.
- 43. Mulkey, S.E.^g, M.C. Zuleta, G.A. Van Esbroeck, H. Lu, **K.E. Kenworthy**, <u>S.R. Milla-Lewis</u>. 2013. Genetic analysis of a St. Augustinegrass germplasm collection using AFLP markers. International Turfgrass Society Research Journal 12:281-291.
- 44. Quesenberry, K.H.[&], <u>K.E. Kenworthy</u>, <u>W.T. Crow</u>, P.F. Harmon, H. Lu, S. Milla-Lewis. 2013. Lance nematode effects on rooting of two St. Augustinegrass cultivars. International Turfgrass Society Research Journal 12:357-361.
- 45. Poudel B.^g, <u>D. Rowland</u>, J. Erickson, J.B. Unruh, <u>K. Kenworthy</u>. 2013. Nitrogen partitioning comparisons among warm-season turfgrass species. International Turfgrass Society Research Journal 12:503-507.
- 46. Rios, E.§, A. Blount, J. Erickson, K. Quesenberry[®], F. Altpeter, C. Cellon, K. Kenworthy. 2013. Root and shoot characterization of mutant turf-type bahiagrasses. International Turfgrass Society Research Journal 12:509-516.
- 47. Rios, E.F.^g, A. Blount, K.E. Kenworthy, A.A. Carlos, and K.H. Quesenberry[&]. 2013. Seasonal expression of apospory in bahiagrass. Tropical Grasslands 1:116-118.
- 48. <u>Zhang, J.^g</u>, <u>J.B. Unruh</u>, **K.E. Kenworthy**. 2013. Zoysiagrass cultivar responses under a linear gradient irrigation system. International Turfgrass Society Research Journal.12:179-185.

MATIAS KIRST, Ph.D.

Professor of Quantitative Genetics and Genomics
University of Florida, Institute of Food and Agricultural Sciences
School of Forest Resources and Conservation & Genetics Institute
PO Box 110410, 367 Newins-Ziegler Hall, Gainesville, FL 32611
(352) 846.0900, mkirst@ufl.edu

https://www.forestgenomics.org/

EDUCATION

| Federal University of Santa Maria (Brazil) | Forestry Engineering | B.S. | 1996 |
|--|--------------------------------|---------|------|
| Federal University of Viçosa (Brazil) | Genetics and Improvement | M.Sc. | 1999 |
| NC State University | Genetics and | | |
| | Functional Genomics (co-major) | Ph.D. | 2003 |
| Cornell University (Buckler Lab) | Genomics of maize diversity | Postdoc | 2004 |

PROFESSIONAL EXPERIENCE

| 2016 | Director, Plant Molecular and Cellular Biology Graduate Program, University of Florida |
|------|--|
| 2015 | Professor, School of Forest Resources and Conservation, University of Florida |
| 2011 | Founder RAPiD Genomics LLC, CEO (2011-2012), Scientific Consultant (2012-present) |
| 2010 | Co-Director Cooperative Forest Genetics Research Program |
| 2005 | Member Genetics Institute, University of Florida |

SELECTED PUBLICATIONS (65 publications since 2003, h-index 36)

Hodel et al. (2018) Linking genome signatures of selection and adaptation in non-model plants: exploring potential and limitations in the angiosperm Amborella. Curr Opin Plant Biol. 42:81.

Tieman et al. (2017) A chemical genetic roadmap to improved tomato flavor. Science 355:391.

- Fahrenkrog et al. (2017) Genome-wide association study reveals putative regulators of bioenergy traits in Populus deltoides. New Phytol. 213:799.
- Vazquez et al. (2016) Increased proportion of variance explained and prediction accuracy of survival of breast cancer patients with use of whole-genome multiomic profiles. Genetics 203:1425.
- Albert et al. (2013) The Amborella genome and the evolution of flowering plants. Science 342:1467.
- Maron et al. (2013) Aluminum tolerance in maize is associated with higher MATE1 gene copy-number. PNAS 110:5241.
- Resende et al. (2012) Accuracy of Genomic Selection Methods in a Standard Data Set of Loblolly Pine (Pinus taeda L.). Genetics 190:1503.
- Harfouche et al. (2012) Accelerating the domestication of forest trees in a changing world. Trends in Plant Sciences 17:64-72.

Drost et al. (2010) Diversification in the genetic architecture of gene expression and transcriptional networks in organ differentiation of Populus. PNAS 107:8492-8497.

Grattapaglia et al. (2009) Genomics of growth traits in forest trees. Curr Opin Plant Biol. 12:148-156.

CURRENT FUNDING (\$20M+ funding as principal investigator since 2006)

- 1. Genome and transcriptome based prediction, and regulator inference, of molecular and whole-plant phenotypes; Agency: National Science Foundation; Award: \$1,956,424; Period: 3/15/15-2/28/20.
- 2. Phylogenomic discovery and engineering of nitrogen fixation into the bioenergy woody crop poplar; Agency: DOE; Award: \$7,309,576; Period: 09/20/17-09/20/22.

TEACHING

GMS 6231 Genomics and Bioinformatics PCB 5065 Advanced Genetics

SYNERGISTIC ACTIVITIES

- Industry/University research collaboration Kirst is the co-Director of the Cooperative Forest Genetics
 Research Program. Kirst also co-founded the start-up biotech company RAPiD Genomics LLC
 (www.rapid-genomics.com).
- Professional/graduate training Kirst leads the development and organization of several training workshops on genomic prediction, including the "Phenotype Prediction Using Genomic Data Workshop"
- Graduate and high-school curriculum development Kirst developed the curriculum of the main course in advanced genomics at the University of Florida, and is currently the lead instructor
- Scientific or external advisory board member for four projects funded by Genome Canada and the European Commission (2011-present).

HARRY KLEE, Ph.D.

Eminent Scholar and Professor
Horticultural Sciences Department
University of Florida, Institute of Food and Agricultural Sciences
2550 Hull Road, Bldg 885, PO Box 110690, Gainesville, Florida 32611

Phone: (352) 392-8249, E-mail: hjklee@ufl.edu https://hos.ifas.ufl.edu/people/on-campus-faculty/harry-j-klee/

PROFESSIONAL PREPARATION

B.S. Psychology, University of Massachusetts, Amherst (1974) Ph.D. Biochemistry, University of Massachusetts, Amherst (1980)

Senior Fellow in the laboratory of Dr. Eugene Nester, Dept. of Microbiology, University of Washington (1980-1984)

APPOINTMENTS

1995- Eminent Scholar, Dickman Chair for Tomato Improvement, University of Florida, Dept. of Horticultural Sciences, Genetics Institute and Plant Molecular and Cellular Biology Program.

1992-95 Fellow, Monsanto Company.

1984-92 Senior Scientist, Monsanto Company.

PUBLICATIONS

(i) Products most closely related to the proposed project:

- 1. Tieman DM, McIntyre L, Blandon-Ubeda A, Bies D, Odabasi A, Rodriguez G, van der Knaap E, Taylor M, Goulet C, Mageroy MH, Snyder D, Colquoun T, Moskowitz H, Sims C, Clark D, Bartoshuk L, Klee H. 2012. The chemical interactions underlying tomato flavor preferences. Current Biology 22:1-5.
- 2. Zhang B, Tieman DM, Chen J, Xu Y, Chen K, Fei Z, Giovannoni J, Klee HJ. (2016) Loss of tomato flavor quality during chilling is associated with reduced expression of volatile biosynthetic genes and a transient alteration in DNA methylation. Proc. Natl. Acad. Sci USA, 113: 12580-12585.
- 3. Liu Z, Alseek S, Brotman Y, Zheng Y, Fei Z, Tieman D, Giovannoni J, Fernie A, Klee H. (2016) Characterization of Solanum *pennellii* chromosome 4 fruit quality-associated metabolite QTLs. Frontiers in Plant Science, doi: 10.3389/fpls.2016.01671.
- 4. Tieman D, Zhu G, Resende M, Lin T, Nguyen C, Bies D, Rambla JL, Ortiz Beltran K, Taylor M, Zhang B, Ikeda H, Liu Z, Fisher J, Zemach I, Monforte A, Zamir D, Granell A, Kirst M, Huang S, Klee H. (2017) A chemical genetic roadmap to improved tomato flavor. Science, 355: 391-394.
- Garbowicz K, Liu Z, Alseekh S, Tieman D, Taylor M, Kuhalskaya A, Ofner I, Zamir D, Klee H, Fernie A, Brotman Y. (2018) Quantitative trait loci analysis identifies a prominent gene involved in the production of fatty-acid-derived flavor volatiles in tomato. Mol. Plant, doi: 10.1016/j.molp.2018.06.003

(ii) Five other significant products:

1. Fernie AR, Klee HJ. 2011. The use of natural genetic diversity in the understanding of metabolic organization and regulation. Frontiers in Plant Physiology. DOI: 10.3389/fpls.2011.00059.

- 2. Goulet C, Mageroy MH, Lam N, Floystad A, Tieman DM, Klee HJ. 2012. The role of an esterase in flavor volatile variation within the tomato clade. Proc. Natl. Acad. Sci. USA. 109: 19009-19014.
- 3. Goulet C, Kamiyoshihara Y, Lam N, Richard T, Taylor M, Tieman D, Klee HJ. 2015. Divergence in the Enzymatic Activities of a Tomato and *Solanum pennellii* Alcohol Acyltransferase Impacts Fruit Volatile Ester Composition, Mol. Plant. 8: 153-162
- 4. Liu Z, Alseek S, Brotman Y, Zheng Y, Fei Z, Tieman D, Giovannoni J, Fernie A, Klee H. (2016) Characterization of Solanum *pennellii* chromosome 4 fruit quality-associated metabolite QTLs. Frontiers in Plant Science, doi: 10.3389/fpls.2016.01671.
- 5. Klee H, Tieman D. (2018) The genetics of fruit flavor preferences. Nature Reviews Genetics. doi:10.1038/s41576-018-0002-5

SYNERGISTIC ACTIVITIES

- Editor-in-Chief, The Plant Journal 2002-2009.
- Qiushi Chair Professor, Zhejiang University, Hangzhou China 2014-
- American Society of Plant Biologists Science Policy Committee 2014-2016
- President, American Society of Plant Biologists 2017-2018

SEONGHEE LEE, Ph.D.

Assistant Professor, Strawberry Molecular Genetics and Genomics
Gulf Coast Research and Education Center
Horticultural Science Department
Institute of Food and Agricultural Sciences, University of Florida
Phone (813) 633-4151; Email seonghee105@ufl.edu

https://gcrec.ifas.ufl.edu/gcrec-facultystaff-directory/seonghee-lee/

EDUCATION

| 2006 | Ph.D., North Dakota State University - Plant Pathology |
|------|---|
| 1999 | M.S., Chungbuk National University (South Korea) - Plant Pathology |
| 1997 | B.S., Chungbuk National University (South Korea) - Agricultural Biology |

PROFESSIONAL EXPERIENCE

| 2016 ~ present | Assistant Professor, Horticultural Science Department, UF/IFAS Gulf Coast |
|----------------|--|
| | Research and Education Center, Wimauma, USA |
| | Faculty Member, Plant Molecular and Cellular Biology Program, UF |
| 2015 ~ 2016 | Research Assistant Professor, Horticultural Science Department, UF/IFAS Gulf |
| | Coast Research and Education Center |
| 2009 ~ 2014 | Senior Research Associate, The Samuel Roberts Noble Foundation, Ardmore, |
| | Oklahoma, USA |
| 2007 ~ 2009 | Postdoctoral Research Associate, Dale Bumpers National Rice Research |
| | Center, USDA-ARS, Stuttgart, Arkansas, USA |
| 2006 ~ 2007 | Postdoctoral Research Associate, Department of Plant Pathology, Pennsylvania |
| | State University, University Park, Pennsylvania, USA |
| 2002 ~ 2006 | Ph.D Graduate Assistant, Department of Plant Pathology, North Dakota State |
| | University, Fargo, North Dakota, USA |
| 2000 ~ 2002 | Research Assistant, Department of Plant Pathology, Washington State |
| | University, Pullman, Washington State, USA |
| 1989 ~ 1999 | B.S and M.S, Department of Plant Pathology, Chungbuk National University, |
| | South Korea |
| | |

PROFESSIONAL ACTIVITIES

Reviewer: Phyotopathology, Plant Science, Plant Cell, PLoS ONE, BMC Research Notes, In Vitro Cellular

and Developmental Biology, Plant Molecular Biology Report, PeerJ

Board of Reviewing Editor: Frontiers in Plant Science, section Horticultural and Crop Science

Host Resistance Committee Member: American Phytopathological Society

DNA Test Team Member, USDA/NIFA RosBREED Project

AWARDS / HONORS

| 2016 | UF/IFAS Early Career Scientist Award |
|------------|--|
| 2010 | Recipient of National Science Foundation (NSF) sponsored Travel Award, 21st |
| | International Conference on Arabidopsis Research |
| 2008 | Recipient of National Science Foundation (NSF) sponsored Travel Award, The 6th |
| | International Symposium on Rice Functional Genomics, Jeju, South Korea, 2008 |
| 2002, 2003 | Graduate School Fellowship, North Dakota State University |

COMPETITIVE RESEARCH GRANTS AWARDED

Project title: Molecular breeding for charcoal rot resistance in strawberry

PI: Seonghee Lee (2019-2022)

Grant agency: Florida Department of Agriculture and Consumer Services (FDACS)

Project title: Next-generation disease resistance breeding and management solutions for strawberry

Co-PI: Seonghee Lee (2018-2021)

Grant agency: USDA Specialty Crop Research Initiative (SCRI)

Project title: Development of CRISPR/Cas gene-editing technology in strawberry.

PI: Seonghee Lee (2016-2019)

Grant agency: University of Florida, Institute of Food and Agricultural Science

Project title: The DNA-test and marker-assisted seedling selection program: Improving fruit quality and disease resistance in Florida strawberries

PI: Seonghee Lee (2017-2021)

Grant agency: Florida Strawberry Research and Education Foundation (FSREF)

Project title: Application of molecular markers to breed more effectively for Phytophthora crown rot resistance in strawberry.

PI: Seonghee Lee (2015-2017)

Grant agency: Florida Strawberry Research and Education Foundation (FSREF)

PEER-REVIEWED PUBLICATIONS (LAST 3 YEARS)

- 1. Barbey, C. R., Hogshead, M. H., Schwartz, A. E., Mourad, N. Verma, S., Lee, S., Whitaker, V. M. and Folta, K. M. 2019. The genetics of differential gene expression related to fruit traits in strawberry. *Frontiers in Genetics* (submitted).
- 2. Oh, Y., Zurn, J. D., Bassil, N., Whitaker, V. M. and Lee, S. 2019. The strawberry DNA testing handbook. *HortScience* (submitted).
- 3. Oh, Y., Chandra, S. and Lee, S. 2019. Development of subgenome-specific markers for *FaRXf1* conferring resistance to bacterial angular leaf spot in allo-octoploid strawberry. *International Journal of Fruit Science* (accepted with revision)/
- 4. Barbey, C., Lee S., Verma, S., Bird, K. A., Yocca, A. E., Edger, P. P., Knapp, S. J., Whitaker, V. M. and Folta, K. M. 2019. Disease resistance genetics and genomics in octoploid strawberry. *G3: Genes, Genomes, Genetics* (accepted with revision).
- Gill, S. U. P, Lee, S.c, Jia, Y. and Mysore, S. K. 2018. Exploring natural variation for rice sheath blight resistance in *Brachypodium distachyon*. *Plant Signaling & Behavior* doi.org/10.1080/15592324.2018.1546527
- Lee, S., Rojas, C., Oh, S., Kang, M., Choudhury, S. R., Lee, H-K., Allen, R. D., Pandey, S. and Mysore, K. S. 2018. Nucleolar GTP-binding protein 1-2 (NOG1-2) interacts with Jasmonate-zim-domain protein 9 (JAZ9) to regulate stomatal aperture during plant immunity. *International Journal of Molecular Sciences* 1922; doi:10.3390/ijms19071922.
- 7. Anciro, A. G, Mangandi, J. g, Verma, S.b, Peres, N., Whitaker, V. M. and Lee, Sc. 2018. FaRCg1: a quantitative trait locus conferring resistance to Colletotrichum crown rot caused by *Colletotrichum gloeosporioides* in octoploid strawberry. *Theoretical and Applied Genetics* 131(10):2167-2177.

- 8. Forcelini, B. B.g, Lee, S., Oliveira, M. S. g and Peres, N. Ac. 2018. Development of high-throughput SNP genotyping assays for rapid detection of strawberry *Colletotrichum* species and the G143A mutation. *Phytopathology* doi: 10.1094/PHYTO-04-18-0128-R.
- 9. Noh, Y-H. G, Oh, Y. P, Mangandi, J.g, Verma, S. b, Zurn, J. D., Lu, Y-T.&, Fan, Z.b, Bassil, N., Peres, N., Whitaker, V. M. and Lee, Sc. 2018. High-throughput marker assays for *FaRPc2*-mediated resistance to Phytophthora crown rot in octoploid strawberry. *Molecular Breeding* 38:104.
- Singh R., Lee, S., Oh, S., Ramu, V. S., Lee, H-K., Kaundal, A., Muthappa, S. K., Rojas, C. Mc. and Mysore, K. S. 2018. Two chloroplast-localized proteins: AtNHR2A and AtNHR2B, contribute to callose deposition during nonhost disease resistance in Arabidopsis. *Molecular Plant-Microbe Interactions* doi: 10.1094/MPMI-04-18-0094-R.
- 11. Kaundal, A., Ramu, V., Oh, S., Lee, S., Pant, B., Lee, H-K., Rojas, C., Muthappa, S-K. and Mysore, K. S. 2017. General control non-repressible-4 (GCN4) destabilizes 14-3-3 and RIN4 complex to regulate stomatal aperture with implications on plant immunity. *Plant Cell* 29: 2233-2248.
- 12. Lee, S., Muthappa, S-K., Kang, M., Rojas, C., Tang, Y., Oh, S., Choudhury, S. R., Lee, H-K., Ishiga, Y., Allen, R. D., Pandey, S. and Mysore, K. S. 2017. The small GTPase, Nucleolar GTP-binding protein 1 (NOG1), has a novel role in plant innate immunity. *Scientific Report* 7: 9260.
- 13. Kang, M., Lee, S., Abdelmageed, H., Reichert, A., Lee, H-K., Fokar, M., Mysore, K. S. and Allen, R. D. 2016. Arabidopsis Stress Associated Protein 9 mediates biotic and abiotic stress responsive ABA signaling via the proteasome pathway. *Plant, Cell and Environment* DOI: 10.1111/pce.12892
- 14. Karlen, S. D., Peck, M. L., Zhang, C., Smith, R. A., Padmakshan, D., Helmich, K. E., Free, H. C. A., Lee, S., Smith, B. G., Lu, F, Sedbrook, J. C., Sibout, R., Grabber, J. H., Runge, T. M., Mysore, K. S., Harris, P. J., Bartley, L. E. and Ralph, J. 2016. Monolignol-ferulate conjugates are naturally incorporated into plant lignins. *Science Advances* 2:e1600393.
- 15. Noh, Y. H., Lee, S., Whitaker, V. M., Cearley, K. R., and Cha, J. 2016. A high-throughput marker-assisted selection system combining rapid DNA extraction and high-resolution melting analysis: strawberry as a model for fruit crops. *Journal of Berry Research* 10.3233/JBR-160145
- Lee, S., Whitaker, V. M. and Hutton, S. 2016. Mini Review: potential applications of nonhost resistance for crop improvement. *Frontiers in Plant Science* (http://dx.doi.org/10.3389/fpls.2016.00997)
- 17. Jia, Y., Zhou, E., Lee, S. and Bianco, T. 2016. Coevolutionary dynamics of rice blast resistance gene *Pi-ta* and *Magnaporthe oryzae* avirulence gene *AVR-Pita* 1. *Phytopathology* 106(7): 676-683.
- 18. Roach, J. A., Verma, S., Peres, N. A., Jamieson, A. R., van de Weg, E. W., Bink, M. C.A.M., Bassil, N. V., Lee, S. and Whitaker, V. M. 2016. *FaRXf1*: a locus conferring resistance to angular leaf spot caused by *Xanthomonas fragariae* in octoploid strawberry. *Theoretical and Applied Genetics* 129(6):1191-1201.

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EDUCATION

| Korea University, Seoul, Repub | lic of Korea | Ph.D. | 2010 | Genetic Engineering |
|--------------------------------|--------------------------|---------|-----------|---|
| Korea University, Seoul, Repub | lic of Korea | M.S. | 2005 | Plant Biotechnology and Genetic Engineering |
| Korea University, Seoul, Repub | lic of Korea | B.S. | 2003 | Agriculture |
| PROFESSIONAL EXPERIENCE | | | | |
| 2018 – present Graduate Fac | culty, Department of Pla | nt Mole | cular and | d Cellular Biology, University |

| PROFESSIONAL E | APERIENCE |
|----------------|---|
| 2018 – present | Graduate Faculty, Department of Plant Molecular and Cellular Biology, University of Florida, FL, USA |
| 2016 – present | Assistant Professor, Horticultural Sciences Department, Gulf Coast Research and Education Center, University of Florida, FL, USA |
| 2010 – 2016 | Postdoctoral Research Associate in Bioinformatics and Soybean Genomics, Department of Crop Sciences, University of Illinois at Urbana- Champaign, IL, USA (Advisor: Matthew Hudson) |
| 2010 – 2010 | Research Professor, Korea University, Seoul, Republic of Korea 2009 |
| 2009 | Researcher, Institute of Life Science & Natural Resources, Korea University, Seoul, Republic of Korea |

SELECTED PEER-REVIEWED PUBLICATIONS

- Hwang, S., T.G. Lee. 2019. Correcting pervasive errors in genotypic datasets to develop genetic maps. Agronomy 9, 196.
- Lee, T.G., S.F. Hutton, R. Shekasteband. 2018. Fine mapping of the brachytic locus on the tomato genome. Journal of the American Society for Horticultural Science 143, 239-247.
- Lee, T.G., B.W. Diers, M.E. Hudson. 2016. An efficient method for measuring copy number variation applied to improvement of nematode resistance in soybean. The Plant Journal 88, 143-153.
- Lee, T.G., I. Kumar, B.W. Diers, M.E. Hudson. 2015. Evolution and selection of Rhg1, a copy-number variant nematode-resistance locus. Molecular Ecology 24, 1774–1791.
- Cook, D.E.*, T.G. Lee*, X. Guo*, S. Melito, K. Wang, A. Bayless, J. Wang, T.J. Hughes, D.K. Willis, T. Clemente, B.W. Diers, J. Jiang, M.E. Hudson¹, A.F. Bent¹. 2012. Copy number

variation of multiple genes at *Rhg1* mediates nematode resistance in soybean. Science 338, 1206–1209. (*Equal Authorship, [¶]Equal Authorship)

- Lee, T.G., M.J. Hong, J.W. Johnson, D.E. Bland, D.Y. Kim, Y.W. Seo. 2009.

 Development and functional assessment of EST-derived 2RL-specific markers for 2BS.2RL translocations. Theoretical and Applied Genetics 119, 663–673.
- Lee, T.G., C.S. Jang, J.Y. Kim, D.S. Kim, J.H. Park, D.Y. Kim, Y.W. Seo. 2007. A Myb transcription factor (*TaMyb1*) from wheat roots is expressed during hypoxia: Roles in response to the oxygen concentration in root environment and abiotic stresses. Physiologia Plantarum 129, 375–385.

SELECTED PEER-REVIEWED EXTENSION PUBLICATIONS

Lee, T.G. 2018. CRISPR: A technical breakthrough for tomato research. Univ. Florida, Inst. Food Agr. Sci., Electronic Data Info. Source, HS1314. Feb. 2018. https://edis.ifas.ufl.edu/hs1314

POSTDOCTORAL FELLOWS TRAINED

Man Bo Lee (2017 – present) Sadal Hwang (2018 – 2019)

GRADUATE STUDENTS TRAINED

Gurleen Kaur (Chair PhD; 2017 – present)
Prashant Bhandari (Chair PhD; 2019 – present)
Doosan Shin (Co-Chair PhD; 2019 – present)

GEOFFREY MERU, Ph.D.

Assistant Professor, Vegetable Breeding, Genetics and Genomics
Horticultural Sciences Department
Tropical Research & Education Center
University of Florida, Institute of Food and Agricultural Sciences
18905 SW 280 St., Homestead, FL 33031-3314

Office Phone: (786) 217-9287; Email: gmeru@ufl.edu https://trec.ifas.ufl.edu/faculty/gmeru/

EDUCATION

University of Georgia, Athens, GA, USA

• Ph.D. Horticulture, Aug., 2010 - Dec., 2014

Thesis: "Genetic mapping of resistance to Fusarium wilt and seed nutrition traits in watermelon"

Project 1: GBS for SNP discovery and QTL mapping of resistance to Fusarium wilt in watermelon

Project 2: Genetic mapping of seed nutrition traits (oil quality/quantity) in watermelon

Project 3: Breeding for fruit quality traits and disease resistance in watermelon

Kenyatta University and ICRISAT, Nairobi, Kenya

M.Sc. Biotechnology, Jan., 2009 - July, 2010

Thesis: "Genotyping BC3F2 populations of four Ethiopian sorghum varieties for Stay Green QTL through marker assisted selection with SSRs"

B.Sc. Biotechnology, Aug. 2004 - Dec. 2008

PROFESSIONAL EXPERIENCE

University of Florida, TREC, Homestead, FL, USA

 Assistant Professor, Vegetable Crop Genetics, June, 2016- Present Research focus: Cucurbit breeding, genetics and genomics

Tennessee State University, Nashville, TN, USA

Postdoctoral Research Associate, Aug., 2015 - June, 2016

Project 1: QTL mapping and heritability estimates for resistance to powdery mildew in dogwood Project 2: Molecular plant-microbe interactions and GFP-tagging in endophyte-plant systems

ICRISAT

Research Consultant Jan., 2010- May, 2010

Project: DNA fingerprinting of pigeon pea and groundnut accessions

PROFESSIONAL SKILLS

Plant Breeding

- Mating design implementation
- Marker-assisted selection
- Trait evaluation and experimental design (field and greenhouse)
- Line selection for disease resistance
- Field and greenhouse pollinations (selfs, crosses, backcrosses)
- Breeding database maintenance

Tissue culture: tetraploid induction and micro-propagation

Molecular Biology

- Marker development and assays: SSRs (capillary electrophoresis), SNPs (KASP)
- Genetic map construction and QTL mapping
- Genotyping by Sequencing, DNA cloning and sequencing &DNA finger-printing

Plant Pathology

- Development and optimization of high throughput disease screening assays
- Fungal, bacterial and viral pathogen inoculation
- Identification of biocontrol agents (in vivo and in vitro)

Statistical Analysis and Bioinformatics

o Joinmap, QTL Cart., MapChart, Genemapper, Tassel, BLAST, R/SAS, Sequencher, MEGA

PEER REVIEWED PUBLICATIONS

Ramos, A. Fu, Y., Michael, V., and **Meru, G**. QTL-seq for identification of genetic loci associated with resistance to *Phytophthora* crown rot in squash (*under review*)

Meru, G., Leyva, D., Michael, V., Dorval, M. Mainviel, R. and Fu, Y. 2019. Genetic variation among *Cucurbita pepo* accessions varying in seed nutrition and seed size. Amer. J. Plant Sci. (*in press*).

Michael, V.G, Fu, Y. and **Meru, G**. 2019. Inheritance of resistance to *Phytophthora* crown rot in *Cucurbita pepo*. HortScience 54:1156-1158.

Michael, V., Moon, P., Fu, Y. and **Meru, G**. 2019. Genetic diversity among accessions of *Cucurbita pepo* resistant to *Phytophthora* crown rot. HortScience 54:17-22. Moon P. and **Meru G**. 2018. Embryo rescue of aged *Cucurbita pepo* seeds in squash rescue medium (J. Hort. Sci. Res. 2:62-69.

Meru, G., Fu, Y., Leyva, D., Sarnoski, P. and Yagiz, Y. 2018. Phenotypic relationships among oil, protein, fatty acid composition and seed size traits in *Cucurbita pepo* Sc. Hort. 233: 47-53.

Parikh L., Mmbaga M, **Meru**, G. et al. 2017. Parikh L., Quantitative trait loci associated with resistance to powdery mildew in Cornus florida. Sci. Horticulturae 226: 322-326.

Porterfield, R. and **Meru**, G. 2017. Candidate Susceptibility Genes for Powdery and Downy Mildew in Watermelon and Squash. J Phylogenetics Evol Biol. 5:2.

Meru G. and Cecilia M. 2016. Genotyping by sequencing for SNP discovery and genetic mapping of resistance to race 1 of *Fusarium oxysporum* in watermelon. Sci. Hort. 209:31-40.

Meru G. and Cecilia M. 2016. Genetic loci associated with resistance to *Fusarium oxysporum* f. sp. niveum race 2 in Citrullus lanatus type watermelon. J. Amer. Soc. Hort. Sci. 141(6):617–622.

Parikh L., Mmbaga M. S. Kodati, M. Blair, D. Hui and **Meru G.** 2016. Broad-sense heritability and genetic gain for powdery mildew resistance in multiple pseudo-F2 (F1) populations of flowering dogwoods (*Cornus florida* L.). Sci. Hort. 213-216-221.

Meru G. and Cecilia M. 2014. Quantitative trait loci and candidate genes associated with fatty acid content of watermelon seed. J. Amer. Soc. Hort. Sci. 139(4):433-441

Meru G. and Cecilia M. 2013. Genetic mapping of seed traits correlated with seed oil percentage in watermelon. HortScience. 48 (8):955-959.

Meru G., D. McDowell, V. Waters, A. Seibel, J. Davis and C. McGregor. 2013. A non-destructive genotyping system from a single seed for marker-assisted selection in watermelon. Genet. Mol. Res. 12 (1):702-709.

BOOK CHAPTERS

- Meru G. 2012. Polyploidy. In: C. Brummer and C. McGregor (eds.), Plant Breeding in the 21st Century. PBGG, University of Georgia, Athens (http://plantbreeding.coe.uga.edu/index.php?title=5.Polyploidy)
- McGregor C., G. Meru and V. Waters. 2012. Breeding methods for specific crops: watermelon. In: C. Brummer and C. McGregor (eds.), Plant Breeding in the 21st Century. PBGG, University of Georgia, Athens http://plantbreeding.coe.uga.edu/index.php?title=20.6 Watermelon)

PATRICIO R. MUNOZ, Ph.D.

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University of Florida, Institute of Food and Agricultural Sciences
Horticultural Sciences Department
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Phone: 352-273-4837, <u>p.munoz@ufl.edu</u> www.blueberrybreeding.com

EDUCATION

| Postdoc Associate | Forest Genomic Lab. | University of Florida | Jan 2012-June |
|-------------------|-----------------------|-------------------------|----------------------|
| | | | 2013 |
| Ph.D. | Molecular Breeding | University of Florida | Jan 2010-Nov 2012 |
| M.Sc. | Quantitative Genetics | University of Florida | Aug 2007-Dec 2009 |
| B.Sc. | Forestry Engineering | Universidad Católica de | Mar 1998-Oct |
| Б.ЗС. | (Honors) | Temuco | 2004 |

PROFESSIONAL EXPERIENCE

April 2012-Nov 2012

| | WEITGE |
|--------------------|--|
| Feb 2017-Present | Assistant Professor Blueberry Breeding and Genomics. Horticultural Science Department, University of Florida, Gainesville, FL. Develop of improved blueberry cultivars. Leader of UF's Blueberry Breeding program. Research and mentor students on breeding, quantitative genetics, genetics and genomics. Teaching courses in Plant Breeding related topics. |
| July 2013-Jan 2017 | Assistant Professor Forage Breeding and Genomics. Agronomy Department, University of Florida, Gainesville, FL. Research on Forage breeding, genetics and genomics. Leader of UF's alfalfa, bermudagrass and clovers Breeding program. Mentor students on the area of breeding, quantitative genetics and genomics. Development of improved forage cultivars for the Southern US. Teaching courses Field Plot Techniques and Advanced Plant Breeding. |
| April 2013 | Quantitative genetic consultant . Texas A&M AgriLife Research-Dallas. Quantitative support in project "Plant genetics and genomics to improve drought and salinity tolerance for sustainable turfgrass production in the southern United States". |
| Feb 2013 | Scientific advisory board assistant , Technology Innovation Group (TIG), Inc. Austin, TX, USA. Support TIG the "Citrus Research Development Foundation, Inc." Scientific Advisory Board. |
| 2012-2013 | Quantitative genetic consultant . GreenWood Resources, Portland, Oregon, USA. Trained four breeders in the use of ASReml software. Analyzed poplar clonal trials data to rank genotypes for selection, estimate genotype-by-environment and genotype-by-year interaction, among others. |

Statistic consultant, Turfgrass Breeding Program, Agronomy Dept. University of

Florida. Gainesville, FL. Analyzed turfgrass breeding experiments for selection based on quality and disease/drought resistance lines. Studied the level of genotype-by-environment, and age-age correlation to define frequency and age to selection.

Jun 2010-2012

Instructor/Consultant, VSN International, Hemel Hempstead, United Kingdom. Organize and teach workshops on use of ASReml software, breeding and quantitative genetic theory. Classes are based on lectures and practical examples.

Sep 2010-2012

Quantitative genetics/Breeding consultant. TRI-GEN Fish Ltd. British Columbia, Canada. Analysis of Salmon progeny trials, including fullsib, genotype x environment interaction, ranking for genotype selection andgenetic correlations. Recommended breeding strategies and design of experiments.

Aug 2012

Quantitative genetic consultant. Fast Genetics, Saskatchewan, Canada. Analyzed sow and swine progeny data: estimated variance component; genetic effect, permanent environment effect and common environment for litter size, fat content, lean content, weight, feed conversion rate and of born.

number

direct

Dec 2011

Quantitative genetic consultant. Nidera Argentina S.A., Venado Tuerto, Argentina. Trained 13 breeders in use of ASReml software and Genomic Selection. Analyzed corn trial data: augmented designs, genotype-by-environment and genotype-by-year interactions and spatial analysis. Recommendations on experimental design

Jan 2010-Dec 2012

Research assistant, Plant Molecular and Cellular Biology. University of Florida. Analysis of Genomic data; Genomic selection, QTL analysis, Linkage Mapping. Analysis of Pine progeny trials; multivariate analysis for genetic correlations and clonal trials.

Aug 2007-Dec 2009

Research assistant, Cooperative Forest Genetics Research Program, University of Florida. Establishment and measure of growth, morphological, phenological and disease traits in field and greenhouse experiments. QTL analysis, Linkage Mapping.

Jan 2008-Dec 2009

Quantitative genetic consultant. Forestal Mininco S.A., Los Angeles, Chile. Analyzed pine and Eucalyptus progeny trials with half-sib, full-sib and clonal data, Study longitudinal, categorical, multisite and multiage for genotype-by-environment interaction, genetic correlations and genotypes for selection.

Sep 2005-Jul 2007

Genetic improvement research assistant, Forestal Mininco S.A., Los Angeles, Chile. Analyzed pine progeny trials data, including half-sib, full-sib, clonal, longitudinal, genotype by environment interaction, genotype by age interaction, genetic correlations, ranking for genotype selection and categorical data. Supported experimental design and supervised progeny trial installation and maintenance. Assist in selection of genotypes for next breeding cycle and for operational use.

Sep 2004-Nov 2004 **Grant proposal assistant**, Universidad Catolica de Temuco, Chile. Revised and formatted university-wide grant projects for national competition.

GRANTS, AWARDS AND FELLOWSHIPS

| 2017 | University of Florida. Richard L. Jones Outstanding New Faculty Research Award. |
|------------|---|
| 2017 | Bermudagrass (Cynodon dactylon L.) A potential host and reservoir of new viruses. Co-PI |
| 2017 | Florida Cattle Enhancement Board . Development of Improved Forage Cultivars and Management Systems for Florida Conditions. \$56,000 PI. |
| 2016 on | University of Florida. Excellence Award for Assistant Professors, given to only 10 faculty the entire UF campus annually. |
| 2016 | NSF-IOS. Genetic and physiological mechanisms of local climatic adaptation in a widespread perennial plant species. Collaborative. Collaborative-PI. \$248,210 (\$ 1.17 Million) |
| 2016 | USDA-Sustainable Agriculture Research & Education . Cover Crop Diversity through Evaluation and Increase from Breeder Stocks and Germplasm Repositories. Co-PI. \$25,594 (\$201,248). |
| 2015 | USDA-NIFA. Persistence, Survival, and Recovery of Warm-Season Turfgrass Selections for Sustainable Urban Landscapes Under Limited Irrigation and Long-Term Drought. Co-PI. \$224,055 (\$4.44 Million). |
| 2015 | Milk Check-Off. A High Manure Uptake Bermudagrass/Stargrass for Dairy Production. PI. \$17,160. |
| 2015 | UF-Plant Breeding Working Group . Development of improved forages for Florida. Pl. \$26,255. |
| 2015 | UF-IFAS Early Career Seed Funds . Discovery of the molecular mechanism for 2,4-D herbicide resistance. PI. \$49,380. |
| 2015 | UF-Agronomy . Improving Cold Units for Forage and Small Grain Seed Storage. Co-PI. \$4,134. |
| 2014 | USDA. Improving breeding efficiency in autotetraploid with genome-wide prediction. PI. \$500,000. |
| 2014 | Sustainable Agriculture Research & Education (SARE). Evaluation of clovers as cover crop to decrease nematode populations on peanut production. PI. \$11,000. |
| 2014 | Milk Check-Off. Developing Improved Alfalfa Cultivars for Florida. Pl. \$11,300. |
| 2014 | UF Plant Breeding Graduate Initiative. Development of cultivars of bermudagrass resistant to stem maggot. PI. \$48,000. |

| 2014 | UF-IFAS Equipment and Facilities. Equipping the Forage Breeding Lab. Pl. \$16,400. |
|-----------|--|
| 2013 | UF-Office of Technology Licensing. Technology Innovator. |
| 2013 | USDA-DOE . Accelerated development of optimal feedstock for bioenergy and renewable chemicals using genome-wide selection. Co-PI. \$225,380 (\$1,000,000). |
| 2013 | USDA-NIFA. Accelerated breeding by improving accuracy and mate allocation using Genome-Wide selection. Co-PI. \$211,744 (\$500,000). |
| 2012 | Best Graduate Student Dissertation Plant Molecular and Cellular Biology Program, University of Florida, FL, USA |
| 2011 | USDA, Honor Award for Excellence : "For collaborative research and outreach approach to successful development and application of genomic-based tree breeding technology that will enhance US competitiveness in the production of forest products" |
| 2010-2012 | Plant Molecular Breeding Initiative Grant Fellowship , University of Florida, FL, USA |
| 2011 | IUFRO, Best Poster Award at the Union of Forest Research Organizations: "Award at best poster selected out 200: "Effect of Alternative BLUP-breeding value prediction on the accuracy of genomic selection" Arraial d' Ajuda, Bahia, Brazil. |
| 2011 | SFTIC, Zobel Award for Best Presentation at the Southern Forest Tree Improvement Conference Biloxi, MS, USA |
| 2004 | Universidad Catolica de Temuco, Double Award for Outstanding Student and Greatest Effort , Temuco, Chile |
| 2002-2004 | Universidad Catolica de Temuco, Top Honor Student Award , Temuco, Chile |

PUBLICATIONS

- **I. Peer Reviewed Journal Publications (31)** (g=graduate student, u=undergraduate, underline=senior, Postdoc=p, other=&):
- 31. Xing L. (g), S. Gezan, K. Kenworthy, and <u>P. Munoz</u>. Genetic parameters and genotype-by- environment interaction of zoysiagrass in Florida. **Submitted** Euphytica.
- 30. Figueiredo U.J. (g), J.A. Rodrigues, C.V. Borges, S.C. Barrios, K. Quesenberry, and <u>P. Munoz</u>. Evaluating early selection in perennial tropical forages. **Submitted** Plant Breeding.
- 29. Müller B (g), L. Neves, J. Filho, M. Resende Jr, **P. Muñoz**, P. Santos, E. Filho, M. Kirst, <u>D. Grattapaglia</u>. 2017. Genomic prediction and GWAS in breeding populations of Eucalyptus benthamii and E. pellita using high-density SNP genotyping. **Submitted BMC Genomics**.
- 28. Klápště J (&), I. Porth, O. Skyba, A. McKown, **P. Munoz**, M. Resende, D. Garrick, R. Guy, C. Douglas, S. Mansfield, <u>Y. El-Kassaby</u>. 2017. Genome-enabled prediction in the context of linkage disequilibrium heterogeneity and multiple environments using unrelated populations. **Submitted Heredity.**
- 27. Rios E. (g), <u>K. Kenworthy</u>, A. Blount, K. Quesenberry, B. Unruh, J. Erickson, F. Altpeter, and **P. Munoz**. 2017. Breeding Apomictic Bahiagrass (Paspalum notatum Flugge) with Improved Turf Traits. *Plant*

- Breeding. In press
- 26. Lopez J. (g), <u>J. Erickson</u>, <u>P. Munoz</u>, A. Saballos, T. Felderhoff, and W. Vermerris. 2017. QTL Associated with crown root angle, stomatal conductance, and maturity in sorghum. *The Plant Genome*. In press (First Look online).
- 25. Pereira M. (u), E. Rios (g), <u>K. Kenworthy</u>, K. Quesenberry, A. Blount, J. Erickson, F. Altpeter and <u>P. Munoz</u>. 2017. Turf-type bahiagrass (Paspalum notatum Flugge) performance for root and shoot traits under various nitrogen regimes. *International Turfgrass Society Research Journal*. **In press**
- 24. Amadeu R. (u), C. Cellon (g), J. Olmstead, A. Garcia, M. Resende, <u>P. Munoz</u>. 2016. AGHmatrix: R package to construct relationship matrices for autotetraploid and diploid species, a Blueberry Example. *The Plant Genome* 9(3):1-10
- 23. <u>Inostroza L. (p)</u>, H. Acuña, <u>P. Munoz</u>, C. Vasquez, J. Ibañez, G. Tapia, M.T. Pino and H. Aguilera. 2016. Using aerial images and canopy spectral reflectance for high-throughput phenotyping of white clover. *Crop Science* 56(5):2629-2637.
- 22. Hunter S. (g), <u>J. Ferrell</u>, T. Webster, J. Fernandez, P. Dittmar, **P. Munoz** and G. MacDonald. 2016. Impact of irrigation volume on PRE herbicide Activity. *Weed Technology* 30(3):793-800.
- 21. Filho J. (g), J. Rodrigues (g), F. Silva, M.D. Resende, <u>P. Munoz</u>, M. Kirst, and M. Resende Jr. 2016. The contribution of dominance to phenotype prediction in a pine breeding and simulated population. *Heredity* 117:33-41.
- 20. Sasson D. (g), **P. Munoz**, S. Gezan and C. Miller. 2016. Resource quality affects weapon and testis size and the ability of these traits to respond to selection in the leaf-footed cactus bug, *Narnia femorata*. *Ecology and Evolution* 6(7): 2098-2108. doi:10.1002/ece3.2017
- 19. Silva F. (g), <u>P. Munoz</u>, C. Vincent, and A. Pio. 2016. Generating relevant information for breeding Passiflora edulis: genetic parameters and population structure. *Euphytica* 208(3): 609-619. doi:10.1007/s10681-015-1616-8.
- 18. <u>Kumar S.</u> (&), C. Molloy, **P. Munoz P**, H. Daetwyler, D. Chagne, and R Volz. 2015. Genome- enabled estimates of additive and non-additive genetic effects and prediction of apple phenotypes across environments. *G3: Genes, Genomes, Genetics* 5: 2711-2718. doi:10.1534/g3.115.021105.
- 17. Rios E. (g), <u>K. Kenworthy</u> and <u>P Munoz</u>. 2015. Association of phenotypic traits with ploidy and genome size in annual ryegrass. Crop Science 55(5): 2078–2090. doi:10.2135/cropsci2015.01.0039.
- 16. <u>Quesenberry K. (&)</u>, A. Blount, <u>P. Munoz</u>, J. Ferrell, and J.C. Dubeux. 2015. Registration of 'FL24D', a red clover selected for tolerance to 2,4-D herbicide. Journal of Plant Registrations 9: 288-293. doi:10.3198/jpr2014.11.0081crc
- 15. Westbrook J. (g), V.E. Chhatre (g), L. Wu, S. Chamala (g), L.G. Neves, **P. Munoz**, P.J. Martinez-Garcia, D.B. Neale, M. Kirst, D.C. Nelson, K. Mockaitis, G.F. Peter, J.M. Davis, and <u>C.S. Echt</u>. 2015. A consensus genetic map for Pinus taeda and Pinus elliottii and extent of linkage disequilibrium in two genotype-phenotype discovery populations of Pinus taeda. G3: Genes, Genomes, Genetics 5(8): 1685-94. doi:10.1534/g3.115.019588.
- 14. Ferreira C.A. (g), M.D.V. Resende, <u>F.F. Silva</u>, J.M.S. Viana, M.S.V. Ferreira, M.F.R. Resende Jr, and **P. Munoz**. 2015. Ridge, Lasso and Bayesian additive-dominance genomic models. BMC Genetics 16(105): 1-13. doi:10.1186/s12863-015-0264-2
- 13. Westbrook J. (g), A.R. Walker (p), G.L. Neves, P. Munoz, M.F. Resende Jr., D.B. Neale, J.L. Wegrzyn,

- D.A. Huber, M. Kirst, J.M. Davis, and <u>G.F Peter</u>. 2015. Discovering candidate genes that regulate resin canal number in Pinus taeda stems by integrating genetic analysis across environments, ages, and populations. New Phytology 205(2): 627-641. doi: 10.1111/nph.13074
- 12. <u>Chandra A.</u> (&), A.D. Genovesi, B.W. Wherley, S.P. Metz, J.A. Reinert, Y-Z. Wu, P. Skulkaew, M.C. Engelke, D. Hargey, L.R. Nelson, B.M. Schwartz, P.L. Raymer, Y. Q. Wu, D.L. Martin, S.R. Milla-Lewis, G. Miller, K.E. Kenworthy and P. Munoz. 2015. Registration of 'DALSA 0605' St. Augustinegrass. Journal of Plant Registrations 9(1): 27-34. doi:10.3198/jpr2014.05.0036crc
- 11. <u>Munoz P.</u>, M.F. Resende Jr., S. Gezan, M.D. Resende, G. de los Campos, M. Kirst, D. Huber, and <u>G. Peter</u>. 2014. Unraveling additive from non-additive effects using genomic relationship matrices. GENETICS 198: 1759-1768. doi:10.1534/genetics.114.171322
- 10. <u>Munoz P.,</u> M.F. Resende Jr., D. Huber, T. Quesada, M.D. Resende, M. Kirst and <u>G. Peter</u>. 2014. Genomic relationship matrix for correcting pedigree errors in breeding populations: impact on genetic parameters and genomic selection accuracy. Crop Science *54*(*3*):1115-1123. *doi:10.2135/cropsci2012.12.0673*
- 09. <u>Quesenberry K. (&)</u>, <u>P. Munoz</u>, A. Blount, K. Kenworthy, and W. Crow. 2014. Breeding forages in Florida for resistance to nematodes. Crop & Pasture Science 65: 1192-1198. doi.org/10.1071/CP13437
- 08. Quesada T. (p), M.F. Resende Jr. (g), **P. Munoz**, J. Wegrzyn, D. Neale, M. Kirst, G. Peter, S. Gezan, D. Nelson, and <u>J. Davis</u>. 2014. Mapping fusiform rust resistance genes within a complex mating design of Loblolly pine. Forest 5(2): 347-362. doi:10.3390/f5020347
- 07. Westbrook J. (g), M.F. Resende Jr., **P. Munoz**, A.R. Walker (g), J.L. Wegrzyn, C.D. Nelson, D.B. Neale, M. Kirst, D. Huber, S. Gezan, G.F Peter and <u>J.M. Davis.</u> 2013. Association genetics of oleoresin flow in loblolly pine: discovering genes and predicting phenotype for improved resistance to bark beetles and bioenergy potential. New Phytology. 199: 89-100. doi:10.1111/nph.12240.
- 06. Flor N. (g), **P. Munoz**, P. Harmon, and K. <u>Kenworthy</u>. 2013. Response of Seashore paspalum genotypes to Dollar Spot Disease. International Turfgrass Society Research Journal. 12: 119-126. ISSN 1817-0641
- 05. Resende Jr. M.F. (g), **P. Munoz (g)**, M.D. Resende, D.J. Garrick, R.L Fernando, J. Davis, E.J. Jokela, T.A. Martin, G.F. Peter, and M. Kirst. 2012. Accuracy of genomic selection methods in a standard dataset of loblolly pine (Pinus taeda L.). *GENETICS* 190: 1503-1510. doi: 10.1534/genetics.111.137026
- 04. <u>Munoz P. (g)</u>, <u>D. Huber</u>, and T. Martin. 2012. Relative contribution of crown and phenological traits to growth of a pseudo-backcross family (slash x loblolly) x slash) and its pure species progenitors. Tree Genetics and Genomes 8(6): 1281-1292. doi:10.1007/s11295-012-0514-7.
- 03. Resende Jr. M.F. (g), **P. Muñoz (g)**, J. Acosta, G. Peter, J. Davis, D. Grattapaglia, M.D. Resende, and M. <u>Kirst</u>. 2012. Accelerating the domestication of trees using genomic selection: accuracy of prediction models across ages and environments. New Phytologist 193(3): 617-624. doi:10.1111/j.1469-8137.2011.03895.x.
- 02. <u>Munoz P. (g)</u>, <u>D. Huber</u>, and J. Butnor. 2011. Phenotypic analysis of first-year traits in a pseudo-backcross {(slash x loblolly) x slash} and the open-pollinated families of the pure-species progenitors. Tree Genetics and Genomes 7(1): 183-192. doi:10.1007/s11295-010-0324-8.
- 01. Resende M.D.V. (&), F.F. Silva, J.M.S. Viana, L.A. Peternelli, M.F. Resende Jr, and **P. Munoz**. 2011. Statistics methods in genomic wide selection (*Original in Portuguese:* "Metodos estatisticos na selecao genomica ampla"). Embrapa Documents 219. Online version. Brazil. ISSN 1980-3958

- **II. Non-refereed Journal Publications (10)** (g=graduate student, u=undergraduate, underline=senior):
- 10. <u>Munoz P.</u>, K. Quesenberry, A. Blount, J.A. Ferrel, and J.C. Dubeux. 2014. A new red clover 2,4- D resistant cultivar to improve broadleaf weed control and elucidate the molecular mechanism of resistance. In: Molecular Breeding of Forage and Turf (Editors: Budak, H and G. Sangenberg). 236 p.
- 09. <u>Blount A.</u>, J. Vendramini, J. Dubeux, A. Babar, K. Kenworthy, **P. Munoz**, and K. Quesenberry. 2014. 2014 Cool-Season Forage Variety Recommendations for Florida. UF EDIS #SS-AGR-84
- 08. Newman Y, J. Dubeux, **P. Munoz**, and K. Quesenberry. 2014. Winter Forage Legume Guide. UF EDIS #SS-AGR-49.
- 07. <u>Dubeux J</u>, and **P. Munoz**. 2014. Alfalfa Production in North Florida. Southern Cattle Advisor. Available through internet: http://www.secattleadvisor.com/2014/12/01/alfalfa-production-in-north-florida.
- 06. Gezan S, M. Kirst, **P. Munoz**, G. Peter, G. Powell, J. Zhang. 2013. Cooperative Forest Genetics Research Program, Fifty-fifth annual progress report. Gainesville, FL
- 05. Balmant K, S. Gezan, M. Kirst, **P. Munoz**, G. Peter, G. Powell, M. Resende, and J. Zhang. 2012. Cooperative Forest Genetics Research Program, Fifty-fourth annual progress report. Gainesville, FL
- 04. Gezan S, M. Kirst, **P. Munoz**, G. Peter, and G. Powell. 2011. Cooperative Forest Genetics Research Program, Fifty-third annual progress report. Gainesville, FL
- 03. Huber D, **P. Munoz**, and G. Powell. 2010. Cooperative Forest Genetics Research Program, Fifty-second annual progress report. Gainesville, FL
- 02. Huber D, X. Li, **P. Munoz**, G. Peter, and G. Powell. 2009. Cooperative Forest Genetics Research Program,
 Fifty-first annual progress report. Gainesville, FL
- 01. Huber D, **P. Munoz**, and G. Powell. 2008. Cooperative Forest Genetics Research Program, Fiftieth annual progress report. Gainesville, FL
- **III. Abstracts (35)** (g=graduate student, u=undergraduate, underline=senior):
- 35. E. Rios (g), M. Resende Jr., M. Kirst, M.D. Resende, J. Filho, and **P. <u>Munoz</u>**. 2016. Genome- wide Family Prediction. National Association of Plant Breeders. 15-18 August 2016, Raleigh, North Carolina, USA.
- 34. <u>Munoz P.</u>, E. Rios (g), M. Resende Jr., M. Kirst, M.D. Resende, and J. Filho. 2016. Genomewide Family Prediction. 5th International Conference of Quantitative Genetics (ICQG) June 2016, Madison, Wisconsin, USA.
- 33. Bhakta M. (p), L. Inostroza, M. Kirst, M. Resende Jr., J. Endelman, and <u>P. Munoz</u>. 2016. Genomewide Family Prediction. 5th International Conference of Quantitative Genetics (ICQG) June 2016, Madison, Wisconsin, USA.
- 32. Xing L. (g), K. Kenworthy, S. Gezan, B. Unruh, and <u>P. Munoz</u>. 2016. Post-hoc blocking and genotype-by- environment interaction in zoysiagrass. 5th International Conference of Quantitative Genetics (ICQG) June 2016, Madison, Wisconsin, USA.
- 31. Santos R. (g), B. Moraes (g), A. Missiagia, A. Aguiar, B. Lima, D. Dias, G. Resende, F. Gonzalves, M.

- <u>Resende Jr., P. Munoz, and M. Kirst</u>. 2016. Comparing genotypic methods for development of genomic selection models in Eucalyptus. 5th International Conference of Quantitative Genetics (ICQG) June 2016, Madison, Wisconsin, USA.
- 30. Muller B. (g), L. Neves, J. Filho, M. Resende Jr., A. Fahrenkrog, **P. Munoz,** M. Kirst and D. Grattapaglia. 2016. Impact of relatedness on genomic prediction and GWAS detection in two elite eucalyptus breeding populations. 5th International Conference of Quantitative Genetics (ICQG) June 2016, Madison, Wisconsin, USA.
- 29. <u>Munoz P.</u>, J. Dubeux, B. Anderson, B. Shwartz, J. Vendramini, M. Saha, M. Castillo, S. Milla- Lewis, and A. Rucker (g). 2016. Genomic Progress in Bermudagrass. Plant and Animal Genome (PAG) Jan 2016, San Diego, California, USA.
- 28. Bhakta M. (p), and <u>P. Munoz</u>. Characterizing Genetic Factors Involved in 2,4-D Resistance using the Red Clover. Plant and Animal Genome Jan 2016. San Diego, CA, USA. Poster Presentation
- 27. Rios, E. (g), K. Kenworthy and <u>P. Munoz</u>. 2016. Predictive Ability of Genomic Estimated Family Values (GEFV). Plant and Animal Genome Jan 2016. San Diego, CA, USA. Poster Presentation
- P. Munoz, K. Kenworthy, A. Chandra, Y. Wu, D. Martin, B. Schwartz, P. Raymer, and S. Milla-Lewis.
 2015. Effect of Drought on Genotype-by-Environment Interaction on Warm- Season Turfgrasses.
 ASA, CSSA and SSSA International Annual Meetings. Minneapolis, MN November 15-19.
- 25. <u>Quesenberry K.</u>, **P. Munoz**, and A. Blount. 2015. Breeding Vegetatively Propagated Warm Season Grasses in Florida: Past, Present, and Future. 5th International Symposium of Forage Breeding (ISFB 2015). October 19–21, in Buenos Aires, Argentina.
- 24. Ibáñez J. (g), H. Acuña, **P. Muñoz**, M. Gonzales, and <u>L. Inostroza</u>. 2015. Genetic structure of a white clover association mapping population. 5th International Symposium of Forage Breeding (ISFB 2015). October 19–21, in Buenos Aires, Argentina.
- 23. Cellon C. (g), R. Amadeu (u), M. Kirst, **P. Munoz** and J. Olmstead. 2015. Establishing genome-wide selection for *Vaccinium corybosum*. National Association of Plant Breeding (NAPB) July 28-30 2015, Pullman, Washington State, USA.
- 22. Müller B. (g), L. Neves, M.F. Resende, <u>P. Munoz</u>, M. Kirst, P. Santos, E. Paludzyszyn, and <u>D. Grattapaglia</u>. 2015. Genomic Selection for growth traits in Eucalyptus benthamii and E. pellita populations using a genome-wide Eucalyptus 60K SNPs chip. Tree Biotechnology Conference. June
- 8- 12, Florence, Italy. Poster Presentation
- 21. <u>Chandra A.</u>, K. Kenworthy, B. Schwartz, P. Raymer, Y. Wu, S. Milla-Lewis, L. Nelson, **P. Munoz**, Q. Yu, J. Moss, B. Wherley, G. Miller, D. Martin, F. Waltz, B. Unruh, W. Reynolds, T. Boyer, C. Chung and M. Palma. 2015. Plant Genetics and Genomics to Improve Drought and Salinity Tolerance for Sustainable Turfgrass Production in the Southern United States. ASA, CSSA and SSSA International Annual Meetings. Minneapolis, MN November 15-19.
- 20. Lopez J. (g), <u>J. Erickson</u>, **P. Muñoz**, A. Saballos, W. Vermerris, T. Felderhoff. 2015. QTLs and Candidate Genes for Root Architecture and Reduced Stomatal Conductance in Sorghum. ASA, CSSA and SSSA International Annual Meetings. Minneapolis, MN November 15-19.
- 19. <u>Saha M</u>, T. Butler, M. Monteros, M. Tremmell, and **P. Munoz**. 2015. Prospective for Breeding Cover Crop Cultivars for the South. ASA, CSSA and SSSA International Annual Meetings. Minneapolis, MN November 15-19.

- 18. Rios, E. (g), K. Kenworthy and <u>P. Munoz.</u> 2015. Association of Phenotypic Traits with Ploidy and Genome Size in Annual Ryegrass. ASA, CSSA and SSSA International Annual Meetings. Graduate Student Oral Competition. Minneapolis, MN November 15-19.
- 17. Xing, L. (g), K. Kenworthy and <u>P. Munoz</u>. 2015. Improving Selection Accuracy with Post- Hoc Blocking in Turfgrass Breeding. ASA, CSSA and SSSA International Annual Meetings. Graduate Student Competition. Minneapolis, MN November 15-19.
- 16. Rucker, A. (g), <u>P. Munoz</u>, J. Dubeux, J. Vendramini, B. Anderson, B. Shwartz and M. Saha. 2015. Bermudagrass Breeding: What is next? ASA, CSSA and SSSA International Annual Meetings. Graduate Student Poster Competition. Minneapolis, MN November 15-19.
- 15. Rios, E. (g), <u>K. Kenworthy</u>, A. Blount, K. Quesenberry, B. Unruh, F. Altpeter and **P. Munoz**. 2014. Novel Turf-type Bahiagrass. ASA, CSSA and SSSA International Annual Meetings. Division C5: Graduate Student Oral Competition. Long Beach, CA, November 1-5.
- 14. Almeida J (g), J. Rodrigues (g), M.F. Resende, R. Santos (g), P. Muñoz, and M. Kirst. 2015. Including Dominance Effects in Genomic Selection Regression Models with Different Priors Pinus taeda. Plant and Animal Genome XXI (PAG) January 10-14 2015, San Diego, California, USA.
- 13. Rodrigues J (g), J. Almeida (g), R. Santos (g), M.F. Resende, **P. Muñoz**, and <u>M. Kirst</u>. 2015. Inclusion of Dominance and GxE Effects in genomic Selection Models to Improve Predictive Ability. Plant and Animal Genome XXI (PAG) January 10-14 2015, San Diego, California, USA.
- 12. Olmstead J., C. Cellon(g), R. Amadeu (u), and **P. Munoz**. 2015. Toward Genomic Selection in Blueberry. Plant and Animal Genome XXI (PAG) January 10-14 2015, San Diego, California, USA.
- 11. <u>Munoz P</u>. A new red clover 2,4-D resistant cultivar to improve broadleaf weed control and elucidate the molecular mechanism of resistance. 8th International Symposium on Molecular Breeding of Forage and Turf. June 2014 Istanbul, Turkey. Oral Presentation
- 10. <u>Munoz P</u>. 2013. Maximize the use of molecular information in breeding. International IUFRO Tree Biotechnology Conference. May 26-June 01, Asheville, NC, USA. Oral Presentation
- 09. Resende Jr. M (g), M.D. Resende, P. Munoz, E. Takahashi, C. Petroli, C. Sansaloni, M. Kirst, and D. Grattapaglia. 2013. Increase in Efficiency of Genomic Selection Using Epistatic Interactions and Detection of Candidate Genes for Rust Resistance in Eucalyptus. Plant and Animal Genome XXI (PAG) January 12-16 2013, San Diego, California, USA.
- 08. **Munoz P**, M.F. Resende, M.D. Resende, S. Gezan, M. Kirst, and <u>G. Peter</u>. 2012. The Re- discovery of the Dominance Variation by Using the Observed Relationship Matrix and its implications in breeding. Fourth International Conference of Quantitative Genetics (ICQG) June 17-22 2013. Edinburgh, Scotland, UK. Poster Presentation
- 07. **Munoz P**, M.F. Resende, S. Gezan, M.D. Resende, M. Kirst, D. Huber, G. Campos, and <u>G. Peter</u>. Rediscovering non-additive effects with genomic relationship matrices and implications in breeding. Plant and Animal Genome Jan 2012. San Diego, CA, USA. Poster Presentation
- 06. **Munoz P**, M.F. Resende, M.D. Resende, D. Garrick, R. Fernando, G. Peter, and <u>M. Kirst</u>. 2012. "Benchmarking genomic prediction in forestry – what works and what doesn't for some growth, disease and resistance and developmental traits". Plant and Animal Genome XX (PAG) January 2012, San Diego, California, USA. Poster Presentation
- 05. Munoz P., M.F. Resende, D. Huber, T. Quesada, M.D. Resende, M. Kirst and G. Peter. 2011 "Effect of

- Alternative BLUP-breeding value prediction on the accuracy of genomic selection". 31th Southern Forest Tree Improvement Conference (SFTIC) June 13-16 2011, Biloxi Mississippi, USA.
- 04. <u>Kirst M</u>, **P. Munoz** and M.F. Resende. 2011 "Hyper-Accelerating Breeding and Adaptation of loblolly pine uning genomic selection". 31th Southern Forest Tree Improvement Conference (SFTIC) June 13-16 2011, Biloxi Mississippi, USA.
- 03. **Munoz P**, M.F. Resende, <u>G. Peter</u>, D. Huber, M. Kirst, and T. Quesada 2011. Effect of BLUP prediction on genomic selection: Practical considerations to achieve greater accuracy in genomic selection. BMC proceedings 5(Suppl 7): P49
- 02. Resende M, **P. Muñoz**, J. Acosta, M.D. Resende, D. Grattapaglia, and M. <u>Kirst</u>. 2011. Stability of genomic selection prediction models across ages and environments. BMC proceedings 5(Suppl 7): 014
- 01. <u>Kirst M</u>, M.F. Resende, **P. Munoz**, and L. Neves. 2011. Capturing and genotyping the genome- wide genetic diversity of trees for association mapping and genomic selection. BMC proceedings 5(Suppl 7): I49

PRESENTATIONS AT CONFERENCES, SCIENTIFIC MEETINGS AND SEMINARS (28)

- I. International (14)
- 14. **Munoz P.**, L. Xing, L. Inostroza, and M. Bhakta. 2016. Phenotyping in the Genomic Era. International Symposium of Genetics and Plant Breeding. Phenomics: a New Era of Biometrics. July 27-28 2016, Universidad Federal of Lavras, Lavras, Brazil. **Invited Speaker**
- 13. **Munoz P.**, E. Rios (g), M. Resende Jr., M. Kirst, M.D. Resende, and J. Filho. Genome-wide Family Prediction. 5th International Conference of Quantitative Genetics (ICQG) June **2016**, Madison, Wisconsin, USA. **Poster Presentation**
- 12. **Munoz P.**, J. Dubeux, B. Anderson, B. Shwartz, J. Vendramini, M. Saha, M. Castillo, S. Milla-Lewis, and A. Rucker. 2016. Genomic Progress in Bermudagrass. Plant and Animal Genome (PAG) Jan **2016**, San Diego, California, USA. **Invited Speaker**
- 11. **Munoz P.**, K. Kenworthy, A. Chandra, Y. Wu, D. Martin, B. Schwartz, P. Raymer, S. Milla-Lewis. Effect of Drought on Genotype-by-Environment Interaction on Warm-Season Turf Grasses. ASA, CSSA and SSSA International Annual Meetings. November 15-19 **2015**. Minneapolis, MN. **Invited Speaker**
- 10. Munoz P. A new red clover 2,4-D resistant cultivar to improve broadleaf weed control and elucidate the molecular mechanism of resistance. 8th International Symposium on Molecular Breeding of Forage and Turf. June 9-12 2014 Istanbul, Turkey. Selected Speaker
- 09. **Munoz P.** Forage Breeding and Genomics. Instituto de Investigacion Agropecuaria (INIA). May 15 **2014** Chillan, Chile. **Invited Speaker and Instructor.**
- 08. **Munoz P,** Resende M, Kirst M and L. Neves. Applications of genomic data in breeding. Embrapa. July **2013** Brasilia Brazil. **Invited Instructor.**
- 07. **Munoz P.** Use of molecular data in breeding. University of Talca. July **2013** Talca Chile. **Invited Speaker**
- 06. **Munoz P.** Maximize the use of molecular information in breeding. Chilean Fruit Consortium. July **2013** Santiago Chile. **Invited Speaker**

- 05. **Munoz P.** Maximize the use of molecular information in breeding. Forestal Mininco S.A. July **2013**. Temuco, Chile. **Invited Speaker**
- 04. **Munoz P.** Maximize the use of molecular information in breeding. IUFRO Tree Biotechnology. May 26th-June 1st **2013** Asheville, NC, USA. **Invited Speaker**
- 03. **Munoz P.** Quantitative Genetics and Genomic Selection Forestry Workshop. Plant and Animal Genome XXI (PAG). January 12-16 **2012** San Diego, California, USA. **Moderator**
- 02. **Muñoz P**, Resende M, Resende MD, Gezan S, Kirst M, Peter GF. **2012**. The Re-discovery of the Dominance Variation by Using the Observed Relationship Matrix and its implications in breeding. Fourth International Conference of Quantitative Genetics (ICQG) June 17-22 2012. Edinburgh, Scotland, UK. **Poster Presentation**
- 01. **Muñoz P**, Resende M, Resende MD, Garrick DJ, Fernando RL, Peter GF, Kirst M. **2012**. "Benchmarking genomic prediction in forestry what works and what doesn't for some growth, disease and resistance and developmental traits". Plant and Animal Genome XX (PAG) January 14-18 2012, San Diego, California, USA. **Poster Presentation**

II. National (09)

- O9. Munoz P., and L. Inostroza. How are we impacting the roots when selecting for persistence and nitrogen content. Root Biology Workshop. The Samuel Roberts Noble Foundation.
 November 05
 2015. Ardmore, OK, USA. Invited Speaker
- 08. **Munoz P**. Uptades on New Forages for Florida. Central Florida Pasture Management Conference. October 1-2 **2015**. Brevard County FL. **Invited Speaker**
- 07. **Munoz P.** Forage Breeding and Genomic Lab. Plant Molecular and Cellular Biology Retreat. May 8-9, **2015** Daytona, FL. **Selected Speaker**
- 06. **Munoz P.** Genomic Prediction for Breeding. Seminar for Plant Breeding. Oct 03 **2014** Raleigh, NC, USA. **Invited Speaker**
- 05. **Munoz P.** Forage Breeding and Genomics. Seminar for Crops Science. Oct 02 **2014** Raleigh, NC, USA. **Invited Speaker**
- 04. **Munoz P.** Breeding and Genomics. Institute of Plant Breeding, Genetics and Genomics (IPBGG). May 19-20 **2014** Tifton, GA, USA. **Invited Speaker**
- 03. **Munoz P.** Maximize the use of genomic information in breeding. National Association of Plant Breeders (NAPB). June 2-5 **2013** Tampa, FL, USA. **Invited Speaker**
- 02. Munoz Del Valle PR, Resende MF, Huber D, Quesada T, Resende MD, Kirst M and Peter G. "Effect of Alternative BLUP-breeding value prediction on the accuracy of genomic selection". 31th Southern Forest Tree Improvement Conference (SFTIC) June 13-16 2011, Biloxi Mississippi, USA. Selected Speaker
- 01. Munoz Del Valle PR, Huber D, Butnor J. "Introgression of Loblolly Pine Genes into Slash Pine". 30th Southern Tree Improvement Conference (SFTIC) May 31- June 03 2009, Blacksburg, VA, USA. Selected Speaker

III. Local (06)

06. Munoz P. Genotypic Prediction Using Family Bulks. UF Animal Science Seminars Series. March

- 08 2016, Gainesville, FL. Invited Speaker
- 05. **Munoz P.** Breeding and Genomic. Corn Metabolomics Grant Project Meeting. May 18 **2015**. Gainesville, FL. **Invited Speaker**
- 04. **Munoz P,** Kirst M and Resende M. Phenotypic prediction using genomic data. UF Genetic Institute. Aug 11 **2014** Gainesville, FL, USA. **Organizer and Moderator**
- 03. **Munoz P.** Updates on Bermudagrass and Alfalfa Breeding. Florida Seed Association. June 25 **2014** Citra, FL, USA. **Invited Speaker**
- 02. **Munoz P.** Update in Alfalfa Breeding and Cultivar Testing. Corn Silage Field Day. May 29 **2014** Citra, FL, USA. **Invited Speaker**
- 01. **Munoz P,** and Resende M. Phenotypic prediction using genomic data. UF Genetic Institute. Aug 19 **2013** Gainesville, FL, USA. **Organizer and Moderator**

TEACHING:

- I. Teaching Context: I currently teach two graduate level courses, Field Plot Techniques (AGR 5266C) and Advanced Plant Breeding (AGR6322). Both courses were developed in fall 2014. Field Plot Techniques is relevant for graduate students in IFAS because it reviews the most common statistical designs in biological sciences for field, greenhouse and laboratory experiments. The objective of this course is to expose students to these different designs and to provide hands- on experience in designing and analyzing experimental data. Advanced Plant Breeding is very relevant for plant breeding graduate students. The objective of this course is to expose students to advanced methods of breeding that require a higher level of knowledge of genetics and genomics.
- **II. Teaching Evaluation:** My "overall rating of instructor" given by my students is higher than departmental and college averages for both years I have taught (Table 1 below). In addition, a 2015 peer auditing of my class has 7 out 10 outstanding scores, while the remainder 3 are in the satisfactory category and almost no changes were recommended (Table 2 below).

Table 1. Overall student evaluation rating of instructor.

| | _ Number of | Reg Te | Team | Team Response | Overall Rating of Instructor | | | |
|----------|-------------|----------|------|---------------|------------------------------|------------|------------|---------|
| Course | Term | Students | Y/N | Taught | Rate | Instructor | Department | College |
| AGR5266C | F16 | 23 | Yes | 87.5 | 83% | 4.89 | 4.47 | 4.53 |
| AGR5266C | F15 | 18 | Yes | No | 89% | 4.56 | 4.53 | 4.53 |
| AGR5266C | F14 | 24 | Yes | No | 75% | 4.56 | 4.34 | 4.47 |
| AGR4932 | F16 | 1 | No | No | 100% | 5.00 | 3.94 | 4.44 |
| AGR6932 | F16 | 2 | Yes | No | 100% | 3.50 | 4.47 | 4.53 |
| AGR6322 | F16 | 17 | Yes | No | 82% | 4.93 | 4.47 | 4.53 |
| AGR6322 | F14 | 6 | Yes | No | 100% | 4.33 | 4.34 | 4.47 |
| PCB7922 | F13 | 9 | Yes | 50% | 78% | 4.86 | 4.49 | 4.50 |

Rating Scale: 1 = Poor, 2 = Below Average, 3 = Average, 4 = Above Average, 5 = Excellent

Table 2. Peer review evaluation of AGR5266C, Fall 2015.

| | In need of Improvement | Satisfactory | Outstanding |
|---|------------------------|--------------|-------------|
| Course content | | | Х |
| Course organization | | | Х |
| Syllabus | | Х | |
| Other handouts | | Х | |
| Quizzes, exams, other course requirements | | | х |
| Instructor enthusiasm | | | Х |
| Classroom technique | | | Х |
| Innovations | | | X |
| Student involvement/participation | | Х | |
| Overall course rating | | | х |

Operational Definitions: Outstanding- performance far surpasses the expected level for such activities in most respects. Satisfactory- performance meets expected level for such activities in most, if not all, respects. In need of improvement- performance fails to meet expected levels for such activities in several key respects.

III. Teaching courses, Invited lectures and workshops

- **Graduate Course Instructor.** AGR6322 Advanced Plant Breeding. University of Florida, Gainesville, FL, USA. Since Fall 2014. Fall even-years.
- **Graduate Course Instructor.** AGR5266C Field Plot Techniques. University of Florida, Gainesville, FL, USA. Since Fall 2014. Fall every year.
- **Invited Guest Lecturer**: Genomic Selection. In course "Molecular Markers for Breeder". University of Florida, Gainesville, FL, USA. November 2014
- **Graduate Course Instructor.** PCB7922 Journal Colloquium on Molecular Breeding. University of Florida, Gainesville, FL, USA. Fall 2013
- **Invited Guest Lecturer**: Genomic Selection. In course "Molecular Markers for Breeder". University of Florida, Gainesville, FL, USA. November 2012
- **Workshop Instructor**: Analysis of Experiments Using ASReml, including Genomic Selection. VSN International, Atlanta, GA, USA. Oct 15-16 2012
- Invited Guest Lecturer: Analysis of Genetic Data for Breeding. In course "Advanced Plant Breeding".

 University of Florida, Gainesville, FL, USA. April 2012
- **Workshop Instructor**: Analysis of Experiments Using ASReml (with emphasis on Breeding Trials). VSN International, Gainesville, FL, USA. Feb. 23-24 2012
- **Workshop Instructor**: Analysis of Experiments Using ASReml (with emphasis on Breeding Trials). VSN International, Venado Tuerto, Argentina. Dec. 13-15 2011 (Private)
- **Invited Guest Lecturer**: An Overview of Genomic Selection in Plant Breeding. In course "Molecular Markers for Breeders". University of Florida, Gainesville, FL, USA. November 2011
- **Workshop Instructor**: Analysis of Experiments Using ASReml (with emphasis on Breeding Trials). VSN International, Savannah, GA, USA. Sept. 30- Oct 01 2010.

Workshop Instructor: Analysis of Experiments Using ASReml (with emphasis on Breeding Trials). VSN International, Chicago, IL, USA. June 11-12 2010.

Teaching Assistant: Formulation and Projects Evaluation 2003-2004; Accountancy and Finances 2003; Mathematical Methods 2001-2002; System Analysis 2002. Universidad Catolica de Temuco, Chile.

MENTORING

I. Graduate Students and Post-docs

Graduate students and post-docs in my lab have been successful at obtaining two research grants, eighteen national, state and local awards, and have presented their work twelve times at national and international conferences.

| Name | Role | Year | Student | Area of Work |
|------------------|----------|------------|----------|------------------------|
| Catherine Cellon | Co-Chair | 2015 | MSc | Blueberry Breeding |
| Esteban Rios | Chair | 2016 | PhD | Ryegrass Breeding |
| Alexandra Rucker | Chair | 2016 | MSc | Bermudagrass Breeding |
| Lin Xing | Co-Chair | 2017* | PhD | Complex Trait Analytic |
| Doug Phillips | Chair | 2017* | MSc | Blueberry Anthracnose |
| Mehul Bhakta | Mentor | 2015-2016 | Post-Doc | Genomics Polyploids |
| Luis Inostroza | Mentor | 2015-2017* | Post-Doc | Breeding and Genomics |

^{*}Expected

Committee member on ten more UF graduate student committees from the departments of agronomy, animal science, genetics and genomics, plant molecular and cellular biology and horticultural sciences.

II. Interns

I have had three undergraduate and five graduate interns in my lab since 2013. Undergraduates performed an independent project supported by one of my graduate students, while visiting graduate students worked in an independent project under my supervision as part of their dissertations. Most of these projects resulted in scientific products: three national and international poster presentations in scientific meetings, five scientific manuscripts accepted, submitted or in the final stage of preparation, and one software program uploaded to the web:

| Rodrigo Amadeu | BSc Student | University of Florida/University of Sao Paulo, Brazil |
|--------------------|--------------|---|
| Mateus Pereira | BSc Student | University of Florida/University of Sao Paulo, Brazil |
| Gustavo Alves | BSc Student | Federal University of Vicosa, Brazil |
| Ulisses Figueiredo | PhD. Student | Federal University of Lavras, Brazil |
| Hugo Ematne | PhD. Student | Federal University of Lavras, Brazil |
| Fernando Silva | PhD. Student | Universidad Estadual do Norte Fluminense, Brazil |
| Braulio Moraes | PhD. Student | Federal University of Lavras, Brazil |
| Paulo Santos | PhD. Student | Universidad Estadual do Norte Fluminense, Brazil |

SPECIALIZED TRAINING

May 2012 Programing and computer algorithms with focus on genomic selection in animal breeding. University of Georgia, Athens, Georgia, USA.

| Oct 2011 | Statistical learning methods for DNA-based prediction of complex traits. Wageningen, The Netherlands. |
|----------|---|
| Sep 2009 | Generation of experimental designs with CycDesign. University of Florida, Gainesville, Florida, USA |
| Mar 2006 | Genetics and forest biotechnology. Universidad de Concepcion and NCSU. Concepcion, Chile. |

SKILLS AND LANGUAGES

Software: ASReml, R, SAS, CYCDESIGN, ARCVIEW, PERL, JMP, QTL Cartographer and JoinMap Languages: Spanish (Native Tongue), English (bilingual proficiency) and Portuguese (basic)

GARY PETER, Ph.D.

Professor of Forest Genetics and Cell Biology

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http://sfrc.ufl.edu/people/faculty/peter/

EDUCATION

| University of Chicago | Biology | A.B. | 1983 |
|---------------------------------------|--------------------|-------|------|
| University of California, Los Angeles | Plant Biochemistry | Ph.D. | 1988 |

RESEARCH & PROFESSIONAL EXPERIENCE

| 2011 –present | Professor, School of Forest Resources and Conservation, University of Florida |
|---------------|---|
| 2011 –present | Co-director, Cooperative Forest Genetics Research Program, School of Forest Resources and Conservation, University of Florida |
| 2007 –present | Co-director, Forest Biology Research Cooperative, School of Forest Resources and Conservation, University of Florida |
| 2007-2011 | Graduate Coordinator & Director, Plant Molecular & Cellular Biology Program, University of Florida |
| 2002-2011 | Associate Professor, School of Forest Resources and Conservation, University of Florida |
| 2001-2002 | Associate Professor of Forest Biology, Institute of Paper Science and Technology |
| 1996-2001 | Assistant Professor, Institute of Paper Science and Technology |
| 1991-1996 | Postdoctoral Fellow, Dept. of Plant Biology, University of California Berkeley with Ian Sussex |
| 1988-1991 | Postdoctoral Fellow, USDA-Plant Gene Expression Center, UC Berkeley with Athanasios Theologis |

HONORS & AWARDS

LEADERSHIP ACTIVITIES

University of Florida Research Foundation Professorship, University of Florida, 2015-2018

USDA/NIFA Partnership Award, Integration of Research, Education, Extension, University of Florida, 2016

William S. Fuller Best Paper Award, Raw Materials Committee TAPPI, 2008

University of Florida Research Foundation Professorship, University of Florida, 2008-2011

President's Award Scientific Team Advancement, Institute of Paper Science and Technology, 1998-19999

TAPPI Foundation Research Award, Department of Plant Biology, Univ. of California Berkeley, 1995-1996

USDA Individual Award, Department of Plant Biology, University of California Berkeley, 1991-1993

NSF Plant Biology Postdoctoral Fellowship, USDA/ARS Plant Gene Expression Center, Univ. of California Berkeley, 1988-1991

Distinguished Scholar Award, Department of Biology, University of California Los Angeles, 1986-1987

Chair, Organizing Committee, IEG40 Conference, 2018 Chair, Science Advisory Board, DOE- The Center for Bioenergy Innovation, 2017-2025 Research Oversight Committee – SpruceUp, Genome Canada, 2017-2021

Chair, Organizing Committee, Southern Forest Tree Improvement Conference, 2017

Chair, Institute of Food and Agricultural Systems, Faculty Research Goal Setting Committee, University of Florida, 2015

Director, Biology Major Undergraduate Program, University of Florida, 2013-14

Chair, Faculty Advisory Committee, School of Forest Resources and Conservation, University of Florida, 2013

Science Advisory Board, DOE-BioEnergy Sciences Center, Oakridge National Lab, 2012-2017

Director, Plant Molecular and Cellular Biology (PMCB) Graduate Program, University of Florida, 2009-2011

Graduate Programs Coordinator, PMCB Graduate Program, University of Florida, 2007-2009

Chair, Curriculum Committee, PMCB Graduate Program, University of Florida, 2006-2008

Chair, Organizing Committee, IEG40, 2005-06

Chair of Faculty, Institute of Paper Science and Technology, 2002

Chair, Admissions Committee, Institute of Paper Science and Technology, 1999-2002

Chair, Graduate Programs Reaccreditation Committee, Institute of Paper Science and Technology, 2001-2002

TAPPI/AF&PA Technology Summit Participant, 2001 & 2004

Chair, Safety Committee, Institute of Paper Science and Technology, 1998-2000

Secretary, TAPPI Fiber Supply Committee, 1997-2000

CURRENT RESEARCH PROJECTS

Commercial Production of Terpene Biofuels in Pine

• The genetics of constitutive and inducible oleoresin synthesis are being studied and multiple genetic approaches are being pursed to increase the terpene biosynthetic and storage capacity of loblolly pine. The goal is to make more significantly more terpenes in the wood of young trees.

PINEMAP

An integrated approach is being pursued to develop regionwide understanding of loblolly pine
productivity with changes in climate, with the goal of increasing planted pine forests to mitigate carbon,
adapt to climate change and transfer this knowledge to land owners to increase forest resilience.

Cooperative Forest Genetics Research Program

• Long-term breeding programs in slash and loblolly pine are being conducted with traditional and molecular methods to increase growth and disease resistance. Slash pine is in its 3rd cycle of tree improvement, and many high oleoresin producers are in the program. Loblolly pine is in its 2nd cycle of tree improvement.

Forest Biology Research Cooperative/Center for Advanced Forestry Systems

• Long-term field based production ecology research is being conducted to understand the biological mechanisms that control forest productivity, sustainability and health.

PROFESSIONAL SERVICE

Panel: DOE/SDA Plant Feedstocks 2014, DOE Plant Systems Biology 2012, Triennial SFA Review 2015 ARPA-E TERRA workshop, 2014 and Biosequestration workshop 2015 Reviewer

PUBLICATIONS

Books

1. Peter, G.F. Developments in Biological Fibre Treatment, Pira International, Surrey, UK 2007 pp. 89.

Patents

1. Pullman, G.S. and Peter, G.F. 2002. Methods of Initiating Embryogenic Cultures in Plants US Patent # 6,492,174

Refereed Journal Articles

- 1. Zhang, J., Bliznyuk, N., Gezan, S.A., Jokela, E.J., Martin, T.A., Peter, G.F. 2019. Consistent genetic and environmental effects from early to mid-rotation on two-parameter Weibull distribution for loblolly and slash pine. *In preparation*.
- 2. Zhang, J., Peter, G.F., Gezan, S.A., Jokela, E.J., Martin, T.A., Bliznyuk, N., 2019. Loblolly and slash pine genotype x environment interactions are detected early and remain consistent through mid-rotation. *In preparation*.
- 3. Mewalal, R., Jones, P.C., Abraham, P.E., Annamraju, A., Weighill, D., Gunter, L.E., Pattathil, S., Jacobson, D., Tschaplinski, T.J., Peter, G.F., Tuskan, G.A., 2019. Molecular dissection of the secretory cells lining the specialized oil glands of *Eucalyptus*. *Plant Journal submitted*
- 4. Ramalho De Oliveira, L., Lassiter, H.A., Wilkinson, B., Whitely, T., Ifju, P., Logan, S., Peter, G.F., Vogel, J., Martin, T.A., 2019. Moving to automated tree inventory: comparison of UAS-derived lidar and photogrammetric data with manual ground estimates. *Remote Sensing* submitted
- 5. Peter, G.F., 2018. Breeding and engineering trees to accumulate high levels of terpene metabolites for plant defense and renewable chemicals. *Frontiers in Plant Science* 9: 1672 doi: 10.3389/fpls.2018.01672
- Mramba, L.K., Peter, G.F., Whitaker, V.M., Gezan, S.A., 2018. Generating improved experimental designs with spatially and genetically correlated observations using mixed models. *Agronomy* 8:40. doi.org/10.3390/agronomy8040040
- 7. Quesada, T., Parisi, L.M., Huber, D.A., Gezan, S.A., Martin, T.A., Davis, J.M., Peter, G.F., 2017. Genetic control of growth and shoot phenology in loblolly pine (*Pinus taeda* L.) clonal trials during the second and sixth growing season. *Tree Genes and Genomes* 13: 1-15.
- 8. Harman-Ware, A.E., Davis, M., Peter, G.F., Sykes, R. 2017. Estimation of terpenoid content in pine biomass using hybrid fast-GC and pyrolysis-molecular beam mass spectrometry. *J. Analytical and Applied Pyrolysis* 124: 343-348.
- 9. Papa, G., Kirby, J., Konda, M., Tran, K., Singh, S., Keasling, J.D., Peter, G.F., Simmons, B.A., 2017. Development of an integrated approach for 🛽-pinene recovery and sugar production from loblolly pine using ionic liquids. *Green Chemistry* 19: 1117
- 10. Mewalal, R., Rai, D.K., Kainer, D., Chen, F., Kulheim, C., Peter, G.F., Tuskan, G.A. 2017. Plant-derived terpenes: A feedstock for specialty biofuels. *Trends in Biotech*. 35: 227-40
- 11. Harman-Ware, A.E., Sykes, R. Peter, G.F., Davis, M., 2016. Determination of terpenoid content in pine by organic solvent extraction and fast-GC analysis. *Frontiers in Energy Research* 4:2 doi: 10.3389/fenrg.2016.00002.
- 12. Hacisalihoglu, G., Gustin, J., Louisma, J., Armstrong, P., Peter, G., Walker, A., Settles A.M. 2016. Enhanced Single Seed Trait Predictions in Soybean (*Glycine max*) and Robust Calibration Model Transfer with Near-Infrared Reflectance Spectroscopy. *Journal of Agricultural and Food Chemistry*. 64: 1079-1086.
- 13. Swamy, P.S., Hu, H., Pattathil, S., Maloney, V.J., Xiao, H., Xue, L-J., Chung, J-D., Johnson, V.E., Zhu, Y., Peter, G.F., Hahn, M.G., Mansfield, S.D., Harding, S.A., Tsai, C-J., 2015. Tubulin perturbation affects cell wall pectin networks, leaf expansion and stomatal behavior in *Populus*. *Journal Experimental Botany*. 20: 6507-6518.
- 14. Westbrook, J.W., V.E. Chhatre, L.S. Wu, S. Chamala, L.G. Neves, P. Muñoz, P.J. Martínez-García, D.B. Neale, M. Kirst, K. Mockaitis, C.D. Nelson, G.F. Peter, J.M. Davis and C.S. Echt. 2015. A consensus genetic map for *Pinus taeda* and *Pinus elliottii* and extent of linkage disequilibrium in two genotype-phenotype discovery populations of *Pinus taeda*. G3 5:1685-1694.

- 15. Zhang, J., Gezan, S.A., Peter, G.F., Powell, G.L., White, T.L. 2015. Comparison of breeding values estimated between single-tree and multi-tree plots for a slash pine population. *Tree Genetics Genomes*. 11: 48 DOI 10.1007/s11295-015-0870-1
- 16. Gonzales-Benecke, C.A, Riveros-Walker, A., Martin, T.A., Peter, G.F., 2015. Automated quantification of false rings using microdensity profiles of mature *Pinus taeda* in a replicated irrigation experiment. *Trees* 29: 185-197.
- 17. Westbrook, J.W., Walker, A.R., Neves, L.G., Munoz, P., Resende Jr., M.F.R., Neale, D.B., Wegrzyn, J.L., Huber, D.A., Kirst, M., Davis, J.M., Peter, G.F., 2015. Discovering candidate genes that regulate resin canal number in *Pinus* stems by integrating association genetics and QTL analysis across environments, ages, and populations. *New Phytologist* 205: 627-641.
- 18. Muñoz, P.; Resende Jr., M.F.R., Gezan, S.A., Resende, M.D.V., de los Campos, G., Kirst, M., Huber, D, Peter, G.F., 2014. Unraveling additive from non-additive effects using genomic relationship matrices. *Genetics* 198: 1759-1768.
- 19. Suseata, A., Peter, G.F., Hodges, A.W., Carter, D.R., 2014. Oleoresin tapping of planted slash pine (*Pinus elliottii Engelm*. var. *elliottii*) adds value and management flexibility to landowners in the southern United States. *Biomass and Bioenergy* 68: 55-61.
- 20. Muñoz, P., Resende Jr., M.F.R., Huber, D.R., Quesada, T., Resende, M.D.V., Neale, D.B., Wegerzyn, J., Kirst, M., Peter, G.F., 2014. Impact of pedigree errors on traditional BLUP and genomic selection accuracy. *Crop Science* 54: 1115-1123.
- 21. Zhang, J., Novaes, E., Kirst, M., Peter, G.F. 2014. Comparison of pyrolysis mass spectrometry and near infrared spectroscopy for genetic analysis of lignocellulose composition in *Populus*. *Forests* 5: 466-481.
- 22. Quesada, T., Resende Jr., M.F.R., Muñoz, P. Gezan, S.A., Wegrzyn, J.L., Neale, D.B., Kirst, M., Peter, G.F., Davis, J.M., 2014. Genetic mapping of fusiform rust resistance in loblolly pine after genomic selection and association testing. *Forests* 5: 347-362; doi 10.3390/f5020347
- 23. White, T.L., Davis, J.M, Gezan, S., Hulcr, J., Jokela, E., Kirst, M., Martin, T.A., Peter, G.F., Powell, G., Smith, J. 2014. Breeding for value in a changing world: past achievements and future prospects. *New Forests* 45: 301-309
- 24. Gustin, J., Jackson, S., Williams, C., Patel, A., Baier, J., Armstrong, P., Edwards, J.W., Peter, G.F., Settles, A.M., 2013. Analysis of maize (*Zea mays*) kernel density and volume using x-ray micro-computed tomography and single-kernel near infrared spectroscopy. *Agriculture and Food Chemistry* 61: 10872-10880.
- 25. Häggman, H., Raybould, A., Borem, A., Fox, T., Handley, L., Hertzberg, M., Lu, M., Macdonald, P., Oguchi, T., Pasquali, G., Pearson, L. Peter, G.F., Quemada, H., Seguin, A., Tattersall, K., Ulian, E., Walter, C., McLean, M. 2013. Genetically engineered trees for plantation forests: key considerations for environmental risk assessment *Plant Biotechnology* 11: 785-98.
- 26. Fedenko, J.R., Erickson, J.E., Woodard, K.R., Sollenberger, L.E., Vendramini, J.M.B., Gilbert, R.A., Helsel, Z.R., Peter, G.F., 2013. Biomass production and composition of perennial grasses grown for bioenergy in a subtropical climate across Florida, USA. *Bioenergy Research* 6: 1082-1093.
- 27. Westbrook, J.W., Resende, M.F.R., Munoz, P., Walker, A.R., Kirst, M., Huber, D.A., Gezan, S.A., Peter, G.F., Davis, J.M. 2013. Association genetics of oleoresin flow in loblolly pine: discovering genes and predicting phenotype for improved resistance to bark beetles and bioenergy potential. *New Phytologist* 199: 89-100.
- 28. Resende, M.F.R., Jr., Muñoz, P., Resende, M.D.V., Garrick, D.J., Fernando, R.L., Davis, J.M., Jokela, E.J., Martin, T.A., Peter, G.F., Kirst, M. 2012. Accuracy of genomic selection methods in a standard dataset of loblolly pine (*Pinus taeda* L.). *Genetics* 190: 1503-10.
- 29. Resende, M.F.R., Jr., Muñoz, P., Acosta, J.J., Peter, G.F., Davis, J.M., Grattapaglia, D., Resende, M.D.V., Kirst, M. 2012. Accelerating the domestication of trees using genomic selection: accuracy of prediction models across ages and environments. *New Phytologist* 193: 617-624.

- 30. Hunter, C.T., Kirienko, D.H., Sylvester, A.W., Peter, G.F., McCarty, D.R., Koch, K.E. 2012. Cellulose synthase-Like D1 is integral to normal cell division, expansion and leaf development in maize. *Plant Physiology* 158: 708-724.
- 31. McDonough, T.J., Courchene, C.E., White, D.E., Schimleck, L., Peter, G.F. 2012. Effects of Loblolly Pine Tree Age and Wood Properties on Linerboard Grade Pulp Yield and Sheet Properties. Part 2: Effects on Sheet Properties. *TAPPI Journal* 11: 41-50.
- 32. Westbrook, J.W., Resende, M.F.R., Munoz, P., Walker, A.R., Kirst, M., Huber, D.A., Gezan, S.A., Peter, G.F., Davis, J.M. 2013. Association genetics of oleoresin flow in loblolly pine: discovering genes and predicting phenotype for improved resistance to bark beetles and bioenergy potential. *New Phytologist*. 199: 89-100.
- 33. Resende, M.F.R., Jr., Muñoz, P., Resende, M.D.V., Garrick, D.J., Fernando, R.L., Davis, J.M., Jokela, E.J., Martin, T.A., Peter, G.F., Kirst, M., 2012. Accuracy of Genomic Selection Methods in a Standard Dataset of Loblolly Pine (*Pinus taeda* L.). *Genetics* 190: 1503-10.
- 34. Resende, M.F.R., Jr., Muñoz, P., Acosta, J.J., Peter, G.F., Davis, J.M., Grattapaglia, D., Resende, M.D.V., Kirst, M. 2012. Accelerating the domestication of trees using genomic selection: accuracy of prediction models across ages and environments. *New Phytologist* 193: 617-624.
- 35. Hunter, C.T., Kirienko, D.H., Sylvester, A.W., Peter, G.F., McCarty, D.R., Koch, K.E. 2012. Cellulose synthase-Like D1 is integral to normal cell division, expansion and leaf development in maize. *Plant Physiology*. 158: 708-724.
- 36. Lunsford, K-A., Peter, G.F., Yost R., 2011. Direct matrix-assisted laser desorption ionization mass spectrometric imaging of cellulose and hemicelluloses in *Populus*. *Analytical Chemistry* 83: 6722-6730.
- 37. McDonough, T.J., Courchene, C.E., White, D.E., Schimleck, L., Peter, G.F., 2011. Effects of Loblolly Pine Tree Age and Wood Properties on Linerboard Grade Pulp Yield and Sheet Properties. Part 1: Effects on Pulp Yield. *TAPPI Journal* Sept. 2011: 45-53.
- 38. Joshi, C.P., Thammannagowda, S., Fujino, T. Gou, J., Avci, U., Haigler, C.H., McDonnell, L.M., Mansfield, S.D., Menghesa, B., Carpita, N.C., Harris, D., DeBolt, S., Peter, G.F., 2011. Perturbation of wood cellulose synthesis causes pleiotropic effects in transgenic aspen. *Molecular Plant* 4: 331-45
- 39. White D.E., Courchene C., McDonough T., Schimleck L., Peter G.F., Rakestraw, J., Goyal G., 2011. Effects of Loblolly Pine Wood and Pulp Properties on Sheet Characteristics. *TAPPI Journal* 10: 36-42
- 40. Gonzales-Benecke, C.B., Martin, T.A., Clark III, A., Peter, G.F., 2010. Water Availability and Genetic Effects on Growth, Wood Density and Stiffness of Loblolly Pine (*Pinus taeda* L.) Stands. *Canadian Journal of Forest Research* 40: 2265-2277.
- 41. Gonzales-Benecke, C.A., Martin, T.A., Peter, G.F., 2010. Hydraulic Architecture and Tracheid Allometry in Mature *Pinus palustris* and *Pinus elliottii* Trees. *Tree Physiology*. 30: 361-375.
- 42. Schimleck, L.R., Mora, C.R., Peter, G.F., Evans, R., 2010. Alternative Methods for Nondestructively Determining Wood Stiffness in Young Trees. *IAWA Journal*. 31: 161-167.
- 43. Novaes E., Osorio L., Drost D.R., Miles B.L., Novaes C.R.D.B., Benedict C., Dervinis C., Yu Q., Sykes R., Davis M., Martin T.A., Peter G.F., Kirst M., 2009. Quantitative Genetic Analysis of Biomass and Wood Chemistry of *Populus* under Different Nitrogen Levels. *New Phytologist*. 182: 878-890.
- 44. White D.E., Courchene C., McDonough T., Schimleck L., Jones D., Peter G.F., Purnell R., Goyal G. 2009. Effects of Specific Gravity and Wood Chemical Content on the Pulp Yield of Loblolly Pine. *TAPPI Journal*. 8: 31-36.
- 45. Liu, X., Lee, S-C., Casella, G., Peter, G.F., 2008. Assessing Agreement of Clustering Methods with Gene Expression Microarray Data. *Computational Statistics and Data Analysis*. 52: 5356-5366.
- 46. Li, X., Huber, D.A., Powell, G.L., White, T.L., Peter, G.F., 2007. Breeding for Improved Growth and Juvenile Corewood Stiffness in Slash Pine. *Canadian J. Forest Research.* 37: 1886-1893.
- 47. Roth, B.E., Li, X., Huber, D.A., Peter, G.F., 2007. Effects of Management Intensity, Genetics and Planting Density on Wood Stiffness in a Plantation of Juvenile Loblolly Pine in the Southeastern USA. *Forest Ecology and Management*. 246: 155-162.

- 48. Peter, G.F., White, D.E., De La Torre, R., Singh, R., Newman, D., 2007. The Value of Forest Biotechnology: A Cost Modeling Study with Loblolly Pine and Kraft Linerboard in the Southeastern USA. *International Journal of Biotechnology*. 9: 415-435.
- 49. Schimleck, L.R., Tyson, J.A., Jones, P.D., Peter, G.F., Daniels, R.F., Clark, A. 2007. Investigation of the Number of Spectra per Radial Strip and Number of Radial Strips Per Plantation Required for Robust *Pinus taeda* L. Wood Property Calibrations *J. Near Infrared Spectroscopy.* 15: 261-268.
- 50. Azencott, H., Peter, G.F., Prausnitz, M., 2007. Influence of the Cell Wall on Intracellular Delivery to Algal Cells by Electroporation and Sonication. *Ultrasound in Medicine and Biology*. 33:1805-1817.
- 51. Vales, T., Feng, X., Ge, L., Xu, N., Cairney, J., Pullman, G.S., Peter, G.F., 2007. Improved Somatic Embryo Maturation in Loblolly Pine by Monitoring ABA-responsive Gene Expression. *Plant Cell Reports*. 26: 133-143.
- 52. Li, X., Shupe, T.F., Hse, C.Y., Peter, G.F., Eberhardt, T.L., 2007. Anatomical and Chemical Composition Changes with Maturation of the Bamboo Species *Phyllostachys pubescens*. *J. Tropical Forestry*. 19: 6-12.
- 53. Jones, P.D., Schimleck, L.R., Peter, G.F., Daniels, R.F., Clark III, A., 2006. Nondestructive Estimation of Wood Chemical Composition of Sections of Radial Wood Strips by Diffuse Reflectance Near Infrared Spectroscopy. Wood Science and Technology. 40: 709-720
- Tuskan, G.A., DiFazio, S.P., Bohlmann, J., Grigoriev I., Hellsten, U., Jansson, S., Putnam, N., Ralph S., Rombauts, S., Salamov A., Schein, J., Sterck, L, Arets A., Bhalerao, R.R., Bhalerao, R.P., Blaudez, D., Boerjan, W., Brun, A., Brunner, A., Busov, V., Campbell, M., Carlson, J., Chalot, M., Chapman, J., Chen, G-L., Cooper, D., Coutinho, P.M., Couturier, J., Covert, S.F., Cronk, Q., Cunningham, R., Davis, J., Degroeve, S., Dejardin, A., dePamphilis, C., Detter, J., Dirks, B., Dubchak, I., Duplessis, S., Ehlting, J., B. Ellis, K. Gendler, D. Goodstein, M. Gribskov, Grimwood A., Groover A., Gunter L., Hamberger, B., Heinze, B., Helariutta, Y., Henrissat, B., Holligan, D., Islam-Faridi, N., Jones-Rhoades, M. Jorgensen, R., Joshi, C., Kangasjärvi, J., Karlsson, J., Kelleher, C., Kirkpatrick, R., Kirst, M., Kohler, A., Kalluri, U., Larimer, F., Leebens-Mack, J., Leplé, J.C., Déjardin, A., Pilate, G., Locascio, P., Lucas, S., Martin, F., Montanini, B., Napoli, C., Nelson, D.R., Nelson, C.D., Nieminen, K.M., Nilsson, O., *Peter, G.*, Philippe, R., Poliakov, A., Richardson, P., Rinaldi, C., Ritland, K., Rouzé, P., Ryaboy, D., Schrader, J., Segerman, B., Sterky, F., Souza, C., Tsai, C., Unneberg, P., Wall, K., Wessler, S., Yang, G., Yin, T., Douglas C., Sandberg G., Van de Peer Y., Rokhsar D. 2006. The Genome of Western Black Cottonwood, *Populus trichocarpa* (Torr. & Gray ex Brayshaw). *Science*. 313 (5793): 1596 1604.
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- 59. Schimleck, L.R., Evans, R., Jones, D.P., Daniels, R.F., Peter, G.F., Clark III, A., 2005. Estimation of Microfibril Angle and Stiffness by Near Infrared Spectroscopy Using Sample Sets Having Limited Wood Density Variation. *IAWA Journal*. 26: 175 187
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- 62. Peter, G.F., Neale, D.B., 2004. Molecular Basis for the Evolution of Xylem Lignification. *Current Opinions in Plant Biology*. 7: 737 742
- 63. Schimleck, L.R., Jones, P.D., Peter, G.F., Daniels, R.F., Clark III, A., 2004. Nondestructive Estimation of Tracheid Length from Sections of Radial Wood Strips by Near Infrared Spectroscopy. *Holzforschung*. 58: 375 381
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- 66. Peter, G.F., Benton, D.M., Bennett, K., 2003. A Simple, Direct Method for Measurement of Microfibril Angle in Single Fibers Using Differential Interference Contrast Microscopy. *Journal of Pulp and Paper Science*. 29/8: 274 280
- 67. Meng, H., Pullman, G.S., Peter, G.F., 1998. Cloning of a Plant Isochorismate Synthase. *Plant Physiology*. 118: 1536 1537
- 68. Pullman, G.S., Cairney, J.C., Peter, G.F., 1998. Clonal Forestry and Genetic Engineering: Forest Biotechnology- Where we Stand, Future Prospects and Impacts. *TAPPI Journal*. 8: 57 64.
- 69. Thornber, J.P., Peter, G.F., Morishige, D.T., Gomez, S., Anandan, S., Kerfeld, C., Welty, B., Lee, A., Takeuchi, T., Priess, S., 1993. Light-harvesting in Photosystems I and II. *Biochemical Society Transactions*. 21: 15 18.
- 70. Priess, S., Peter, G.F., Anandan, S., Thornber, J.P., 1993. The Multiple Pigment-proteins of the Photosystem I Antenna. *Photochemistry Photobiology*. 57: 152 157.
- 71. Peter, G.F., Thornber, J.P., 1991. Biochemical Evidence that the Higher Plant Photosystem II Core Complex is Organized as a Dimer. *Plant and Cell Physiology*. 32: 1237 1250.
- 72. Peter, G.F., Thornber, J.P., 1991. Biochemical Composition and Organization of Higher Plant Photosystem II Light-harvesting Pigment-proteins. *Journal of Biological Chemistry*. 266: 16745 16754.
- 73. Peter, G.F., Takeuchi, T., Thornber, J.P., 1991. Solubilization and Two-dimensional Electrophoretic Procedures for Studying the Organization and Composition of Photosynthetic Membrane Polypeptides. *A Companion to Methods in Enzymology*. 3: 115 124
- 74. Rottmann, W.H.*, Peter, G.F.*, Oeller, P.W., Keller, J.A., Shen, N.F., Nagy, B.P., Taylor, L.P., Campbell, A.D., Theologis, A., 1991. 1-Aminocyclopropane-1-Carboxylate Synthase in Tomato is Encoded by a Multigene Family Whose Transcription is Induced during Fruit and Floral Senescence. *Journal of Molecular Biology*. 222: 937 961. *Equal contributions, co-first authors
- 75. Ferguson, L., Halloran, E., Hawthornthwaite, A.M., Cogdell, R., Kerfeld, C., Peter, G.F., Thornber, J.P., 1991. The Use of Nondenaturing Deriphat-Polyacrylamide Gel-Electrophoresis to Fractionate Pigment-Protein Complexes of Purple Bacteria. *Photosynthesis Research*. 30: 139 143.
- 76. Deng, X-W., Tonkyn, J.C., Peter, G.F., Thornber, J.P., Gruissem, W., 1989. Post-transcriptional Control of Plastid mRNA Accumulation during Adaptation of Chloroplasts to Different Light Quality Environments. *The Plant Cell.* 1: 645 654.
- 77. Nechushtai, R., Peterson, C.C., Peter, G.F., Thornber, J.P., 1987. Purification and Characterization of a Light-harvesting Chlorophyll-a/b-protein of Photosystem I of *Lemna gibba*. *European Journal of Biochemistry*. 164: 345 350.
- 78. Thornber, J.P., Peter, G.F., Nechushtai, R., 1987. Biochemical Composition and Structure of Higher Plant Photosynthetic Pigment-proteins. *Physiologia Plantarum*. 71: 236 240.

Non-refereed Publications

- 1. Nelson, C.D., Peter, G.F., McKeand, S.E., Jokela, E.J., Rummer, R.B., Groom, L.H., Johnsen, K.H., 2013, Pines in *Biofuel Crops: Production, Physiology and Genetics*, Editor B.P.Singh, CAB International. P. 427-459.
- 2. Sykes, R., Yung, M. Novaes, E., Kirst, M., Peter, G.F., Davis, M., *Biofuels: Methods and Protocols, Methods in Molecular Biology.* High-throughput Screening of Plant Cell-wall Composition Using Pyrolysis Molecular Beam Mass Spectrometry, Editor: Mielenz J.R., Humana Press, 2009. Vol. 581 169-183.
- 3. Peter, G.F., *Genetic Improvement of Bioenergy Crops.* Southern Pines: A Resource for Bioenergy, Editor: Vermerris, W., Springer Press, 2008. 397-414.
- 4. McDonough, T.J., Courchene, C.E., White, D.E., Schimleck, L. Peter, G.F., *Effects of loblolly pine tree* age and wood properties on linerboard grade pulp yield and sheet properties. Part 2: Effects on Paper Properties. 2011. Tappi PEERS Conference. CD-ROM
- 5. McDonough, T.J., Courchene, C.E., White, D.E., Schimleck, L. Peter, G.F., *Effects of loblolly pine tree age and wood properties on linerboard grade pulp yield and sheet properties. Part 1: Effects on Pulp Yield.* 2010. Tappi PEERS Conference. CD-ROM
- 6. White, D., Courchene, C., McDonough, T., Schimleck, L., Jones, D., Peter, G.F., Purnell, R., Goyal, G., *Effects of specific gravity and lignin content on the paper properties of loblolly pine*. 2008. Tappi Engineering, Pulping and Environmental Conference. CD-ROM
- 7. White, D., Courchene, C., McDonough, T., Schimleck, L., Jones, D., Peter, G.F., Purnell, R., Goyal, G., Effects of specific gravity and lignin content on the pulp yield of loblolly pine. 2007. Tappi Engineering, Pulping and Environmental Conference. CD-ROM
- 8. Evans, M.A., White, D., Peter, G.F., Trends in digital printing papers: Reliability and print quality are key factors in purchase decision. 2007. *Paper360*° May 2007: 10-12.

FUNDED GRANTS & CONTRACTS

- M. Kirst, **G. Peter**, P. Munoz, 2013-16
- Accelerated development of optimal pine feedstocks for bioenergy and renewable chemicals using genome-wide selection.- USDA/DOE
- **G.F. Peter,** A. Hodges, 2013-2015
- Commercial production of terpene biofuels from existing slash pine plantations FDACS-Office of Energy
- G.F. Peter, J. Davis, M. Davis, M. Hinchee, J. Keasling, 2012-2015
- Commercial Production of Terpene Biofuels in Pine DOE-ARPAe
- T. Martin, **G.F. Peter**, E. Jokela, + 50 other coPIs, 2011 2016
- Integrating research, education and extension for enhancing southern pine climate change mitigation and adaptation *USDA/NIFA Climate Change*
- **G.F. Peter**, M. Kirst, G. Powell, 2011 2016
- Cooperative Forest Genetics Research Program Forest Industry
- M. Kirst, **G.F. Peter**, J.M. Davis, D. Huber, 2009 2013,
- Advanced Pine Breeding through Association Genetics and Biotechnology USDA-AFRI
- E. Jokela, **G.F. Peter**, T. Martin, J. Davis, 2009 2014,
- Center for Advanced Forestry Systems *National Science Foundation University Cooperative Research Centers Program*

- M. Kirst, **G.F. Peter**, 2009 2012,
- Mechanism of Carbon Partitioning Regulation by cpg13 in the Bioenergy Woody Crop Poplar -DOE-USDA Plantfeed Stocks
- Y. Chen, **G.F. Peter**, 2008 2011,
- Towards Multiscale Mechanical Design of Hierarchical Cellular Materials *National Science Foundation*
- G.F. Peter, S. Blackband, L. Ingram, R. Yost, 2007-2011
- Integrated Nondestructive Spatial and Chemical Analysis of Lignocellulosic Materials during Pretreatment and Bioconversion to Ethanol DOE Analytical Imaging
- J. Davis, E. Jokela, T. Martin, G.F. Peter, 2007 -present
- Forest Biology Research Cooperative Forest Industry
- C. Langley, D.B. Neale- UC Davis, G.F. Peter, J.M. Davis, M. Kirst, G. Casella, D.A. Huber, C. Loopstra,
- T. Byram-TAMU, B. Goldfard, B. Li- NCSU, 2005- 2010
- Association Genetics and Natural Genetic Variation of Complex Traits in Pine- NSF Plant Genome

INVITED SEMINARS

- 1. Peter, G.F., Conifer Terpenes: Manipulating an Ancient Plant Defense Pathway for Production of Renewable Chemicals and Biofuels, Southern Forest Tree Improvement Conference, Melbourne, FL, 2017
- 2. Peter, G.F., Conifer Terpenes: Manipulating an Ancient Plant Defense Pathway for Production of Renewable Chemicals and Biofuels, Southern Forest Tree Improvement Conference, North Carolina State University, 2016
- 3. Peter, G.F., Conifer Terpenes: Manipulating an Ancient Plant Defense Pathway for Production of Renewable Chemicals and Biofuels, Southern Forest Tree Improvement Conference, North Carolina State University, 2016
- 4. Peter, G.F., PINEMAP Overview and Update, Southern Forest Tree Improvement Conference, Hot Springs, AR, 2015
- 5. Peter, G.F., Conifer Terpenes: Manipulating an Ancient Plant Defense Pathway for Production of Renewable Chemicals and Biofuels, Centre for Agricultural Genomics, Spain, 2014
- 6. Peter, G.F., Introgression of Loblolly Pine Alleles into Slash Pine: QTL Analysis for Crown, Growth and Growth Efficiency in a Pseudo-backcross ((Slash X Loblolly) X Slash) Family IUFRO Mexican and Tropical Pines, Jacksonville, FL, 2013
- 7. Peter, G.F., Southern Pines: The Renewable Chemicals & Bioenergy Star. Society for In Vitro Biology, Providence, RI, 2013
- 8. Peter, G.F., Innovation in the Transportation Landscape, BioEnergy Science Center, Chattanooga, TN, 2013
- 9. Peter, G.F, Planted Forest Value: Tree Breeders Can Enable New Markets. Southern Forest Tree Improvement Conference, Clemson, SC, 2013
- 10. Peter, G.F., Conifer Terpenes: Manipulating an Ancient Plant Defense Pathway for Production of Renewable Chemicals and Biofuels. Florida Genetics, Gainesville, FL, 2013
- 11. Peter, G.F., Past, Present and Future of Breeding for Rust Resistance in Slash Pine., IEG 40 Workshop Integrating Fusiform Rust Research, Screening and Breeding, Asheville, NC, 2012
- 12. Peter, G.F., Opportunities and Challenges Associated with Genetically Engineered Southern Pines, 9th Biennial Short Rotation Woody Crops Operations Working Group Conference, Oak Ridge, TN, 2012
- 13. Peter, G.F., Regulation of Genetically Engineered Trees, ICMBO, St. Louis, MO, 2012

- 14. Peter, G.F., High Terpene Pines: Transforming and Enabling New Forest Biorefineries, Frontiers in Biorefining: Chemicals and Products from Renewable Carbon, St. Simons Island, GA, 2012
- 15. Peter, G.F., Past, Present and Future of Breeding for Rust Resistance in Slash Pine., IEG 40 Workshop Integrating Fusiform Rust Research, Screening and Breeding, Asheville, NC, 2012
- 16. Peter G.F., PINEMAP: An Integrated Research, Education and Extension Project. Sustainable Corn Annual Meeting, Chicago, II, 2011
- 17. Peter, G.F., Quantitative and Association Genetics of Wood Properties in Loblolly Pine. University of Malaga, Spain 2011
- 18. Peter, G.F., Association and Conservation Genetics of Loblolly Pine Seville, Estacion Biologica de Donana, CSIC, Spain 2011
- 19. Peter, G.F., Quantitative and Association Genetics of Wood Properties in Loblolly Pine. Auburn University, Auburn, AL, 2011
- 20. Peter, G.F., Phenotype to Genotype: Genetics of Wood Chemistry, Bioenergy Science Center Workshop on Biomass Characterization, Golden, CO, 2011
- 21. Peter, G.F., Munoz, P., Huber, D.A., Martin, T.A. Introgression of Loblolly Pine Alleles into Slash Pine: QTL Analysis for Crown, Growth and Growth Efficiency in a Pseudo-backcross ((Slash x Loblolly) x Slash) Family SFTIC, Biloxi, MS, 2011
- 22. Peter, G.F., Characterization of woody biofeedstocks for biofuel production, National Renewable Energy Laboratory, Golden, CO, 2011
- 23. Peter, G.F., Integrated Nondestructive Spatial and Chemical Analysis of Lignocellulosic Materials during Pretreatment and Bioconversion to Ethanol, Bioenergy Science Center Workshop on Biomass Characterization, Riverside, CA, 2010
- 24. Peter, G.F., Genetic Architecture of Growth, Disease, and Wood Quality Traits in Southern Pines, Annual Meeting, NSF-IUCRC-CAFS, Indianapolis, IN, 2010
- 25. Peter, G.F., Quantitative and Association Genetics of Wood Properties in Loblolly Pine, IUFRO Tree Biotechnology, Whistler Mountain, Canada, 2009
- 26. Peter, G.F., Association Genetics to Identify Genes Controlling Wood Properties in Loblolly Pine, Southern Forest Tree Improvement Conference, Blacksburg, VA, 2009
- 27. Peter, G.F. Quantitative and Association Genetics of Wood Properties in Loblolly Pine, INRA Bordeaux, France 2009
- 28. Peter, G.F., Forest Biomass and Bioenergy, Florida State Horticultural Society & The Soil and Crop Science Society of Florida Annual Meeting, Jacksonville, FL, 2009
- 29. Peter, G.F., Genetic Control of Hydraulic Conductivity and Water Relations in *Populus*, Dept. of Wood Science, University of British Columbia, Vancouver, 2008
- 30. Peter, G.F., Genetic and Environmental Control of Juvenile Corewood Stiffness in Southern Pine, INIA, Madrid, Spain, 2007
- 31. Peter, G.F., Genetic Control of Xylem Hydraulics and Linkages with Growth and Water Relations in Populus, Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN, 2007
- 32. Peter, G.F., The Value of Forest Biotechnology: A Cost Modeling Study with Loblolly Pine and Kraft Linerboard in the Southeastern USA, IUFRO Tree Biotechnology-2007, Ponta Delgada, Azores, Portugal, 2007

GRADUATE STUDENTS & POSTDOCTORAL SCHOLARS TRAINED

- **UF Ph.D**.: Derek Drost, 2009; Xiaobo Li, 2009; Patricio Munoz, Alejandro Riveros Walker, current; Jianxing Zhang, current;
- UF MS: Brianna Miles, 2007; Anne Mwaniki, 2009
- Postdoctoral: Tania Quesada, current; Yongsheng Wang, current

COURSES TAUGHT (Last 5 years)

Plant Molecular Biology and Genomics; Forest Productivity, Sustainability and Health; Forests for the Future, Journal Colloquia

EXTENSION & OUTREACH

Co-Director Cooperative Forest Genetics Research Program: We breed loblolly and slash pine with our members (ArborGen, Florida Forest Service, Four Rivers Land and Timber, Georgia Forestry Commission, International Forest Company, Rayonier, Weyerhaeuser) for development of commercial lines.

Co-Director Forest Biology Research Cooperative: We conduct research on the productivity, health and sustainability of planted loblolly and slash pines.

BALA RATHINASABAPATHI, Ph.D.

Professor, Plant Physiology and Molecular Biology
University of Florida, Institute of Food and Agricultural Sciences
Horticultural Sciences Department, Plant Molecular and Cellular Biology Program
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PROFESSIONAL INTERESTS

Metabolic Adaptation of Plants to Environmental Stress. Horticulture Education.

EDUCATION

| Univ. of Saskatchewan, Saskatoon, Canada | Biology | Ph.D. | 1990 |
|---|-------------|-------|------|
| Indian Agricultural Res. Institute, New Delhi | Genetics | M.Sc. | 1985 |
| | | | 1000 |
| Annamalai University, India | Agriculture | B.Sc. | 1983 |

EMPLOYMENT

| 2012 – present | Professor, Horticultural Sciences, University of Florida |
|----------------|---|
| 2014 – 2018 | Graduate coordinator, Horticultural Sciences, University of Florida |
| 2003 - 2012 | Associate Professor, Horticultural Sciences, University of Florida. |
| 1997 - 2003 | Assistant Professor, Horticultural Sciences, University of Florida |
| 1994 – 1997 | Research Associate, Horticultural Sciences, University of Florida. |
| 1991 – 1994 | Postdoctoral Associate, IRBV., University of Montreal, Montreal. |
| 1990 – 1991 | Postdoctoral, DOE-PRL, Michigan State Univ, East Lansing, MI |
| 1985 – 1990 | Graduate Assistant, University of Saskatchewan, Saskatoon |

PROFESSIONAL ACTIVITIES AND AWARDS

Nominee for College of Agriculture Outstanding Undergraduate Teaching Award (2010, 2012)

Elected to Gamma Sigma Delta, University of Florida (2002)

Outstanding Teacher of the Year, Environ. Horticulture Club, Univ. of Florida (1997-98)

Travel award, American Society of Plant Biologists (1998)

University of Saskatchewan Graduate Scholarship (1985-90)

Fellowship, India Foundation, Pune (1985)

Summer fellow, Tata Institute of Fundamental Research, Bombay (1984)

Indian Council of Agricultural Research Junior Research Fellowship (1983-85)

National Merit Scholarship (1980-83)

PROFESSIONAL AFFILIATIONS

American Society of Plant Biologists (ASPB) American Society of Horticultural Science (ASHS) Florida State Horticultural Society (FSHS)

TEACHING

HOS3020 General Horticulture (4 credits)

VEC2100 World Herbs and Vegetables (3 credits)

VEC3221 Vegetable Crop Production (3 credits)

HOS6932 Topics (Food Phytochemicals, Proteomics, Metabolic Engineering) (1 credit)

HOS5711 Phytochemicals in Food and Health (3 credits)

BOT 6935 Plant Biochemistry (4 credits)

HOS5242 Genetics and Breeding of Vegetable Crops (3 credits)

HOS 1014 Vegetable Gardening (1 credit).

Developed a special curriculum in plant breeding and genetics to involve undergraduate students in research- "Building Better Peppers", an on-going project since 2010.

GRADUATE STUDENTS, POST-DOCTORAL AND VISITING SCHOLARS

Current Ph.D. students (4):

Qingyuan Xiang, David Friedman, Jingwei Fu, Caitlin Clarke

Past graduate students (7):

Dr. Newton Kilasi, Dr. Elton Goncalves, Dr. Walid Fouad, Dr. Aparna Krishnamurthy, Dr. Richard Buker (co-advisor), Dr. Piyasa Ghosh (co-advisor), Saul Sotomayor (M.S.)

Past visiting scholars/post-docs (10):

Dr. Jose Francisco, Adeel Shahid Dr. Suresh B. Raman, Dr. Victor Odjeba, Dr. Mohammed Aly, Dr.

K. Soorianathasundaram, Dr. S. Sundaram, Dr. M. El-Zohri, Dr. L. Vilarinho, M.L.Grigio.

GRANTS (since 2004 to present): \$900,000 in external funding and \$ 205,800 in internal funding.

Recent grants are listed below:

Nematode resistant pepper varieties for Florida. FDAC Block Grant. 2018. \$81,371.

Improved specialty peppers for Florida's fresh produce market, FDAC, 2016. \$87,785.

Educational resources for teaching plant breeding. Role: PI. College of Agriculture and Life Sciences, University of Florida, \$ 4000. 2011.

Genomics of heat stress tolerance in rice. IFAS Climate change and Florida's Agricultural, Natural Resources and Human Systems Program, Univ of Florida. 2016. \$ 121000.

Engineering heat tolerant maize, USDA-SBIR, \$ 91,607. Role: Co-PI. 2014-2015.

Engineering glutaredoxins for stress tolerance and yield, Consortium for Plant Biotechnology Research Inc. \$189,600. Role: Pl. 2009 -2013.

Genetic improvement of tropical vegetables for heat stress tolerance and yield. Role: PI. USDA-TSTAR \$91,644. Role: PI. 2005-2007.

REFEREED JOURNAL ARTICLES (Listed 2013-2019) Career total = 96

96. Abid, R., Manzoor, M., De Oliveira, L.M., Da Silva, E., **Rathinasabapathi, B.**, Rensing, C., Mahmood, S., Liu, X., Ma, L.Q. (2019) Interactive effects of As, Cd and Zn on their uptake and oxidative stress in Ashperaccumulator *Pteris vittata*. Environmental Pollution 248: 756-762.

95. Manzoor, M., Abid, R., **Rathinasabapathi, B.**, De Oliveira, L.M., Da Silva, E., Deng, F., Rensing, C., Arshad, M., Gul, I., Ma, L.Q. (2019) Metal tolerance of arsenic-resistant bacteria and their ability to promote plant growth of *Pteris vittata* in Pb-contaminated soil. Science of the Total Environment 660: 18-24.

94. Nascimento, G.O., Souza, D.P., Santos, A.S., Batista, J.F., **Rathinasabapathi, B.**, Gagliardi, P.R., Goncalves, J.F.C. (2019) Lipidomic profiles from seed oil of *Carapa guianensis* Aubl. and *Carapa vasquezii*, Kenfact and implications for the control of phytopathogenic fungi. Industrial Crops and Products 129: 67-73.

- 93. Khan, N., Bano, A., Rahman, M.A., Rathinasabapathi, B., Babar, M.A. (2019) UPLC-HRMS-based untargeted metabolic profiling reveals changes in chickpea (*Cicer arietinum*) metabolome following long-term drought stress. Plant, Cell & Environment 42: 115-132.
- 92. Shahid, M.A., Balal, R.M., Khan, N., Rossi, L., **Rathinasabapathi, B.**, Liu, G., Khan, J., Camara-Zapata, J.M., Martinez-Nicolas, J.J., Garcia-Sanchez, F. (2018) Polyamines provide new insights into the biochemical basis of Cr-tolerance in Kinnow mandarin grafted on diploid and double-diploid rootstocks. Environmental and Experimental Botany 156: 248-260.
- 91. Shahid, M.A., Balal, R.M., Khan, N., Zotarelli, L., Liu, G., Ghazanfar, M.U., **Rathinasabapathi, B.**, Mattson, N.S., Martinez-Nicolas, J.J., Garcia-Sanchez, F (2018) Ploidy level of citrus rootstocks affects the carbon and nitrogen metabolism in the leaves of Chromium-stressed Kinnow mandarin plants. Environmental and Experimental Botany 149: 70-80.
- 90. Kilasi, N., Singh, J., Vallejos, C.E., Ye, C., Jagadish, S.V.K., Kusolwa, P., **Rathinasabapathi, B.** (2018). Heat stress tolerance in rice (*Oryza sativa L.*): Identification of quantitative trait loci and candidate genes for seedling growth under heat stress. Frontiers in Plant Science 9: 1578.
- 89. Bera, T., McLamore, E.S., Wasik, B., **Rathinasabapathi, B**., Liu, G (2018) Identification of a maize (*Zea mays* L.) inbred line adapated to low-P conditions via analyses of phosphorus utilization, root acidification and calcium influx. Journal of Plant Nutrition and Soil Science 181: 275-286.
- 88. Han, Y.H., Liu, X., **Rathinasabapathi, B.**, Li, H.B., Chen, Y., Ma, L.Q.(2017) Mechanisms of efficient As solubilization in soils and As accumulation by As-hyperaccumulator *Pteris vittata*. Environmental Pollution 227: 569-577.
- 87. Chen, Y., Hua, C., Jia, M., Fu, Y., Liu, Y., **Rathinasabapathi, B.**, Cao, Y., Ma, L.Q. (2017) Heterologous expression of *Pteris vittata* arsenite antiporter PvACR3;1 reduces arsenic accumulation in plant shoots. Environmental Science and Technology 51: 10387-10395.
- 86. Fu, J., Xue, L., Han, Y., Mei, H., Cao, Y., De Oliveira, L.M., Liu, Y., **Rathinasabapathi, B.**, Chen, Y., Ma, L.Q. (2017) Arsenic hyperaccumulator *Pteris vittata* efficiently solubilized phosphate rock to sustain plant growth and As uptake. J Hazardous Materials 330: 68-75.
- 85. Chen, Y., Han, Y., Cao, Y., Zhu, Y., **Rathinasabapathi, B**., Ma, L.Q. (2017) Arsenic transport in rice and biological solutions to reduce arsenic risk from rice. Frontiers in Plant Science 8.
- 84. De Oliveira, L.M., Das, S., Gress, J., **Rathinasabapathi, B**., Chen, Y., Ma, L.Q. (2017) Arsenic uptake by lettuce from As-contaminated soil remediated with *Pteris vittata* and organic amendment. Chemosphere 176: 249-254.
- 83. Grigio, M., Chagas, E.A., **Rathinasabapathi, B.,** Chagas, P.C., Da Silva, A.R.V., Sobral, S.T., De Oliveira, R.R. (2017) Qualitative evaluation and biocompounds present in different parts of Camu-camu (*Myrciaria dubia*) fruit. African Journal of Food Science 11: 124-129.
- 82. Han, YH., Liu, X., **Rathinasabapathi, B.**, Li, H.B., Chen, Y., Ma, L.Q. (2017) Mechanisms of efficient As solubilization in soils and As accumulation by As-hyperaccumulator *Pteris vittata*. Environmental Pollution 227: 569-577.

- 81. Balal, R.M., Shahid, M.A., Vincent, C., Zotarelli, L., Liu, G., Mattson, N.S., **Rathinasabapathi, B.**, Martinez-Nicolas, J.J., Garcia-Sanchez, F. (2017) Kinnow mandarin plants grafted on tetraploid rootstocks are more tolerant to Cr-toxicity than those grafted on its diploid one. Environmental and Experimental Botany 140: 8-18.
- 80. Chen, Y., Hua, C., Jia, M., Fu, Y., Liu, Y., **Rathinasabapathi, B.**, Cao, Y., Ma, L.Q. (2017) Heterologous expression of Pteris vittata arsenite antiporter PvACR3;1 reduces arsenic accumulation in plant shoots. Environmental Science and Technology (in press).
- 79. Han YH, Fu JW, Xiang P, Cao Y, **Rathinasabapathi B**, Chen Y, Ma LQ (2017) Arsenic and phosphate rock impacted the abundance and diversity of bacterial arsenic oxidase and reductase genes in rhizosphere of As-hyperaccumulator *Pteris vittata*. Journal of Hazardous Materials 321: 146-153.
- 78. Liu X, Fu JW, Da Silva E, Shi XX, Cao Y, **Rathinasabapathi B**, Chen Y, Ma LQ (2017) Microbial siderophores and root exudates enhanced goethite dissolution and Fe/As uptake by Ashyperaccumulator Pteris vittata. Environmental Pollution 16: 32459-9.
- 77. Chen Y, Fu JW, Han YH, **Rathinasabapathi B**, Ma LQ (2016) High As exposure induced substantial arsenite efflux in As-hyperaccumulator *Pteris vittata*. Chemosphere 144: 2189-2194.
- 76. Han YH, Fu JW, Chen Y, **Rathinasabapathi B**, Ma LQ (2016) Arsenic uptake, arsenite efflux and plant growth in hyperaccumulator *Pteris vittata*: Role of arsenic-resistant bacteria. Chemosphere 144: 1937-1942.
- 75. De Oliveira LM, Gress J, De J, **Rathinasabapathi B**, Marchi G, Chen Y, Ma, LQ (2016) Sulfate and chromate increased each other's uptake and translocation in As-hyperaccumulator *Pteris vittata*. Chemosphere 147: 36-43.
- 74. Goncalves, EC, Wilkie, AC, Kirst M, **Rathinasabapathi**, **B** (2016) Metabolic regulation of triacylglycerol accumulation in the green algae: identification of potential targets for engineering to improve oil yield. Plant Biotechnol J. 14: 1649-1660.
- 73. Goncalves, EC, Koh, J., Zhu N, Yoo MJ, Chen S, Matsuo, T, Johnson JV, **Rathinasabapathi**, **B** (2016) Nitrogen starvation-induced accumulation of triacylglycerol in the green algae: Evidence for a role for ROC40, a transcription factor involved in circadian rhythm. Plant Journal 85: 743-757.
- 72. Ghosh, P., **Rathinasabapathi, B.**, Ma, L.Q. (2015) Phosphorus solubilization and plant growth enhancement by arsenic-resistant bacteria. Chemosphere 134: 1-6.
- 71. Ghosh, P., **Rathinasabapathi, B**., Teplitski, M., Ma L.Q. (2015) Bacterial ability in AsIII oxidation and AsV reduction: Relation to arsenic tolerance, P uptake, and siderophore production. Chemosphere 138: 995-1000.
- 70. El-Zohri, M., Odjegba, V., Ma, L., **Rathinasabapathi**, **B** (2015) Sulfate influx transporters in Arabidopsis thaliana are not involved in arsenate uptake but critical for tissue nutrient status and arsenate tolerance. Planta 241: 1109-1118.

- 69. Lessl, J.T., Guan, D.X., Sessa, E., **Rathinasabapathi, B.**, Ma, L.Q. (2015) Transfer of arsenic and phosphorus from soils to the fronds and spores of arsenic hyperaccumulator Pteris vittata and three non-hyperaccumulators. Plant Soil 390: 49-60.
- 68. Wang, X., Peng, B., Tan, C., Ma, L., **Rathinasabapathi**, **B**. (2015) Recent advances in arsenic bioavailability, transport and speciation in rice. Environ Sci Pollut Res 22: 5742-5750.
- 67. Chen YS, Han YH, Rathinasabapathi B, Ma LQ (2015) Naming and function of ACR2, arsenate reductase, and ACR3 arsenite efflux transporter in plants. Environ. Int. 81: 98-99.
- 66. Sun, H.J., **Rathinasabapathi, B**., Wu, B., Luo, J, Pu, L.P., Ma, L.Q. (2014) Arsenic and selenium toxicity and their interactive effects in humans. Environ. Int. 69: 148-158.
- 65. Zhu L.J., Guan, D.X., Luo, J., **Rathinasabapathi, B**., Ma, L.Q. (2014) Characterization of arsenic-resistant endophytic bacteria from hyperaccumulators *Pteris vittata* and *Pteris multifida*. Chemosphere 113: 9-16.
- 64. Tisarum, R., Lessl, J., Dong, X., de Oliverria LM, **Rathinasabapathi**, **B**., Ma, L.Q. (2014) Antimony uptake, efflux and speciation in arsenic hyperaccumulator *Pteris vittata*. Environmental Pollution 186: 110-114.
- 63. Goncalves, E., **Rathinasabapathi**, **B** (2013) Nitrogen starvation in biofuel green algae: Recycling of membrane lipid acyl groups to triacylglycerol and the formation of lipid bodies at early and late time points. Planta 238: 895-906.
- 62. Krishnamurthy, A., **Rathinasabapathi, B** (2013) Oxidative stress tolerance in plants: Novel interplay between auixn and reactive oxygen species signaling. Plant Signaling and Behavior doi 10.4161/psb.25761.
- 61. Krishnamurthy, A., **Rathinasabapathi**, **B** (2013) Auxin and its transport play a role in plant tolerance to oxidative stress from arsenite, high temperature stress and salinity in *Arabidopsis thaliana*. Plant Cell, & Environment 36: 1838 1849.
- 60. Lessl, J.T., Ma, L.Q., **Rathinasabapathi, B**, Guy C (2013) A novel phytase from *Pteris vittata* resistant to arsenate, high temperature, and soil inactivation. Environmental Science and Technology 47: 2204-2211.

BOOK CHAPTERS (Listed 2011-2019) Career total = 12

- 12. **Rathinasabapathi, B** (2019) Improving vegetable Capsicums for fruit yield, quality and tolerance to biotic and abiotic stress. In: Genome Designing of Climate-Smart Vegetable Crops, C. Kole (ed.), Springer-Nature.
- 11. **Rathinasabapathi, B**. Liu, X., Cao, Y., Ma, L.Q. (2018) Phosphate solubilizing Pseudomonads for improving crop plant nutrition and agricultural productivity. In: 'Crop Improvement through Microbial Biotechnology" Edited by Prasad, R., Gill, S.S. and N. Tuteja, Elsevier.
- 10. **Rathinasabapathi, B.** (2011) Functional genomics of drought tolerance in crops: Engineering transcriptional regulators and pathways. In: 'Improving Crop Resistance to Abiotic Stress" Edited by N. Tuteja, A.F. Tiburcio, S. S. Gill and R. Tuteja, Wiley-Blackwell, Wiley-VCH Verlag.

PATENTS Career total = 4

- 4. **Rathinasabapathi, B.**, Fouad, W (2014) Increased stress tolerance and enhanced yield in plants. U.S. Patent No. 8,748,696.
- 3. **Rathinasabapathi, B.**, Sundaram S (2013) Increased stress tolerance, yield, and quality via glutaredoxin overexpression. U.S. Patent No. 8,519,226.
- 2. Rathinasabapathi, B., Raman SB (2007) Beta-alanine N methyltransferase. U.S. Patent No. 7,202,084.
- 1. Hanson, AD., **Rathinasabapathi**, **B**., Burnet M. (2001) Polynucleotide encoding choline monooxygenase and plants transformed therewith. U.S. Patent No. 6,310,271.

MÁRCIO FERNANDO RIBEIRO DE RESENDE JR., Ph.D.

Assistant Professor, Corn Breeding and Genomics University of Florida, Institute of Food and Agricultural Sciences Horticultural Sciences Department, Plant Molecular and Cellular Biology Program PO Box 110690, 2135 Fifield Hall, Gainesville, FL 32611

> 352-682-0488, mresende@ufl.edu https://www.resendelab.com/

EDUCATION

| 2010 – 2014 | Ph.D. in Genetics and Genomics - University of Florida, Gainesville, USA |
|-------------|---|
| 2008 – 2010 | M.Sc. in Genetics and Plant Breeding - Federal University of Vicosa, Brazil |
| 2004 – 2008 | B.S. in Forest Engineering (Honors) - Federal University of Vicosa, Brazil |

| PROFESSIONAL EXPERIENCE | | |
|-------------------------|---|--|
| 2017 | Assistant Professor, Sweet Corn Breeding and Genetics – University of Florida (Current) | |
| 2015 | Chief Executive Officer, RAPID Genomics, LLC, Gainesville, FL. | |
| 2013 | Consultant Quantitative Genetics, Beck's Hybrids, Indiana. | |
| 2013 | VP of Science Operations, RAPID Genomics, LLC., Gainesville, FL. | |
| 2013 | Invited Instructor ASReml, VSN International, Hemel Hempstead, United Kingdom. | |
| 2011 | Board of directors' member, RAPiD Genomics LLC., Gainesville, FL. | |
| 2010 | Research Assistant, University of Florida / Arborgen. | |
| 2009 | Consultant Quantitative Genetics, AcelorMittal, Brazil. | |
| 2008 | Quantitative Genetics Research Assistant, Federal University of Viçosa, Brazil. | |
| 2007 | Plant Breeding Research Assistant, Federal University of Viçosa, Brazil. | |

GRANTS

- 1. Resende M.F.R. (PI) et al. UF-PBGI, \$120,000.00
- 2. Settles, Resende M.F.R. (co-Pl) et al. USDA-SCRI (#2018-51181-28419), \$7,382,441.00
- 3. Kirst, Resende M.F.R. (co-PI) et al. NSF-PGRP (#1444543), \$1,956,424.00
- 4. Kirst, Resende M.F.R. (co-PI) et al. NSF-I-Corp (#1742833), \$50,000.00
- 5. Sandoya, Resende M.F.R. (co-PI) et al. UF-PBGI, \$120,000.00
- 6. Rios, Resende M.F.R. (co-PI) et al. UF-PBGI, \$120,000.00

PUBLICATIONS

Total: 36 Citations: 1244 H-index: 18 I10-index: 22 Patents: 4

Selected publications:

1. Ferrão L.F.V, Marinho C., Munoz P., RESENDE M.F.R., Integration of Dominance and Marker x Environment Interactions into Maize Genomic Prediction Models. bioRxiv, 2018.

- Sousa T.V., Caixeta E.T., Alkimim E.R., Oliveira A.C.B., Pereira A.A., Sakiyama N.S., <u>RESENDE M.F.R.</u>, Zambolim L. Population structure and genetic diversity of coffee progenies revealed by genome-wide SNP marker. *Tree Genetics and Genomics* 13:124. 2017.
- Muller, B., Neves, L.G., Filho, J.A., <u>RESENDE M.F.R.</u>, et. al. Genomic prediction of growth traits in breeding populations of Eucalyptus benthamii and E. pellita and a contrast to genome-wide association in explaining heritable variation. *BMC genomics* 18 (1), 524. 2017.
- 4. Tieman, D.M., Zhu, G., <u>RESENDE M.F.R.</u>, Nguyen, C., Bies, D., Rambla, J.L., Beltran, K.S.O, Taylor, M., Zhang, B., Ikeda, H., Liu, Z., Fisher, J., Monforte, A., Zamir, D., Granell, A., Kirst, M., Huang, S., Klee, H.J. A genetic roadmap to improved tomato flavor. *Science* 355 (6323), 391-394. 201
- Fahrenkrog, A.M., Neves, L.G., <u>RESENDE M.F.R.</u>, Vazquez, A.I., de los Campos, G., Dervinis, C., Sykes, R., Davis, M., Davenport, R., Barbazuk, W., Kirst, M. Genome-wide association study reveals putative regulators of bioenergy traits in Populus deltoides. DOI: 10.1111/nph.14154. *New Phytologist*, 2017.
- Amadeu, R., Cellon, C., Olmstead J., Garcia, A., <u>RESENDE M.F.R.</u>, Munoz, P. AGHmatrix: R package to construct relationship matrices for autotetraploid and diploid species, a Blueberry Example. DOI: 103835/plantgenome2016.01.0009. *The Plant Genome*, 2016.
- Song, J., Yang, X., <u>RESENDE M.F.R.</u>, Neves, L.G., Todd, J., Zhang, J., Comstock, J., Wang, J. Natural allelic variation in the germplasm of highly polyploid sugarcane. DOI: 10.3389/fpls.2016.00804. Frontiers in Plant Science, 2016.
- 8. Vazquez, A., Veturi, Y., Behring, M., Shrestha, S., Kirst, M., <u>RESENDE M.F.R.</u>, de los Campos, G. Increased Proportion of Variance Explained and Prediction Accuracy of Survival of Breast Cancer Patients with use of Whole-Genome Multi-Omic Profiles. DOI: 10.1534/genetics.115.185181, *Genetics*, 2016.
- Raposo F.A., Neves L.G., <u>RESENDE M.F.R.</u>, Mobili F., Miyaki C.Y., Pellegrino K.C.M., Biondo C. Ultraconserved elements sequencing as a low-cost source of complete mitochondrial genomes and microsatellite markers in non-model amniotes. *PLoS ONE* 10: e0138446, 2015.
- 10. <u>RESENDE M.F.R.</u>, Munoz P., Resende M.D.V., Garrick D.J., Fernando R.L., Davis J.M., Jokela E.J., Martin T.A., Peter G.F., Kirst M. Accuracy of genomic selection methods in a standard data set of loblolly pine (*Pinus taeda L.*). *Genetics*, 190: 1503–1510, 2012.

OTHER ACTIVITIES OF DISTINCTION

- 1. Chair/organizer of the symposium "Phenotype prediction using genomic data" (2013-2019) that happens annually at University of Florida with over 500 attendees every year
- 2. Co-leading the efforts to establish a Ph.D. program in Plant Breeding at UF
- 3. Faculty advisor of the Plant Science Council graduate student organization.
- 4. Associate editor Crop Science Journal
- 5. Young Entrepreneur: Award granted by the State of Florida and Governor Rick Scott.
- 6. Utility patent recognition: 9th Annual UF/IFAS FAES Awards Ceremony.

- 7. Currently mentoring 3 UF graduate students, 4 visiting Ph.D. student, 2 post-docs and 1 undergrad
- 8. Carrying extension work with multiple sweet corn growers in Florida
- 9. Invited to sit on 2 grant review panels (DOE and USDA-AFRI).
- 10. Invited to give talks in multiple meetings including international conferences.

ESTEBAN FERNANDO RIOS, Ph.D.

Assistant Professor, Forage Breeding and Genetics
Agronomy Department
University of Florida, Institute of Food and Agricultural Sciences
2005 SW 23rd Street, Bldg 350, Gainesville, FL 32608
352-301-2244, estebanrios@ufl.edu

EDUCATION

Ph.D. 2016. Agronomy, University of Florida (UF). Area: Forage Breeding.

M.S. 2013. Agronomy, UF. Area: Forage and Turfgrass Breeding.

B.S. 2010. Agronomy Engineer, Universidad Nacional del Nordeste (UNNE), Argentina.

RESEARCH PORTFOLIO (*undergraduate and ^graduate student under my supervision)

Refereed publications

- 1. ^Minski da Motta E., et al., and E. Rios. Nutritive value and forage production in *Paspalum* interspecific hybrids. *Under review: Chilean J. Agri. Res.*
- 2. Rios, E., et al. Genetic Parameters for Agronomic and Morphological Traits in Annual Ryegrass (*Lolium multiflorum* Lam.). 2019. *Crop Sci. doi:10.2135/cropsci2019.02.0126*.
- 3. Rios, E., et al. Management Practices for Improving Seed Production in Turf and Forage Type Bahiagrass (*Paspalum notatum* Flügge). *Under review: Crop Sci.*
- 4. *Pereira, M., E. Rios, et al. 2017. Comparisons of Turf-Type Bahiagrass for Root and Shoot Parameters Under Various Nitrogen Regimes. *Int. Turfgrass Soc. Res. J.* 13:1–11.
- 5. Rios, E., K. et al. 2017. Breeding Apomictic Bahiagrass (*Paspalum notatum* Flügge) with Improved Turf Traits. *Plant Breeding* 136:253–260.
- 6. Rios, E., K. Kenworthy and P. Munoz. 2015. Association of Phenotypic Traits with Ploidy and Genome Size in Annual Ryegrass. *Crop Sci.* 55:2078-2090.
- 7. Rios, E., et al. 2015. Ergot resistant tetraploid bahiagrass and fungicide effects on seed yield and quality. *Plant Health Progress* 16, 56-62.
- 8. Zilli, A.L., E.A. Brugnoli, F. Marcón, M.B. Billa, E.F. Rios, et al. Acuña 2015. Heterosis and Expressivity of Apospory in Tetraploid Bahiagrass Hybrids. *Crop Sci*. 55:1189–1201.
- 9. Rios E.; Blount A.; Kenworthy K.; Acuña C.; Quesenberry K. 2013. Seasonal expression of apospory in bahiagrass. *Tropical Grasslands–Forrajes Tropicales* 1:116–118.
- 10. Rios, E., et al. 2013. Root and Shoot Characterization of Mutant Turf-Type Bahiagrass. *Int. Turfgrass Soc. Res. J.* Volume 12.

Book chapter

1. Sollenberger, L., et al., and **E. F. Rios**. 2019. Warm-Season Grasses for Humid Areas. Forages: The Science of Grassland Agriculture (7th Edition). *In press*.

Most recent oral presentations (*invited speaker)

- 1. *X Brazilian Plant Breeding Congress, July 2019, Aguas de Lindoia, Sao Paulo, Brazil.
- 2. International Forage and Turf Breeding Conference. March 24-27 2019, Orlando, FL, USA.
- 3. *XXII Int. Symposium in Genetics and Plant Breeding, November 2018, Lavras, Brazil.
- 4. *INERA, June 2018, Bobo-Diulasso, Burkina Faso.
- 5. North America Alfalfa Improvement Conference, June 2018, Logan, UT.
- 6. *Instituto de Botanica del Nordeste, February 2017, Corrientes, Argentina.
- 7. *Universidad Autonoma de Chapingo, 2017, Texcoco, Mexico.

GRANTS

- 1. Bill & Melinda Gates Foundation/UF LSIL. Investigator, 2018-2022. (\$8,742,893).
- 2. USAID-AREA Project. Co-PI, 2017-2019 (\$45,579.24, out of \$7,510,829).
- 3. USDA-AFRP. Co-PI, 2017-2019 (\$34,000, out of \$250,000).
- 4. USDA-SARE. Co-PI, 2017-2019 (\$19,695, out of \$205,138).
- Corteva. UF Plant Science Symposia 2016 to 2019 (\$32,000).
- 6. Florida Cattle Enhancement Board. PI, 2016-2020 (\$175,000).
- 7. UF-IFAS Plant Molecular Breeding Initiative. PI, 2019-2022 (\$120,000).
- 8. Florida Milk-Checkoff Program. Pl, 2018-2020 (\$42,000).
- 9. UF-IFAS Office of Research Young Breeder Equipment Funds. PI, 2017 (\$35,901).
- 10. UF-IFAS Office of Research. PI, 2017 (\$31,153).

AWARDS AND HONORS (*undergraduate under my supervision)

- *Best poster presentation: Maryjo Valle. Undergraduate research competition at the Southern Branch ASA Annual Meeting, February 2018, Jacksonville, Florida.
- 2016-17 Best dissertation Award, Agronomy Department, UF (Jan 2017).
- Jimmy G. Cheek Medal of Excellence (2016).
- UF Outstanding Graduate Student Award, UF Graduate Student Council (2016).
- UF/IFAS Dean for Research, 2016 High Impact Research Publication.

LEADERSHIP, INVOLVEMENT AND PROFESSIONAL SERVICE

- Faculty advisor: Agronomy Graduate Student Association and the UF Plant Science Council.
- Crop Science Society of America C6 division session moderator: R.F. Barnes Ph.D. Oral Contest

and Graduate Student Poster Session during the 2017 Annual Meeting, Tampa, FL.

- Associate Editor of the Brazilian Journal of Animal Science.
- Ad hoc reviewer for Crop Science, Agronomy Journal, Theoretical and Applied Genetics,
 Industrial Crops and Products, Canadian Journal of Plant Science.

TEACHING AND MENTORING

I teach three graduate-level courses and I have mentored 26 students. My areas of expertise and instruction are genetics, plant breeding and experimental designs.

Average teaching evaluation scores across all classes and sections (3 classes, 7 sections)

| | Question | Fall_2017 | Spring_2018 | Fall_2018 | Mean |
|----|---|-----------|-------------|-----------|------|
| 1 | Description of course objectives and assignments | 4.73 | 4.93 | 4.31 | 4.66 |
| 2 | Communication of ideas and information | 4.45 | 4.86 | 4.37 | 4.56 |
| 3 | Expression of expectations for performance in this class | 4.64 | 4.93 | 4.41 | 4.66 |
| 4 | Availability to assist students in or out of class | 5.00 | 5.00 | 4.60 | 4.87 |
| 5 | Respect and concern for students | 5.00 | 4.93 | 4.94 | 4.96 |
| 6 | Stimulation of interest in course | 4.82 | 4.93 | 4.69 | 4.81 |
| 7 | Facilitation of learning | 4.73 | 4.93 | 4.34 | 4.67 |
| 8 | Enthusiasm for the subject | 4.82 | 5.00 | 4.84 | 4.89 |
| 9 | Encouragement of independent, creative, & critical thinking | 4.82 | 4.86 | 4.84 | 4.84 |
| 10 | Overall rating of the instructor | 4.73 | 5.00 | 4.69 | 4.81 |

Number of students and mentees (numbers in parenthesis indicate degree completion)

| Role | Degree and number of students |
|------------------|---|
| Chair | PhD: 1; MS: 3 (2) |
| Co-Chair | PhD: 1; MS 2 |
| Committee member | PhD: 2; MS: 5 (2) |
| Mentor | Postdoctoral researcher: 2; Visiting students: 9 (1); Undergraduates: 5 |

HARDEV S. SANDHU, Ph.D.

Assistant Professor Agronomy Department

Everglades Research and Education Center (EREC)
University of Florida, Institute of Food and Agricultural Sciences
Belle Glade, FL 33430

Phone: 561-993-1567, Fax: 561-993-1582

Email: hsandhu@ufl.edu

Website: https://erec.ifas.ufl.edu/faculty/sandhu/

EDUCATION

B. Sc., Agriculture, Punjab Agricultural University, Ludhiana, India
 M. Sc., Entomology, Punjab Agricultural University, Ludhiana, India

2010 Ph.D., Entomology, University of Florida, Gainesville, FL

PROFESSIONAL EXPERIENCE

2014-present Assistant Professor, Agronomy Department, EREC, UF-IFAS, Belle Glade, FL 2010-2014 Post-Doctoral Research Associate, Agronomy, EREC, UF-IFAS, Belle Glade, FL

2006-2010 Graduate Research Assistant, EREC, UF-IFAS, Belle Glade, FL

SELECTED AWARDS

 2017 American Society of Agronomy (ASA) Early Career Award - This award is presented annually by ASA to recognize individuals who have made an outstanding contribution in agronomy within seven years of completing their final degree.

• 2017 Seymour Webber Extension Award –UF-IFAS award for outstanding contribution in extension.

SELECTED GRANTS

| PI/Co-PI | Funding agency | Total amount | Title of the project |
|----------|-------------------|--------------|--|
| | | (2014-2019) | |
| PI | Florida Sugarcane | \$711,000 | Genetic improvement and agronomic |
| | League | | evaluation of sugarcane |
| | | | |
| Co-PI | DOE | \$195,049 | Discovering the desirable alleles contributing |
| | | | to the lignocellulosic biomass traits in |
| | | | Saccharum germplasm collections for energy |
| | | | cane improvement |
| PI | BP Biofuels LLC | \$382,395 | Saccharum Breeding, Evaluation, and |
| | | | Development of Energy Cane for Bio-Fuel |
| | | | Production |

SUMMARY OF RESEARCH ACCOMPLISHMENTS

| Book chapters | 1 |
|--|------------------------|
| Refereed research publications | 71 |
| Published abstracts | 40 |
| Non-refereed publications/Trade journal articles | 60 |
| Graduate students-Chair | 7 (4 Ph.D., 3 Masters) |
| Sugarcane cultivar released | 34 |

SELECTED REFEREED PUBLICATIONS: g = Graduate student

- 1. **Sandhu, H.S.**, M.P. Singh and M. Vuyyuru^g. 2019. Minimum or no-tillage improves sugarcane ration yield on Florida Histosol. *Agron. J.* 111: 1516-1523.
- 2. Vuyyuru, M^g., **H.S. Sandhu,** J. M. McCray and R.N. Raid. 2018. Effects of soil fungicides on sugarcane root and shoot growth, rhizosphere microbial communities and nutrient uptake. *Agronomy*, DOI: 10.3390/agronomy8100223 (online).
- 3. Migneault, A.^g, **H.S. Sandhu**, P. McCord, D. Zhao, and J. Erickson. 2018. Albinism in sugarcane: Significance, research gaps and potential future research developments. *Sugar Tech*. DOI 10.1007/s12355-018-0668-1 (online)
- 4. Zhang, J., P. Wang, X. Wang, **H.S. Sandhu**, and Y. Wang. 2018. Enhancement of sucrose metabolism in Clostridium *saccharoperbutylacetonicum* N1-4 through metabolic engineering for improved acetone—butanol—ethanol (ABE) fermentation. *Biores. Technol.* 270: 430-438.
- 5. **Sandhu, H.S.**, P. McCord, D. Zhao, J. Comstock, et al. 2018. Registration of 'CP 09-1822' Sugarcane. *J. Plant Reg.* 12: 333-339.
- 6. Karounos, M.^g, R. Cherry, **H. Sandhu**, and C. Odero. 2018. Feeding behavior of wireworms, *Melanotus communis* (Coleopltera: Elateridae) in southern Florida sugarcane. *J. Entomol. Sci.* 53: 242-250.
- 7. **Sandhu, H.S.**, M.P. Singh, R.A. Gilbert, et al. 2017. Harvest management effects on sugarcane ratoon growth, yield and nutrient cycling in Florida and Costa Rica. *Field Crops Res.* 214: 253-260.
- 8. **Sandhu, H.S.**, P. McCord, J.C. Comstock, et al. 2016. Registration of 'CP 07-2137' Sugarcane. *J. Plant. Reg.* 10: 265-270.
- 9. Shi, P., **H.S. Sandhu**, and G.P. Reddy. 2016. Dispersal distance determines the exponent of the spatial Taylor's power law. *Ecol Modell*. 335: 48-53.
- 10. **Sandhu, H. S.**, R. A. Gilbert, J. C. Comstock, et al. 2015. Registration of 'UFCP 74-1010' sugarcane. *J. Plant. Reg.* 9: 179-184.
- 11. **Sandhu, H. S.,** B. S. Glaz, S. J. Edmé, et al. 2014. Registration of 'CPCL 02-6848' sugarcane. *J. Plant. Reg.* 8: 155-161.
- 12. **Sandhu, H. S.**, R. A. Gilbert, G. Kingston, et al. 2013. Effects of sugarcane harvest method on microclimate in Florida and Costa Rica. *Agr. Forest Meteorol.* 177: 101-109.
- 13. **Sandhu, H. S.**, G. S. Nuessly, R. H. Cherry, et al. 2011. Effects of *Elasmopalpus lignosellus* (Lepidopter: Pyralidae) damage on sugarcane yield. *J. Econ. Entomol.* 104: 474-483.
- 14. **Sandhu, H. S.**, G. S. Nuessly, R. H. Cherry, et al. 2011. Effects of harvest residue and tillage on lesser cornstalk borer (Lepidoptera: Pyralidae) damage to sugarcane. *J. Econ. Entomol.* 104: 155-163.
- 15. **Sandhu, H. S.**, G. S. Nuessly, S. E. Webb, et al. 2010. Temperature-dependent development of *Elasmopalpus lignosellus* (Lepidoptera: Pyralidae) on sugarcane under laboratory conditions. *Environ. Entomol.* 39: 1012-1020.

SELECTED PROFESSIONAL ACTIVITIES

- Associate Editor, Agronomy Journal (2019-2022)
- Leader, Bioenergy Systems Community, Annual meetings of ASA, CSSA and SSSA, 2016, Phoenix.
- Program Chair, Joint American Society of Sugar Cane Technologists (ASSCT) meeting, June-2016, St. Petersburgh, FL.
- Committee member, Agronomy section of the Agriculture Commission, International Society of Sugar Cane Technologists (ISSCT), 2015-present.
- Member, IFAS Cultivar Release Advisory Committee, 2014-present.
- Member, UF Sustainability Committee, 2017-2019.

GERMÁN V. SANDOYA-MIRANDA, Ph.D.

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EDUCATION AND PROFESSIONAL EXPERIENCE

| University of California, Davis. The Genome | Assistant Project | 11/2013 - 09/2016 |
|---|----------------------|-----------------------------------|
| Center and Department of Plant Science | Scientist IV | Dr. Richard Michelmore, advisor |
| University of California, Davis. The Genome | Postdoctoral | 11/2011 – 10/2013 |
| Center and Department of Plant Science | Research | Dr. Richard Michelmore, advisor |
| The Pennsylvania State University | Postdoctoral Scholar | 01/2011 – 10/2011 |
| | | Dr. Marcia Buanafina, advisor |
| The Pennsylvania State University | Postdoctoral Scholar | 11/2008 – 12/2010 |
| | | Dr. Dawn Luthe, advisor |
| University of Vigo, CSIC | Ph.D. degree | 06/2004 – 05/2008 |
| | | Drs. Rosa Malvar and Ana Butron |
| Mediterranean Agronomic Institute of | Master of Science | 09/2002 – 05/2004 |
| Saragossa - CIHEAM | degree | Drs. Amando Ordas and Rosa Malvar |

APPOINTMENTS

October 2016-Present: Assistant Professor in Lettuce Breeding and Genetics, Everglades Research and Education Center/ Horticultural Sciences Department, University of Florida, Gainesville, FL

FIVE SELECT RECENT PUBLICATIONS

<u>G. Sandoya</u>, B. Maisoneuve, M.J. Truco, C. T. Bull, I. Simko, M. Trent, R.J. Hayes, R.W. Michelmore. 2019. Genetic analysis of resistance to bacterial leaf spot in the heirloom lettuce cultivar Reine des Glaces. Molecular Breeding (in press)

Hayes, R. **G. Sandoya**, B. Mou, I. Simko, K. Subbarao. 2018. Release of three iceberg lettuce populations with combined resistance to two soil borne diseases. HortScience 53:247-250.

Sandoya, G., K.V. Subbarao, R.J. Hayes. 2017. Delayed wilt symptoms caused by *Verticillium dahliae* as a resistance characteristic in iceberg lettuce (*Lactuca sativa*). HortScience 52: 513-519.

<u>Sandoya, G.,</u> S. Gurunj, D. Short, K.V., Subbarao, R. Michelmore, R.J. Hayes. 2017. Genetics of resistance in lettuce to races 1 and 2 of *Verticillium dahliae* from different host species. Euphytica 21: 3-20.

Lafta A., T. Turini, <u>G. Sandoya</u>, B. Mou. 2017. Field evaluation of green and red leaf lettuce genotypes in the Imperial, San Joaquin, and Salinas Valleys of California for heat tolerance and extension of the growing seasons. HortScience 52:40-48.

FIVE ADDITIONAL PUBLICATIONS OF NOTE

Gurung, S., D. Short, X. P. Hu, <u>G.V. Sandoya</u>, R.J. Hayes, K.V. Subbarao. 2015. Screening of cultivated and wild *Capsicum* germplasm reveals new sources of Verticillium wilt resistance. Plant Disease 99: 1404-1409.

Hu, X. P., S. Gurung, D.P.G. Short, W. Shang, <u>G.V. Sandoya</u>, K.V. Subbarao. 2015. Defoliating and non-defoliating strains of *Verticillium dahliae* from cotton show high affinity with races 1 and 2 from lettuce. Plant Disease 99:1173-1720.

Gurung, S., D.P.G. Short, **G.V. Sandoya**, R.J. Hayes, S. Koike, K. V. Subbarao. 2015. Host range of *Verticillium isaacii* and *V. klebahnii* from spinach and lettuce. Plant Disease 99: 933-938.

Short, D.P.G., <u>G. Sandoya</u>, G.E. Vallad, B. Wu, S. Gurung, C. Xiao, S.T. Koike, R.J. Hayes, K.V. Subbarao. 2015. Dynamics of *Verticillium dahliae* microesclerotia following flooding, fumigation, and different crop patterns. Phytopathology 105: 638-645.

Novakazi, F., P. Inderbitzin, <u>G. Sandoya</u>, R.J. Hayes, A. von. Tiedemann, K.V. Subbarao. 2015. The three lineages of the diploid hybrid *Verticillium longisporum* differ in virulence and pathogenicity. Phytopathology 105: 662-673.

AWARDS AND HONORS

2017. Early Career Grant Dean of Research. University of Florida, IFAS

SYNERGISTIC ACTIVITIES

- **1. Graduate & Postdoc Mentoring.** I have mentored one postdoc and three graduate students which two are Ph.D.'s and one masters. I also supervise undergraduate, high school and international visiting scholars' students.
- **2. Communications.** I talk at different stakeholder venues such as the Florida Seed Association, Florida Foundation for Seed Producers, the Florida Lettuce Advisory Committee among others.
- **3.** Community Building. I was one of two main coordinators of the Strawberry Genome Sequencing Consortium that published the genome in 2011. I was elected Chair of the Rosaceae Genetics Genomics and Breeding Executive Committee in 2007 and was elected to the committee from 2005-2008; 2010-2013. My position as a Department Chairman (2012-2018) allowed many opportunities to connect researchers, students, growers and industry statewide.
- **4. Outreach.** I host local high school students in Palma Beach County and offer mentoring in projects for these students nationwide when asked.
- **5. Service to Discipline.** Reviewer for Journals such as HortScience, Journal of Horticulture, Theoretical and Applied Genetics and Euphytica.

BARRY L. TILLMAN, Ph.D.

Professor

Agronomy Department

North Florida Research and Education Center
University of Florida, Institute of Food and Agricultural Sciences

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https://nfrec.ifas.ufl.edu/faculty-directory/barry-tillman/

EDUCATION

| 1994 | Ph.D., | Louisiana State University, Baton Rouge, LA |
|------|--------|---|
| 1991 | M.S., | Louisiana State University, Baton Rouge, LA |
| 1986 | B.S., | Auburn University, Auburn, AL |

| ACADEMIC/PROFESSIONAL APPOINTMENTS | | | | |
|------------------------------------|---|--|--|--|
| 7/1- present | Professor - (75% Research, 15% Extension); North Florida Research and Education Center, Agronomy Department, University of Florida | | | |
| 3/17-present | Assistant Center Director- (10% administrative) North Florida Research and Education Center, Agronomy Department, University of Florida | | | |
| 7/10-6/18 | Associate Professor- Peanut Breeding and Genetics (80% Research, 20% Extension); North Florida Research and Education Center, Agronomy Department, University of Florida | | | |
| 2/04- 6/10 | Assistant Professor- Peanut Breeding and Genetics (75% Research, 20% Extension; North Florida Research and Education Center, Agronomy Department, University of Florida | | | |
| 06/97-02/04 | Hybrid Rice Breeder- 2-Line Program Leader (100% Research); RiceTec, Inc., Alvin, Texas | | | |
| 03/95-06-97 | Assistant Research Scientist (100% Research); Beaumont Research and Education | | | |

Center, Department of Soil and Crop Sciences, Texas A&M University

PUBLICATIONS AND INTELLECUTAL PROPERTY

UNITED STATES PATENTS

- Tillman, Barry L. and Daniel W. Gorbet. May 15, 2012. Peanut Cultivar UFT113. United States Patent 8178752.
- Sarreal, Eugenio S., Tillman, Barry L., and Ibrahim, Yahia Hassan. January 5, 2010. Rice hybrid XL729. United States Patent 07642435.
- Sarreal, Eugenio S. and Tillman, Barry L. February 3, 2009. Rice hybrid XP316M. United States Patent 7485784.
- Sarreal, Eugenio S. and Tillman, Barry L. April 1, 2008. Inbred rice line 053002. United States Patent 7351891.
- Sarreal, Eugenio S. and Tillman, Barry L. April 1, 2008. Inbred rice line 054001. United States Patent Application 7351892.
- Sarreal, Eugenio S. and Tillman, Barry L. April 1, 2008. Inbred rice line 053001. United States Patent Application 7351893.

- Sarreal, Eugenio S. and Tillman, Barry L. December 4, 2007. Rice hybrid XL723. United States Patent 7304223.
- Sarreal, Eugenio S. and Tillman, Barry L. November 27, 2007. Rice hybrid XL730. United States Patent 7301083.
- Tillman, Barry L. and Sarreal, Eugenio S. April 26, 2005. Rice hybrid RH101. United States Patent 6884931.
- Tillman, Barry L. and Sarreal, Eugenio S. June 3, 2004. Rice hybrid RH102. United States Patent 7005567.
- Tillman, Barry L. September 30, 2003. Rice hybrid RH103. United States Patent 6953881.

CULTIVAR RELEASES AND PLANT VARIETY PROTECTION CERTIFICATES

Release of peanut cultivar- Walton (2018), Developer, Joint release with Dr. Maria Balota, Virginia Tech University.

Release of peanut cultivar- FloRun™ '331' (2016), Developer, (PVP pending- 201700120)

Release of peanut cultivar- FloRun[™] '157' (2015), Developer, (PVP pending)

Release of peanut cultivar-TUFRunner™ '297' (2014), Developer, (PVP 201500201)

Release of peanut cultivar- TUFRunnerTM '511' (2013), Co-developer, (PVP 201400249)

Release of peanut cultivar- Spain (2012), Co-developer, (PVP 201200394)

Release of peanut cultivar- Florida EPTM '113' (2011), Co-developer, (Patented)

Release of peanut cultivar- TUFRunnerTM '727' (2011), Co-developer, (PVP 201300199)

Release of peanut cultivar- FlorRun[™] '107' (2010), Co-developer. (PVP 201100459)

Release of peanut cultivar- Florida Fancy (2007), Co-developer. (PVP 200800231)

Release of peanut cultivar- AP-4 (2007), Co-developer. (PVP 200800158)

Release of peanut cultivar- York (2006), Co-developer. (PVP 200800186)

Release of peanut cultivar- McCloud (2006), Co-developer. (PVP pending)

Release of peanut cultivar- Florida-07 (2006), Co-developer. (PVP 200800069)

PUBLICATIONS

- Racette, K.A., D.L. Rowland, B.L., Tillman, J. Erickson, P. Munoz, W. Vermeris. 2019. Transgenerational stress memory in seed and seedling vigor of peanut (Arachis hypogaea L.) varies by genotype. Environmental and Experimental Botany 162:541-549.
- Power, I.L., Tillman, B.L., Brenneman, T.B., Kemerait, R.C., Stevenson, K., and Culbreath, A.K. 2019. Field resistance and components of peanut rust resistance of newly developed breeding lines. *Peanut Science* 46:22-36.
- Tillman, B.L. and J.L. McKinney. 2018. Relationships among symptoms of spotted wilt disease of peanut (Arachis hypogaea L.) and their potential impact on crop productivity and resistance breeding. Plant Breeding 137:757-762.
- Tseng, Y-C., B.L. Tillman, S.A. Gezan, J. Wang, and D.L. Rowland. 2018. Heritability of spotted wilt resistance in a Florida-EP[™] '113' derived peanut (*Arachis hypogaea*) population. Plant Breeding. 137:614–620. DOI: 10.1111/pbr.12610
- Zurweller, B.A., A. Xavier, B.L. Tillman, J.R. Mahan, P.R. Payton, N. Puppala, and D.L. Rowland. 2018. Pod yield performance and stability of peanut genotypes under differing soil water and regional conditions, Journal of Crop Improvement, DOI: 10.1080/15427528.2018.1458674.

- Colvin, B.C., Yu-Chien Tseng, B.L. Tillman, D.L. Rowland, J.E. Erickson, A.K. Culbreath, and J.A. Ferrell. 2018. Consideration of peg strength and disease severity in the decision to harvest peanut in southeastern USA. Journal of Crop Improvement. 32:287-304. DOI: 10.1080/15427528.2017.1422073.
- Tillman, B.L. 2017. Registration of TUFRunnerTM '297'. J. of Plant Reg. DOI:10.3198/jpr2017.02.0007crc.
- Carter, E.T., Rowland, D.L., Tillman, B.L., Erickson, J.E., Grey, T.L., Gillett-Kaufman, J.L., Clark, M.W. 2017. Pod Maturity in the Shelling Process. Peanut Science. 44:26–34.
- Tillman, B.L. and D.W. Gorbet. 2017. Registration of TUFRunnerTM '511'. J. of Plant Reg. 11:235–239. doi:10.3198/jpr2016.11.0064crc.
- McKinney, J.L. and B.L. Tillman. 2017. Spotted wilt in peanut (Arachis hypogaea L.) as impacted by genotype resistance, planting date and plant population. Crop Sci. 57:1-7. doi: 10.2135/cropsci2016.05.0368.
- Tseng, YC, B.L. Tillman, Z. Peng, and J.P. Wang. 2016. Identification of major QTLs underlying tomato spotted wilt virus resistance in peanut cultivar Florida-EP (TM) '113'. BMC Genetics 17:128. DOI 10.1186/s12863-016-0435-9.
- Culbreath, A.K., A.C. Selph, B.W. Williams, R.C. Kemerait Jr., R. Srinivasan, M.R. Abney, B.L. Tillman, C.C. Holbrook, and W.D. Branch. 2016. Effects of new field resistant cultivars and in-furrow applications of phorate insecticide on tomato spotted wilt of peanut. Crop Protection 81:70-75.
- Ze, Peng, M. Gallo, B.L. Tillman, D. Rowland, and J. Wang. 2015. Molecular marker development from transcript sequences and germplasm evaluation for cultivated peanut (Arachis hypogaea L.). MGAG 291:363-381.
- Leon, R.G. and B.L. Tillman. 2015. Postemergence herbicide tolerance variation in peanut germplasm. Weed Science 63:546-554.
- Tillman, B.L. and D.W. Gorbet. 2015. Registration of FloRunTM '107'. Journal of Plant Registrations 9(2):162-167.
- Thornton, S.T., M. Gallo, and B.L. Tillman. 2015. Genotypic variability in calcium concentration of peanut (Arachis hypogaea L.) seeds. Crop Science 55: 211-218. doi:10.2135/cropsci2014.04.0302.
- Chamberlin, K., N.L. Barkley, B.L. Tillman, J. Dillwith, R. Madden, M. Payton, and R. Bennett. 2014. A comparison of methods used to determine the oleic/linoleic acid ratio in cultivated peanut (Arachis hypogaea L.). Agricultural Sciences 5(3):227-237.
- Phan-Thien, K.Y., G.C. Wright, B.L. Tillman, and N.A Lee. 2014. Peanut Antioxidants: Part 1. Genotypic Variation and Genotype-by-Environment Interaction in Antioxidant Capacity of Raw Kernels. LWT Food Science and Technology 57:306-311.
- Narh, S., K.J. Boote, J.B. Naab, M.Abudulai, Z.M. Bertin, P. Sankara, M.D. Burow, B.L. Tillman, R.L. Brandenburg, and D.L. Jordan. 2014. Environment Analyses of Peanut Cultivars in Multilocation Trials in West Africa. Crop Sci. 54:2413–2422.

VANCE M. WHITAKER, Ph.D.

Associate Professor
Horticultural Sciences Department
Gulf Coast Research and Education Center
University of Florida, Institute of Food and Agricultural Sciences
14625 CR 672, Wimauma, FL 33598
vwhitaker@ufl.edu, (813) 419-6608
https://gcrec.ifas.ufl.edu/gcrec-facultystaff-directory/vance-whitaker/

EDUCATION

Ph.D. (2009) Plant Breeding and Molecular Genetics, Univ. of Minnesota, St. Paul, MN M.S. (2006) Plant Breeding and Molecular Genetics, Univ. of Minnesota, St. Paul, MN B.S. (2003) Horticultural Science, North Carolina State University, Raleigh, NC B.S. (2003) Agricultural Economics, North Carolina State University, Raleigh, NC

PROFESSIONAL APPOINTMENTS

June 2015 to Present. Associate Professor, University of Florida, Institute of Food and Agricultural Sciences, Gulf Coast Research and Education Center, Balm, FL. I direct the strawberry breeding program at UF which is focused on genetic improvement of strawberries for annual production systems, release and commercialization of cultivars, and extension of knowledge and resources to growers (80% research, 20% extension).

August 2009 to June 2015. Assistant Professor, University of Florida, Gulf Coast Research and Education Center, Balm, FL.

April 2009 to August 2009. Post-doctoral Research Fellow, Department of Horticultural Science, University of Minnesota, St. Paul, MN. Inheritance and molecular marker analyses of race-specific black spot resistances in tetraploid rose.

SYNERGISTIC PROFESSIONAL ACTIVITIES

Member, RosEXEC: Committee for Coordination of Rosaceae Genetics and Genomics in U.S. (elected) Executive Committee Member and Statistical Genetics Team Lead, USDA/NIFA RosBREED SCRI CAP 8th International Strawberry Symposium Scientific Committee 7th International Rosaceae Genomics Conference Scientific Committee

Past-President, Fruit Breeding Working Group, American Society for Horticultural Science Florida representative to the USDA/CSREES Regional Project NCCC 212: Small Fruit Research Member, USDA Crop Germplasm Committee for Small Fruits

Secretary, UF/IFAS Plant Breeders Working Group and Member, UF/IFAS Tomato and Blueberry Cultivar Release Advisory Committees

HONORS AND AWARDS

UF/IFAS Richard Jones Outstanding New Researcher Award (2013) UF Term Professorship (2018-2020)

PATENTS AWARDED AND PENDING

'Florida Brilliance' Strawberry (Released 2017, U.S. Plant Patent Pending)
'Florida Beauty' Strawberry (Released 2016, U.S. Plant Patent Pending)
Sweet Sensation® 'Florida127' Strawberry (U.S. PP25,574 P3)
Compositions and methods for modifying perceptions of sweet taste (U.S. Patent 20130280400)

GRADUATE STUDENTS ADVISED

| Degree | Role | Students | Total |
|--------|----------|---|-------|
| PhD | Chair | Kennedy ('13), Mangandi ('15), Salinas* ('19), Fan* ('22) | 4 |
| | Co-Chair | Chambers ('14), Torres ('16), Barbey ('18), Tapia ('21), Kim ('22) | 5 |
| MS | Chair | Perez ('13), Roach ('15), Nelson ('18) | 3 |
| | Co-Chair | Anciro ('17) | 1 |

TOTAL 13

Publications and Abstracts Key: Senior/Corresponding Author(s) = underline; Graduate Student = g; Biological Scientist = b; Postdoc = p; Research Coordinator = r; Visiting Scholar = vs

REFEREED JOURNAL PUBLICATIONS

- Noh, Y.H., Y. Oh, J. Mangandi^g, S. Verma^b, J.D. Zurn, Y.T. Lu, Z. Fan, N. Bassil, N. Peres, G. Cole, C. Acharya, R. Famula, S. Knapp, **V.M. Whitaker** and <u>S. Lee</u>. 2018. High-throughput marker assays for FaRPc2-mediated resistance to Phytophthora crown rot in octoploid strawberry. Molecular Breeding 38:104
- Anciro, A.^g, J. Mangandi^g, S. Verma^b, N. Peres, <u>V.M. Whitaker</u> and <u>S. Lee</u>. 2018. *FaRCg1*: a quantitative trait locus conferring resistance to Colletotrichum crown rot caused by *Colletotrichum gloeosporioides* in octoploid strawberry. Theoretical and Applied Genetics https://doi.org/10.1007/s00122-018-3145-z
- Mramba, L., G.F. Peter, **V.M. Whitaker** and <u>S. Gezan</u>. 2018. Generating improved experimental designs with spatially and genetically correlated observations using mixed models. Agronomy 8:40.
- Mangandi, J.^g, S. Verma^b, L. Osorio^b, N.A. Peres, E. van de Weg and <u>V.M. Whitaker</u>. 2017. Pedigree-based analysis in a multiparental population of octoploid strawberry reveals QTL alleles conferring resistance to *Phytophthora cactorum*. G3:Genes, Genomes, Genetics 7:1707-1719.
- Gezan, S., L.F. Osorio^b, S. Verma^b and <u>V.M. Whitaker</u>. 2017. An experimental validation of genomic selection in octoploid strawberry. Horticulture Research 4:16070 doi:10.1038/hortres.2016.70.
- Pillet, J., A.H. Chambers, C. Barbey, Z. Bao, A. Plotto, J. Bai, M. Schwieterman, T. Johnson, B. Harrison, V.M. Whitaker, T.A. Colquhoun and <u>K.M. Folta</u>. 2017. Identification of a methyltransferase catalyzing the final step of methyl anthranilate synthesis in cultivated strawberry. BMC Plant Biology 17:147.
- Verma, S^b, J.D. Zurn, N. Salinas^g, M.M. Mathey, B. Denoyes, J.F. Hancock, C.E. Finn, N.V. Bassil and <u>V.M.</u> <u>Whitaker</u>. 2017. Clarifying sub-genomic positions of QTLs for flowering habit and fruit quality in U.S. strawberry (*Fragaria* x *ananassa*) breeding populations using pedigree-based QTL analysis. Horticulture Research 4:17062.
- Whitaker, V.M., L.F. Osorio^b, N.A Peres, Z. Fan^b, M. Herrington, M. Cecilia do Nascimento Nunes, A. Plotto and C. Sims. 2017. 'Florida Beauty' Strawberry. HortScience 52:1443-1447.
- Noh, Y., <u>S. Lee</u>, **V.M. Whitaker**, K.R. Cearley^b and J.S. Cha. 2017. A high-throughput marker-assisted selection system combining rapid DNA extraction, high-resolution melting and simple sequence repeat analysis: Strawberry as a model for fruit crops. Journal of Berry Research 7:23-31.
- Mathey, M., S. Mookerjee, L. Mahoney, K. Gunduz, U. Rosarya, J.F. Hancock, P.J. Stewart, **V.M. Whitaker**, N.V. Bassil, T. Davis and <u>C.E. Finn</u>. 2017. Genotype by environment interactions and combining ability for strawberry families grown in diverse environments. Euphytica 213:112.

^{*}Awarded graduate school fellowships

- Roach, J.^g, S. Verma ^b, N.A. Peres, A.R. Jamieson, W.E. van de Weg, M.C.A.M. Bink, N.V. Bassil, S. Lee and **V.M. Whitaker**. 2016. *FaRXf1*: a locus conferring resistance to angular leaf spot caused by *Xanthomonas fragariae* in octoploid strawberry. Theoretical and Applied Genetics 129:1191-1201.
- Kelly, K.^g, **V.M. Whitaker** and <u>C. Nunes</u>. 2016. Physiochemical characterization and postharvest performance of the new Sensation® 'Florida127' strawberry compared to commercial standards. Scientia Horticulturae 211:283-294.
- <u>Lee, S.</u>, **V.M. Whitaker** and S.F. Hutton. 2016. Potential applications of non-host resistance for crop improvement. Frontiers in Plant Science 7:997.
- Perez, Y^g, S. Sargent, C. Nunes and <u>V.M. Whitaker</u>. 2016. Composition of commercial strawberry cultivars and advanced selections as affected by season, harvest and postharvest storage. HortScience 51:1134-1143.
- Thekke-Veetil, T., T. Ho, C. Moyer^b, **V.M. Whitaker** and <u>I.E. Tzanetakis</u>. 2016. Detection of strawberry necrotic shock virus using conventional and TaqMan[®] quantitative RT-PCR. Journal of Virological Methods 235:176-181.
- Zuzek, K., D. Zlesak, **V.M. Whitaker**, S. McNamara and <u>S.C. Hokanson</u>. 2016. Northern Accents® 'Lena', 'Ole', 'Sigrid', and 'Sven': four cold-hardy polyantha rose cultivars from the University of Minnesota Woody Landscape Plant Breeding Program. HortScience 51:296-299.
- Wu, F., <u>Z. Guan</u> and **V.M. Whitaker**. 2015. Optimizing yield distribution under economic and biological constraints: Florida strawberries as a model for perishable commodities. Agricultural Systems 141:113-120.
- Whitaker, V.M., C.K. Chandler, N.A. Peres, M.C.N. Nunes, A. Plotto and C. Sims. 2015. Sensation™ 'Florida127' Strawberry. HortScience 7:1088-1091.
- Torres-Quezada, E.A.^g, <u>L. Zotarelli</u>, **V.M. Whitaker**, B.M. Santos and I. Hernandez-Ochoa. 2015. Initial crown diameter of strawberry bare-root transplants affects early and total fruit yield. Hort Technology 25:203-208.
- Mangandi, J.^g, N.A. Peres and <u>V.M. Whitaker</u>. 2015. Identifying resistance to crown rot caused by *Colletotrichum gloeosporioides*. Plant Disease 99:954-961.
- Pillet, J., H-W Yu, A.H. Chambers ^g, **V.M. Whitaker** and <u>K.M. Folta</u>. 2015. Identification of candidate flavonoid pathway genes using transcriptome correlation network analysis in ripe strawberry (*Fragaria* ×*ananassa*) fruits. Journal of Experimental Botany doi: 10.1093/jxb/erv205.
- Bassil, N.V., T.M. Davis, H. Zhang, S. Ficklin, M. Mittmann, T. Webster, L. Mahoney, D. Wood, E.S. Alperin, U.R. Rosyara, H. Koehorst-vanc Putten, A. Monfort, D.J. Sargent, I. Amaya, B. Denoyes, L. Bianco, T. van Dijk, A. Pirani, A. Iezzoni, D. Main, C. Peace, Y. Yang, V.M. Whitaker, S. Verma^b, L. Bellon, F. Brew, R. Herrera and W.E. van de Weg. 2015. Development and preliminary evaluation of a 90 K Axiom[®] SNP array for the allo-octoploid cultivated strawberry *Fragaria* ×*ananassa*. BMC Genomics 16:155.
- Kennedy, C.K.^g, T. Hasing^b, and <u>V.M. Whitaker</u>. 2014. Characterization of *Fragaria virginiana* and *F. chiloensis* in a minimal-chill, winter annual production system. HortScience 49:848-855.
- Kennedy, C.K.^g, L.F. Osorio^r, N.A. Peres, and <u>V.M. Whitaker</u>. 2014. Additive genetic effects for resistance to foliar powdery mildew in strawberry revealed through divergent selection. Journal of the American Society for Horticultural Science 139:310-316.
- Chambers, A.H.^g, J. Pillet, A. Plotto, J. Bai, <u>V.M. Whitaker</u> and <u>K. Folta</u>. 2014. Identification of a strawberry flavor gene using an integrated genetic-genomic-analytical chemistry approach. BMC Genomics 15:217 doi:10.1186/1471-2164-15-217.
- Schwietermann, M., T. Colquhoun, E. Jaworski, L. Bartoshuk, J. Gilbert, D. Tieman, A. Odabasi, H. Moskowitz, K. Folta, H. Klee, C. Sims, **V.M. Whitaker** and <u>D. Clark</u>. 2014. Strawberry flavor: diverse chemical compositions, a seasonal influence, and effects on sensory perception. PLoS ONE 9: e88446. doi:10.1371/journal.pone.0088446.

- <u>Yue, C., R.K. Gallardo</u>, J. Luby, A. Rihn, J.R. McFerson, V. McCracken, **V.M. Whitaker**, C.E. Finn, J.F. Hancock, C. Weebadde, A. Sebolt, and A. lezzoni. 2014. An evaluation of U.S. strawberry producers trait prioritization: evidence from audience surveys. HortScience 49:188-193.
- Mathey, M., <u>C.E. Finn</u>, S. Mookerjee, K. Gunduz, J.F. Hancock, A.F. lezzoni, L.L. Mahoney, T.M. Davis, N.V. Bassil, K.E. Hummer, P.J. Stewart, **V.M. Whitaker**, D.J. Sargent, B. Denoyes, I. Amaya and W.E. van de Weg. 2013. Large-scale standardized phenotyping of strawberry in RosBREED. Journal of the American Pomological Society 67:205-216.
- Kennedy, C.K.^g, T. Hasing^b, N.A. Peres and <u>V.M. Whitaker</u>. 2013. Evaluation of strawberry species and cultivars for powdery mildew resistance in open-field and high tunnel production systems. HortScience 48:1125-1129.
- Osorio, L.F.^r, J.A. Pattison, N.A. Peres, and <u>V.M. Whitaker</u>. 2013. Genetic variation and gains in resistance of strawberry to *Colletotrichum gloeosporioides*. Phytopathology 104:67-74.
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ABSTRACTS

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TECHNICAL JOURNALS

- Seijo, T., J. Mertely, **V.M. Whitaker**, and <u>N.A. Peres</u>. 2014. Evaluation of strawberry cultivars and advanced selections for resistance to Colletotrichum crown rot caused by *Colletotrichum gloeosporioides*, 2013-14. Plant Disease Management Reports 8 (online): SMF030. The American Phytopathological Society, St. Paul, MN.
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- Seijo, T., J. Mertely, **V.M. Whitaker**, and <u>N.A. Peres</u>. 2013. Evaluation of strawberry cultivars and advanced selections for resistance to Colletotrichum crown rot caused by *Colletotrichum gloeosporioides*, 2012-13. Plant Disease Management Reports 7 (online): SMF044. The American Phytopathological Society, St. Paul, MN.
- Seijo, T., J. Mertely, **V.M. Whitaker**, and <u>N.A. Peres</u>. 2012. Evaluation of strawberry cultivars and advanced breeding selections for field resistance to anthracnose and Botrytis fruit rots, 2010-11. Plant Disease Management Reports 6 (online): SMF021. The American Phytopathological Society, St. Paul, MN.
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- <u>Whitaker, V.M.</u>, N.A. Peres and S. Agehara. 2017. 'Florida Beauty' Strawberry. HS1307. Gainesville: University of Florida, Institute of Flood and Agricultural Sciences. (https://edis.ifas.ufl.edu/pdffiles/hs/hs130700).
- <u>Whitaker, V.M.</u>, N.S. Boyd, N.A. Peres, J.W. Noling and J. Renkema. 2017. Strawberry production, pp. 293-312. In: G.E. Vallad, H.A. Smith, P.J. Dittmar and J.H. Freeman (eds.). Vegetable production handbook for Florida 2017-18. (http://edis.ifas.ufl.edu/pdffiles/cv/cv29200.pdf).
- <u>Lee, S.</u>, Y. Noh^{vs}, S. Verma^b and <u>V.M. Whitaker</u>. 2016. DNA, Technology, and Florida Strawberries. HS1287. Gainesville: University of Florida, Institute of Flood and Agricultural Sciences. (https://edis.ifas.ufl.edu/hs1287).
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- <u>Whitaker, V.M.</u>, <u>C.K. Chandler</u>, B.M. Santos and N.A. Peres. 2013. 'Florida Radiance' Strawberry. HS1151. Gainesville: University of Florida, Institute of Food and Agricultural Sciences. (http://edis.ifas.ufl.edu/HS400).
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- <u>Whitaker, V.M.,</u> B.M. Santos, and N.A. Peres. 2012. University of Florida Strawberry Cultivars. HS1199. Gainesville: University of Florida, Institute of Food and Agricultural Sciences. (http://edis.ifas.ufl.edu/HS1199).
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- Moyer, C.^b, <u>V.M. Whitaker</u>, and <u>N.A. Peres</u>. 2010. Viral diseases of strawberries. PP273. Gainesville: University of Florida, Institute of Food and Agricultural Sciences. (http://edis.ifas.ufl.edu/PP273).

EDITORIAL ADVISORY BOARDS

Horticulture Research (Nature Publishing Group) – Associate Editor

INVITED LECTURES

- "Breeding for a Complex of Quality Traits in a Complex Fruit Crop". University of Minnesota Plant Sciences Symposium, St. Paul, Minnesota, 2018.
- "Advances in Strawberry Breeding at the University of Florida". 8th International Strawberry Symposium. Quebec City, Quebec, Canada. August, 2016.
- "Breeding blueberry and strawberry cultivars with resiliency and wide adaptability". International Horticulture Congress. Brisbane, Australia. August 2014.
- "Sensory-Assisted Strawberry Breeding". Annual Meeting of the American Society for Horticultural Science, Orlando, FL. July, 2014.
- "46 Years of strawberry breeding in Florida." Southeast Strawberry Expo, Pinehurst, NC. November,
- "Consumer-Assisted Breeding in Strawberry". Annual Meeting of the National Association of Plant Breeders, Tampa, FL. June, 2013.
- "Consumer-Assisted Strawberry Breeding". University Industry Consortium, Gainesville, FL. April, 2013.
- "Genomewide Selection in Strawberry". USDA/NIFA RosBREED Strawberry Workshop, Corvallis, OR. January, 2013.
- "Trends in Public and Private Strawberry Breeding Programs". 7th North American Strawberry Symposium. Tampa, FL. February 2011.
- "Strawberry breeding at the University of Florida: Strengths, weaknesses, and opportunities". Southern Region American Society for Horticultural Science, Orlando, FL. February 2010.
- "New advances in strawberry breeding at UF". Ekland International Strawberry Conference. Tampa, FL. January 2010.
- "NBS and LRR profiling for marker development and RGA discovery in rose". Plant and Animal Genome XVII Conference. San Diego, CA. January 2009.

- APPENDIX D. External consultants' reports, as requested by Dr. Elaine Turner, Dean of the College of Agricultural and Life Sciences (CALS). The four consultants are listed below, and their reports follow consecutively.
 - 1. **Dr. William Tracy**, Professor of Agronomy at the University of Wisconsin-Madison, former Department Chair. Dr. Tracy is a member of the graduate faculty of the interdepartmental graduate training program in Plant Breeding and Genetics, which is very similar in design and objectives to our proposed program.
 - 2. **Dr. Wayne Smith**, Professor of Cotton Breeding and Associate Department Head, Department of Soil and Crop Sciences at Texas A&M University, and Vice-Chair of the Plant Breeding Coordinating Committee (PBCC) Executive Committee.
 - 3. **Dr. B. Todd Campbell**, Research Geneticist, USDA-ARS, Coastal Plains Soil, Water, and Plant Research Center and former President of the National Association of Plant Breeders (NAPB).
 - 4. Dr. Rex Bernardo, Professor and Endowed Chair of corn breeding at the University of Minnesota, and former Associate Director of Graduate Studies and former Director of Graduate Studies in Applied Plant Sciences at the University of Minnesota.

From: <u>Turner,R Elaine</u>

To: <u>Kampf, Eliana</u>; <u>Whitaker, Vance M</u>

Cc: <u>Brendemuhl, Joel H</u>

Subject: FW: External review of Plant Breeding PhD Program Proposal

Date: Sunday, January 12, 2020 9:46:01 PM

Attachments: Florida PB review Tracy.pdf

Another review received.

From: William Tracy <wftracy@wisc.edu> **Sent:** Sunday, January 12, 2020 8:28 PM **To:** Turner,R Elaine <returner@ufl.edu>

Subject: Re: External review of Plant Breeding PhD Program Proposal

[External Email]

Dr. Turner,

Please see that attached file.

I hope this is useful. I strongly endorse this effort.

Bill

William F. Tracy
Professor of Agronomy
Clif Bar and Organic Valley Chair in Plant Breeding for Organic Agriculture
University of Wisconsin-Madison
364c Moore Hall, 1575 Linden Dr. Madison, Wisconsin 53706
(608) 262-2587

And pray what more can a reasonable man desire, in peaceful times, in ordinary noons, than a sufficient number of ears of green sweet corn boiled, with the addition of salt.

Henry David Thoreau, Walden

This was typed by me so please forgive all snorts of errors.



12 January 2020

Dr. R. Elaine Turner, Dean College of Agricultural and Life Sciences University of Florida

Email: returner@ufl.edu

Dean Turner

Thank you for the opportunity to provide an external review of the proposed Plant Breeding Ph.D. program in the College of Agricultural and Life Sciences at the University of Florida. I am currently a professor of agronomy at the University of Wisconsin-Madison, I chaired the department for 14 years with the exception of 14 months when I served as interim dean of the College of Agricultural and Life Sciences. For 35 years I have been a member of the graduate faculty of the interdepartmental graduate training program in Plant Breeding and Plant Genetics, which is very similar in design and objectives to the proposed Plant Breeding Ph.D. program.

In your letter you suggested I address the topics below:

- Overall merit of the proposed program
 - o The overall merit is very strong. The proposal is well written and explains needs, reasons, and benefits for the proposed program. UF has a very strong group of plant breeders working in diverse crops in diverse ecoregions. The fundamental and agricultural sciences that are needed to support the degree program are also strong at UF. I believe students would benefit from this environment and be well trained.
- Demand for Ph.D. plant breeders in the Southeast region, the United States and the world.
 - Despite the consolidation of the seed industry the demand for plant breeders remains strong, in fact the consolidation will increase the need especially in the Southeast. As companies consolidate they leave entire regions and crops creating gaps that new companies (that will hire breeders) strive to fill. This is especially true in the highly specialized agriculture of Florida. Another reason demand for new Ph.D.s in plant

breeding will be high is many states are downsizing their colleges of agriculture and this has affected plant breeding training programs. It is my perception that Florida's powerful specialty ag industry keeps the ag programs in your college strong.

- Importance of such a program in the Southeast region, the United States and the world.
 - O There are other strong programs in the Southeast such as NC State and Georgia, but nowhere else offers the potential to study breeding of subtropical and tropical crops and the adaptation of temperate crops such as blueberries and strawberries to those conditions. In addition to this unique role, as I said above, this new program has the opportunity to supply breeders nationally and internationally as traditionally strong programs downsize. The ability to train students in tropical breeding and germplasm management is an enormous opportunity, currently entirely unmet.
- Potential of the program to provide the educational needs of future plant breeders
 - As someone who has studied USA public plant breeding both in terms of cultivar development and graduate training I have long felt that UF was missing a great opportunity to be one of the leading Ph.D. plant breeding Ph.D. programs. UF has, perhaps, the strongest public cultivar development program in the US, with a very strong and deeply knowledgeable faculty. Mobilizing this group toward graduate training will quickly move UF into the top five programs if not the top three.
- Ability of plant breeding faculty and administration at UF to build a successful program.
 - See above.
- Financial and other resources available.
 - Potential resources exceed those of any other institution I know of, except, perhaps, TAMU.
- Advice for achieving program success based on your experiences at your institution.
 - o For the greatest success I strongly recommend that the faculty work to develop and support a strong cohort and community approach. Having each incoming cohort take an introductory seminar together or perhaps tour that orients them to the unique programs and faculty. It is very hard for students at Gainesville to gain a sense of the massive operation they are a part of. They need to be made aware. Then have seminars and journal clubs that all Ph.D. candidates (and faculty) are required to attend.

This of course means that the faculty must work to maintain these opportunities at an engaging level of content.

I hope this evaluation is useful.

Respectfully yours,

William F. Tracy

Professor of Agronomy

Clif Bar and Organic Valley Chair in Plant Breeding for Organic Agriculture wftracy@wisc.edu

From: Smith, C W <cwsmith@tamu.edu>
Sent: Tuesday, December 24, 2019 12:12 PM
To: Turner,R Elaine <returner@ufl.edu>

Subject: Re: External review of Plant Breeding PhD Program Proposal

[External Email]

Elaine,

Thank you for the opportunity to review your proposed IDP in Plant Breeding at the UFL. It is an excellent program and a well written proposal. I believe that you have the breadth of plant breeding programs and plant breeders for a highly successful program. I made a few comments on the attached pdf proposal and addressed your suggested comments below.

• Overall merit of the proposed program

The proposed program is well designed to meet the needs of the state of Florida and the nation for well-trained plant breeders. It will expand the impact of the UFL in this critical area of STEM education and research.

• Demand for Ph.D. plant breeders in the Southeast region, the United States and the world

The proposed program will add to the number of well-trained PhD plant breeders in the U.S. and globally. Demand for PhD plant breeders has been strong since the 1970 PVP act and especially since the 1994 PVP act and the advent of patented genetic products and procedures since 1985.

• Importance of such a program in the Southeast region, the United States and the world

Plant breeding is recognized as a cornerstone of modern agriculture. However, rates of genetic gain have decreased over the past 20 years while global population growth demands improved cultivars to meet caloric and nutritional needs. This situation requires extensive training of future plant breeders with the education and training to lead diverse teams of scientists to meet this challenge. Florida is well positioned to remain a major player and to enhance its footprint in this arena given their environment suitable to numerous crops. The proposed program will be an important effort to meet the demands for additional plant breeders in the Southeast, the U.S., and globally.

• Potential of the program to provide the educational needs of future plant breeders

The proposed program has been vetted through UFL faculty and administrators and will produce well-trained plant breeders to meet societal needs. I would question the number of graded courses proposed since current BS-MS-PhD students, at least at my institution, are exposed to 44 graded SCH (24 during their MS and another 20 minimum (by departmental policy) as a PhD candidate). The proposed program (If I'm reading it correctly) would have PhD candidates entering the program with an MS to have more academic experience than a candidate with only a BS degree. I'm a proponent of class room education and of exposing students to an array of subject matter. I have unsuccessfully proposed that our PhD students be required to take at least one people management course and one business course during their degree program because upon employment there's a high probability that they will be managing people and budgets and a little instruction in those areas should be a good expenditure of time.

I also would suggest a bit of clarification on your distance delivery. At A&M, we can only deliver 49% of a degree plan at distance except in our approved Distance Plant Breeding Program where 100% can be distance delivered. If Florida has similar rules then that section of the proposal needs clarification.

• Ability of plant breeding faculty and administration at UF to build a successful program

The proposal addresses the administration of the program extremely well. It is obvious that UFL is a leading LGU in this area with excellent faculty and administrators who will ensure a successful program.

• Financial and other resources available

Well documented.

• Advice for achieving program success based on your experiences at your institution

Our experience suggests that UFL will be successful with this program. There is a need to engage research personnel on RECs in graduate education to take advantage of their vast knowledge and experience in plant breeding research. I believe that this proposal addresses that to a greater degree and any program that I'm aware of. One point that you might need to address is whether or not this program will accept students as cohorts in the fall semester or individually in any semester

Regards,

Wayne

Professor, Cotton Breeding Associate Department Head

979.845.3450

From: <u>Turner,R Elaine</u>

To: <u>Kampf, Eliana</u>; <u>Whitaker, Vance M</u>

Cc: <u>Brendemuhl, Joel H</u>

Subject: FW: External review of Plant Breeding PhD Program Proposal

Date: Saturday, January 11, 2020 7:21:18 PM

Attachments: <u>image001.png</u>

image002.png image003.png image004.png image005.png

Review of UF Plant Breeding degree proposal.pdf

Another review received.

From: Campbell, Todd - ARS <todd.campbell@usda.gov>

Sent: Saturday, January 11, 2020 5:32 PM **To:** Turner,R Elaine <returner@ufl.edu>

Subject: Re: External review of Plant Breeding PhD Program Proposal

[External Email]

Dear Dr. Turner:

Please find attached my review of the proposed program. Feel free to contact me if you need additional assistance. Good luck with establishing this new and exciting program!

Best regards,

bboT

B. Todd Campbell, Ph.D.

Research Geneticist

USDA-ARS

Coastal Plains Soil, Water, and Plant Research Center

2611 West Lucas St. Florence, SC 29501 Office: 1-843-519-0491 Cell: 1-843-496-3751

Fax: 1-843-669-6970

Get more information: www.ars.usda.gov











Below are some suggested items which could be addressed in your review:

• Overall merit of the proposed program

The program fills a current gap in graduate degree offerings at UF. By leveraging existing faculty expertise and resources, the new interdisciplinary based degree program creates a new and very strong plant breeding degree program with little to no initial investment. The interdisciplinary nature of the program avoids competition among existing departments (Agronomy, Horticulture, etc.) which often times fractures the strength of plant breeding education at a Land Grant institution. The breadth and diversity of the existing plant breeding effort at UF (e.g.-diversity of crops and plants already with plant breeding efforts) is leveraged to build a strong and singular interdisciplinary plant breeding program that offers students unique and diverse educational opportunities.

- Demand for Ph.D. plant breeders in the Southeast region, the United States and the world Private companies represent the primary employer of plant breeders in the future. As such, all indications from private industry note a large need for well trained plant breeders in the future. There are numerous reports of current graduates not meeting the needs of the industry. In the last 10-15 years, we have seen a large, increased investment by private industry to build plant breeding capacity. During this time, plant breeding has evolved and become even more multi-disciplinary in nature to include traditional breeding, agronomy, pathology, entomology, molecular genetics, biochemistry, statistics, genomics, computational biology, computer science, engineering, and data science. States such as Florida and others in the Southeast region that depend upon agriculture and horticulture as a large part of their economies, will need to provide the industry well trained plant breeders in the future. 'Local' plant breeders will work within large domestic and global teams to fulfull their jobs while meeting the needs of consumers.
- Importance of such a program in the Southeast region, the United States and the world Continuing the comments above regarding the demand of plant breeders, the strong program proposed by UF herein should begin filling the employment gap noted very quickly. There are strong plant breeding programs already in the region (NC State University and University of Georgia); however, a new program at UF would complement those and build more capacity for the Southeast. A UF program is complementary because there are a number of crops/plants unique to Florida that are not addressed elsewhere in the region.
- Potential of the program to provide the educational needs of future plant breeders

 The academic program as outlined is adequate to meet the educational needs of future plant breeders. Two suggestions for additional courses. 1) More advanced statistics course offerings should be considered. 2) A course or combination of 1-hour module courses focused on management (both financial and people) and/or professional development should be considered. In my opinion, one of the weaknesses of many PhD plant breeding degree programs is a lack of education involving these areas.
- Ability of plant breeding faculty and administration at UF to build a successful program By leveraging existing faculty expertise and resources, the new interdisciplinary based degree program creates a new and very strong plant breeding degree program with little to no initial investment. The interdisciplinary nature of the program avoids competition among existing departments (Agronomy, Horticulture, etc.) which often times fractures the strength of plant breeding education at a Land Grant institution. The breadth and diversity of the existing plant breeding effort at UF (e.g.-diversity of crops and plants already with plant breeding efforts) is

leveraged to build a strong and singular interdisciplinary plant breeding program that offers students unique and diverse educational opportunities.

- Financial and other resources available

 The financial plan proposed seems adequate. Suggest reaching out to the network of private companies involved in plant breeding to provide recurring support.
- Advice for achieving program success based on your experiences at your institution I like the overall scope of this new interdisciplinary program as it appears to balance traditional plant breeding training with training in new areas (e.g. genomics, bioinformatics, etc). In my career, I have seen a number of institutions historically very strong in plant breeding shift the emphases in their degree program to 100% molecular and/or genomic technologies. This has resulted in a significant dilution of traditional breeding skills that still are required for jobs today...these involve experimental design, data analysis, and field based skills. The private industry has commented that recent graduates are usually strong in the basic sciences, but lack traditional breeding skills. I would also like to comment that I strongly feel this new degree program needs a strong leader, especially early in the life of the program. My suggestion would be to hire a new faculty or re-allocate the appointment of an existing faculty member to lead the new program. A revolving leadership track often times results in weak leadership. It will be critical for strong leadership be in place to help this program fulfill its potential. Similarly, it is very important that the new program has the faculty teaching capacity to adequately teach all of the courses in the plan of study. Similar to the dilution of traditional plant breeding skills, I have also seen institutions propose new degree offerings without teaching capacity in place because most currently faculty did not have a teaching component in their job requirement.

From: Rex Bernardo
To: Turner,R Elaine

Cc: Whitaker, Vance M; Kampf, Eliana

Subject: Re: External review of Plant Breeding PhD Program Proposal

Date: Saturday, December 21, 2019 12:02:44 PM
Attachments: UFL Plant breeding proposal review - Bernardo.pdf

[External Email]

Dear Elaine,

Attached is my review of the proposed Plant Breeding Ph.D. program at the University of Florida. It is a strong proposal, and I offer three suggestions to strengthen it further. Please let me know if you have questions or if I can provide any additional input.

Sincerely,

Rex

Rex Bernardo Professor and Endowed Chair in Corn Breeding and Genetics

Department of Agronomy and Plant Genetics University of Minnesota 411 Borlaug Hall, 1991 Buford Circle St. Paul, MN 55108 Phone: (612) 625-6282

Fax: (612) 625-1268
Email: bernardo@umn.edu
http://stemmapress.com

University of Minnesota

Twin Cities Campus

Department of Agronomy and Plant Genetics

College of Food, Agricultural and Natural Resource Sciences

411 Borlaug Hall 1991 Upper Buford Circle St. Paul, MN 55108

Office: 612-625-7773 *Fax:* 612-625-1268

December 21, 2019

Dr. R. Elaine Turner University of Florida 2001 McCarty Hall D, PO Box 110270 Gainesville, FL 32611-0270 Email: returner@ufl.edu

Dear Dean Turner:

Thank you for the opportunity to review the proposal for a Plant Breeding Ph.D. program at the University of Florida. I am providing this review on the basis of my experience as former Associate Director of Graduate Studies (2015–2017) and former Director of Graduate Studies (2005–2007, 2017–2019) in the Applied Plant Sciences (www.appliedplantsciences.umn.edu) program at the University of Minnesota. I am currently Professor and Endowed Chair in corn breeding at Minnesota.

I am pleased to fully support the efforts of your plant breeding faculty to develop a graduate program that provides a unified platform for coordinating teaching efforts, reaching across different disciplines, leveraging developments in different crops, and building community among doctoral students and faculty who are engaged in the genetic improvement of plants for human benefit. The University of Florida is strategically located to play a vital role in U.S. crop improvement, given its research programs on plants that are of economic importance in the southeast U.S. At Minnesota, we pride ourselves in being able to work on row crops, forages, cover crops, fruits, vegetables, flowers, turfgrasses, woody ornamentals, and turfgrasses; on self-pollinated, cross-pollinated, and asexually propagated species; on diploids and polyploids; and annuals and perennials. I can easily see that the same richness of plant species, which enhances the graduate education experience in an interdepartmental program such as ours at Minnesota, is present on the main campus and the outlying research centers at the University of Florida.

You also have a core mass of faculty whose expertise spans the spectrum of crop improvement, from molecular genetics to phenotyping to statistical genetics. Your faculty are very productive in releasing cultivars and in academic research. Overall, I believe the proposed Ph.D. Plant Breeding program will elevate Ph.D. research and education in plant breeding across your campus and will lead to graduates who are well prepared for future contributions in plant improvement.

That being said, the proposal made me wonder whether there was a missed opportunity to evaluate the current set of plant breeding graduate courses and see what changes need to be made. The following statement was given on page 11: "Because the curriculum of the program relies on current coursework being taught in the involved departments, most faculty will not see a change in their responsibilities, or their time assigned to the new program." Perhaps I missed it elsewhere in the proposal, but the above statement gave me the impression that the doctoral curriculum is largely an assemblage of current courses rather than the result of identifying what new courses—particularly for emergent fields in plant improvement—are needed. Two new courses (Journal Colloquium and

Survey of Breeding Tools and Methods) are proposed. While these courses will be helpful, they do not address the following gaps that I perceive in the proposed curriculum. Please allow me to offer three suggestions for further strengthening the proposed curriculum:

- 1. Focus more on principles and concepts applicable across species, rather than on individual types of crops. A key issue in planning curricula is the limit on the total number of coursework credits. Given this limit, I think it is better for courses to focus on what is applicable across species, rather than on breeding for specific types of crops. I noticed that the curriculum includes a course on breeding for perennial crops and a course on breeding for vegetable crops. Continuing to offer these courses seems contrary to the goal of the proposal of unifying plant improvement across species. This is not to say that differences in breeding for different types of crops should be ignored. Introductory plant breeding courses should highlight the key differences in breeding different types of plants, e.g., yield in cereals versus "flower power" in roses. Differences in applicable breeding approaches for different species can also be emphasized in the *Plant Breeding Techniques* course.
- 2. <u>Include more courses in statistics and data science</u>. When I ask seed industry contacts about the main technical skills they seek in our graduates, the most common answer I get is the ability to quickly make breeding decisions from large amounts of data. My audience for this question is skewed towards row crops, but this answer nevertheless underscores that plant breeding will continue to be increasingly data driven. The proposed core curriculum has a statistics course and a field plot techniques course, whereas no statistics courses are included as electives. My opinion is that the list of elective courses should be expanded to include courses in traditional areas such as regression and mixed-model methodology, as well as newer areas such as machine learning. Again, I realize that the total number of credits is limited. But between a field plot techniques course and a regression course, I would recommend the latter because it is more difficult to learn on your own or by experience than field plot techniques.
- 3. Develop a course on professional skills. Breeding in major companies these days has shifted to a team effort, and the days of a corn breeder largely working alone in some place in, say, central Iowa are over. I believe that modern Ph.D. curricula need to have a formal component devoted to the awareness and development of professional skills. A few years ago, I emailed my former M.S. and Ph.D. students to ask them what they wish we taught them in graduate school but we didn't, and the replies were uniform: dealing with conflict; creating budgets; communicating with non-experts; personality differences; work-life balance; etc. I therefore developed a graduate course called *Professional Skills for Scientists* at Minnesota. We are not deceiving ourselves in thinking that simply taking a course is sufficient, as these are skills learned and honed across a lifelong professional career. Yet it is important for our students to be aware that they will encounter these issues, and for us to begin to teach them basic, soft skills in these areas. I strongly suggest that the proposed Ph.D. curriculum include a component on professional skills.

I hope you find these comments helpful; please ignore what isn't. I wish your plant breeding faculty the very best on this proposal.

Sincerely,

Rex Bernardo

Plex Bernardo

Professor and Endowed Chair in Corn Breeding and Genetics

- **APPENDIX E.** Letters from leading national and international agricultural industry showing support for the development of the University of Florida/IFAS graduate program in Plant Breeding.
 - 1. Support letter from Tabare Abadie, Ph.D., Lead External Academic Outreach, Corteva Agriscience, Agricultural Division of Dow DuPont, Johnston, IA.
 - 2. Support letter from James Brusca, Vice President of Global Breeding, HM Clause, Inc., Davis, CA.
 - 3. Support letter from Larry Pierce, Senior Director of Research & Development/Plant Breeding, Duda Farm Fresh Foods, Inc.
 - 4. Support letter from Pilar Bañados, Ph.D., Research & Development Director, Blueberry Breeding Programs and Rafael Quevedo, Global Production Director, HORTIFRUT, Santiago, Chile.
 - 5. Support letter from Joe Bouton, Owner and consultant, Bouton Consulting Group, LLC, Athens, GA.
 - 6. Support letter from Jeff Trickett, Director of Sales & Marketing, Bejo Seeds, Inc.
 - 7. Support letter from Douglas W. Heath, Senior Tomato Breeder, Bejo Seeds, Inc., Oceano, CA.
 - 8. Support letter from Paul Orsenigo and David Basore, GMI Grower's Management, Belle Grade, FL.
 - 9. Support letter from Michael D. Nelson, Ph.D., Vice President, Plant Sciences, Inc., Watsonville, CA.

Support letter #1 from Tabare Abadie, Ph.D., Lead External Academic Outreach, Corteva Agriscience, Agricultural Division of Dow DuPont, Johnston, IA.



Johnston, Iowa, August 2018

Drs. Patricio Munoz and Marcio Rezende

University of Florida, Gainesville

I am writing to express support for University of Florida proposal to further develop a graduate program in Plant Breeding.

Corteva Agriscience, the Agricultural Division of Dow DuPont, is a science-based products and services company. Our company puts science to work by creating sustainable solutions essential to better, safer, healthier life for people all over the world. Operating in more than 130 countries, our company is one of the world's largest sources of customized solutions for the agricultural sector. Our purpose is to enrich the lives of those who produce and those who consume, ensuring progress for generations to come.

Our industry depends on the research advances of basic and applied plant sciences as well as a continuous source of outstanding talent in order to address growing global agricultural needs through creative and innovative science. Breeding of plants is a critical core expertise for a nation that intends to continue having a vibrant agriculture in the rapidly changing world and Corteva Agriscience is honored to support the training of future scientists in this field of studies.

I was excited to learn about the proposal you are putting together. The University of Florida is well recognized around the world for the diversity and success of its breeding programs, and for the high quality of the academic opportunities it provides to graduate students. We have recently partnered with the graduate students of your University by sponsoring highly successful student lead Science Symposia (2017-18, and also one planned for early 2019), as part of our global Plant Science Symposia Series, that includes more than 50 of the most prestigious Universities around the world (www.pioneer.com/Symposia). The success of these events are a testament of the excellent preparation of your graduates and their eagerness to enhance the connections with prestigious scientists and peer graduate students in the area of Plant Breeding. Developing a graduate program in Plant Breeding will hence provide the graduates of the U. Florida with further opportunities to be prepared for a successful career in the field,

strengthening the already strong training in quantitative and molecular based sciences, and matching it with field experience on your existing breeding programs.

The development of the program proposed matches with the objectives of our company to support education, and the trainees of this program will sure fit the needs of our organization in the future. Hence, we are committed to sending seminar speakers to talk about Corteva Agriscience and industry careers generally for your seminar series, and to continue supporting the student lead Symposia Series at your University. Also, trainees from this proposed program will be considered for our 3-6 months' internship program and, upon graduation, full-time employment within our company. Finally, we will be honored to serve on the External Advisory Committee of your program, and to provide ad-hoc advise if requested.

Tabare Abadie, PhD

(tabare.abadie@pioneer.com)

Lead External Academic Outreach

Corteva Agriscience, Agricultural Division of Dow DuPont

Support letter #2 from James Brusca, Vice President of Global Breeding, HM Clause, Inc., Davis, CA.



August 2, 2018

Dr. Samuel Hutton and Dr. Geoffrey Meru University of Florida, Department of Horticulture Science Gulf Coast Research and Education Center 14625 CR 672, Wimauma, FL 33598

Dear University of Florida Plant Breeding Faculty,

I am very pleased to learn of the current efforts to establish a Ph.D. degree program in plant breeding and delighted to write this letter of support for this initiative. It is well documented and often discussed that the number of University plant breeding programs, particularly in vegetables, has declined over the past decade. Applied university plant breeding programs are critical to the exploration of germplasm diversity to identify and characterize novel traits, development and release of relevant germplasm and the delivery of a pipeline of plant breeders to industry and academia alike. The global human population is estimated to reach 9.6 billion in 2050 - the need for new and adapted plant varieties (and the scientists who breed them) is clear.

With a significant number of applied plant breeders and the release of meaningful and innovative germplasm to industry, the University of Florida has been an important partner for industry. Beyond the germplasm contributions in many crops, the University of Florida has and continues to generate well-trained applied scientists impacting industry and society in plant breeding roles.

Plant breeding as a discipline becomes increasingly interdisciplinary, and the skill set required by future plant breeders is more and more complex. Beyond the diverse technical requirements in a range of scientific disciplines, today's plant breeders also need to have economics understanding, strong project management skills, leadership abilities to coordinate diverse teams in a common direction, strong communication and interpersonal skills and capacity to constructively collaborate with partners in marketing, sales, supply chain, HR and beyond. As the needs and skills of applied industry plant breeders evolve, it is important that the educational and training programs developing plant breeders evolve as well.

In my role as VP Global Breeding at HM.Clause, I oversee our plant breeding activities and teams globally. HM.CLAUSE Inc. was formed in 2008 by bringing together Harris Moran, headquartered in California, and Clause, headquartered in France. HM.CLAUSE, a business unit of the Limagrain Group, specializes in breeding, production and commercialization of vegetable seeds varieties. We work in over 20 vegetable crops in over 100 countries, and are dedicated to innovative and sustainable development of the highest quality vegetable seeds.

HM.CLAUSE, Inc. 260 Cousteau Place — Suite 210 — Davis, CA 95618 — USA Tel. +1 (530) 747 3700 — Fax +1 (530) 747 3794 www.hmclause.com





A significant part of my strategic agenda is planning for growth and turnover for applied plant breeding roles. I am concerned that there will not be the needed supply of well-trained students to meet the needs of HM.Clause and industry in general. The University of Florida is in a unique position to grow its leadership position to meet this need. Beyond the strong history of applied plant breeding and student development at UF, through initiatives like the Challenge 2050 Project, UF continues to demonstrate its concern for global food supply and interest and capability to be a proactive partner for industry. The establishment of a Ph.D. program in plant breeding would be an important step towards continuing this legacy.

Thank you for the opportunity to share this message of support. Should you have any questions, please feel free to contact me.

Sincerely,

James Brusca

James Brusca

Global VP Breeding

Email: james.brusca@hmclause.com Mobile USA: + (530) 650-5015 Support letter #3 from Larry Pierce, Senior Director of Research & Development/Plant Breeding, Duda Farm Fresh Foods, Inc.







July 29, 2018

There is no doubt that the University of Florida has distinguished itself from other Universities by supporting numerous applied breeding programs and professionals. This has provided substantial advantage to A. Duda & Sons on two fronts.

- The products developed through these programs have provided benefit for its business.
- As a source of trained plant breeders in Horticultural Crops for fulfilling roles in its own proprietary plant breeding programs.

In the last three years we have hired one PhD and one MS student from the University of Florida as a breeder and assistant breeder. Of particular importance was that these individuals came from programs that focused on plant breeding in horticultural crops. There are definitive differences between focus of quality attributes, breeding techniques and general propagation and breeding principles between horticultural crops and agronomic crops. Our experience is that those trained in agronomic crops typically require considerable supplemental horticultural training to become horticultural crop plant breeders.

There are very few programs in the United States that are currently training applied plant breeders with hands on training experience in horticultural crops. It is our opinion that a plant breeding degree with hands on experience in horticultural crops would be of special value. However, a plant breeding degree with agronomic experience would have less significance to our company and becomes one of many programs across the country that actually provide similar training. We would value future candidates from the University of Florida and believe it can continue to distinguish itself if it creates said degree with an opportunity to have supplemental training in horticultural crops.

The University of California currently offers an opportunity for companies like Duda to provide supplemental training for breeders that have a horticultural degree through a plant breeding academy. We are not aware of a similar opportunity to provide horticultural training to an agronomic trained plant breeder. It would be of particular value if we did not have to provide this supplemental training and would look forward to an opportunity to consider future plant breeding candidates from the University of Florida.

Larry Pierce
Senior Director Research & Development/Plant Breeding
Duda Farm Fresh Foods, Inc.
(831)229-3486
Larry.Pierce@Duda.com

Support letter #4 from Pilar Bañados, Ph.D., Research & Development Director, Blueberry Breeding Programs and Rafael Quevedo, Global Production Director, HORTIFRUT, Santiago, Chile.



Santiago, August 10, 2018

Dr. Patricio Munoz Blueberry Breeding and Genomics Lab. Horticultural Science Department IFAS - University of Florida 2211 Fifield Hall, Gainesville FL 32611, USA

REF: Support letter from Hortifrut

Dear Dr. Munoz

We are very pleased to send you this support letter to create a Ph.D. degree program in plant breeding at the University of Florida.

As you know Hortifrut is the largest Blueberry producer in the world with more than 25% of the global market share. "Hortifrut Genetics" is called the extensive Program of Genetic Improvement of Hortifrut Berries and whose objective is the permanent selection and development of new and better Berries for Hortifrut, its partners, its producers, its commercial platforms and its final consumers. Through the careful work of our Breeders, Hortifrut seeks to differentiate itself in the market of Berries of the world with new flavors, better quality, more attractive and healthy fruits, with a longer post-harvest life, which will allow our company to extend the dates of offer in the global market of Berries to the World Every Day.

Investing in genetic improvement is a strategic part of Hortifrut global strategy, and thus hiring plant breeders with a core formation in plant breeding, without forgetting the horticultural background is and will be a key as we keep expanding and developing new cultivars. A formal training in applied Plant Breeding will be something we in Hortifrut will definitely prefer when we chose a candidate to be incorporate in our breeding program. We value the science behind the breeding and the new knowledge in advance breeding and molecular techniques will benefit the speed and progress of our programs at Hortifrut

Without any doubt the berry industry needs well trained and up to date scientist that help us developing the Berries for the future.

Sincerely,

Pilar Bañados. Ing Agr. MS. PhD

R&D Director

Blueberry Breeding Programs

HORTIFRUT

Rafael Quevedo. Ing Agr.
Global Production Director

HORTIFRUT

Av. Del Condor 600 piso 4, Santiago, Chile



Support letter #5 from Joe Bouton, Owner and consultant, Bouton Consulting Group, LLC, Athens, GA.

August 14, 2018

Dr. Esteban Rios Assistant Professor – Forage Breeding and Genetics University of Florida – IFAS – Agronomy Department 2005 SW 23rd Street, Bldg. 350 Off 5 Gainesville, FL 32608

Dear Esteban:

I am happy to provide my perspective on the efforts of the UF Plant Breeding Faculty to establish a PhD program in Plant Breeding.

I was a Professor at the University of Georgia (now Emeritus Professor) and a Senior VP and Division Director at the Samuel Roberts Noble Foundation. My research focused on plant breeding and genetics, but especially developing new cultivars of pasture and forage crops. After retiring, I formed a consulting company, Bouton Consulting Group LLC, and currently work with several clients to improve their ongoing plant breeding and cultivar development research and development programs (https://www.linkedin.com/in/joseph-bouton-939bb970/).

From my past experience, and especially from what I see now as a consultant, there is a continuing, and even increasing, demand for well-trained plant breeders that I am sure your proposed program will have few problems in meeting.

Seed company R&D units simply want plant breeders; especially those with training in the new biotechnologies. I am also sure that any candidate would be viewed more favorably if he/she had formal training and a degree specifically in Plant Breeding vs one with a broader degree (e.g., Ph.D. in Agronomy) for positions with these companies; including the large multinationals.

This potential program is a very good idea, and as a UF alumnus, I wish you luck with getting it approved.

Sincerely,

Joe Bouton

Owner and Consultant

1020 Powell Court Athens, GA 30606

580-220-7688



UF/IFAS Plant Breeding Workshop University of Florida

July 31, 2018

SUBJ: Ph.D Plant Breeding

To Whom It May Concern,

I am writing to express my support for the University of Florida establishing a Ph.D program in Plant Breeding. Speaking from the Sales & Marketing side of Bejo Seeds, plant-breeding capabilities are critical to our company and its future success. Having qualified candidates for key Breeding Research roles is imperative in order to provide the product development leadership so important to our business model. We need talented and qualified individuals to fill these roles who can provide vision and insure the long new variety development cycle is kept fresh to provide the types of quality products Bejo wants to market in the future.

The University has been a significant partner to Bejo in our development of the Tomato segment and we would be happy to continue a close relationship via potential Breeding Research candidates coming out of a Ph.D program at UF.

Sincerely,

Bejo Seeds, Inc.

Jeff Trickett

Director Sales & Marketing

cc: Mark Overduin; Greg Styers; Doug Heath



July 30, 2018

To the UF/IFAS Plant Breeding Working Group,

I am providing this letter in support of the proposal to establish a PhD in Plant Breeding at the University of Florida. Being a PhD in Plant Breeding from Cornell myself I understand on a personal level the value of this degree. In my opinion it is much more than a title. A PhD in Plant Breeding is a specialization in both aspects of study, research, and title.

When I was searching for a PhD program after getting my MS in Vegetable Crops, I was surprised to find in the late 1980's that an actual PhD in Plant Breeding was rather limited to a few Universities. Luckily for me a program became available at Cornell where I had just finished my Masters.

Now I see that many more Universities have added the option of getting a PhD in Plant Breeding. I feel that the University of Florida would benefit in multiple ways from adding this degree option.

First, this option will attract more students that have a very firm idea that Plant Breeding is the specific area of focus for them. I knew it well after finishing my Masters and while I was not able to get a PhD program based on research with vegetables which were my first choice, the degree was nevertheless the right option for me. I strongly feel that this option will attract students highly motivated to excel at this area of study and research.

The University of Florida already has a strong foundation in Plant Breeding from past programs. I would like to acknowledge Dr. John [Jay] Scott. I must say I was not very aware of both Dr. Scott and another Professor that I now feel was an equally successful Plant Breeder as well as Researcher who is Dr. Randy Gardner. Both of these Professors had the unique blend of strong academic programs and being well-known Plant Breeders with extensive strong breeding programs that made them both very attractive to the commercial sector. I know that when I started with Peto Seed in 1993 that Paul Thomas told me he had tried several times to hire both Jay and Randy but they were both loyal to their University positions. Both of these breeding

programs have contributed in a very significant way to commercial plant breeding programs worldwide. I feel it is very important to continue with this and not let it wane. Indeed Dr. Sam Hutton is in my opinion continuing with excellence in the path that Dr. Scott forged as did he with his predecessors. Dr. Hutton is able to combine the areas of both molecular and applied breeding so necessary in Plant Breeding today for both the public and private sectors. As an applied tomato breeder for 26 years now I see and appreciate the value of interaction with University programs. University Plant Breeding programs can handle the early developmental breeding that is harder for us commercial breeders to do. An example of this is finding new traits of interest in wild accessions and doing the often difficult interspecific crosses. This allows the public and private sectors to interface and work together to reach common goals of research and applied results faster through collaboration.

Finally, as a Senior Plant Breeder I will be searching in about four years to hire an Assistant Breeder that I can train to take my place. Many large corporate Seed Companies will only hire a PhD for such a position and the specialization in Plant Breeding gives those people a real edge in getting such a position. Even though I do not have this restriction at Bejo, I would still prefer to hire someone with a PhD in Plant Breeding if possible. We did just that recently for the potato program.

If you have any further questions please feel free to contact me.

Sincerely,

Douglas W. Heath

Senior Tomato Breeder

Bejo Seeds, Inc.

1972 Silver Spur Place | Oceano, California, 93445 | USA

That's bejo quality ▶ bejoseeds.com | T(805) 602-2738 | E <u>dheath@bejoseeds.com</u>

Support letter #8 from Paul Orsenigo and David Basore, GMI Grower's Management, Belle Grade, FL.



P.O. Box 130 Belle Glade, FL 33430

Phone (561) 996-6469 Fax (561) 996-6480

August 2, 2018

Dr. Germán Sandoya-Miranda UF/IFAS Plant Breeding Working Group

Our farming operation grows and packs a wide variety of leafy vegetables for the fresh market, as well as sweet corn in the Everglades Agricultural Area(EAA) and other locations in South Florida.

We are keenly aware of the foundational successes that American agriculture has experienced in the last 200 plus years as a direct result of plant breeding, cultivar development and genetic improvement within multiple crops and plant species.

Grower's Management has historically been very supportive of the breeding programs, particularly lettuce and leafy vegetables at the Everglades Research and Education Center (EREC) in Belle Glade, Florida.

We are encouraged by the proposal to initiate a Plant Breeding PhD degree program within the University of Florida's College of Agriculture. The demand/supply equation for plant breeders is very unbalanced with a shortage of breeders in the ag industry, especially in the specialty/minor crop segment of food production. The need for well trained and effective plant breeders will continue to increase into the future as pest and environmental challenges become more intense. Post-harvest shelf life, nutritional value, crop yield optimization and improved vigor are additional economic benefits to the farmer, supply chain manager and consumer.

Employment opportunities and good jobs are abundant for those that successfully complete the proposed program. Thank you for the opportunity to provide this letter of support for a very worthy endeavor.

Paul Orsenigo

David Basore

Support letter #9 from Michael D. Nelson, Ph.D., Vice President, Plant Sciences, Inc., Watsonville, CA.



342 Green Valley Road Watsonville, California USA 95076

> Office Phone 831.728.7771 Fax 831.728.4967

> > www.plantsciences.com

August 29, 2018

Vance M. Whitaker, PhD Strawberry Breeding and Genetics UF / IFAS Gulf Coast Research and Education Center 14625 CR 672 Wimauma, FL 33598

Dear Vance,

Thank you for the opportunity to provide input regarding the potential establishment of a cross-departmental graduate degree program in plant breeding at the University of Florida.

Plant Sciences, Inc. (PSI) is an agricultural research, consulting and production business headquartered in California. Our mission is to serve the global fruit and vegetable industries by developing superior cultivars through traditional breeding including the use of the latest genetic marker and genomics technologies. We continue to expand our work into new crops and geographies around the world. To meet our future anticipated workforce needs, we would strongly support the development of a graduate degree program specifically aimed at training students in plant breeding, genetics and utilizing the most advanced molecular technologies for crop improvement. Students who come out of graduate school with a MS or PhD degree in the specific area of plant breeding would be given greater priority over those with a more general agronomy or horticulture degree. We would anticipate that students with a plant breeding degree would have experienced a greater level of instruction and training in current breeding systems and methods relative to those graduating with a general agricultural degree.

We have hired several graduates with advanced degrees from the University of Florida over the years and have been very pleased with their capabilities and expertise. Our interest in future graduates would only increase with the potential plant breeding degree program you are looking to establish.

Sincerely,

Michael D. Nelson, PhD

With D. William

Vice President

APPENDIX F. Examples of CALS plant breeding alumni successfully employed in academia, industry, government and research institutions nationally and globally.

| Alumni Name (Last, First Name) | Current Position - INDUSTRY, GOVERNMENT AND RESEARCH INSTITUTIONS - | Chair /Co-Chair | Graduation Year |
|-----------------------------------|--|-------------------------|--------------------|
| Acharya, Ananta R. | Bioinformatics Scientist, Corteva Agrisciences, Indianapolis, IN | Quesenberry, K. | 2009 |
| Aina, Olubunmi O | Senior Biologist, Breeding & Genetics, Corteva AgriScience, Haiwaiian Islands | Quesenberry, K. | 2011 |
| Anciro, Ashlee L. | Molecular Biology Manager and Tissue Culture Research Associate | Lee, S./Whitaker, V. | 2017 |
| Barten, Jay | Tomato Breeder & Station Director, DeRuiter Seeds (Bayer), Almeria, Spain | Scott, J. | 1991 |
| Blaker, Kendra | Small Fruit Breeder, Plant Sciences, Inc., Watsonville, CA | Olmstead, J. | 2013 |
| Bowman, Kim Dean | Citrus Rootstock Breeder, USDA-AR, Ft. Pierce, Florida | Gmitter, F. | 1990 |
| Carrilo-Mendonza, Omar | Strawberry Breeder, Driscoll's, Watsonville, CA | Chaparro, Jose | 2012 |
| Carvalho, Marcelo Ayres | Forage Breeder & Germplasm Manager, EMBRAPA, Brasilia, Brazil | Quesenberry, K. | 2004 |
| Cellon, Catherine | Assistant Plant Breeder, Duda Farm Fresh Foods, Belle Glade, FL | Olmstead, J./Munoz, P. | 2015 |
| Christensen, Christian | High Chill Blueberry Breeder, Driscoll's, Watsonville, CA | Kenworthy, K. | 2012 |
| Czarnecki, David M. II | Flower Breeder, Ernst Benary of America, Inc., CA | Deng, Z. | 2011 |
| Drost, Derek | Discovery Genomics Strategy Lead, Bayer | Kirst, M./Peter, G. | 2009 |
| Freire, Marcos | Program Officer, Alliance Green Revolution in Africa (AGRA), Mozambique | Quesenberry, K. | 1999 |
| Gilbert, Jessica | Molecular Blueberry Breeder, Driscoll's, Watsonville, CA | Olmstead, J./Clark, D. | 2015 |
| Hardy, Stephanie R | Official at European Commission, Belgium | Quesenberry, K. | 1986 |
| Holderbaum, James F. | International Business & Technical Consultants, Inc. Vienna, VA | Quesenberry, K. | 1989 |
| Hossain, Maksud M. | Research Associate, Noble Research Institute, OK, US | Babar, A. | 2017 |
| Jandrew, Jason R. | Ornamental Breeder, Ball Horticultural Company | Clark, D. | 2002 |
| Jank, Liana | Forage Breeder, EMBRAPA, Campo Grande, MS, Brazil | Quesenberry, K. | 2001 |
| Kennedy, Colleen | Plant Breeder, Duda Farm Fresh Foods, CA | Whitaker, V. | 2013 |
| Kouame, Christophe M. | Senior Scientist & Country Dir., World Agroforestry Ctr. (ICRAF), Ivory Coast | Quesenberry, K. | 1991 |
| Luciani, Gabriela F. | Scientist, Bayer, Argentina | Altpeter, F. | 2007 |
| Mangandi Sanchez, Jozer | Plant Breeder, Berry Blue, Inc. Plant City, FL | Whitaker, V. | 2015 |
| Marco, Martin Alberto | Manager, Forestry Improvement Program (PROMEF), INTA, Argentina | Rockwood, D. | 1987 |
| Marino, Silvia R. | Research and Development, Wonderful Citrus, Mcallen, TX | Olmstead, J. | 2012 |
| Martens, Roy Jesse | Sugarbeet Breeder, Syngenta, Longmont, CO | Barnett, R. | 1996 |
| Moon, David | Wheat Breeder, Pioneer Wheat Breeding Program, West Memphis, AR | Quesenberry, K. | 1993 |
| Mowrey, Bruce D | Director of Plant Breeding, Driscoll's | Sherman, W. | 1985 |
| Neibaur, Isaac E. | Senior Research Associate, Corteva Agriscience, China | Altpeter, F. | 2007 |
| Nguyen, Penny | Strawberry Breeder, Driscoll's, Watsonville, CA | Clark, D. | 2007 |
| Norden, Elliot H. | Research Associate II, Driscoll's, Dover, FL | Chaparro, J. | 2017 |
| Padley, Les | Squash breeder, Syngenta Global | Lyrene, P. | 2005 |
| Piccinino, Lisa L. | Tomato Breeder, Syngenta Seeds, Naples, FL | Scott, J. | 1985 |
| Poerba, Yuyu S. | Plant Breeder, Research Center for Biology, Inst. of Science (LIPI), Indonesia | Quesenberry, K. | 1996 |
| Rodriguez-Armenta, Hilda | Blueberry Breeder, Fall Creek Farm and Nursery, Ciudad Guzman, Mexico | Olmstead, J. | 2015 |
| Sandhu, Sukhpreet | Scientist, Bayer Crop Science, USA | Altpeter, F./Blount, A. | 2008 |
| Sanhueza-Herrera, Rebeca | General Manager, SPT Chile, Quillota Province, Chile | Rockwood, D. | 1999 |
| Sierra-Lucero, Victor | Director of Innovation and Technology Transfer Office, UNAB, Chile | Rockwood, Don | 1999 |
| Smith, Sarah M. | Squash Breeder, HM Clause, CA | Deng, Z./Clark, D. | 2011 |
| Stewart, Philip Jacob | Global Plant Breeding Director, Driscoll's Strawberry, San Francisco Bay Area | Chandler, C. | 2007 |
| Tamang, Bijay | Project Forester & Analyst, F4 Tech | Rockwood, D. | 2009 |
| Taparia, Yogesh | Research Associate, Corteva Agrisciences, India | Altpeter, F. | 2011 |

| Taylor, Steven G. | Integrated Crop Technical Manager, Syngenta, Greensboro, North Carolina | Quesenberry, K. | 1987 |
|--------------------|---|----------------------|------|
| Thornton, Steven T | Maize Breeder, Corteva Agrisciences, Mississippi, USA | Tillman, B. | 2014 |
| Wente, Rebecca | Syngenta, plant breeding support position | Hutton, S. | 2018 |
| Xiaobo, Li | North American Corn Breeding Data Lead, Bayer, St. Louis, MO | Peter, G. | 2009 |
| Yang, Zhi | Business Analysis Manager, iQIYI.com, Beijing, China | Rockwood, D. | 2009 |
| Yu, Yuan | Citrus Breeder, Haisheng Corporation, China | Gmitter, F./Klee, H. | 2014 |
| Zhang, Jianxing | Assistant VP, Compliance Quantitative Operations Associate, Bank of America | Peter, G. | 2015 |

| Alumni Name (Last, First Name) | Current Position - ACADEMIA - | Chair /Co-Chair (Last, First Name) | Graduation Year |
|-----------------------------------|---|---------------------------------------|--------------------|
| Acuna, Carlos Alberto | Professor and forage breeder, UNNE Corrientes, Argentina | Blount, A./Quesenberry, K. | 2009 |
| Baldessari, Jorge J. | Peanut Breeder, Instituto Nacional de Tecnologia Agropecuaria (INTA), Argentina | Tillman, B. | 2008 |
| Blount, Ann | Professor, Forage Breeding, University of Florida, North FL REC, Marianna, FL | Quesenberry, K. | 1984 |
| Cao, Zhe | Postdoctoral Researcher, University of Saskatchewan | Deng, Z./Clark, D. | 2016 |
| Chambers, Alan | Assistant Professor, Tropical Fruits Breeder, Univ. of Florida | Folta, K./Whitaker, V. | 2013 |
| Chaparro, Cesar J | Professor, Faculdad de Recursos Naturales, Univ. Nacional de Formosa, Argentina | Quesenberry, K. | 1991 |
| Chavez Velasquez, Dario J. | Extension Specialist and peach breeder, University of Georgia, Griffin | Chaparro, J. | 2013 |
| Deren, Christopher (retired) | Director, Rice Research and Extension Center, Stuttgart, University of Arkansas | Quesenberry, K. | 1986 |
| Gmitter, Frederick Jr | Professor, Citrus Research & Educ. Center, University of Florida | Sherman, W. | 1985 |
| Goyzueta Altamirano, Marco | Ph.D. Student in Agronomy, University of Florida | Tillman, B./Rowland, D. | 2017 |
| Griffiths, Phillip D. | Associate Professor of Horticulture, Cornell University, Geneva Station | Scott, J. | 1998 |
| Hutton, Samuel F. | Assistant Professor, Gulf Coast Research & Educ. Ctr., University of Florida | Scott, J. | 2008 |
| Itle, Rachel A. | Post-doctoral Researcher, University of Georgia | Olmstead, J. | 2010 |
| Jung, Jehyeong | Senior Scientist, Korea Institute of Science and Technology, Korea | Altpeter, F. | 2012 |
| Kemerait, Pamela Jean L | Adjunct Instructor, Abraham Baldwin Agricultural College, Tifton, GA | Chandler, C. | 1998 |
| Kilasi, Newton | Assistant Professor, Sokoine University of Agriculture, Morogoro, Tanzania | Rathinasabapathi, B. | 2016 |
| Mourao, Francisco A | Assoc. Professor, ESALQ, Universidade de Sao Paulo, USP, Brazil | Grosser, J. | 1995 |
| Mramba, Lazarus K. | Statistician, University of Florida Health | Gezan, S. | 2016 |
| Muir, James Pierre | Professor, Texas AgriLife Research, Texas A&M University System | Quesenberry, K. | 1989 |
| Phillips A., Douglas | Blueberry Extension Coordinator, University of Florida, Wimauma, FL | Munoz, P. | 2017 |
| Ribeiro de Resende, Marcio | Assistant Professor, Horticultural Sciences, University of Florida | Kirst, M. | 2014 |
| Rios, Esteban F. | Assistant Professor, Agronomy, University of Florida | Munoz, P./Kenworthy, K. | 2016 |
| Riveros Walker, Alejandro | Post-Doctorate Associate, University of Florida | Peter, G. | 2014 |
| Roach, Jack | Ph.D. student, Max Planck Plant Breeding Research, Cologne, Germany | Whitaker, V. | 2015 |
| Rodriguez, Jorge | Professor, Instituto de Recursos Geneticos y Productividad, Montecillo, Mexico | Sherman, W. | 1984 |
| Schwartz, Brian M. | Associate Professor, Turfgrass Breeding, University of Georgia, Tifton, GA | Kenworthy, K. | 2008 |
| Sinche Serra, Marco Vinicio | Professor, Escuela Politécnica Nacional, Quito, Ecuador | Altpeter, F. | 2013 |
| Topp, Bruce L | Assoc. Professor, Centre Horticulture Scs., University of Queensland, Australia | Sherman, W. | 1992 |
| Tseng, Yu-Chen | Breeder, University of Taiwan | Tillman, B. | 2016 |
| Weber, Courtney | Assoc. Professor, School of Integrative Plant Science, Horticulture, Cornell University | Sherman, W. | 1994 |



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC3 December 3, 2020

SUBJECT: Degree Program Termination

Morteza "Mori" Hosseini, Chair

BACKGROUND INFORMATION

The Board of Governors requires periodic reviews of all academic degree programs to determine whether they remain viable academic offerings. Degree programs that have been inactive or which are not planned to be reactivated must be closed.

The College of Public Health and Health Professions is requesting to terminate the Ph.D. in Health Services Research (CIP Code 51.0701). This program was replaced with the Ph.D. in Public Health, Health Services Research Concentration and has not had any new enrollment since Fall 2017. All students graduated from the program in Fall 2019. The Faculty Senate approved this request at its September 17, 2020 meeting.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the above degree program termination for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors final approval will be required for termination of all doctoral and professional degree programs only.

Supporting Documentation Included: See attached proposal.

Submitted by: Joseph Glover, Provost and Senior Vice President for Academic Affairs

Approved by the University of Florida Board of Trustees, December 4, 2020

W. Kent Fuchs, President and Corporate Secretary

Board of Governors, State University System of Florida ACADEMIC DEGREE PROGRAM TERMINATION FORM

In Accordance with BOG Regulation 8.012

| UNIVERSITY: University of Floric | la |
|---------------------------------------|--|
| | |
| PROGRAM NAME: Health Servi | ces Research Ph.D |
| | |
| DEGREE LEVEL(S): Ph.D | CIP CODE: 51.0701 |
| (B., M., Ph.D., Ed.D., etc.) | (Classification of Instructional Programs) |
| | |
| ANTICIPATED TERMINATION | TERM: Fall 2017 |
| (First term when no new students will | be accepted into the program) |
| | |
| ANTICIPATED PHASE-OUT TEI | RM: Spring 2020 |
| (First term when no student data will | |

Please use this form for academic program termination. The form should be approved by the University Board of Trustees (UBOT) prior to submission to the Board of Governors, State University System of Florida for consideration. Please fill out this form completely for each program to be terminated in order for your request to be processed as quickly as possible. Attach additional pages as necessary to provide a complete response. In the case of baccalaureate or master's degree programs, the UBOT may approve termination in accordance with BOG Regulation 8.012, with notification sent to the Board of Governors, Office of Academic and Student Affairs. For doctoral level programs please submit this form with all the appropriate signatures for Board of Governors' consideration. The issues outlined below should be examined by the UBOT when approving program terminations.

1. Provide a narrative rationale for the request to terminate the program.

The PhD in Health Services Research (HSR) has been replaced with the PhD in Public Health, Health Services Research Concentration (PH-HSR).

The HSR PhD program has not had any new enrollments since Fall 2017. All HSR PhD students have graduated from the HSR PhD program.

2. Indicate on which campus(es) the program is being offered and the extent to which the proposed termination has had or will have an impact on enrollment, enrollment planning, and/or the reallocation of resources.

This program was offered at the University of Florida, Main Campus, Gainesville Florida. The last student enrolled in HSR PhD has graduated from the program in Fall 2019. There are no new enrollees.

This has no impact on enrollment, enrollment planning or the reallocation of resources.

3. Explain how the university intends to accommodate any students or faculty who are currently active in the program scheduled to be terminated. State what steps have been taken to inform students and faculty of the intent to terminate the program. Please provide the date when the teach-out plan was submitted to SACSCOC, if applicable.

No accommodations are needed as there are no students in the HSR PhD program. Current faculty transitioned into PH-HSR PhD and none were displaced.

4. Provide data (and cite sources) on the gender and racial distribution of students in and faculty affiliated with the program. For faculty, also list the rank and tenure status of all affected individuals.

| HSR PhD Fall 2016 Student & Faculty Demographic Detail | | | | | |
|--|-----|-----|--|--|--|
| Gender, Race, Faculty Rank Students Faculty | | | | | |
| Female | 55% | 33% | | | |
| Male | 45% | 67% | | | |
| Asian | 36% | 22% | | | |
| Black | 18% | 11% | | | |
| Hispanic | 0% | 11% | | | |
| White | 45% | 56% | | | |
| Assistant Professor | | 22% | | | |
| Clinical Assistant Professor | | 44% | | | |
| Lecturer | | 11% | | | |
| Professor/Tenured | | 22% | | | |
| Source: University of Florida Human Resources, (GIMS) Graduate Information Management System | | | | | |

5. Identify any potential negative impact of the proposed action on the current representation of females, minorities, faculty, and students in the program.

The HSR PhD Program was replaced by the PH-HSR PhD Program and has had no impact on current representation of females, minorites, faculty or students in the program.

6. If this is a baccalaureate program, please explain how and when the Florida College System (FCS) institutions have been notified of its termination so that students can be notified accordingly.

Not Applicable.

| Signature of Requestor/Initiator | Revised 12/2016 |
|---|-----------------|
| orginature of Requestory Inflution | Dute |
| Signature of Campus EO Officer | Date |
| michael S. Perrí | 4/21/2020 |
| Signature of College Dean | Date |
| Signature of President or Vice President for Academic Affairs | Date |
| Date Approved by the Board of Trustees | Date |
| Signature of the Chair of the | Date |

Board of Trustees



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC4 December 3, 2020

SUBJECT: Degree Program Changes

BACKGROUND INFORMATION

The College of Design, Construction and Planning is requesting to remove a 3 credit MAC 1140 course in the first semester to keep it at 15 credits and the total for the B.S. in Sustainability in the Built Environment at 120 credits (CIP Code 30.3301). This change was approved by the Curriculum Committee and then by the Faculty Senate at their August 25, 2020 meeting.

The College of Agricultural and Life Sciences is requesting modifications to the Common Prerequisite Manual for 13 majors within the College. These changes would allow transfer applicants statewide to meet the prerequisite courses needed in order to be admitted into these majors. These changes were approved by the Curriculum Committee and then by the Faculty Senate at their September 17, 2020 meeting.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the above degree program changes for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is required.

| Supporting Documentation Included: | See attached proposals. |
|---------------------------------------|--|
| Submitted by: Joseph Glover, Provost | and Senior Vice President for Academic Affairs |
| Approved by the University of Florida | a Board of Trustees, December 4, 2020 |
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |

Degree|Change_Credits for request 14768

Info

Request: Sustainability and the Built Environment - Credit change

Description of request: Rationale/Justification:

"Model semester plan for BSSBE degree in semester one incorrectly lists both MAC 1147 and MAC 1140 meeting the mathematics requirement. This also creates confusion as MAC 1147 is 4 credits and MAC 1140 is 3 credits, making the total listed in the semester plan 119-120 credits. To correct, we would like to remove MAC 1140 as an option in semester one. This will leave just MAC 1147 as 4 credits, keeping semester one at 15 credits and the total for the BSSBE degree at 120 credits."

Academic Learning Compact and Academic Assessment Plan

"This correction to the semester plan produces an eight semester schedule that adds up to 120 credits in the undergraduate catalog, versus 119-120 in the previous iteration."

Submitter: Bahar Armaghani barmagh@ufl.edu

Created: 2/21/2020 12:19:48 AM

Form version: 1

Responses

Degree Name

Enter the name of the degree program.

Response:

Sustainability and the Built Environment

CIP Code

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program. The code has the numerical format XX.XXXX. Contact the Office of Institutional Planning and Research (OIPR) to verify the CIP code for the existing degree program.

Response:

30-3301

Current Total Credits

Enter the current number of credits needed to complete the majors in the degree program.

Response:

120

Proposed Total Credits

Enter the proposed number of credits needed to complete the majors in the degree program.

Response:

120

Effective Term

Enter the term (semester and year) that the requested change in total credits would be effective.

| Response Spring |
|--------------------|
| |

Effective Year

Response: 2020

Pedagogical Rationale/Justification

Describe the rationale for the proposed change to the total credits. In accordance with the requirements of Section 1007.25, F.S., the Board of Governors may approve a request by a university board of trustees for a bachelor's degree program to exceed 120 credit hours to degree for the following reasons:

- Additional courses are required to meet specialized accreditation standards for program content and such accreditation is expected or required for program graduates to become employed in the profession for which they are being prepared (e.g. Engineering, Architecture).
- Additional courses are required to meet state or federal mandated criteria for professional licensing (e.g., Teacher Education).
- The degree program offers a unique and innovative learning experience, such as honors programs, individualized study, and other non-traditional approaches to education.

Response:

Rationale/Justification:

"Model semester plan for BSSBE degree in semester one incorrectly lists both MAC 1147 and MAC 1140 meeting the mathematics requirement. This also creates confusion as MAC 1147 is 4 credits and MAC 1140 is 3 credits, making the total listed in the semester plan 119-120 credits. To correct, we would like to remove MAC 1140 as an option in semester one. This will leave just MAC 1147 as 4 credits, keeping semester one at 15 credits and the total for the BSSBE degree at 120 credits."

Academic Learning Compact and Academic Assessment Plan

"This correction to the semester plan produces an eight semester schedule that adds up to 120 credits in the undergraduate catalog, versus 119-120 in the previous iteration."

Impact on Initial Enrollment/Retention/Graduation

Describe the projected impact of the change in total credits on enrollment and on retention and graduation of students in the majors.

Response:

There is no impact.

Assessment Data Review

Describe the Student Learning Outcome and/or program goal data that was reviewed to support the proposed changes.

Response: unchanged

Academic Learning Compact and Academic Assessment Plan
Describe the modifications to the Academic Learning Compact and Academic Assessment Plan that result from the proposed change.

Response: unchanged

Cover Sheet: Request 14976

Common Prerequisite Manual for Programs in the College of Agricultural and Life Sciences

Info

| Process | Degree Change Common Prereqs |
|----------------|--|
| Status | Pending at Board of Trustees |
| Submitter | Casey Griffith cgriffith@aa.ufl.edu |
| Created | 5/5/2020 3:47:49 PM |
| Updated | 9/18/2020 7:53:28 PM |
| Description of | The College of Agricultural and Life Sciences is requesting a modification to the Common |
| request | Prerequisite Manual (CPM) for the following programs; |
| | 1. Food and Resource Economics |
| | 2. Animal Sciences |
| | 3. Plant Science |
| | 4. Soil and Water Sciences |
| | 5. Forest Resources and Conservation |
| | 6. Geomatics |
| | 7. Entomology |
| | 8. Interdisciplinary Studies |
| | 9. Dietetics. |
| | 10. Horticultural Science |
| | 11. Wildlife Ecology and Conservation |
| | 12. Human Resource Development (FYCS) |
| | 13. Nutritional Science |
| | 14. Food Science |
| | 15. Landscape and Nursery Horticulture (Deletion, program closed in 2012) |
| | |
| | The college has been working with the Office of Undergraduate Affairs since Spring of 2019 |
| | regarding these changes. |

Actions

| Step | Status | Group | User | Comment | Updated |
|--|-----------|--|----------------------|------------------------------|----------|
| Department | Approved | CALS - Agricultural and Life Sciences - General 60030000 | Joel H Brendemuhl | Approved by CALS. | 5/5/2020 |
| No document of | hanges | | | | |
| College | Approved | CALS - College of Agricultural and Life Sciences | Joel H Brendemuhl | Approved by CALS. | 5/5/2020 |
| No document of | hanges | | | | |
| Associate Provost for Undergrad Affairs | Approved | PV - Associate Provost for Undergraduate Affairs | Casey Griffith | | 5/5/2020 |
| CALS -CPM m | | equests_email revie | ew chain.pdf | | 5/5/2020 |
| University Curriculum Committee | Commented | PV - University Curriculum Committee (UCC) | Lee Morrison | Added to the UCC May agenda. | 5/7/2020 |

| Step | Status | Group | User | Comment | Updated |
|----------------------|--------------------|---------------------|--------------------|---------|---------------|
| | | ests May 2020.pdf | | | 5/6/2020 |
| | | e Economics CPM | Modifications.pdf | | 5/6/2020 |
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| 51.3101 Dieteti | | | · | | 5/6/2020 |
| 01.0603 CPM F | REQUESTED | DELETIÓN.pdf | | | 5/6/2020 |
| 01.1001 Food 9 | Science CPM | 1 Modifications.pdf | | | 5/6/2020 |
| 03.0601 Wildlife | e Ecology an | d Conservation CP | M Modifications.pd | f | 5/6/2020 |
| 30.1901 Nutrition | onal Science | s CPM Modification | is.pdf | | 5/6/2020 |
| 01.1103 Horticu | ultural Sciend | ce CPM Modification | ns.pdf | | 5/6/2020 |
| 19.0707 FYCS | CPM Modifie | cations.pdf | | | 5/6/2020 |
| University | Approved | PV - University | Casey Griffith | | 5/12/2020 |
| Curriculum | | Curriculum | | | |
| Committee | | Committee | | | |
| | | (UCC) | | | |
| | | PM Modifications.p | | | 5/11/2020 |
| Faculty | Approved | FAC - Faculty | Laurie Bialosky | | 8/26/2020 |
| Senate | | Senate Steering | | | |
| Steering | | Committee | | | |
| Committee | | | | | |
| No document c | | EAO E 11 | | | 0.14.0.10.000 |
| Faculty | Approved | FAC - Faculty | Laurie Bialosky | | 9/18/2020 |
| Senate | | Senate | | | |
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| Board of Trustees | Pending | Board of Trustees | | | 9/18/2020 |
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| Affairs | | | | | |
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| Coordinating | | | | | |
| Committee | | | | | |
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| Office of the | | | | | |
| Registrar | | | | | |
| No document c | hanges | | | | |
| Student | | | | | |
| Academic | | | | | |
| Support | | | | | |
| System | | | | | |
| No document c | hanges | | | | |
| Catalog | | | | | |
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| Assessment | | | | | |
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UF/IFAS

College of Agricultural and Life Sciences Office of the Dean 2001 McCarty Hall D PO Box 110270 Gainesville, FL 32611-0270 352-392-1963 Phone 352-392-8988 Fax

MEMORANDUM

TO: Dr. Angela Lindner, Associate Provost

FROM: Dr. R. Elaine Turner, Dean

SUBJECT: Statewide transfer agreement

DATE: May 4, 2020

The College of Agricultural and Life Sciences seeks to institute a statewide transfer agreement with the Florida College System and the UF College of Agricultural and Life Sciences. As the agriculture and natural resources instructional arm of the land-grant university, the College of Agricultural and Life Sciences (CALS) has multiple bachelor's degree programs that cannot be accessed anywhere else in the state. Specifically, we are interested in focusing on these 13 majors, which are unique to UF-CALS:

- Agricultural Education and Communication
- Agricultural Operations Management
- Animal Sciences
- Entomology and Nematology
- Environmental Management in Agriculture and Natural Resources
- Family, Youth and Community Sciences
- Forest Resources and Conservation
- Geomatics
- Horticultural Sciences
- Natural Resource Conservation
- Plant Science
- Soil and Water Science
- Wildlife Ecology and Conservation

Most of these programs are STEM, and national data tell us that graduates in agriculture and natural resource related areas are currently, and will continue to be in high demand (see

https://www.purdue.edu/usda/employment). A statewide agreement would allow us to develop customized advising materials in collaboration with each state college to clearly identify the transfer pathway to these programs. Our data show that ~70% of the transfer applicants who are denied admission to these programs in CALS are denied because they are missing prerequisite courses. We want to take all measures possible to assist the state colleges in preparing students for successful transfer.

To move forward with this process, we seek to update the Common Prerequisite Manual for these and other programs in CALS to match current transfer admission practices. In all cases, this reduces the number of courses required for transfer admission,



COMMITTEE ON ACADEMIC, FACULTY, AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC5 December 3, 2020

SUBJECT: Academic, Faculty, and Student Success, Public Relations and Strategic Communications Committee Charter Revision

BACKGROUND INFORMATION

It is proposed to combine the Committee on Academic, Faculty, Student Affairs and Experience and Committee on Marketing, Public Relations and Strategic Communications and update their charter to combine the scope of both committees' responsibilities. This is consistent with a unified strategy to advance the University's reputation with a full range of stakeholders. The new combined Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications will be asked to endorse the changes, which reflect the committee's current practice and posted charter.

PROPOSED COMMITTEE ACTION

The new combined Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications is asked to endorse the updates to its charter, as shown on the attached lined copy. Upon approval by the Committee on Governance, Government Relations, and Internal Affairs and endorsement by the Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications, the Board of Trustees will be asked for its approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governor's approval is not required. Submission to the Board of Governors of the new committee charter is required after approval by the GGRIA committee.

Supporting Documentation Included: <u>Combined Academic, Faculty, and Student Success, Public</u> Relations and Strategic Communications Committee Charter

Submitted by: Joe Glover, Provost and Senior Vice President and Nancy Paton, Vice President, Strategic Communications and Marketing

Approved by the University of Florida Board of Trustees, December 3, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



CONSOLIDATED CHARGE AND RESPONSIBILITIES

ACADEMIC POLICY AND STRATEGIC COMMUNICATIONS (APSC)

APSC addresses policies and initiatives that enhance academic quality and student experiences and advance the university's national prominence.

The Committee evaluates academic policies and student life programs for recommendation to the Board. It also reviews and recommends to the Board communications and marketing strategies that enhance the University stature and reputation while promoting its teaching, research, and service missions in the local, state, national, and international communities.

APSC SHALL FULFILL ITS GENERAL OVERSIGHT DUTIES AND RESPONSIBILITIES TO INCLUDE THE FOLLOWING:

- Review and recommend policies for the academic, curricular, and student co-curricular experiences and programs.
- Review Admissions recruiting efforts.
- Provide high-level input and guidance on institutional strategic communications and marketing priorities.
- Review and recommend policies pertaining to public relations, branding, advertising, internal and external communications, news, and information.
- Identify trends and issues that affect the University and higher education in general.
- Review and recommend policies impacting the University's national reputation and brand.

The working title for this committee is: ACADEMIC POLICY & STRATEGIC COMMUNICATIONS

Form 1

Format and Guidelines for Institutes/Centers

Sample Cover Sheet for a State of Florida or University Institute/Center Proposal

Center for Coastal Solutions

The submission and signing of a proposal to initiate a State of Florida institute/center or the establishment of a University institute/center constitutes a commitment by the university(ies) to ensure that the institute/center's activities support the stated mission(s) and goals of the institution(s).

| University of Florida | Dr. Kent Fuchs | 10/13/20 |
|---|---|--------------------------------|
| University Submitting Proposal | President | Date |
| | Dr. Joseph Glover Joseph Glover | |
| | Provost | Date |
| Center | | |
| Type of Institute/Center | Senior Vice President | Date |
| | Dr. David Norton David Norton | <u>9/21/2</u> 020 3:38 PM ED |
| Proposed Implementation Date | Vice President for Research | Date |
| | Cammy abernathy | 9/21/2020 1:07 PM EDT |
| 14 | Dr. Cammy Abernathy | |
| Associated Discipline (2-digit CIP) | Dean of School or College | Date |
| Dr. Christine Angelini | Christopher J. Cowen | 9/24/2020 1:55 PM EDT |
| Proposed Institute/Center Date Director (if known) | Vice President and Chief Financial Officer (as appropriate) | Date |
| | Other President(s)/ | Date |

Form 2

Institute/Center Data

| | D | irectory Information | | | |
|------------------|---|---|--|--|--|
| I/C Name: | Center for Coastal Solutions | | | | |
| I/C Code: | | University: University of I | Florida I/C Type: | | |
| I/C Director: Dr | | r. Christine Angelini | Discipline(s) (2-Digit CIPs): | | |
| I/C Address: | 1949 Stadium Rd 575 Weil Hall | | | | |
| | Gainesville, FL 32611 | | | | |
| I/C Telephone: | Gainesville, FL 32611 (352) 294 7815 | I/C E-Mail Address: | ccs@eng.ufl.edu | | |
| I/C Telephone: | | I/C E-Mail Address: I/C Web Site Address: | ccs@eng.ufl.edu www.ccs.ufl.edu (In Development) | | |

Mission and Areas of Focus

Mission Statement: words)

The mission of the Center for Coastal Solutions (CCS) is to predict and prevent human health, environmental health, and economic impacts to coastal communities. The CCS will leverage the intellectual capital of the University of Florida, a growing network of partners and the HiPerGator NVIDIA AI supercomputer to pursue science-based, data-driven, policy-relevant innovation, workforce training, (No more than 120 and outreach to enhance our capacity to better detect, track, forecast, mitigate and prevent coastal environmental hazards. To address these pressing challenges, the CCS will apply an open source model that capitalizes on strong across-campus and multi-sector collaboration to accelerate progress in developing feasible, holistic solutions for coastal communities at greatest risk to these hazards.

Key Terms:

Coastal Environmental Hazards and Resilience, Engineering, Artificial Intelligence, Public Health, Bio-Medical Informatics, Public Policy, Biology, Hazard, Climate Change, Forecast, Science Communications

Form 3

| I/C Code: Prepared By: | | I/C Name: | | Center for Coastal Solutions | | | |
|---|---------------------------|------------------------------|----------------------------|------------------------------|---------------------------------|-----------|--|
| | | Date: | 9/15/2020 | Telephone: | (352) 39 | 92-0946 | |
| Estimated Expenditures for the Institute/Center | | FISCAL YEAR: FY202 | | | FY2021 | | |
| | | Budgetary Unit:* | | Univesrity E&G | | | |
| | | SUS Appropriated Funds | Contracts and Grants | Fees for Services | Private & Other (Specify) | Total | |
| Salaries & Benefits | Faculty, TEAMS, & USPS | 1,262,000 | 830,389 | 0 | 23,151 | 2,115,540 | |
| Other | Housestaff | 0 | 0 | 0 | 0 | 0 | |
| Personal | Graduate Assistants | 182,363 | 734,254 | 0 | 94,288 | 1,010,905 | |
| Services | Other | 28,017 | 434,184 | 0 | 0 | 462,201 | |
| Expenses | | 3,096 | 6,021,639 | 0 | 54,975 | 6,079,710 | |
| Operating Capital Outlay | | 0 | 0 | 0 | 0 | 0 | |
| Total Expenditures | | 1,475,476 | 8,020,466 | 0 | 172,414 | 9,668,355 | |

| Positions and Rate | SUS Appropriated Funds | Contracts and Grants | Fees for Services | Private & Other (Specify) | Total |
|---|--|----------------------------|-------------------------|---------------------------------|---------------------|
| Faculty Positions (FTE in Personyears) | 10.20 | 4.40 | 0.00 | 0.00 | 14.60 |
| TEAMS and USPS Positions (FTE in Personyears) | 2.50 | 0.00 | 0.00 | 0.00 | 2.50 |
| Total Positions (FTE in Personyears) | 12.70 4.40 0.00 1,212,000 580,389 0 | 4.40 | 0.00 | 0.00 | 17.10 |
| Sum of Salary Rates for These <u>Faculty</u> Positions | | 23,151 | 2,115,540 | | |
| Sum of Salary Rates for These TEAMS and USPS Positions | 50,000 | 250,000 | 0 | 0 | 0 0 51 2,115,540 |
| Sum of Salary Rates for Faculty, TEAMS, and USPS Positions | 1,262,000 | 830,389 | 0 | 23,151 | |

^{*} Budgetary Unit: Specify E&G, IFAS, or UF-HSC

Projected Space Requirements (in square feet)

| Projected Space Required by Source | Office | Laboratory | Conference Rooms | Other |
|---------------------------------------|--------|------------|---------------------|-------|
| From Existing Inventory | 3165 | | 618 | |
| Rented | | | | |
| New Construction | | | | |

Proposal to establish the Center for Coastal Solutions as a University of Florida Center

Points of Contact:

Dr. Christine Angelini (Director, Center for Coastal Solutions: c.angelini@ufl.edu)
Dr. Forrest Masters (Assoc. Dean for Research, HWCOE, masters@eng.ufl.edu)
Dean Cammy Abernathy (Dean, HWCOE, caber@eng.ufl.edu)

Key Terms:

Engineering, Artificial Intelligence, Public Health, Bio-Medical Informatics, Public Policy, Biology, Hazard, Climate Change, Forecast, Science Communications

1. Mission Statement and Goals.

The mission of the Center for Coastal Solutions (CCS) at the University of Florida is to predict and prevent human health, environmental health, and economic impacts to coastal communities through convergent research, interdisciplinary collaboration, and workforce development. The CCS will leverage the intellectual capital of the University of Florida and of a growing network of public and private sector partners to pursue science-based, data-driven, policy-relevant innovation, workforce training, and outreach to enhance our capacity to better track, forecast, and mitigate environmental hazards at the coast, including nutrient and industrial pollution, harmful algae blooms, waterborne pathogens, sea level rise, ocean acidification and other climate change- and human development-related threats. The CCS will leverage the HiPerGator NVIDIA AI Super Pod and catalyze convergent research in applied engineering and science to create reliable, early warning systems for a multitude of coastal hazards and develop effective and sustainable solutions for reducing their effects on coastal residents, visitors, wildlife and ecosystems. To address these pressing and escalating challenges, the CCS will apply an open source model that capitalizes on strong across-campus and multi-sector collaboration to accelerate progress in developing feasible, holistic solutions for coastal communities at greatest risk to these hazards. The CCS will thus serve as a centralized "Smart Resource Hub" where decision-makers, natural resource managers and community leaders can easily access expertise, information, forecasts and mitigation strategies for improving coastal resilience state-, nationand worldwide.

2. Proposed Activities

Rationale for a Center:

The value of creating the Center for Coastal Solutions to the University of Florida can be summarized in the following five benefit areas.

First, this Center will allow UF to advertise to federal, state and local partners, industries, non-governmental organizations, alumni, and the public a single 'smart resource hub' for accessing expertise, information, forecasts and mitigation strategies, helping streamline our outward-facing communications to these various partners and the many units around campus working on

various aspects of coastal' solutions. This smart resource hub will be embedded in the CCS' website, which, as of September 2020, is in development and will go live in October 2020.

Second, the Center will position involved UF faculty to leverage the tremendous research and workforce development infrastructure of the Center in future applications for external funding. In essence, the Center will lend credibility to faculty proposing to conduct ambitious, highly convergent research and training. Faculty leading the CCS are already involved in writing a \$30M proposal to the National Science Foundation to establish an Engineering Research Center as well as a host of other proposals to NOAA, NIH, NSF and other federal funding programs to build out the foundation of each thrust (see thrust details below). We are also already in discussions with leadership at Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, the National Estuarine Research Reserves, NOAA, and NASA to help blend the CCS activities with their own research, workforce development and outreach priorities.

Third, the Center, by hosting an annual *Innovating Coastal Resilience Summit*, a Distinguished lecture series, and other workshops and networking events, will help catalyze new collaborative research and workforce training involving UF faculty and our partners, especially around the topics of coastal hazards and Artificial Intelligence, as these two topical areas are interwoven throughout our five major thrusts, described below. By maintaining an easily searchable database of affiliate faculty from across campus & affiliate partners, and an online jobs board where both our faculty and partners can post various jobs and internships, we aim to create multiple new opportunities for sharing expertise across campus and with our partners and support the career development of UF graduates.

Fourth, the Center will allow UF to be even more competitive in recruiting excellent new faculty and student talent to the University as we feel this collaborative, tech-forward initiative will serve as a major 'tool' UF deans, department chairs, and faculty can use to attract new talent to join our team.

Fifth, and finally, given that many of UF's alumni grew up with close emotional and cultural ties to coastal resources here in the state, we anticipate that the CCS can be leveraged to help cultivate deeper connections to our alumni and attract further philanthropic and corporate support for UF through Center outreach activities.

Relationship with other Centers or Institutes

Our vision is for the CCS to be among the most active 'hubs' on campus for collaboratively using the HiPerGator NVIDIA AI Super Pod to accelerate our progress in multiple applications of Artificial Intelligence (e.g. see Thrust details below). In addition, CCS leadership is already working to form strong, collaborative ties with the Nelms Center for the Connected World, the Florida Institute for Cybersecurity Research, UF/IFAS Extension, Florida Sea Grant, the Florida Engineering Extension Station, the UF Tourism Crisis Management Initiative, the Conservation Clinic in the UF Levin School of Law, and other centers around campus. We have already established personal ties with leaders in each of these centers/institutes through our Centerenvisioning and -planning activities and have identified strategies to begin to synergize with each.

The CCS's primary focus on engaging industry, government and non-governmental organization and faculty from across campus to innovate new technologies, solutions and policies to address coastal environmental hazards complements the missions of these other existing entities around campus and we will continue to look ahead for opportunities to work together on larger proposals to the state and federal agencies and strategic initiatives. Leadership from all of these entities will be invited to our annual Summit as a means of keeping them up-to-date on CCS activities.

Below we summarize some of the key convergent research and workforce development activities that are foundational to the Center for Coastal Solutions' plan to fulfill its mission, stated above. The CCS will involve faculty with relevant expertise from across UF campus and will be developing a membership program for public and private sector partners to engage in the CCS's research, technology transfer, and workforce development efforts. Our workforce development efforts will primarily occur through the involvement of undergraduates, graduate students and post-doctoral scholars in our research, facilitation of the placement of students in internships and jobs with our industry, government and non-governmental organization partners, encouragement of students to obtain minors, certificates, masters degrees, and other accreditations in fields the complement their primary field of study to support interdisciplinary training. Courses and potential degree or continuing education programs may develop over time but are not primary foci on the CCS in its first years.

2.1. Interdisciplinary Research & Workforce Development

The convergent research activities produced through the Center for Coastal Solutions will leverage the comprehensive expertise present across the University of Florida and are designed to address the greatest environmental, human health and economic challenges facing the State of Florida's more than 14 million coastal residents. Each CCS research thrust involves a partnership between faculty within the HWCOE and other departments and units across campus. In response to changes in industry, government and societal need, these thrusts will expand in breadth and depth and necessarily evolve in focus over time. Below, we summarize the CCS's five major research thrusts.

Thrust 1: 'Blue' Economic Resilience.

The CCS will blend faculty and student expertise in economic impact analyses from UF/IFAS, Tourism and Hospitality Management, with HWCOE expertise in applied Artificial Intelligence (AI), data science, coastal, coastal and environmental engineering and other UF campus units to develop deeper insights regarding the sectors of the 'blue' economy (i.e. those sectors depended on coastal resources, such as commercial-recreational fishers, tourism, hospitality) that are most vulnerable, and resilient, to different coastal hazards. Within this collaborative framework, we will explore how future climate change and different interventions (e.g. local-community led efforts to bolster the resilience of the tourism or commercial fisheries sectors, for instance) may influence Florida's blue economy. Through partnerships with the state and local communities, we will use this information to guide proactive decision-making and design strategies that improve blue economy resilience statewide. This application of UF's unparalleled capabilities AI

to support economic resilience will serve as a gold-standard for such convergent, societally-relevant research.

Thrust 2: Coastal Hazard Detection & Monitoring.

Through participation for experts across campus in sensor design, sensor networks, sensor power, data compression, Al-based automated signal and image interpretation, and other related fields, the CCS will help support the development of new technologies for better detecting and tracking a variety of coastal hazards. We intend to collaborate broadly with the public and private sector in data collection, data sharing, and sensor system optimization. We are adopting an inclusive approach to coastal hazard sensing in that we intend to collect data on coastal hazards from satellites, to semi- and autonomous gliders, drones and subsurface vehicles, in-situ sensors, and both commercial-recreational fishing boat, and human-deployed sensors. We will involve faculty, students and partners focused on innovating sensors across these platforms and others, as well as researchers focused on 'smart' communications among sensors (e.g. creating sensor networks able to self-organize and adaptively follow harmful algae blooms), sensor power, fouling and performance, and data compression, data security, and other related areas.

Thrust 3: Coastal Hazard Modeling and Forecasting.

In blending expertise from HWCOE Civil & Coastal Engineering and Environmental Engineering Sciences with that from our partners, we will build a suite of models able to couple watershedestuary-nearshore-ocean-atmospheric processes that will help our CCS team better resolve locations and timing of coastal hazard initiation (e.g. when and where harmful algal blooms, such as Florida red tide and blue-green algal blooms first form) and forecast how these hazards move through coastal environments. These models will be supported by our University's tremendous supercomputing capabilities, recently augmented by the \$70M partnership between NVIDIA and the University of Florida, and extensive (and growing) expertise in Al. By sharing these insights with local, state and federal decision-makers and producing forecasts that are communicated to the public in forms much like weather forecasts, we will prepare our citizen to better prevent coastal hazards from becoming full-blown crises, and inform decision-making about how to better avoid hazard when they do occur.

Thrust 4: Embracing a One-Health Approach to Florida's Coasts.

The CCS will adopt a truly 'OneHealth' approach to understanding how coastal hazards affect human and wildlife health in the coastal zone across the state. We will specifically integrate expertise in applied AI and data science present with the HWCOE with that of faculty from Public Health and Health Professions (PHHP), the College of Veterinary Medicine (CVM) and College of Medicine (COM) to evaluate which coastal hazards are driving declines in human mental and physical health, and in wildlife (e.g. fish, mammals, invertebrates) health, information vital for identifying where investments in mitigating hazards may result in the greatest benefits to 'coastal health'. This thrust leverages the tremendous resources of the University available through the OneFlorida Clinical Research Consortium, Florida Family Data Center, and other public and wildlife health database as well as significant data on coastal hazards that will be produced through Thrust 2 (Coastal Hazard Detection and Monitoring).

Thrust 5: Coastal Policy Lab. The CCS will include a "Coastal Policy Laboratory" designed to provide a central campus hub for coastal policy research and training. Faculty from key disciplines at the intersection of science and policy - law, economics, engineering, planning and the social sciences – will engage students from these and other disciplines in a "laboratory" format to ensure that the policy implications of Center research are adequately understood and addressed, that Center students are equipped with the tools of policy analysis, and that Center stakeholders have a place to go to seek advice on policy applications that advance coastal solutions, including those developed by the Center. The Coastal Policy Laboratory will closely collaborate with the Florida Sea Grant Legal Program in the design, development and dissemination of coastal policy solutions.

2.2 Distinguished Lecture Series

The CCS, starting in 2021, will begin a Distinguished Lecture Series that will involve up presentations from to three thought leaders from academia, the public sector and the private sector per year. These thought leaders will bring new ideas for collaborative research and training into the CCS, help stimulate new partnerships, and enable the CCS broadcast its activities to the institutions that these thought leaders represent.

2.3 Annual Innovating Coastal Resilience Summit

Annually, in May at the conclusion of the Spring semester, we will host a 2-Day Summit involving students, faculty, staff, and the CCS's many private and public sector partners. This Summit will involve a keynote address, presentations, workshops and working group meetings on special topics, a poster-session/mixer for students to engage with potential public and private sector employers and other activities to help cultivate strong partnerships and collaboration across participants in the CCS. We hope to jointly host the Summit with other entities on campus, such as Florida Sea Grant and the Nelms Center for the Connected World some years to help catalyze convergent research and training activities in areas we identify as having strong scope for growth and attraction of external funding. We are currently working to fundraise to support this event via corporate and private donations.

2.4 Jobs Board

To help facilitate the recruitment of excellent students into CCS research and outreach programs and help place our UF students in careers at our partnering agencies and organizations, we will host a jobs board on the CCS webpage. This will be maintained by the CCS administrative assistant and will serve as a resource for hiring talented students and staff for all participating organizations.

2.5 Affiliate Faculty and Partner Database

The CCS will host an easy-to-search database including all faculty affiliated with the CCS and, as desired, our partners. This database will serve as a key resource for faculty from across campus and external to UF identify potential collaborators and build active research networks.

3. Reporting Structure

The CCS Director (currently, Dr. Christine Angelini) will report to HWCOE Dean (currently Dr. Cammy Abernathy). Every three months the CCS Director will meet with the HWCOE Dean to provide updates on collaborative research, workforce development, extramural funding, industry, government and NGO partnerships and other relevant activities. Annually, the CCS Director will provide a written report that summarizes these activities and other topics requested by the Dean for review.

4. Administrative Structure

The CCS administration structure will include the following personnel and advisory boards. The personnel will convene weekly (and more frequently as needed) to manage CCS activities; the Director and Chair of the Advisory Boards will meet bi-weekly, and the advisory boards will convene quarterly.

4.1 Personnel

Director: Dr. Christine Angelini

Responsibilities: The director will oversee the day-to-day operations of the CCS, including coordination and activities of staff, communication with government and industry partners, the submission of research and education proposals to bring funds into the CCS, and the execution of research, education, mentorship and outreach activities. The director will lead weekly team meetings with the Associate Directors and staff, as well as quarterly meetings with both the faculty team and advisory board to share ECCS progress, strategize next steps in ECCS growth, and evaluate mechanisms to expand the CCS' impacts on research, education, and workforce development. The director will annually report CCS progress and accomplishments to UF Administration, in particular the HWCOE Dean, and the CCS Advisory Board.

Associate Director of Applied Research & Policy: Dr. David Kaplan

The Associate Director of Applied Research and Public Policy will be responsible for developing and maintaining relationships and communications with government agencies, offices, and representatives at the federal, state, and local levels. This person will assist the Director in the development of CCS strategies, policies, and plans, particularly in the context of government laws, regulations, and funding mechanisms. Responsibilities of the Associate Director of Applied Research & Policy include: communicating and promoting the goals and successes of the ECCS to government representatives; meeting with elected and appointed officials and their staffs to advocate for support and collaboration with the CCS; developing policy initiatives that align with the goals of the CCS; and providing information about potential new laws and regulations to the Director. This person will meet weekly with the CCS Director, produce quarterly summaries to the subject matter expert team and advisory board, and contribute to the annual CCS progress report.

Associate Director for Al Research & Programs: Dr. Paul Gader

Responsibilities include (1) identifying sources of environmental data, and evaluating their quality and spatial-temporal extent and resolution, (2) create information flow architecture of data throughout the center, (3) devise, implement, analyze, and share new AI-based signal and image interpretation algorithms for estimating characteristics of quantities of interest to

modelers, mitigators, and public health researchers, (4) define, implement, and maintain database architecture for storing environmental data to be jointly analyzed with public health data, (5) devise new and/or faster data science algorithms for supporting multi-factor research using public health and environmental data, (6) building a data hub that contains links to online data sets and center created data sets as well as open source software to facilitate collaborative research by those involved in the center as well as many other researchers, (7) devise, maintain, and upgrade data dashboard. This person will meet weekly with the CCS Director, produce quarterly summaries to the subject matter expert team and advisory board, and contribute to the annual CCS progress report.

CCS Full-time Staff:

Administrative Assistant & Secretary to the Advisory Board: To be hired upon availability of funds 0.5 FTE position

Field Operations Director: Todd Van Natta (1.0 FTE)

Data Scientist: To be hired upon availability of funds (1.0 FTE)

4.2. Advisory Boards

The CCS will be overseen by three complementary advisory boards, which will be collectively overseen by a single Chairman of the Board, currently Scott Pressly, a UF HWCOE alum.

Science Sub-Committee

The role of this sub-committee is to provide academic expertise and advice to the director and faculty of the ECCS.

Industry Sub-Committee

The role of this sub-committee is to focus on external relations and outreach, including Marketing and Communications, Development and Corporate Engagement.

Government Sub-Committee

The role of this sub-committee is to advise on opportunities and issues in the county and state governments and agencies.

Form la Indirect Cost Return for Proposed Center

For UF Internal Use Only

The indirect cost return for a center in a college is subtracted from that received by the college. This is because all indirect costs are now returned to the colleges, minus costs of running central programs. This form is to establish what percentage (7.5% maximum), if any, the proposed center or institute will receive in indirect cost return.

INDIRECT COST ASSIGNMENT

| Date: 09/11/2020 | | | |
|---|--------------|--------------------------|---|
| Institute or Center Name: Center fo | or Coastal S | Solutions | |
| College: Herbert Wertheim Colleg | e of Engine | eering | |
| Indirect Cost Return: | YES | % Return (max 7.5%) < | % |
| Dean's Agreement: (Use separate form for each college) | | | |
| Cammy Abernathy | | | |
| Dean's signature | | | |
| | | | |
| EDC/cl | | | |

Form 1

Format and Guidelines for Institutes/Centers

Center for Genetic Epidemiology and Bioinformatics

September 1, 2020

The submission and signing of a proposal to initiate a State of Florida institute/center or the establishment of a University institute/center constitutes a commitment by the university(ies) to ensure that the institute/center's activities support the stated mission(s) and goals of the institution(s).

| University of Florida | apr 1 | olaho |
|--|-------------------------------------|--------------------------|
| University Submitting Proposal | W. Kent Fuchs, PhD | Date |
| | President | |
| | Greent Clause | 10/6/2020 8:14 PM ED |
| | Joseph Glover Joseph Glover, PhD | Date |
| | Provost and Senior Vice President | for |
| | Academic Affairs | |
| University of Florida (UF) Institute/Center | David Melson | 8/19/2020 6:04 PM EDT |
| Type of Institute/Center | David R. Nelson, MD | Date |
| | Senior Vice President, Health Affai | irs |
| September 1, 2020 | David P. Norton | 8/20/2020 7:57 AM EDT |
| Proposed Implementation Date | David P. Norton, PhD | Date |
| The state of the s | Vice President for Research | |
| 51 | A Tyndall | 8/19/2020 5:47 PM EDT |
| Associated Discipline (2-digit CIP) | J. Adrian Tyndall, MD | Date |
| | Dean, College of Medicine | |
| Jinying Zhao 8/17/2020 | Christopher J. Cowen | 10/6/2020 10:36 AM EDT |
| Proposed Institute/Center Director Date | Vice President and Chief Financial | Date |
| Jinying Zhao, MD, PhD | Officer (as appropriate) | |
| | Other President(s)/Administrator(s) | Date |
| | (as appropriate) | |

Form la Indirect Cost Return for Proposed Center

For UF Internal Use Only

The indirect cost return for a center in a college is subtracted from that received by the college. This is because all indirect costs are now returned to the colleges, minus costs of running central programs. This form is to establish what percentage (7.5% maximum), if any, the proposed center or institute will receive in indirect cost return.

INDIRECT COST ASSIGNMENT

| Date: August 17, 2020 | | | | |
|--|------------------|--------------------------|------------|---------|
| Institute or Center Name: Center | r for Genetic Ep | idemiology and Bioinform | natics (Go | eneBio] |
| College: College of Medicine | | | | |
| Indirect Cost Return: | YESx NO | % Return (max 7.5%)_ | 7.5 | % |
| Dean's Agreement: (Use separate form for each | i college) | | | |
| A Tyndoll | | | | |
| Dean's signature (J. Adrian Tyndall, MD) | - | | | |

EDC/cl

Form 2

Institute/Center Data

| I/C Name: | Center | for Genetic Epidemiology and Bioinformat | tics (GeneBio) |
|---|---|--|----------------------------------|
| I/C Code: | | University: University of Florida | I/C Type: |
| I/C Director: | J | inying Zhao, MD, PhD | Discipline(s) (2-Digit CIPs): |
| | 2004 Mowry Road, UF C | CTRB 4230 | |
| I/C Address: | PO Box 100231 Gainesville, FL, 32610 | | |
| 777 | PO Box 100231 | I/C E-Mail Address: | jzhao66@ufl.edu |
| I/C Address: I/C Telephone: I/C SUNCOM: | PO Box 100231 Gainesville, FL, 32610 | | jzhao66@ufl.edu |

Mission and Areas of Focus

Mission
Statement:
(No more than 120 words)

The Mission of the GeneBio Center is to develop, foster, and support innovative, collaborative, and multidisciplinary research and training in genetic epidemiology, translational population genomics, and bioinformatics, with a goal to uncover and understand disease mechanisms underlying human complex diseases and translate research findings to improve health outcomes and prevent diseases.

Genetic Epidemiology Bioinformatics Translational Research

Key Terms:

Precision Health Multi-omics Population Sciences

| - | | | | - |
|----|----|---|-----|---|
| 14 | - | - | *** | 3 |
| | ., | | | |

| I/C Code: | | I/C Name: | Center for G | lenetic Epidem | iology and Biointe | ormatics (GeneBio) |
|------------------------|------------------------------------|-------------------------------|----------------------------|-------------------------|---------------------------------|--------------------|
| Prepared By: | I | Date: 8/17/202 | 20 | Telephone: | 352-2 | 273-5933 |
| Ti- | | FISCAI | L YEAR: | | 2020-202 | 1 |
| | timated | Budgeta | ry Unit:* | | UF-HSC | |
| f | enditures for the ute/Center | SUS Appropriate d Funds | Contracts and Grants | Fees for Services | Private & Other (Specify) | Total |
| Salaries & Benefits | Faculty, TEAMS, & USPS | | 106,647 | | 114,667 | 221,314 |
| Other | Housestaff | | | | | |
| Personal | Graduate Assistants | | | | | |
| Services | Other | | 3,000 | | 3,000 | 6,000 |
| E | xpenses | | 25,000 | | 25,000 | 50,000 |
| Operating | Capital Outlay | | | | | |
| Total I | Expenditures | | 134,647 | | 142,667 | 277,314 |
| Positio | ns and Rate | SUS Appropriate d Funds | Contracts and Grants | Fees for Services | Private & Other (Specify) | Total |
| | ty Positions n Personyears) | | 0.25 | | 0.00 | 0.2 |
| | | | | | | |

| Positions and Rate | SUS Appropriate d Funds | Contracts and Grants | Fees for Services | Private & Other (Specify) | Total |
|--|-------------------------------|----------------------------|-------------------------|---------------------------------|---------|
| Faculty Positions (FTE in Personyears) | | 0.25 | | 0.00 | 0.25 |
| TEAMS and USPS Positions (FTE in Personyears) | | 0.50 | | 1.50 | 2.00 |
| Total Positions (FTE in Personyears) | | 0.75 | | 1.50 | 2,25 |
| Sum of Salary Rates for These <u>Faculty</u> Positions | | 62,544 | | 0 | 62,544 |
| Sum of Salary Rates for These TEAMS and USPS Positions | | 44,103 | | 114,667 | 158,770 |
| Sum of Salary Rates for Faculty, TEAMS, and USPS Positions | | 106,647 | | 114,667 | 221,314 |

^{*} Budgetary Unit: Specify E&G, IFAS, or UF-HSC

UF Center for Genetic Epidemiology and Bioinformatics (GeneBio)

Jinying Zhao, MD, PhD

Professor, Department of Epidemiology

College of Public Health and Health Professions & College of Medicine

University of Florida

August 17, 2020

A. Introduction

We propose to create the Center for Genetic Epidemiology and Bioinformatics (GeneBio) at the University of Florida. Genetic epidemiology is a rapidly growing field in public health, encompassing diverse disciplines including population genetics, epidemiology, medicine, public health, molecular biology, statistical modeling, computational biology, and bioinformatics. The goal of genetic epidemiology research is to identify novel biomarkers and understand the role of genetics, environmental factors, and gene-environment interactions in determining human health and diseases. Such knowledge can be translated into precision strategies to combat disease including early diagnosis, prevention, and intervention tailored to an individual's personal profile. Thus, genetic epidemiology is at the heart of precision health. High-throughput genomic sequencing and other omics technologies are routinely used in genetic epidemiology research to identify genetic variants that cause disease or influence drug responses. The omics datasets generated are often very large (big data) and extremely complex. Therefore, sophisticated computational and statistical methods are required to analyze and interpret the data so that we can understand disease biology and identify drug targets in each individual's genome. The overall goal of the GeneBio Center is to discover and understand genetic drivers that cause complex human diseases and translate such knowledge to precision public health and precision medicine. To achieve this goal, the Center will create and foster a collaborative and interactive research and training environment for faculty, researchers, students, and healthcare professionals from a variety of disciplines within medicine, public health, epidemiology, genetics, biostatistics, pharmacy, and bioinformatics. This multidisciplinary cooperation will enhance campus-wide collaborations and synergy towards a clarified mission.

The Division of Genetic Epidemiology. The GeneBio Center will build on and expand the existing Division of Genetic Epidemiology in the Department of Epidemiology at the PHHP & COM. The Division was initiated in 2016 as part of Dr. Zhao's Preeminence startup package when she joined the Department. Since its inception, the Division has hired two full-time faculty members (one research assistant professor, one research assistant scientist) and supports another assistant professor (30% effort) and 4 PhD students (one graduated in Dec 2018, three are current PhDs). The Division has developed and offered two 3-credit hour graduate courses (PHC 7594 Genetic Epidemiology [offered since 2017] and PHC 6937 Population Genetics [offered in fall 2019]) with another course (Computational Genetics and Genomics) scheduled to be offered in spring 2020. In addition, the Division has successfully developed a Concentration in Genetic Epidemiology and submitted the application for a Certificate in

Genetic Epidemiology (pending approval). Moreover, Dr. Zhao has been mentoring multiple MS/MPH students and collaborating with faculty members from multiple colleges/departments/centers including the Department of Neurology, Department of Statistics, Department of Chemistry, Institute on Aging, UF Health Cancer Center, College of Engineering, College of Nursing, etc. Her mentees had submitted extramural grant applications for pre-doctoral fellowship, career development grant (e.g., NIH K01), and research grants (e.g., R01s).

While the Division of Genetic Epidemiology has been conducting interdisciplinary research and training, achieving "center" status has several advantages, including enhancing our reputation campuswide, statewide and nationally, facilitating more productive collaborations, and ensuring a long-term commitment to our mission. The Center status will also allow us to obtain additional funding support from indirect cost returns and from external donors. Additionally, the Center status will enhance our opportunities for obtaining additional funding sources from NIH and/or the state of Florida. The University of Florida does not have an existing Center with a focus on the strategic areas pursued by GeneBio, and we will offer to assist researchers and trainees who are interested in genetic epidemiology, population genomics, translational epidemiology, precision health, and bioinformatics across UF including the Jacksonville campus. The presence of the Center will also enhance the visibility and reputation of the University of Florida as a leader in this area of high research focus.

The new GeneBio Center consists of four major components:

- Translational multi-omics research: Uncover molecular mechanisms and identify novel biomarkers for human complex diseases using multi-omics approaches (genomics, epigenomics, transcriptomics, metabolomics, proteomics, microbiome, metagenomics, phenomics, pharmacogenomics, and other omics platforms), and translate such knowledge into usable diagnostic, preventive and therapeutic decisions.
- Bioinformatics and omics data science: Develop novel statistical methods and analytical
 approaches for high-dimensional omics data analysis and integrate genetic, behavioral, and
 environmental factors with omics measures for both scientific discovery and targeted prevention
 and interventions.
- Education and training: Train and nurture the next-generation genetic epidemiologists, bioinformaticians, physician scientists, and public health practitioners who are interested in translational epidemiology, population genomics, omics data science and precision health. The work at the Center will help connect basic science and clinical practice across UF and its affiliated centers/institutes including the Jacksonville campus.
- Service: The Center will provide service and support for genetic epidemiological study design, genetic and omics data analysis, data management, and assist with requests for access to genetic/genomic data collected by the Center for use in grant applications, publications and presentations.

B. Vision

To become a nationally recognized, NIH-funded multidisciplinary research and training Center for translational epidemiology, population genomics, omics data science, and precision health.

C. Mission Statement and Goals

Our Mission is to develop, foster, and support innovative, collaborative, and multidisciplinary research and training in genetic epidemiology, translational population genomics, and bioinformatics, with a goal to uncover and understand disease mechanisms underlying human complex diseases and translate research findings to improve health outcomes and prevent diseases.

D. Strategic Focus Areas and Activities

Scientific discovery, innovative training, and high-quality service through multidisciplinary collaboration define the goals and structure of GeneBio. The Center will focus on the below described strategic areas to advance translational epidemiology, genomic medicine, and precision health by carrying out the following activities:

D1. Research activities:

- Conduct innovative scientific research to understand and uncover the molecular mechanisms and identify novel biomarkers for human complex diseases, especially aging and age-related diseases such as cardiovascular disease, diabetes, hypertension, obesity, depression, and Alzheimer's disease and its related disorders.
- 2. Develop novel statistical methods and bioinformatics tools for gene discovery, disease risk assessment and prediction, genomic data interpretation, and drug targets identification.
- 3. Translate research findings into clinical and public health practice for early screening, accurate diagnosis, drug development, and targeted prevention and treatment.

D2. Training activities:

The GeneBio Center will train and nurture the next-generation leaders in translational epidemiology, genomic medicine, and precision health by providing interdisciplinary training and educational support to trainees working on research activities related to the Center's mission and vision. Specifically, we will engage trainees in interactive discussions with investigators, physician scientists, public health practitioners, and community members through the following activities:

- Hold a monthly center seminar or journal club: we will hold research seminars and/or journal clubs every month during the fall and spring of each year. The seminars will present and discuss research findings and allow the sharing of research experience between investigators and trainees. The journal club will present and discuss recent groundbreaking articles in the fields of genetic epidemiology, omics sciences (e.g., genetics, epigenetics, metabolomics, proteomics, microbiome, etc.), translational research, population genomics, and precision health. The seminars and journal clubs will include students, fellows, clinicians, investigators, and community members from academic backgrounds both within and outside of genetic epidemiology and bioinformatics.
- Hold an annual conference: We plan to hold an annual conference to present and discuss
 research findings, brainstorm new scientific ideas, and exchange research experience with
 trainees. We will invite both inside and outside speakers including some of the most prominent
 researchers in the fields of genetic epidemiology, population genetics, bioinformatics,
 translational research, genomic medicine, and precision health. The annual meeting will

coordinate collaborative research and training activities among investigators, trainees and other partners.

- Apply for training and career development grants: We plan to secure a T32 training grant focusing on training in translational epidemiology and omics data science for cardiometabolic diseases, cognitive aging, or Alzheimer's disease. The Center will also engage and support trainees to apply for both internal (e.g., TL1 training program and KL2 career development grant) and external career development grants, such as the NIH career development grants (i.e., K-series), the NIH fellowship grants (i.e., F-series), the AHA pre-doctoral and post-doctoral fellowship, the AHA Scientist Development Grant, and the ADA new investigator award, etc.
- Develop and oversee a Center Training Program: The training program will outline specific
 goals for the training and development of undergraduate students, graduate students, postdoctoral
 fellows, professional trainees, research staff, and interns from diverse academic backgrounds.
 The training program will set specific goals and expectations for our trainees, including attending
 seminars or journal clubs, contributing to different working groups, giving formal presentations,
 and writing research papers and proposals.

Together, these teaching/training activities provided by the Center will provide essential enhancement and support to research and training in this increasingly important and expanding field.

D3. Service activities:

The Center will provide high-quality service and support for genetic epidemiological study design, access to research data, bioinformatics and multiomics data analysis for new grant proposals, scientific publications, and presentations. This includes assistance with data cleaning, data merging and harmonization, data management, data safety and monitoring, and secure data transfer across multiple departments and institutions.

E. Reporting Structure

Director. Jinying Zhao, MD, PhD, Professor of Epidemiology, is proposed as the initial Director of the GeneBio Center. Dr. Zhao is currently directing the Division of Genetic Epidemiology in the Department of Epidemiology. She is a tenured professor and has been highly successful in securing NIH funding. Currently, she is the PI of four NIH-funded ongoing R01 projects focusing on integrated multiomics studies on human complex diseases such as diabetes, cardiovascular disease, biological aging, Alzheimer's disease, and neuropsychiatric disorders. She has extensive experience in recruiting, enrolling, and developing population cohorts to test novel scientific hypotheses. Dr. Zhao has also mentored dozens of MS/MPH students, PhD students, postdoctoral fellows, and junior faculty both within and outside of her home department. Dr. Zhao will oversee the major Center activities and facilitate interaction and communications among faculty, staff, students, and community members. She will manage an efficient organizational structure and work to identify funds to sustain and expand upon the Center's activities. If approved, an Associate Director will be appointed to assist Dr. Zhao with the Center's research, education, and service activities. In the event that Dr. Zhao is not able to continue as Director, a new director will be chosen by the Center Executive Committee (to be established).

Center Membership. GeneBio Center membership will be awarded annually to:

Trainees who committed to participate in the training program

- Research staff working towards the Center's mission
- Faculty who receive funding from the GeneBio-related grants, mentor students, work in related research areas, and/or contribute IDC to the Center

Most GeneBio Center activities will be available to everyone, regardless of membership status. For example, anyone would be able to be part of our regular email list-serv, and to attend our scheduled seminars and meetings. However, some GeneBio resources (e.g. travel support, training support, and special events with visitors) will only be available to Center members. Center members will be listed on the GeneBio websites.

F. Executive and Advisory Committees

If approved, the Center will follow the guidelines for UF Centers and Institutes and assemble an Executive Committee to discuss scientific collaborations, requests for pilot funds, annual meeting planning, and strategies for future funding. A Scientific Advisory Committee will also be assembled to provide advice and input on the overall activities of the Center. The committee will help the Center with strategic planning related to funding and impact. This committee will meet once a year in person at the Center annual conference and provide *ad hoc* feedback as needed. Looking forward, when we have a chance to build population cohorts, the Center will also appoint a Community Advisory Board.

G. Plans to apply for external funding

We have plans to secure external funding to maintain and expand the Center by submitting extramural grant proposals, such as a Center grant in response to RFAs from NIH and/or the Florida Department of Health, program projects (P01), research grants (e.g., R01, R21), travel and meeting grants, training grants, etc.

H. Collaboration and synergy with other UF Centers, Institutes, and departments

The wide-ranging goals of the Center require interactive and multidisciplinary collaborations across diverse disciplines within medicine, public health, basic science, clinical care, the local community, local and national government, and healthcare delivery systems. The Center will support, facilitate, coordinate, and enhance interdisciplinary research and training in genetic epidemiology, population genomics, and bioinformatics within the PHHP/COM as well as across the UF research and teaching community. The GeneBio Center is committed to creating and fostering multidisciplinary teamwork by convening members from all fields through campus-wide collaborations with other departments, research centers, and institutes at the University of Florida, such as CTSI, SECIM, UF Genetics Institute, UF Diabetes Institute, UFHCC, Informatics Institute, Center for Epigenetics, Center for Pharmacogenomics, SHARC, Institute on Aging, Pepper Center, McKnight Brain Institute, and Norman Fixel Institute for Neurological Diseases. In bringing together diverse disciplines and multidisciplinary teams focusing on innovative research, we can make scientific discoveries, implement targeted prevention and interventions, and make more rapid and accurate advances in finding precision solutions to improve human health.

I. Deliverables

Each year, the Center will prepare an annual report that outlines:

- Grants submitted and received by Center members, including trainees
- · Scientific publications
- Presentations at national and international meetings
- Number and diversity of Center membership
- Professional service activities
- List of awards provided by the Center (travel, seed funding, etc.)
- · Report from Scientific Advisory Board

J. Resources Needed

Space. The Division of Genetic Epidemiology currently has space in the Department of Epidemiology located in the CTRB 4th floor. This includes 3 individual offices for the Director (Zhao), two junior faculty members (Drs. Qin and Zhu) and three cubicle/desks for PhD students. If approved, the GeneBio Center will need office spaces for two more faculty members, one administrative coordinator, one statistical coordinator/program analyst, and several cubicles/desks for PhD students and other trainees. Should the Center maintain its success and expand in the future, a more dedicated space, including a larger office space for the Director (to facilitate group meetings with Center faculty, staff, and students) would be ideal. We will also benefit from access to video-conferencing facilities within the CTRB to enhance our collaborations with groups outside of the UF campus.

Operating budget as outlined in Table 1.

Personnel

Jinying Zhao, MD, PhD is a Professor of epidemiology in the PHHP & COM. She currently directs the Division of Epidemiology in the Department of Epidemiology. Dr. Zhao is an accomplished genetic epidemiologist whose research focuses on genetic epidemiology, statistical genetics, translational population genomics, and computational biology and bioinformatics, with the goal of identifying novel biomarkers and understanding disease mechanisms to reduce disease burden and improve human health. She is the principal investigator of several NIH-funded research projects using multiomics approaches (genomics, epigenomics, transcriptomics, metabolomics, lipidomics) to study cardiometabolic diseases, aging, and age-related disorders such as Alzheimer's disease. She has extensive experience in leading and collaborating large-scale population cohorts or consortia. For example, she conceptualized and developed the NIMH-funded Mood Methylation Study (MMS) by recruiting monozygotic twin pairs discordant on major depression and deeply phenotyped the twins using an integrated multi-omics approach. She serves on the Steering Committee of the Strong Heart Study (SHS), a multi-center prospective cohort study of cardiometabolic diseases in American Indians. She has also been collaborating with several other NIH-funded large-scale population cohorts including the Framingham Heart Study (FHS), the Women's Health Initiative (WHI), the Multi-ethnic Study of Atherosclerosis (MESA), the Religious Orders Study and the Rush Memory and Aging Project (ROSMAP), the Vietnam Era Twin Study of Aging (VETSA), the Vietnam Era Twin Registry (VETR), and the Washington State Twin Registry (WSTR). In 2018, she was appointed by the Director of

NHLBI to serve on the National Heart, Lung, and Blood Advisory Council (NHLBAC) Working Group on Emerging Issues in Data Sharing (EIDS). More recently, she was elected Fellow of American Heart Association (FAHA). She has also published extensively and mentored trainees in the field of genetic epidemiology, population genomics, omics data science, and bioinformatics. These research and leadership experience makes her uniquely suitable to lead the GeneBio Center and make important contributions to the applied genomics and precision health program at UF.

Junior faculty members. Two junior faculty members (Drs. Huaizhen Qin and Yun Zhu) have been hired using Dr. Zhao's preeminence start-up package and NIH grants. Dr. Zhao is also supporting another assistant professor (Dr. Zhiguang Huo, 30% effort) from the Department of Biostatistics. The Center plans to hire two more junior faculty (two research assistant professors, or one research assistant professor and one research assistant scientist) in the next 1-2 years to expand and strengthen the Center's ability to achieve its mission and goals. These positions will be covered by Dr. Zhao's grants.

Research staff

Administrative Coordinator. This person will run the Center on a day-to-day basis, coordinate regular meetings and travels, the annual center conference and meeting of the scientific advisor board, track and manage center-related documents, and manage paperwork related to center finances. He/she will also oversee and provide administrative support for researchers, staff, and students working with the Center, develop, maintain, and update the center website, and assist with grant preparations. This person will also help prepare communications including staff meetings, executive committee meetings, IRB renewals, and Data Safety and Monitoring Reports, as well as monitor time allocations for part-time students and research staff hired by the Center. Additional responsibilities include training of new Center staff and students, management of Center members' compliance, and tracking of research collaborations and concepts.

Statistical Coordinator and Program Analyst. This person will be responsible for data management, data cleaning, data merging and harmonization, data security and monitoring. This person will manage requests to our data, assist data analysis for trainees, collaborators, center members, and lead a bi-weekly or monthly GeneBio data meeting. The person will also create and maintain documentation and databases describing variables and methods related to research projects/cohorts.

Consultants and speakers: \$3,000 per year is budgeted to support consultants and provide speaker honorariums related to the Center seminar series, External Advisory Board, and Community Advisory Board. Some of the costs will be offset by sharing 2-3 speakers per year with the Department of Epidemiology.

Marketing and advertising: \$5,000 per year is budgeted to market the Center brand within the state of Florida. The market audience includes researchers, students, and participants. This cost will also include fees related to maintaining and updating the center's websites, employing graphic designers, and advertising in publications and other marketing materials such as flyers, brochures, etc.

Travel support: \$1,000 per year is budgeted to support travel for students who work on the Center's projects to attend a national meeting to disseminate their research findings. Travel support per student will generally not exceed \$500 per student, per trip. The remaining travel expenses can be shared with the Department of Epidemiology (the Department of Epidemiology has funds supporting travel for PhD students) or covered by other resources such as travel awards or Center member's grants.

Publications and Presentations: \$2,000 per year is budgeted to cover costs for publications and/or presentations, e.g., poster printing.

Annual Research Meeting: The GeneBio Center will hold an annual research meeting by bringing together researchers and trainees in the field of genetic epidemiology, translational population genomics, and bioinformatics to discuss research findings and promote collaborations. The meeting will be held in Gainesville (or another site in Florida) every year. \$10,000 per year is budgeted to cover the costs of event space, travel for guest speakers, and food for the event. The Center will also plan to submit NIH Research Conference Grant (R13) to support the Center's research meetings.

Computers: We budgeted \$2,000 to cover computational costs (e.g., UF HiPerGator) and computers for key staff and research assistants working with the Center.

Competitive seed money and research support: \$5,000/year is budgeted to support pilot projects related to the Center's mission. Preliminary data generated will be used for external grants applications. The pilot projects will be reviewed by the Center Executive Committee.

K. Expansion of our GeneBio team science to Jacksonville or other UF academic settings: To enhance and promote scientific collaboration and synergy across entire UF, we are committed to expanding our work to the UF Jacksonville campus or other academic settings to achieve the goal of team science.

L. Financial Plan

GeneBio faculty and staff will be funded primarily through NIH grants (i.e., R01AG064786; RF1AG052476; R01DK107532; R01MH097018; RF1AG052476S1). We anticipate at least \$20,000 annually in IDC returns to the GeneBio Center, and this amount is expected to increase as the Center grows and we submit and receive more grants. Additional revenue will be sought through multiple sources such as internal UF funding opportunities, private donations, fee-for-service work (e.g., data analysis, data management, and study design), etc. With the anticipated increase in collaborations across multiple disciplines both within and outside UF, we will also seek long-term funding support from the NIH (e.g., NIH Center grants) and the Florida state legislature should the Center receive national recognition for its excellence in research, education and service.

Table. Estimated budget for UF Center for Genetic Epidemiology and Bioinformatics (GeneBio)

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | All Years |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Research coordinator | | T.L. | a direct | 0.75.5 | 100000 | |
| Salary (100% FTE) | \$52,000 | \$53,560 | \$55,167 | \$56,822 | \$58,526 | \$276,075 |
| Fringe (35.7%) | \$18,564 | \$19,121 | \$19,695 | \$20,285 | \$20,894 | \$98,559 |
| Total for RC | \$70,564 | \$72,681 | \$74,862 | \$77,107 | \$79,420 | \$374,634 |
| Program analyst | | | | | | |
| Salary (50% FTE) | \$32,500 | \$33,475 | \$34,479 | \$35,514 | \$36,579 | \$172,547 |
| Fringe (35.7%) | \$11,603 | \$11,951 | \$12,309 | \$12,678 | \$13,059 | \$61,599 |
| Total for PA | \$44,103 | \$45,426 | \$46,788 | \$48,192 | \$49,638 | \$234,146 |
| Consultant | \$3,000 | \$3,000 | \$3,000 | \$3,000 | \$3,000 | \$15,000 |
| Marketing | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$25,000 |
| Computing | \$2,000 | \$2,000 | \$2,000 | \$2,000 | \$2,000 | \$10,000 |
| Publication/presentation | \$2,000 | \$2,000 | \$2,000 | \$2,000 | \$2,000 | \$10,000 |
| Travel | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$5,000 |
| Pilot funds | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$5,000 | \$25,000 |
| Other expenses | \$10,000 | \$10,000 | \$10,000 | \$10,000 | \$10,000 | \$50,000 |
| Total | \$142,667 | \$146,107 | \$149,650 | \$153,299 | \$157,058 | \$748,780 |

Request to Change the Name of a Center/Institute

Over the life of a Center or Institute the need or interest in changing the name may occur. To request such a name change, complete the information below and forward to the Provost's Office, PO Box 113175. The name change is contingent upon approval from the Provost.

Center/Institute Original Name: Center for World Arts

Proposed New Center/Institute Name: Center for Arts, Migration, and Entrepreneurship

Brief Explanation for the Name Change:

For the past 25 years the Center for World Arts (CWA) has worked to link local and global communities, and to expand the international reach and artistic breadth of UF's academic programs. Recognizing the diverse and interconnected nature of the modern world, the CWA has explored varying paradigms of research, curriculum, cultural programming, and public outreach.

We feel that the language of World Arts does not fully capture the layered implications of how cultural arts production and arts practice are represented in the context of human movement and migrations.

The College of the Arts seeks revise the name of the CWA. This renamed center will be

| called The Center for Arts Mi | gration and E | ntrepreneurship (| (CAME). | | |
|--------------------------------|---------------|-------------------|---------|------------------|--------|
| O.A.E. | 12/13/ | 19 | Onye | Ozuzu | 1/8/20 |
| Director | Date | —{ <u> </u> | Dean | 00 | Date |
| | | | | | |
| Vice President (as appropriate | e) Date | _ | | | |
| Joseph Glover | RJH | | 1/16/20 | 20 2:33 PM EST | |
| Provost | | 7. H | Da | ite | |
| X Approved | | ☐ Disapproved | | | |
| For Provost's Office Use Onl | у | | | | |
| Copy to requesting Center: (d | ate) | | | 25:3 | |
| Copy to Institutional Research | h: (date) | | | | |

Request to Change the Name of a Center/Institute

Over the life of a Center or Institute the need or interest in changing the name may occur. To request such a name change, complete the information below and forward to the Provost's Office, PO Box 113175. The name change is contingent upon approval from the Provost.

Center/Institute Original Name: Institute for Sustainable Food Systems

Proposed New Center/Institute Name: Food Systems Institute

Brief Explanation for the Name Change: The Food Systems Institute (FSI) will combine a livestock focus with the existing crops and seafood foci of Institute for Sustainable Food Systems (ISFS). This transdisciplinary institute will continue to address global food and nutrition security and the associated, health, economic, societal and environmental challenges, and will serve as a one-stop clearing house for organizations interested in conducting collaborative research studies in these areas.

| Menogen | 10/6/2020 | Rlug Si | les 10/9/2 |
|-----------------------------|-------------|---------------------|-----------------|
| Director | Date | Dean | Date |
| Vice President (as appropri | ate) Date | | |
| Joseph Glover | | 10/11/202 | 0 9:46 PM EDT |
| Provost X Approved | in the | Date Disapproved | |
| For Provost's Office Use O | nly | | |
| Copy to requesting Center: | (date) | - | |
| Copy to Institutional Resea | rch: (date) | _ | |

Over the life of a Center or Institute the need or interest in changing the name may occur. To request such a name change, complete the information below and forward to the Provost's Office, PO Box 113175. The name change is contingent upon approval from the Provost.

Center/Institute Original Name: Center for Respiratory Research and Rehabilitation (CRRR)

Proposed New Center/Institute Name: Breathing Research and Therapeutics (BREATHE) Center

Center Mission: First established in 2015, the CRRR is committed to developing a world-renowned program devoted to understanding physiological challenges to respiratory motor control in health and disease and to translating our knowledge into treatments for neuromuscular disorders that compromise breathing and airway defense. The center brings together interdisciplinary researchers from across the University of Florida as well as the international breathing community in a collaborative effort to advance the understanding and treatment of neuromuscular disorders that compromise respiratory and non-respiratory movements.

Reason for Name Change: As the center has evolved and expanded, including adding a T32 Training Program to its portfolio, we believe that the original name no longer encompasses the full scope of our members' interdisciplinary and translational research. As such, our Steering Committee has unanimously voted to change the name from CRRR to the Breathing Research and Therapeutics (BREATHE) Center. This name has the advantages of more accurately delineating the scope of research collaborations within the center as well as being in line with our T32 Training Program (BREATHE). Moreover, as noted by our new Assistant Director, who has a background in communications, it is a more marketable and attractive acronym that will readily lend itself to development opportunities. As one Steering Committee member colorfully put it, "you won't have to be a drunken pirate to say our name now!" We hope that you will approve this change so that we can move forward with a T32 renewal and an eventual NIH Program Project/Center Grant (P series) submission with a name that better reflects the work of our breathing collaborators.

| Bond mitchell 614 | <i>1</i> 20 | michael S. | Peni 6/4/2020 |
|------------------------------------|-----------------|-----------------|-----------------|
| Director | Date | Dean | Date |
| Vice President (as appropriate) | Date | | |
| Joseph Glover | | 6/7/202 | 0 9:44 PM EDT |
| Provost X Approved | D | Date isapproved | |
| For Provost's Office Use Only | | | |
| Copy to requesting Center: (date) | 9-01-2020 | | |
| Copy to Institutional Research: (c | late) 8-26-2020 | 0 | |

Over the life of a Center or Institute the need or interest in changing the name may occur. To request such a name change, complete the information below and forward to the Provost's Office, PO Box 113175. The name change is contingent upon approval from the Provost.

Center/Institute Original Name: Center for Neuropsychological Studies

Proposed New Center/Institute Name: Brain Injury, Rehabilitation, and Neuroresilience (BRAIN) Center

Reason for Name Change: Established in 1981, the Center for Neuropsychological Studies has undergone several changes since its inception, including bringing on board center director Michael Jaffee, MD, FAAN, FANA, Associate Professor and Vice Chair in the Department of Neurology, in 2016. During this period, the McKnight Brain Institute (MBI) and the more recently established Fixel Institute identified **traumatic brain injury and concussion** as essential research areas, and our center has adopted this focus. This research area requires an **interdisciplinary focus** that expands beyond neuropsychology. Indeed, center participants now include researchers and clinicians from multiple departments across the University of Florida, including Neurology, Emergency Medicine, Orthopedics/PM&R, Neuropsychology, Family Medicine, Neurocience, and Physical Therapy. Moreover, our center initiatives cover all severities of injury, time points of care, and ages as well as preclinical and clinical issues. As such, the limited nature of the center's original name is clearly not in line with this broader research mission.

On May 29, 2020, our newly formed Steering Committee met to discuss the future of the center and future steps. As part of that discussion, the committee unanimously decided that a new name was necessary and brainstormed several alternatives. Ultimately, after several conversations and voting via Qualtrics, they determined that **Brain Injury**, **Rehabilitation**, and **Neuroresilience** (BRAIN) Center best captures the center's broad mission and interdisciplinary focus.

| Michael & Juffee \$118125 Director Date | Dean | 8-24-20 Date |
|--|------------------|-----------------|
| Vice President (as appropriate) Date | | |
| Joseph Glover | 8/27/2020 1:11 | . PM EDT |
| Provost X Approved | Date Disapproved | |
| For Provost's Office Use Only | | |
| Copy to requesting Center: (date) 9-01-2020 | | |
| Copy to Institutional Research: (date) 9-01-20 | 020 | |

Program-Major/|Change_Name for request 14670

Info

Request: Name change of the major from Tourism and Recreation Management to Tourism and Hospitality Management

Description of request: The Department of Tourism, Hospitality & Event Management in the College of Health and Human Performance is proposing to rename the current M.S. with a major in Tourism & Recreation Management (TRM) program to M.S. with a major in Tourism & Hospitality Management (THM)

Submitter: Svetlana Stepchenkova svetlana.step@ufl.edu

Created: 5/4/2020 11:28:19 AM

Form version: 7

Responses

Current Degree Program Name Master of Science with a major in Tourism & Recreation Management CIP Code 31.0301 Requested Name Change Change the name of a major. Change of CIP Code No

Current Major Name Tourism and Recreation Management
Proposed Major Name Tourism and Hospitality Management
Current Major Code TRM
Proposed Major Code THM
Effective Term Spring
Effective Year 2021

Pedagogical Rationale/Justification The Department of Tourism, Hospitality & Event Management in the College of Health and Human Performance is proposing to rename the current M.S. degree with a major in Tourism and Recreation Management (TRM) to an M.S. degree with a major in Tourism and Hospitality Management (THM).

In 2015-2018, the faculty engaged in a review of the existing M.S. degree with a major in TRM to assess the implementation of the curriculum, as well as to address student demand. It was concluded that the interests of master-level students have shifted away from community-based recreation and parks to options such as tourism, hospitality, and destination management.

From a statewide perspective, the tourism, hospitality and event sectors fall within the top two economic contributors to Florida. The US Bureau of Labor Statistics recognizes that the tourism and hospitality industry supplies a larger amount of occupations, employment, and wages in the state when compared to all other state's industrial markets. Further, the Bureau reports that job openings in the Leisure and Hospitality industry increased 282% between 2010 and 2018, and expected to continue to grow. This provides a solid career path for UF students.

In 2018-2019, the established new unit – Department of Tourism, Hospitality & Event Management provided further faculty engagement with a review process via a series of meetings for discussions during the semester periods. It was determined the degree name should reflect the new name of the department and share focus between undergraduate and master's degrees, both residential and online. The new name should also signal changing industry perspectives and needs, as well as newly emerging career possibilities for which students require more specific educational training. Based on continued discussions, the faculty approved the degree name to be amended as an M.S. degree with a major in Tourism and Hospitality Management (THM). The name change will not trigger a change in curriculum requirements at this time as the recreation courses have not been offered for several years due to low demand. The program already has a focus on tourism and hospitality management for the residential and online programs. The current curriculum and the program policies involving Internship, capstone project, or Thesis/Non-thesis tracks stay the same.

Assessment Data Review SLO1 Knowledge. Discuss and explain key concepts and theories relevant to tourism and hospitality management. Assessment: A. Successful thesis defense presentation per department standards and guidelines. B. Successful completion of CAPSTONE project per department standards and guidelines.

SLO2 Knowledge. Identify, describe, explain, and apply traditional and current research methods within tourism and hospitality management. Assessment: A. Successful thesis defense presentation

per department standards and guidelines. B. Successful completion of CAPSTONE project per department standards and guidelines.

SLO3 Skills. Identify and articulate tourism and hospitality management skills. Assessment: A. LEI 5188 Trends in Tourism and Recreation Management –Final Term Paper. B. HLP 6535: Research methods- Term Project and/or Final Examination

SLO4. Professional behavior. Display ethical behaviors, cultural sensitivity, teamwork, professional conduct and professional communication. Assessment: A. Successful presentation and defense of thesis research per department standards and guidelines. B. Successful presentation of professional paper per department standards and guidelines. C. Successful practicum per department standards and guidelines.

Academic Learning Compact and Academic Assessment Plan There will be no change as the two courses - HLP 6535 Research Methods and LEI 5188 Trends in Tourism and Recreation Management will stay the same.

Cover Sheet: Request 14612

UF/IFAS School of Forest Resources and Conservation (SFRC) - Name Change

Info

| Process | Unit New/Modify/Close Dept |
|----------------|--|
| Status | Pending at FAC - Faculty Senate |
| Submitter | Casey Griffith cgriffith@aa.ufl.edu |
| Created | 1/15/2020 9:31:12 AM |
| Updated | 10/2/2020 3:13:02 PM |
| Description of | Requesting to change the name of the UF/IFAS School of Forest Resources and Conservation |
| request | (SFRC) to the proposed name: School of Forest, Fisheries, and Geomatics Sciences. |

Actions

| Step | Status | Group | User | Comment | Updated |
|--|-------------|-------------------------------|-------------------|--|-----------|
| Department | Approved | CALS - Forest | Terrell Baker III | | 1/15/2020 |
| | | Resources and | | | |
| | | Conservation | | | |
| No document of | hanges | 60460000 | | | |
| College | Approved | CALS - College | Joel H | This request has been | 1/15/2020 |
| Concge | Approved | of Agricultural | Brendemuhl | approved by the IFAS Faculty | 1710/2020 |
| | | and Life | | Assembly and endorsed by | |
| | | Sciences | | IFAS administration and the | |
| | | | | College of Agricultural and | |
| | | | | Life Sciences. I approve on | |
| | | | | behalf of the CALS | |
| No document o | hanges | | | Curriculum Committee. | |
| No document of University | | PV - University | Lee Morrison | Added to the February | 2/13/2020 |
| Curriculum | Johnnentec | Curriculum | Loc Morrison | agenda. If approved, this will | 2/10/2020 |
| Committee | | Committee | | go into effect for the Summer | |
| | | (UCC) | | B 2020 term with the | |
| | | | | publication of the 2020-2021 | |
| N | | | | undergraduate catalog. | |
| No document o | | D\/ | O O-:ff:H- | Dan dia a continuis a | 0/40/0000 |
| University Curriculum | Recycled | PV - University Curriculum | Casey Griffith | Pending continuing conversation between CALS | 2/18/2020 |
| Committee | | Committee | | and CLAS. | |
| Committee | | (UCC) | | and GEAG. | |
| No document of | changes | () | • | | |
| College | Approved | CALS - College | Joel H | Discussions have taken place | 4/30/2020 |
| | | of Agricultural | Brendemuhl | and a compromise was | |
| | | and Life | | reached and a new name has | |
| CLAS Letter of | Cuppert No. | Sciences | | been proposed. | 4/29/2020 |
| CLAS Letter of University | | PV - University | Casey Griffith | Added to May, 2020 agenda. | 5/5/2020 |
| Curriculum | Johnnentec | Curriculum | Jasey Sillium | / laded to iviay, 2020 agenda. | 0/0/2020 |
| Committee | | Committee | | | |
| | | (UCC) | | | |
| SFRC revised name change memo April 2020.doc | | | | | 5/5/2020 |
| University | Approved | PV - University | Casey Griffith | | 5/12/2020 |
| Curriculum | | Curriculum | | | |
| Committee | | Committee (UCC) | | | |
| No document of | changes | (000) | | | |
| Graduate | Approved | GRAD - | Francesca Tai | This proposal was presented | 9/22/2020 |
| Council | , ipp. 3730 | Graduate | | to the Graduate Council as an | |
| | | Council | | information item on 9/17/20. | |
| | | | | | |

| Step | Status | Group | User | Comment | Updated |
|---------------------|---------------------|-----------------|-----------------|---------|-----------|
| No document of | No document changes | | | | |
| Faculty | Approved | FAC - Faculty | Laurie Bialosky | | 10/2/2020 |
| Senate | | Senate Steering | | | |
| Steering | | Committee | | | |
| Committee | | | | | |
| No document of | No document changes | | | | |
| Faculty | Pending | FAC - Faculty | | | 10/2/2020 |
| Senate | | Senate | | | |
| No document of | No document changes | | | | |
| Academic | | | | | |
| Affairs | | | | | |
| | No document changes | | | | |
| Board of | | | | | |
| Trustees | | | | | |
| No document changes | | | | | |
| Office of the | | | | | |
| Registrar | | | | | |
| No document changes | | | | | |
| OIPR Notified | | | | | |
| No document changes | | | | | |



COMMITTEE ON ADVANCEMENT AGENDA

Thursday, December 3, 2020 1:00 p.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL

Committee Members:

| 3.0 | Review and Approval of Minutes |
|-----|-------------------------------------|
| 4.0 | Discussion Items |
| 5.0 | New Business Anita G. Zucker, Chair |
| 6.0 | Adjourn Anita G. Zucker, Chair |



COMMITTEE ON ADVANCEMENT

Meeting Minutes
June 5, 2020

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, Florida Time Convened: 9:00 a.m.

Time Adjourned: 9:27 a.m.

Committee and Board members present:

Anita Zucker (Committee Chair), David L. Brandon, Sylvain Doré, James W. Heavener, Morteza Hosseini (Board Chair), Leonard H. Johnson, Thomas G. Kuntz, Daniel T. O'Keefe, Rahul Patel, Trevor J. Pope, Marsha D. Powers, Jason J. Rosenberg, and Robert G. Stern.

Others present:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; David Nelson, Senior Vice President for Health Affairs and President of UF Health; David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs; Scott Stricklin, Director of Athletics, members of the President's Cabinet, members of the University of Florida community, and other members of the public and the media.

1.0 Call to Order and Welcome

Committee Chair Zucker welcomed everyone and called the Advancement Committee meeting to order at 9:00 a.m. She remarked that it's wonderful to see all the smiling faces and shared that the reason she was not attending in person was because her son and daughter-in-law are expecting a new baby within the next week, so she is not allowed to travel. She asked Vice President Mitchell to verify the quorum.

2.0 Verification of Quorum

Vice President Tom Mitchell called roll and verified a quorum with all members present.

3.0 Review and Approval of Minutes

Committee Chair Zucker reminded everyone to speak into their microphones so that everyone can hear. She asked if there were any additions and/or corrections to the minutes of the Committee meeting on March 26, 2020, and the pre-meeting conference call held on April 16, 2020. Hearing none, she asked for a motion to approve the minutes, which was made by Trustee Rosenberg and a second, which was made by Trustee Powers. Committee Chair Zucker asked for all in favor of the motion to say aye and any opposed to say no. All were in favor, and the motion was approved unanimously.

4.0 Discussion Items

Committee Chair Zucker called attention to the impact brochure on the Warrington College of Business that was included in the trustees' meeting folders. The brochure is also available on Boardvantage for those joining virtually. Dean Kraft will be discussing the brochure as part of his presentation. She shared that we will be doing something to honor the Warrington family through the UF Foundation Board, probably in early October at our next National Board weekend.

Committee Chair Zucker proceeded to provide a campaign update.

4.1 Go Greater Campaign Update

Committee Chair Zucker remarked that the Go Greater campaign continues to exceed our expectations:

- We have raised \$2.62 billion toward our \$3 billion campaign, which is 87% of our goal and that's amazing. Congratulations to Tom, his team and all of us.
- We hope to hit \$2.64 billion by June 30, and we have \$20 million to go to reach our goal.
- We continue to make great progress with commitments to our endowment with 91% of our goal achieved, which is outstanding.
- We're particularly pleased with the cash amount of \$259 million that has come into the endowment, which is 74% of the goal to date.
- We have a working goal of \$275 million for priority capital projects, and we've raised \$259 million which is 94%.
- Our alumni participation rate has moved from 12% when we started the campaign to 17%, which ranks among the top alumni participation rates in public universities.
- We'll reach our alumni participation goal of 18%; it's almost here.
- Our operations continue to run efficiently with a return of \$9+ for every dollar invested.

She called on Vice President Mitchell to provide an amazing update on the new gifts we've received since the last meeting.

4.2 New Gifts (Mar. 26 – Jun. 4)

Vice President Mitchell shared that it was a great pleasure to report on some of these incredible gifts that we've received across the campus since our last meeting.

Jon and Melanie Antevy

Jon and Melanie Antevy made a gift of \$5 million to support renovations to the Architecture Building in the College of Design, Construction and Planning.

Regards and congratulations to Dean Anumba and the College of DCP and also to Trustee Brandon who helped us with this gift.

Johnson Scholarship Foundation

We recently received a challenge gift of \$2 million from the Johnson Scholarship Foundation to support the Machen Florida Opportunity Scholars Program. Vice President Evans has done a lot of heavy lifting for us in this space, and it's a point of light across the campus. This is a match gift with the goal of reaching \$8 million for MFOS over the next five years. A week after we received this gift, we contacted one of our alums, and they have agreed to provide a \$2 million gift to match this challenge, so we've already reached \$4 million toward this wonderful gift.

Our congratulations to Vice President Evans and her colleagues.

Sam and Robbie Vickers

We recently confirmed a gift from Sam and Robbie Vickers who have committed their Florida Art Collection, comprised of over 1,200 pieces. This is one of the largest collections in the state and probably in the nation. The Vickerses have been collecting Florida art for over 50 years, and it has been their lifelong dream and passion to gift the collection to the state's flagship university so future generations can learn about the history of Florida through visual art.

Sam and Robbie asked that each of the trustees be presented with a book (placed at their seats) that celebrates their Florida art and highlights many of the pieces in their collection. The Vickerses personalized the books with notes to each of the trustees expressing their thanks and gratitude.

The Marcus Foundation

The Marcus Foundation is no stranger to UF. This recent \$12.5 million gift will support the Veterans Brain Health Initiative at UF Health Jacksonville. This is a comprehensive rehabilitation program focused on assessing and treating discharged U.S. military service members with mild to moderate brain injuries, concussions and other health concerns. The gift will expand this initiative's ability to diagnose and treat patients with traumatic brain injuries.

Our thanks to Leon Haley and our UF Health leadership for this wonderful gift.

Two Additional Gifts

We have received two additional gifts this week that are not on this morning's slides.

Ken and Linda McGurn

Ken and Linda, our campaign co-chairs, have topped off the Florida Museum of Natural History project. This is the Earth Systems Science project that Vice President Reynolds talked about yesterday. The McGurns have provided a gift of \$3 million to complete the private gift portion for that project.

College of Medicine

Our congratulations to David Nelson and Ed Jimenez on receiving notification about a gift of \$10 million to support the College of Medicine. We'll hear more about that in the coming weeks.

At Trustee Heavener's request, Vice President Mitchell introduced the next speaker. Talk about impact at UF, talk about the Warrington College of Business (WCB) and talk about John Kraft, our dean. He will be completing his tenure at the end of July after having served UF in the capacity of Dean of the WCB for over 30 years. He has led three campaigns and has named everything he could possibly name in and around the WCB, except for the air space above the WCB. Although the air space is still unnamed, he is working on it. Welcome to Dean John Kraft.

4.3 Go Greater Campaign Impact – Warrington College of Business

In response to the standing ovation, Dean Kraft remarked that the faculty also stand when he enters a room. He noted that there's a \$20 million price tag for the campus air space above WCB, if anyone is interested, and then he went on to talk about the importance of faculty support to the campaign.

This started in the early days when Al Warrington made his original gift to name the college. The focus was on faculty support and that made all the difference. Al left the decision as to who the faculty would be up to the WCB leadership. The key priority has always been faculty support.

The WCB has an endowment value of \$242 million, and of that number, almost all of it goes toward faculty support and other things. In addition, there's another \$130 -\$140 million in deferred gifts that we will get later on at some point, so we're in pretty good shape.

The way we use our faculty support is based on the idea that we want to attract high-level performing junior faculty, keep them as they remain with us over x number of years and provide them with the resources they need to be successful. Over the past 30 years, we've hired about 160 tenure-track faculty, but only 8 have been at the senior ranks. Of those 8, only 4 have actually received chairs or professorships when they came to us. We're really focused on bringing in high-quality junior faculty and allowing them to compete. A number of those stay with us, and we want to advance them through their careers. Normally, when we bring in an assistant professor, only 1 in 5 is tenured. We don't deny them tenure, but instead, we give them signals early on because their careers just haven't progressed as we would have liked. Some of them have gone on to get tenured positions in

other schools, but they continue to represent our legacy. Although they weren't successful with us, they went on to become successful. People who are with us tend to remain with us over a very long time. We've had about 50 people get matching offers from peer schools or better, but because of our professorships and faculty support, we've been able to retain all but 8 of those people. Faculty support is key to our performance.

Dean Kraft remarked that this is the first time he's seen the Warrington brochure, and then went on to highlight some key things that are important:

- Al and Judy Warrington are key to what we've done
- 70 tenure-track faculty
- 59 chairs, professorships and fellowships
- Almost all tenured faculty would have some type of name/title which gives them resources beyond what we can provide them
- 8 additional endowments to support faculty
- Mo Wang, at age 40, is probably our most distinguished, high-performance professor
 - o He's ranked #1 or #2 in major business journals
 - We hired him with tenure, and he came in as an associate professor in the psychology department
- We have the highest percentage of non-business PhDs economists, operation researchers, physicists, etc. – lots of people who have successfully crossed over into business all because we found ways to retain them with faculty support
- The campaign's focus on endowment has allowed us to retain these people over time

Dean Kraft introduced the WCB impact video and then announced a gift from former faculty member Eugene Brigham, who was ultra-successful in his academic career as well as in outside investments in other areas. He's given over \$22 million to the WCB, and his recent gift resulted in the naming of the Finance Department.

Eugene Brigham's gift supports student activities outside the classroom. He firmly believes in making the environment outside the classroom as important as what the students learn in the classroom. That involves a wide range of activities that help students in finance get better and have the resources they need to be successful outside the classroom. It's not quite a faculty naming gift because he had a named professorship that allowed us to bring him here, but he's been involved and engaged with the faculty ever since. We are expecting all the people who have chaired to do the same thing. Thank you all for listening, and good luck.

Board Chair Hosseini thanked Dean Kraft on behalf of the BOT for all his good work in running the business school over years and years. We appreciate it, and you have made us proud. Dean Kraft remarked that he had lots of talented people working for him.

Vice President Mitchell thanked Dean Kraft and shared that the dean had chaired the search that brought him to Florida, as well as the search for Vice President Lane. We owe Dean Kraft a deep gratitude and appreciation. Not only has he made a difference but he has also positioned the WCB for next and has impacted many students. When we started this idea of being among the very best institutions in the country, the WCB was our top-ranked college. All of the other colleges started moving up in the rankings, and it all started with the WCB. They were the point of light for all of us, and we appreciate the impact, advice and counsel of Dean John Kraft.

4.4 FY21 Forecast and Beyond

Vice President Mitchell presented the next two slides on the forecast for FY21.

\$3B+ Go Greater Campaign

We think we'll be at \$2.64 billion by the end of this month, and it wouldn't be surprising to see us reach \$2.65 billion, as it looks like we could close another \$25 - \$30 million by June 30. If that's the case, that would leave us \$350 million short of the campaign goal. The first six years of the campaign, we were averaging \$425 million per year. It looks as if we'll hit \$3 billion this next fiscal year. We're tracking 13 months ahead of schedule (October 2022).

\$460 Million Total Commitments

Even though we're not quite sure of the outcome this year, we continue to stretch ourselves a bit and have not moved off of our goal of \$460 million. We believe we'll reach it or exceed it.

19% APR

We've moved one more notch in the alumni participation rate (APR) journey. This started with Trustee Patel and the UF Alumni Association. Trustee Rosenberg provided wonderful encouragement and then it moved to UFAA Past Presidents Karen Unger and Brian Burgoon. Each year we moved it by 1%, and we're hopeful we can get it to 19% this year.

Vice President Mitchell shared that he fondly remembers the call from Provost Glover regarding the APR numbers being down at 12% to which he had responded that we were trying to raise \$3 billion and didn't really care much about the APR. Provost Glover informed him that he did, in fact, care a lot about it now and asked when he would have a plan to address it. In response to Provost Glover, we put together a team of people, and thanks to the generosity of Gators all over the world, we think we'll reach 19%. This will put us among the top 3-4 public institutions across the nation, so now we thank Provost Glover for his call.

Board Chair Hosseini asked where we would be at 20% APR. Vice President Mitchell responded that this would put us among the top 1 or 2 in the nation – the gold standard – but that's next year when we go from 19% to 20%.

Your Ideas/Innovation/A.I. University

The campaign theme for FY21 is your ideas, innovation and A.I. University. We have incredible momentum with this A.I. initiative, thanks to President Fuchs, Provost Glover, Vice President Norton and a number of people who are doing some heavy lifting on this. This is something unique, special and different in the world of universities, and it's an opportunity for us to claim our stake. Trustee Heavener will be the campaign co-chair for the last year of the campaign, and he will lead the effort, along with President Fuchs and all of the other trustees.

Digital Communications Platform

We're moving heavily into a digital communications platform. As you might imagine, just about everything has a digital platform, and we are already moving events into salon platforms. Deans, faculty members and UF leaders are working closely with our alumni people and looking at virtual tailgates for the fall all over the country. We're even thinking about a virtual homecoming. In the future, we could also launch some type of virtual namings, which is most exciting.

Culture of Engagement

In closing, Vice President Mitchell stated that he would like to talk about Committee Chair Zucker who has provided extraordinary leadership with this committee and continues to be a champion for the University of Florida. It's her vision and inspiration that we follow on a daily basis, and I talk with her once a week.

Over the last few months, we've been playing defense, and everyone knows that you can win championships with defense. But now that we're in the process of stopping COVID, we're moving to offense. You heard Provost Glover talk about A.I. and what that means to the university. I hope that we can put more points on the board as we move closer to the \$3 billion number. This will be an exciting and wonderful year for the University of Florida.

5.0 New Business

Committee Chair Zucker thanked Vice President Mitchell for a great report. She remarked that when we began this campaign and took it public, we had our beautiful alum singing about rising up and that we are continuing to rise up. We're all amazing, and she is proud of us. She thanked Dean Kraft for his years and years of service and wished him a wonderful retirement and also thanked Trustee Heavener for everything he has done. We'll continue to move up in the rankings and continue to do everything we can to the best of our abilities. She asked if anyone had questions or new business, and there were none.

Board Chair Hosseini thanked Dean Kraft for all of his good work and said that it was good to see Trustee Heavener via Zoom.

6.0 Adjourn

There being no further discussion, Committee Chair Zucker adjourned the meeting at 9:27 a.m.



COMMITTEE ON ADVANCEMENT

Pre-Meeting Minutes
Virtual Meeting
October 15, 2020

Time Convened: 4:03 p.m. Time Adjourned: 4:22 p.m.

Committee and Board members present:

Anita G. Zucker (Committee Chair), Richard P. Cole, James W. Heavener, Morteza "Mori" Hosseini (Board Chair), Leonard H. Johnson, Daniel T. O'Keefe, Rahul Patel, Trevor J. Pope, Marsha D. Powers, and Jason J. Rosenberg

Others present:

Thomas Mitchell, Vice President for Advancement; members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Anita G. Zucker welcomed everyone in attendance, some of whom were attending their first meeting, and called the meeting to order at 4:03 p.m. She noted that this was a short information meeting only, and there would be no voting.

2.0 Roll Call

Board Staff conducted a roll call of all Committee and Board members present.

3.0 Review Agenda for December 2020 Meeting

The following items were addressed by the Committee:

3.1 Review Minutes

Committee Chair Zucker noted that we will have minutes from the June 5, 2020, meeting and the October 15, 2020, pre-meeting to review and approve at the December BOT meeting.

3.2 Discussion Items

Committee Chair Zucker outlined the discussion topics for the December meeting and noted that materials and draft speaking points will be provided to the presenters in advance of the meeting.

Go Greater Campaign Update – Your Ideas/Innovation

Trustee Heavener agreed to present the Go Greater Campaign Update.
 Committee Chair Zucker noted that Trustee Heavener is the new campaign

co-chair for this year. She congratulated him and shared her excitement in working with him to help us get over the goal.

New Gifts (July - November)

O Vice President Mitchell will present the new gifts. He reported that we had a record July, August and September. We're always a little concerned about the 1st quarter of the fiscal year, but over the six-year period of the campaign, this has been the largest 1st quarter we've ever had. Under Trustee Heavener's leadership, we're off to a great start. Currently, we're at \$2.77B. We have six more major gifts we think we can close in October, November and December, so we are anticipating a good report to share at the December BOT meeting. Committee Chair Zucker noted that we work with a star group of people.

Go Greater Campaign Impact – Herbert Wertheim College of Engineering

 Trustee Powers agreed to present the Go Greater campaign impact on the Herbert Wertheim College of Engineering.

• Capital Projects Now/Next

Trustee Cole agreed to present the capital projects.

Top Publics Comparable Data

Committee Chair Zucker will present the top publics comparable data, which is a group of top 5 universities that we aspire to join in the future. Vice President Mitchell reminded everyone that Chairman Hosseini had suggested at the last meeting that we add research dollars and rankings to our comparable data set. We've already compiled an updated grid that contains the rankings, research dollars and private support.

Alumni Participation Rate Goal/Strategy

 Trustee Rosenberg agreed to present an update on the alumni participation rate goal and strategy for the first six months of the year.
 Committee Chair Zucker noted that he has his work cut out for him, as our goal is 19%. Although this a stretch for us, we're up to it.

Committee Chair Zucker closed the discussion on the meeting topics by noting that this has been a very exciting year, strategically from a fundraising perspective as well as the goals we're trying to achieve. It's been a tough year dealing with COVID-19, but we'll get through safely and securely, and we'll come out in the end in great ways.

4.0 New Business

Committee Chair Zucker asked if anyone had any new business to share.

Chairman Hosseini reported that he just sent out the results of a study on rankings to 4-5 people. We took the reputation ranking out of the data and normalized it. The reputation is just based on the opinions of presidents, provosts and deans of admissions, and it is the one area that we have fallen short on. UF has not moved in that space, but we have improved everything else. He noted that the Board will send the data to everyone once it's been vetted by Provost Glover to make sure there are no mistakes. The data will show that UF would be ranked #3 in the country if not for the reputation score. Berkeley would be #5 and Michigan

would be behind us. The data clearly shows that our reputation makes a big difference. Trustee Patel is chair of that committee, and Vice President Mitchell is helping us out with the reputation. This is going to be a game changer for us. We'll be working very hard on our reputation, and hopefully, that will help us in September.

Committee Chair Zucker thanked Chairman Hosseini for the wonderful update, as it shows us exactly what we have to focus on. We're doing everything else the right way, but the reputation is a very subjective evaluation, so we need to make certain that they know about us. We are excited and prepared to do it.

Vice President Mitchell shared that we're putting together a strategy for the ranking that will probably be ready in the next couple of weeks. He'd like to get the Trustees involved in the strategy and wondered if there was an opportunity to include it on the upcoming agenda.

Trustee Patel agreed that it would absolutely be worth it to take a few minutes to discuss it. He noted that there has been lots of work done around AI and NVIDIA, which started in this committee through Vice President Mitchell's work in Advancement, which resulted in the gift from Chris Malachowsky. As part of our strategy to improve our reputation ranking, we're going to show that we're using and leveraging our relationship with NVIDIA and all the work around it. If disciplined and leveraged in the right way, it will positively impact our reputation ranking.

Vice President Mitchell expressed his thanks to Trustee Patel and remarked that it's a very narrow and focused strategy, which is probably focused on 250 universities. Harvard's vote has the same weight as Florida Atlantic or Florida International, and we're looking for votes. The machine is the first piece of the puzzle, and the offering of access to the machine is the second piece. Who better than UF to offer this access? It's part of our mission; it's what we do. How do we offer that access and deliver on the promise when we say yes, we can provide the training? We met with NVIDIA yesterday, and they have agreed to co-brand with us and provide the training access to the AI supercomputer. This is the niche we will roll out in October, November and December – a drum beat every month. Provost Glover has already whispered to the state universities and now we could go to the Southeastern Region. At the end of the day, it's a countdown of votes. UF has a chance to leverage the AI initiative with access to the supercomputer. We will be the only training center in the U.S. that is designated by NVIDIA, and yesterday, NVIDIA shared that they would provide it pro bono for us.

Committee Chair Zucker noted that this will generate collaborative work opportunities for other incredible projects. Vice President Mitchell agreed and said that communities of common interest will form, which will create great potential for refining the strategy; for example, different sectors that want to focus on brain tumors. We've looked at all the national organizations and where we need to present high visibility with presidents, provosts and admission directors over the next six months. We welcome input from the Trustees to help develop our strategy.

Trustee Patel noted that we will quarterback that collaboration with content and the computer, and get it out to all the universities with the goal of providing value. We'll be getting the word out in the next few months and our reputation ranking would catch up to the value we are providing. If we base it on the objective facts, we are #3 in the country now, but we have to get everyone else to see and understand what we are doing at UF. With the NVIDIA partnership and the interest in AI that is gaining momentum around the country, UF has a good platform and we are aggressively going after it. We're hoping that this coming year, our reputation catches up with the value we're providing and what we're doing. Vice President Mitchell has a good plan in a disciplined way.

Committee Chair Zucker stated that this sounds incredible, and we're thrilled that you brought it up. As we move forward, there is lots of opportunity, but most importantly, the ability to collaborate with others. These broad horizons are big time, and having UF at the heart of it really changes it. Dr. Duane Mitchell and the Remission Alliance with 11-12 other universities is a great example and can serve as a model of how we might do this. Just adding the AI piece brings tremendous strength we didn't have before, and it's such a good fit in so many places: engineering, medicine, agriculture, communications, etc. It's a phenomenal tool that we can use in so many ways. She expressed her great appreciation to Trustee Patel.

Vice President Mitchell shared that the Provost just received proposals from all the colleges for their new positions. The Provost said that they were very good proposals, and it will be really tough to decide which ones to fund.

Committee Chair Zucker ended the discussion by expressing her thanks for bringing this information to the committee and sharing her belief that we'll continue to go in the right direction in the future.

5.0 Adjourn

There being no further discussion, Committee Chair Zucker adjourned the meeting at 4:22 p.m.

BOARD OF TRUSTEES Advancement Committee

December 3, 2020



Committee Chair Anita Zucker

Welcome





Go Greater Campaign Update

Bill Heavener



UF

GOGREATER

| | CAMPAIGN | | | PRIORITY CAPITAL | | RETURN ON |
|--|----------|-----------|---------------------|-----------------------------|-------------------------|---------------------|
| | PROGRESS | ENDOWMENT | ENDOWMENT (CASH) | PROJECTS/ INFRASTRUCTURE | ALUMNI PARTICIPATION | INVESTMENT (ROI) |
| GOALS | \$3B+ | \$1B+ | \$350M | \$275M | 19% | \$8+ |
| STATUS TO DATE AS OF NOVEMBER 2020 | \$2.85B | \$946M | \$277M | \$275.1M | 18% | \$9+ |
| AS OF NOVEWBEN 2020 | 0 | • | 0 | • | 0 | 0 |



Your Ideas/Innovation

Al Initiative

Data Center Upgrade





Elias Eldayrie



Data Center Upgrade





HiPerGator Al





HiPerGator 3.0 Current Status







Tom Mitchell

New Gifts











WHITNEY RESEARCH LABORATORY







Tyrel Clayton



MACHEN FLORIDA
OPPORTUNITY SCHOLARS



Andrew and Pamela Banks







MACHEN FLORIDA
OPPORTUNITY SCHOLARS



Go Greater Campaign Impact

Marsha Powers





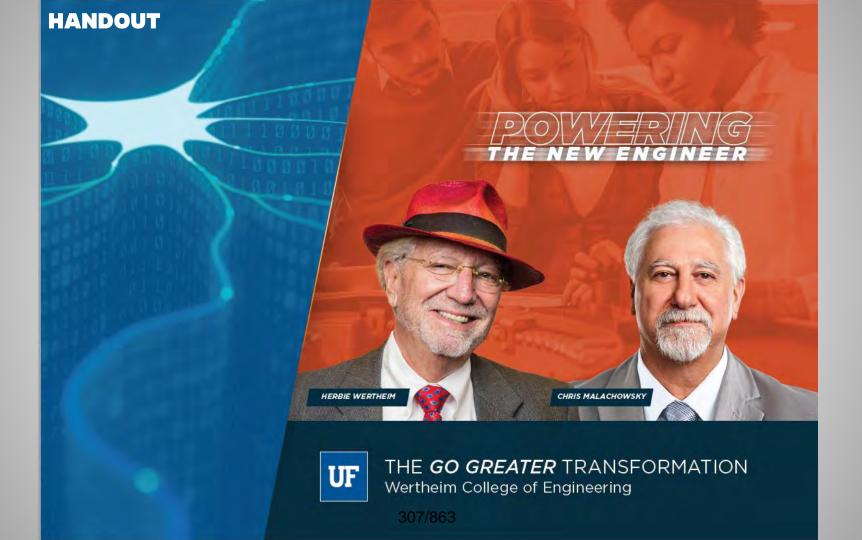
PENDING COE IMPACT VIDEO







Dean Cammy Abernathy

















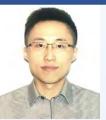
Programs Elevated by Go Greater

- Engineering Leadership Institute
 - Wadsworth Directorship and Fraser Lecturers
 - Hudson Leader in Residence
- Engineering Innovation Institute
 - Durham Directorship
- Warren B. Nelms Institute for the Connected World
 - Directed by the Semmoto Professor
- Student Support
 - STEPUP Antevy and Fraser Scholars
 - Fernandez Scholars
 - Renwick Scholars
- Rhines Rising Star Profess@rs/bips for Young Faculty

POWERING THE NEW ENGINEER TO TRANFORM THE FUTURE



ESSIE: Sara Behdad PhD UIUC



ChE: Henry Chu Post-doc CMU PhD Cornell



ECE: N. Ebrahimi Post-doc Michigan PhD UCSD



CISE: J. Fairbanks PhD Georgia Tech



BME: M. Ferrall-Fairbanks Post-doc Moffitt PhD Georgia Tech



CISE: K. Graim Post-doc Princeton PhD UCSC



ISE: Karen Hicklin PhD NC State



ISE: A. Kazachkov PhD Polytech. Montreal



ESSIE: E. Morrison BME: Ivana Parker PhD UF



Post Doc CDC PhD Georgia Tech



BME: Ana Porras Post Doc Cornell PhD Wisconsin



CISE: S. Rampazzi Res Sci Michigan PhD Pavia



ChE: J. Sampath Post Doc UWash. PhD Ohio State



ECE: Shreya Saxena Post Doc Columbia PhD MIT



ESSIE: A. Subgranon PhD Michigan



BME: Brittany Taylor Post Dos Id Ponn PhD Rutgers



EED: I. Villanueva Post Doc NIH PhD Colorado



ISE: Yu Yang PhD Georgia Tech



Capital Projects

Richard Cole

















Malachowsky Data Science and Information Technology













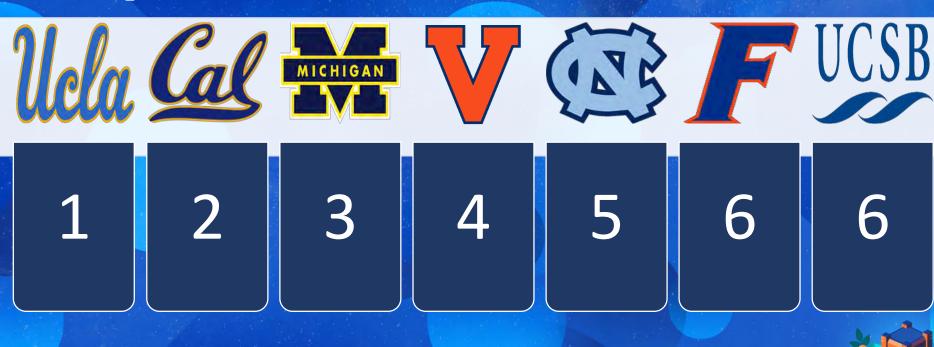


Committee Chair Anita Zucker

Top Publics Data



Top Publics



HANDOUT

Top-Ranked Public Universities Comparable Data

| USNWR Ranking | Institution | Founding Year | FY18 Research Expenditures* | Total Fundraising Commitments | Campaigns | Endowment | Alumni of Record | Alumni Partici- pation Rate | Median Starting Salary of Alumni |
|------------------|---------------------------------|------------------|--------------------------------|----------------------------------|---|-----------|---------------------|--------------------------------|-------------------------------------|
| 1 | Ucla | 1919 | \$1.32B | \$676M | \$5.5B Completed 8-Year Campaign 2012 – 2019 | \$4.9B | 500K+ | 7% | \$58.4K |
| 2 | Cal | 1868 | \$797M | \$1.04B | \$6B Working Goal 10-Year Campaign \$3.7B – 7 Years | \$5B | 450M+ | 8% | \$66.6K |
| 3 | MICHIGAN | 1817 | \$1.60B | \$590M | \$5.3B Completed 7.5-Year Campaign Jul 2011 – Dec 2018 | \$12.3B | 500K+ | 17% | \$63.7K |
| 4 | V | 1819 | \$552M | \$530M | \$5B Working Goal 12-Year Campaign \$3.1B – 7 Years | \$7.1B | 250K+ | 20% | \$61.6K |
| 5 | (Z) | 1789 | \$1.14B | \$565M | \$4.25B Working Goal 8-Year Campaign \$3.3B – 6.5 Years | \$3.4B | 336K+ | 18% | \$51K |
| 6 Tie | F | 1853 | \$865M | \$523M | \$3B Working Goal 8-Year Campaign \$2.85B – 6.5 Years | \$1.85B | 445K+ | 18% | \$54.8K |
| 6 Tie | UCSB arch numbers won't be rele | 1909 | \$235M | \$100M+ 329/863 | \$1.5B Working Goal 7-Year Campaign Kickoff 2021 | \$434M | 210K+ | 17% | \$55.6K |

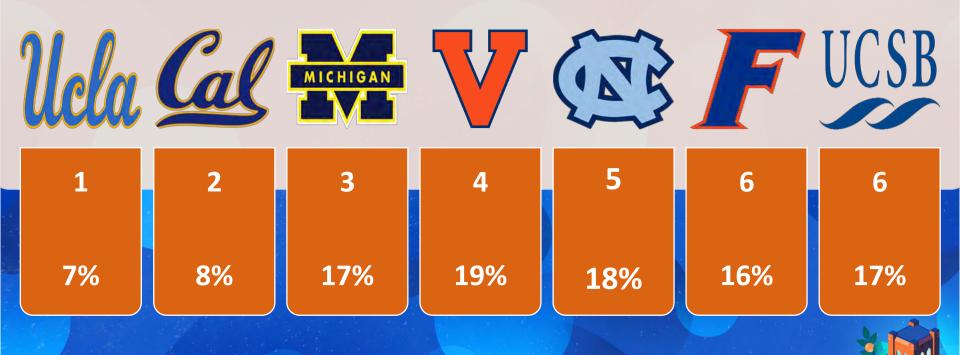


Alumni Participation

Jason Rosenberg

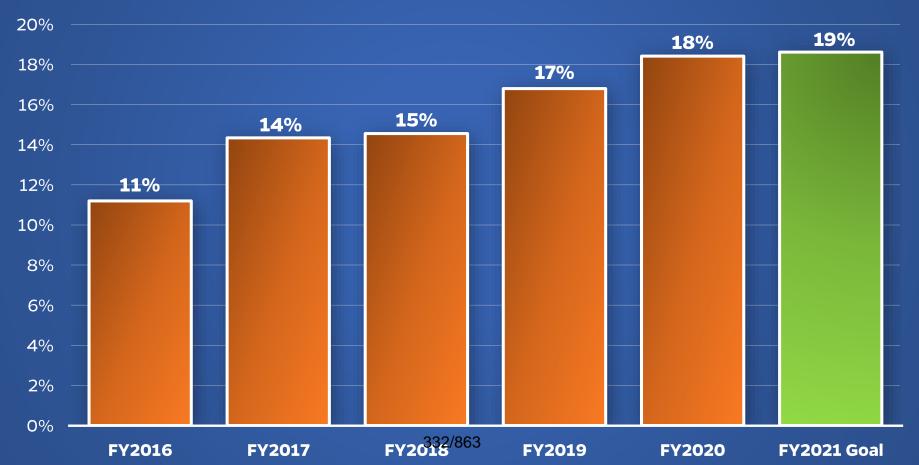


Top 5 Publics APR



APR rates calculated on a two-year average

UF Alumni Participation Rate by FY



INITIATIVES



















GATORPLATES.COM

336/863

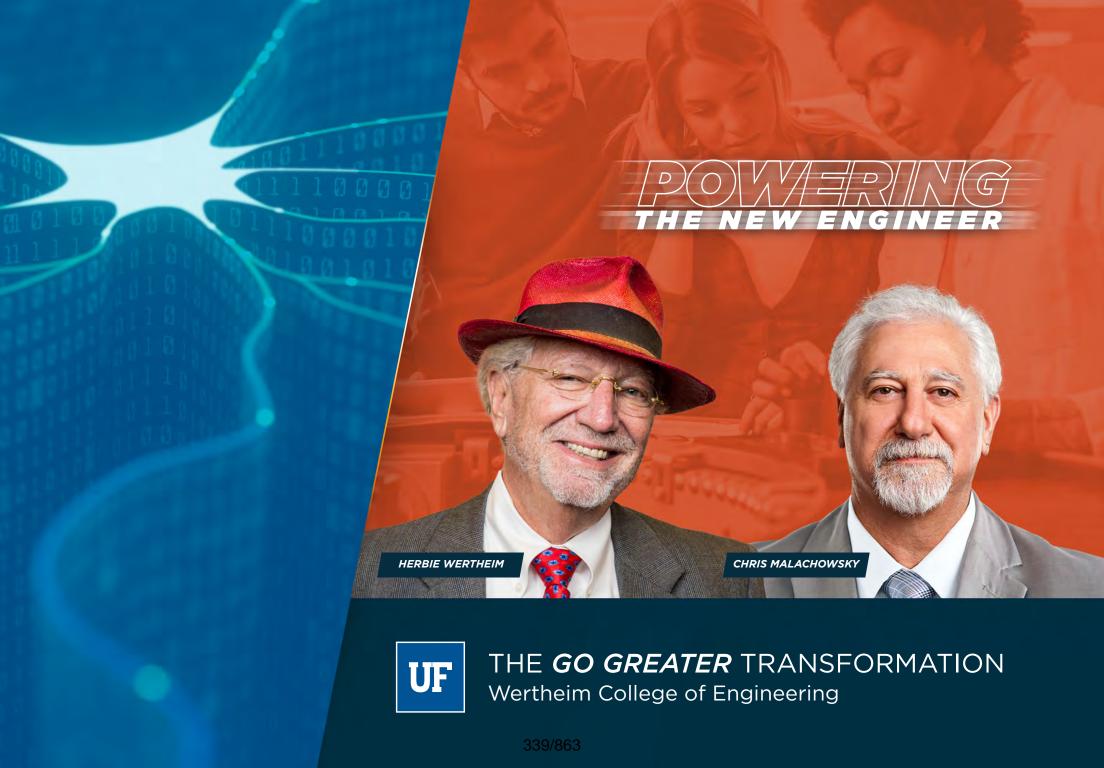


New Business

Committee Chair Anita Zucker







STEPPING FORWARD

UF's engineering college is stepping forward in this moment to unflinchingly meet the moments ahead. Dean Cammy Abernathy, colleagues and donors are reimagining the college's mission to "Powering the New Engineer." Dr. Herbie Wertheim, the college's namesake, predicts that UF will eventually have the "premier engineering college."

"Engineering is the future for us as a society. When we think of all the good things that have happened in our lives ... it all comes from engineering."

— Herbie Wertheim



GOING GREATER

2014

- Juan Gilbert recruited as Andrew Banks Family
 Preeminence Chair
- Cybersecurity expert Patrick Traynor named
 John H. and Mary Lou Dasburg Preeminent Chair in
 Engineering

2015

- **Dr. Herbie and Nicole Wertheim** invest \$50 million in college; becomes catalyst for \$300 million private-public partnership
- Linda Parker Hudson's gift launches Leader in Residence program
- The George Kirkland Professorship created for leadership education

2016

• **Herbie Wertheim Laboratory** for Engineering Excellence ground breaking

201

- David Nelms creates Warren B. Nelms Institute for the Connected World
- Engineering Innovation Institute receives gift from **Michael Durham** to create more student entrepreneurs



Linda Parker Hudson



David Nelms

INVESTING IN PEOPLE

Dozens of new hires, a flurry of strategic donor investments, and a focus on complex problems — things like big data, biomedical informatics, autonomous systems, a sustainable environment, cybersecurity, workforce development, human-centered computing, neuroscience and renewable energy — have placed the college squarely on the fast track.



Sachio Semmoto



Rhonda Holt

 Sachio Semmoto creates endowed professorship for director of Nelms Institute

2018

- UF Transportation Institute launches I-STREET, places 200 sensors around campus and Gainesville to create a realworld testbed for smart transportation technologies
- Glenn and Deborah Renwick establish scholarship for master's students

2019

 Erika Moore, Daisy Zhe Wang and Kevin Butler awarded Rising Star Professorships, established by Walden Rhines and Arnold and Lisa Goldberg

2020

- UF becomes "America's A.I. University" when Chris Malachowsky and his company NVIDIA pledge \$50 million to place the university and the engineering college on the cutting-edge of artificial intelligence training and innovation
- Rhonda Holt establishes a multicultural collaboration space in the new Herbert Wertheim Laboratory for Engineering Excellence

"What really got
NVIDIA and me
excited was partnering
with UF to make
A.I. available to K-12
students, state and
community colleges, and
businesses. This will help
address under-represented
communities and sectors
across the region where
technology will have a
profound positive effect."

— Chris Malachowsky





"If we really want to change the world it starts with educating the new engineer — an engineer who's technically competent, but [also] one who is capable of leading and innovating in a world that is increasingly global and virtual."

— Cammy Abernathy

BRAVE NEW WORLD

Powering the New Engineer is the most ambitious undertaking in the engineering college's 100-plus-year history: a movement to "lead the next era of technological revolution by preparing a generation of engineers capable of solving global problems and creating and commercializing the discoveries that will transform the way we live our lives."

- 2 NEW BUILDINGS; 1 finished, 1 under construction, as of fall 2020
- 10 ACADEMIC DEPARTMENTS jump in national rankings in 2019 and 2020
- 77 NEW FACULTY hired since 2015
- 195 INNOVATION-RELATED LICENSES or options since 2015
- 241 PATENT APPLICATIONS in 2019-20
- \$113.7 MILLION in research awards in 2020

Top-Ranked Public Universities Comparable Data

| USNWR Ranking | Institution | Founding Year | FY18 Research Expenditures* | Total Fundraising Commitments | Campaigns | Endowment | Alumni of Record | Alumni Partici- pation Rate | Median Starting Salary of Alumni |
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| 2 | Cal | 1868 | \$797M | \$1.04B | \$6B Working Goal 10-Year Campaign \$3.7B – 7 Years | \$5B | 450M+ | 8% | \$66.6K |
| 3 | MICHIGAN | 1817 | \$1.60B | \$590M | \$5.3B Completed 7.5-Year Campaign Jul 2011 – Dec 2018 | \$12.3B | 500K+ | 17% | \$63.7K |
| 4 | | 1819 | \$552M | \$530M | \$5B Working Goal 12-Year Campaign \$3.1B – 7 Years | \$7.1B | 250K+ | 20% | \$61.6K |
| 5 | (AB) | 1789 | \$1.14B | \$565M | \$4.25B Working Goal 8-Year Campaign \$3.3B – 6.5 Years | \$3.4B | 336K+ | 18% | \$51K |
| 6 Tie | | 1853 | \$865M | \$523M | \$3B Working Goal 8-Year Campaign \$2.85B – 6.5 Years | \$1.85B | 445K+ | 18% | \$54.8K |
| 6 Tie | UCSB | 1909 | \$235M | \$100M+ | \$1.5B Working Goal 7-Year Campaign Kickoff 2021 | \$434M | 210K+ | 17% | \$55.6K |

^{*}FY19 research numbers won't be released until January



COMMITTEE ON AUDIT AND COMPLIANCE AGENDA

Thursday, December 3, 2020 ~1:45 p.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL

Committee Members:

6.0

| | a D. Po J. Pope | wers (Chair), David L. Brandon, Richard P. Cole, Sylvain Doré, Leonard H. Johnson, | | | | | |
|-----|---|---|--|--|--|--|--|
| 1.0 | Call to Order and Welcome | | | | | | |
| 2.0 | Verification of Quorum | | | | | | |
| 3.0 | Review and Approval of Minutes | | | | | | |
| 4.0 | Action AC1 | Items | | | | | |
| | AC3 AC4 | Metrics – Data Integrity (Audit Report) and Annual Data Integrity Certification Institutional Compliance Annual Report Office of Internal Audit Work Plan January 1, 2021 - June 30, 2021 | | | | | |
| 5.0 | 5.15.25.35.4 | sion Items | | | | | |
| | <u>5.5</u> | Quarterly Follow-up Joe Cannella and Dhanesh Raniga | | | | | |

7.0 AdjournMarsha D. Powers, Chair



COMMITTEE ON AUDIT AND COMPLIANCE Meeting Minutes June 4, 2020

Via Zoom from the President's Room 215B, Emerson Alumni Hall
University of Florida, Gainesville, FL
Time Convened: 3:33 p.m.

Time Adjourned: 4:14 p.m.

Committee and Board members present:

Marsha D. Powers (Committee Chair), David L. Brandon, James W. Heavener, Morteza Hosseini, Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Trevor Pope, Daniel T. O'Keefe, Rahul Patel, Jason J. Rosenberg, Robert G. Stern, Sylvain Dore, Anita G. Zucker.

Others present:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations; Mike McKee, Vice President and Chief Financial Officer; Thomas Mitchell, Vice President for Advancement; David Nelson, Interim Senior Vice President for Health Affairs and President of UF Health; David Norton, Vice President for Research; David Parrott, Vice President for Student Affairs; Nancy Paton, Vice President for Strategic Communications and Marketing; Jack Payne, Senior Vice President for Agriculture and Natural Resources; Curtis Reynolds, Vice President for Business Affairs and other members of the University community.

1.0 Verification of Quorum

Vice President Liaison Charlie Lane confirmed a quorum with all Committee members present.

2.0 Call to Order and Welcome

Committee Chair Powers welcomed everyone in attendance and called the meeting to order at 3:33 p.m.

3.0 Review and Approval of Minutes

Committee Chair Powers asked for review of the minutes from the March 26, 2020 meeting, and the May 7, 2020 meeting, which were approved. Committee Chair Powers then asked for further discussion, for all in favor of the motion and any opposed, and the motion was approved unanimously.

4.0 Action Items

Committee Chair Powers turned the Committee's attention to the following action item.

AC1 July 1, 2020 through December 31, 2020 Office of Internal Audit Work Plan

The Office of Internal Audit establishes its audit coverage with a work plan that identifies the activities and issues they plan to cover during a specific time period. Interim Chief Audit Executive Joe Cannella presented the current work plan reflecting planned projects for the period July 1, 2020 to December 31, 2020. He stated the work plan was prepared based on the university's strategic plan including required audits, while also considering the current risk environment of the university. He stated during the current period the objective is to remain flexible so they could address key functions, activities and units of the university for the purpose of evaluating and improving the effectiveness of its risk management, internal controls and governance processes in the current environment. The audit work plan will be reviewed semi-annually in response to changing priorities, conditions, or audit resources and is expected to utilize the efforts of the university's evolving enterprise risk management program.

Chair Powers asked for a motion to approve Committee Action Item AC1, which was made by Trustee Patel, and a second, which was made by Trustee Stern. Chair Powers asked for any further discussion, and then asked for all in favor of the motion and any opposed and the motion was approved unanimously. This is the final action on this matter. Further Board of Trustees action is not required.

5.0 Discussion/Information Items

5.1 Update on External Audits

Chair Powers provided an update on external audit activity that has been conducted by the Auditor General's Office. Chair Powers reviewed the audits under way at this time, the financial statement audit of the university for FY 2019-2020, and the audit of the university's federal awards, which includes university-administered federal financial assistance programs.

5.2 Board of Governors Assessment

Chair Powers reported that the Board of Governors received a report on Controls and Business Process Assessments, a system-wide audit of internal controls and business processes, conducted by Crowe. Vice President and Chief Information Officer Elias Eldayrie and Interim Chief Audit Executive Joe Cannella are working to address the two IT-related findings.

5.3 Strategic Update and Enterprise Risk Management

Senior Vice President and Chief Operating Officer Charlie Lane presented a strategic update, which included the Enterprise Risk Management program at the university. Baker Tilly was hired to consult with UF administrators to help develop an enterprise-wide program. Significant progress has been made, including identifying the program structure, university governance, and oversight. By the end of the next fiscal year Senior

Vice President and Chief Operating Officer Lane hopes to have a risk map available to identify general risk areas, which will allow the university to fine tune potential impacts and the likelihood of occurrence.

5.4 Compliance Program Update

Interim Chief Compliance Officer Terra DuBois presented a Compliance Program update, which included a review of the UF Compliance and Ethics FY21 Work Plan. The work plan addressed training for university employees and board of trustee members, development of an enterprise-wide statement of integrity and standards of conduct, involvement with the strategic direction of the enterprise risk management process and the reporting schedule for key program elements. She also gave an update on International Activities, including the university's local and national involvement, and UFOLIO Disclosure Program, which all colleges are expected to be a part of by the end of June.

5.5 Audits and Other Reviews

Interim Chief Audit Executive Joe Cannella presented the following internal audit projects that had been issued since the last Committee meeting:

- 1) UAA Ticket Office
- 2) Executive Expense Review
- 3) Animal Care Services

The reports and summaries, which had been previously provided to the Committee for detailed review, were briefly discussed and questions were answered. Board Chair Mori Hosseini requested a change to the procedures going forward, and asked that the Board Chair also receive a copy of the expense details from the CFO's office.

5.6 Quarterly Follow-up

Interim Chief Audit Executive Cannella also reported on the follow-up status of comments and action plans from previously issued internal and other audits and indicated that there was nothing of significance to report, nor any follow-up ceased due to departmental inaction.

6.0 New Business

Chair Powers mentioned that she and Trustee Patel had reviewed investigations with Senior Vice President and Chief Operating Officer Lane and Interim Chief Audit Executive Cannella and there were no issues. Chair Powers also gave an update on the Chief Audit Executive search and indicated that the search committee met with two candidates and they will hopefully soon have information to share on a final candidate.

7.0 Adjourn

There being no further discussion, the meeting was adjourned at 4:14 p.m.



COMMITTEE ON AUDIT AND COMPLIANCE

Pre-Meeting Minutes
Virtual Meeting
November 19, 2020
University of Florida, Gainesville, FL
Time Convened: 3:06 p.m.
Time Adjourned: 3:48 p.m.

Committee and Board members present:

Marsha D. Powers (Committee Chair), Richard P. Cole, Leonard H. Johnson, Rahul Patel, Trevor J. Pope

Others present:

Amy Hass, Vice President and General Counsel; Curtis Reynolds, Vice President for Business Affairs; Terra DuBois, Chief Compliance, Ethics, and Privacy Officer; Dhanesh Raniga, Chief Audit Executive; Joe Cannella, Audit Director; Alan West, Assistant Vice President and University Controller; members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Powers welcomed everyone in attendance and called the meeting to order at 3:06 p.m.

2.0 Roll Call

Board Staff conducted a roll call of all Committee and Board members present.

3.0 Review Agenda for December 3,2020 Meeting

The following items were addressed by the Committee:

3.1 Review Minutes

June 4, 2020, Committee on Audit and Compliance Minutes

3.2 Action Items

AC1 Review Charters

1.1 Audit and Compliance Committee Charter

The Audit and Compliance Committee charter is required to be reviewed every three years as per BOG Regulation 4.002 (2). Dhanesh Raniga, Chief Audit Executive, gave an overview of the process to review the charter and advised that the audit and compliance duties and responsibilities of the committee are

now combined into one concise section in the charter. The duties and responsibilities regarding financial reporting and disclosure, internal audit and compliance oversight were updated to provide clarity and make references to BOG regulations, where appropriate. Terra DuBois, Chief Compliance, Ethics, and Privacy Officer confirmed that compliance duties are now included in the charter and reflect the BOG regulations.

1.2 Office of Internal Audit Charter

Chief Audit Executive Raniga discussed updates to the Internal Audit charter that were made, to incorporate BOG regulations and consolidate internal audit services and responsibilities to remove duplication.

1.3 UF Compliance and Ethics Charter

Chief Compliance, Ethics, and Privacy Officer DuBois discussed the UF Compliance and Ethics (UFCE) charter, which was reviewed as required by BOG Reg. 4.003 every three years. Minor revisions were made to reflect the changes in the office name and the chief compliance officer reporting structure. A new section was added to include the professional standards the CCO and UFCE staff adhere to.

AC2 University of Florida Performance Based Funding and Preeminent Status Metrics – Data Integrity (Audit Report) and Annual Data Integrity Certification Chief Audit Executive Raniga gave a brief overview of the report and advised that the audit has been conducted by his office for the last seven years. There were no reportable issues noted regarding data integrity or the information submitted. The certification needs to be approved and signed by President Fuchs and Board Chair Hosseini.

AC3 Institutional Compliance Annual Report

Chief Compliance, Ethics, and Privacy Officer DuBois presented key points of the Institutional Compliance Annual Report which is also required by the BOG. The report is organized into the seven elements of an effective compliance program and provides, for each element, a high-level summary of UFCE activities followed by highlights of compliance partners' efforts and initiatives. Fifty-seven units contributed to the annual report.

AC4 Office of Internal Audit Work Plan January 1, 2021 - June 30, 2021

Chief Audit Executive Raniga discussed the work plan, which includes areas of high risk and where internal audit can add the most value. The plan focuses more towards assurance type internal audit projects and included significant areas of the University's business and operations. The audit plan includes areas such as Payroll, Research Compliance, Construction, IT Security and audits at the decentralized locations. Time has been allocated to facilitate the University's Enterprise Risk Management program, which will assist in informing the future internal audit plans. The plan included some carry-over projects which are in progress.

3.3 Discussion Items

Update on External Audits

Committee Chair Powers briefed the committee that the external auditors recently issued an audit report on P.K. Yonge, which included a few findings and plans for improvement.

Compliance and Ethics Program Update

Chief Compliance, Ethics, and Privacy Officer DuBois gave an update on the Compliance and Ethics Program. The major points included the status of key projects, an update on the office staffing, and more details on the institutional compliance annual report. Other updates included Youth Compliance Services functions being folded into UFCE and the Office taking the centralized responsibility for meeting the Department of Education foreign gifts and contacts reporting.

Audits of Affiliated Organizations

Assistant Vice President and University Controller Alan West reviewed the audits of affiliated organizations and advised that almost all audits came in for the DSO's as clear, unmodified. The auditor's opinion on the Gator Boosters financial statements was accepted by their board. The opinion on the Cattle Enhancement Board financial statements has been drafted, with plans to issue by end of month. Mr. West also gave an overview of management letter comments for UF Development Corporation and Florida Health Professions Association, Inc. He also mentioned that an audit at UF Health Shands was pending due to the external auditors requiring time to audit the CARES Act requirements in relation to the financial statements.

Audits and Other Reports

Audit Director Joe Cannella gave a brief overview of the audits that have been issued since the last committee meeting or will be issued before the December BOT meeting: UFF Information Technology General Controls, UFF Restricted Gifts (Endowed and Non-Endowed), Research Shield Computing, Construction Funding, and Performance-Based Funding and Preeminence Data Integrity, as well as other advisory reports and the internal audit annual report. The Committee received a copy of the annual report in the materials. Audit Director Cannella also provided a brief review of the content of the annual report and stated it would be issued after the meeting.

Quarterly Follow-up

Audit Director Joe Cannella reported the follow-up status of comments from previously issued internal and other audits. He explained the purpose and objectives for the follow-up processes.

4.0 New Business

There was no new business to come before the committee.

5.0 Adjourn

There being no further discussion, Committee Chair Powers adjourned the meeting at 3:48 p.m.





COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC1.1 December 3, 2020

SUBJECT: Audit and Compliance Committee Charter Revision

BACKGROUND INFORMATION

The State University System Florida Board of Governors (BOG) Regulation 4.002(2) requires the Audit and Compliance Committee Charter (Charter) be reviewed and approved by the Board of Trustees, at least every three years and as deemed necessary for consistency with applicable BOG and university regulations, professional standards, and best practices. Accordingly, the Charter was reviewed and updated to provide clarity regarding the responsibilities and duties of the Audit and Compliance Committee for financial reporting and disclosure, internal audit and compliance oversight. A copy of the approved charter and any subsequent changes shall be provided to the Board of Governors.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the proposed revisions to the committee charter, as presented. The committee is asked to recommend to the GGRIA committee for approval.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors of the new committee charter is required after approval by the GGRIA committee.

Supporting Documentation Included: <u>Original</u> and <u>Revised</u> Audit and Compliance Committee Charters

Submitted by: Dhanesh Raniga, Chief Audit Executive and Terra DuBois, Chief Compliance, Ethics and Privacy Officer

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary

UNIVERSITY OF FLORIDA BOARD OF TRUSTEES

Board Operations

Adopted: June 13, 2003 Amended: December 15, 2017

AUDIT AND COMPLIANCE COMMITTEE CHARTER

Purpose

The Audit and Compliance Committee assists the Board of Trustees in fulfilling its oversight responsibilities for optimizing the effectiveness of the financial reporting process, ethical business practices, the system of internal control over financial reporting, and oversight of the audit and compliance programs.

Organization/Composition

The Audit and Compliance Committee will be comprised of a minimum of four trustees. The members should be free from any financial or personal conflicts that would interfere with the exercise of their independence with respect to management or the institution. All members of the Audit and Compliance Committee should have a working familiarity with the principles governing higher education, and basic finance and accounting practices, and at least one member must have accounting or related financial management expertise.

The Chairman of the Board of Trustees, recognizing the need for continuity of membership from year to year, shall appoint the members of the Audit and Compliance Committee.

University staff liaisons will include the Vice President and Chief Financial Officer or designee, the Vice President and General Counsel or designee, the Chief Audit Executive, and the Chief Compliance Officer.

Meetings

The Audit and Compliance Committee will meet at least three times annually. Additional meetings may occur as circumstances dictate. The Committee Chair, the Chief Audit Executive, and the Chief Compliance Officer should discuss and finalize the meeting agenda. The meetings are open to the public. The Audit and Compliance Committee will invite members of management, auditors, compliance professionals, and/or others to attend meetings and provide pertinent information as necessary.

Responsibilities and Duties

The Audit and Compliance Committee sets the overall tone for quality financial reporting, sound business risk practices, compliance with applicable state and federal laws and regulations, University regulations and policies, and ethical behavior.

The Audit and Compliance Committee monitors audit processes and compliance program effectiveness, ensures independent communication and information flow for audit and compliance processes, and ensures committee members are knowledgeable and diligent in performing their duties.

The Audit and Compliance Committee strives to ensure that its policies and procedures remain flexible to best react to changing conditions and provide reasonable assurances to the Board that the scope of audit activities and the adequacy of the system of internal controls promote compliance with state and federal laws and regulations, and University regulations and policies. The Audit and Compliance Committee shall make reports to the Board, as it deems necessary.

General Duties and Responsibilities

The Audit and Compliance Committee shall fulfill its general oversight duties and responsibilities as follows:

- Adopt a formal written charter that has been approved by the full Board of Trustees that specifies scope
 of responsibility, process, membership, etc. The charter will be reviewed at least every three years
 for consistency with applicable Board of Governors and University regulations, professional standards,
 and best practices.
- Maintain minutes or other records of meetings and activities.
- Report Committee actions to the Board with such recommendations as the Committee may deem appropriate.
- Conduct or authorize investigations into any matters within the Committee's scope of responsibilities.
 The Committee shall be empowered to retain independent counsel, accountants, or others to assist it in the conduct of any investigation.
- Review and monitor implementation of management's response to internal and external audit recommendations and compliance findings.
- Provide other governance oversight as assigned by the Board.

Financial Statements/Internal Controls

The following shall be the principal duties and responsibilities of the Audit and Compliance Committee regarding financial statements:

- Review annual audited financial statements with management and the independent auditors to determine that the independent auditors are satisfied with: (1) the fair presentation of the financial statements, and (2) management's application of conservative accounting principles.
- Consider independent auditors' judgments regarding the quality, consistency, and appropriateness of financial statements.
- Make inquiries of management and external auditors concerning the adequacy of the University's system
 of internal controls.
- Require financial management and the independent auditor to discuss with the Audit and Compliance Committee its qualitative judgments about the appropriateness, not just acceptability, of accounting principles and financial disclosure practices used or proposed to be adopted by the institution.
- Review, accept and recommend for the Board approval the University's annual audit of accounts and records/financial statements and the report on internal controls and compliance.
- Review the programs and policies of the University designed by management to assure compliance with applicable laws and regulations and monitor the results of compliance efforts.

Internal Audit Function

The Audit and Compliance Committee shall fulfill its duties and responsibilities associated with the internal audit function as follows:

- Review and approve the annual internal audit plan and any significant changes to the internal audit plan.
- Annually, review the staffing levels to fulfill the plans and mission as well as the adequacy of internal audit staff qualifications.
- Approve and periodically (at least every three years) review the internal audit charter and the internal audit function including its independence and authority.
- Inquire of the Chief Audit Executive regarding the adequacy and effectiveness of accounting and financial controls and request recommendations for improvements.
- Review a summary of findings and completed internal audits and a progress report on executing the approved internal audit plan.
- Maintain adequate policies and guidelines for receiving complaints regarding accounting controls and reports of financial fraud. Review significant findings and issues identified as a result of special reviews or whistleblower complaints.
- Inquire of the Chief Audit Executive regarding any difficulties encountered in the course of his/her audits conducted, including any restrictions on the scope of his/her work or access to required information or any lack of cooperation.
- Require the Chief Audit Executive to report in writing annually on activities of the office.
- Inquire of the Chief Audit Executive regarding the Quality Assurance and Improvement Program, including periodic internal and external quality assessment results.
- Review and concur in the appointment, compensation, replacement, reassignment, or dismissal of the Chief Audit Executive.
- Obtain approval from the Board of Governors prior to outsourcing the Chief Audit Executive's entire audit or investigative function.

Compliance Function

The Audit and Compliance Committee shall fulfill its duties and responsibilities associated with the compliance function as follows:

- Provide governance oversight of the compliance program.
- Review at least every three years and periodically approve the Compliance Charter and any subsequent revisions.
- Review the Chief Compliance Officer's annual report on the effectiveness of the compliance program and approve any compliance work plan revisions.

- Oversee the development and implementation of employee communication and training activity promoting ethical conduct, compliance with the law, and due diligence to prevent and detect improper conduct.
- Ensure that appropriate and consistent discipline is imposed for violations of the Code of Conduct, UF
 policies, and legal requirements and that action is taken to prevent similar violations from occurring in
 the future.
- Inquire of the Chief Compliance Officer regarding any difficulties encountered in the course of the compliance program implementation and monitoring activities, including any restrictions on the scope of his/her work or access to required information or any lack of cooperation.
- Review significant or key compliance findings identified through audits or investigations along with pertinent industry or regulatory updates presented by the Chief Compliance Officer and approve any preventative or corrective measures.
- Review at least once every five years, an external evaluation of the Compliance Program's design and
 effectiveness and approve any recommendations for program improvements.

UNIVERSITY OF FLORIDA BOARD OF TRUSTEES

Board Operations

Adopted: June 13, 2003 Amended: December 15, 2017

AUDIT AND COMPLIANCE COMMITTEE CHARTER -DRAFT

Purpose

This Charter governs the operations of the Audit and Compliance Committee (the 'Committee'). The Committee assists the Board of Trustees (the 'Board') in fulfilling its oversight responsibilities relating to the following:

- Integrity of the university's financial statements
- The effectiveness of the university's internal controls over financial reporting
- Compliance with legal and regulatory requirements
- Effectiveness of the university's risk management program
- · Performance of the internal audit and compliance functions
- Other governance oversight responsibilities, as assigned by the Board

In accordance with the State University System Florida Board of Governors (BOG) Regulation 4.002(2), the Committee will review this Charter at least every three years and as deemed necessary for consistency with applicable BOG and university regulations, professional standards, and best practices and recommend the Charter to the Board of Trustees for approval.

Composition, Staff Liaisons, and Meetings

The Committee will be comprised of a minimum of four trustees. The Chairman of the Board shall appoint the members of the Committee. All members of the Committee should collectively have a working familiarity with the principles governing higher education and basic finance and accounting practices

University staff liaisons may include the Senior Vice President and Chief Operating Officer, the Vice President and General Counsel or designee, the Chief Audit Executive, and the Chief Compliance Officer.

The Committee will meet at least three times annually. Additional meetings may occur as necessary to discharge the Committee's responsibilities under this charter. The Committee will invite members of management, auditors, compliance professionals, and/or others to attend meetings and provide pertinent information, as necessary.

The quorum for the Committee will be a majority of the members.

Responsibilities and Duties

The Committee, in carrying out its responsibilities, will utilize flexible procedures in order to best react to changing conditions and circumstances. The Committee will take appropriate actions to monitor the overall organizational tone for quality financial reporting, sound business risk practices, compliance with applicable laws and regulations, policies, and ethical behavior.

In discharging its responsibilities, the Committee shall conduct or authorize investigations within its scope of responsibilities and is empowered to retain and compensate independent counsel, accountants, experts, and other advisors as it deems necessary.

The Committee shall make reports to the Board, as it deems necessary, to report Committee actions and other matters as required under this charter.

The following shall be the principal duties and responsibilities of the Committee. These matters are set forth as a guide with the understanding that the Committee may supplement them as appropriate.

Financial Reporting and Disclosure Responsibilities

University management is responsible for:

- The preparation, presentation, and integrity of the university's annual financial statements;
- The appropriateness of the accounting principles and reporting policies that are used by the university;
 and
- Establishing and maintaining internal control over financial reporting.

The Committee shall review and discuss the annual audited financial statements and any matters required to be communicated to the Committee by the independent auditors under professional accounting standards.

The Committee's review of the financial statements shall include: (1) major issues regarding accounting principles and financial statement presentations, including any significant changes in the university's selection or application of accounting principles, and major issues as to the adequacy and effectiveness of the university's internal control over financial reporting and any specific remedial actions adopted in light of significant deficiencies or material weaknesses; (2) discussions with management and the independent auditor regarding significant financial reporting issues and judgments made about the preparation of the financial statements and the reasonableness of those judgments; (3) consideration of the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements; (4) consideration of the judgment of both management and the independent auditor about the quality, not just the acceptability, of accounting principles; and (5) the completeness and clarity of the disclosures and notes in the financial statements.

The Committee shall make inquiries of university management and external auditors concerning the adequacy of the university's system of internal controls.

The Committee shall review, accept, and recommend to the Board approval of the university's annual financial statements and the report on internal controls and compliance.

Internal Audit Oversight and Responsibilities

The BOG Regulation 4.002 requires all universities to have an Office of Chief Audit Executive with oversight by the Committee. In fulfilling its oversight responsibilities, the Committee shall:

- Provide governance oversight of the Office of Chief Audit Executive, which acts as a point for coordination
 of and responsibility for activities that promote accountability, integrity, and efficiency in the operations of
 the university.
- Review with management and concur in the appointment, replacement, reassignment, and dismissal of the Chief Audit Executive.
- Review and approve the internal audit plan and any significant changes to the plan.
- Review and discuss with internal audit the scope, progress, and results of executing the internal audit plan.
- Receive reports on the status of significant findings and recommendations, and management's responses.
- Inquire of the Chief Audit Executive regarding any difficulties encountered during audits conducted, including any restrictions on the scope of work or access to required information or any lack of cooperation.
- Periodically review the internal audit charter, organization reporting relationship, activities, staffing, and credentials of the internal audit office for consistency with applicable BOG and university regulations, professional standards, and best practices.
- Review the annual performance of the internal audit function, including receiving periodic reports of any quality assurance and performance measure results.
- Review procedures for receiving complaints and concerns under an employee "hotline" or other direct access program.

 Obtain approval from the Florida Board of Governors prior to fully outsourcing the entire internal audit or investigative function.

Compliance Oversight and Responsibilities

The BOG Regulation 4.003 requires all universities to have an office of the chief compliance officer with oversight by the Committee. In fulfilling its oversight responsibilities, the Committee shall:

- Provide governance oversight for the university-wide compliance and ethics program, which acts as a
 point for coordination of and responsibility for activities that promote ethical conduct and maximize
 compliance with applicable laws, regulations, policies, and procedures.
- Coordinate with the President and appropriate Cabinet members in the designation of a senior-level administrator as chief compliance officer.
- Approve the compliance office charter and review, at least every three years, for consistency with applicable BOG and university regulations, professional standards, and best practices.
- Approve the compliance program plan and any subsequent changes.
- Review, at least every five years, an external assessment of the compliance program's design and effectiveness and approve any recommendations for program improvements.
- Review the Chief Compliance Officer's annual report on the effectiveness of the compliance program.
- Ensure the Chief Compliance Officer has the independence, resources, and appropriate authority to perform the responsibilities of the function.
- Inquire of the Chief Compliance Officer regarding any difficulties encountered in the course of the compliance program implementation and monitoring activities, including any restrictions on the scope of work or access to required information or any lack of cooperation.
- Review significant compliance findings identified through audits, investigations, reviews, or other means. Review resulting corrective actions and any reasonable steps taken to prevent future similar behavior.
- Ensure failures in compliance or ethics are addressed through appropriate and consistent measures, including education and disciplinary actions, and that action is taken to prevent similar violations from occurring in the future.



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC1.2 December 3, 2020

SUBJECT: Internal Audit Charter

BACKGROUND INFORMATION

The Internal Audit Charter (Charter), which defines the duties and responsibilities of the Office of Internal Audit, derives its authority through the Board of Governors Regulation (BOG) 4.002 and adoption by the Audit and Compliance Committee of the University of Florida Board of Trustees. In accordance with BOG Regulation 4.002(3), this Charter shall be reviewed every three (3) years, and as deemed necessary, for consistency with applicable BOG and University regulations, professional standards and best practices. A copy of the approved charter and any subsequent changes shall be provided to the BOG. The Charter was previously revised on December 1, 2016.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the revised Internal Audit Charter.

ADDITIONAL COMMITTEE CONSIDERATIONS

Supporting Documentation Included: Original and Revised Internal Audit Charters

Submitted by: Dhanesh Raniga, Chief Audit Executive

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



Charter

Introduction

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Mission and Scope of Work

The mission of the Office of Internal Audit (OIA) is to provide independent, objective assurance and consulting services, using a risk-based approach, to add value and improve the operations of the University of Florida and its affiliated organizations, including its direct support organizations and Faculty Practice Plan corporations. The OIA will serve as a central point for coordination of and oversight for activities that promote accountability, integrity, and efficiency in the operations of the university.

The scope of work of the OIA is to determine whether the university's network of risk management control and governance processes, as designed and represented by management, are adequate and functioning in a manner to promote:

- Risks impacting the achievement of the university's strategic objectives are appropriately identified and managed
- Interaction with the various governance groups occurs as needed
- · Significant financial, managerial, and operating information is accurate, reliable, and timely
- · Employees' actions are in compliance with policies, standards, procedures, and applicable laws and regulations
- Resources are acquired economically, used efficiently, and protected adequately
- Achievement of programs, plans, and objectives
- Quality and continuous improvement in the university's controls process
- Recognition and appropriate action relative to significant legislative or regulatory issues impacting the university

Opportunities for improving management control may be identified during audits. They will be communicated to the appropriate level of management.

Organization, Independence and Authority

This charter, which defines the duties and responsibilities of the Chief Audit Executive (CAE) and the OIA, derives its authority through adoption by the Committee on Audit and Operations Review. This charter shall be reviewed at least every three (3) years for consistency with applicable Board of Governors and university regulations, professional standards, and best practices.

To provide for the independence of the OIA, its staff report to the CAE, who is appointed by and operates under the general oversight of the university President. The CAE reports administratively to the university President and to the Senior Vice President and Chief Operating Officer (SVPCOO), and reports functionally to the Board of Trustees through its Committee on Audit and Operations Review as to the process and content of its reports. This reporting relationship promotes independence and assures adequate consideration of audit findings and planned actions.

The CAE and staff of the OIA are authorized to:

- Have unrestricted access to all functions, records, property, and personnel.
- Have full and free access to the Committee on Audit and Operations Review.
- Allocate resources, set frequencies, select subjects, determine scopes of work, and apply the techniques required to accomplish audit objectives.
- Obtain the necessary assistance of personnel in units of the university where they perform audits, as well as other specialized services from within or outside the university (other universities, federal, state or local government entities).

The CAE and staff of the OIA are not authorized to:

- Perform any operational duties for the university or its affiliated organizations.
- Initiate or approve accounting transactions external to the OIA.
- Direct the activities of any university employee not employed by the OIA, except to the extent such employees have been appropriately assigned to auditing teams or to otherwise assist the OIA staff.

Accountability

The CAE, in the discharge of his/her duties, shall be accountable to management and the Committee on Audit and Operations Review to:

- Provide assessments on the adequacy and effectiveness of the university's processes for controlling its activities and managing its risks in the areas set forth under the mission and scope of work
- Report significant issues related to the processes for controlling the activities of the university and its affiliated organizations, including potential improvements to those processes, and provide information concerning such issues through resolution
- Provide information periodically on the status and results of the annual audit plan and the sufficiency of department resources. Inform the Committee on Audit and Operations Review when contracting for specific instances of audit or investigative assistance
- Coordinate activities with other control and monitoring functions (e.g., risk management, compliance, security, information technology legal, ethics, environmental, and external audit) to promote proper coverage and minimize duplication of efforts
- Communicate the results of the quality assurance and improvement program and the external quality assessment review

Duties and Responsibilities

- Develop a flexible three-year audit work plan using appropriate risk-based methodology, including any risks or control
 concerns identified by management, and submit that plan to the Board of Trustees for approval. The flexible audit
 work plan will be revised annually and approved by the Committee on Audit and Operations Review. Approved audit
 work plans will be provided to the Board of Governors.
- Implement the audit plan as approved, including any appropriate special tasks or projects requested by management and the Committee on Audit and Operations Review.
- Conduct and coordinate audits, investigations, and management reviews which promote economy, efficiency, and
 effectiveness in the administration of programs and operations of the university and its affiliated organizations. A
 copy of final audit reports will be provided to the Board of Governors.
- Perform, or coordinate, other consulting services or activities carried out or financed by the university for the purpose
 of assisting management in meeting its objectives, promoting economy and efficiency in the administration of, or
 preventing and detecting fraud and abuse in its programs and operations. These may include facilitation, training and
 advisory services.
- Issue periodic reports to the Committee on Audit and Operations Review and management summarizing results of audit activities.
- Provide and maintain a mechanism (third-party hotline) whereby university staff, faculty, students and trustees, and
 the general public may anonymously report allegations of improprieties related to the university.
- Receive complaints and coordinate all activities of the university as required by the Whistle-blower's Act pursuant to Sections 112.3187-112.31895, Florida Statutes.In accordance with the university's Policy on Fraudulent and Dishonest Acts, receive and consider complaints that do not meet the criteria for an investigation under the Whistleblower's Act and conduct, supervise, or coordinate such inquiries, investigations, or reviews pursuant to the Standards for Complaint Handling and Investigations for the State University System of Florida.
- Keep the President, the Senior Vice President and Chief Operating Officer, management and the Committee on Audit
 and Operations Review informed concerning significant and credible allegations and known occurrences of waste,
 fraud, mismanagement, abuses, and internal control deficiencies relating to programs and operations; facilitate
 initiation of corrective actions; and report on the progress made in implementing corrective actions.

- Consider the scope of work and ensure effective coordination and cooperation between the Auditor General, federal
 auditors, and other governmental bodies and external auditors with a view toward avoiding duplication.
- Review, as appropriate, rules and procedures relating to the programs and operations of the university and make recommendations concerning their impact.
- Maintain a professional audit staff with sufficient knowledge, skills, experience, and professional certifications to meet the requirements of this charter.
- Confirm to the Committee on Audit and Operations Review, at least annually, the organizational independence of the OIA.
- Develop and maintain a quality assurance and improvement program covering all aspects of the OIA and communicate the results of the quality assurance and improvement program to management and the Committee on Audit and Operations Review. This program shall include an external quality assessment review conducted at least once every five (5) years. The external quality assessment report and any related improvement plans shall be presented to the Committee on Audit and Operations Review, with a copy provided to the Board of Governors.
- Keep the Committee on Audit and Operations Review informed of emerging trends and successful practices in internal auditing.
- By September 30th of each year, prepare and provide an annual report summarizing the activities of the OIA for the
 preceding year. The report shall be provided to the President, the SVPCOO, the Committee on Audit and Operations
 Review, and the Board of Governors.

In the performance of these services, the Office of Internal Audit will ensure that an appropriate balance is maintained between audit, investigative, and other activities. Detailed operational procedures for the OIA will be established and maintained.

Standards of Audit Practice

The OIA will meet or exceed the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing. As appropriate given the engagement, the OIA may also follow Government Auditing Standards (published by the United States Government accountability Office) or the Information Systems Auditing Standards (ISACA, Information Systems Audit and Control Association).

The OIA staff members have a responsibility to the interest of those they serve and should refrain from entering into any activity that may create a conflict of interest. They have an obligation of self-discipline above and beyond the requirements of laws and regulations. They should uphold and demonstrate qualities of integrity, honesty, loyalty, morality, dignity, and confidentiality consistent with the Institute of Internal Auditors Code of Ethics.

Brian D. Mikell Chief Audit Executive

W. Kent Fuchs

President

Charles E. Lane

Senior Vice President and Chief Operating Officer

Marsha D. Powers

Chair, Board of Trustees Committee on Audit

and Operations Review

Approved Date:

December 1, 2016



Internal Audit Charter

Objective and Scope

The objective of Internal Auditing is to provide an independent, objective assurance and consulting service designed to add value and improve the operations of the University of Florida and its affiliated organizations, including its direct support organizations and the Faculty Practice Plan corporations (collectively, the University). The Office of Internal Audit (OIA) helps the University to accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes¹.

The State University System Florida Board of Governors (BOG) Regulation 4.002(1) requires that each university shall have an office of chief audit executive (CAE) as a point for activities that promote accountability, integrity, and efficiency in the operations of the university. The scope of work of internal audit encompasses the examination and evaluation of all activities of the University and includes determining whether the University's risk management, internal controls, and governance processes, as designed and represented by management, are adequate and functioning effectively to provide a reasonable level of assurance that:

- (a) Exposure to risk and fraud is managed in an effective and efficient manner.
- (b) Significant financial, managerial, and operating information is accurate, reliable, and timely.
- (c) Services are delivered efficiently and effectively to obtain best value for money.
- (d) Resources are acquired economically, used efficiently, and accounted for accurately.
- (e) Programs, plans and objectives are achieved.
- (f) Employees' actions are in compliance with applicable laws, regulations, contract provisions, and University policies and procedures.
- (g) Accountability, quality and continuous improvement are fostered in the University's control processes.
- (h) Significant legislative or regulatory issues impacting the University are recognized and addressed.

Organization, Independence, and Authority

This charter, which defines the duties and responsibilities of the OIA, derives its authority through BOG Regulation 4.002 and adoption by the Audit and Compliance Committee of the University of Florida Board of Trustees. In accordance with BOG Regulation 4.002(3), this charter shall be reviewed every three (3) years, and as deemed necessary, for consistency with applicable BOG and University regulations, professional standards and best practices. A copy of the approved charter and any subsequent changes shall be provided to the BOG.

The CAE will report administratively to the University President and to the Senior Vice President and Chief Operating Officer (SVP & COO), and functionally to the Board of Trustees through the Audit and Compliance Committee to ensure independence of the OIA.

In order to fulfil its responsibilities, the CAE and staff of the OIA are authorized to:

- Have unrestricted access to all functions, records, property, and personnel.
- Have full and free access to the Audit and Compliance Committee and the University

¹ Institute of Internal Auditors, Definition of Internal Auditing, International Professional Practices Framework (IPPF).

- President, including notification of any restrictions in scope, resources, and access to information that may impair the satisfactory completion of internal audit activities.
- Allocate resources, select areas of focus, determine scopes of work, and apply the techniques required to accomplish audit objectives.
- Maintain a professional staff with sufficient knowledge, skills, experience, and professional certifications to meet the requirements of this charter.
- Obtain the necessary assistance of personnel in units of the University where they perform audits, as well as other specialized services from within or outside the University.
- Inform the UF Board of Trustees through the Audit and Compliance Committee when contracting for specific instances of audit or investigative assistance.

The CAE and staff of the OIA are not authorized to:

- Perform any operational duties for the University or its affiliated organizations.
- Initiate or approve accounting transactions external to the OIA.
- Direct the activities of any University employee not employed by the OIA, except to the
 extent such employees have been appropriately assigned to auditing teams or to otherwise
 assist the OIA staff.

Accountability

The CAE, in the discharge of his/her duties, shall be accountable to the Audit and Compliance Committee to:

- Provide assessments on the adequacy and effectiveness of the University's processes for controlling its activities and managing its risks in the areas set forth under the mission and scope of work.
- Report significant issues related to the processes for controlling the activities of the University
 and its affiliated organizations, including potential improvements to internal controls and key
 business processes through internal audit report recommendations.
- Provide information to the University President and the Audit and Compliance Committee, at least annually, regarding the organizational independence of the OIA, the status and results of the annual audit plan and the sufficiency of department resources.
- Promote, in collaboration with other appropriate university officials, the effective coordination between the university and the Florida Auditor General, federal auditors, accrediting bodies, and other governmental or oversight bodies.
- Coordinate activities with other control and monitoring functions (e.g., risk management, compliance, and the external auditors) to promote proper coverage and minimize duplication of efforts.

Internal Audit Services

Internal Audit shall conduct financial, operational, compliance, and information technology audits in accordance with approved plans and its established policies and procedures, in conformance with the Institute of Internal Auditors' Code of Ethics and the International Professional Practices Framework, as well as other professional auditing standards which may be applicable to the performance of work assignments. The OIA may also follow the Government Auditing Standards (published by the United States Government Accountability Office) and the Information Systems Auditing Standards (as promulgated by the Information Systems Audit and Control Association), as appropriate. The Institute of Internal Auditors' Practice Guides and Position Papers will also be adhered to, as applicable.

Internal Audit services and activities include but are not limited to the following:

- Develop and implement a flexible audit plan using an appropriate risk-based methodology, including risks or control concerns identified by management. These plans, including any revisions, shall be submitted to the Audit and Compliance Committee for review and approval and a copy of the approved audit plan will be provided to the BOG.
- Examine and evaluate the adequacy and effectiveness of the systems of internal controls, including any significant new or changing services, processes, operations, and controls coincident with their development and implementation.
- Identify opportunities for reducing costs, improving processes, and enhancing the University's reputation.
- Review the reliability and integrity of financial and operating information and the means used to identify, measure, classify, and report such information.
- Assess compliance with laws, regulations, contract/grant provisions, and internal policies, plans, and procedures.
- Verify that resources are acquired economically, used efficiently, accounted for accurately, and protected adequately.
- Review operations or programs to ascertain whether results are consistent with established objectives.
- Perform advisory services to assist management in managing risks, improving internal controls, and governance processes. Examples might include facilitation, process design, education and training.
- Assess steps taken by management to embed a risk and control culture that is committed to lawful and ethical behavior in the University.
- Provide training and outreach to promote accountability and address topics such as fraud awareness, risk management, controls, and other related subject matter, as appropriate.
- Have a mechanism (third-party hotline) whereby University staff, faculty, students, trustees, and the general public may anonymously report allegations of fraud or improprieties related to the University or allegations about questionable accounting, internal controls or auditing matters.
- Establish policies which articulate the steps for reporting and escalating matters of alleged misconduct, including criminal conduct.
- Receive statutory whistleblower information and coordinate all activities of the University as
 required by the Whistle-blower's Act and in accordance with the University policy on
 Reporting and Investigating Fraudulent or Other Wrongful Acts and the University of Florida
 Investigation Protocols, as approved by the UF Board of Trustees.
- Conduct, supervise, or coordinate activities for the purpose of preventing and detecting fraud and abuse within the University.
- Keep the Audit and Compliance Committee, the President and the SVP &COO informed concerning significant and credible allegations and known occurrences of waste, fraud, mismanagement, abuses, and internal control deficiencies relating to programs and operations.
- Facilitate initiation of corrective actions and report on the progress made in implementing corrective actions.
- Develop and maintain a quality assurance and improvement program covering all aspects of the OIA and communicate the results of the quality assurance and improvement program to University management and the Audit and Compliance Committee. This program shall include

- an external quality assessment conducted at least once every five (5) years. The external quality assessment report and any related improvement plans shall be presented to the Audit and Compliance Committee, with a copy provided to the BOG.
- Prepare and provide an annual report summarizing the activities of the OIA for the preceding year. The report shall be provided to the President, the SVP & COO, the Audit and Compliance Committee, and the BOG.

In the performance of these services, the Office of Internal Audit will ensure that an appropriate balance is maintained between audit, investigative and other activities outlined under this Charter.

| Dhanesh K. Raniga | Charles E. Lane |
|-------------------------|--|
| Chief Audit Executive | Senior Vice President and Chief Operating Office |
| W. Kent Fuchs President | Marsha D. Powers Chair, Board of Trustees Audit and Compliance Committee |
| Approved Da | ate: December X, 2020 |



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC1.3

December 3, 2020

SUBJECT: Compliance and Ethics Office Charter

BACKGROUND INFORMATION

The Board of Governors Regulation 4.003 requires the compliance and ethics office charter to be reviewed at least every three years for consistency with applicable Board of Governors and university regulations, professional standards, and best practices. The revised charter includes minor modifications necessary to reflect changes to the administrative organization of the compliance program as a result of the appointment of a new chief compliance officer in July 2020.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the revisions of the Compliance and Ethics Office Charter as presented. The Committee is asked to recommend this item to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors is required after approval by the Board of Trustees.

Supporting Documentation Included: <u>Original</u> and <u>revised</u> UF Compliance and Ethics Office Charter

Submitted by: Terra DuBois, Chief Compliance, Ethics, and Privacy Officer

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair W. Kent Fuchs, President and Corporate Secretary

Compliance Office Charter

This Charter describes the mission, reporting structure, independence, authority, and principal responsibilities of the University of Florida Compliance Office.

Mission

The Compliance Office is dedicated to protecting and promoting the corporate integrity of the University of Florida and serves as a resource to all employees in matters of ethical conduct and compliance with the law. The Compliance Office provides oversight and guidance on university-wide compliance activities and fosters a culture that embeds the importance of compliant conduct in all university functions. The Compliance Office proactively collaborates with faculty, staff, and various key staff (Compliance Partners) to further this mission.

Reporting Structure and Independence

The Chief Compliance Officer reports functionally to the University of Florida Board of Trustees and administratively to the University Senior Vice President and Chief Operating Officer. Also, the Chief Compliance Officer meets regularly with the University President. This reporting structure promotes independence and objectivity in the performance of the responsibilities of the Chief Compliance Officer function. The Chief Compliance Officer has organizational independence and all activities of the office are to remain free from influence.

Authority

The Compliance Office has the authority to audit or investigate all areas of the University including its Direct Support Organizations, Centers and Institutes, and Health Science Center Affiliates. The Compliance Office has unrestricted timely access to all institutional activities, records, data, personnel, property, and other information in possession or control of the University, including information reported to the University Hotline, as may be necessary to fulfill its responsibilities. Any documents and information reviewed or collected by the Compliance Office shall be handled in a prudent and confidential manner as applicable per laws, regulations and/or University policies and regulations.

Duties and Responsibilities

The Compliance Office and Chief Compliance Officer shall work collaboratively with Compliance Partners to:

• Establish a Program Plan that promotes compliance with applicable laws, regulations, and University policies and regulations. This plan and any subsequent changes shall be approved by the Board of Trustees and a copy provided to the Board of Governors.

- Foster strong stewardship and management accountability at all levels with the highest standards of honesty and integrity.
- Coordinate general compliance training to employees, faculty, and board members.
- Provide multiple points of contact to address concerns of potential non-compliance or unethical behavior including an avenue for anonymous reporting and appropriately address concerns.
- Conduct audits and risk assessments in accordance with the Compliance Office workplan to help identify risks and assist in managing issues identified.
- Provide continuous assessments of the effectiveness of the Compliance Program.
- Provide compliance advisory services and guidance to management, faculty, and staff.
- Evaluate emerging compliance trends in higher education and implement best practices.
- Coordinate awareness initiatives to ensure that the University community is aware of the Compliance Program, the Compliance Hotline, and Whistleblower Protection Policies.
- Investigate, as necessary, any potential allegation of misconduct in coordination with University Human Resources, Legal Services, Internal Audit and other offices as appropriate.
- Promote and enforce the Program, in consultation with the Senior Vice President and Chief Operating Officer and Board of Trustees, consistently through appropriate incentives and disciplinary measures to encourage a culture of compliance and ethics.
 Failures in compliance or ethics shall be addressed through appropriate measures, including education or disciplinary action.
- Initiate, conduct, supervise, coordinate, or refer to other appropriate offices (such as Human Resources, Internal Audit, Title IX, or General Counsel) such inquiries, investigations, or reviews as deemed appropriate and in accordance with University regulations and policies.
- Submit final reports to appropriate action officials.

Chief Compliance Officer

The Chief Compliance Officer shall:

- Have adequate resources and appropriate authority.
- Maintain a professional staff with sufficient knowledge, skills, and experience to ensure an effective Program.
- Utilize approved third-party resources as appropriate to supplement the Program's efforts.
- Communicate routinely to the University of Florida Senior Vice President and Chief Operating Officer, Audit and Compliance Committee, and Board of Trustees regarding Program activities.

- Conduct and report on compliance activities and inquiries free of actual or perceived impairment to the independence of the Chief Compliance Officer.
- Notify the Senior Vice President and Chief Operating Officer of any unresolved restriction or barrier imposed by any individual on the scope of any inquiry, or the failure to provide access to necessary information or people for the purposes of such inquiry. In such circumstances, the Chief Compliance Officer shall request the Senior Vice President and Chief Operating Officer's assistance in remedying the restrictions.
- Report at least annually on the effectiveness of the Program. Any Program plan revisions, based on the Chief Compliance Officer's report, shall be approved by the Board of Trustees.

Charter Review and Approval

The Compliance Office Charter shall be approved by the UF Board of Trustees and reviewed at least every three years for consistency with applicable regulations, professional standards, and best practices.

Approved by the University of Florida Board of Trustees (Date)

UNIVERSITY OF FLORIDA COMPLIANCE AND ETHICS

Adopted: December 15, 2017

Amended:

COMPLIANCE AND ETHICS OFFICE CHARTER

Mission and Purpose

The mission of the University of Florida Compliance and Ethics (UFCE) office is to protect and promote the corporate integrity of the University of Florida and serve as a resource to all employees in matters of ethical conduct and compliance with the law. UFCE provides oversight and guidance on enterprise-wide compliance activities and fosters a culture that embeds the importance of compliant conduct in all university functions. The compliance program is designed to help fulfill the fiduciary and oversight responsibilities of the University of Florida Board of Trustees, Audit and Compliance Committee. UFCE proactively collaborates with faculty and staff, including identified compliance partners across the enterprise, to further its mission and purpose.

Authority

UFCE has the authority to monitor, review or investigate all areas of the University including its Direct Support Organizations, Centers and Institutes, and Affiliated Entities. In order to meet its responsibilities and maintain independence, UFCE has unrestricted timely access to all institutional activities, records, data, personnel, property, and other information in possession or control of the University, including information reported to the University Hotline. Any documents and information reviewed or collected by UFCE will be handled in compliance with applicable laws, regulations, and University policies and procedures.

Reporting Structure and Independence

The Chief Compliance Officer reports functionally to the University of Florida Board of Trustees and administratively to the University President or designee. This reporting structure promotes independence and objectivity in the performance of the responsibilities of the Chief Compliance Officer function. The Chief Compliance Officer has organizational independence and all activities of the office are to remain free from influence.

Responsibility and Duties

Compliance Program

UFCE is responsible for implementing an enterprise-wide compliance program that coordinates activities that promote ethical conduct and maximize compliance with applicable laws, regulations, policies and procedures. UFCE carries out this responsibility by performing the following duties:

- Establish a program plan that promotes compliance with applicable laws, regulations, and University policies and regulations. This plan and any subsequent changes shall be approved by the Board of Trustees and a copy provided to the Board of Governors.
- Foster strong stewardship and management accountability at all levels with the highest standards
 of honesty and integrity.
- Coordinate general compliance training to employees, faculty, and board members.
- Provide multiple points of contact to address concerns of potential non-compliance or unethical behavior including an avenue for anonymous reporting and appropriately address concerns.
- Conduct monitoring activities, reviews and risk assessments to help identify risks and assist in managing issues identified.
- Provide continuous assessments of the effectiveness of the compliance program.
- Provide compliance advisory services and guidance to management, faculty, and staff.
- Evaluate emerging compliance trends in higher education and implement best practices.
- Coordinate awareness initiatives to ensure that the University community is aware of the compliance program, the compliance hotline, and whistleblower protection policies.
- Investigate, as necessary, any potential allegation of misconduct in coordination with University Human Resources, General Counsel, Internal Audit and other offices, as appropriate.
- Promote and enforce the program, in consultation with the President or designee and Board of Trustees, consistently through appropriate incentives and disciplinary measures to encourage a culture of compliance and ethics. Failures in compliance or ethics shall be addressed through appropriate measures, including education or disciplinary action.
- Submit final reports to appropriate action officials.

Chief Compliance Officer

The Chief Compliance Officer shall:

- Have adequate resources and appropriate authority.
- Maintain a professional staff with sufficient knowledge, skills, and experience to ensure an effective compliance program.
- Utilize approved third-party resources, as appropriate, to supplement the program's efforts.
- Communicate routinely to the President or designee, Audit and Compliance Committee, and Board of Trustees regarding program activities.
- Conduct and report on compliance activities and inquiries free of actual or perceived impairment to the independence of the Chief Compliance Officer.
- Notify the President or designee of any unresolved restriction or barrier imposed by any individual
 on the scope of any inquiry, or the failure to provide access to necessary information or people
 for the purposes of such inquiry. In such circumstances, the Chief Compliance Officer shall request
 the President's or designee's assistance in remedying the restrictions. If the matter is not resolved,
 the Chief Compliance Officer shall notify the Board of Trustees or Board of Governors, as
 appropriate and required in Board of Governors Regulation 4.003.
- Report at least annually on the effectiveness of the program. Any program plan revisions, based on the Chief Compliance Officer's report, shall be approved by the Board of Trustees and provided to the Board of Governors.

Professional Standards

UFCE adheres to the Florida Code of Ethics for Public Officers and Employees contained in Part III, Chapter 112, Florida Statutes; the Federal Sentencing Guidelines Manual, Chapter 8, Part B, Section 2.1(b); and the Code of Professional Ethics for Compliance and Ethics Professionals.

Charter Review and Approval

The Compliance and Ethics Office Charter shall be approved by the UF Board of Trustees and reviewed at least every three years for consistency with applicable regulations, professional standards, and best practices.



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC2 December 3, 2020

SUBJECT: University of Florida Performance Based Funding and Preeminence – Data Integrity (Audit Report) and Annual Data Integrity Certification

BACKGROUND INFORMATION

Florida Statutes 1001.92 and 1001.7065 promulgate the establishment of the funding for the State University System Performance-based Incentive ('performance-based funding' or 'PBF') and the Preeminent State Research Universities Program. Florida Statute section 1001.706 (5) (C) requires each university to conduct an annual audit to verify that the data submitted complies with the data definitions established by the Board of Governors. The results of the annual audit are required to be submitted to the BOG Office of Inspector General as part of the university's annual certification process.

On June 25, 2020, the Chairman of the BOG instructed each university president to execute a Data Integrity Certification. The certification document shall be signed by the university president and board of trustees' chair after being approved by the board of trustees.

The Board of Governors Chair further instructed each university board of trustees to direct its chief audit executive to perform an audit of the university's processes that ensure the completeness, accuracy and timeliness of data submissions. He further requested that these audits include testing of data that supports performance funding metrics, as well as preeminence or emerging preeminence metrics for those universities so designated, as testing is essential in determining that processes are in place and working as intended.

The Office of Internal Audit has performed such an audit and on November 10, 2020 issued audit report No. 20-744-07, Performance Based Funding and Preeminence – Data Integrity.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to accept the University of Florida Performance Based Funding and Preeminence - Data Integrity audit report as presented, and to approve the Performance Based Funding Data Integrity Certification, as executed by the President. The Committee is asked to recommend these items to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors is required after action by the Board of Trustees and certification by the Board of Trustees Chair.

Supporting Documentation Included: <u>Performance Based Funding and Preeminence – Data Integrity</u> (Audit Report No. 20-744-07) and Data Integrity Certification Form

| Submitted by: Dhanesh Raniga, Chief Audit Executive | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Approved by the University of Florida Board of Trustees, December 4, 2020 | | | | | | | | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | | | | | | | |



Data Integrity Certification March 2021

| U | University Name: | | | | | | |
|--|---|-----|----|---------------------|--|--|--|
| INSTRUCTIONS: Please respond "Yes" or "No" for each representation below. Explain any "No" responses to ensure clarity of the representation you are making to the Board of Governors. Modify representations to reflect any noted significant audit findings. | | | | | | | |
| Data Integrity Certification Representations | | | | | | | |
| | Representations | Yes | No | Comment / Reference | | | |
| 1. | I am responsible for establishing and maintaining, and have established and maintained, effective internal controls and monitoring over my university's collection and reporting of data submitted to the Board of Governors Office which will be used by the Board of Governors in Performance-based Funding decision-making and Preeminence or Emerging-preeminence Status. | | | | | | |
| 2. | These internal controls and monitoring activities include, but are not limited to, reliable processes, controls, and procedures designed to ensure that data required in reports filed with my Board of Trustees and the Board of Governors are recorded, processed, summarized, and reported in a manner which ensures its accuracy and completeness. | | | | | | |
| 3. | In accordance with Board of Governors Regulation 1.001(3)(f), my Board of Trustees has required that I maintain an effective information system to provide accurate, timely, and cost-effective information about the university, and shall require that all data and reporting requirements of the Board of Governors are met. | | | | | | |
| 4. | In accordance with Board of Governors Regulation 3.007, my university provided accurate data to the Board of Governors Office. | | | | | | |
| 5. | In accordance with Board of Governors Regulation 3.007, I have appointed a Data Administrator to certify and manage the submission of data to the Board of Governors Office. | | | | | | |

Data Integrity Certification

| Data Integrity Certification Representations | | | | |
|--|---|-----|----|---------------------|
| | Representations | Yes | No | Comment / Reference |
| 6. | In accordance with Board of Governors Regulation 3.007, I have tasked my Data Administrator to ensure the data file (prior to submission) is consistent with the criteria established by the Board of Governors Data Committee. The due diligence includes performing tests on the file using applications, processes, and data definitions provided by the Board Office. | | | |
| 7. | When critical errors have been identified, through the processes identified in item #6, a written explanation of the critical errors was included with the file submission. | | | |
| 8. | In accordance with Board of Governors Regulation 3.007, my Data Administrator has submitted data files to the Board of Governors Office in accordance with the specified schedule. | | | |
| 9. | In accordance with Board of Governors Regulation 3.007, my Data Administrator electronically certifies data submissions in the State University Data System by acknowledging the following statement, "Ready to submit: Pressing Submit for Approval represents electronic certification of this data per Board of Governors Regulation 3.007." | | | |
| 10 | . I am responsible for taking timely and appropriate preventive/ corrective actions for deficiencies noted through reviews, audits, and investigations. | | | |
| 11 | I recognize that Board of Governors' and statutory requirements for the use of data related to the Performance-based Funding initiative and Preeminence or Emerging-preeminence status consideration will drive university policy on a wide range of university operations – from admissions through graduation. I certify that university policy changes and decisions impacting data used for these purposes have been made to bring the university's operations and practices in line with State University System Strategic Plan goals and have not been made for the purposes of artificially inflating the related metrics. | | | |

Data Integrity Certification

| Data Integrity Certification Representations | | | | |
|---|-----|----|---------------------|--|
| Representations | Yes | No | Comment / Reference | |
| 12. I certify that I agreed to the scope of work for the Performance-based Funding Data Integrity Audit and the Preeminence or Emerging-preeminence Data Integrity Audit (if applicable) conducted by my chief audit executive. | | | | |
| 13. In accordance with section 1001.706, Florida Statutes, I certify that the audit conducted verified that the data submitted pursuant to sections 1001.7065 and 1001.92, Florida Statutes [regarding Preeminence and Performance-based Funding, respectively], complies with the data definitions established by the Board of Governors. | | | | |
| Data Integrity Certification Representations, Signatures | | | | |
| I certify that all information provided as part of the Board of Governors Data Integrity Certification for Performance-based Funding and Preeminence or Emerging-preeminence status (if applicable) is true and correct to the best of my knowledge; and I understand that any unsubstantiated, false, misleading, or withheld information relating to these statements render this certification void. My signature below acknowledges that I have read and understand these statements. I certify that this information will be reported to the board of trustees and the Board of Governors. Certification: | | | | |
| i resident | | | | |
| I certify that this Board of Governors Data Integrity Certification for Performance-based Funding and Preeminence or Emerging-preeminence status (if applicable) has been approved by the university board of trustees and is true and correct to the best of my knowledge. | | | | |
| Certification: Date Date | | | | |



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC3 December 3, 2020

SUBJECT: Institutional Compliance Annual Report

BACKGROUND INFORMATION

The Board of Governors Regulation 4.003 requires the chief compliance officer to report at least annually on the effectiveness of the compliance and ethics program. The regulation further requires the Board of Trustees to review and approve the Institutional Compliance Annual Report prior to submission to the Board of Governors.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the 2019-2020 Institutional Compliance Annual Report as presented. The Committee is asked to recommend this item to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors is required after approval by the Board of Trustees.

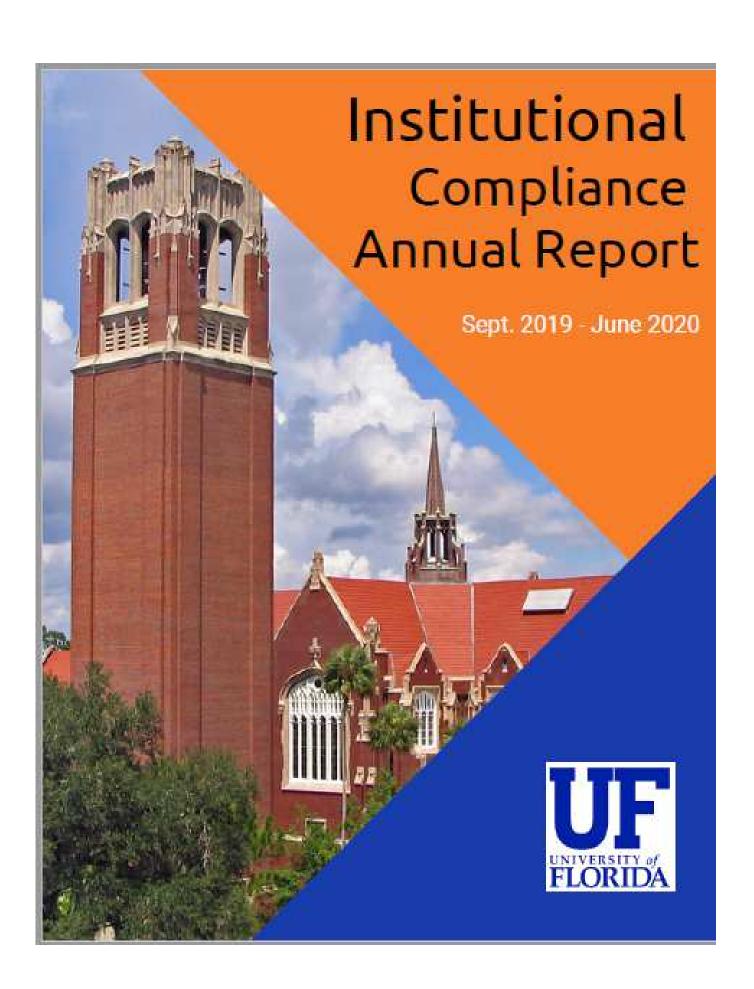
Supporting Documentation Included: See attached <u>2019-2020 Institutional Compliance Annual</u> Report and Compliance Program Update

Submitted by: Terra DuBois, Chief Compliance, Ethics, and Privacy Officer

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



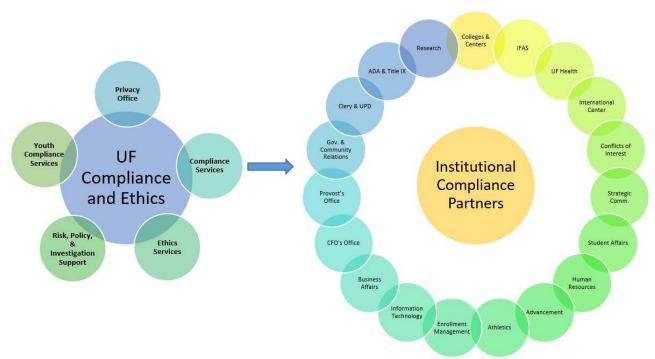
INSTITUTIONAL COMPLIANCE PROGRAM ANNUAL REPORT

September 1, 2019 – June 30, 2020¹

COMPLIANCE PROGRAM SCOPE

In recognition of the University of Florida's (University or UF) commitment to ethical conduct and compliance, the Board of Trustees implemented an enterprise-wide Compliance and Ethics Program (Program). The Program is designed to promote a culture of compliance and ethical conduct, maximize compliance with applicable laws, regulations, and policies, and effectively prevent or detect non-compliance. The Program design and implementation is consistent with the Florida Board of Governors' Regulation 4.003, the Florida Code of Ethics for Public Officers and Employees, Chapter 8 of the Federal Sentencing Guidelines, and the U.S. Department of Justice's Corporate Compliance Program Guidance.

The University Chief Compliance, Ethics, and Privacy Officer (CCO) manages the UF Compliance and Ethics (UFCE) office and is responsible for the Program. In addition to the CCO and Program staff, recognized Compliance Partners across the enterprise perform operational compliance functions within their respective offices. As of the date of this annual report, the Program includes fifty Compliance Partners who coordinate and communicate with the CCO on matters related to the Program.



Relationship between UFCE core functions and Compliance Partners. Note: some units have multiple Partners.

¹ Previously, the Program followed a reporting cycle that ran from September through August. As such, the prior reporting period covered September 2018 through August 2019. During the current reporting period, however, the CCO decided that annual reporting should follow the University's fiscal year. Therefore, the current reporting period bridges the gap between the change in the reporting cycle and will reflect September 2019 through June 2020. The next reporting period will be aligned with the fiscal year and represent July 2020 through June 2021.

ANNUAL REPORT ORGANIZATION

This annual report highlights enterprise-wide compliance and risk mitigation efforts from September 1, 2019 to June 30, 2020. The report presents the University's compliance activities organized by the following seven elements of an effective compliance program:

- Governance and High-Level Oversight
- Policies and Standards of Conduct
- Open Communications and Reporting
- Training and Education
- Auditing and Monitoring
- Addressing Known or Potential Issues
- Enforcing Standards

For each program element, the report provides a high-level summary of UFCE's oversight and coordination of Program activities followed by examples of compliance efforts demonstrating how Compliance Partners actively contribute in meeting the requirements of an effective compliance program. This report presents an illustrative listing of Compliance Partners' activities. Complete individual Compliance Partner reports, which serve as a source of information for this annual report, are available from UFCE upon request. The colleges, offices, and units represented by Compliance Partners who contributed to this annual report are listed on page four.

Reporting Colleges, Offices, and Units

- Accessibility and Gender Equity
- Advancement
- Athletics
- Business Affairs
 - Business Affairs
 - Business Services
 - Environmental Health and Safety
 - Emergency Management
 - Facilities
 - Planning, Design, and Construction
 - Police Department (UFPD)/Office of Clery Act Compliance
- Chief Financial Officer
 - Finance and Accounting
 - Procurement
- Colleges
 - Agricultural and Life Sciences & IFAS
 - Arts
 - Business, Warrington College
 - Dentistry
 - Design, Construction, and Planning
 - Education
 - Engineering, Herbert Wertheim College
 - Health and Human Performance
 - Journalism and Communications
 - Law, Levin College
 - Liberal Arts and Sciences
 - Medicine
 - Nursing
 - Pharmacy
 - Public Health and Health Professions
 - Veterinary Medicine
- Enrollment Management

- Government and Community Relations
- Human Resources
- Information Technology
- Privacy Office
- Provost
 - Center for Latin American Studies
 - Conflicts of Interest Program
 - Florida Museum of Natural History
 - Graduate School
 - International Center
 - Institutional Planning and Research
 - Whitney Laboratory for Marine Bioscience
- Real Estate
- Research
 - Animal Care Services and Institutional Animal Care and Use Committee
 - Contracts and Grants
 - Institutional Biosafety Committee
 - Institutional Review Boards
 - Research Affairs, Jacksonville
 - Research Integrity
 - Sponsored Programs
 - UF Innovate
- Student Affairs
 - Career Connection Center
 - Counseling and Wellness Center
 - Disability Resource Center
 - Division of Student Affairs
 - Financial Services
- Strategic Communications and Marketing
- UF Health Compliance Services
- Youth Compliance Services

GOVERNANCE AND HIGH-LEVEL OVERSIGHT

Traditional governance and high-level oversight structures of an effective university compliance program require the institution's governing authority, including the University President and Board of Trustees, to be knowledgeable about the content and operation of the compliance and ethics program and to exercise reasonable oversight with respect to its implementation and effectiveness. Additionally, high-level personnel must be assigned overall responsibility for the compliance and ethics program and must ensure that the institution's program is effective.

UFCE Activities:

- The University maintains a senior-level staff member in the CCO role. During this reporting period, the Program's leadership changed when a new CCO was hired in January 2020. The new CCO assessed the Program's current state and reassigned staff to provide additional support to the core Program functions. The CCO continues to evaluate Program needs and restructure its organization to guide the Program into the next implementation phase.
- The CCO regularly communicated with the Audit and Compliance Committee (ACC) Chair and the Vice President and General Counsel to provide Program updates, receive guidance regarding the Program's implementation, and report on significant known or potential issues.
- The CCO provided Program information to the Board of Trustees via the 2018-2019 Annual Report and during the September 2019, December 2019, March 2020, and June 2020 Board meetings. Additionally, the CCO and ACC Chair developed a new training schedule for the Board in which the CCO will provide an educational session on a unique compliance topic at least twice per year. This year, the CCO presented an overview of foreign influence and conflicts of interest at the March 2020 Board meeting and a general discussion of the Compliance Program during the June 2020 Board meeting.
- The CCO met with nearly all of the Compliance Partners after her hire in January 2020. Moreover, the CCO held weekly or monthly meetings with certain Compliance Partners whose areas of responsibility include significant compliance activities, including Research Integrity, Clery Act Compliance, UF Health Compliance Services, the Privacy Office, and Student Affairs. This active communication between the CCO and Compliance Partners allowed the Compliance Partners to share information about the effectiveness of the Program directly with the CCO, who in turn acted on and reported important information, as necessary, to University leadership.
- In an effort to have more direct engagement with all the colleges, the CCO added 10 new Compliance Partners so that each college is now represented. The total number of Compliance Partners increased from 38 to 50 during this reporting period.

Selected Compliance Partners Activities:

Advancement/University of Florida Foundation, Inc. (UFF) — UFF has an Executive Board Audit
Committee that meets four times a year and reports to the Board. The Audit Committee has oversight
of the internal and external audit and the risk management program. The Office of Risk Management
reports to the Audit Committee twice a year. Audit Committee training, which includes the risk

management program, was developed during the fiscal year and launched soon after. The recently launched UF Advancement Data Management & Governance Program team executed many projects but among the most important was establishing the UFF Data Sharing & Application policy and accompany Data Use Classification & Escalation Tiers (BUCETs). Through this work, all of UFF's core fundraising and engagement data was identified and categorized. Rules for accessing, storing, and sharing that data were defined by category.

- Business Services In support of its responsibility to oversee food services across the enterprise, Business Services created a new position for Director of Food and Beverage Services. This new Director position, once filled, will oversee all aspects of Business Services' compliance program with food and beverage services, which includes the vendors Aramark, Pepsi and Canteen. This new position will provide for more efficient reporting and monitoring of the vendors' compliance with respective guidelines and regulations.
- Conflicts of Interest Program The UF Conflicts of Interest (COI) Program was established in October 2019, with the appointment of an Assistant Vice President for COI and staffing of a program office. The COI Program is the centralized outside activities disclosure review office for the University and implements UF's new electronic disclosure system, UFOLIO. In collaboration with campus partners, the UF COI Program seeks to identify and manage conflicts of interest that could undermine institutional integrity.
- o **Emergency Management** The Director meets monthly via conference call with the other State University System emergency management directors to benchmark UF operations within the system.
- Environmental Health and Safety (EH&S) EH&S Research Services oversees health and safety compliance for research spaces for approximately 1500 Principal Investigators across 9 colleges. During this reporting period, EH&S Research Services oversaw, collaborated with, or participated in various compliance committees including the Institutional Biosafety Committee, Institutional Animal Care and Use Committee, Institutional Review Board, Human Use of Radioisotopes and Radiation Committee, Radiation Control Committee, and Laser Safety Committee. EH&S's participation increased high-level compliance governance across key University compliance functions.
- Institutional Planning and Research UF Institutional Planning and Research Data Group, created and led by Assistant Provost Cathy Lebo, meets bi-weekly with representatives from Enterprise Systems, Enrollment Management, Teaching and Technology, and Institutional Planning and Research to review compliance mandates and resolve data management issues for state and federal reporting.
- Levin College of Law The compliance and ethics oversight activities of the Levin College of Law include regular reporting to the college's accrediting body, the American Bar Association (ABA); adherence to the Statement of Good Practices of the Association of American Law Schools (AALS); annual reporting to U.S. News; and adherence to the Faculty Policy Manual, which reflects policies adopted by the faculty through faculty votes.
- Police Department (UFPD)/Office of Clery Act Compliance The Office of Clery Act Compliance became
 an officially recognized office within the University Police Department in November 2019, and hired a
 new Clery Act Compliance Coordinator. The Office formed a Clery Act Compliance Committee and held
 the first meeting in January 2020.

POLICIES AND STANDARDS OF CONDUCT

The institution must have established written standards of conduct including regulations, policies, and procedures that promote ethical conduct and aim to provide education and prevent and detect non-compliance. Written standards must demonstrate the institution's commitment to a culture of compliance in its day-to-day operations and must be accessible to all employees.

UFCE Activities:

- o In this reporting period, the CCO focused on two areas that demonstrate continued improvement within the policies and standards of conduct program element.
 - With regard to procedures and standards for the management of UFCE's activities, UFCE created standard operating procedures for many functions including development of the annual compliance report, management of compliance records, creation of the compliance work plan, and communications via the Compliance Gazette quarterly publication.
 - In support of policies and standards implementation across the enterprise, UFCE provided leadership for the Department of Education's foreign gifts and contracts reporting process by coordinating among the many involved University offices and developing a standard operating procedure to increase efficiency, consistency, and accuracy in reporting. Additionally, while not encompassed within this reporting period, it is important to note that the CCO is co-leading with the General Counsel's office UF's efforts to implement its new Policy on Policies, which centralizes policy development and approval efforts.
- UFCE completed the biennial review of all compliance matrices in collaboration with Compliance Partners. The matrices identify and record responsibility for compliance with federal and state regulatory requirements.

Selected Compliance Partners Activities:

- Office of Accessibility and Gender Equity In response to the Department of Education's revised Title
 IX regulations issued in May 2020, the office drafted a new gender equity policy. This policy goes beyond
 the regulatory requirements outlined by Title IX to address all sexual-based misconduct and relationship
 violence that occurs in an institutional program or activity.
- Conflicts of Interest Program The Conflicts of Interest Program, in partnership with the Office of General Counsel, supported the University's efforts to update UF Regulation 1.011 Disclosure and Regulation of Outside Activities and Financial Interests and to establish a new Policy on Conflicts of Commitment and Conflicts of Interest. The Board of Trustees adopted the updated regulation and new policy in March 2020. The COI Program also created various resources to guide UF employees in complying with the institution's conflicts of interest policy and processes.
- o Finance & Accounting The Finance and Accounting Office developed and launched myUFL Marketplace, the new single procure-to-pay system designed to streamline compliance efforts for faculty and staff. It allows suppliers to electronically submit invoices to the University. The system routes the invoices to departmental personnel for review and approval. Once approved, the invoice flows to the myUFL accounts payable system to build vouchers and pay the suppliers. The Office of Finance & Accounting also created a new division, Internal Controls & Quality Assurance (IQCA), to evaluate and

assist university departments with improving internal control procedures.

- Human Resources (HR) HR implemented several policies and procedures to address changes in work circumstances due to COVID-19, including institutional recovery and employee requirements for COVID-19 screening, standards for returning to UF work locations, and employee responsibilities for working safely.
- o Research The Institutional Animal Care and Use Program is voluntarily accredited by AAALAC International, an organization that promotes the humane treatment of animals in science through voluntary external accreditation and assessment programs. The Human Research Protection Program (HRPP) is voluntarily accredited by AAHRPP, an organization that uses a voluntary, peer-driven, educational model to ensure that HRPPs meet rigorous standards for quality and protection. To earn accreditation, organizations must provide tangible evidence—through policies, procedures, and practices—of their commitment to scientifically and ethically sound research and to continuous improvement.
- Office of Clery Act Compliance The Office of Clery Act Compliance drafted an institutional Clery Act policy, which is currently being reviewed by the Office of the General Counsel. Once approved, the Clery Act policy will serve as the overarching policy for the University's Clery Act program under which subpolicies will eventually be housed. The sub-policies will include more specific statements of policy and university procedures as they relate to the Clery Act and University's Clery program.
- o **Procurement Services** UF Procurement Services continues to require anyone with delegated signature authority in Procurement to review, agree to, and execute a Code of Ethics.

OPEN COMMUNICATIONS AND REPORTING

In order to encourage open communications within a compliance program, the university must establish internal mechanisms that allow employees to share and receive compliance-related information. Additionally, the university must have and advertise a reporting mechanism whereby employees, anonymously or otherwise, can submit concerns or reports of suspected wrongdoing without fear of retaliation.

UFCE Activities:

- UFCE completed numerous activities that shared and promoted compliance-related information. For example, UFCE regularly updated its website to include "hot topics" in compliance and relevant regulatory updates; published three issues of the Compliance Gazette during this reporting period; and frequently circulated emails to Compliance Partners with Program updates and other compliance news.
- The CCO presented to faculty and staff groups on the topics of foreign influence in research, research integrity, and the overall structure of the Program.
- O With regard to its reporting mechanism, the University provides telephonic and web-based hotlines that are available 24 hours a day, 365 days a year. The CCO is a member of a leadership team who receives and triages each hotline report. The hotline is widely publicized on posters throughout University property and on multiple office websites, including UFCE, Research Integrity, Human Resources, and Internal Audit. In addition, there are several University offices that specialize in specific matters and those offices advertise contact methods for reporting concerns (e.g., UF Office for Accessibility and Gender

Equity, Institutional Review Board, Research Integrity, Office of Ombudsman, UF Privacy Office, University of Florida Police Department, Physician Billing Compliance Offices, and UF Compliance and Ethics).

Selected Compliance Partners Activities:

- O Athletics The University of Florida Athletics Association (UAA) circulated a monthly newsletter to all employees (Orange and Blue Newsletter). The newsletters contained information about events and activities within the UAA, as well as updates on compliance and ethics related topics. In addition, the UAA compliance staff circulated weekly updates to staff on NCAA compliance topics that are relevant to activities conducted during a particular time of year.
- Center for Latin American Studies (LAS) LAS used several avenues to communicate ethics and compliance topics with members of their community. Throughout the academic year, they held monthly meetings with the Faculty Advisory Council, monthly meetings with center-based faculty members, biannual meetings with Graduate Assistants, and staff biweekly meetings. The minutes of these meetings were shared, as appropriate. In addition, periodic special workshops were held with faculty and staff to go over policies and guidelines regarding travel and expense reimbursement, research, and grant management. At the beginning of the fall semester, orientation events were organized for students in their various programs where LAS welcomes incoming students, communicates academic expectations, and provides an overview of their different specializations and programming. The Center organized 2 faculty-staff retreats to discuss their governance, academic programs, and policy changes.
- College of Veterinary Medicine College leadership sent email communications to faculty, staff, and students regarding outside activities and conflicts of interest policies and best practices; requirements for completing the mandatory compliance training; advertising fiscal responsibility training and recommending groups attend in teams; and reminders about policies and procedures.
- Environmental Health and Safety (EH&S) EH&S developed a bi-monthly Research Safety Newsletter
 to provide EH&S Research Services updates, safety-related announcements, and clarification on
 compliance expectations. The newsletter is distributed to all 13,000 users registered in Gator TRACS.
 Additionally, the Associate Director for Research Services sent an email to department chairs at the
 beginning of each academic term outlining expectations and important announcements.
- Levin College of Law The Levin College of Law regularly reminded faculty throughout the academic year of their obligation to comply with various university, Levin College of Law, ABA, and AALS policies, including policies pertaining to syllabi, out-of-class course assignments, outside activities, observance of religious holidays, proxy voting, course evaluations, blind grading procedures, ADA class recordings, diversity and inclusion, and Title IX. They also reminded them of their obligation to comply with university and Levin College of Law policies regarding spending and financial controls, human resources, diversity and inclusion, events, and facilities.
- Office of the Provost The Office of the Provost sent multiple administrative memos on compliance-related topics such as UF Religious Observances Policy, Reporting Outside Activities and Potential Conflicts of Interest, and the Nepotism Policy. In addition, communications with campus through the weekly faculty update included guidance on academic policies such as syllabi, office hours, and student evaluations.

Police Department (UFPD)/Office of Clery Act Compliance

- The Office of Clery Act Compliance and UFPD oversaw and issued Emergency Notifications and Timely Warning messages when the legal standard for issuance, as prescribed within the Clery Act, is met for various incidents. UFPD also partners with Emergency Management to offer the GatorSAFE app, which offers local crime mapping, shares Emergency Notifications and Timely Warning messages, and the opportunity to make crime reports to the UFPD.
- UFPD published the University of Florida's Annual Security and Fire Safety reports in September and
 made it available to all employees on their website and through email. The reports include statistics
 for the previous three years of reported crimes and information related to campus security, policies
 regarding alcohol and drug use, crime prevention, sexual assault, domestic violence, dating
 violence, and stalking prevention, as well as disciplinary procedures and other matters of
 importance related to security and safety on campus.
- Student Affairs Disability Resource Center (DRC) The Center sent annual and monthly communications to students and faculty regarding their services and disability rights of students. Examples of communications topics are: syllabus information regarding accessibility/accommodations statement; testing accommodations for faculty and students; HR website for accommodations; ADA website; and Electronic Information Technology Accessibility (EITA) Policy.
- O UF Health Compliance Services Compliance Services for the Colleges of Medicine, Physician Billing Compliance, and the University of Florida Jacksonville Physicians, Inc. actively communicated compliance, privacy, and research topics, including general program communications and regulatory and industry updates to the workforce. With the COVID-19 pandemic, a significant amount (several hundred) of guidance, changes, and waivers have been released from local, state, and federal authorities, and other professional organizations, accrediting bodies, and licensing agencies. The College of Medicine collaborated with the Hospital Compliance Department in organizing a virtual Compliance Awareness Month and Survey in March.

TRAINING AND EDUCATION

Compliance training and education efforts are an essential element of an effective compliance program. Board of Governors Regulation 4.003 requires that all employees and Board of Trustees members receive training regarding their responsibility and accountability for ethical conduct and compliance with applicable laws, regulations, rules, policies, and procedures. To demonstrate effective training efforts, the institution must communicate periodically its standards and procedures, and other aspects of the compliance and ethics program, by conducting practical training programs and otherwise disseminating compliance information.

UFCE Activities:

- During the reporting period, a total of 11,196 employees took the compliance and ethics general awareness training. The CCO developed a revised version of this training, which launched in October 2020.
- O In other training efforts, the CCO and ACC Chair developed a new training schedule for the Board of Trustees in which the CCO will provide an educational session on a unique compliance topic at least twice per year. This year, the CCO presented an overview of foreign influence and conflicts of interest at the March 2020 Board meeting and a general discussion of the Compliance Program during the June 2020 Board meeting.

 UFCE was also involved in compliance training for new College of Medicine employees; various benchmarking efforts, such as comparing ethical standards and training in responsible conduct of research at other universities nationwide; and presenting to faculty and staff groups on the topics of foreign influence in research, research integrity, and the overall structure of the Program.

Selected Compliance Partners Activities:

- College of Education College of Education employees are encouraged to take training that helps promote compliance, ethics and understanding of their roles and responsibilities. Examples of trainings attended include: Enterprise Analytics Reporting; Enterprise Reporting: Dashboards; GBAS Virtual Series; Fiscal Responsibility for Leaders at UF; Fraud Awareness; Research Administrator Financial Training (RAFT); New Faculty Orientation; and PCard for Travel, Commodities and Approvers/Reconcilers.
- College of Engineering University of Florida Training Reactor (UFTR) management, licensed operators, and operator trainees are enrolled in the UFTR's U.S. Nuclear Regulatory Commission approved Reactor Operator Training and Requalification Program. Training covered during this reporting period include: Technical Specifications; Rabbit System Operations; Emergency Drill; Security Procedures; Annual Report Review; Overhead Crane Operations; Operator Walkthrough Exam; Annual Operations Test; and Reactor Protection Systems.
- Enrollment Management The Division of Enrollment Management has developed and utilizes a Required Training Checklist, which must be completed, reviewed, and signed by both the employees and their supervisors.
- o **Finance and Accounting** The Finance and Accounting Office continued its course CFO400 Fiscal Responsibility outreach, engaging approximately 1,400 UF employees across various levels of employment to become responsible and knowledgeable stewards and safeguards of UF funds. They are currently piloting virtual Fiscal Onboarding sessions for Travel, General Accounting, Pre-Award, and Payroll to engage new fiscal staff and proactively train on important fiscal areas where new employees struggle. They plan to increase virtual trainings in the upcoming months to further expand outreach and support onboarding new fiscal staff. The transition of these classes to online has led to attendance by Jacksonville and non-Gainesville based IFAS employees, ensuring consistency of compliance messaging.
- O Human Resources (HR) HR Training and Organizational Development (T&OD) facilitates a number of compliance related trainings for UF faculty and staff on behalf of Human Resources or compliance partners, including HR101, "Compliance: A Collaboration for Success!" and "Maintaining a Safe and Respectful Campus." T&OD offers a variety of courses relating to legal compliance, ethical leadership, and ethical business practices in which any employee may enroll. T&OD also partners with the Chief Financial Officer in offering workshops and events sponsored by Gator Business Administrator Services (GBAS). Such events often focus on financial, operational, and business ethics.
- o **Information Technology (UFIT)** UFIT developed an annual Information Security Awareness training, which is mandatory for all faculty and staff and launched in October 2020. They developed an annual phishing awareness training for students, which will be assigned beginning in the spring 2021 semester. They also procured a service to conduct simulated cyber-attacks against UF users to train users to identify and respond to malicious activity and includes just-in-time training to assist those who do not

identify simulated phishing messages.

- o International Center (UFIC) UFIC staff members receive continuous regulatory compliance training on Federal regulations as they pertain to the J-1 and F-1 visa program for international students and scholars. Selected UFIC staff also provide regular periodic training sessions for departmental administrators and staff to ensure regulatory compliance for the sponsoring units across campus.
- Research Integrity In collaboration with the RCR on Campus group, UF Research Integrity hosted a pilot Research Integrity and Responsible Conduct of Research Summer Seminar Series. Over 200 employees from across campus participated in workshops to learn about a variety of RCR topics. Of those, over 150 employees received a certificate for completing the full series of 14 core courses and two electives. In light of the program's success, it will now be offered annually.
- Youth Compliance Services updated the online YCS800 course to include more robust online/virtual safety information and worked to integrate online training for IFAS/4H into 4H online version 2.0.

AUDITING AND MONITORING

Auditing and monitoring activity is critical to an effective compliance program. The University must continuously monitor and audit high-risk areas in order to effectively prevent and detect non-compliance. Additionally, the University must periodically evaluate the effectiveness of the program.

The University Office of Internal Audit plans and administers the annual audit work plan, maintaining a balance between audit, investigative and management advisory services. In addition, UF Enterprise Risk Management (ERM) program is working on developing a collaborative, risk-aware culture across the University.

UFCE Activities:

- During this reporting period, the University began a formal Enterprise Risk Management (ERM) program.
 The CCO participates in the ERM Work Group, along with the Office of Internal Audit, Office of the Chief Operating Officer, and the Office of General Counsel.
- UFCE coordinates with the Office of Internal Audit (OIA) to discuss enterprise-wide risks and focus
 monitoring efforts, as appropriate. Additionally, ensures that UFCE is aware of any audits resulting in
 significant compliance-related findings.
- UFCE conducted a self-assessment of the effectiveness of the UF Compliance Program in anticipation of the required external review, upcoming in Spring 2021. The assessment included 126 questions developed in collaboration with the State University System Compliance and Ethics Consortium. UFCE assessed and selected an external vendor to perform the upcoming Program review.

Selected Compliance Partners Activities:

 Business Affairs – Business Affairs conducted routine activities involving financial stewardship (e.g., processing monthly financial reconciliation forms within Business Affairs) and meeting reporting expectations (e.g., processing disclosures of outside activities and financial interests).

- College of the Arts The College of the Arts monitored syllabi and instructor postings for compliance with FERPA and all access to online workflow systems ensuring access only includes appropriate individuals. In addition, the college monitored compliance with University, sponsor, state, and federal policies and regulations by performing separation of duties, monthly reconciliations, spot checks of financial reports, regularly scheduled budget meetings with Directors and Deans, and up-to-date training.
- College of Dentistry The Office of Research of the College of Dentistry handles monitoring and review of research projects and related issues. In terms of reconciliation of expenditures and compliance with University policies, a staff member has been hired to reconcile all central accounts and to spot check various departments. When a problem is brought to the attention of the Dean's Office related to billing and/or compliance, it is investigated thoroughly. As appropriate, cases are referred to the Associate Dean for Clinical Affairs and Quality, who serves as the College Compliance Officer, for review and action. Issues related to privacy are routed through him as well for referral to the Privacy Office. Chart audits are routinely conducted throughout the clinical enterprise to ensure medico-legal compliance. Results from chart audits are sent to the Associate Dean for Clinical Affairs and Quality for review and action, if needed. All contracts are reviewed through the Contracts Office in General Counsel to ensure compliance. Gift agreements are reviewed through Foundation legal counsel to ensure compliance.
- College of Nursing The College of Nursing had an outside audit confirming that there were no compliance/audit issues for the College of Nursing Faculty Practice Association. The college accounting office conducted monthly financial reconciling of all financial reports to confirm compliance. Audit reviews on travel authorizations and expense reports were conducted both at the college and university level to ensure compliance. Department chairs conducted annual faculty evaluations. Staff and supervisors participated in quarterly check-ins to monitor work productivity and performance. Payroll transactions were reviewed biweekly to confirm accuracy.
- College of Liberal Arts and Sciences (CLAS) CLAS degree programs (140) and certificate programs (28) report annually the results of evaluations and assessments of student learning outcomes and program goals. Results were shared with the accrediting body, the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). Site visits for auditing purposes are made by SACSCOC every 10 years and an off-site audit is completed at the 5-year mark. CLAS had no findings at the last 10-year review (2015). The 5-year off-site review has been completed, but results will not be available until midfall. Based on internal audits, they expect a positive report.
- Facilities Services Facilities Services warehouses received perfect results for the second year in a row during the annual audit process of "0.0% of the quantity of items and 0.0% of the dollar amount audited needing adjustment." This is reflective of changed processes and procedures put in place beginning in late 2018.
- Florida Museum of Natural History The Florida Museum of Natural History's laboratories and collections are inspected annually by UF Environmental Health and Services (EH&S). The museum's laboratories are inspected every three years by USDA APHIS in order to renew CITES compliance and certification. The museum's Butterfly Rainforest and McGuire Center for Lepidoptera and Biodiversity are inspected annually by the USDA and several times per year by the State of Florida's Division of Plant Industry.
- o **Planning, Design, and Construction** The Division received external reviews on regular basis by both the Office of Internal Audit and the State Auditor General's office to ensure adequate process and

financial controls were in place and followed.

- Police Department (UFPD) UFPD's compliance with law enforcement accreditation standards is verified annually by the Commission on Accreditation for Law Enforcement Agencies (CALEA) through an online review of directives and proofs of compliance. Additionally, on-site assessments done by three different organizations occur every three years.
- Sponsored Programs and Contracts and Grants The Division of Sponsored Programs (DSP) and Contracts and Grants (C&G) Accounting have partnered with the Controller's Office to perform ongoing assessments of individual campus units in meeting the expectations of sponsored programs management. In addition to this, C&G Grant Accountants performed expenditure reviews at regular intervals throughout the award lifecycle including the conclusion of an award.
- Student Affairs Office of Assessment and Research The Office of Assessment and Research conducted program reviews of units within the Division on a 5-year cycle. Such reviews combine internal self-assessments and external reviews. Many of these reviews are based on Standards established by the Council for the Advancement of Standards in Higher Education (e.g., the Disability Resource Center uses CAS Standards in its program reviews). One of the twelve broad standard categories found within the CAS standards involves "Ethics, Law, and Policy." Programs that do not use the CAS Standards often have their own professional standards for their program, such as the Career Connection Center.
- O UF Health Compliance Services The College of Medicine Compliance Services for Gainesville and Jacksonville completed significant auditing and monitoring efforts as part of its annual work plan and, in addition, completed unplanned audits in response to allegations and issues. Audit topics include routine billing compliance audits of clinical departments, new provider billing compliance prospective reviews as of 30-90 days of new hire, special billing reviews requested by various areas, monthly exclusion screening for COM personnel and vendors, and CMS/payor compliance with downstream requirements for fraud, waste, and abuse.
- O University of Florida Foundation, Inc. (UFF) UFF underwent annual financial audits, conducted by an outside audit firm, and three financial and internal control audits each year conduct by UF Office of Internal Audit. All audit reports are reviewed by organizational leadership and the Audit Committee. UFF used a risk-based disbursement review program to review expenditures for compliance with policy and donor intent. This program reduces risk by enabling review efforts to focus on riskier transactions. UFF used an audit tracking workspace to track all audits and resulting audit comments, as well as follow-up action items. They developed a Fund Stewardship Dashboard to track efforts to enhance donor fund utilization and stewardship and a Disbursement Compliance Dashboard (still in draft) to track and enhance compliance with disbursement policies and procedures.

ADDRESSING KNOWN OR POTENTIAL ISSUES

Universities must timely and appropriately address all reported or identified concerns of suspected non-compliance with laws or policies. When instances of non-compliance are confirmed, the university must take reasonable steps to appropriately address the issues and to prevent further similar instances from occurring in the future, including making any necessary modifications to the compliance and ethics program.

UFCE Activities:

- The CCO is a member of the Internal Review Committee (IRC), along with the Chief Audit Executive, Chief Operating Officer, General Counsel, and Vice President for Human Resources. The IRC reviewed and addressed hotline complaints and other potential issues. The group met on a weekly basis to discuss and assess risk levels, resolution, and necessary reporting to University leadership and the Board of Trustees.
- Multiple offices across the enterprise are involved in responding to concerns or issues within their area of expertise. UFCE maintains oversight of these activities through communication with Compliance Partners and periodic review of significant investigatory efforts.
- UFCE received and responded to a variety of inquiries on topics such as record requests, intellectual property rights, disclosures, training, and nepotism. The office collaborated with Compliance Partners and other key individuals for resolution, as appropriate.

Selected Compliance Partners Activities:

- Information Technology (UFIT) UFIT produced monthly metrics on the information security risk assessment program to advise leadership on program status. UFIT compiled significant information security risks are into an annual risk register identifying top risks and suggested actions to address those risks.
- o Institute of Food and Agricultural Sciences (IFAS) The IFAS International Support Team continues to work directly with IFAS faculty and staff who are planning activities outside of the United States (grant planning support, proposal and agreement review, travel feedback, partner vetting, etc.). During this reporting period, IFAS account specialists in the Shared Services Center identified a gap in the management, review, and training of cash-based and state appropriated funds for the 18 departments with which it works. They found a solution that involved reorganizing the Fiscal Team, separating the responsibilities into two categories Transaction Specialists and Account Specialists and divided their responsibilities. Over the past year, they added the new positions, established expectations, and trained the new staff. The value of the changes has been exponential.
- O **Human Resources** Employee Relations and Equal Opportunity investigators conducted numerous HR-related investigations, often partnering with other University compliance/investigatory units.
- Office of the Provost In partnership with Employee Relations, Office for Accessibility and Gender Equity, and the General Counsel's office, the University Ombudsman reviewed and investigated employee-made complaints of regulation violations, which may have included discrimination, (non-Title IX) harassment, pay inequities, and FLSA violations.
- Research Integrity During the reporting period, Research Integrity reviewed and investigated multiple allegations of research misconduct or other research noncompliance.
- Strategic Communications and Marketing Strategic Communications and Marketing completed an Issues
 Management and Crisis Preparedness Strategy Plan and an internal assessment of current practices and
 protocol.

- Student Affairs Financial Services Unit Financial Directors are responsible for addressing known or potential issues. The Vice President's Office meets with units on a quarterly basis to discuss processes and ensure financial reconciliation is being performed.
- O UF Health Compliance Services Compliance Services for both of the primary Hospitals (UF Health Shands and UF Health Jacksonville) responded to and addressed any known or potential issues related to Compliance and/or Privacy. Certain activity was included on the Work Plan as a planned review area, others were addressed as issues arise or reports are made. A few key areas are noted below (for this time period):
 - Responded and tracked all issues/inquiries/investigations in accordance with policy;
 - Investigated/audited all concerns reported to Compliance and Privacy;
 - Designation and monitoring of Action Plans/Corrective Action Plans within Departments/Facilities and areas to follow-up and resolve known issues or audit outcomes requiring action (e.g., education, policy adjustment, rebill, HR disciplinary action);
 - Rebill projects completed to ensure Compliance with the Overpayments/60-day rule;
 - Tested processes related to Excluded Individuals/Entities for compliance by departments to followup on exclusion past settlement;
 - Drafted process for new/changed business units/locations to be carried out in FY21; and
 - Breach events and Privacy disclosures.

ENFORCING STANDARDS

A university's compliance and ethics program must be promoted and enforced consistently throughout the institution and must include appropriate incentives and disciplinary measures to promote compliance and ethical conduct. Additionally, the university must respond appropriately to wrongdoing and take steps to prevent similar conduct.

The University has policies and procedures for incentivizing ethical behavior and disciplining students, employees, and volunteers who engage in unethical behavior or behavior that is not in compliance with existing federal, state, local, and University laws, regulations, and policies.

Employees found to have participated in fraudulent or dishonest acts will be subject to disciplinary action pursuant to collective bargaining agreements and University rules. In addition, criminal or civil actions may be taken against employees who participate in unlawful acts. In those instances where disciplinary action is warranted, the University's Office of Human Resource Services or appropriate academic administrator(s) and the Office of the Vice President and General Counsel shall be consulted prior to taking such actions. Disciplinary action is detailed in the 6C1-1.007 University of Florida; Code of Penalties.

The University promotes compliance through appropriate incentives to help encourage ethical behavior. This is done in a variety of ways such as in their performance evaluation and/or by recognizing employees for compliance initiatives or for demonstrating ethical behavior by reporting difficult issues and being part of the resolution.

UFCE Activities:

o Through participation in the Internal Review Committee and close engagement with the Compliance

- Partners, the CCO provides oversight to the University's various investigatory and enforcement activities and monitors activities for consistency across the enterprise.
- UFCE maintains awareness and oversight of various enforcement activities to ensure that the University's policies are appropriately enforced and disciplinary action is carried out consistent with UF Regulation 1.007 Code of Penalties.

Selected Compliance Partners Activities:

- Human Resources (HR) HR applies disciplinary actions when applicable for issues such as misconduct, negligence, unsatisfactory attendance, or a violation of provision of law, university regulation, or departmental policy, procedure, or practice that is either verbal, written, or understood.
- Institutional Animal Care and Use Committee (IACUC) Corrective actions mandated by the IACUC were tailored on a case-by-case basis as reported to the UF Vice President for Research and to external regulatory agencies. Oversight monitoring by the Research Regulatory Manager and other members of the IACUC office has been increased for the investigators and research staff involved.
- Privacy Office The University of Florida (UF) promotes standards of conduct and encourages all members of its workforce and the workforce of its affiliated entities to honor the privacy rights of patients, clients, students, employees, and volunteers. The Privacy Office reviewed and investigated all privacy-related complaints and reported incidents of information privacy or security and recommended disciplinary action in accordance with UF policy, as needed.
- Office of the Provost The Office of the Provost partners with Human Resources and the Office of the Vice President and General Counsel to apply disciplinary action when applicable for issues such as misconduct, negligence, unsatisfactory attendance, or a violation of law, university regulation, or departmental policy, procedure, or practice that is either verbal, written, or understood.
- Student Affairs Counseling and Wellness Center The Counseling and Wellness Center has built and strives to maintain an organizational culture where individuals carry out their service and contribution largely out of intrinsic motivation. The center encourages people to report accidental violations, makes sure that they provide education, shows appreciation for the work that people do and the care that people put into doing the right thing. This helps to maintain the culture of ethical conduct and compliance. When appropriate, following education corrective disciplinary action is taken following UF HR guidelines and UF Collective Bargaining Agreement.



INSTITUTIONAL COMPLIANCE ANNUAL REPORT



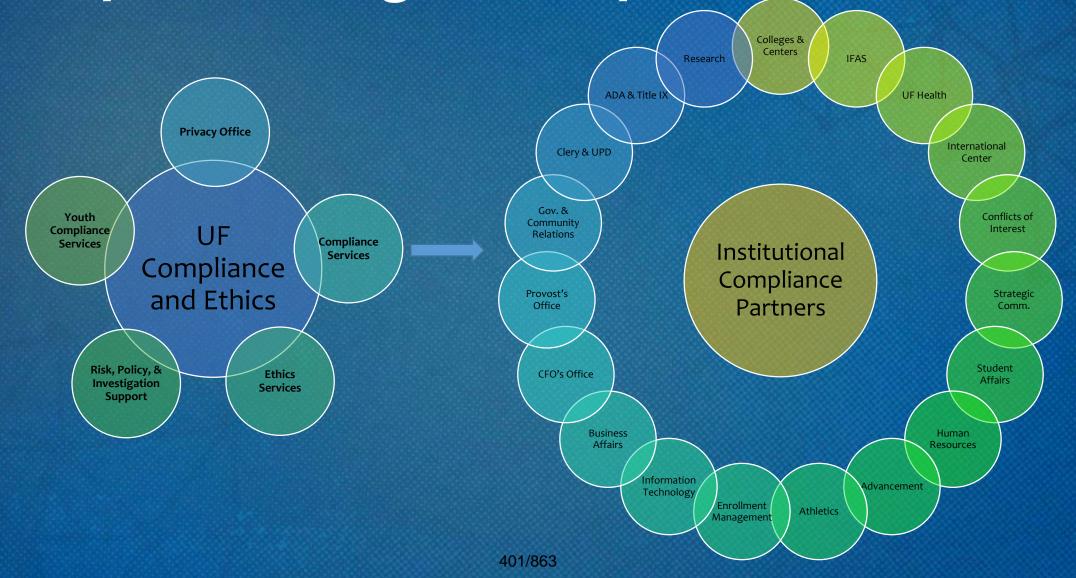


Key Projects

| Program Element | Frequency | Report to BoT or BoG? | BoT Meeting Date | |
|------------------------------------|---------------|-----------------------|-----------------------|--|
| Training and Education | Continuous | ВоТ | Each Meeting | |
| UFCE Work Plan | Annual | ВоТ | June 2020 | |
| Institutional Compliance Report | Annual | BoT & BoG | December 2020 | |
| Program Charter | Every 3 Years | BoT & BoG | December 2020 | |
| External Review | Every 5 Years | BoT & BoG | June 2021 | |
| Program Plan | As Needed | ВоТ | June or December 2021 | |



Compliance Program Scope



Annual Report Organization

- UF's program is built around the seven elements of an effective compliance program:
 - Governance and High-Level Oversight
 - Policies and Standards of Conduct
 - Open Communications and Reporting
 - Training and Education
 - Auditing and Monitoring
 - Addressing Known or Potential Issues
 - Enforcing Standards
- For each program element, the report provides a high-level summary of UFCE's oversight and coordination of Program activities followed by examples of compliance efforts demonstrating how Compliance Partners actively contribute in meeting the requirements of an effective compliance program.
- 57 distinct units contributed to the annual report

Compliance Office Highlights

- Outreach Efforts
 - We've increased our Compliance Partners group from 38 to 50
 - CCO has met individually with nearly all Compliance Partners throughout the year
 - CCO added more regular communication (weekly or monthly meetings) with Compliance Partners in several key areas, including:
 - Research Integrity
 - Clery Act Compliance
 - UF Health Compliance Services
 - Privacy Office
 - Student Affairs
- Standardized UFCE operations through development of written policies and procedures
- Centralized the responsibility for meeting the Department of Education's foreign gifts and contracts reporting and developed a standard procedure for generating the University's biannual reports
- During the reporting period, over 11,000 employees took the general compliance awareness training
- Completed a self-assessment of the compliance program in preparation for the upcoming external review

Compliance Partners Highlights

Governance and High-Level Oversight

- Office of Clery Act Compliance recognized as individual unit within UFPD
- Hired a new Clery Compliance Coordinator and formed a Clery Act Compliance Committee of stakeholders across the institution

Policies and Standards of Conduct

- Several major policy revisions and new policies in key compliance areas, including Gender Equity Policy, COI Policy, and various policies related to COVID-19
- Finance & Accounting created a new division, Internal Controls and Quality Assurance, to evaluate and assist with university-wide internal control procedures

Open Communications and Reporting

- The annual report identifies numerous outreach and information sharing activities among the Compliance Partners in the form of newsletters, staff meetings, and formal administrative memos
- One example is Environmental Health & Safety's Research Safety Newsletter, which was distributed to 13,000 research staff across the enterprise

Training and Education

- Research Integrity hosted a new summer education series on the responsible conduct of research. 150 employees earned a certificate for completing 14 core courses and 2 electives.
- The series was so successful that, going forward, Research Integrity will host the program annually.

Compliance Partners Highlights

Auditing and Monitoring

- Many units performed internal auditing and monitoring functions to assess compliance and effectiveness.
- Of note, the College of Dentistry added a position to focus on fiscal reconciliation and monitoring for research activities.

Addressing Known or Potential Issues

- The report describes several university activities that demonstrate continuous improvement and actions taken to address issues or concerns.
- For example, IFAS took steps to improve its processes and oversight related to fiscal management. The team accessed their current state and, upon finding areas for improvement, reorganized, added new staff, and increased staff training.

Enforcing Standards

- During the reporting period, there were consistent efforts across the core offices to enforce existing standards.
- For example, the Privacy Office investigated incidents and provided remediation and education, and, where appropriate, recommended disciplinary action.



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC4 December 3, 2020

SUBJECT: January 1, 2021 – June 30, 2021 Office of Internal Audit Work Plan

BACKGROUND INFORMATION

The Board of Governors Regulation 4.002 (6) states the chief audit executive shall develop audit plans based on the results of periodic risk assessments. The plans shall be submitted to the board of trustees for approval. A copy of approved audit plans will be provided to appropriate university management and the Board of Governors.

The Office of Internal Audit (OIA) establishes its audit coverage with a work plan that identifies the activities and issues they plan to cover. The current work plan was prepared to reflect the planned projects for the period from January 1, 2021 to June 30, 2021.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to review and approve the OIA work plan through June 30, 2021. The Committee is asked to recommend this item to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Submission to the Board of Governors of a copy of the Office of Internal Audit Work Plan is required, but Board of Governors approval is not required.

| Supporting Documentation Included: Work Plan | Office of Internal | Audit | <u>January -</u> | - June | 2021 | Proposed |
|--|--------------------|---------|------------------|--------|------|----------|
| Submitted by: Dhanesh Raniga, Chief A | Audit Executive | | | | | |
| Approved by the University of Florida | Board of Trustees, | , Decen | nber 4, 20 |)20 | | |
| | | | | | | |

Morteza " Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



Office of Internal Audit

PROPOSED JANUARY 2021-JUNE 2021 WORK PLAN – GUIDING PRINCIPLES



Core theme – 'Protect University Business and Reputation' & 'Deliver Measurable Value'



Risk focus – Right risks at the *optimal* time in the process



Increased focus on assurance type internal audit projects to validate key internal controls while assessing for leading business practices



Significant areas of the University's operations e.g., Payroll, Research, Construction



Accounts for the decentralized nature of the University



Flexibility to allow for changing risk profile via alignment with ERM, the University's strategic risks and other sources of input, e.g., assurance map.

PROPOSED WORK PLAN - JANUARY 2021 TO JUNE 2021

| | Audit Area | High Level Scope | Rationale |
|---|--|--|--|
| 1 | Payroll - Non-exempt Employees | Assessment of internal controls and key business processes for non- exempt employees. Scope to include assessment of application controls of information systems and business practices to manage compliance with award conditions. | Significant portion of the University's budget is payroll (approx. 65%). Various systems are used to record and manage non-exempt employee time and some business processes are decentralized. |
| 2 | Research Compliance | Assessment of internal controls and key business processes for non- exempt employees. Scope to include assessment of application controls of information systems and business practices to manage compliance with award conditions. | The University received significant research funds from federal and non-federal sources. Significant reputational and funding risk of non-compliance with contract award conditions, including allowability of costs. |
| 3 | Construction | Assessment of project management internal controls and compliance with funding requirements, as appropriate. | University capital budget on construction is \$900m and is a significant to the operations. |
| 4 | IT Security Risk Assessment | Assess information security controls using UFIT risk framework at selected decentralized locations. | Information technology, including cyber security is a high-level risk in organizations. The University's decentralized governance structures adds another layer of risk that should be assessed and managed. |
| 5 | Business Continuity and Disaster Recovery Planning -Enterprise Systems | Assess business continuity and disaster recovery plans for enterprise level systems to ensure it meets BCP/DRP standard. business requirements and aligns with the University's risk appetite. | Critical that University has BCP/DRP plans in place, specially in the current Covid-19 environment where remote access and controls are important. Management of certain enterprise level systems (e.g. Gator1 Card ,myAssets, SPACE) are also decentralized. |
| 6 | College/Unit Level Assessment | Assessment of financial and operational internal controls and key business processes covering fiscal management and compliance with policies and procedure. Focus areas will include financial, HR, accuracy of management reporting and oversight controls. | Significant portion of the University's financial and operational processes are decentralized at the various Colleges and units. High level of risk of inconsistent business practices, including impact on internal controls. |
| 7 | University of Florida Foundation | To be determined | To be determined |
| 8 | University of Florida Foundation | To be determined | To be determined |
| 9 | Enterprise Risk Management (ERM) | Facilitate the ERM program to assist in developing a university-wide risk profile. ERM results will provide input into the audit plan and other university level risk management activities. | Effective risk management supports the university to achieve its strategic and operational objectives. It is essential part of good governance and assists in making informed decisions, enhance performance and organizational resilience. |

Office of Internal Audit

PROPOSED WORK PLAN - JANUARY 2021 TO JUNE 2021

| | Audit Area | High Level Scope | Rationale | | | | | | |
|----|---|--|---|--|--|--|--|--|--|
| C | Carry-Over Projects from 2020 | | | | | | | | |
| 10 | Coronavirus, Aid, Relief, & Economic Security (CARES) Act | Assessing business processes and key control to ensure compliance with CARES Act funding requirements | Dept. of Education has provided emergency financial aid grants under the CARES Act. These funds are referred to as the Higher Education and Emergency Relief Funds (HEERF). HEERF funds were distributed in April 2020 to post-secondary institutions to support the students and institutions themselves for expenses related to the disruption of campus operations due to the coronavirus. The University received \$31 million in total and at least 50 percent was required to be allocated to students. | | | | | | |
| 11 | Procurement | Assessment of Covid-19 impact on internal controls and key business processes | Due to Covid-19, significant portion of the University's employees are working remotely. It is likely that this may have impacted key business processes, including segregation of duties | | | | | | |
| 12 | Identity/Access Controls - Terminated Employees | Assess business process and internal controls for timely removing access to IT systems and University assets post termination of employee. | Office of Inspector General had identified weaknesses in process for timely removing access to IT systems and university assets. An automated process has been implemented and audit of key control will provide an independent assurance. | | | | | | |
| 0 | ther Significant Activitie | es | | | | | | | |
| 1 | Annual Audit Plan | Identify strategic areas of focus for the 2021/22 annual audit work plan | ERM results will provide input into risk areas that may warrant audit attention to assess and validate risk mitigation statements. Time will be spent developing an assurance map | | | | | | |
| 2 | Follow-up | Ongoing | Quarterly follow up on the implementation of management action plans from internal audit and other assurance reports | | | | | | |
| 3 | Management Requests | Ongoing | Includes assurance reports for external agencies to meet audit requirement. | | | | | | |
| 4 | Investigations | Ongoing | Responding to and following up on whistleblowers complaints received through the 'Hotline' and other sources. | | | | | | |



UF ERM Purpose Statement

The purpose of the University of Florida's Enterprise Risk Management ("ERM") program is to strengthen the University's ability to achieve its mission and strategic objectives.

By promoting ERM we will create a collaborative, risk-aware culture across the University that enables strategic risk and opportunity identification, prioritization and planning for enterprise risk.

ERM Activities – Progress to date

- Identify an organizational ERM champion and program leader
- Identify institutional stakeholders and partners
- Engage leadership: communicate purpose, goals & structure of ERM
- Develop ERM framework, including governance, roles & responsibilities, process and reporting templates
- Develop preliminary risk register
- Select strategic risk areas to pilot the ERM risk assessment
 - International Activities
 - Deferred Maintenance
 - Financial "Stress Test"
 - Public Health Emergency

Inputs to the Preliminary Risk Register

- Compliance risk information
- Office of Internal Audit "risk universe"
- Trends in higher education
- Cabinet and subject matter expert input



UF Preliminary Risk Register

Research Integrity/Misconduct

Campus Life (Greek Organizations)
Catastrophic Event / Communications

Housing and Residence Education

Recreational Activities/Sports

Student Government

Student Union

Student Wellness

Student Conduct and Resolution

Student Support

UF Research Foundation

Subrecipients

Counseling

Alumni Affairs and Engagement

Information Security and Privacy

Building Access, Security and Monitoring

Facilities & Infrastructure

Endowment and Investments

Stewardship and Donor Intent

Campus Safety and Security

Environmental Health and Safety

Equipment/Facility Malfunction Infrastructure - water and energy

Deferred Maintenance

Design and Construction

Planning and Development University Police

Public Relations

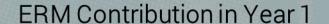
| Operational (organized by VP oversight) | | Regulatory Compliance | Financial | Strategic & Reputational | External / Emerging | |
|---|---|---|--|--|--|--|
| Academic Support and Instruction | <u>Health Services</u> | Enterprise Wide Compliance Risks | <u>Financial Management</u> | <u>Institutional Planning and Policy</u> | <u>General</u> | |
| Accreditation | Claims Development & Submission | Accessibility (physical and electronic) | Accounting and Financial Reporting | Business Continuity and Disaster Recovery | Competitors and Rankings | |
| Admissions and Registration | Clinics / Hospitals | Contracts & Procurement | Asset Management | Centers and Institutes | Data modernization | |
| Advisement and Retention | Compensation Plans | Disclosures and Reporting | Budgeting | Conflicts of Interests | Funding - state / federal / economy | |
| College and Department Admin and Governance | Electronic Records and Restricted Data | DSO & Foundations Regulations | Decentralized Collections | Contract Management | Future of Learning | |
| Continuing and Executive Education | Quality of Patient Care | Exclusion Screening | Disbursements and Transfers | Data Governance | Government Relations | |
| Curriculum Development and Management | Special Areas of Risk / Compliance | Export Controls | Finance and Cash Management | Emergency Services and Support | | |
| Enrollment Management and Recruiting | Student Health Services / Infirmary | Faculty Activity Reporting | Fraud | Governance/Decision-Making | Items in this category represent enterprise | |
| Institutional Reporting | Information Resource Mgmt and Computing | Information Technology | Fund Management | Incident Response | level topics that are not specifically assigned | |
| Laboratories / Lab Schools | Academic Technology | International Travel & Activities | Payroll | International Activities | elsewhere. Primarily used to capture new and | |
| Libraries | Administrative Systems | Minor Protections | PCards | Marketing and Public Relations | emerging risks that the university has not fully | |
| Online & Distance Learning | Decentralized IT | Privacy | Performance of Major Colleges | Risk Management / Loss Prevention | vetted or external areas that the university | |
| Program Integrity Rules | Identity and Access Management | Public Record Laws | Procurement | Shared Service Centers | can't control. | |
| Agricultural Research and Extension | IT Security/Data Breach | Records Retention | Revenues and Collections | Student Experience | | |
| Extension Services | Research Computing | Tax Reporting and Compliance | Travel and Employee Reimbursement | | _ | |
| Agricultural DSOs and Foundations | Personnel Administration | Title IX | UFICO | Items in the Strategic & Reputational category | | |
| Research and Education Centers | Academic Personnel Management | Training Requirements | Vendor Management | represent key enterprise level risks or | | |
| Sponsored Programs | Benefits/Insurance | | Vulnerability of State Support | opportunities that generally require enterprise- | | |
| <u>Athletics</u> | Childcare Services | Items in the Regulatory Compliance category | | level effort and oversight. | | |
| Auxiliary and Contracted Services | Diversity | reflect compliance risk areas that may have a | Items in the Financial category represent key | | | |
| NCAA & SEC Compliance | Education and Training | | financial areas that have potential enterprise | | | |
| Sports Administration | Employee Relations | level effort and oversight. If this criteria does | level impact or generally involve every | | | |
| Student Athlete Safety and Support Services | Gatorcare | not exist the compliance risk would be | university unit. | | | |
| Auxiliary and Public Services | Recruitment/Staffing | included in the operational area | | | | |
| Public Radio and Television | <u>Research</u> | | | | | |
| Auxiliary Operations/Services | Animal Care Services | | | | | |
| Technology Licensing and Transfer | Clinical Trials and Drug Studies | | | | | |
| Public Partnerships - Innovation Square | Effort Reporting | | | | | |
| Transportation and Parking | Human/Animal Research | | | | | |
| Food/Beverage Contracts | Indirect Costs and Overhead Funds | | | | | |
| Public Facilities and Events | Intellectual Property & Tech Transfer | | | | | |
| Continuing Education | Lab Safety and Security | | | | | |
| | | | | | | |
| Museums | Post Award Accounting and Reporting | | | | | |

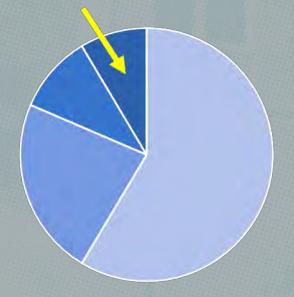
This category represents areas that could potentially have an enterprise-level impact yet are primarily managed at the individual VP oversight level. This should also be an indication of who might best serve in the "ERM Executive Risk Owner" role

ERM Activities – Ongoing and Planned

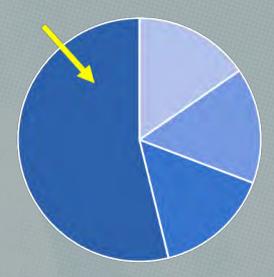
- Formalize roles and responsibilities for ERM Council,
 Risk Advisory Council and key stakeholders
- Develop risk assessment criteria and guidelines, including a risk vocabulary and associated definitions
- Establish an ongoing timeline for risk review and reporting
- Develop resources to educate key stakeholders as well as the broader university community to promulgate a risk aware culture
- Integrate ERM results into the annual internal audit planning process

ERM Process and Internal Audit





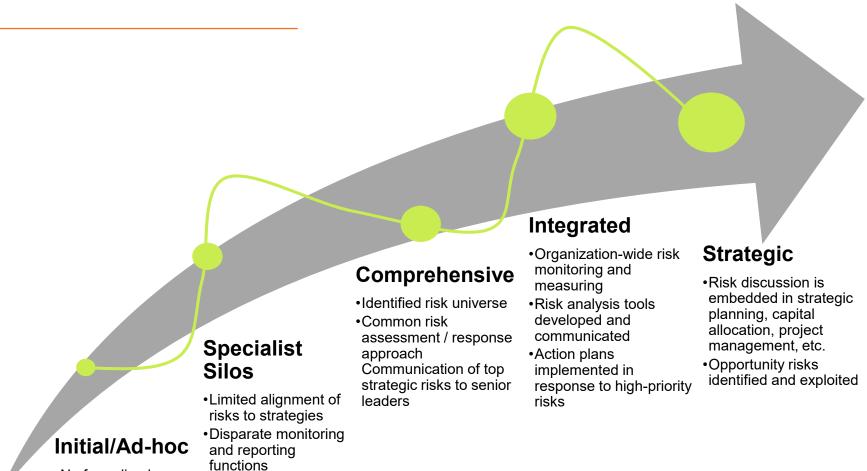
ERM Contribution in Year 5



Internal Audit assesses risk information from various sources, including ERM, to determine enterprise risk exposure for developing a list of key processes and controls that informs the audit universe.

ERM Maturity Curve

No formalized approach of procedures



THANK YOU

UNIVERSITY OF FLORIDA SUMMARY OF AUDIT REPORTS FOR AFFILIATED ORGANIZATIONS Year Ended 2020

| | | | Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters | | | | |
|---|-------------------|----------------------|--|---|--|--|--|
| | | | Matters | | | | |
| | | | | | | | |
| | | | | | | Control Deficiencies | |
| | | Auditors' Opinion on | Instances of | | Control Deficiencies | Considered Material | Management Letter |
| | Fiscal Year Ended | Financial Statements | Noncompliance? | Control Deficiencies? | Significant? | Weaknesses? | Comments? |
| DIRECT-SUPPORT ORGANIZATIONS | | | | | | | |
| 1. University of Florida Foundation, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 2. University of Florida Research Foundation, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 3. The University Athletic Association, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 4. Gator Boosters, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 5. Florida Foundation Seed Producers, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 6. Florida 4-H Club Foundation, Inc. | March 31, 2020 | Unmodified | No | No | No | No | No |
| 7. Southwest Florida Research and Education Foundation, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 8. Citrus Research and Development Foundation, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| University of Florida Leadership & Education Foundation, Inc. | December 31, 2019 | Unmodified | No | No | No | No | No |
| 10. University of Florida Alumni Association, Inc. (1) | June 30, 2020 | (1) | (1) | (1) | (1) | (1) | (1) |
| 11. University of Florida Investment Corporation | June 30, 2020 | Unmodified | No | No | No | No | No |
| 12. University of Florida Historic St. Augustine | June 30, 2020 | Unmodified | No | No | No | No | No |
| 13. University of Florida Development Corporation | June 30, 2020 | Unmodified | No | No | No | No | Yes |
| 14. GatorCare Health Management Corporation | June 30, 2020 | Unmodified | No | No | No | No | No |
| 15. Cattle Enhancement Board, Inc. | June 30, 2020 | Draft | Draft | Draft | Draft | Draft | Draft |
| HEALTH SCIENCE CENTER AFFILIATES | | | | | | | |
| Florida Clinical Practice Association, Inc. (College of Medicine) | June 30, 2020 | Unmodified | No | No | No | No | No |
| University of Florida Jacksonville Physicians, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 3. Faculty Associates, Inc. (College of Dentistry) | June 30, 2020 | Unmodified | No | No | No | No | No |
| 4. Florida Health Professions Association, Inc. | June 30, 2020 | Unmodified | No | No | No | No | Yes |
| 5. University of Florida College of Nursing Faculty Practice Association, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 6. University of Florida College of Pharmacy Faculty Practice Association, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 7. Florida Veterinary Medicine Faculty Association, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| 8. Faculty Clinic, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| OTHER AFFILIATED ORGANIZATIONS | | | | | | | |
| Shands Teaching Hospital and Clinics, Inc. and Subsidiaries | June 30, 2020 | Unmodified | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit |
| 2 .Shands Jacksonville Healthcare, Inc. | June 30, 2020 | Unmodified | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit |
| University of Florida Self-Insurance Program (Including HEIC) | June 30, 2020 | Unmodified | No | No | No | No | No |
| | | | Report on Compliance and Internal Control Over Compliance Applicable to Each Major Federal Awards Pro Financial Assistance Project and Schedule of Expenditures of Federal Awards (As Applicable) | | | | rogram and/or State |
| | Year Ended | Opinion | Report on Compliance - Instances of Non- Compliance? | Report on Internal Control Over Compliance - Control Deficiencies? | Report on Internal Control Over Compliance - Deficiencies Significant? | Report on Internal Control Over Compliance - Deficiencies Considered Material Weaknesses? | Other Findings and/or Questioned Costs? |
| AFFILIATED ORGANIZATION | | | | | | | |
| University of Florida Foundation, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| Citrus Research and Development Foundation, Inc. | June 30, 2020 | Unmodified | No | No | No | No | No |
| Shands Teaching Hospital and Clinics, Inc. and Subsidiaries | June 30, 2020 | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit |
| Shands Jacksonville Healthcare, Inc. | June 30, 2020 | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit | Pending Single Audit |

⁽¹⁾ The accounts related to the University of Florida Alumni Association, Inc. are included in the financial statements of the University of Florida Foundation, Inc. (UFF). The operating activities of the Alumni Association are presented in the notes to UFF's Financial Statements.

Audits of Affiliated Organizations Findings and Deficiencies 2019-20 Fiscal Year

University of Florida Development Corporation, Inc.

Auditor Letter of Comments and Recommendations (SAS114)

Auditor's Observation and Recommendation: We noted the following other matters that we did not consider a material weakness or significant deficiency, but consider important to communicate to the board of directors.

Disbursement Testing Controls

During our control testing over disbursements, we noted the disbursements over \$10,000 at the Innovation Square-level did not have a second signature signed by Trevor Schneider as noted in the internal control narratives. While we recognize that this control is only required on the UFDC-level by the bylaws, this control has been in place for years prior which may have been missed during the difficult transition in Directors. We recommend Trevor to review invoices over \$10,000 and sign/initial, noting approval moving forward.

Management Response: Management agrees with the recommendation that the Director, Trevor Schneider, review invoices over \$10,000 and sign/initial, noting approval moving forward. Management will coordinate with Avison Young to implement and enforce this control procedure through updating the management agreement with Avison Young.

Shands Note Payable Interest

During our testing over note payable, we noted interest expense of approximately \$219,000 had been accrued relating to the Shands Note Payable. Per review of the agreement between UFDC and Shands, there should not have been any interest expense accrued within the scope of the agreement, but our understanding based on discussions with management and Shands is that they have agreed to modifications of terms that are not yet reflected in an updated agreement between the two parties. We recommend UFDC to discuss with Shands on amending the agreement to accurately depict the expected transactions moving forward.

Management Response: Management agrees with the recommendation and the UFDC will coordinate with Shands and discuss an amendment to modify the terms of the agreement, specifically relating to interest expense. Shands fully recognized the loss during fiscal year end June 30, 2019 on the discounted note calculated from the present value of Shands' agreement with UFDC. Shands is amortizing the discount through interest expense which is currently not reflected within the terminology of the agreement. Updating the agreement to reflect the amortization of this discount captured through interest expense will more accurately reflect the payment terms on the financial statements of both parties.

Source: 2020 University of Florida Development Corporation, Inc. SAS 114 Letter (James Moore & Co., PL), Other Significant Matters, Findings or Issues

Audits of Affiliated Organizations Findings and Deficiencies 2019-20 Fiscal Year

Florida Health Professions Association, Inc.

Auditor Letter of Comments and Recommendations (SAS114)

Auditor's Observation and Recommendation: We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Association's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention. During our audit we identified the following matter:

Deposit Reconciliation

During the year ended June 30, 2020, deposits for the Clinical Health Psychology department per the general ledger exceeded payments posted to the billing system by \$26,736. This resulted in an understatement of accounts receivable per the general ledger, which was subsequently corrected. We recommend management reconcile the deposits between the two systems on at least a monthly basis to more timely identify any differences and ensure deposits posted to both the general ledger and subsidiary records are accurate and complete.

Management Response: The Department of Clinical and Health Psychology (CHP) has reviewed the SAS 114 letter provided by Purvis Gray for the annual audit of Florida Health Professions Association, Inc. Fiscal Year 2020. With regard to the recommendation related to deposit reconciliation, we would like to provide additional context and information regarding what led to this outcome and how we are addressing this issue moving forward.

On July 1, 2019, FHPA transitioned from NERVE, our legacy billing system, to the EPIC billing system. This transition was in response to a previous finding regarding concern over our aging accounts receivable (AR) and would provide us with more resources to manage our billing process. EPIC is managed by Florida Clinical Practice Association (FCPA)'s Billing and Accounts Receivable department (B/AR). Epic and B/AR are utilized by the greater UF Health community, but we represent the first non-FCPA entity to utilize this billing service. As a result, this transition presented a learning curve for both entities.

The primary change from the previous system in terms of the accounting process is that the AR collections now route through FCPA who in turn transfer those funds to FHPA in a weekly electronic funds transfer (EFT). For this process to flow smoothly, all of the insurance payers needed to update their systems to reflect the FCPA banking information. Due to delays in payers updating their banking information, payment deposits continued to flow into the FHPA bank account in lieu of depositing to FCPA from July 2019 until March 2020 for services billed by FCPA on our behalf. In order to post payment to individual patient accounts properly, FCPA required all deposits be transferred to them periodically. This allowed the FCPA, CHP Billing Manager and CHP Clinic Manager to best coordinate reconciliation and posting of payments to individual patient accounts and then return income to the FHPA bank account and corresponding general ledger. In the process outlined above, we feel confident that an error occurred allowing income to be mistakenly recorded on the general ledger that did not match our returned income between the two entities (FCPA and FHPA).

Audits of Affiliated Organizations Findings and Deficiencies 2019-20 Fiscal Year

Florida Health Professions Association, Inc. (continued)

Thankfully, the process outlined above is no longer in practice as all clinic income is being deposited into the FCPA's bank account. This allows the FCPA to reconcile and post payment information to individual patient accounts in advance. As a result of this audit's exit interview, we have implemented a multifaceted reconciliation process to ensure all income is verified on a weekly occurrence between the FCPA's accounting team and CHP Clinic Manager. This is completed in advance of funds being transferred to the FHPA bank account via EFT from the FCPA. Once funds are transferred, the CHP Business Manager reconciles the transfer amount and ensures its accurate posting to the general ledger. This process goes through additional reviews and at a higher frequency than was recommended by the auditors.

Source: 2020 Florida Health Professions Association, Inc. SAS 114 Letter (Purvis Gray and Company, LLC), Other Audit Findings or Issues



Reports Issued

June 1, 2020 – November 12, 2020

| 0 12 20 | or momation reclinions, deficial controls |
|----------|---|
| 6-12-20 | UFF Non-Endowed Restricted Gifts |
| 6-12-20 | UFF Endowed Restricted Gifts |
| 8-25-20 | Research Shield Computing Environment |
| 11 10 20 | Doubourness Passed Funding and Dysominance Date Integrity |

LIFE Information Technology General Controls

11-10-20 Performance Based Funding and Preeminence Data Integrity

11-20-20 Construction Funding

Other Reports:

6-12-20

- Expanded Food and Nutrition Program
- Student Athlete Online Proctoring
- Annual Report

OFFICE OF INTERNAL AUDIT

UFF Information Technology General Controls

The OIA works with the UFF Audit Committee to determine audit projects and priority. We evaluated the information technology general controls within the foundation system's IT control environment focusing on access controls, application rights, and penetration testing.

Conclusion: The ITGC Audit is a Confidential report

UFF Endowed and Non-Endowed Restricted Gifts

We evaluated Controls to determine if university units used endowed and non-endowed restricted funds in accordance with donor intent, foundation policies, and university directives. We also examined whether new restricted funds were properly established and the appropriateness of transfers to the university. Disbursements were \$83.2 million and transfers to the university were \$116.4 million during 2019.

Conclusion: The controls were adequate.

- ✓ The OIA issued 25 endowed fund management letters
- ✓ The OIA issued 5 non-endowed fundament letters

OFFICE OF INTERNAL AUDIT

Research Shield Computing Environment

The audit provides an independent assessment and assurance that the ResShield computing environment meets the National Institute of Standards and Technology (NIST) 800-53 moderate controls framework.

Conclusion:

Information security controls over the ResShield computing environment were **adequate** to demonstrate compliance.

☐ Confidential report

Construction Funding

The audit identified and evaluated the adequacy and effectiveness of key controls to review, approve, and monitor construction related E&G funding to comply with BOG Regulations and Florida Statutes.

Conclusion:

Construction funding key business processes for the use of E&G funds are adequate to manage compliance with Florida Statute1011.45 (3) and BOG Regulation 9.007(6).

■ No Comments



Office of Internal Audit Annual Report 2019 - 2020



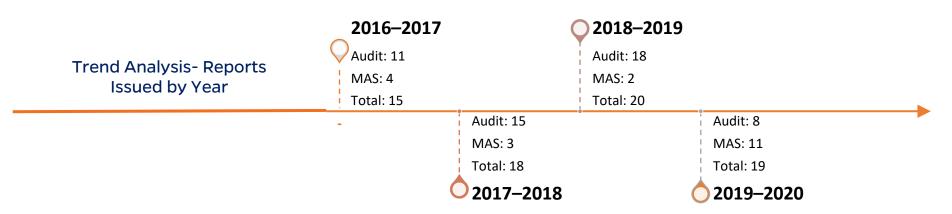
CONTENTS

- 1. Purpose
- 2. The Year in Review
- 3. Strategic Plan Update
- 4. Required Communications





HIGHLIGHTS



Significant Events during 2019-2020:

- Relocated OIA office from Human Resources to renovated space in Ayers Building
- The University and Internal Audit continued operations off-campus due to
 COVID
- Significant progress against work plan with several key staff vacancies
 - √ New CAE started in September 2020
- Local and national leadership presence within IIA and ACUA
- OIA strategic plan goals implemented related to advancement of key initiatives:
 - ✓ Facilitation of Enterprise Risk Management for UF
 - ✓ Data Analytics Improvement Plan
 - ✓ Collaborative UFIT **Risk** Assessite Anitiative

UF

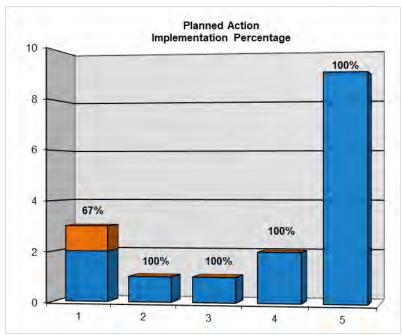
The OIA worked with the Planning Design & Construction Division to relocate to a newly renovated and functional office workspace. Located in the Innovation District, this office supports the OIA's ability to serve the university's needs now and in the future.





University of Florida Office of Internal Audit Follow-up Statistics as of September 31, 2020

(April 1, 2020 through September 30, 2020)



- 1.Academic Affairs
- 2.Chief Financial Officer
- 3. Chief Information Officer

- 4. Research
- 5. UF Foundation

| | Total | Balance | Statistics for April 1, 2020 through September 30, 2020 | | | | |
|---------------------------|---------------------------------|----------------------------------|---|-------------|--------------------------|------------------------|------------------------|
| Oversight by | Outstanding as of 9/30/20 | Due in Subsequent Quarters | Follow Up Due and Reviewed | Implemented | In process (extended) | Follow Up Ceased | Percent Implemented |
| Academic Affairs | 4 | 1 | 3 | 2 | 1 | - | 67% |
| Chief Financial Officer | 1 | 0 | 1 | 1 | - | - | 100% |
| Chief Information Officer | 4 | 3 | 1 | 1 | - | - | 100% |
| IFAS | 3 | 3 | - | - | - | - | N/A |
| Research | 10 | 8 | 2 | 2 | - | - | 100% |
| UAA | 3 | 3 | - | - | - | - | N/A |
| UF Foundation | 11 | 2 | 9 | 9 | - | - | 100% |
| Total | 36 | 20 | 16 | 15 | 1 | - | 94% |

Office of Internal Audit November 12, 2020

University of Florida Office of Internal Audit Summary of Significant Comments Period ending September 30, 2020

The following comments for this period were noted as significant:

STATE OF FLORIDA AUDITOR GENERAL OPERATIONAL AUDIT, REPORT 2020-135 ISSUED FEBRUARY 2020

FINDING 2 - STUDENT FEES:

As reported in the Auditor General Operational audit, the student Orientation and nonrefundable application fees were not always limited to amounts specified in State Law and BOG and University regulations.

The university agreed with the auditor general recommendation. We reviewed the published information for student orientation and admission application fees. We noted that the amounts permitted by the Florida Statues (\$35 for orientation and \$30 for application fee) were now reflected on university websites and there were no additional service or processing fees. – **Implemented.**

Office of Internal Audit November 12, 2020



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS AGENDA

Friday, December 4, 2020 ~10:10 a.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL

Committee Members:

David L. Brandon (Chair), Morteza "Mori" Hosseini, Leonard H. Johnson, Thomas G. Kuntz, Daniel T. O'Keefe, Jason J. Rosenberg, Anita G. Zucker 1.0 2.0 3.0 June 4, 2020 FCI Committee September 28, 2020 FCI Subcommittee November 2, 2020 FCI Pre-Meeting Action Items David L. Brandon, Chair 4.0 FCI1 Campus Master Plan Amendment 2020-2030....... Curtis Reynolds Vice President for Business Affairs FCI2 Naming: The DeLuca Preserve........... Tom Mitchell, Vice President, Advancement FCI4 Naming: The Ronald Young Family BermTom Mitchell FCI5 Naming: The Henry and Nell Davis PavilionTom Mitchell Naming: The Ken and Linda McGurn Exhibition HallTom Mitchell FCI6 Discussion ItemDavid L. Brandon, Chair 5.0 5.1 6.0 7.0 AdjournDavid L. Brandon, Chair



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS

Meeting Minutes
June 4, 2020

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL Time Convened: 1:59 p.m.

Time Adjourned: 2:45 p.m.

Committee and Board members present

Morteza "Mori" Hosseini (Board Chair), David L. Brandon, Sylvain Doré, James W. Heavener, Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Trevor J. Pope, Marsha D. Powers, Jason J. Rosenberg, Robert G. Stern, and Anita G. Zucker

Others present:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Curtis Reynolds, Vice President for Business Affairs; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Edward Jimenez, Chief Executive Officer for UF Health; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; David Nelson, Senior Vice President for Health Affairs and President of UF Health; David Norton, Vice President for Research; D'Andra Mull, Vice President for Student Affairs; Nancy Paton, Vice President for Strategic Communications and Marketing; Scott Stricklin, Director of Athletics; and members of the University of Florida community.

1.0 Call to Order and Welcome

Board and Committee Chair Hosseini welcomed everyone in attendance and called the meeting to order at 1:59 p.m.

2.0 Verification of Quorum

Vice President Curtis Reynolds confirmed a quorum with all Committee members present.

3.0 Review and Approval of Minutes

Board and Committee Chair Hosseini asked for a motion to approve the committee minutes from the Thursday March 26, 2020 and the FCI Premeeting Meeting Minutes from May 4, 2020 meetings, which was made by Trustee Leonard H. Johnson and a

second, which was made by Trustee David L. Brandon. Board and Committee Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

4.0 Action Items

Board and Committee Chair Hosseini asked Vice President Curtis Reynolds to present the Action Items as follows:

FCI1 Fixed Capital Outlay Legislative Budget Request for Fiscal Year Ending June 30, 2022

The Florida Board of Governors requires an annual submission from each university of its Fixed Capital Outlay Legislative Budget Request. Several items are included in this submission as follows:

- Five-year Capital Improvement Plan PECO Eligible Project Requests
- Five-year Capital Improvement Plan CITF Projects
- Five-year Capital Improvement Plan Non-State Supplemental Funding

Vice President Reynolds discussed the Public Education Capital Outlay (PECO), Capital Improvement Trust Fund Fee (CITF) and Non-State Supplemental Funding projects highlighting Whitney Laboratory for Marine Bioscience, Florida Natural History Museum Earth Systems Addition and the New Music Building totaling \$65.3 million.

Board and Committee Chair Hosseini asked for a motion to approve Action Item FCI1 which was made by Trustee Thomas G. Kuntz and a second, which was made by Trustee David L. Brandon for recommendation to the Board for its approval on the Consent Agenda. Board and Committee Chair Hosseini asked for further discussion. Board and Committee Chair Hosseini then asked for all in favor of the motion and any opposed and the motion was approved unanimously.

FCI2 Facilities Spending Plan for Fiscal Year Ending June 30, 2021

During the 2020 Florida Legislative session, the University of Florida received legislative appropriations as follows:

| • | (PECO) Data Science and Information Technology Building | \$ 3 | 35,000,000 |
|---|---|------|------------|
| • | (PECO) PK Yonge Secondary School Facility Phase II | \$ | 8,300,000 |
| • | (CITF) SWRC Weight Room Expansion | \$ | 2,980,000 |
| • | (CITF) Synthetic Turf Field | \$ | 1,300,000 |
| • | (CITF) JWRU Branding Enhancements | \$ | 600,000 |
| • | (CITF) SWRC Dedicated Cycling Studio | \$ | 480,000 |
| • | (CITF) JWRU Grand Ballroom AV Equip | \$ | 400,000 |
| • | (CITF) JWRU Grand Ballroom Desk Renovation | \$ | 350,000 |
| • | (CITF) Greek Plots | \$ | 350,000 |
| • | (CITF) J. W. Reitz Union South Terrace Enhancement | \$ | 320.000 |

| • | (CITF) Dean of Students Office Peabody Hall Renovation | \$ 372,763 |
|---|--|---------------|
| • | (CITF) Boardwalk at Liberty Pond | \$ 250,000 |
| • | (CITF) Waterfront Checkout at Lake Wauburg - North | \$ 135,000 |
| • | (CITF) Career Connections Center AV Upgrades | \$ 115,000 |
| • | (CITF) JWRU AV Upgrades | \$ 90,000 |
| • | (CITF/UFO) UF Online Improvements | \$ 558,504 |

Vice President Reynolds confirmed the projects are listed as anticipated to receive funding upon the Governor's final modifications.

Board and Committee Chair Hosseini asked for a motion to approve Action Item FCI2 which was made by Trustee Thomas G. Kuntz and a second, which was made by Trustee Leonard H. Johnson for recommendation to the Board for its approval on the Consent Agenda. Board and Committee Chair Hosseini asked for further discussion. Board and Committee Chair Hosseini then asked for all in favor of the motion and any opposed and the motion was approved unanimously.

Vice President Reynolds asked Vice President Thomas Mitchell to present the naming Action Items FCI3 – FCI8.

Vice President Mitchell noted, all due diligence had been met regarding fundraising guidelines, governance policies and approvals for the proposed namings as follows:

FCI3 Naming: Alfred McKethan Field at the Florida Ballpark

In recognition of the generous and significant support of the University of Florida by Alfred A. McKethan and the McKethan family, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the field at the Florida Ballpark the "Alfred McKethan Field."

The Committee on Facilities and Capital Investments is asked to approve Resolution # R20-234 to name the field at the Florida Ballpark the "Alfred McKethan Field," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

FCI4 Naming: Darren O'Day Bullpen at the Florida Ballpark

In recognition of the generous support of the University of Florida by Darren O'Day, and his contributions as a former member of the Florida Gators baseball team, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the home bullpen at the Florida Ballpark the "Darren O'Day Bullpen."

The Committee on Facilities and Capital Investments is asked to approve Resolution # R20-235 to name the home bullpen at the Florida Ballpark the "Darren O'Day Bullpen," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

FCI5 Naming: Strems Gator Deck at the Florida Ballpark

In recognition of the generous support of the University of Florida by Scot Strems, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the deck at the Florida Ballpark the "Strems Gator Deck."

The Committee on Facilities and Capital Investments is asked to approve Resolution # R20-236 to name the deck at the Florida Ballpark the "Strems Gator Deck," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

FCI6 Naming: National Championship Display Courtesy of The Gator Dugout Club In recognition of the generous support of Florida Gators Baseball by the Gator Dugout Club, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the National Championship Display at the Florida Ballpark the "National Championship Display Courtesy of The Gator Dugout Club."

The Committee on Facilities and Capital Investments is asked to approve Resolution # R20-237 to name the National Championship Display at the Florida Ballpark the "National Championship Display Courtesy of The Gator Dugout Club," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

FCI7 Naming: LaFace Family Student-Athlete Lounge at the James W. "Bill" Heavener Football Training Center

In recognition of the generous support of the University of Florida by Chris and Angela LaFace, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the student-athlete lounge at the James W. "Bill" Heavener Football Training Center the "LaFace Family Student-Athlete Lounge."

The Committee on Facilities and Capital Investments is asked to approve Resolution # R20-238 to name the student-athlete lounge at the James W. "Bill" Heavener Football Training Center the "LaFace Family Student-Athlete Lounge," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

FCI8 Naming: Todd Prosser Sandy Burnett Family Berm

In recognition of the generous support of the University of Florida by the Prosser family and the A.H. Burnett Foundation, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the right field berm at the Florida Ballpark the "Todd Prosser Sandy Burnett Family Berm."

The Committee on Facilities and Capital Investments is asked to approve Resolution # R20-239 to name the right field berm at the Florida Ballpark the "Todd Prosser Sandy Burnett Family Berm," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

Vice President Mitchell asked Mr. Scott Stricklin, Director of Athletics to give a few comments on the namings that were presented. Mr. Stricklin expressed his support of the namings presented by Vice President Mitchell.

Board and Committee Chair Hosseini asked for a motion to approve Action Items FCI3, FCI4, FCI5, FCI6, FCI7 and FCI8 which was made by Trustee Thomas G. Kuntz and a second, which was made by Trustee David L. Brandon for recommendation to the Board for its approval on the Non-Consent Agenda. Board and Committee Chair Hosseini asked for further discussion. Board and Committee Chair Hosseini then asked for all in favor of the motion and any opposed and the motion was approved unanimously.

5.0 Discussion

Board and Committee Chair Hosseini asked Vice President Curtis Reynolds to present the discussion items as follows:

5.1 Construction Update

Vice President Reynolds presented the Construction Update highlighting the following projects:

- UF-461 Herbert Wertheim Laboratory for Engineering Excellence (Nuclear Science Building)
- UF-394 –PK Yonge Phase II
- UAA-41 –Florida Ballpark (Baseball)

5.2 Update from Advisory Subcommittee on Construction Management

Trustee David L. Brandon presented an updated from the Advisory Subcommittee on Construction Management. Trustee Brandon thank committee members Curtis Reynolds, Colt Little, Carlos Dougnac, Chip Howard and Brad Pollitt for their diligent work. Trustee Brandon discussed the final recommendations for an optimal model for construction management at UF, including the planning and design phases of construction with both cost and timeliness as a priority that will be incorporated.

7.0 New Business

There was no new business to come before the committee.

8.0 Adjourn

There being no further discussion, Committee Chair Hosseini adjourned the meeting at 2:45 p.m.



SUBCOMMITTEE ON CAPITAL INVESTMENT STRATEGY

Minutes
Virtual Meeting

September 28, 2020

University of Florida, Gainesville, FL

Time Convened: 4:30 p.m. Time Adjourned: 5:20 p.m.

Committee and Board members present:

Morteza "Mori" Hosseini (Board Chair), (Committee Chair), David L. Brandon, Daniel T. O'Keefe, Richard P. Cole, Sylvain Doré, Leonard H. Johnson, Rahul Patel and Trevor J. Pope

Others present:

Chris Cowen, Senior Vice President and Chief Financial Officer; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; D'Andra Mull, Vice President for Student Affairs; Curtis Reynolds, Vice President for Business Affairs; Mark Helms, Assistant Vice President for Facilities Services; Colt Little, Senior Counsel, General Counsel; Joseph Souza, Director of Physical Security; members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Mori Hosseini welcomed everyone in attendance and called the meeting to order at 4:30 p.m.

2.0 Roll Call

Curtis A. Reynolds, Vice President for Business Affairs conducted a roll call of all Sub-Committee and Board members present.

3.0 Discussion Items

The following Discussion Items were addressed by the Committee:

3.1 Overview of Capital Campus Infrastructure Projects

Curtis Reynolds, Vice President for Business Affairs provided an Overview of Capital Campus Infrastructure Projects. Vice President Reynolds introduced Mark Helms, Assistant Vice President for Facilities Services. Mr. Helms gave an update on current infrastructure projects for the following areas of campus: Southwest, Southeast, Northwest and Northeast. Mr. Helms also presented a detailed overview of the Central

Energy Plant replacement. Chair Hosseini commented that some of these projects go back many years. The Board is not going to leave things to the future. We need to take care of infrastructure and deferred maintenance.

Vice President Reynolds introduced Joseph Souza, Director of Physical Security. Mr. Souza provided a brief summary of the Campus Safety Plan. Mr. Souza's information contained an overview of the License Plate Reader (LPR) project, go live dates and locations of the readers. Mr. Souza also noted additional plans to install readers at University of Florida's affiliate P. K. Yonge Developmental Research School.

Chair Hosseini noted the implementation of the study done by Dr. Charlie Lane, Senior Vice President and Chief Operation Officer regarding the campus safety for students. Chair Hosseini asked Dr. Lane if the recommendations from the consultants were being followed and Dr. Charlie Lane confirmed. Chair Hosseini added campus security is of the utmost importance to protect students, faculty, and staff.

Additionally, Trustee David Brandon noted that the recent campus lighting upgrades contained a plug and play technology.

3.2 Draft Construction Report

Vice President Reynolds noted that with the guidance of Trustee Brandon; a draft Construction Report would be presented at the December 2020 Board of Trustees meeting. Vice President Reynolds briefly explained the new aspects of the report would track Board of Trustees approvals, project funding/amendments and comments. The Report would require Board of Trustees approval for record.

3.3 Fixed Capital Outlay

There was no discussion on this item.

3.4 Carry Forward Spending Plan

Chair Hosseini requested that Christopher Cowen, Senior Vice President and Chief Financial Officer, provide an explanation of the materials regarding the Carry Forward Spending Plan. Senior Vice President Cowen noted the highlights and due to the COVID-19 pandemic, the university had taken steps to reduce spending. Chair Hosseini asked if there were any questions and stated Senior Vice President Cowen would present the Carry Forward Spending Plan during the Board of Trustees meeting on Tuesday, September 29, 2020. There were no questions.

4.0 New Business

There was no new business to come before the subcommittee.

5.0 Adjourn

There being no further discussion, Committee Chair Hosseini adjourned the meeting 5:20 p.m.



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS

Pre-Meeting Minutes
Virtual Meeting
November 2, 2020
University of Florida, Gainesville, FL
Time Convened: 10:01 a.m.

Time Adjourned: 11:04 a.m.

Committee and Board members present:

David L. Brandon (Committee Chair), Richard P. Cole, Sylvain Doré, James W. Heavener, Morteza "Mori" Hosseini (Board Chair), Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Trevor Pope, and Anita G. Zucker

Others present:

W. Kent Fuchs, President; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; Curtis Reynolds, Vice President for Business Affairs; Carrie Bush, Director of Strategic Initiatives; Carlos Dougnac, Assistant Vice President, Planning, Design and Construction; Mark Helms, Assistant Vice President for Facilities Services; Craig Hill, Associate Vice President, Business Affairs; Colt Little, Senior Counsel, General Counsel; Jeanna Mastrodicasa, Associate Vice President for Agricultural and Natural Resources; Linda Dixon, Director of Planning, Planning, Design and Construction; Lindsey Farah, Director, Advancement Initiatives, University of Florida Advancement; Susan Goffman, Executive Director, University of Florida Advancement; Kevin Heinicka, Director, UF/IFAS Facilities Planning & Operations; Chip Howard, Executive Athletic Director, University Athletic Association; Eugene Herring, Director of Capital Programs and Financial Management, Planning, Design and Construction; Melissa Stuckey, Associate Athletics Director, University Athletic Association; Joseph Souza, Director of Physical Security; members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair David L. Brandon welcomed everyone in attendance and called the meeting to order at 10:01 a.m.

2.0 Roll Call

Board Staff conducted a roll call of all Committee and Board members present.

3.0 Review Agenda for December 2020 Meeting

The following items were addressed by the Committee:

3.1 Review Minutes

September 28, 2020, FCI Subcommittee Minutes

3.2 Action Items

FCI1 Campus Master Plan Amendment 2020-2030

Curtis A. Reynolds, Vice President for Business Affairs presented the Campus Master Plan Amendment 2020-2030. Vice President Reynolds asked Chair Brandon if he would allow Ms. Linda Dixon, Director of Planning, Planning, Design and Construction to give a brief verbal explanation and defer the full presentation to the Board of Trustees meeting in December 2020. Chair Brandon concurred to allow Ms. Dixon to give an abbreviated version of the presentation. Ms. Dixon presented the Campus Master Plan Amendment and noted certain elements of jurisdiction and legality of the document. During the discussion, she also informed the Committee of Florida Statue requirement as well as the upcoming <u>public workshop/presentations</u> scheduled for Alachua County and City of Gainesville administrators, UF faculty and staff.

Committee Chair Brandon opened the floor for questions: Board Chair Mori Hosseini asked Ms. Dixon if the University could develop outside the urban service boundaries. Ms. Dixon explained the University could potentially given the appropriate steps were taken with the county authority.

Board Chair Hosseini asked Ms. Dixon to have a follow-up conversation with other contacts. Committee Chair Brandon agreed and asked Ms. Dixon to update the Campus Master Plan Amendment presentation to add slides regarding jurisdictions and development rights. Trustee Daniel O'Keefe asked that a map of all property owned by the University outside of the Alachua County boundaries be provided to the board. Trustee O'Keefe asked Ms. Dixon to confirm with General Counsel the legal aspects of developing outside of the boundaries and to confirm what development is permitted. Trustee Sylvain Doré noted concerns regarding the removal of 348 graduate apartments as part of the Campus Master Plan and asked if there any plans to address restoration of the units removed. A discussion ensued regarding the Lakeside Complex apartments; designating land use at the current Baby Gator site for potential future housing; and new locations for Baby Gator. Trustee Doré indicated he wanted to make sure the University had a plan for graduate housing and childcare.

Chair Brandon recognized Tom Mitchell, Vice President for Advancement for the presentation of the proposed naming(s) Vice President Mitchell confirmed all namings have met the fundraising guidelines and administrative approvals; Naming Advisory Council; Vice President Mitchell presented the namings as follows:

FCI2 Naming: The DeLuca Preserve

FCI3 Naming: The Archer Aviation eVTOL Lab
FCI4 Naming: The Ronald Young Family Berm
FCI5 Naming: The Henry and Nell Davis Pavilion

FCI6 Naming: The Ken and Linda McGurn Exhibition Hall

Vice President Mitchell concluded his discussion of the proposed namings.

FCI7 Construction Report

Committee Chair Brandon provided a brief explanation on the new format of the Major Projects Construction Report. Vice President Reynolds informed the Committee of his intent to require the Construction Report to be accepted by Committee via a motion of the Committee Chair at all preceding Committee meetings.

There ensued a discussion of the format of the Construction Report. Trustee Kuntz asked if an additional column could be added referring to the source of funding for any amendment. Vice President Reynolds noted the column would be added and made available for the December committee packet. Vice President Reynolds concurred all projects noted on the Construction Report adhere to the Board of Trustees Governance guidelines prior to their reference on the reports. Trustee Raul Patel commented, in regards to Governance protocol, future intents to develop a spreadsheet that ensure protocols are working for anything that requires Board transaction.

3.3 Discussion Items

Florida Surgical Center

Vice President Reynolds discussed the Florida Surgical Center and noted its approval within the Construction Projects Planning & Approval Executive Committee (CPPEC). Vice President Reynolds noted per Board Governance, approval of such projects from Direct Support Organizations (DSOs), requires the Board Chair and President's concurrence and acknowledgement by the Board Vice Chair. A discussion ensued regarding the proper protocol for notification of such projects. Board Chair Hosseini directed Dr. Charlie Lane, Senior Vice President and Chief Operating Officer, to forward the details for his approvals. Chair Hosseini noted that he would provide additional guidance, if needed for Board of Trustee approval.

University Athletic Association Bond Initiative

Melissa Stuckey, Associate Athletics Director, from University Athletic Association, discussed to the details related to the Bond Initiative and rational for the changes.

Chip Howard, Executive Athletic Director, University Athletic Association gave a brief update on the new Football complex and potential expansions to the Soccer and Lacrosse areas.

4.0 New Business

There was no new business to come before the committee.

5.0 Adjourn

There being no further discussion, Committee Chair Brandon adjourned the meeting at 11:04 a.m.





COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS ACTION ITEM FCI1 December 4, 2020

SUBJECT: Campus Master Plan Amendment, 2020-2030

BACKGROUND INFORMATION

Because of the unique relationship between the state universities and the local governments in which they are situated, the Florida Legislature determined in the early 1990's that state university campuses should follow a master plan process for campus planning and concurrency requirements instead of the traditional growth management laws followed in and by local communities. By law, university master plans must be updated at least every five years. At the current time, it is necessary for the University of Florida to update its Campus Master Plan (CMP).

At this board's meeting on December 5, 2019, the board was notified that the CMP amendment process was beginning for the 2020-2030 period. The plan and its supporting analysis are now complete consistent with statute and Florida Board of Governors Regulations, Chapter 21. The University has determined that this plan amendment does not require interagency reviews and a public hearing adoption process because it does not meet criteria established in Chapter 1013.30(9) F.S. that would require these steps. Therefore, the board will be asked to adopt the Campus Master Plan Amendment for 2020-2030 at its December meeting. At the same time, the board will be asked to authorize the University to negotiate a Campus Development Agreement with the City of Gainesville and Alachua County to be brought to the board at its March 2021 meeting. The CMP analysis concluded that the university's projected growth through 2030 does not create impacts to public facilities and services that require mitigation to the host local governments through financial compensation.

The updates of this plan amendment cycle incorporate the growth patterns, projections and projects developed in the recent Campus Framework Plan, Housing Master Plan, Transportation & Parking Strategic Plan, and Landscape Master Plan prepared in 2018-2019.

An informal public information session will be conducted in November along with other community outreach. The City of Gainesville and Alachua County are also invited to submit comments on the plan prior to the December adoption. Opportunity for public comment should be provided at the meeting when the board adopts this plan amendment. Plan documents are posted at https://facilities.ufl.edu/plan/campusmasterplan.html .

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to recommend to the Board of Trustees (i) approval on the Non-Consent Agenda of the Campus Master Plan Amendment 2020-2030, and (ii) authorization of University staff to commence negotiation of an updated Campus Development Agreement with the City of Gainesville and Alachua County.

ADDITIONAL COMMITTEE CONSIDERATIONS

| Board of Governors approval is not required | | | | |
|---|--|--|--|--|
| Supporting Documentation Included: | See attached | | | |
| Submitted by: Charles E. Lane, Senior | Vice President and Chief Operating Officer | | | |
| Approved by the University of Florida | Board of Trustees, December 4, 2020 | | | |
| | | | | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | | | |





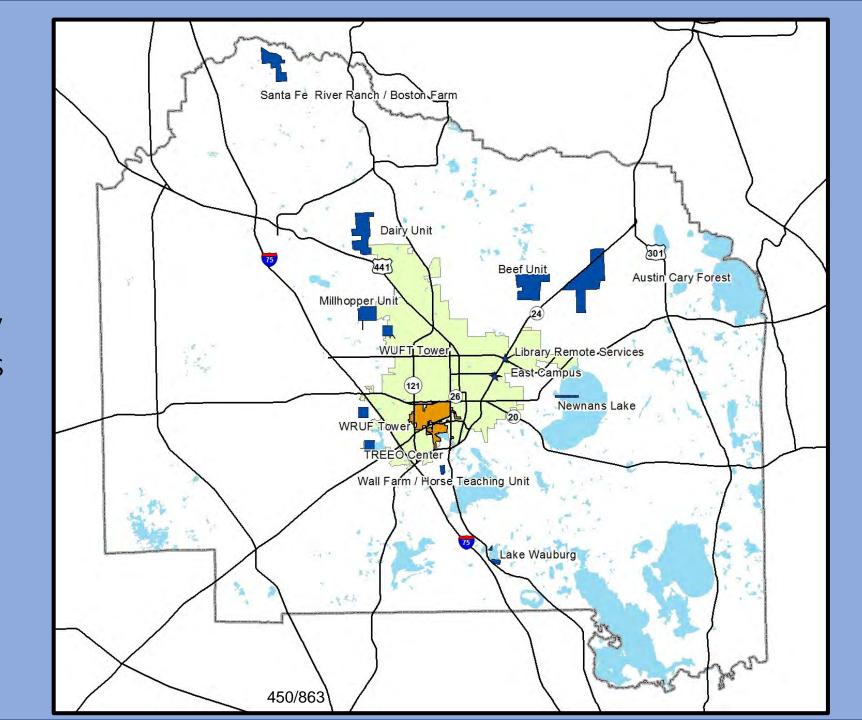
Campus Master Plan, 2020-2030 – What is it?

- Regulatory and Communication Document
- 10-Year Planning Horizon with 5-Year Updates
- Update Incorporates All Recent Planning Projects
 - Housing, Transportation, Landscape, Framework, etc.
- Results in a Campus Development Agreement (CDA)
 - CDA expires Dec. 31, 2025
- Process
 - Florida Statutes, Chapter 1013.30
 - FBOG Regulations, Chapter 21



Jurisdiction – Where does it apply?

Main Campus and 13 Alachua County Satellite Properties



How is it used?

- Communicate with City, County and community
- Jurisdiction impacts project review authority and process
- Future building site decisions
- State review of debt financing and PECO submissions
- Policies affecting day-to-day decision-making and operations regarding
 - facilities
 - grounds
 - shared governance
 - intergovernmental coordination
- Results in a Campus Development Agreement



How is it Organized?

- Plan Elements Goals, Objectives, Policies, Maps
- Data and Analysis Report
- Evaluation and Appraisal Report
- FBOG Required:
 - Future Land Use
 - Transportation
 - Housing
 - General Infrastructure
 - Conservation
 - Recreation & Open Space
 - Intergovernmental
 - Capital Improvements

Optional:

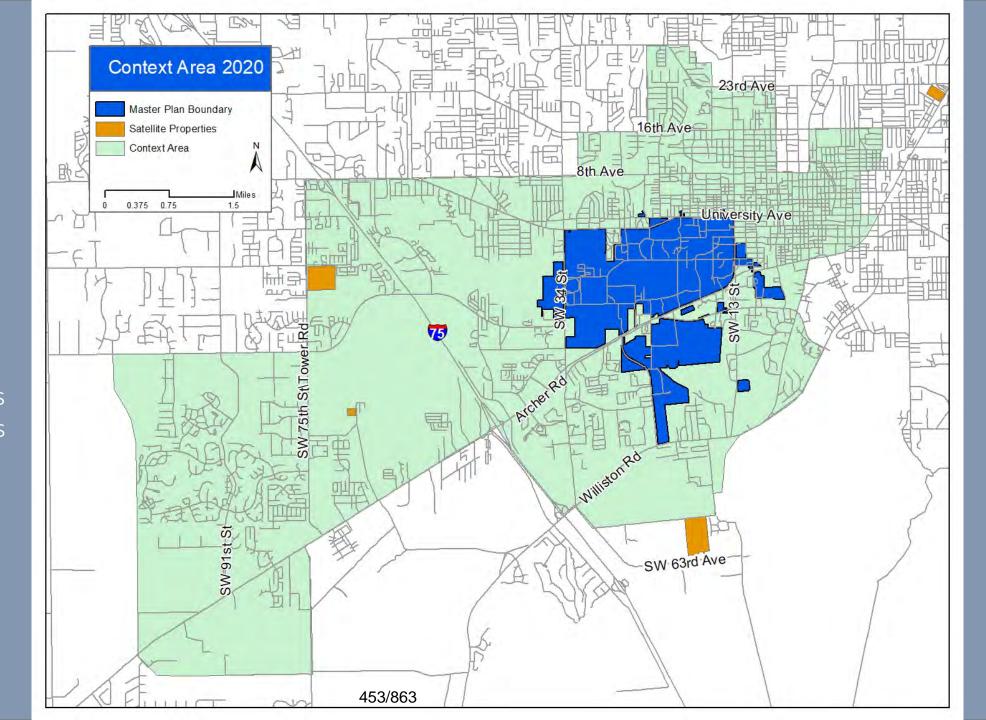
- Urban Design
- Academic Facilities
- Support/Clinical/Cultural
- Public Safety
- Implementation



CONSTRUCTION

Context Area 2020-2030

- Area in which
 potential impacts
 to public facilities
 and services is
 evaluated
- Defined in BOG Reg. Chapter 21.201



1013.30 FS Thresholds for Adoption Process

- (9) An amendment to a campus master plan must be reviewed and adopted under subsections (6)-(8) if such amendment, alone or in conjunction with other amendments, would:
- (a) Increase density or intensity of use of land on the campus by more than 10 percent;
- (b) Decrease the amount of natural areas, open space, or buffers on the campus by more than 10 percent; or
- (c) Rearrange land uses in a manner that will increase the impact of any proposed campus development by **more than 10 percent** on a road or on another public facility or service provided or maintained by the state, the county, the host local government, or any affected local government.



Campus Growth, 2020-2030

- On-Campus Headcount Employment remain flat
- On-Campus Headcount Enrollment decrease
- Building Development
 - Add approx. 2.3m net new GSF (estimated 7/1/2020 6/30/2030)
 - Add 870 net new parking spaces (currently exceeding CDA authorization)
- NO impacts to public facilities and services
- NO growth that triggers required public hearing adoption process
 - 1013.30 (9)(a)(b)(c) F.S.



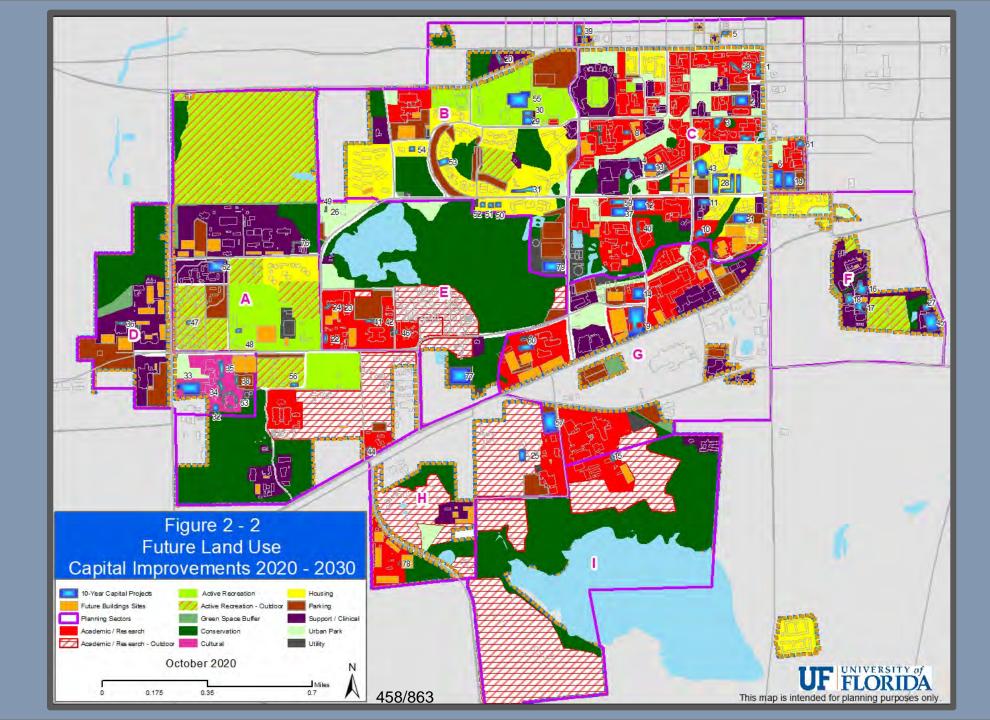
Highlights

C St. Land & Million

- Create Bicycle/Pedestrian Zone
- Implement Landscape Master Plan Priority Projects
- Construct New Honors College and undergraduate housing
- Remove Graduate/Family Housing along SW 34th St.
- Convert portion of McCarty Woods Conservation Area to "Future of Learning" academic building site consistent with Campus Framework Plan, 2019
- Expand Lake Alice Conservation Area and construct Trail System
- Expand Structured Parking and densify by building on surface lots
- Focus Development on the eastern 1/3 of campus "the Red Box strategy"
- Add State Lease Land at Newnans Lake
- Remove Collegiate Living Organization and City Roundabout property



2020-2030 Future Land Use and Capital Projects



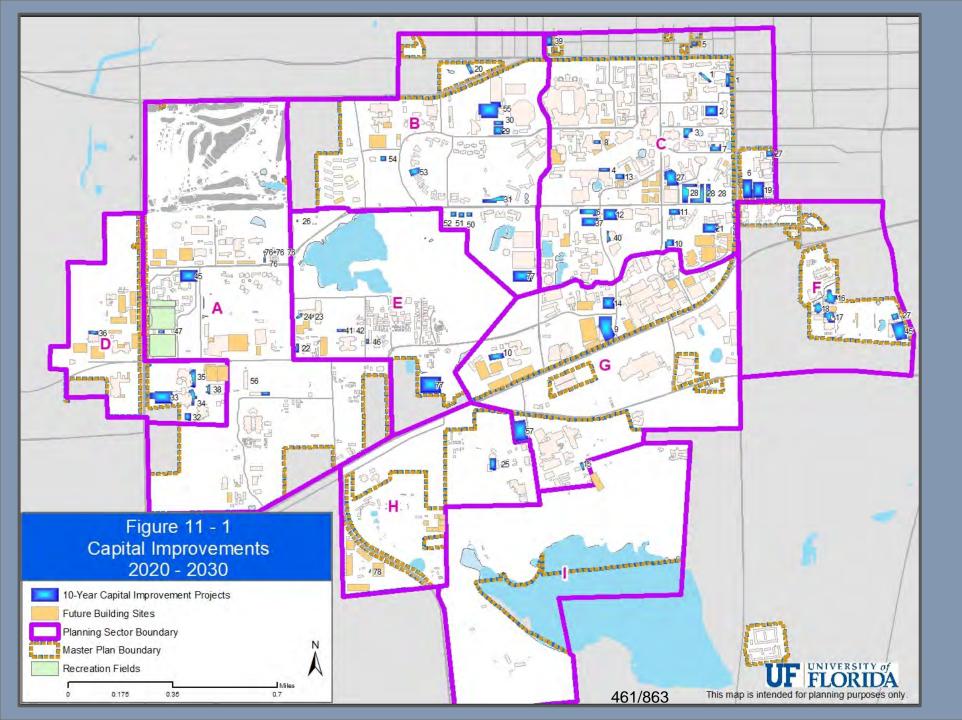
Future Land Use Changes

| Land Use Classification | As Adopted 2015-2025 (Acres) | As Amended 2018 (Acres) | Proposed 2020-2030 (Acres) | Change (Acres) |
|-----------------------------|------------------------------------|----------------------------|-------------------------------|----------------|
| Academic | 270.1 | 274.1 | 278.4 | 4.3 |
| Academic - Outdoor | 319.0 | 301.8 | 302.9 | 1.1 |
| Active Recreation | 78.3 | 92.5 | 89.3 | -3.2 |
| Active Recreation - Outdoor | 175.3 | 175.3 | 172.1 | -3.2 |
| Buffer | 24.6 | 24.6 | 19.6 | -5.0 |
| Conservation | 448.0 | 448.0 | 455.3 | 7.3 |
| Cultural | 19.5 | 19.5 | 19.5 | 0.0 |
| Housing | 156.5 | 156.5 | 128.7 | -27.8 |
| Parking | 101.8 | 101.8 | 105.6 | 3.8 |
| Road | 83.6 | 83.6 | 82.4 | -1.2 |
| Support | 187.2 | 184.8 | 194.2 | 9.4 |
| Urban Park | 64.3 | 63.8 | 79.4 | 15.6 |
| Utility | 27.0 | 28.9 | 26.9 | -2.0 |
| Total * | 1955.2 | 1955.2 | 1954.3 | -0.9 |

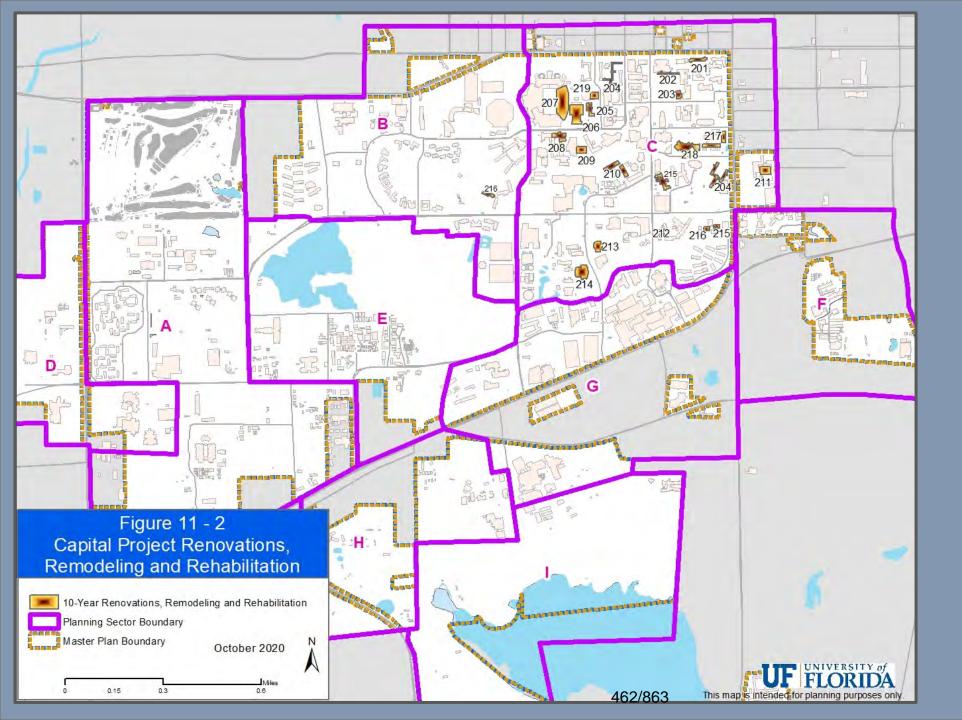
| UF Main Campus Space Type | Planned Net New GSF 2020-2030 |
|----------------------------|-------------------------------|
| Academic / Academic- | Tamica Net New 331 2020 2030 |
| Outdoor | 1,254,950 |
| Active Recreation / Active | |
| Recreation-Outdoor | 227,841 |
| Support/Clinical and | |
| Cultural | 577,157 |
| | |
| Housing | 178,570 |
| | 2.460 |
| Urban Park | 2,160 |
| Utilities | 57,900 |
| | 37,300 |
| TOTAL | 2,298,578 |

10-Year Capital Projects List (July 1, 2020 – June 30, 2030)

Main Campus



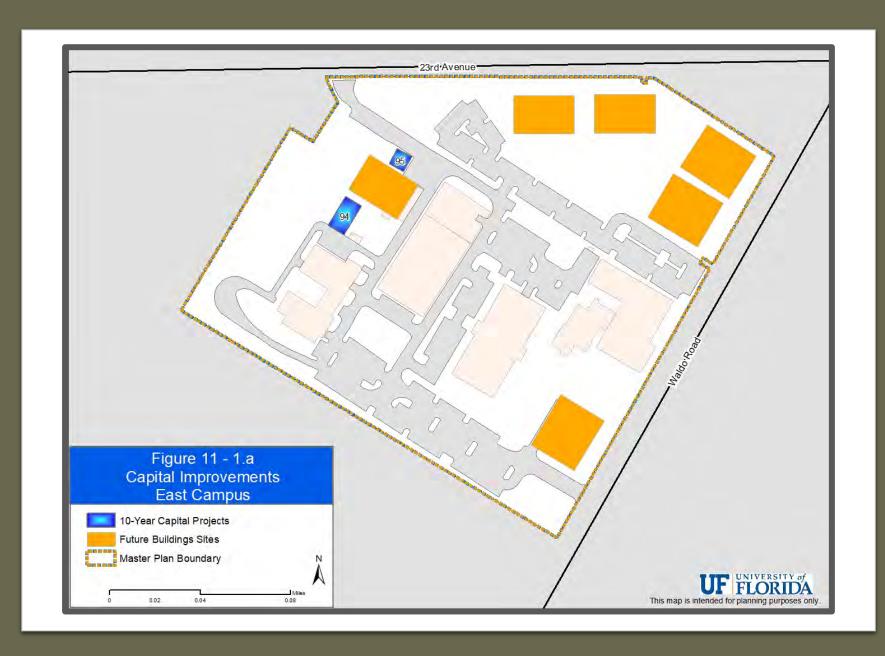
2020-2030
Capital
Projects and
Future
Building
Sites



2020-2030 Capital Projects -Renovations

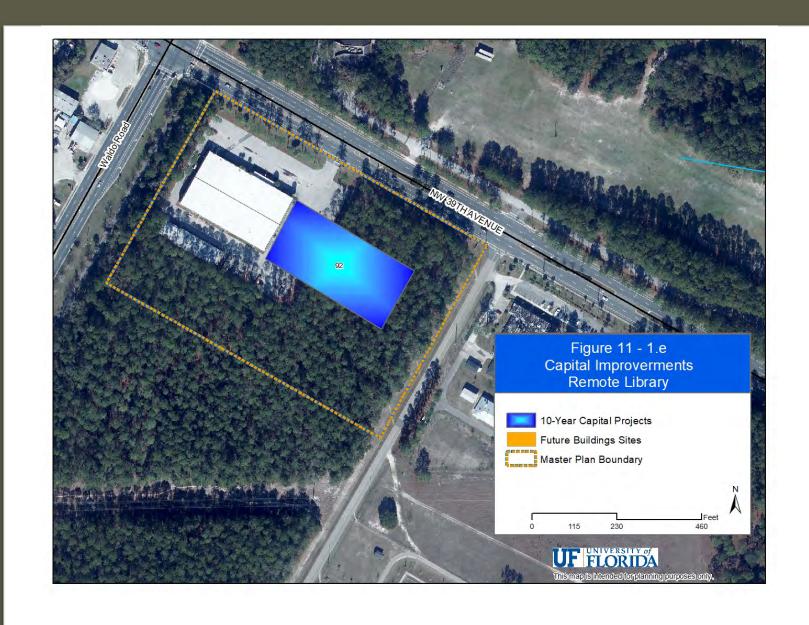
University Avenue st Avenue 2nd Avenue SW,2nd Avenue 3rd Avenue 4thAvenue 6th Avenue Mowry Road 16th Avenue SW 20th Avenue Figure 1 - 5 Ritchey Road Open Space Enhancement **Priorities** Open Space Priority Projects Note: Please refer to the Lanscape Master Plan for specific project information. Enhancement Areas Physical enhancements in Conservation Areas Master Plan Boundary are addressed in other Master Plan maps and Green Space Buffer Conservation Urban Park 0.3 0.6 463/863

2020-2030 Open Space Enhancements



Future Buildings – East Campus

Storage and Utility Upgrades



Future
Buildings –
Remote
Library
Services

Library Storage Expansion



Future Buildings – Wall Farm/ HTU

Training Barn and Field Support Buildings

Figure 11 - 1.c Capital Improvements Lake Wauberg 10-Year Capital Projects Master Plan Boundary SEWACAHOOTARD

Future Buildings – Lake Wauburg

- Lodge Renovation and Addition
- Residence Demolition



Future Buildings – Newnans Lake

- Add Property
- Restroom and Pavilion Replacement

468/863



Future Buildings – WRUF Tower Road

- Communications Tower Consolidation and Relocation
- Park & Ride Lot (RTS)

Schedule

- October November
 - Public Outreach
 - https://facilities.ufl.edu/plan/campusplanning.html
- December
 - BOT Adopt CMP Update
 - BOT Authorize UF to Negotiate CDA with City & County
- March 2021
 - BOT Adopt CDA



PLANNING, DESIGN &
CONSTRUCTION



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS ACTION ITEM FCI2

December 4, 2020

SUBJECT: Naming: DeLuca Preserve

BACKGROUND INFORMATION

In grateful recognition of the generous donation of a 27,000-acre preserve to the University of Florida by Elisabeth DeLuca to be used for education, research, and conservation, the University and the University of Florida Foundation seek to name the 27,000-acre preserve in Osceola County (Intersection of SR 60 & 441) the "DeLuca Preserve."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-253 to name the 27,000-acre preserve in Osceola County (Intersection of SR 60 & 441) the "DeLuca Preserve," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution #R20-253

Approved by the University of Florida Board of Trustees, December 4, 2020

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |
|--------------------------------|--|



Elisabeth DeLuca

Fred A. DeLuca Foundation - President



Elisabeth is the widow of Subway co-founder Fred DeLuca, who passed away after battling leukemia in 2015. The DeLucas, who were high-school sweethearts, married in 1966 and had a daughter, Erica and a son, Jonathan.

Fred co-founded the successful sandwich chain at the age of 17 in Bridgeport, Connecticut in 1965. He started the company with a loan from family friend and co-founder, Peter Buck. Buck still owns half of the privately held firm. Elisabeth inherited the other half. At the time of his death, DeLuca's net worth was \$3.5B, according to Forbes.

DeLuca enlisted family members to help with the new venture. His mother hosted weekly planning meetings at her kitchen table and later became a company officer and director. His sister, Suzanne Greco, became vice president in charge of operations and research and development. Elisabeth, whom he married in 1966, later worked at Subway's corporate headquarters. As of 2018, Subway had over 43,000 franchises worldwide and produced \$9B in sales a year.

Following his 2013 cancer diagnosis, Fred's sister, Suzanne, took over daily operations of the company. She remained CEO until her retirement in 2018, marking the first time in 53 years that the chain was not led by a family member. Suzanne still serves as a director of the Fred A. DeLuca Foundation. Fred and Elisabeth's son, Jonathan, serves as treasurer and director and implements the foundation's mission of providing education, job training, and skill development opportunities to young Americans.

Established in 1997, the DeLuca Foundation funding interests include health, community development, social & human services, arts & culture, sports & recreation.

Elisabeth is an alumna of the UConn School of Nursing and served on the school's advisory board. In response to a grant from the foundation in 2017, UConn trustees approved the naming of a visiting professorship in the School of Nursing as the DeLuca Foundation Visiting Professorship in Nursing Innovation and New Knowledge.



DeLuca Preserve







UF/IFAS
Office of the Vice President
Agriculture and Natural Resources

PÓ Box 110180 Gainesville FL 32611-0180 (352) 392-1971

October 14, 2020

Mr. Thomas J. Mitchell Vice President for Advancement University of Florida Advancement 1938 W. University Avenue Gainesville, FL 32603

Dear Tom,

Our development team has been working with Elisabeth DeLuca on a proposed naming for her gift of property to UF/IFAS in Osceola County to be called the "DeLuca Preserve."

This gift of property from Mrs. DeLuca- DeLuca Preserve- is nearly 27,000 acres of living laboratory in Central Florida which provides UF/IFAS the unique opportunity to conduct large-scale research in a natural setting while also establishing a new platform for teaching and instruction for our students. Even more, this property allows our faculty to fulfill their land grant mission through Extension programming that undoubtably will occur on this site. The DeLuca Preserve provides our scientists with access to a well-preserved, wildlife corridor and ecosystem, unparalleled amongst our peer institutions.

We are honored that Mrs. DeLuca had the foresight to protect this amazing piece of natural landscape in the heart of Florida for the best interest of the people our state. UF/IFAS, in turn, wishes to honor Mrs. DeLuca by naming this property after her family and ensuring that her generosity is remembered by future generations.

I respectfully request your support and assistance advancing this proposed naming to President Fuchs, the Board of Trustees, and any other university approvals as necessary.

Thank you for your consideration and please let me know if you have any questions.

Sincerely,

J. Scott Angle



RESOLUTION

| | Number: | R20-253 |
|---|--------------------------------|---|
| | Subject: | Naming the DeLuca Preserve |
| | Date: | December 4, 2020 |
| | • | WHEREAS, Elisabeth DeLuca has made a generous contribution of a 27,000-acre Osceola County (Intersection of SR 60 & 441) to the University of Florida for search, and conservation; |
| | name the 27,0 | WHEREAS, in grateful recognition for this contribution, the University seeks to 000-acre preserve in Osceola County (Intersection of SR 60 & 441) the "DeLuca" |
| | preserve in O | WHEREAS, the University of Florida Foundation seeks to name the 27,000-acre sceola County (Intersection of SR 60 & 441) the "DeLuca Preserve;" |
| | conferred by | WHEREAS , the University of Florida Board of Trustees has naming authority the Florida Board of Governors under its Regulations 1.001 and 9.005; |
| | that the 27,00 "DeLuca Pres | NOW, THEREFORE , the University of Florida Board of Trustees hereby resolves 00-acre preserve in Osceola County (Intersection of SR 60 & 441) be named the erve." |
| | Adopt | ed this 4th day of December, 2020, by the University of Florida Board of Trustees. |
| | | |
| М | orteza "Mori" l | Hosseini, Chair W. Kent Fuchs, President and Corporate Secretary |
| | | |



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS ACTION ITEM FCI3

December 4, 2020

SUBJECT: Naming: Archer Aviation eVTOL Lab

BACKGROUND INFORMATION

In recognition of the generous support of the Herbert Wertheim College of Engineering by Adam Goldstein, Brett Adcock and Archer Aviation, the University and the University of Florida Foundation seek to name the College's electric vehicle (EV) design lab the "Archer Aviation eVTOL Lab."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve R20-254 to name the Herbert Wertheim College of Engineering's electric vehicle (EV) design lab the "Archer Aviation eVTOL Lab," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached <u>materials</u> and <u>Resolution # R20-254</u>
Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| | proved by the University of Florida Bo | oard of Trustees, December 4, 2020 |
|--|--|--|
| | | |
| Morteza "Mori" Hosseini, Chair W. Kent Fuchs, President and Corporate Secret | rteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



Archer Aviation:

Archer Aviation is an aerospace company building an all-electric vertical takeoff and landing aircraft focused on improving mobility in cities. The company's mission is to advance the benefits of sustainable air mobility. Archer is designing, manufacturing, and operating a fully electric aircraft that can carry four passengers for 60 miles at speeds of up to 150mph while producing minimal noise. Archer's team is based in the San Francisco Bay Area.



Brett Adcock:

Brett is a technology entrepreneur and co-founder of Archer Aviation based in Palo Alto, CA. Prior to this, Mr. Adcock co-founded Vettery, an online talent marketplace that was acquired by The Adecco Group in February 2018. Brett is a UF alumnus with a degree in Business Administration (BSBA '08).



Adam Goldstein:

Adam is a technology entrepreneur and co-founder of Archer Aviation based in Palo Alto, CA. He is also a board member of directors for the Museum of American Finance. Prior to this, Mr. Goldstein co-founded Vettery, an online talent marketplace that was acquired by The Adecco Group in February 2018. He is a UF alumnus with a degree in Business Administration (BSBA '01).



Archer Aviation eVTOL Lab







Herbert Wertheim College of EngineeringOffice of the Dean

300 Weil Hall PO Box 116550 Gainesville, FL 32611-6550 352-392-6000 352-392-9673 Fax

September 28, 2020

Mr. Thomas J. Mitchell Vice President for Advancement University of Florida Advancement 1938 W. University Avenue Gainesville, FL 32603

Dear Tom,

Our development team has been working with Adam Goldstein and Brett Adcock on a proposed naming for the new electric vehicle (EV) design center to be named the "Archer Aviation eVTOL Lab."

The donors support undergraduate and graduate research on air and ground electric vehicles, such as solar-powered cars and electric aerial vehicles, notably drones and vertical take-off and landing (E-VTOL) technologies. This will be an appropriate and impactful naming for the College and the Mechanical and Aerospace Engineering Department as recognition for the two funds established. The first non-endowed fund to be known as the "Archer Aviation EV Design Center Fund" supports the reconstruction of the building that will house the new electric vehicle (EV) design center at the College and also supports the purchase of equipment with in the building. The second endowed fund's spendable income from the established "Archer Aviation EV Design Center Endowment" shall be used to support operation, maintenance, equipment and infrastructure of the EV Design Center Building as well as activities related to the design and study of electric vehicles.

I respectfully request your support and assistance advancing this proposed naming to President Fuchs, the Board of Trustees, and any other university approvals as necessary.

Thank you for your consideration and please let me know if you have any questions.

Sincerely,

Cammy R. Abernathy Dean



RESOLUTION

| Number: | R20-254 |
|-----------------------|---|
| Subject: | Naming the Archer Aviation eVTOL Lab |
| Date: | December 4, 2020 |
| generous con | WHEREAS , Adam Goldstein, Brett Adcock and Archer Aviation have made tributions to the University of Florida; |
| | WHEREAS, in grateful recognition for these contributions, the University seeks to bert Wertheim College of Engineering's electric vehicle (EV) design lab the ion eVTOL Lab;" |
| Wertheim Col Lab;" | WHEREAS, the University of Florida Foundation seeks to name the Herbert llege of Engineering's electric vehicle (EV) design lab the "Archer Aviation eVTOL |
| conferred by | WHEREAS , the University of Florida Board of Trustees has naming authority the Florida Board of Governors under its Regulations 1.001 and 9.005; |
| | NOW, THEREFORE , the University of Florida Board of Trustees hereby resolves ert Wertheim College of Engineering's electric vehicle (EV) design lab be named viation eVTOL Lab." |
| Adopt | ed this 4th day of December, 2020, by the University of Florida Board of Trustees. |
| | |
| Morteza "Mo | ri" Hosseini, Chair W. Kent Fuchs, President and Corporate Secretary |



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS ACTION ITEM FCI4

December 4, 2020

SUBJECT: Naming: Ronald Young Family Berm at Katie Seashole Pressly Stadium

BACKGROUND INFORMATION

In recognition of the generous support of the University of Florida by Ronald Young, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the Right Field Berm at Katie Seashole Pressly Stadium the "Ronald Young Family Berm."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-255 to name the Right Field Berm at Katie Seashole Pressly Stadium the "Ronald Young Family Berm," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution # R20-255

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



Ronald Young

Ron Young is an avid supporter and season ticket holder for Florida Gators Football, Softball, Volleyball, Gymnastics, and Men's Basketball. He and his wife, Janie, live in Gainesville and are retired. Ron and Janie have made several major gifts to Athletics.

Ron graduated from UF's Levin College of Law in 1971 and went on to practice law for several decades in Palm Beach County. Ron is a lifetime member of the UF Alumni Association.





EXISTING

PROPOSED

RONALD YOUNG FAMILY
BERM

(1) 23" x 62" ACM (1/4") sign with digital print overlay and laminate



SCOTT STRICKLIN DIRECTOR OF ATHLETICS SCOTTS@GATORS.UFL.EDU OFFICE (352) 375-4683 EXT. 6000 FAX (352) 384-2725

September 30, 2020

Tom Mitchell Vice President for Advancement University of Florida Advancement 1938 W. University Ave., Gainesville, FL 32603

Dear Tom,

I am writing you in reference to the proposed naming of the Ronald Young Family Berm at Katie Seashole Pressly Stadium. This will be the berm on the first base side.

We would like to ask for your permission to move forward with this approach and request your support in bringing this matter to the attention of President Fuchs and the Board of Trustees.

Thank you for your consideration.

Scott Stricklin Athletics Director

CC: Phil Pharr, Executive Director, Gator Boosters





RESOLUTION

| Number: | R20-255 |
|-------------------------|--|
| Subject: | Naming the Ronald Young Family Berm at Katie Seashole Pressly Stadium |
| Date: | December 4, 2020 |
| University of | WHEREAS, Ronald Young has made generous commitments to support the Florida; |
| to name the Berm;" | WHEREAS, in grateful recognition for these commitments, the University seeks Right Field Berm at Katie Seashole Pressly Stadium the "Ronald Young Family |
| | WHEREAS, the University of Florida Foundation and the University of Florida ciation seek to name the Right Field Berm at Katie Seashole Pressly Stadium the ng Family Berm;" |
| conferred by | WHEREAS , the University of Florida Board of Trustees has naming authority the Florida Board of Governors under its Regulations 1.001 and 9.005; |
| that the Righ Berm." | NOW, THEREFORE , the University of Florida Board of Trustees hereby resolves t Field Berm at Katie Seashole Pressly Stadium be named the "Ronald Young Family |
| Adopt | ted this 4th day of December, 2020, by the University of Florida Board of Trustees. |
| Morteza "Mo | ori" Hosseini, Chair W. Kent Fuchs, President and Corporate Secretary |



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS ACTION ITEM FCI5

December 4, 2020

SUBJECT: Naming: Henry and Nell Davis Pavilion

BACKGROUND INFORMATION

In recognition of the generous support of UF/IFAS Extension 4-H Camp Cherry Lake by Morris and Judy Steen, the University and the University of Florida Foundation seek to name the pavilion at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL the "Henry and Nell Davis Pavilion," to honor the Davis' legacy as 4-H champions for local and state youth.

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-256 to name the pavilion at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL the "Henry and Nell Davis Pavilion," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution # R20-256

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Approved by the University of Florida | Board of Trustees, December 4, 2020 |
|---------------------------------------|--|
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |





Henry Davis grew up in Davisville, FL participating in Escambia County 4-H and after graduation entered the U.S. Army, serving in post-war Germany. He would then enroll at the University of Florida College of Agricultural and Life Sciences (UF/IFAS CALS). After graduating in 1950 with a bachelor's in soil science he launched a 32-year Extension career with his first positions

in Santa Rosa and Gadsden Counties. He and his wife Nell Davis then relocated to Taylor County where he would serve 28 years as county extension director, and they would raise their family.

During his tenure with UF/IFAS Extension, Mr. Davis advanced agriculture, youth development and communities in the region with the establishment and growth of programs such as Taylor County Farm Bureau, the first Florida Forest Festival, the statewide 4-H Forest Ecology Program and more. He was honored with numerous awards including an official "Henry Davis Day" in 2002, the Florida Farm Bureau Distinguished Service Award, UF/IFAS CALS Award of Distinction, and in 2018 was inducted to the Florida 4-H Hall of Fame. If you asked Mr. Davis his most significant contribution, he would point to the time invested in youth through 4-H.

Mrs. Nell Davis supported Henry in his often long and irregular hours as a county extension director. She retired from the Department of Agriculture and Consumer Services after a 20 year career and was involved in a number of community programs including leading the Perry chapter of the Red Cross and serving as volunteer coordinator for the county. She passed away in 2006.

Mr. Davis provided generations of Taylor County youth with opportunities in 4-H clubs, Short Course and Congress trips to Gainesville, and summers at Camp Cherry Lake—supported in part by the sale of honey collected from 4-H club hives. He made an enduring



impact on many, and for some it was just the beginning of a lifelong mentorship. The *Henry Davis* **4-H Scholarship Fund**, endowed with the UF Foundation in 2017, supports opportunities for Taylor County's 4-H'ers in citizenship-leadership such as 4-H University, 4-H Legislature and camping.

Henry passed away August 31, 2020. His funeral service was a testament to the importance of UF and 4-H in his life, and the impacts he and his family made through Extension and particularly 4-H.



Henry and Nell Davis Pavilion



(Conceptual – UF/IFAS Extension 4-H Camp Cherry Lake Branding)



UF/IFAS
Office of the Vice President

1001 McCarty Hall D PO Box 110180 Gainesville, FL 32611 352.448.1435

October 5, 2020

Mr. Thomas J. Mitchell Vice President for Advancement University of Florida Advancement 1938 W. University Avenue Gainesville, FL 32603

Dear Tom.

The IFAS advancement team has been working with Morris and Judy Steen on a proposed naming for the recreational pavilion at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL.

Morris Steen grew up camping at Cherry Lake with his Taylor County 4-H Agent, Mr. Henry Davis. It was Mr. Davis who delivered Morris to Gainesville for his first day as a University of Florida student. As a Collegiate 4-H member at UF, Morris then returned to camp as summer staff, and Cherry Lake remains one of his favorite places. Mr. Davis would remain Morris's lifetime mentor as he served in the Navy and eventually returned home to serve as President of North Florida Community College.

Morris is a member of the Florida 4-H Foundation Board, has helped raise community support for Camp Cherry Lake renovations, and now he and Judy are making this endowed commitment that will provide critical annual resources to the facilities maintenance needs at camp. In honor of the impact Henry and Nell Davis have had on the Steens, along with other families through UF/IFAS Extension, it would be a fitting tribute to memorialize the Davises at the Camp Cherry Lake recreational pavilion in consideration of this gift.

I respectfully request your support and assistance advancing this proposed naming to President Fuchs, the Board of Trustees, and any other university approvals as necessary.

Thank you for your consideration and please let me know if you have any questions.

Sincerely,

J. Scott Angle, PHD

UF Vice President for Agriculture and Natural Resources

The Foundation for The Gator Nation

An Equal Opportunity Institution



RESOLUTION

| Number: | R20-256 |
|--------------------------------|---|
| Subject: | Naming the Henry and Nell Davis Pavilion |
| Date: | December 4, 2020 |
| University of local and state | WHEREAS, Morris and Judy Steen have made a generous contribution to the Florida in honor of Henry and Nell Davis and their legacy as 4-H champions for youth; |
| name the pav Nell Davis Pav | WHEREAS, in grateful recognition for this contribution, the University seeks to ilion at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL the "Henry and ilion;" |
| UF/IFAS Exten | WHEREAS , the University of Florida Foundation seeks to name the pavilion at sion 4-H Camp Cherry Lake in Madison, FL the "Henry and Nell Davis Pavilion;" |
| conferred by t | WHEREAS , the University of Florida Board of Trustees has naming authority the Florida Board of Governors under its Regulations 1.001 and 9.005; |
| • | NOW, THEREFORE , the University of Florida Board of Trustees hereby resolves on at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL be named the ell Davis Pavilion." |
| Adopte | ed this 4th day of December, 2020, by the University of Florida Board of Trustees. |
| | |
| Morteza "Mor | ri" Hosseini, Chair W. Kent Fuchs, President and Corporate Secretary |
| | |



COMMITTEE ON FACILITIES AND CAPITAL INVESTMENTS ACTION ITEM FCI6

December 4, 2020

SUBJECT: Naming: Ken and Linda McGurn Exhibition Hall

BACKGROUND INFORMATION

In recognition of the many generous and significant contributions made by Ken and Linda McGurn to the University of Florida and the Florida Museum of Natural History, the University and the University of Florida Foundation seek to name the Florida Museum of Natural History's Thompson Earth Systems Institute addition the "Ken and Linda McGurn Exhibition Hall."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-257 to name the Florida Museum of Natural History's Thompson Earth Systems Institute addition the "Ken and Linda McGurn Exhibition Hall" for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution #R20-257

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Approved by the University of Florida | a Board of Trustees, December 4, 2020 |
|---------------------------------------|--|
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



Ken & Linda McGurn



Through McGurn Investment Company (MIC) and other separate companies, the McGurn partnership has been instrumental in the Gainesville community's innovation and progress since 1978. Due to the couple's local real estate development projects, they have revitalized the downtown area, spurred new types of development and prioritized green and sustainable approaches to building. The McGurns also invest in high tech incubators and startup companies, fostering job creation and strengthening Gainesville's entrepreneurial community.

The couple and their companies have received more than 60 local, state, regional and national awards for their work, including a

Sustainable Florida Initiative Award from Governor Bush and a National Certificate of Merit from the U.S. Department of Housing and Urban Development.

The McGurns have also been honored by the Gainesville Chamber of Commerce for their volunteering and have served on and chaired dozens of boards. They have been active supporters of organizations working in housing and land development, sustainability and the environment, the arts, education, and programs supporting underserved communities.

The University of Florida has also been a recipient of the McGurns' involvement and generosity. The couple established named funds in the Warrington College of Business (WCOB) and the Florida Museum of Natural History (FLMNH), and has supported many other areas at UF, including the Machen Florida Opportunity Scholars, Performing Arts, the Harn Museum of Art and the College of Design, Construction and Planning (DCP). Both Ken and Linda serve on the UF WCOB Dean's Advisory Board and previously served on the college's Center for Entrepreneurship and Innovation Advisory Board. In 2012, they became the first couple in UF's history to be named Distinguished Alumni and, in 2016, were honored as UF Foundation Life Time Volunteers.

At UF, Linda is a member of the UF Foundation executive board (past chair). She was previously co-chair of UF Women, which worked to engage women in leadership and philanthropy at UF, and a member of the Steering Committee for UF's Fisher School of Accounting. Linda attended UF, where she earned a Bachelor of Science in accounting from WCOB in 1973 and a Juris Doctorate from the Levin College of Law in 1978.

At UF, Ken is a member and past chair of FLMNH and the UF WCOB Bergstrom Center for Real Estate Studies boards, and a member of DCP's Florida Institute for Built Environment Resilience board. He previously served on the UF Foundation board. Like his wife, Ken also attended UF, receiving a Bachelor of Science in business administration in 1972 and a master's degree in 1973 and doctorate in 1981 in real estate, finance and economics. He is a Vietnam veteran and was a spy, paratrooper, and the youngest Captain in the military to command a spy plane in Europe at age 22.



Ken and Linda McGurn Exhibition Hall Conceptual Rendering*



*Temporary recognition on current Florida Museum facility; recognition to be transferred to Thompson Earth Systems Institute facility upon completion



Florida Museum of Natural History
Office of the Director

Museum Road PO Box 117800 Gainesville, FL 32611-7800 352-392-1721 Tel 352-392-8783 Fax

October 20, 2020

Mr. Thomas J. Mitchell Vice President for Advancement University of Florida Advancement 1938 W. University Avenue Gainesville, FL 32603

Dear Tom,

Our development team has been working with Ken and Linda McGurn on a proposed naming for the Florida Museum of Natural History's Thompson Earth Systems Institute Addition. We are proposing the name: "Ken and Linda McGurn Exhibition Hall".

As you know, this past year Ken and Linda served UF Advancement as Co-Chairs of the Go Greater Capital Campaign. This year's theme was 'Your Environment' which was extremely appropriate as the McGurns have been life-long supporters of Florida's natural environments. They are largely responsible for the renewed vitality of Gainesville's urban core where all of their real estate and urban redevelopment activities are accomplished with a commitment to environmental stewardship and ecological sustainability. They have contributed their time, talent, and treasure to UF, and especially the Florida Museum, for over a quarter-century, supporting exhibits and public programming that promote understanding of Florida's unique biological and physical environments. The deep commitment of Ken and Linda to share the wonder of natural Florida with students, families and life-long learners will be recognized with the naming of this museum space dedicated to inspiring people to care about life on Earth.

I respectfully request your support and assistance advancing this proposed naming to President Fuchs, the Board of Trustees, and any other university approvals as necessary.

Thank you for your consideration and please let me know if you have any questions.

Douglas S. Jones

Director and Professor

The Foundation for The Gator Nation



RESOLUTION

| Number: | R20-257 |
|-----------------------------|---|
| Subject: | Naming the "Ken and Linda McGurn Exhibition Hall" |
| Date: | December 4, 2020 |
| | WHEREAS, Ken and Linda McGurn are valued members of the University of nunity who have made a generous and significant contribution to the Florida atural History in support of the Thompson Earth Systems Institute addition; |
| | WHEREAS, in grateful recognition of this contribution, the University seeks to rida Museum of Natural History's Thompson Earth Systems Institute addition the la McGurn Exhibition Hall;" |
| Museum of N McGurn Exhib | WHEREAS, the University of Florida Foundation seeks to name the Florida atural History's Thompson Earth Systems Institute addition the "Ken and Linda pition Hall;" |
| conferred by | WHEREAS, the University of Florida Board of Trustees has naming authority the Florida Board of Governors under its Regulations 1.001 and 9.005; |
| | NOW, THEREFORE , the University of Florida Board of Trustees hereby resolves da Museum of Natural History's Thompson Earth Systems Institute addition be en and Linda McGurn Exhibition Hall." |
| Adopt | ed this 4th day of December, 2020, by the University of Florida Board of Trustees. |
| Morteza "Mo | ri" Hosseini. Chair W. Kent Fuchs. President and Corporate Secretary |

University of Florida Board of Trustees

Major Capital Construction Projects - Update

Report Date: December 3, 2020

| | | | Program Plannin | _ | | - | Requested Budget Amendment Funding | | | Requires BOG/FCO | | | | |
|-------------------|----------------|---|-----------------|----------|-----------------|---------------|---------------------------------------|-------|-----------------|------------------|------|-----------------|--------------------|---|
| Project Phase | Project Number | Ü | Budget |] | Ratified Budget | Amendment | Source | Net C | Changes To Date | Amendment (Y) | Fina | al Project Cost | Planned Completion | Status/Comments: |
| Construction | UAA-41 | Florida Ballpark (Baseball) | \$ 45,878,8 | 800 \$ | 65,000,000 | \$ - | | \$ | 19,121,200.00 | | \$ | 65,000,000 | August-2020 | Substantial Completion |
| Construction | UAA-53 | Football Facility Training Complex | \$ 59,961,7 | 700 \$ | 59,961,700 | \$ 29,027,800 | Bonds | \$ | - | N | \$ | 88,989,500 | February-2022 | Sitework and Demolition of old Baseball Stadium underway |
| Construction | UAA-53A | Offsite Utility Infrastructure Improvements | \$ 8,791,1 | 100 \$ | 7,700,000 | \$ 1,091,100 | Utility Infrastructure Fund | \$ | - | N | \$ | 8,791,100 | August-2021 | Construction Started |
| Construction | UF-221 | Norman Hall Remodeling and Addition (Phase III) | \$ 31,500,0 | 000 \$ | 31,470,362 | \$ - | | \$ | 6,729,240.00 | | \$ | 38,199,602 | March-2021 | Phases I & II Completed, Phase III Completion March-2021 |
| Construction | UF-394 | PK Yonge Developmental School Phase II | \$ 20,877,5 | 500 \$ | 28,000,000 | \$ - | | \$ | - | | \$ | 28,000,000 | December-2020 | Construction 95%, December 2020 completion on schedule. |
| Construction | UF-461 | Herbert Wertheim Laboratory for Engineering Excellence (Nuclear Science Building) | \$ 53,000,0 | 000 \$ | 72,316,512 | \$ - | | \$ | 20,213,945.00 | | \$ | 73,213,945 | October-2020 | New Building is Complete/Occupied, Renovations/Infrastructuin Nuclear Sciences Bldg. Scheduled completion December 20 |
| Construction | UF-615 | Electrical Substation 2 Cable and Switchgear Replacement | \$ 5,400,0 | 000 \$ | 6,010,162 | \$ - | | \$ | - | | \$ | 6,010,162 | September-2020 | Substantial Completion |
| Construction | UF-622 | VET Med Central Energy Plant (ESCO) | \$ 25,000,0 | 000 \$ | 25,656,151 | \$ - | | \$ | - | | \$ | 25,656,151 | October-2020 | Substantial Completion |
| Construction | UF-639 | Architecture Building Exterior Envelope Repairs | \$ 5,000,0 | 000 \$ | 5,000,000 | \$ - | | \$ | _ | | \$ | 5,000,000 | March-2021 | Construction 20% Complete |
| Construction | UF-641 | East Campus Data Center Utility Upgrade | \$ 14,816,6 | | 14,816,600 | \$ - | | \$ | - | | \$ | 14,816,600 | January-2021 | Construction 35% Complete |
| Construction | UF-642 | SW Campus Transportation Road Improvement | \$ 9,400,0 | 000 \$ | 9,400,000 | \$ - | | \$ | - | | \$ | 9,400,000 | December-2021 | Construction 15% Complete |
| Construction | UF-649 | Basic Sciences Building 1rst Floor Renovation | \$ 4,301,7 | 700 \$ | 4,000,000 | \$ - | | \$ | - | | \$ | 4,000,000 | February-2021 | Construction 10% Complete |
| Construction Tota | 1 | (12 Projects) | \$ 283,927,4 | 100 \$ | 329,331,487 | \$ 30,118,900 | | \$ | 46,064,385 | | \$ | 367,077,060 | | |
| Design | UAA-60 | Soccer Team Facility & Lacrosse Facility Improvements | \$ 7,100,0 | | 7,100,000 | | | \$ | - | | \$ | 7,100,000 | September-2021 | ERP-1 and 75% Construction Documents |
| Design | UF-200 | University Public Safety Building (Police Department) | \$ 26,000,0 | \$ | - | \$ - | | \$ | - | | \$ | - | May-2022 | Design Development |
| Design | UF-373 | UF-373 - FLMNH Special Collections Building (Alcohol Storage) | \$ 11,100,0 | 000 \$ | - | \$ 3,100,000 | Internal Strategic Funds | \$ | - | N | \$ | 11,100,000 | November-2021 | Design Development |
| Design | UF-623B | Thermal Utilities Infrastructure (Museum Rd) | \$ 50,000,0 | 000 \$ | - | \$ - | | \$ | - | | \$ | - | April-2023 | Phase 1 Design Complete, Phase 2 Construction Documents |
| Design | UF-623C | Electrical Utilities Infrastructure (Substation) | \$ 45,000,0 | 000 \$ | - | \$ - | | \$ | - | | \$ | - | December-2022 | 60% Construction Documents |
| Design | UF-623D | Central Energy Plant & Utilities Infrastructure | \$ 200,000,0 | | - | \$ - | | \$ | - | | \$ | - | July-2025 | Design Development |
| Design | UF-632 | Data Science and Information Technology Building | \$ 150,000,0 | 000 \$ | 150,000,000 | \$ - | | \$ | 15,000,000.00 | | \$ | 150,000,000 | February-2023 | ERP-1 & 2 construction to start in December 2020, Building design 75% Construction Documents |
| Design | UF-638 | Student Health Care Center Phase 2 (Infirmary) | \$ 26,000,0 | | - | \$ - | | \$ | - | | \$ | - | March-2022 | Design Development |
| Design | UF-640 | Blueberry Research Facility | \$ 5,092,0 | | | \$ - | | \$ | - | | \$ | - | September-2021 | 100% Construction Documents |
| Design | UF-644 | Inner Road Surface Paving Improvements | \$ 5,000,0 | | - | * | | \$ | - | | \$ | - | March-2022 | Advanced Schematic Design |
| Design | UF-644A | Inner Road Thermal Infrastructure Improvements | \$ 10,000,0 | | | \$ - | | \$ | - | | \$ | - | March-2022 | Advanced Schematic Design |
| Design | UF-644B | Reitz Union Lawn Thermal Infrastructure Improvements | \$ 15,000,0 | | | \$ - | | \$ | = | | \$ | - | March-2022 | Advanced Schematic Design |
| Design | UF-656 | Landscape Master Plan | \$ 5,000,0 | 000 \$ | - | \$ - | | \$ | - | | \$ | - | December-2021 | Advanced Schematic Design |
| Design | UF-657 | Peabody Hall Dean of Students Renovation | \$ 3,985,5 | 500 \$ | - | \$ - | | \$ | - | | \$ | - | January-2022 | Advanced Schematic Design |
| Design Total | | (14 Projects) | \$ 559,277,5 | | 157,100,000 | | | \$ | 15,000,000 | | \$ | 168,200,000 | | |
| Planning | UAA-62 | Ben Hill Griffin Stadium Facility Upgrades | \$ 70,000,0 | | | \$ - | | \$ | - | | \$ | - | TBD | AE/CM Selection & Budget Confirmation |
| Planning | UF-606 | Whitney Laboratory for Marine Bioscience | \$ 28,500,0 | | - | | | \$ | - | | \$ | - | TBD | Facility Program and AE Selection |
| Planning | UF-626 | Powell University House | \$ 10,000,0 | | - | | | \$ | - | | \$ | - | TBD | AE Selection |
| Planning | UF-645 | Shealy Drive Parking Deck | \$ 3,000,0 | | - | | | \$ | - | | \$ | - | TBD | Facility Program Development |
| Planning | UF-651 | Florida Museum Natural History North Florida Water Gallery | \$ 2,750,0 | | | \$ - | | \$ | - | | \$ | - | October-2021 | Design Builder Selection |
| Planning | UF-652 | Biomedical Research Building | \$ 58,200,0 | | - | | | \$ | - | | \$ | - | TBD | Facility Program Development |
| Planning | UF-654 | New Honors Residential Building | \$ 197,000,0 | | - | · · | | \$ | - | | \$ | - | TBD | Facility Program Development, Design Criteria, Bond Initiativ |
| Planning | UF-666 | Project, Eglin AFB, Modular Building | \$ 2,500,0 | | - | · | | \$ | - | | \$ | - | July-2021 | Facility Program and Site Planning |
| Planning | UF-667 | Racquet Club Dining Renovation | \$ 5,800,0 | 000 \$ | - | \$ - | | \$ | - | | \$ | - | TBD | Facility Program Development |
| Planning Total | | (9 Projects) | \$ 377,750,0 | | - | | | \$ | - | | \$ | - | | |
| Grand Total | | (35 Projects) | \$ 1,220,954,9 | ۸۸۸ ه | 486,431,487 | \$ 33,218,900 | | \$ | 61,064,385 | | \$ | 535,277,060 | | |

| Chro | onology of P | Project Budget Amendments | Amendment Pric | or BOT Approved Budget | Requested Budget Amendment | BOT Approved Budget Amendment | Revised Project Budget | Requires BOG/FCC Amendment (Y) | |
|--------------|--------------|--|-----------------------|---------------------------|-------------------------------|----------------------------------|------------------------|-----------------------------------|--|
| Design | UF-632 | Data Science and Information Technology Building | September 28, 2020 \$ | 135,000,000 \$ | 15,000,000 | \$ 15,000,000 | \$ 150,000,000 | Y | The construction economy since 2018 has seen robust growth and driven material and labor costs higher. Geotechnical requirements and change of building's location on site required increased excavation, retaining walls, and other site-related, as well as building structure and superstructure costs. Imminent changes to Florida Building Code during design phases requires additional electrical costs. BOG Amendment will be accomplished concurrent with the October 1, FCO Budget Submission |
| Construction | UF-221 | Norman Hall Remodeling and Addition (Phase III) | September 28, 2020 \$ | 31,470,362 \$ | 6,729,240 | \$ 6,729,240 | \$ 38,199,602 | Y | The project scope has been expanded to include the renovation of the ground floor of the Norman Library. Renovations to the first and second floor Norman library are completed. The renovation will provide for efficient and configurable meeting spaces, flexible furnishings, modern labs, studio's, classrooms, and AV equipment to support modern Tele-conferencing technologies. Also additional site Utility Infrastructure including steam, condensate, and manhole construction is included. BOG Amendment will be accomplished concurrent with the October 1, FCO Budget Submission |
| Design | UAA-41 | Florida Ballpark (Baseball) | March 22, 2018 \$ | 45,878,800 \$ | 19,121,200 | \$ 19,121,200 | \$ 65,000,000 | N | Project site moved from current baseball stadium to SW campus by recommendation of BOT Committee on Capital Investments. The move facilitates increased capacity for new stadium and provides for optimal siting for new Football Operations Facility and New Student Health Care Center (Infirmary). Per BOG Regulation 14.003, DSO's are exempt from FCO budget approval and amendment guidelines. |
| Design | UF-394 | PK Yonge Developmental School Phase II | June 6, 2019 \$ | 20,877,500 \$ | 7,122,500 | \$ 7,122,500 | \$ 28,000,000 | N | Project budget increased to accommodate inflationary adjustment due to (4) years delay awaiting Legislative construction Funding. Project was included in Legislative Fixed Capital Outlay Budget Request and received full BOG approval prior to Legislative submission for increased funding |
| Construction | UF-461 | Herbert Wertheim Laboratory for Engineering Excellence (Nuclear Science Building) | September 28, 2020 \$ | 72,316,512 \$ | 897,433 | \$ 897,433 | \$ 73,213,945 | N | Funding was provided by Facilities Services to upgrade the Mechanical Exhaust system as a part of the Renovation to the existing Nuclear Sciences Building, Additional funding provided by the College of Engineering for Donor signage. |
| Construction | UF-461 | Herbert Wertheim Laboratory for Engineering Excellence (Nuclear Science Building) | June 6, 2019 \$ | 67,247,568 \$ | 5,068,944 | \$ 5,068,944 | \$ 72,316,512 | N | Project budget increase funded by the College of Engineering for Classroom/Conf. Room Technology Equipment, Research Laboratory Equipment, Teaching Laboratory |
| Construction | UF-461 | Herbert Wertheim Laboratory for Engineering Excellence (Nuclear Science Building) | March 22, 2018 \$ | 55,400,000 \$ | 11,847,568 | \$ 11,847,568 | \$ 67,247,568 | N | Additional donor/college funding provided to accommodate heavier concrete superstructrure, energy efficient south facing shading structure, upgrades to AV/Furniture/Equipment, and AE fee for design enhancements. Additional funding & scope added to project by Facilities Services (PPD) to economize construction of campus site utility infrastructure in the immediate vicinity of the project |
| Design | UF-461 | Herbert Wertheim Laboratory for Engineering Excellence (Nuclear Science Building) | June 9, 2016 \$ | 53,000,000 \$ | 2,400,000 | \$ 2,400,000 | \$ 55,400,000 | N | Project budget was amended in the Fixed Capital Outlay Legislative Budget Request to accommodate multi- year PECO request funding delays coinciding with market escalation. |
| Deign | UF-373 | UF-373 - FLMNH Special Collections Building (Alcohol Storage) | December 3, 2020 \$ | 8,000,000 \$ | 3,100,000 | \$ 3,100,000 | \$ 11,100,000 | N | The Facility Program budget was established at \$8M as a challenge to our design-builders. We have presently designed the simplest building with the best value analysis already performed. This design would give us the minimum space/equipment necessary in the building to address the program. FLBOG FCO Budget Amendment is not required due to the budget amendment being below the \$5M threshold as stipulated in BOG Regulation 14.003(4)e. |
| Construction | UAA-53 | Football Facility Training Complex | December 3, 2020 \$ | 59,961,700 \$ | 29,027,800 | \$ 29,027,800 | \$ 88,989,500 | N | While the Design Professional and the CM teams were procured in accordance with the initial schedule, the design phase was changed to August 2018 through June 2020 and the Construction Phase was changed to July 2020 through December 2021. The completion delay of approximately 18 months was based on the need for the new baseball facility to be complete prior to demolition of the existing facility. The net assignable square footage of the facility was initially programmed at approximately 104,000 square feet, while the relocated facility has grown to incorporate several all-athlete areas and a separate maintenance facility which now encompasses over 111,000 square feet. The purpose of the facility has changed from strictly a football-oriented facility to incorporate the all athlete areas. In addition, the maintenance use directed a separate facility. These changes constitute the overall program increase. FLBOG FCO Budget Amendment is not required due to DSO's being exempted from BOG Regulation 14.003. |
| Construction | UAA-53A | Offsite Utility Infrastructure Improvements | December 3, 2020 \$ | 7,700,000 \$ | 1,091,100 | \$ 1,091,100 | \$ 8,791,100 | N | Due to the magnitude of major utility disruptions to accomplish the base project, it was deemed prudent to accomplish additional infrastructure needs, and eliminate future utility disruptions. Additional work includes stormwater system upgrades, electrical system upgrades to serve the new Student Health Care Center, upgraded steam connections to O'Connell Center & Van Fleet Hall, and roadway work due to the storm system upgrades. |



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS AGENDA

Friday, December 4, 2020 ~11:20 a.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL

Thomas G. Kuntz (Chair), David L. Brandon, Sylvain Doré, James W. Heavener, Daniel T. O'Keefe,

Committee Members:

Rahul Patel, Marsha D. Powers Call to Order and WelcomeThomas G. Kuntz, Chair 1.0 2.0 Review and Approval of Minutes......Thomas G. Kuntz, Chair 3.0 June 5, 2020 November 20, 2020 4.0 Action ItemsThomas G. Kuntz, Chair FSPPM1 Housing Rental Rates...... Chris Cowen, Senior Vice President and CFO Discussion Items......Thomas G. Kuntz, Chair 5.0 5.1 UFICO UpdateBill Reeser, Chief Investment Officer, UFICO 5.2 Furlough Process Update......Jodi Gentry, Vice President for Human Resources 5.5 Housing and Central Energy Plant Information Chris Cowen 6.0 New BusinessThomas G. Kuntz, Chair 7.0 AdjournThomas G. Kuntz, Chair



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS Meeting Minutes Friday, June 5, 2020 President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL Time Convened: 10:47 a.m. Time Adjourned: 11:50 a.m.

Committee and Board members present:

David L. Brandon, James W. Heavener, Morteza Hosseini (Board Chair), Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Marsha D. Powers, Jason J. Rosenberg, Robert G. Stern, Ray G. Thomas, Anita G. Zucker

Others present were:

W. Kent Fuchs, President; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; D'Andra Mull, Vice President for Student Affairs; David Nelson, Senior Vice President for Health Affairs and President of UF Health; David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Jack Payne, Senior Vice President for Agriculture and Natural Resources; Curtis Reynolds, Vice President for Business Affairs; members of the University of Florida Community, and other members of the public and the media.

1.0 Call to Order and Welcome

Committee Chair Thomas G. Kuntz welcomed everyone in attendance and called the meeting to order at 10:47 a.m.

2.0 Verification of Quorum

Provost and Senior Vice President Joseph Glover verified a quorum with all members present.

3.0 Review and Approval of Minutes

The Committee Chair asked for a motion to approve the minutes of the March 26, 2020 and May 11, 2020 committee meetings. The Committee Chair asked for further discussion, after which he asked for all in favor of the motion and any opposed and the motion was approved unanimously.

The Committee considered the following Action Items:

4.0 Action Items

FSPPM1: Preliminary Operating Budget FY21

Committee Chair Kuntz called on Assistant Vice President George Kolb, who gave an overview of the action item. He explained that the budget being presented only includes UF, UAA, and Faculty Practice and indicated that approval of the preliminary budget was required to be submitted to BOG by July 1, 2020. AVP Kolb noted that there is a lot of uncertainty in the numbers, and that fourth quarter numbers are estimated and used to make annual projections. There was a conversation about State Appropriations and Patient Service Revenue, in which AVP Kolb explained that updates are still being made and numbers would likely change. Committee Chair Kuntz questioned whether the numbers/final budget would be presented to the Board again and suggested the need for another look. AVP Kolb explained that the approved preliminary budget will be presented to BOG, then at the next Board of Trustees meeting, the entire enterprise budget would be presented to the Board for approval.

The Committee Chair asked for a motion to approve Action Item FSPPM1 which was made by Trustee O'Keefe, and a second, which was made by Trustee Powers for recommendation to the Board for its approval on the Consent Agenda. The Committee Chair asked for further discussion and asked for all in favor of the motion and any opposed and the motion was approved unanimously.

FSPPM2: Estimated DSO Use of University Resources for FY21

Committee Chair Kuntz asked Assistant Vice President Alan West to provide an overview of the action item. AVP West explained that the action item is in response to a comment from the Auditor General and briefly went over recent changes to the report including adding a row showing the main source of funds for reimbursements and another showing travel expenses paid using state funds. Committee Chair Kuntz noted that the University is in compliance with state regulations.

The Committee Chair asked for a motion to approve Action Item FSPPM2 which was made by Trustee Hosseini, and a second, which was made by Trustee O'Keefe for recommendation to the Board for its approval on the Consent Agenda. The Committee Chair asked for further discussion and asked for all in favor of the motion and any opposed and the motion was approved unanimously.

The following Discussion/Informational Items were the addressed by the Committee:

5.0 Discussion

5.1 UFICO Update

Committee Chair Kuntz began the discussion by introducing Bill Reeser from UFICO. Mr. Reeser gave an update on the performance of UF's endowment and operating portfolios. He indicated that as of April 30, UF's endowment pool is in approximately the same place as it was 12 months ago and the fiscal year ending balance will likely be close to the value at the beginning of the fiscal year. He then moved on to the operating portfolio, explain that despite volatility, return on these funds is positive. He stated that as of May 31, 2020 this portfolio has a 2% FYTD return. Additionally, Mr. Reeser noted that this portfolio is operating with a high level of liquidity and safety. Committee Chair Kuntz asked for questions, and complimented Mr. Reeser and UFICO on their ongoing collaboration and outreach with the University.

5.2 UFF Spend Distribution

Committee Chair Kuntz introduced Vice President Tom Mitchell, who provided a brief overview of the UFF Spend Distribution discussion. He explained that 99.5% of the endowment is designated by donors for restricted purposes and that the largest portion of the payout to the University, around 35%, goes towards faculty and staff support followed by student support at 26%. Vice President Mitchell then introduced Bill Reeser from UFICO to discuss investment returns. Mr. Reeser explained UFICO does a deep dive annually into UFF endowment portfolio, and that 10-year investment returns were 7.9%. He indicated that the endowment outperformed the 60/40 and CPI benchmarks while assuming 30% less risk and noted that FY20-21 projections show an estimated value of \$1.70B. Following Mr. Reeser's presentation, David Christie from Advancement discussed UFF's market value based spend policy. He explained that the University's policy adjusts automatically every quarter, payout is 4% of spending base (85% to 95% of market value), and that payouts are suspended if market value drops to 70% of gift value. He indicated that the policy is both conservative and timely, and that the FY21 payout for individual endowments is projected to decrease 3-8% from FY20. Committee Chair Kuntz mentioned the importance of the Board understanding the spend policy and reiterated that almost all payouts are restricted by donors. Trustee O'Keefe questioned whether the spend goes to faculty and staff support, and VP Mitchell confirmed that it does in the way of endowed chairs and similar.

5.3 Faculty Hiring Report

Vice President Jodi Gentry began the discussion by providing a brief overview of the Faculty Hiring Report. She stated that there was not much activity during the spring semester and as of Fall, the student to faculty ratio is at 17:1. Vice President Gentry explained that the University has hired a total of 445 net new faculty under the Faculty 500 initiative and reminded the Board that the University had actually offered and filled 509 positions. Committee Chair Kuntz questioned whether the new Artificial Intelligence initiative (which includes adding 100 new AI faculty) should be added to the Faculty 500. In response to Committee Chair Kuntz' question, Board Chair Hosseini gave a brief history of the Faculty 500 initiative and explained that the university is still not where it needs to be. He suggested that UF continue to hire the best of the best in order to reach 500 net new hires and a student to faculty ratio of 16:1. Additionally Board Chair Hosseini suggested that an Artificial Intelligence initiative to add 100 net new AI faculty be separate from the Faculty 500, and that the Board would vote on this at the next Board meeting. Committee

Chair Kuntz indicated that Provost Glover and Vice President Gentry would present the AI initiative at the next meeting. Vice President Gentry mentioned that the university is currently recruiting over 300 faculty and that she looks forward to presenting new information at the next meeting.

Following the Faculty Hiring Report discussion, Committee Chair Kuntz asked Provost Glover to discuss recent performance metrics. Provost Glover gave an overview of the University's performance metrics explaining that UF had exceeded most goals but fell short of a few. He explained that UF achieved an 88.4% 6-year graduation rate instead of the 90% goal set. Board Chair Hosseini suggested that Vice Chair Kuntz have a conversation with the BOG Chairman regarding the metric and UF's point proposal. Provost Glover indicated that if a new metric is needed that he would provide options for the Board to consider.

5.4 Quarterly Financials

Due to time constraints, this item was not discussed. Committee Chair Kuntz asked that the Board review the information provided and reach out to Assistant Vice President Alan West and Assistant Vice President George Kolb with any questions. He also noted that the University was currently searching for a new Vice President and Chief Financial Officer.

6.0 New Business

There was no new business to come before the committee.

7.0 Adjourn

There being no further discussion, Committee Chair Kuntz adjourned at the meeting at 11:50 a.m.



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS Pre-Meeting Minutes Virtual Meeting Friday, November 20, 2020 Time Convened: 1:01 p.m.

Time Adjourned: 2:00 p.m.

Committee and Board members present:

Thomas G. Kuntz (Committee Chair and Board Vice Chair), Richard P. Cole, Sylvain Doré, James W. Heavener, Daniel T. O'Keefe, Rahul Patel, Trevor J. Pope, Marsha D. Powers

Others present:

W. Kent Fuchs, President; Chris Cowen, Senior Vice President and Chief Financial Officer; Jodi Gentry, Vice President for Human Resources; Amy Hass, Vice President and General Counsel; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Curtis Reynolds, Vice President for Business Affairs; George Kolb, Assistant Vice President, Financial Analysis and Budget; William Reeser, Chief Investment Officer; Melissa Stuckey, Associate Athletics Director; Alan West, Assistant Vice President and University Controller; members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Thomas G. Kuntz welcomed everyone in attendance and called the meeting to order at 1:01 p.m.

2.0 Roll Call

Board Staff conducted a roll call of all Committee and Board members present.

3.0 Review Agenda for TBD Meeting

The following items were addressed by the Committee:

3.1 Review Minutes

November 20, 2020

3.2 Action Items

FSPPM1

Committee Chair Kuntz asked Senior Vice President Chris Cowen to provide an overview of the action items. SVP Cowen explained that the first action item relates to an increase in housing fees up to 4 ½ percent over the next 5 years beginning Fall 2021. He indicated

that no increase has been made since 2005 and that by increasing fees the university will be able to renovate dorms where needed and potentially build new housing. Additionally, he mentioned that even with the proposed increase, on-campus housing rates will remain low compared to the surrounding market. Committee Chair Kuntz expressed the need for rates to remain lower than off-campus housing. SVP Cowen confirmed that rates will be affordable and remain lower than off-campus options. He also proposed that the committee provide the Board with an annual update including comparative rates. Committee Chair Kuntz agreed and stated that the action item will be presented at the December meeting.

FSPPM2

Senior Vice President Cowen provided a brief overview of the second action item explaining that it relates to a \$50 million bond issuance for a football training center and improvements to the soccer and lacrosse facility. Committee Chair Kuntz asked Associate Athletics Director Melissa Stuckey for feedback on conversations with Board of Governors and Division of Bond Finance, and for a quick recap of the projects included in the bond request. Melissa indicated that this has been presented 3 times, but the timeline has been impacted each time due to COVID. She stated that BOG and DBF have the package, but she is still waiting on feedback and hopes to be able to say it's been signed off on at the December BOT meeting. Stuckey also explained that the lacrosse and soccer plans are part of the master plan that will provide the soccer team with support space/offices and needed improvements to the lacrosse facility. She mentioned that the football training center will be completed first, then they will move on to lacrosse and soccer. Committee Chair Kuntz questioned whether everyone fully understood that lacrosse and soccer were included in the bond and if they were onboard with the plan. Stuckey stated that she will ensure understanding. With no questions from the committee, Committee Chair Kuntz ended the item discussion and stated that it will be presented at the December BOT meeting.

3.3 Discussion Items UFICO Update

Committee Chair Kuntz asked Chief Investment Officer Bill Reeser to provide the committee with a snapshot of his presentation for the December BOT meeting. Mr. Reeser began by providing an overview of UF's Endowment Portfolio, noting that despite market volatility, the university ended the year up 3.7%. In regard to UF's Operating Portfolio, the university ended the year at net 2.8%. He indicated that over 75% of the allocations are highly liquid. Committee Chair Kuntz encouraged committee feedback on how to maximize earnings from the operating pool without taking excessive risk. He also questioned the Endowment Quarterly Return Ranking and suggested the slide be adjusted to show rankings based on performance vs. benchmark rather than return alone. There was a short discussion about whether the figures presented were net and how peer groups were defined. Mr. Reeser indicated that the numbers are indeed net and that peer groups are sorted by all endowments and all billion+ endowments. Committee Chair Kuntz asked that the report include additional

information and Mr. Reeser agreed to make the changes. There was no further discussion.

Furlough Process Update

Vice President Jodi Gentry began the discussion on the furlough process by emphasizing that there were no plans for a university-wide furlough. She explained that the furlough plan was created in a way that allows each college to decide whether they want to use it. She expressed that it is a tool that is available for use if needed, and if used, must be done so in a targeted manner i.e. work stoppage or funding issues. Further, she stated that the plan excludes Graduate Assistants and was not created to reduce faculty. Additionally, if used, any furlough decisions will have to be approved by the college Dean or Vice President and HR. Committee Chair Kuntz questioned whether this item is present on any other committee agenda and whether it will require approval. VP Gentry confirmed that it is only on this committee agenda and will not require approval. It is being presented for discussion purposes only following the regulation change/approval at the last BOT meeting in September. Trustee Sylvain Dore' asked whether there is an early retirement option in place as alternative to furlough. VP Gentry explained that there is something in place, and that a plan has been approved by the Board Chair and Vice Chair, but the university is still consulting with the Union. Additionally, she stated that the early retirement incentive is positioned as an expanded sick leave cash-out option. Committee Chair Kuntz asked whether this option will be voluntary and at the choice of the faculty member. VP Gentry confirmed that it is voluntary for both the college and faculty.

Faculty 500 Update

Vice President Jodi Gentry gave a brief overview of the most recent faculty hiring report highlighting that the university has added over 500 new positions with net new hires totaling 457. She stated that at this point, the challenge is managing normal attrition; however, recruitment efforts continue. Committee Chair Kuntz noted the great improvements since 2009 along with the huge efforts that have been made towards achieving the Faculty 500 goal. Trustee Dore' noted that despite the increase in faculty, resources have remained the same. There was then a brief discussion around this topic in which Trustee O'Keefe and Cole, and Committee Chair Kuntz each made statements about increased efficiency and the effort made to allocate resources and funding and plans to build new space.

CFO Report

Senior Vice President Chris Cowen began the discussion by explaining that the CFO Report is a narrative he created to provide context around the number's that are historically presented. He spoke briefly about each section beginning with Procurement, noting their ongoing effort to procure PPE during recent times. SVP Cowen then mentioned that he is working with UFICO in regard to UF's investment funds and is also working to combine the quarterly financial reports to make the information more seamless and easier to read. In regard to financials, he noted that non-compensation spending is 18% over budget but actually 6% below last years spend — likely due to this

year's budget being made and approved conservatively due to COVID and the uncertainty surrounding it. Committee Chair Kuntz suggested that it may be helpful for SVP Cowen to have 1:1 conversation with the committee members to gather a good understanding of what the Board would like to see. SVP Cowen agreed to reach out and gather input. He also mentioned that he is working on a multi-year budget forecast.

Housing and Central Energy Plant Information

Senior Vice President Cowen indicated that there is no financing plan in place, but the goal is to build new student housing with 1400 beds – potentially in phases. He will solidify a plan before submitting to the Board of Governors for approval. Additionally, Cowen explained that there are some legal issues to work through in regard to financing the central energy plant; however, once ironed out a proposal will be submitted.

Following the last discussion item, Committee Chair Kuntz asked each committee member and trustee on the call to express what they'd like to see the new SVP and CFO accomplish. Each provided their thoughts to SVP Cowen.

President Fuchs provided some closing remarks and there was a short discussion about the increase in applications compared to this time last year.

4.0 New Business

There was no new business to come before the committee.

5.0 Adjourn

There being no further discussion, Committee Chair Kuntz adjourned the meeting at 2:00 p.m.



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS ACTION ITEM FSPPM1 December 4, 2020

SUBJECT: Housing Rental Rates for the Fiscal Year Ending June 30, 2022

BACKGROUND INFORMATION

The UF Housing experience should be a catalyst for preeminence. By improving both conditions and the program of the existing housing facilities, the University will support students' social and academic engagement in a way that is unique to the University of Florida. This means creating community at every scale of each residence hall while using the residential experience to connect students with the support and rich experiences UF has to offer. While the student housing system is robust with over 10,000 beds, there is significant need to prioritize capital projects addressing the conditions of existing buildings.

The residence halls built in the Mid-Century (1950-1967) represent over half of the University's undergraduate housing stock. With an average age of 62 years, most of these buildings have their original mechanical, electrical, and plumbing (MEP) systems in place. Systems on the whole are beyond their useful life and are experiencing issues that need immediate attention. The facilities lack the kind and quality of common spaces that can support a vibrant student life. These halls are, as a rule, in need of renovation and replacement.

To create the Housing experience expected of a preeminent institution, UF Housing is requesting that the Board approve a rental rate increase up to 4 ½ percent annually for the next 5 years, beginning Fall 2021.

Currently, UF Housing maintains highly competitive rates in relation to the off-campus market (see Figure 1). UF's average rate for an on-campus apartment is \$657/month, compared to an average of \$1,000/month for an off-campus apartment, and falls 52% below market average (see Figure 2). UF's average rate for traditional and suite-style units is \$697/month, standing at 44% below market average for similar off-campus nearby properties (see Figure 3). Similarly, in comparison to peer institutions, UF offers affordable housing options (refer to Attachment A). On average, the semester rate for a traditional double occupancy room is 21% less than the average at peer institutions. Single occupancy rates are between 15% and 30% less than the average at peer institutions. Among the Florida SUS, UF Housing's rents are 10% to 30% less than other member institutions. Moreover, among public universities in the South, UF Housing's rents are among the lowest (refer to Attachment B).

Assuming the maximum rental rate increase annually, the proposed rental rates for single student housing and graduate and family housing are outlined in Attachment C and Attachment D, respectively. Given this assumption, and no changes to the housing inventory, the average rate for an on-campus apartment would be \$819/month and remain 22% below market average compared to off-campus

properties. The average rate for a non-apartment, on-campus unit would be \$868/month, remaining 15% below market average.

The Board of Trustees has the authority to set local fees for the Fiscal Year ending June 30, 2022 effective July 1, 2021, including student housing rental rates. The last year that the Department of Housing and Residence Life received a rate increase was 2015. These proposed rates are reasonable in the context of demand for, and cost of providing, University of Florida student housing, as well as local market conditions.

PROPOSED COMMITTEE ACTION

The Finance, Strategic Planning, and Performance Metrics Committee is asked to recommend to the Board of Trustees, on its non-consent agenda, approval of the proposed rental rate increase up to 4 ½ percent annually for the next 5 years, beginning with the Fiscal Year ending June 30, 2022.

ADDITIONAL COMMITTEE CONSIDERATIONS

| Board of Governors approval is not requ | uired. |
|---|--|
| Supporting Documentation Included: So | ee attached. |
| Submitted by: D'Andra Mull, Vice Presid | dent for Student Affairs |
| Approved by the University of Florida E | Board of Trustees, December 4, 2020 |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



RESOLUTION

Number: R20-258

Subject: FSPPM1 Housing Rental Rates FY2021-22

Date: December 4, 2020

At a meeting duly held on the above date the University of Florida Board of Trustees ("Board") hereby adopts the following resolution:

WHEREAS, the University of Florida's Housing experience should be a catalyst for preeminence and should support students' academic and social engagement in a way that is unique to our flagship institution;

WHEREAS, there is a critical need to prioritize capital projects that will address the conditions of existing Housing buildings, over half of which were constructed in the Mid-Century and continue to have their original mechanical, electrical, and plumbing systems in place;

WHEREAS, the systems in these buildings, on the whole, are well beyond their useful life and are experiencing issues that need immediate attention and lack the kind of quality of common spaces that can support a vibrant student experience;

WHEREAS, the University's Housing function maintains highly competitive rates in relation to the off-campus market (e.g., UF's average rate for an on-campus apartment is \$657/month, compared to an average of \$1,000/month for an off-campus apartment, and falls 52% below market average. UF's average rate for traditional and suite-style units is \$697/month, standing at 44% below market average for similar off-campus nearby properties;

WHEREAS, in order to best meet student housing needs, the University has adopted a Residence Master Plan which will inform decisions regarding renovation, demolition and new construction as part of an overall facilities strategy;

WHEREAS, the University of Florida is authorized to establish local Housing Rental Rates by section 1009.24, Florida Statutes and Florida Board of Governors Regulation 7.003;

WHEREAS, the last year that the University's Housing function received a rate increase was 2015; and

WHEREAS, the University has the proposed rates are reasonable in the context of demand for, and cost of providing, University of Florida student housing, as well as local market conditions;

WHEREAS, the University of Florida wishes to establish a rental rate increase of up to 4 ½ percent annually for the next five (5) years, beginning with the Fiscal Year ending June 30, 2022;

WHEREAS, to ensure that the University maintains its commitment to both student affordability and maintaining and improving its student housing, the Board will be provided with a market rate update and update on facility reinvestment annually at its December meeting;

NOW, THEREFORE, The University of Florida Board of Trustees hereby resolves to authorize the rental increase as described above, and to delegate such authority to the President.

| Adopted this 4 th day of Decem | ber, 2020, by the University of Florida Board of Trustees. |
|---|--|
| | |
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |

Figure 1: Student Oriented Off-Campus Housing Market Rental Rates (1-mile radius)

| | Studio | 1BR | 2BR | 3BR | 4BR |
|---------------------------------|---------|---------|---------|-------|-------|
| 13th Street | | \$1,309 | \$809 | \$749 | \$709 |
| Archstone Luxury Apartments | \$1,149 | \$1,429 | \$929 | \$779 | \$814 |
| Ashton Lane II | | \$1,389 | \$937 | \$819 | \$819 |
| Ashton Lane Phase I | | \$1,339 | \$874 | \$785 | \$819 |
| Avenyl | | \$1,455 | \$955 | \$975 | \$895 |
| Camden Court | | | \$899 | \$804 | \$774 |
| Cascades Luxury Apartments | \$1,239 | \$1,419 | \$949 | \$844 | \$844 |
| College Manor | \$769 | \$814 | | \$620 | |
| Courtyards Student Apartments | | | \$790 | | \$559 |
| Greystone Luxury Apartments | \$1,165 | \$1,399 | \$874 | \$819 | \$804 |
| Heritage Oaks Luxury Apartments | | \$1,285 | \$817 | | |
| Latitude 29 | | \$1,299 | \$879 | | |
| LynCourt Square | \$1,250 | \$1,325 | \$930 | \$885 | \$845 |
| Royal Village | | | | \$764 | \$724 |
| Royale Palms | | \$1,344 | \$874 | \$809 | |
| Sabal Palms | | | | \$814 | \$805 |
| Social 28 | | | \$994 | \$944 | \$814 |
| Solaria 1024 | \$1,224 | \$1,459 | \$949 | \$849 | \$854 |
| The Estates at Sorority Row | \$1,079 | \$1,449 | \$919 | \$835 | |
| The NINE of Gainesville | | \$1,404 | \$1,004 | \$884 | \$819 |
| The Standard at Gainesville | | \$1,280 | \$1,205 | | |
| Average | \$1,125 | \$1,337 | \$922 | \$822 | \$793 |

NOTE: Average rent for student-oriented properties within a 1-mile radius of campus is \$1,000. This is derived from average rent for unit types listed above (\$4,999/5).

Figure 2: Off-Campus Market Rental Rate Comparison to UF Apartments Fall 2020 Rates (all rates are per person per month)

| | | Student-Oriented (1 mile) Average: \$1,000 |
|-----------------------------------|-----------------|--|
| UF Unit Type | Average UF Rate | Difference from UF |
| Undergrad Apartment - Single Occ. | \$734 | 36% |
| Undergrad Apartment - Double Occ. | \$632 | 58% |
| Grad/Family Housing | \$605 | 65% |
| Average | \$657 | 52% |

Figure 3: Off-Campus Market Rental Rate Comparison to UF Non-apartment Units Fall 2020 Rates (all rates are per person per month)

| | | Student-Oriented (1 mile) Average: \$1,000 |
|---------------------------|-----------------|--|
| UF Unit Type | Average UF Rate | Difference from UF |
| Traditional - Single Occ. | \$633 | 58% |
| Traditional - Double Occ. | \$591 | 69% |
| Suite - Single Occ. | \$822 | 22% |
| Suite - Double Occ. | \$741 | 35% |
| Average | \$697 | 44% |

Attachment A

Comparison of Housing Rates to Peer Institutions and the Florida SUS

HOUSING RATES

When comparing University of Florida's housing rates against its peer institutions, UF offers more affordable opportunities to students. On average, the semester rate for a traditional double-occupancy unit is 21% less than the average across peer institutions for the same bed type. UF's single-occupancy rates for traditional and double-occupancy suite-style units are more closely aligned in pricing with its peers. UF's undergraduate apartment rates are between 15% and 30% less than the average rate of its peer institutions. A full comparison of housing rates for undergraduate bed types is provided in Figure 4 and 5.

Figure 4. Undergraduate Traditional and Suite Style Monthly Rates per Bed

| Institution | Traditional Double Occupancy | Semi-Suite Double Occupancy | Full Suite Double Occupancy |
|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|
| FSU | NA | \$3,348 | NA |
| OSU | \$3,298 | \$3,529 | \$4,236 |
| UGA | \$2,896 | \$3,305 | \$3,349 |
| UM | \$3,502 | NA | \$4,105 |
| UNC | \$3,305 | \$3,305 | \$3,657 |
| UVA | \$3,130 | \$3,625 | NA |
| UF | \$2,661 | \$3,375 | \$3,898 |
| Peer Average | \$3,226 | \$3,422 | \$3,837 |
| Peer Difference to UF | +21% | +1% | -2% |

Figure 5. Undergraduate Apartment Monthly Rates per Bed

| Institution | Undergraduate Apt. 2BR Single Occupancy | Undergraduate Apt. 2BR Double Occupancy | Undergraduate Apt. 4BR Single Occupancy |
|---------------------------------------|--|--|--|
| FSU | \$3,900 | \$3,060 | \$3,655 |
| OSU | NA | \$4,236 | NA |
| UGA | \$3,853 | \$3,530 | \$3,620 |
| UM | NA | \$4,196 | NA |
| UNC | \$4,211 | \$3,783 | \$4,211 |
| UVA | \$3,790 | \$3,380 | \$3,790 |
| UF | \$3,429 | \$2,845 | \$3,174 |
| Peer Average Peer Difference to UF | \$3,939 +15% | \$3,698 +30% | \$3,819 +20% |

UF's housing rates for graduate apartments at Tanglewood, Corry, Diamond, Maguire and UVS are priced significantly less than its peer institutions. On average UF's studio, one-bedroom and two-bedroom apartments rent for 68% less than the average monthly rate of graduate apartments at peer institutions. This comparison is shown in Figure 6.

Figure 6. Graduate Apartment Rates per Unit

| Institution | Studio | 1BR | 2BR | 3BR | 4BR |
|--------------------------|--------|---------|---------|---------|---------|
| FSU | NA | NA | NA | NA | NA |
| OSU | \$885 | \$995 | \$1,938 | \$2,526 | \$3,304 |
| UGA | NA | \$725 | \$794 | NA | NA |
| UM | \$893 | \$951 | \$1,186 | \$1,277 | NA |
| UNC | NA | \$1,055 | \$1,165 | NA | NA |
| UVA | NA | \$820 | \$1,015 | \$1,205 | NA |
| UF | \$533 | \$586 | \$666 | NA | NA |
| Peer Average | \$889 | \$909 | \$1,220 | \$1,669 | \$3,304 |
| Peer Difference to UF | +67% | +55% | +83% | NA | NA |

^{*}Average monthly rent per bed for The Continuum, a University-affiliated property is \$903 and units come furnished.

SUS RENTAL RATE COMPARISON

As previously mentioned, B&D also compared UF's housing rates against its member SUS institutions to understand its competitive position. The research demonstrated that UF's housing is priced below many of the SUS institutions.

B&D compared rates across non-apartment (single- and double-occupancy) and singleoccupancy apartment units. On average UF's housing rents are 10-30% less than other member SUS institutions. The results are depicted in the table below (Figure 8).

May 2019

Figure 8. SUS Price Comparison

| SUS Peer | Non-Apartment Double- Occupancy | Non-Apartment Single- Occupancy | Apartment Single- Occupancy |
|-----------------------|---------------------------------------|---------------------------------------|-----------------------------------|
| USF | \$3,706 | \$4,796 | \$4,431 |
| FSU | \$3,487 | \$3,784 | \$3,762 |
| FPU | \$3,440 | \$4,284 | NA |
| FAU | \$3,360 | \$4,453 | \$4,490 |
| NCF | \$3,123 | \$4,028 | \$4,489 |
| FAMU | \$3,086 | \$3,619 | \$3,224 |
| UWF | \$2,950 | \$3,240 | \$3,380 |
| UNF | \$2,806 | \$4,489 | \$4,062 |
| UCF | \$2,701 | \$2,905 | \$3,126 |
| FIU | \$2,650 | \$3,350 | \$4,021 |
| FGCU | \$0 | \$3,237 | \$2,983 |
| UF | \$2,790 | \$2,961 | \$3,302 |
| Peer Average | \$3,067 | \$3,835 | \$3,797 |
| Peer Difference to UF | +10% | +30% | +15% |

May 2019

Attachment B

Comparison of Housing Rates to Selected Public Institutions in the South

2020 - 2021 Rental Rates

for Student Housing in Selected Public Universities in the South

| | | ce Halls | = | Graduate Apartme | | | |
|---|-------------------------|--------------------------|---------------------------------|---------------------------------|---------------|---|--|
| | A/C Room Double Room | A/C Room Double Suite | Num 1 | nber of Bedrooms 2 | 3 | Requested Increase Over Current Rate | |
| | (per ter | m cost) | ((| cost per month) | | | |
| AUBURN UNIVERSITY | \$3,120 - \$5,930 | \$3,120 - \$5,930 | N/A | N/A | N/A | 2% | |
| FLORIDA STATE UNIVERSITY | \$3,115 | \$3,440 - \$3,890 | Removed from inventory | Removed from inventory | N/A | TBD | |
| LOUISIANA STATE UNIVERSITY | \$3,030 - \$4,165 | \$4,115 - \$4,405 | \$1,458 | \$750 - \$976 | \$815 - \$971 | 3 - 5% | |
| MISSISSIPPI STATE UNIVERSITY | \$2,344 - \$3,854 | N/A | N/A | N/A | N/A | 3.5% | |
| NORTH CAROLINA STATE UNIVERSITY | \$3,170 - \$3,430 | N/A | \$3,170 - \$3,758 (per sem.) | \$3,825 - \$4,455 (per sem.) | N/A | TBD | |
| TEXAS A & M UNIVERSITY | \$2,000 - \$4,388 | \$4,388 | \$933 - \$1,024 | \$1,164 - \$1,378 | N/A | 5% | |
| UNIVERSITY OF ALABAMA | \$2,950 - \$3,850 | \$4,700 - \$5,100 | N/A | N/A | N/A | TBD | |
| UNIVERSITY OF ARKANSAS | \$3,098 - \$4,415 | \$4,415 | NA | N/A | N/A | 3% | |
| UNIVERSITY OF FLORIDA | \$2,648 - \$3,574 | \$2,740 - \$3,729 | \$484 - \$628 | \$542 - \$745 | N/A | 4.5% | |
| UNIVERSITY OF GEORGIA | \$2,664 - \$3,359 | \$3,554 | N/A | N/A | N/A | 3% | |
| UNIVERSITY OF KENTUCKY | \$3,050 - \$4,950 | N/A | N/A | N/A | N/A | 3% | |
| UNIVERSITY OF MISSISSIPPI | \$2,675 - \$3,132 | N/A | Removed from inventory | Removed from inventory | N/A | TBD | |
| UNIVERSITY OF MISSOURI | \$3,000 - \$3,635 | \$4,263 - \$4,998 | N/A | N/A | N/A | TBD | |
| UNIVERSITY OF NORTH CAROLINA – CHAPEL HILL | \$3,438 | \$3,805 | \$1,100 - \$1,205 | \$1,180 - \$1,380 | N/A | TBD | |
| UNIVERSITY OF SOUTH CAROLINA | \$3,876 | \$4,530 | N/A | N/A | N/A | TBD | |
| UNIVERSITY OF TENNESSEE | \$2,274 - \$3,245 | \$3,060 - \$3,480 | N/A | N/A | N/A | TBD | |
| UNIVERSITY OF VIRGINIA | \$3,355 | \$3,355 | \$870 | \$1,120 | \$1,290 | TBD | |
| VANDERBILT UNIVERSITY | \$5,770 | \$5,770 | N/A | N/A | N/A | TBD | |

Attachment C

Proposed Rental Rates for Single Student Housing

UNIVERSITY OF FLORIDA DEPARTMENT OF HOUSING & RESIDENCE LIFE RESIDENCE HALLS ROOM RENTAL RATES FOR FALL/SPRING SEMESTER 2021-2026 (Rates Listed are Per Person, Per Semester)

| M | urr | hree | Area |
|---|-----|------|------|

Broward Area

Yulee Area

| Resident Hall | Room Type | 2021-2022 Proposed Rate | 2022-2023 Proposed Rate | 2023-2024 Proposed Rate | 2024-2025 Proposed Rate | 2025-2026 Proposed Rate |
|---------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Buckman | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| Fletcher | Single | 2,817 - 3,177 | 2,944 - 3,320 | 3,076 - 3,469 | 3,214 - 3,625 | 3,359 - 3,788 |
| | Double | 2,767 - 2,817 | 2,892 - 2,944 | 3,022 - 3,076 | 3,158 - 3,214 | 3,300 - 3,359 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | Two Room Double | 2,817 - 3,177 | 2,944 - 3,320 | 3,076 - 3,469 | 3,214 - 3,625 | 3,359 - 3,788 |
| | Three Room Triple | 2,973 - 3,177 | 3,107 - 3,320 | 3,247 - 3,469 | 3,393 - 3,625 | 3,546 - 3,788 |
| Murphree | Double | 2,942 | 3,074 | 3,212 | 3,357 | 3,508 |
| • | Triple | 2,565 | 2,680 | 2,801 | 2,927 | 3,059 |
| | Two Room Double | 2,942 - 3,177 | 3,074 - 3,320 | 3,212 - 3,469 | 3,357 - 3,625 | 3,508 - 3,788 |
| | Three Room Triple | 2,942 - 3,177 | 3,074 - 3,320 | 3,212 - 3,469 | 3,357 - 3,625 | 3,508 - 3,788 |
| Sledd | Single | 2,565 - 3,163 | 2,680 - 3,305 | 2,801 - 3,454 | 2,927 - 3,609 | 3,059 - 3,771 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | Two Room Double | 2,817 - 3,051 | 2,944 - 3,188 | 3,076 - 3,331 | 3,214 - 3,481 | 3,359 - 3,638 |
| | Two Room Triple | 2,817 - 3,177 | 2,944 - 3,320 | 3,076 - 3,469 | 3,214 - 3,625 | 3,359 - 3,788 |
| | Three Room Quad | 2,817 | 2,944 | 3,076 | 3,214 | 3,359 |
| | Shared Bedroom Apartment | 2,863 | 2,992 | 3,127 | 3,268 | 3,415 |
| Thomas | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | Quad | 2,338 | 2,443 | 2,553 | 2,668 | 2,788 |
| Broward | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| Rawlings | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Two Room Quad | 2,817 | 2,944 | 3,076 | 3,214 | 3,359 |
| | Double Suite | 2,863 | 2,992 | 3,127 | 3,268 | 3,415 |
| Cypress | Single | 3,953 | 4,131 | 4,317 | 4,511 | 4,714 |
| | Double Suite | 3,735 | 3,903 | 4,079 | 4,263 | 4,455 |
| | Super Suite | 3,735 | 3,903 | 4,079 | 4,263 | 4,455 |
| Mallory | Single | 2,817 - 2,930 | 2,944 - 3,062 | 3,076 - 3,200 | 3,214 - 3,344 | 3,359 - 3,494 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| Reid | Single | 2,930 - 3,163 | 3,062 - 3,305 | 3,200 - 3,454 | 3,344 - 3,609 | 3,494 - 3,771 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| Yulee | Single | 2,817 - 2,930 | 2,944 - 3,062 | 3,076 - 3,200 | 3,214 - 3,344 | 3,358 - 3,494 |
| 1 uice | Double | | | 3,022 | | |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |

| | Resident Hall | Room Type | 2021-2022 Proposed Rate | 2022-2023 Proposed Rate | 2023-2024 Proposed Rate | 2024-2025 Proposed Rate | 2025-2026 Proposed Rate |
|-----------------------|------------------|------------------|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Jennings Area | | | | | | | |
| | Jennings | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| Graham Area | a . | a: 1 | 2.020 | 2.042 | 2 200 | 2244 | 2 101 |
| | Graham | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | C: | Cinala | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Simpson | Single Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Double | 2,707 | 2,092 | 3,022 | 3,136 | 3,300 |
| | Trusler | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Trusici | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| Hume Area (Honors) | | Double | 2,707 | 2,072 | 3,022 | 3,130 | 3,300 |
| Trume Tireu (Tionors) | Hume | Single | 3,953 | 4,131 | 4,317 | 4,511 | 4,714 |
| | 1141110 | Double | 3,735 | 3,903 | 4,079 | 4,263 | 4,455 |
| Springs Complex | | Double | 5,755 | 3,703 | .,077 | 1,203 | 1,100 |
| Springs complex | Springs | Single Suite | 3,433 | 3,587 | 3,748 | 3,917 | 4,093 |
| | | Double Suite | 3,198 | 3,342 | 3,492 | 3,649 | 3,813 |
| Tolbert Area | | | -,-,- | -, | -, | 2,017 | 2,022 |
| | East | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | 1 | , | | , | <u> </u> | |
| | North | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| Tolbert Area | | | | | | | |
| | Riker | Single | 2,930 - 2,973 | 3,062 - 3,107 | 3,200 - 3,247 | 3,344 - 3,393 | 3,494 - 3,546 |
| | | Double | 2,767 - 2,942 | 2,892 - 3,074 | 3,022 - 3,212 | 3,158 - 3,357 | 3,300 - 3,508 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| | | | | | | | |
| | Tolbert | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| | *** | 6: 1 | 2.020 | 2.0.0 | 2 200 | 224 | 2 101 |
| | Weaver | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | | | | | | |
| Apartment Style | Beaty Towers | Shared Bedroom | 2,973 | 3,107 | 3,247 | 3,393 | 3,546 |
| | | | 2,713 | 5,107 | 5,247 | 2,273 | 5,5 10 |
| | Keys Complex | Private Bedroom | 3,317 | 3,466 | 3,622 | 3,785 | 3,955 |
| | | | 2,217 | 2,.00 | -,-22 | 2,.00 | -,- 50 |
| | Lakeside Complex | Shared Bedroom | 2,973 | 3,107 | 3,247 | 3,393 | 3,546 |
| | | Private Bedroom | 3,583 | 3,744 | 3,912 | 4,088 | 4,272 |
| | | | - ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | - / | - / | , | , |

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|------|----|-----|-----|------------|---|
| Alla | CH | 111 | ei. | ΙL | U |

Proposed Rental Rates for Graduate and Family Housing

UNIVERSITY OF FLORIDA DEPARTMENT OF HOUSING & RESIDENCE LIFE GRADUATE & FAMILY HOUSING RENTAL RATES 2021-2026

(Rates would be effective July 1, 2021)

| Residential Village | Apartment Type | 2021-2022 Proposed Rate (Monthly) | 2022-2023 Proposed Rate (Monthly) | 2023-2024 Proposed Rate (Monthly) | 2024-2025 Proposed Rate (Monthly) | 2025-2026 Proposed Rate (Monthly) |
|--------------------------|--|---|---|---|---|---|
| | | (====================================== | (| (====================================== | (====================================== | (====================================== |
| Corry Village | | | | | | |
| | One Bedroom | 506 | 529 | 553 | 578 | 604 |
| | One Bedroom/Remodeled Apartment | 656 | 686 | 717 | 749 | 783 |
| | Two Bedroom | 566 | 591 | 618 | 646 | 675 |
| | Two Bedroom/Remodeled Apartment | 719 | 751 | 785 | 820 | 857 |
| | Two Bedroom/Deluxe Remodeled Apartment | 779 | 814 | 851 | 889 | 929 |
| Diamond Village | | | | | | |
| - | One Bedroom | 656 | 686 | 717 | 749 | 783 |
| | Two Bedroom | 719 | 751 | 785 | 820 | 857 |
| Tanglewood Apartments | | | | | | |
| | Efficiency | 536 | 560 | 585 | 611 | 638 |
| | Efficiency w/Remodeled Kitchen | 577 | 603 | 630 | 658 | 688 |
| | One Bedroom | 614 | 642 | 671 | 701 | 733 |
| | One Bedroom w/Remodeled Kitchen | 656 | 686 | 717 | 749 | 783 |
| | Two Bedroom | 675 | 705 | 737 | 770 | 805 |
| | Two Bedroom w/Remodeled Kitchen | 719 | 751 | 785 | 820 | 857 |
| | Townhouse | 737 | 770 | 805 | 841 | 879 |
| | Townhouse w/Remodeled Kitchen | 779 | 814 | 851 | 889 | 929 |
| University Village South | | | | | | |
| , , | One Bedroom | 585 | 611 | 638 | 667 | 697 |
| | One Bedroom w/Remodeled Kitchen | 626 | 654 | 683 | 714 | 746 |
| | Two Bedroom | 645 | 674 | 704 | 736 | 769 |
| | Two Bedroom w/Remodeled Kitchen | 688 | 719 | 751 | 785 | 820 |
| Maguire Village | | | | | | |
| | One Bedroom | 585 | 611 | 638 | 667 | 697 |
| | One Bedroom w/Remodeled Kitchen | 626 | 654 | 683 | 714 | 746 |
| | Two Bedroom | 645 | 674 | 704 | 736 | 769 |
| | Two Bedroom w/Remodeled Kitchen | 688 | 719 | 751 | 785 | 820 |



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS ACTION ITEM FSPPM2, RESOLUTION R20-252 December 4, 2020

SUBJECT: UAA Bond Initiative

BACKGROUND INFORMATION

The University Athletic Association, Inc. ("UAA") proposes to finance, through the issuance of fixed rate or variable rate bonds, as determined by the UAA, a portion of the cost (to include reimbursement to UAA for amounts expended prior to bond issuance) of the following capital improvements relating to student-athlete facilities on the main campus (collectively, the "Projects"): (a) the acquisition, construction, and equipping of the \$85 million James W. "Bill" Heavener Football Training Center, a new stand-alone football team complex and dining hall and lounge for all student athletes, and (b) the construction of \$7.5 million in improvements to the existing Lacrosse facility and the construction of a Soccer facility to house all Soccer program functions in one complex.

These projects will provide the University and UAA with state-of-the-art modernized facilities for the student athletes and coaches and will contribute to the overall well-being of the student athletes and staff. The bonds will be issued in a total principal amount not to exceed \$50 million, and the balance of the Project's costs will be paid by the UAA. The bonds will be general obligations of the UAA, payable from available revenues of UAA including, but not limited to, ticket sales, conference revenues, auxiliary sales, sponsorships, and such other revenues that may be used pursuant to section 1010.62, *Florida Statutes*. The planning and design portions of the Project have already commenced.

Detailed information regarding the proposed \$50 million bond issuance is provided in the accompanying supporting documentation.

The Board is asked to approve the issuance of the bonds and adopt the authorizing resolution as required by the Board of Governors' Debt Management Guidelines. The Board of Trustees' review and general endorsement of the Project is also sought.

PROPOSED COMMITTEE ACTION

The Committee on Finance, Strategic Planning and Performance Metrics is asked to recommend to the Board of Trustees, on its Non-Consent Agenda, approval of the Project and adoption of the attached Resolution R20-252 (i) authorizing the issuance of the bonds to fund a portion of the

Project and pay costs associated with the bonds; (ii) requesting that the Board of Governors approve the issuance of the bonds; and (iii) authorizing the President of the University, any officer of UAA, and other authorized representatives of the University and UAA, to take all necessary or desirable actions in connection with the execution, sale, and delivery of the bonds.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors' approval of the bond issuance, which is being requested at its March meeting, is required. Legislative approval of the financing for the Project was previously obtained through the 2020 General Appropriations Act.

| Supporting Documentation Included: | See attached Resolution and appendix |
|---|--|
| Submitted by: Scott Stricklin, Athletic | Director |
| Approved by the University of Florid | a Board of Trustees, December 4, 2020 |
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |

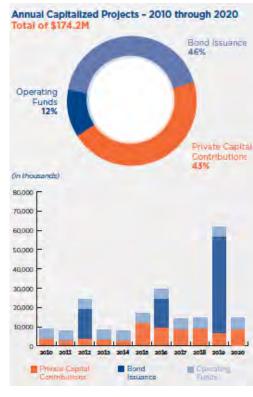
University Athletic Association, Inc. Tax-Exempt Bond Issue

The University Athletic Association, Inc. ("UAA") is seeking approval for a not to exceed \$50 million tax-exempt bond issue to provide funds for capital projects and improvements.

The UAA has a conservative yet proactive practice regarding debt. The UAA has made a significant commitment to buildings and improvements, and \$174.2 million has been spent on capital assets since 2010. The funding for these projects has come primarily from operating funds and private capital contributions, with 46% funded through the issuance of debt. With annual revenues of \$161 million in 2020, the UAA currently has only \$114.3 million in debt.

While the UAA has been affected by the COVID-19 pandemic like all athletic programs throughout the nation and world, the UAA has experienced steady rates of growth in its operating revenues and expenses over the last ten years through FYE 2020. Operating revenues have grown by 43% from \$111 million to \$157 million and operating expenses have grown by 34% from \$104 million to \$139 million. During this period, the UAA steadily grew its net position by 70% from \$118 million in 2011 to \$201 million in 2020, which assists in its response to the COVID-related challenges.

The UAA experienced positive revenue increases prior to March 2020 and significant savings in expenses after March due to no competition, which is unprecedented in the history of college athletics. The UAA experienced a net increase in total assets of \$7.6 million in 2020, which included a decrease of \$31.2 million in current assets due to the timing of ticket-related contributions for the 2020 football season. With construction of the Florida Ball Park near completion, the UAA's capital assets increased by \$40.8 million.





The UAA also paid down its debt by \$6.7 million and experienced an increase in net position of \$32.2 million in FYE 2020.

| | | | 2020- | 2019 | | 2019-2 | 2018 |
|---|------------|------------|------------|-------------------|------------|------------|-------------------|
| | 2020 | 2019 | (decrease) | Percent change | 2018 | (decrease) | Percent change |
| Operating revenues | | | | | | | |
| Sales of goods and services | \$ 41,138 | \$ 35,470 | \$ 5,668 | 15.98% | \$ 40,348 | s (4,878) | -12.09% |
| SEC and NCAA distributions | 46,591 | 47,670 | (1,079) | -2.26% | 45,420 | 2,250 | 4.95% |
| Contributions | 37,890 | 38,635 | (745) | -1.93% | 36,976 | 1,659 | 4.49% |
| Royalties and sponsorships | 24,203 | 21,363 | 2,840 | 13.29% | 19,414 | 1,949 | 10.04% |
| Other | 6,835 | 8,311 | (1,476) | -17.76% | 7,091 | 1,220 | 17.20% |
| Total operating revenues | 156,657 | 151,449 | 5,208 | 3.44% | 149,249 | 2,200 | 1.47% |
| Nonoperating revenues | 4,648 | 5,154 | (506) | -9.82% | 4,734 | 420 | 8.87% |
| Total revenues | 161,305 | 156,603 | 4,702 | 3.00% | 153,983 | 2,620 | 1.70% |
| Operating expenses | | | | | | | |
| Salaries, wages and benefits | 63,008 | 59,862 | 3,146 | 5.26% | 70,585 | (10,723) | -15.19% |
| Direct team expenses | 26,178 | 32,239 | (6,061) | -18.80% | 29,667 | 2,572 | 8.67% |
| Scholarships and athlete support services | 20,402 | 22,227 | (1,825) | -8.21% | 22,203 | 24 | 0.11% |
| Administrative services and facilities | 18,479 | 17,653 | 826 | 4.68% | 17,834 | (181) | -1.01% |
| Camps and depreciation | 10,446 | 10,695 | (249) | -2.33% | 10,925 | (230) | -2.11% |
| Total operating expenses | 138,513 | 142,676 | (4,163) | -2.92% | 151,214 | (8,538) | -5.65% |
| Nonoperating expenses | | | | | | | |
| Interest on capital related debt | 3,401 | 3,696 | (295) | -7.98% | 2,003 | 1,693 | 84,52% |
| Contributions to University of Florida and UF Foundation | 1,741 | 3,352 | (1,611) | -48.06% | 7,426 | (4,074) | -54.86% |
| Total nonoperating expenses | 5,142 | 7,048 | (1,906) | -27.04% | 9,429 | (2,381) | -25.25% |
| Total expenses | 143,655 | 149,724 | (6,069) | -4.05% | 160,643 | (10,919) | -6.80% |
| Capital contributions from Gator | | | | | | | |
| Boosters, Inc. and others | 14,611 | 6,366 | 8,245 | 129.52% | 9,039 | (2,673) | -29.57% |
| increase in net position | 32,261 | 13,245 | 19,016 | 143.57% | 2,379 | 10,866 | 456.75% |
| Net position, beginning of year | 168,996 | 155,751 | 13,245 | 8,50% | 153,372 | 2,379 | 1.55% |
| Net position, end of year | \$ 201,257 | \$ 168,996 | 6 32,261 | 19.09% | \$ 155,751 | s 13,245 | 8,50% |

While conservatively limiting our use of debt, the UAA is aggressive in the active debt management of its obligations to minimize interest cost, deftly respond to the changing economic and financial markets, and ensure that our mix of fixed and variable rate debt is appropriate for our mission and risk profile.

Since 1991, the UAA has utilized a combination of weekly and daily variable rate debt, and 1 – 20-year fixed rate tranches. The UAA's asset profile includes cash and investments includes a 5-year average annualized balance of \$75 million with a balance of \$118 million at June 30, 2020. When daily and weekly variable rate debt has been outstanding, the UAA has monitored the interest rates on a daily basis, and responded quickly when events affected the variable rate market such as the financial crisis in 2008 and the downgrades of the previous credit provider, SunTrust. In response to each of these events, the UAA's finance team immediately met to review the available alternatives, such as alternate credit providers and conversion to fixed rate debt. The UAA is fully aware of the risks associated with variable rate financing and carefully considers these risks in addition to the benefits of lower interest cost, asset-liability management, and flexibility.

Over the past 10 years, the UAA estimates an average variable rate debt cost of under 2.0%, including remarketing and liquidity fees.

The UAA's current debt profile consists of the following:

University of Florida Athletic Association Outstanding Principal as of 11/1/20

| | A. | В. | C. | | D. | | E. | F. | | | | |
|--|--|---|--|--------------|----------------|---------------|---|---|-------------------|-------------|---------------|---------|
| | Fixed Rate at 1.78% with JP Morgan | 6 Year Fixed Rate at 1.91% with SunTrust, mand tender 10/1/23 | Weekly Variable w/ US Bank at SIFMA +.47% | | ced Rate at 2. | | 10 Year Fixed at 1.94% through 10/1/30 w/ JP Morgan | 2018 Note w/ SunTrust at 3.43% (20 yr mand tender, 25 yr amort) | То | tal | | |
| | Series 2001 | Series 2001 | Series 2001 | Series 2007 | Series 2011 | Total | Series 2015 | Series 2018 | | | Mandatory | |
| Date | Principal | Principal | Principal | Principal | Principal | Principal | Principal | Principal | Principal | Balance | Tenders | Date |
| 10/1/21 | | \$ - | \$ - | \$ 500,000 | | | \$ 750,000 | \$ 1,375,000 | \$ 6,585,000 | | \$ 14,235,000 | 10/1/21 |
| 10/1/22 | 3,350,000 | - | - | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,425,000 | 6,775,000 | 100,900,000 | - | 10/1/22 |
| 10/1/23 | 3,490,000 | - | - | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,475,000 | 6,965,000 | 93,935,000 | 15,950,000 | 10/1/23 |
| 10/1/24 | 3,640,000 | - | - | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,525,000 | 7,165,000 | 86,770,000 | - | 10/1/24 |
| 10/1/25 | - | 2,005,000 | 1,790,000 | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,580,000 | 7,375,000 | 79,395,000 | | 10/1/25 |
| 10/1/26 | - | 2,090,000 | 1,865,000 | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,635,000 | 7,590,000 | 71,805,000 | 4,250,000 | 10/1/26 |
| 10/1/27 | - | 2,175,000 | 1,945,000 | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,690,000 | 7,810,000 | 63,995,000 | - | 10/1/27 |
| 10/1/28 | - | 2,270,000 | 2,025,000 | - | 750,000 | 750,000 | 750,000 | 1,750,000 | 7,545,000 | 56,450,000 | - | 10/1/28 |
| 10/1/29 | - | 2,365,000 | 2,115,000 | - | 750,000 | 750,000 | 750,000 | 1,810,000 | 7,790,000 | 48,660,000 | - | 10/1/29 |
| 10/1/30 | - | 2,470,000 | 2,200,000 | - | 750,000 | 750,000 | 750,000 | 1,875,000 | 8,045,000 | 40,615,000 | 3,750,000 | 10/1/30 |
| 10/1/31 | - | 2,575,000 | 2,295,000 | - | 750,000 | 750,000 | 750,000 | 1,940,000 | 8,310,000 | 32,305,000 | - | 10/1/31 |
| 10/1/32 | - | - | - | - | - | - | 750,000 | 2,010,000 | 2,760,000 | 29,545,000 | - | 10/1/32 |
| 10/1/33 | - | - | - | - | - | - | 750,000 | 2,080,000 | 2,830,000 | 26,715,000 | - | 10/1/33 |
| 10/1/34 | - | - | - | - | - | - | 750,000 | 2,150,000 | 2,900,000 | 23,815,000 | - | 10/1/34 |
| 10/1/35 | - | - | - | - | - | - | 750,000 | 2,225,000 | 2,975,000 | 20,840,000 | - | 10/1/35 |
| 10/1/36 | - | - | - | - | - | - | - | 2,305,000 | 2,305,000 | 18,535,000 | | 10/1/36 |
| 10/1/37 | - | - | - | - | - | - | - | 2,385,000 | 2,385,000 | 16,150,000 | | 10/1/37 |
| 10/1/38 | - | - | - | - | - | - | - | 2,465,000 | 2,465,000 | 13,685,000 | 13,685,000 | 10/1/38 |
| 10/1/39 | - | - | - | - | - | - | - | 2,550,000 | 2,550,000 | 11,135,000 | | 10/1/39 |
| 10/1/40 | - | - | - | - | - | - | - | 2,640,000 | 2,640,000 | 8,495,000 | | 10/1/40 |
| 10/1/41 | - | - | - | - | - | - | - | 2,735,000 | 2,735,000 | 5,760,000 | | 10/1/41 |
| 10/1/42 | - | - | - | - | - | - | - | 2,830,000 | 2,830,000 | 2,930,000 | | 10/1/42 |
| 10/1/43 | - | - | - | - | - | - | - | 2,930,000 | 2,930,000 | - | | 10/1/43 |
| ; | \$ 13,690,000 | \$ 15,950,000 | \$ 14,235,000 | \$ 3,500,000 | \$ 8,250,000 | \$ 11,750,000 | \$ 11,250,000 | \$ 47,385,000 | \$ 114,260,000 | | \$ 51,870,000 | |
| 12% % Variable Rate/Subject to Interest Rate Risk at Remarketing | | | | | | | | | | 45% | | |
| | | | | | | | | % Amortiz | ing at Fixed Rate | | 55% | |
| UAA Ou | ıtstanding Debt | | | | | | | ,0, and az | Total | | 100% | |
| % Total | Amount | | | | | | | | iotai | | 10070 | |

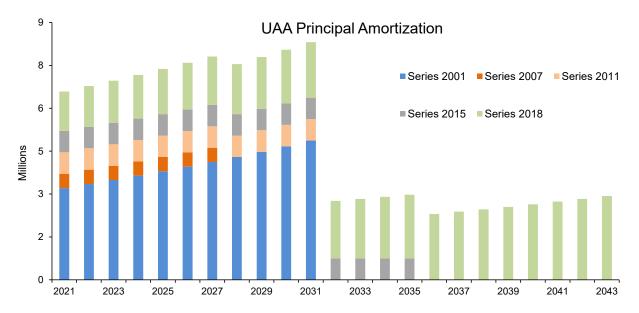
| % Total | Amount | |
|---------|-------------|--|
| 12% | 13,690,000 | A. Fixed rate at 1.78% with JP Morgan. Prepayable in whole or part on any Interest Date with make-whole provision. |
| 14% | 15,950,000 | B. 6 year fixed rate at 1.91% with SunTrust, mand. tender 10/01/23. Optional redemption in whole or part at par w/ notice not less than 15 days and not more than 60 days prior. |
| 12% | 14,235,000 | C. Direct placement weekly variable rate with US Bank, mandatory tender 10/01/21. Subject to optional redemption on any interest payment date without premium. |
| 10% | 11,750,000 | D. 10 year fixed rate at 2.08% with US Bank, mandatory tender 10/01/26. ¹ |
| 10% | 11,250,000 | E. Fixed rate at 2.39% through 10/1/20, 1.94% with mandatory tender 10/1/30 with JP Morgan. Prepayable in whole or part on any Interest Date with make-whole provision. |
| 41% | 47,385,000 | F. 20 year fixed rate with 25 year amortization at 3.43% w/ SunTrust, mand. tender 10/01/38. Make-whole until 10/1/28; optional redemption at par on or after 10/01/28. |
| 100% | 114,260,000 | |

¹ Original rate of 1.71%; rate change due reduction of corporate tax rate effective 01/01/2018

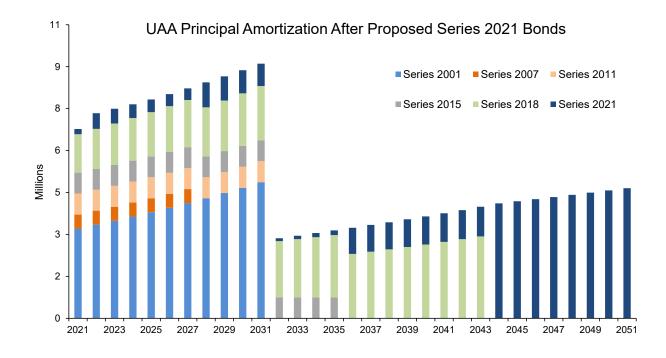
² Original spread of .41%; rate change due reduction of corporate tax rate effective 04/02/2018, extended tender from 10/1/19 to 10/01/2021

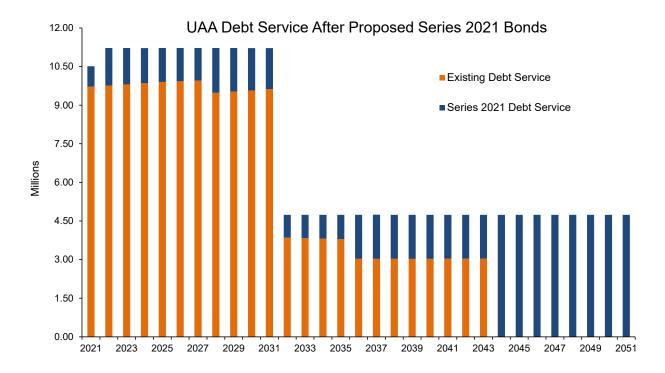
³ Original rate of 1.97%; rate change due to reduction of corporate tax rate effective 1/1/2018

The UAA's principal amortization currently increases to approximately \$8.3 million in 2031 and then drops off to under \$3 million as illustrated below.



Continuing with our active debt management, the UAA expects to issue \$50 million in new debt as variable rate bonds or bonds with a fixed rate for a shorter period, such as 11 years to coincide with the decline in principal payments after 2031. However, we respectfully request the financial flexibility to issue all or a portion of the bonds with a shorter or longer fixed rate period depending on market conditions at the time of issuance. The new bond will have a 30 year final maturity. Due to the current debt pattern, we propose smaller amortizations through 2031 and increased annual principal payments thereafter to provide more of an overall level debt service pattern. Below are charts of the UAA's principal amortization and aggregate debt service after the proposed issue.





We have utilized conservative assumptions in our forecasts, and still project debt service coverage of 1.11x, which includes negative operating income for FY21, over the next 5 years.

The UAA seeks the UFBOT's adoption of the Resolution permitting the debt issuance.

A RESOLUTION AUTHORIZING THE ISSUANCE OF DEBT AND REQUESTING THE FLORIDA BOARD OF GOVERNORS TO APPROVE THE ISSUANCE OF DEBT IN AN AMOUNT NOT TO EXCEED \$50,000,000 TO FINANCE OR REIMBURSE THE COSTS OF (I) THE CONSTRUCTION AND EQUIPPING OF THE JAMES W. "BILL" HEAVENER FOOTBALL TRAINING CENTER, AND (II) THE CONSTRUCTION OF A SOCCER AND LACROSSE STADIUM COMPLEX, EACH ON THE CAMPUS OF THE UNIVERSITY OF FLORIDA AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE BOARD OF TRUSTEES (all capitalized terms not otherwise defined herein will be as defined in the Amended and Restated Trust Indenture, dated as of October 1, 2011, between The University Athletic Association, Inc. ("UAA") and U.S. Bank National Association, or its successors or assigns (the "Trustee"), as heretofore amended and supplemented, particularly as amended and supplemented by a Ninth Supplemental Trust Indenture, dated as of its date, between UAA and the Trustee (collectively, the "Indenture"):

Section 1. The University of Florida Board of Trustees (the "Board of Trustees") hereby authorizes the issuance of tax-exempt debt in an amount not to exceed FIFTY MILLION DOLLARS (\$50,000,000) (the "Debt") by UAA on behalf of the Board of Trustees, such authorization conditioned upon UAA having heretofore authorized the issuance of the Debt. The Board of Trustees hereby requests the State University System of Florida Board of Governors (the "Board of Governors") to approve the issuance of the Debt for the purpose of (i) financing or reimbursing the costs of (a) the construction and equipping of the James W. "Bill" Heavener Football Training Center, a new stand-alone football team complex and dining hall and lounge for all student athletes, and (b) the construction of improvements to the existing Lacrosse facility and the construction of a Soccer facility to house all Soccer program functions in one complex (collectively, the "Project"), all as more particularly described on Schedule A hereto, on the campus of the University of Florida (the "University") and (ii) paying certain costs relating to the Debt. The Board of Trustees hereby affirms the existence and the purposes of UAA.

Section 2. The Florida legislature has authorized the Project pursuant to the 2020-21 General Appropriations Act, effective July 1, 2020. The Project is reflected on the approved master plan for the University and is consistent with the mission of the University because the Project will provide additional and renovated facilities for use by the students and employees of the University and UAA. Construction of the Project began in July 2020 and is expected to be completed by December 2023. Proceeds of the Debt are not anticipated to be sufficient to complete the construction of the Project without the use of additional funds. Additional necessary funding in the amount of approximately \$42.7 million will be obtained from capital gifts as well as unrestricted cash and investments contributed by UAA. Prior to the issuance of the Debt, approval of the Board of Governors will be obtained. No proceeds of the Debt will be used to finance operating expenses of the University or UAA.

Section 3. The Debt will be a general obligation of UAA and UAA is legally authorized to secure the payment of the Debt with available revenues of UAA, including but not limited to, ticket sales, conference revenues, auxiliary sales, sponsorships and such other revenues that may be used, pursuant to Section 1010.62, Florida Statutes, as amended, to pay and secure debt (with the exception of (i) the Athletic Fees described in Section 1009.24(12), Florida Statutes, as amended and (ii) any capital gifts and donations). The Debt is expected to be issued on parity and with the same benefit and security of the Indenture as all other Debt issued thereunder and no Athletic Fees, as described in Section 1009.24(12), Florida Statutes, as amended, or capital gifts and donations will be pledged for payment of the debt service on the Debt. The Debt may be secured by a Credit Facility that will be chosen through a competitive selection process analyzing the cost of the Credit Facility and the expected interest cost savings resulting from its use. UAA is committed to ensuring that sufficient revenues will be generated to fulfill UAA's obligations with respect to the Debt.

Section 4. The Debt will mature not more than thirty (30) years after issuance, including any extensions or renewals thereof. The estimated average useful life of the Project of thirty (30) years does not exceed the anticipated final maturity of the Debt. The Debt will bear interest in a fixed or variable rate mode as determined by UAA. The Board has determined the UAA has the requisite technical expertise to determine the initial interest rate mode for the Debt that will be in the best interest of UAA as the market would dictate at the time of issuance. Variable rate debt will be managed in accordance with the Debt Management Guidelines adopted by the Board of Governors on June 17, 2016, as heretofore amended, and as may be amended from time to time by the Board of Governors (the "Debt Management Guidelines") and UAA's post-issuance tax compliance and monitoring procedures policy on file with UAA.

Section 5. The Board has determined the UAA has the requisite technical expertise to properly manage the risks and the execution of the Debt in any interest rate mode through its staff, including the Director of Athletics, the Associate Athletics Director and UAA's Bond Financial Advisor. UAA's Chief Financial Officer will be responsible for monitoring the variable interest rates paid on the Debt, if any, and if necessary, establishing a variable rate debt service budget for the Debt and preparing the annual reports on variable rate debt required pursuant to the Debt Management Guidelines.

Section 6. It is expected that the Debt will be sold pursuant to a negotiated sale. A negotiated sale is necessary because of prevailing market conditions, because delays caused by soliciting competitive bids could adversely affect the ability to issue and deliver the Debt at presently favorable interest rates, and because the nature of the security for the Debt and the sources of payment of debt service on the Debt requires the participation of a purchaser, an underwriter, a placement agent and/or remarketing agent in structuring the Debt. An analysis was provided to the Division of Bond Finance and the Board of Governors demonstrating that a negotiated sale is desirable as referenced in Appendix A hereto. Any selection of a purchaser, an underwriter, a placement agent and/or remarketing agent will be accomplished through a competitive selection process.

- **Section 7.** The Board of Trustees will comply, and will require the University and UAA to comply, with all requirements of federal and state law relating to the Debt, including but not limited to, laws relating to maintaining any exemption from taxation of interest payments on the Debt and continuing secondary market disclosure of information regarding the Debt.
- **Section 8.** The Board of Trustees and UAA shall comply with post-issuance considerations stipulated in the Debt Management Guidelines and UAA's post-issuance tax compliance and monitoring procedures policy in connection with the issuance of the Debt.
- **Section 9.** The President of the University, any officer of UAA and other authorized representatives of the University and UAA are hereby authorized to take all actions and steps, to execute all instruments, documents, and contracts, and to take all other actions as they may deem necessary or desirable, in connection with the execution, sale and delivery of the Debt.
- **Section 10.** In making the determination to finance the Project, the Board of Trustees has reviewed additional information relevant to such determination. Such information is set forth in Appendix A hereto.
- **Section 11.** These resolutions shall take effect immediately upon their adoption, subject to the approval of the Board of Governors.

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CERTIFICATE OF THE CORPORATE SECRETARY

The undersigned, Corporate Secretary of The University of Florida Board of Trustees, does hereby certify that the attached resolution is a true and accurate copy as adopted by The University of Florida Board of Trustees on December 3, 2020.

| | THE UNIVERSITY OF FLORIDA BOARD OF TRUSTEES |
|--------------|--|
| Dated:, 2020 | |
| | By: Corporate Secretary |

Appendix A

[FOLLOWS]

Appendix A Project Summary University of Florida University Athletic Association, Inc. Athletic Improvements

Project Description:

The University of Florida's University Athletic Association (the "UAA") is proposing an athletic improvement project. The proposed project includes two components: (i) renovation and expansion of Soccer and Lacrosse Stadium Complex and (ii) new Bill Heavener football training center (collectively, the "Project").

Bill Heavener Football Training Center

The facility will serve as the new day-to-day home for Florida football student-athletes and staff. Florida's meeting rooms, locker room, strength and conditioning area, training room and coaches' offices will all be adjacent to the practice field, creating maximum efficiency within the program. The front lower quadrant of the building will be for <u>all</u> student-athletes and will feature a dining hall and lounge, along with outdoor activities and amenities.



Soccer and Lacrosse Stadium Complex

UAA desires to construct improvements to the existing Lacrosse and Soccer Practice facility. The Lacrosse facility improvements will include a reception area, coaches offices, storage and work areas. The Soccer facility will be an addition to the current Lacrosse building and provide all Soccer program functions including: coaches offices, locker room, training area, equipment storage, and other program spaces. This will allow the Soccer program to be more efficient by being housed at their practice and game facility rather than several other current locations. In addition to the

individual program upgrades, a common multi-purpose classroom/team meeting room is also programmed.



The Project is included in the University Master Plan.

Facility Site Locations: The Project is located in several areas of the main campus.

(See Schedule I - map)

Projected Start and Opening Date:

The Bill Heavener football training complex construction started in July 2020 with the demolition of the existing baseball stadium. Completion is expected in Spring 2022. Renovation and expansion of the Soccer and Lacrosse facility is currently in the design phase and construction is expected to take 12 months. An official start date would be no sooner than August 2021.

Approvals:

The UAA Board is expected to approve the proposed financing terms of the Project in November 2020 (the "UAA Resolution"). The University Board of Trustees will review and approve the Project on December 3, 2020.

Specific legislative approval of the Project financing has been obtained, effective July 1, 2020.

Demand Analysis:

Bill Heavener Football Training Center

This facility will benefit all UF Student-Athletes. The front lower quadrant of the building will be for all student athletes, featuring a dining hall and lounge, along with outdoor activities and amenities. It will serve as the new daily home for Florida Football and includes a prominent and visible entrance that is intended to capture the attention of recruits and fans. The team locker room and meeting areas will now be housed right next to their practice

field, creating maximum efficiency. The weight room will be a new state-of-the-art strength and conditioning space dedicated to the football program and adjacent to the indoor practice facility.

The coaches' offices and player areas will allow for more face-toface time with players, and having a dedicated team and lounge space will be inviting for players and recruits alike. The enhanced sports medicine and rehabilitation facility with hydrotherapy will have state-of-the-art resources to treat the student-athletes and to ensure their health and development.

With the daily activities of the football program moving out of Ben Hill Griffin Stadium, these spaces will be available for future development to benefit other student-athletes and fans. Plans for these spaces are under development and will be announced at a later date.

Soccer and Lacrosse Stadium Complex

In 2016, the UAA engaged a consultant on a feasibility study to evaluate the necessary modifications needed to permanently relocate UF Soccer to the UF Lacrosse site. At the time of the study, the soccer competition field was a shared space with the track and field stadium. The dimensions of the playing field precluded the UAA from hosting post-season championships at this site. Subsequent to this study, Soccer has permanently relocated to the original lacrosse stadium for all competition.

With the permanent relocation of the soccer competition site and our need to fully support our student-athletes in a first-class manner, the UAA would like to move all of the related support services for these teams to the current competition and practice site.

Study of Private Sector Alternatives:

The Project consists of athletic facilities managed and operated by the UAA for the benefit of student-athletes and the athletic programs at the University. The programs and services offered at these proposed facilities are directly correlated and impacted by the physical proximity to athletic facilities, housing, dining and academic programs. The UAA is also convinced that the advantages of proximity also affect student-athlete recruitment and retention.

As a result, there are no private sector alternatives that can provide the same level of access and service as the proposed Project.

Project Cost and Financing Structure:

The total project cost for the two facilities is estimated at \$92.5M and will be funded through an estimated \$50 million in debt

proceeds. The remaining \$42.5M will be a combination of contributions from private donors and unrestricted UAA cash.

| Project | Cost |
|--|--------------|
| Soccer and Lacrosse Stadium Complex | \$7,500,000 |
| Bill Heavener Football Training Center | \$85,000,000 |
| Total: | \$92,500,000 |

(See Schedule II - Estimated Sources and Uses of Funds)

Accordingly, what the UAA is seeking in the UAA Resolution is flexibility to issue the debt using the financial structure that is most advantageous to the UAA at the time of issuance, which could include some combination of publicly offered bonds and privately placed debt. If all or a portion of the debt is placed directly with a bank, this will be done via a negotiated process. The portion of the debt that may be issued via a bank loan is planned to be issued with a term of as short as 5 years or as long as 30 years.

The UAA is seeking this flexibility with regards to financing methods due to current uncertainty in the market as to the direction of both short-term and long-term interest rates. The UAA's goal is to issue debt using the method that is projected to result in the lowest cost of capital, while maintaining a conservative risk profile. Based on market conditions closer to the time of sale, the UAA will review the all-inclusive interest costs, terms, and advantages/disadvantages of a public offering compared to a direct placement and determine the financing method and structure at the time. In making this decision, the UAA's considerations will include, but not be limited to, the UAA's outstanding debt characteristics, the shape of the yield curve, interest rates, available direct placement structures, and market conditions at the time.

The debt will be structured with a 30-year final maturity, and a manner which is accordance with the Debt Management Guidelines.

Security/Lien Structure: The debt will be issued on a parity basis with the outstanding UAA debt, totaling \$114,260,000 as of October 1, 2020. This balance is comprised of \$59.3M, or 52%, of variable rate and short-term fixed rate debt and \$54.8M in debt that has a fixed rate through its final maturity. Once the debt is issued, the UAA will have \$164.3M in outstanding debt, of which approximately 67% will be in variable rate and short-term fixed rate modes.

> Debt service payments are structured on a generally level basis as specified in the Debt Guidelines.

The debt will be a general obligation, payable from available revenues of the UAA pursuant to Section 1010.62, Florida Statutes, but excluding (i) Athletic Fees described in Section 1009.24(12), Florida Statutes and (ii) any capital gifts and donations.

Pledged Revenues and Debt Service Coverage:

The revenues available to pay debt service consist of revenues of the UAA (excluding Athletic Fees and capital gifts and donations). These revenues come mainly from ticket sales and conference revenues related to football and basketball; however, significant revenues are derived from other sports, auxiliary sales, camps, royalties and sponsorships. To understand the operations of the UAA and the likelihood that debt service will be paid in full and on time, it is important to review the financial operations and performance of the UAA, taking into consideration all revenues and expenses. This review includes the Athletic Fees and capital gifts and donations, even though they are not pledged, since they are available to pay other expenses of the UAA.

(See Schedule III - Financial Statement History and Pro Forma Projections)

The proposed Project will generate less in net revenues than in new debt service, accordingly, the UAA is projecting a decline in net implied debt service coverage from a 4 year historical average of 3.08X to a projected 5 year average of 1.10X coverage. The 5-year projection includes a negative debt service coverage ratio for FY21 due to pandemic effected revenues. As noted in the pro-forma the Association is projecting a two-year recovery period prior to the revenue stream normalizing. This conservative approach indicates financial strength even in this unprecedented time.

As a general obligation pledge, the UAA's debt is further secured by its estimated available unrestricted investments of \$49.2M as of June 30, 2020 and the ability to significantly reduce expenses if required to make debt service coverage.

Projected revenues available to pay debt service are projected to decline from historical years primarily because of conservative projections (which do not include any capital contributions or any annual increase to the Athletic Fee). Over the past 5 years, capital contributions averaged \$9.6M and the total Athletic Fee averaged \$2.5M. While not legally pledged to UAA debt, these revenues would be available to pay other expenses of the UAA.

Projections are based on an increase of 2% for most revenues and 3% for expenses, which is a conservative approach and intended to stress test the revenue streams. Projections have also been adjusted for FY22 in anticipation of possible further disruption from the pandemic. Growth in revenues is primarily based on the

expected growth in SEC revenue, football revenue, and men's basketball revenue.

Management of Variable Rate Debt:

The debt is expected to be issued for an initial term shorter than maturity using a direct placement note with a bank and not on a fixed rate basis. Under the Debt Management Guidelines, debt whose term is less than the full maturity is treated as variable debt. Accordingly, the UAA's demonstrated experience and variable debt rate management plan should be carefully considered, as well as the fact that the UAA has a significant amount of outstanding variable rate debt and also has some fixed rate debt of shorter duration that have characteristics of variable rate debt.

The UAA's expertise and financial strength indicate that they have an adequate understanding of the risks and complexities associated with variable rate debt. With regard to managing interest rate risks, the UAA budgets for variable rate debt each year consider the volatility of short-term interest rates and their impact on the budget, as well as expectations regarding interest rates. The current practice is to budget based upon the highest monthly rate for the preceding twelve months with a review of predicted future fed rate increases. Quarterly monitoring of debt service expenditures, projections and variations from budget will be performed by the Director of Athletics, the Association Finance Committee, and the chair of the Association Audit Committee so that any budgetary concerns can be recognized and quickly addressed.

The UAA has determined that it will also maintain appropriate amounts of short-term and long-term investments as a partial hedge against rising interest rates on its debt. The financing documents (on previously issued debt) require the UAA to maintain unrestricted cash and marketable securities of at least 25% of its outstanding indebtedness. The short-term investments average approximately \$54M on a quarterly basis. Based on current projections, this amount will need to be \$42M to match the new debt total of \$164M. On June 30, 2020, long-term investments totaled \$49.2M, almost 43% of outstanding debt. The short-term investments are invested with the State's Treasury Investment Pool and earn interest at a variable monthly rate.

The short-term investments should perform as a direct hedge against approximately one-fifth of the outstanding and proposed variable rate debt because the interest received on the investments should increase as the interest rate paid on the variable rate debt increases. The long-term investments are currently invested primarily in equity funds, which can be converted to cash within 90 days. These investments might not perform in the same manner as the variable rate debt because their value and earnings under

varying market conditions could decline when the interest rate on the variable rate debt is rising. Although investing in equity funds does not provide the most stable or predictable hedging tool, the \$49.2M in those funds, along with the \$54M in short-term investments, provides significant protection to the UAA in the event of an increase in interest rates. The outstanding debt in the short-term fixed rate mode also provides budgetary stability during the fixed rate period.

The UAA does not intend to use derivatives for this transaction.

Quantitative Metrics:

Bill Heavener Football Training Center

The current student-athlete dining hall facility is undersized and underserves the needs of the student-athletes. Currently, over 450 students utilize the training table facility on a daily basis for all of their nutritional needs. The area has seating and serving capacity for 125 students when there is an actual need of simultaneous service for closer to 250 students. The new facility will allow for food choice and staffing dedicated to the needs of the student-athletes.

The sports health training room and hydrotherapy spaces in the new facility will greatly improve the overall health and well-being of the student-athletes. The current space is significantly undersized and underserves the students. The hydrotherapy pools, which play a significant role in the student-athletes' rehab and recovery, are also undersized. The new facility will both triple the number of available pools and provide access to the best rehab practices and technology available, which in turn will have a positive impact on the student-athletes' quality of life.

The removal of the baseball stadium has created the opportunity to house all team operations, activities, and needs of the football team within adjacent buildings. The location of the current facilities in relation to the practice fields is not ideal. The proposed new facility would be co-located with the practice fields, solving the current issues with travel time and safety concerns for athletes crossing the road fully dressed for practice. Expansion of the existing space was considered but was deemed sub-optimal due to the lack of proximity and a connection to the facility itself and the need for co-location to the practice fields.

While this facility will not be a revenue generating facility, it will allow our staff and students to maximize their time and resources. It will allow our staff and student-athletes the ability to more easily navigate inclement weather due to the connectivity to the indoor practice facility. The new training center will also aid in recruiting prospective student-athletes by way of elevating our facilities to an elite category in college athletics.

The new facility also creates future opportunities. With the daily activities of the football program moving out of Ben Hill Griffin Stadium, these spaces will be available for future development to benefit other student-athletes and fans.

Soccer and Lacrosse Stadium Complex

The UAA desires to construct improvements to the existing Lacrosse and Soccer Practice facility.

The current Lacrosse facility does not include the coaches' offices. The current office location is in the Lemerand Center near the O'Connell Center, creating inefficiencies and coordination efforts that will be resolved with the new addition to the facility. The addition to the existing facility will provide a larger Coaches Suite, providing space for not only the head coach, but the assistant coaches and support staff as well. This space will also support a dedicated conference room for the staff to use.

While the soccer practice field is located at the facility and the soccer team games are in the adjacent stadium, there are no support facilities at the site. The team utilizes offices located in the Lemerand Center near the O'Connell Center and other temporary facilities, creating inefficiencies and coordination efforts that will be resolved with the new addition.

The new facility will provide roughly 2,800 square feet of new space to the Lacrosse team, roughly 10,950 square feet of new space for the Soccer team, and a 1,200 square foot multi-purpose classroom to be used by both teams.

The existing facilities also create a Title IX equity issue. Currently, these two female sports are the only sports that do not have the ability to house their team functions (and are forced to travel across campus to do so), unlike their male counterparts. This new expansion and renovation would alleviate these inequities.

Type of Sale:

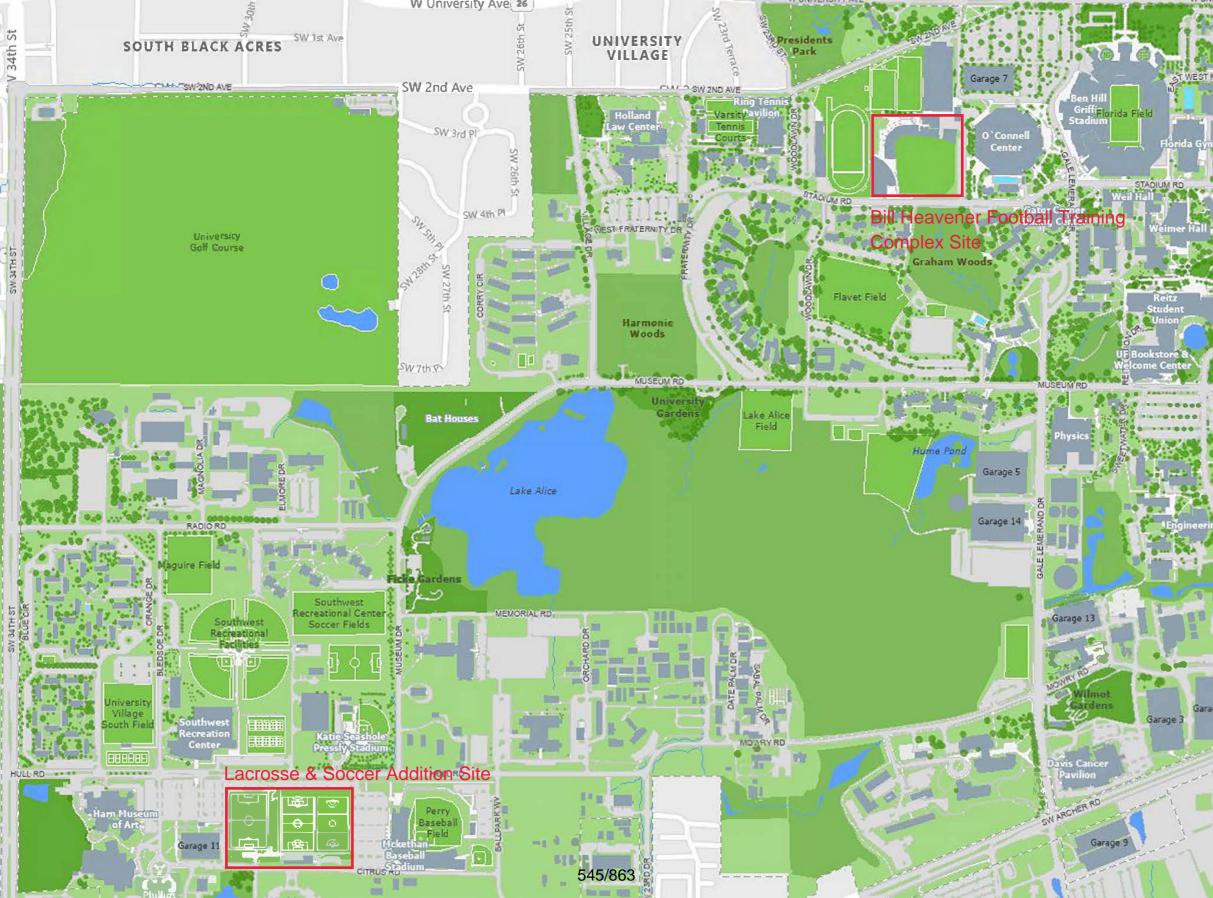
The UAA is requesting approval for a negotiated sale of the debt and/or a direct placement with a bank via a competitive/negotiated process. Based on the UAA negotiated sale analysis, the factors indicate a negotiated sale is appropriate and in the UAA's best interest.

Selection of Professionals:

The professionals involved in this transaction were selected through a competitive process. The bond counsel for the debt will be McGuireWoods LLP and the financial advisor will be RBC Capital Markets. These professionals have been in place for ten years.

Analysis and Recommendation:

The proposed financing complies with the Florida Statutes governing the issuance of university debt and complies with the Board of Governors' Debt Management Guidelines. Accordingly, the UAA requests approval of the financing proposal and associated Project.



Schedule II STATE UNIVERSITY SYSTEM OF FLORIDA BOARD OF GOVERNORS

UF University Athletics Association, Inc.
Athletic Improvement Project

Estimated Sources and Uses of Funds of \$50,000,000

Sources of Funds

| Bond Par Amount | \$ 50,000,000 |
|--|------------------|
| Private donors & Cash Contribution ¹ | 42,655,000 |
| | |
| Total Sources of Funds | \$ 92,655,000 |
| | |
| Uses of Funds | |
| Project Cost: Soccer/Lacrosse Stadium | \$ 7,500,000 |
| Project Cost: Bill Heavener Football Training Center | 85,000,000 |
| Cost of Issuance ² | 155,000 |
| | |
| | \$ 92,655,000 |
| | |

¹⁾ Primarily donor contributions, to a lesser extent UAA capital.

²⁾ Costs are based on a full issuance of the \$50 million and will be less based on actual amount of debt issued and includes: Bond Counsel 50,000 - Underwriters Discount 45,000 - Financial Advisor 15,000 - Rated Agency fees 20,000 - Trustee Fees 5,000 - Miscellaneous 20,000.

Schedule III STATE UNIVERSITY SYSTEM OF FLORIDA BOARD OF GOVERNORS

UF University Athletics Association, Inc.
Athletic Improvements Project

Historical and Projected Debt Service Coverage

| | | | Audited | | | | | Projected 1, 2 | | |
|--|---------------|---------------|----------------|---------------|---------------|---------------------|---------------|----------------|---------------|---------------|
| | FY2015-16 | FY2016-17 | FY2017-18 | FY2018-19 | FY2019-20 | FY2020-21 | FY2021-22 | FY2022-23 | FY2023-24 | FY2024-25 |
| Operating Revenues | | | | | | | | | | ' |
| Ticket Sales (face value) | \$ 29,216,432 | \$ 25,868,675 | \$ 32,234,135 | \$ 32,432,340 | \$ 34,356,368 | \$ 13,687,147 | \$ 27,715,733 | \$ 32,318,337 | \$ 32,952,451 | \$ 33,589,165 |
| Booster Contributions (ticket related) | 35,731,403 | 36,624,248 | 36,975,975 | 38,635,095 | 37,889,677 | 8,544,800 | 31,733,959 | 37,034,850 | 37,761,318 | 38,483,417 |
| SEC and NCAA distributions | 41,528,787 | 44,250,133 | 45,420,076 | 47,669,824 | 46,591,415 | 46,270,000 | 46,040,290 | 47,359,009 | 48,297,312 | 64,238,752 |
| Royalties and sponsorships | 20,663,251 | 19,712,941 | 19,414,042 | 21,362,635 | 24,202,943 | 14,451,074 | 19,828,727 | 21,626,128 | 22,061,231 | 22,499,826 |
| Student fees | 2,431,579 | 2,535,847 | 2,708,530 | 2,618,076 | 2,418,615 | 2,585,000 | 2,573,214 | 2,631,201 | 2,682,406 | 2,733,934 |
| Direct state support ³ | 1,998,856 | 1,567,806 | 2,331,865 | 2,261,773 | 2,545,481 | 1,312,536 | 2,003,892 | 2,331,468 | 2,377,181 | 2,423,471 |
| Camps | 1,485,301 | 1,204,589 | 1,485,607 | 1,695,002 | 1,787,129 | - | 1,234,465 | 1,581,562 | 1,613,053 | 1,644,134 |
| Other sports revenue | 371,429 | 1,297,385 | 6,628,188 | 1,342,976 | 4,994,081 | 545,400 | 2,961,606 | 4,061,347 | 4,128,147 | 4,208,873 |
| Other revenue | 1,897,417 | 1,998,344 | 2,050,730 | 3,431,638 | 1,871,036 | 1,623,595 | 2,195,069 | 2,434,861 | 2,484,524 | 2,529,451 |
| Total Operating Revenue | 135,324,455 | 135,059,968 | 149,249,148 | 151,449,359 | 156,656,745 | 89,019,552 | 136,286,954 | 151,378,763 | 154,357,622 | 172,351,022 |
| Operating Expenses | | | | | | | | | | |
| Salaries, wages and benefits | 49,912,720 | 54,742,847 | 56,127,339 | 59,862,204 | 63,008,061 | 56,923,950 | 58,132,880 | 59,911,359 | 61,718,218 | 63,538,996 |
| Football transition expenses | | - | 14,458,350 | - | - | - | - | - | - | - |
| Direct sports team expenses | 27,866,778 | 28,233,801 | 29,666,514 | 32,239,385 | 26,178,404 | 19,539,964 | 27,171,614 | 28,036,033 | 28,888,224 | 29,715,281 |
| Scholarships | 14,164,218 | 14,185,365 | 14,508,308 | 14,663,676 | 13,687,766 | 14,849,792 | 14,378,981 | 14,808,272 | 15,239,812 | 15,675,673 |
| Student-athlete support services | 6,147,924 | 7,171,391 | 7,694,752 | 7,562,914 | 6,714,086 | 6,925,569 | 7,213,742 | 7,432,634 | 7,649,559 | 7,867,134 |
| Administrative services | 9,108,098 | 12,045,866 | 10,287,786 | 10,251,622 | 10,121,427 | 8,601,237 | 10,261,588 | 10,568,506 | 10,877,529 | 11,191,247 |
| Facility maintenance and overhead | 6,477,457 | 6,702,265 | 7,545,773 | 7,401,517 | 8,357,937 | 7,082,018 | 7,417,902 | 7,648,325 | 7,879,518 | 8,114,296 |
| Camps | 1,080,726 | 1,089,787 | 842,688 | 1,134,425 | 1,042,238 | - | 821,828 | 850,636 | 879,505 | 906,461 |
| Depreciation | 9,639,491 | 9,776,321 | 10,082,721 | 9,560,592 | 9,403,776 | 9,694,952 | 9,703,672 | 9,994,303 | 10,284,271 | 10,579,666 |
| Total Operating Expenses | 124,397,412 | 133,947,643 | 151,214,231 | 142,676,335 | 138,513,695 | 123,617,482 | 135,102,207 | 139,250,068 | 143,416,635 | 147,588,755 |
| Operating Income (Loss) | \$ 10,927,043 | \$ 1,112,325 | \$ (1,965,083) | \$ 8,773,024 | \$ 18,143,050 | \$ (34,597,930) | \$ 1,184,747 | \$ 12,128,695 | \$ 10,940,986 | \$ 24,762,267 |
| Depreciation | 9,639,491 | 9,776,321 | 10,082,721 | 9,560,592 | 9,403,776 | 9,694,952 | 9,703,672 | 9,994,303 | 10,284,271 | 10,579,666 |
| Capital contributions from Gator Boosters, Inc. and others | 9,194,026 | 8,510,386 | 9,039,324 | 6,366,163 | 14,611,395 | - | - | - | - | - |
| Investment income | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 650,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Amount Available for Debt Service: | \$ 30,260,560 | \$ 19,899,032 | \$ 17,656,962 | \$ 25,199,779 | \$ 42,658,221 | \$ (24,252,978) | \$ 11,388,420 | \$ 22,622,998 | \$ 21,725,257 | \$ 35,841,933 |
| Debt Service | | | | | | | | | | |
| Current Debt (Principal + Interest) 4 | 5,904,193 | 7,135,658 | 7,142,861 | 8,946,483 | 10,051,147 | 8,221,242 | 9,539,511 | 9,581,526 | 9,749,726 | 9,836,658 |
| Projected interest only for \$50M Series @ 2.5% | - | - | - | - | - | 412,500 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 |
| Total Debt Service | 5,904,193 | 7,135,658 | 7,142,861 | 8,946,483 | 10,051,147 | 8,633,742 | 10,789,511 | 10,831,526 | 10,999,726 | 11,086,658 |
| Debt Service Coverage | 5.13 | 2.79 | 2.47 | 2.82 | 4.24 | (2.81) ⁵ | 1.06 | 2.09 | 1.98 | 3.23 |
| Maximum Debt Service Coverage (occurs in 2025 @ \$11.08M) | - | - | - | - | - | (2.19) | 1.03 | 2.04 | 1.96 | 3.23 |

Assumptions

- 1) FY20-21 estimated revenues and expenses based on budgeted and year-to-date performance projected through remainder of the year.
- 2) FY21-22 revenue and expenses based on 5-year average, inclusive of FY20-21 to impart lower, more conservative estimates in light of potential legacy impact from COVID. FY22-23 and beyond assume normal operations; estimates based on 4-year average, excluding FY20-21, and assumes 2% growth in revenues, 3% growth in expenses. Minimal SEC revenue increase until FY25.
- 3) Per Section 1006.71(2)(c) F.S., sales tax on ticket sales retained by the university to support women's athletics.
- 4) Current debt service based on actual amortization and interest rates
- 5) Debt service will be covered by UAA reserves (cash & investments)

Schedule A

| <u>Project</u> | Estimated Cost | Actual/Estimated Construction Start Date | Estimated Completion Date | Estimated Date Bond Proceeds Required | <u>Useful</u> <u>Life</u> |
|---|----------------|--|---------------------------|---------------------------------------|------------------------------|
| James W. "Bill" Heavener Football Training Center | \$85,000,000 | July 2020 | Spring 2022 | February 1, 2021 ¹ | 30 Years |
| Soccer/Lacrosse Stadium Complex Expansion | \$7,500,000 | August 2022 | December 2023 | February 1, 2021 ¹ | 25 Years |

¹ UAA will reimburse the construction costs upon receipt of the bond proceeds.

The draw schedule will be based on the construction period for each of the projects with all bond proceeds being fully drawn down by February 1, 2023.

130810641v3

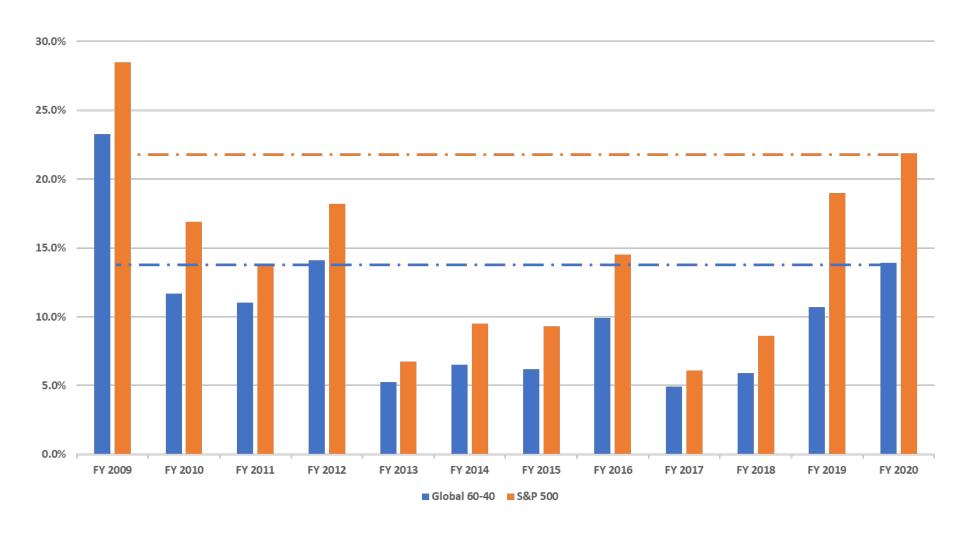




UFF Endowment Portfolio Update



FY 2020 Performance Increasing Volatility



Annualized based on monthly returns



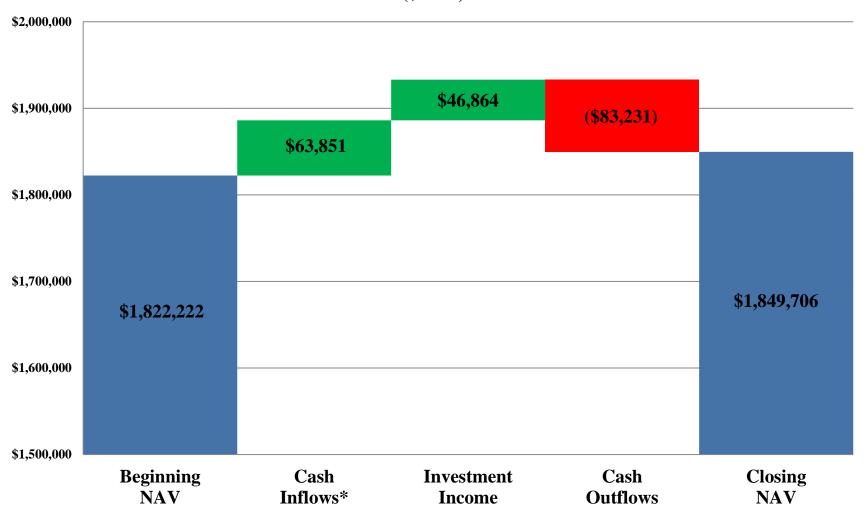


FY 2020 Performance Review Managing through volatility



FY 2020 Financial Recap





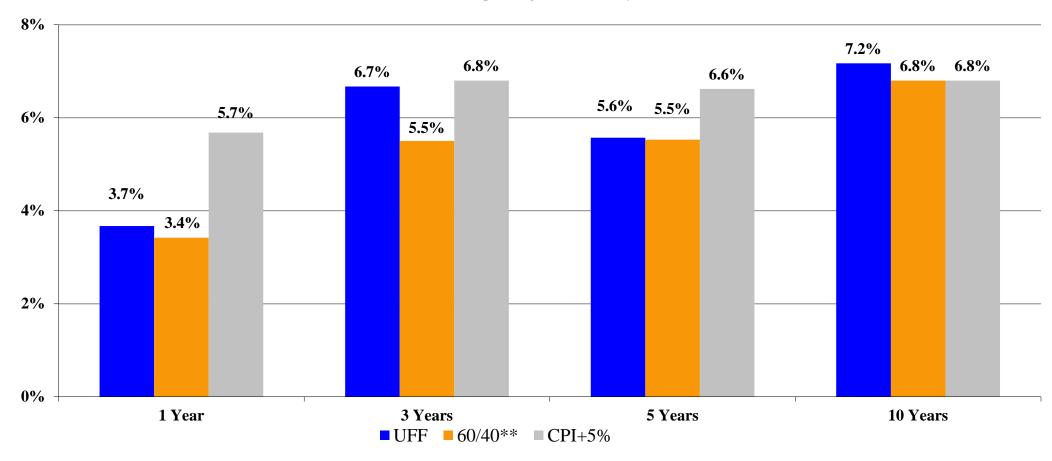
* Note: The timing of cash inflows does not always correspond with the timing of endowment gifts. The Recap is based on accounting values.



FY 2020 Final Investment Performance

Periods Ending June 30, 2020

(annualized for periods greater than one year)



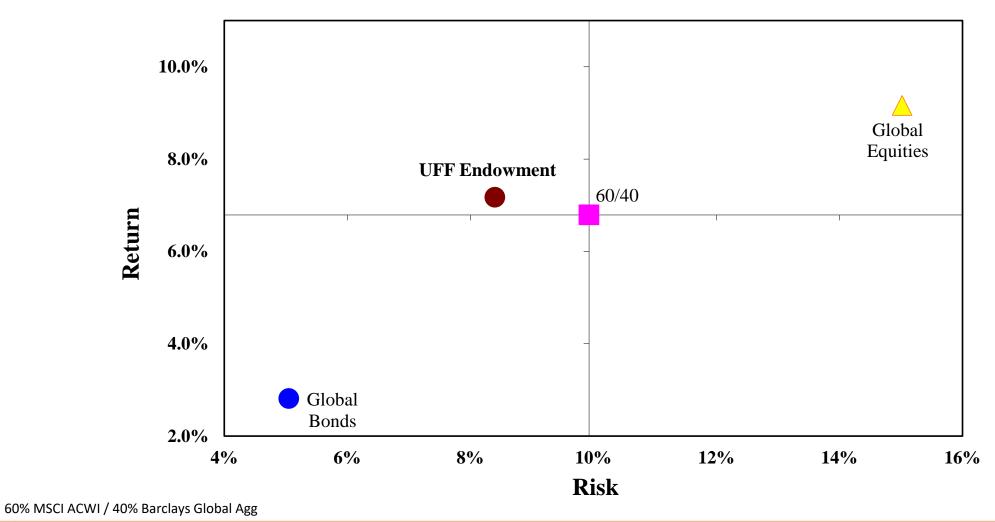
^{** 60%} MSCI ACWI / 40% Barclays Global Agg





Risk & Return

Ten Years Ended June 30, 2020



Asset Allocation As of 6/30/2020

| | Sub Portfolios | Estimated Current Allocation | Broad Allocation Actual | Broad Allocation Targets | Sub Portfolio Targets | Sub Portfolio Variances |
|-------------------------|---|-------------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|
| Growth Allocation | Public Equity Private Growth Private Park Mkt. Directional HFs | 39.8% - 23.9% 4.7% 10.5% _ | 78.9% | 80.0% | 40.0% 30.0% 0.0% 10.0% | -0.2% -6.1% 4.7% 0.5% |
| Diversifying Allocation | Diversifying HFs | 11.4% | 11.4% | 10.0% | 10.00% | 1.4% |
| Liquidity Allocation | Fixed Income Inflation Liquidity Cash | 6.3% 2.5% 0.9% | 9.7% | 10.0% | 6.5% 2.5% 1.0% | -0.2% 0.0% -0.1% |
| | Totals | 100.0% | 100.0% | 100.0% | 100.0% | |

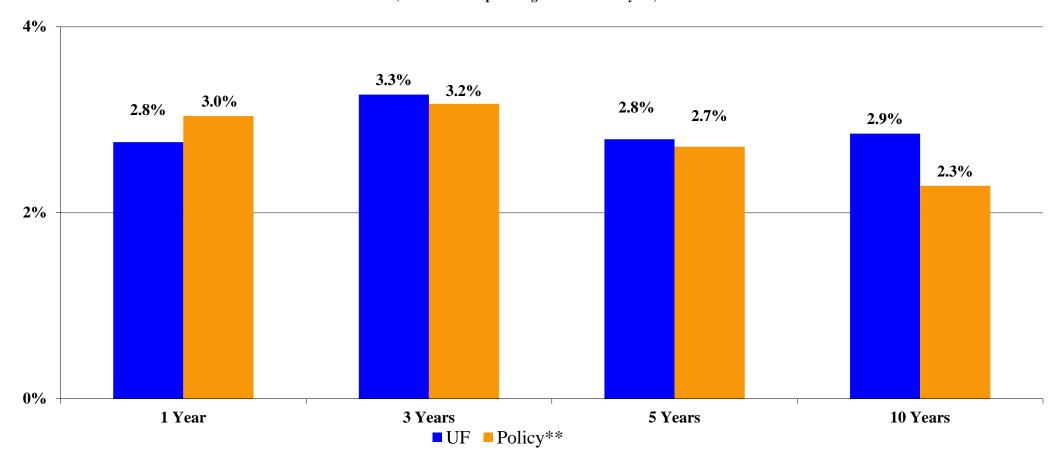
UF Operating Portfolio Update



FY 2020 Final Investment Performance

Periods Ending June 30, 2020

(annualized for periods greater than one year)



^{**} Blended benchmark using actual allocations and the benchmarks of the underlying portfolios.



| | Sub Portfolios | Estimated Current Allocation |
|-------------------------|---|------------------------------|
| Liquidity Allocation | SPIA Portfolio Short-term Treasuries | 32.4% 45.1% 77.5% |
| Growth Allocation | Long-term Pool | 19.3% 19.3% |
| Other Allocation | Internal Loans Other Direct Investments | 3.1% 0.1% 3.2% |
| | Totals | 100.0% 100.0% |

UF Operating Assets Portfolio Construction



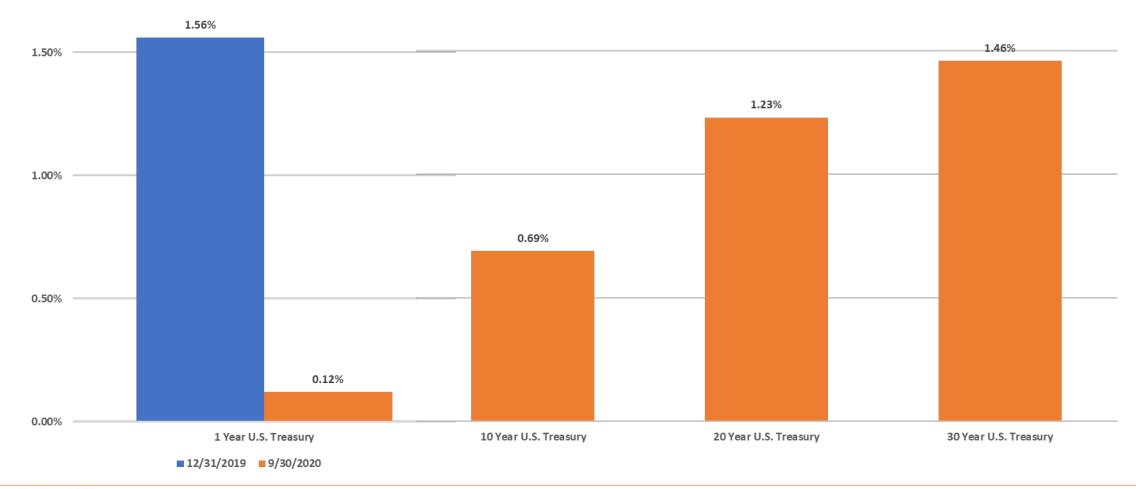
- Liquidity Assets
- Cash
- Money Markets
- U.S. Treasury Bills
- 'High quality' Fixed Income

- Growth Assets
- LTP "Endowment" Portfolio
 - Equities
 - Hedge Funds
 - Private Investments



U.S. Treasury Yields

2.00%







Investing in a Zero Yield Environment

Forward environment challenging to meet return objectives

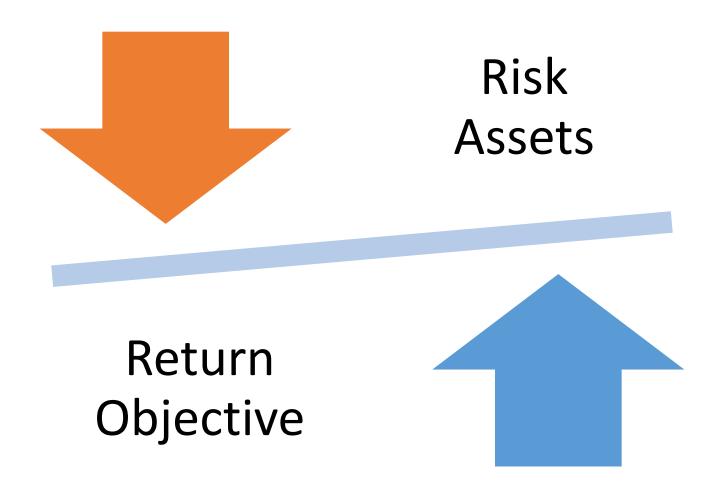
| Current Investments | Current Allocation | Projected Payout/Yield | Contribution To Return |
|------------------------------|-----------------------|------------------------|---------------------------|
| Liquidity Assets | 80% | ~0% | 0% |
| LTP "Endowment" Portfolio | 20% | 5% | 1% |
| | | Expected Return | ~1% |

Alternatives to meet target return

- X) Seek higher yielding liquidity assets
- 2) Increase Growth Assets (LTP and/or other growth investments)



Investing in a Zero Yield Environment



UF UNIVERSITY of FLORIDA INVESTMENT CORPORATION

Faculty Hiring Report

11/06/2020



| | | U.S. News and World Report | | | | |
|-----------|--|-----------------------------|--------------------|------------------------------------|--|--|
| | Full-Time Base Faculty Headcount (A) | Instructional FTE (B) | Student FTE (C) | Student-to-Teacher Ratio (D) | | |
| Fall 2009 | 3,289 | 2,122 | 43,370 | 20.4:1 | | |
| Fall 2010 | 3,401 | 2,076 | 42,708 | 20.5:1 | | |
| Fall 2011 | 3,591 | 2,075 | 42,438 | 20.5:1 | | |
| Fall 2012 | 3,578 | 1,979 | 42,431 | 21.4:1 | | |
| Fall 2013 | 3,618 | 2,006 | 42,186 | 21.0:1 | | |
| Fall 2014 | 3,691 | 2,034 | 42,149 | 20.7:1 | | |
| Fall 2015 | 3,792 | 2,104 | 43,455 | 20.7:1 | | |
| Fall 2016 | 3,905 | 2,142 | 43,716 | 20.4:1 | | |
| Fall 2017 | 4,117 | 2,292 | 43,778 | 19.1:1 | | |
| Fall 2018 | 4,357 | 2,410 | 43,700 | 18.0:1 | | |
| Fall 2019 | 4,537 | 2,457 | 44,100 | 17.0:1 | | |
| Fall 2020 | 4,574 | 2,468 (Preliminary) | N/A | N/A | | |

| June 2017 | UF announces plans to hire 500 new faculty positions | | | | | | |
|---|--|--------------------------|-----------------------|------------------------------------|--|--|--|
| | | U.S | . News and World Repo | ort | | | |
| | Full-Time Base Faculty Headcount (A) | Instructional FTE (B) | Student FTE (C) | Student-to-Teacher Ratio (D) | | | |
| Fall 2017 | 4,117 | 2,292 | 43,778 | 19.1:1 | | | |
| Faculty Departures | 410 | 116 | | | | | |
| Faculty Hires | 650 | 234 | | | | | |
| Fall 2018 | 4,357 | 2,410 | 43,700 | 18.0:1 | | | |
| Faculty Departures | 330 | 218 | | | | | |
| Faculty Hires | 510 | 265 | | | | | |
| Fall 2019 | 4,537 | 2,457 | 44,100 | 17.0:1 | | | |
| Faculty Departures | 273 | 81 | | | | | |
| Faculty Hires | 310 | 92 | | | | | |
| Fall 2020 (Preliminary) | 4,574 | 2,468 | N/A | N/A | | | |
| Total Activity Since Fall 2017 | | | | | | | |
| New Faculty Hires—Total | 1,470 | 639 | | | | | |
| Net New Faculty Hires—Total | 457 | 176 | | | | | |
| New Faculty 500—Hires and Accepted Offers | 511 | 486 | | | | | |
| Recruiting | 3 | 3 | | | | | |

| | | Faculty 500 | | | |
|---|----------------|---|--------------------|------------------|--|
| | | 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | | | |
| College/Center | Total Hires | Hires | Accepted Offers | Hiring Target | |
| College of Agriculture and Life Sciences | 100 | 43 | 1 | 44 | |
| College of Business | 20 | 11 | 0 | 11 | |
| College of Dentistry | 27 | 4 | 0 | 4 | |
| College of Design, Construction & Planning | 24 | 20 | 0 | 20 | |
| College of Education | 43 | 27 | 0 | 27 | |
| College of Engineering | 105 | 92 | 0 | 78 | |
| College of Health & Human Performance | 21 | 18 | 2 | 20 | |
| College of Journalism & Communications | 27 | 24 | 0 | 24 | |
| College of Law | 19 | 0 | 0 | 0 | |
| College of Liberal Arts & Sciences | 222 | 136 | 0 | 139 | |
| College of Medicine | 483 | 25 | 0 | 25 | |
| College of Nursing | 24 | 22 | 0 | 22 | |
| College of Pharmacy | 33 | 8 | 0 | 8 | |
| College of Public Health & Health Professions | 51 | 27 | 0 | 27 | |
| College of the Arts | 57 | 32 | 0 | 31 | |
| College of Veterinary Medicine | 41 | 11 | 0 | 11 | |
| Florida Museum of Natural History | 4 | 2 | 0 | 2 | |
| Office of Research | 4 | 1 | 0 | 1 | |
| College of MedicineJacksonville | 157 | 0 | 0 | 0 | |
| Center for Latin American Studies | 3 | 1 | 0 | 1 | |
| Whitney Labs | 3 | 2 | 0 | 2 | |
| Honor's Program | 1 | 1 | 0 | 2 | |
| Innovation Academy | 1 | 1 | 0 | 1 | |
| Florida Sea Grant | 0 | 0 | 0 | 0 | |
| Totals | 1470 | 508 | 3 | 500 | |

| | | Reasons for D | | | | |
|---------------------|-------------|---------------|-------------|---------|--------------------------|----------------------------|
| Departure from Base | Resignation | Retirement | Involuntary | Other | Total Base Faculty | Turnover (12 months) |
| 106 | 49 | 47 | 6 | 4 | 577 | 7% |
| 15 | 7 | 4 | 3 | 1 | 103 | 1% |
| 34 | 19 | 11 | 2 | 2 | 113 | 13% |
| 14 | 8 12 | 5 | 1 2 | 0 | 87 | 3% |
| 29 | | 11 | 2 | - | 104 | 10% |
| 57 12 | 44 6 | 11 5 | 1 | 0 | 364 47 | 7% |
| 7 | 3 | 2 | 2 | 0 | 56 | 3% 7% |
| 20 | 8 | 6 | 0 | 6 | | |
| | | 41 | | | 68 | 5% |
| 107 354 | 54 270 | 28 | 6 24 | 6 32 | 706 1283 | 6% 9% |
| 14 | 5 | 5 | 1 | | | 8% |
| 25 | 22 | 2 | 0 | 3 | 49 109 | 8% |
| 25 | 22 | 2 | 0 | 1 | 109 | 070 |
| 47 | 44 | 2 | 1 | 0 | 158 | 6% |
| 23 | 14 | 6 | 2 | 1 | 118 | 7% |
| 38 | 28 | 6 | 1 | 3 | 151 | 9% |
| 7 | 1 | 4 | 0 | 2 | 29 | 3% |
| 4 | 3 | 1 | 0 | 0 | 15 | 7% |
| 98 | 80 | 9 | 4 | 5 | 412 | 8% |
| 0 | 0 | 0 | 0 | 0 | 8 | 0% |
| 0 | 0 | 0 | 0 | 0 | 12 | 0% |
| 1 | 1 | 0 | 0 | 0 | 4 | 0% |
| 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| 1 | 0 | 0 | 0 | 1 | 1 | 0% |
| 1013 | 678 | 206 | 58 | 71 | 4574 | |

Notes: Base faculty includes faculty in academic departments and excludes adjuncts, county extension, librarians, faculty administrators (dean level and above), and career faculty. Instructional faculty are not a subset of Base faculty. Base and Instructional faculty are over-lapping sets. The Instructional faculty reported for the Student Faculty ratio exclude faculty in stand-alone graduate and professional programs (Medicine, Dentistry, Veterinary Medicine, and Law). Include staff teaching a course as 1/3 FTE. *College of Health and Health Professions Speech and Hearing Clinic transferred to UF Health-Shands, which resulted in 21 resignations and 1 non-renewal.

REPORT OF THE CHIEF FINANCIAL OFFICER COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS UNIVERSITY of FLORIDA BOARD OF TRUSTEES FRIDAY, DECEMBER 4, 2020

INTRODUCTION

This CFO report will update the Trustees on activities within the Office, provide context for information included in the reports contained in this package, and highlight issues for future discussion and review. Hopefully, it will aid a better understanding of the University's complex financial profile and provide an opportunity for increased engagement around a variety of issues. As a new report, we will continue to modify the content and welcome input to ensure that the information contained herein is useful.



To begin, one of the most noteworthy items to highlight for the first quarter is that the University has a new CFO! I am now in Gainesville following a 2,900-mile journey from Sonoma County through fires, snow, hurricanes, a Presidential election and a global pandemic—and with a 17 year old wheaten terrier, Max.

Since arriving on campus, I have been engaging with the UF community, including a recent webinar with Jodi Gentry regarding strategic budgeting at the University and have formed a 7-member faculty quarterly "lunch" series to receive informal feedback. We also have begun the process of moving forward with the Office's 2021 Preliminary Objectives that was shared on the November 6th FSPPM ZOOM call (with this report being the first effort toward improved reporting to the Finance Committee and the Board of Trustees). I look forward to advancing these initiatives with University leadership and the Board over the next year, and beyond.

In other areas outlined in the *Preliminary Objectives*, Chief Investment Officer Bill Reeser and his staff at UFICO and I have begun conversations regarding possible adjustments for enhanced investment of operating funds. Charlie Lane and his team as well as others in the University community are having conversations regarding capital projects and a multi-year approach to funding deferred maintenance. Antonio Farias and I have been discussing University diversity metrics and we have begun on our efforts to increase the staffing support for the Office. We will keep you updated on the progress of these initial efforts.

Our Office has been active in several other areas as well. The Procurement Office quickly acquired PPE including 19,200 facemasks and 5,000 social distancing floor decals to help protect our students, faculty

and staff on campus this fall. The Budget Office is moving ahead with procurement of new budget management software that will better engage the campus financial community in effectively managing their resources and will be a useful tool as we evaluate improvements to the budget model.

The materials contained herein include two action items— (1) a resolution to increase student housing rates, and (2) a resolution to approve a bond issuance for the University Athletic Association, both of which will be discussed in more detail below. We also are moving forward with the development of financing recommendations for the Student Housing Master Plan and the Central Energy Plant. Although we do not have specific plans for approval at this time, we are continuing our analysis and will present option(s) for consideration and approval at an upcoming Board of Trustees meeting, and Chair Hosseini indicated the possibility of a special meeting to do so prior to March 18th.

Also included is a UFICO Update that will be reviewed by the CIO, and a verbal update on the furlough process by the VP for Human Resources (of note: Jodi Gentry and I have made a point of informing the campus that there is no intent for a University wide furlough).

The quarterly financial statements are included, with a brief MD&A in this report, including information on affiliates and UF Health. Also presented is an update on the University's outstanding debt.

ACTION ITEMS

Housing Fees

The Board is being requested to approve increases in student housing fees of up to 4 ½ percent annually for the next 5 years, beginning Fall 2021. As shown in supporting documents, UF's average rate for oncampus housing is \$687/month, compared to an off-campus housing average of \$1,000/ month for Fall 2020 positions UF 46 percent below the market average. Assuming the maximum increases (and no changes in the housing mix), the average UF room rate for Fall 2025 would be \$819, keeping on-campus rates 22 percent below market averages assuming no increases in average off-campus rental rates over this time period, which is a conservative assumption as we are aware that newer properties near campus are projected to bear even higher monthly rents. We remain committed to keeping UF rental rates affordable and below market.

The strategy of predictably and slowly raising rates (average \$132/month after 5 years) provides the revenues necessary to make some of the investments in renovations and additions to UF housing stock to keep our facilities competitive for all Florida students. In addition, it is worth noting that UF's housing rates are below average for select public universities in the South and the State University System and above only those at UCF.

UAA Bond

The University Athletic Association is seeking approval to issue \$50 million in bonds to finance a portion of the \$85 million Bill Heavener football training center and \$7.5 million soccer/lacrosse stadium complex expansion. The bonds are scheduled to be considered by the Board of Governors on January 26th-27th, with a potential closing via a bank direct placement as early as February. We continue to work with UAA on the successful execution of this plan of finance.

QUARTERLY FINANCIALS UPDATE

Under the "One UF" model, this Office now has financial oversight for the entire University of Florida Enterprise in order to provide a comprehensive financial profile of the University, which will aid in governance. Notably, this approach allows me to strengthen relationships across the University and build upon collaborative engagements. While we include financial information for the entire UF Enterprise, there are several components we would like to discuss in greater detail— (1) The University of Florida (academic), (2) the University Athletic Association, (3) UF Health, (4) Shands Jacksonville, (5) University of Florida Foundation and (6) Other Direct Support Organizations. I would like to thank Melissa Stuckey and Jim Kelly for their teamwork and input.

For the second quarter update in March, we are envisioning a change in the presentation of the quarterly data to combine the two reports, which will make comparison of the current year's budget variance easier to relate to the prior year (I find myself continually flipping between the charts on the two versions in order to do this, and think this change will clarify the interpretation of the results).

University of Florida (Academic)

The first quarter results shown in the reports are generally positive; however, there are a number of uncertainties over the remainder of the fiscal year and beyond that we need to consider over the next several months. An example is the presentation of \$2.12 billion in total cash and investments at the University at September 30. We need to present a more complete understanding of what this balance represents, and we are committed to doing so and will be presenting more detailed analyses to the administration and Trustees shortly.

We look at this balance in several ways, and going forward we expect to present additional reports related to the UF Enterprise balance sheet, with a particular emphasis on the UF cash and investments. In the Assets & Liabilities statement, Enterprise-wide Cash in the Bank increased from \$294 million at 1Q20 to \$511 million at 1Q21. Virtually all of that increase is attributable to UF Health, largely driven by a remaining portion of the \$369 million received under the CARES Act (primarily Medicare advances) earlier in the calendar year. This also explains a large portion of the Component Unit Investments.

The other item we wish to highlight is the reduction in State Appropriation balances held at UF from \$220 million at the end of 1Q20 to \$130 million at the end of 1Q21, a decrease of 40 percent. This is primarily attributable to more aggressive spending of carry forward dollars, per our plan.

Turning to the budget to actuals for the first quarter (this is where flipping between the presentation materials is helpful), we would like to first highlight the State Appropriations and indicate what the changes represent. Last year, UF received \$203 million from the State and this year \$192 million, with the majority of that amount-- \$186 million –received by UF. That decline in funding is interesting, because our State funding actually increased by \$40.4 million (prior to the holdback), offset by \$5.7 million in mandated but unfunded retirement contributions, and \$2.2 million for an unfunded central library. The result is our appropriation is approximately 4% above budget. Note the FY21 budget includes the effect of a 6% holdback, which amounts to a \$49 million reduction. Note also that the appropriation does not reflect the loss of \$16 million in PECO funding, which is not included here because of Board of Governors reporting requirements (This is one of many instances where the BOG presentation format does not

necessarily align with how we manage the budget internally. This is an area we are working to clarify and redesign in our reporting.

We note that investment income is down from a \$12 .6 million budget to \$6.4 million, largely due to market conditions. Since interest rates are not expected to increase for the foreseeable future, this puts a current and future strain on our flexibility to fund initiatives centrally as these earnings are what funds the "President's Initiative fund," and therefore we are exploring options with UFICO.

Sales of Goods and Services are a bit better than budget, at \$35.9 million versus a budget of \$30.9 million, representing an improvement of 16 percent. It is important to note, however, that this is because we budgeted very conservatively due to uncertainties surrounding COVID, and our actual results are 22 percent lower than last year.

On the expense side, Employee Compensation and Benefits is basically on budget (2% over), with the other component "Other Operating Expense Disbursements" at \$229 million versus a \$195 million budget, representing 18 percent over budget. Again, it is important to provide context for this figure. When the budgets were established in the spring the University did not know what the Fall would be like and budgeted expenses down substantially. In fact, the actual YTD figure for FY21 is 6 ½ percent below the comparable figure for last year. A portion of this increased expenditure is due to higher unbudgeted COVID-related costs (including increased testing), which are likely to increase further in the second half of the year. An additional portion of the spending over budget is driven by departments spending from their reserves/ carry forward balances, which is not currently directly influenced by the CFO's office.

As a point of reference, for the full fiscal year we have budgeted a surplus of \$193 million (compared to \$270 million budgeted in FY20, which ended at \$275 million). For the first quarter, the bottom line is currently \$23 million over the initial budget. We will continue to monitor the evolving budget situation and expect more clarity after Q2, and also with establishing the budget for FY22.

University Athletic Association

Not surprisingly, UAA shows a significant negative variance for the first quarter due almost entirely to COVID-19 related effects on athletics. Fortunately, the Gators are playing football this fall, so the impact is much less than the worst case scenario that had been discussed in August; however it is still substantial, with a budgeted surplus of \$2.5 million turning negative to an actual deficit on a cash basis of \$8.0 million, with the second quarter and the remainder of the fiscal year projected to remain challenging, with operating revenues potentially down ~\$55 million or more.

UAA has undertaken a number of actions to address the current and anticipated budget challenges, including reducing expenses, utilizing reserves and liquidating investments. However, additional expenses (COVID testing, lower than forecast football revenues) and uncertainty have resulted in a continued projected deficit, currently estimated at ~\$16.3 million. This amount largely represents payments from UAA to UF for a variety of items, which will be covered by the University in FY21. UAA and UF are working to establish a financial arrangement going forward that better reflects mutual alliances and objectives.

UF Health (excluding Jacksonville)

These summaries below highlight the consolidated statistical information and results of operations for the three months ended September 30, 2020 for UF Health Shands and UF Health Central Florida (not including Jacksonville).

On a cash basis, for the quarter ended September 30, 2020, total cash received from third-party payers, patients and other sources, including the UFICO investment portfolio, amounted to \$554.0 million, which exceeded budget by \$25.6 million (5% variance). Unfavorable variances in patient service revenue of \$5.3 million (1.0%, due to lower than expected patient volumes due to the ongoing effects of COVID-19 and the timing of receipt of State of Florida Low Income Pool and Graduate Medical Education payments) and other receipts of \$8.9 million (64%, largely due to timing of receipts) were more than offset by a favorable variance in investment income of \$38.5 million (963%, primarily due to gains in global equity markets).

Transfers to UF and Component Units of \$37.2 million were under budget by \$12.3 million (25%) due to the timing of the transfer payments.

Operating expense disbursements of \$450.3 million exceeded budget by \$13.5 million (3%) as salaries and benefits paid to employees were over budget by \$11.9 million (5%) and payments to suppliers and vendors were over budget by \$1.6 million (1%). The salaries and benefits variance was largely due to employee benefits, with higher than expected payments for pension contributions, workers' compensation insurance, and group health insurance.

For the quarter ended September 30, 2020, total cash receipts, net of transfers and less operating expense disbursements, amounted to \$66.5 million, which exceed budget by \$24.4 million.

Shands Jacksonville

A notable item on the Shands Jacksonville statement is "Other Receipts", which was budgeted at a relatively modest \$3.0 million, but the actual amount is \$50.2 million. Virtually the entire variance is due to the July receipt of \$45.6 million in unbudgeted CARES Act stimulus. This receipt also explains a significant part of the increase in cash balances shown in the statements.

University of Florida Foundation

The Foundation is a bright spot in the financials with cash receipts \$37 million (244%) over budget for the quarter due to the receipt of a large gift.

Other Direct Support Organizations

The line to point out on this report is "Sales of Goods and Services," which shows a budget of \$792,000 and an actual of \$54.4 million (there is a similar difference in the "Other Operating Expense Disbursements" line.) This is because actual employee contributions and claim expenses reported by GatorCare are not included in their budget. We will work on revising this presentation to provide a more accurate picture of YTD budget versus actuals.

BOND PORTFOLIO UPDATE

On October 14th, the State Division of Bond Finance closed a refinancing transaction for the \$19,025,000 University of Florida Clinical Translational Research Building Revenue Refunding Bonds, Series 2020A, which refunded all outstanding Series 2011 bonds. These obligations were sold via a competitive sale bank direct placement (not a public bond offering) due to the size and tenor (final maturity 2030) of the debt. We received four bids and the winning bid of 1.5455% (compared to an average interest rate of 4.43% on the outstanding debt) was submitted by Bank of America. The refunding generated present value savings of \$2.7 million, representing 14.3% of par. Notably, the tax-exempt bonds were refunded on a taxable basis thereby removing limitations on non-compliant private use in addition to the monetary savings for our research activities.

For the outstanding Housing and parking debt, we calculated our required debt service coverage ratios at June 30, 2020 and the housing dormitory revenue bonds and parking facility revenue bonds both exceeded minimum debt service coverage ratios. We continue to work with both auxiliaries to monitor these ratios for FY21 as the fiscal year progresses.

CAPITAL PROJECTS (STUDENT HOUSING AND CENTRAL ENERGY PLANT)

The University is moving forward with two significant capital projects that require external funding. We are evaluating options for both student housing and the Central Energy Plant, and going forward the CFO's Office will be involved in evaluating financing plans and budgets with Facilities earlier in the process so that Project and Financing plans can be considered together in a more strategic manner. We will present financing proposals to the FSPPM Committee and the Board of Trustees for consideration as soon as practicable.

Student Housing

For Student Housing, the Master Plan has identified the need to invest in significant deferred maintenance in the University's aging facilities, and also in the construction of a new Honors College to better compete for the most academically talented students. We recognize that in order to provide an excellent UF experience to all of our students, we need to invest in both of these priorities, yet financial constraints due in part to COVID-19 impacts on the operating performance of the Housing System in FY20 and FY21 and the increase in project costs are requiring further analysis and consideration of options. Some of these approaches include a reimagined Honors College at Gator Village that can accommodate a wider range of students thereby helping demand and achieving our values, a phased-in approach to construction with the possibility of fewer beds at least initially, and/or value engineering to reduce cost per square foot. The concept also might accommodate facilities for student athletes, as a separate new west campus housing facility likely is not feasible for the foreseeable future. We also must keep renovation a priority as we allocate scarce dollars. Numerous members of University leadership are working to refine this plan and a financing approach.

A significant constraint on our ability to issue the amount of debt we require is due to restrictive bond covenants that look only at recent financial performance of the Housing System, which as we have mentioned are negatively impacted by COVID, and because we cannot include projected revenues from the incremental beds (but we are required to include the associated debt service). Fortunately, we can

refund the outstanding debt at little to no cost in order to eliminate existing covenants, but we need State Department of Bond Finance and Board of Governors approval to waive these covenants going forward and to provide us greater flexibility. Additionally, we are speaking with private developers, but the central location of the project and the nature of the new construction, which includes several necessary programmatic features, makes it a less attractive option than other types of student housing and the required cost to students would be prohibitive.

Central Energy Plant

The bonds that would be issued to finance the construction of the Central Energy Plant are expected to be repaid from utility charges to campus users. A number of those users (e.g., colleges) make those utility payments from monies received from the State. There is ambiguity in the Florida statutes about whether these State funds that are used to pay utility charges can be provided as security to bondholders. We are working to receive legal clarification. Assuming we have a solid legal authorization permitting the issuance of the bonds, the financial model appears robust, and is expected to provide substantial economic benefit to the University.

We also are exploring the possibility of franchising the CEP with a third-party developer/operator.





Overview of Projects to be Considered for External Financing

Student Housing

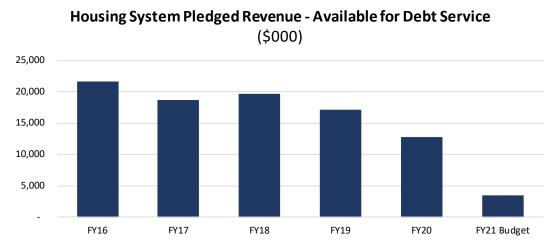
- Master Plan guiding development of new projects and required renovation/demolition of existing facilities
- Financing expected to be backed by Housing System Revenue
 - Bond and BOG current limitation Must be able demonstrate current housing revenue can support all
 additional debt, which is challenging given the identified needs, cost increases, and recent COVID-related
 impacts on housing revenue in FY20 and FY21
- Discussions are ongoing to determine affordability, State and BOG covenant waivers, and scope/phasing of new housing based on current architectural drawings
 - Potential UF Honors College at Gator Village

Energy

- Central Energy Plan (CEP) project to upgrade aging utility infrastructure is required based on agreement with Duke
 Energy and increased campus energy requirements
- Financing to be repaid by internal utility charges
 - State law limitation Lack of clarity that there is legal authority to issue debt backed by internal utility charges that have State funding as a source

Housing Plan – New Construction and Renovations

- Evolving scope of Honors College / Gator Village project and financing (New west campus dorm is postponed)
- Ability to issue new debt relies on current housing revenue which was negatively impacted for FY 2020 and is expected to further decline in FY 2021. (Note: existing covenants do not allow consideration of future revenues.)



Note – Pledged revenue available for debt service is net of operating expenses other than overhead.

- Under current State / BOG requirements, limited ability to issue debt (and no ability after June 30, 2021 for several years)
- Currently working with State and BOG to review options of restructuring existing Housing System bonds to allow for additional debt and determining what covenant flexibility they will permit
 - Additionally, UF must be able to support the debt and operate within internal financial capacity constraints 576/863

Central Energy Plant

- New plant and electrical infrastructure to upgrade aging utility facilities, support campus growth, and replace costly energy purchases
- CEP expected to provide significant cost savings over time
- Approximate project need of ~\$200 million (could be larger based on turbine size)
 - May include additional debt to fund required related utility infrastructure
- Working with DBA and lawyers to clarify whether debt supported by utility charges paid from funds received from the State is permissible, absent legislative clarification
- Alternative financing structures are being analyzed, such as partnering with a developer / operator, which
 is legally allowed



Next Steps

| December 2020 | Seeking BOT approval to develop recommended plans of finance to be brought to the FSPPM Committee and the Board for approval at the March meetings, or at an earlier special meeting |
|--------------------------|--|
| January/February 2021 | Receive waivers/ clarifications on permitted structures and submit materials to Board of Governors and SBA as financing strategies are confirmed |
| March 2021 | If not at earlier special meeting, receive BOT approval on plans of finance.= |
| May 2021 | Receive BOG and SBA approval on plan of finance |
| June 2021 | Funding for housing project received |
| July/August 2021 | Receive legislative approval for CEP project; Funding for CEP received |

Housing System – Debt Portfolio and New Debt

Dormitory Revenue Bonds - Outstanding as of 10/1/2020

| | Par Outstanding | | Redemptio | |
|--------------------|-----------------|---------------|-----------|----------------|
| Bond Series | (\$000) | Coupon | n | Final Maturity |
| 2011A | 5,410 | 3.25% - 4.00% | 7/1/2021 | 7/1/2028 |
| 2012A | 17,550 | 3.00% - 4.00% | 7/1/2021 | 7/1/2031 |
| 2013A | 16,955 | 3.00% - 5.00% | 7/1/2023 | 7/1/2033 |
| 2016A | 14,980 | 3.00% - 5.00% | 7/1/2026 | 7/1/2030 |

- UF's Housing System has approximately \$55 million in long-term tax-exempt debt outstanding, which is supported by the Pledged Revenues of the System.
 - Pledged Revenues consist of the net revenues of the System after payment of expenses.
- The amount of new housing debt UF can issue is limited by a debt service coverage covenant incorporated into the existing Revenue Bonds.
 - Additional Bonds Test: Average pledged revenues for the two immediately preceding fiscal years must be at least
 125% of current and pro forma maximum annual debt service.
 - To issue the desired amount of new debt, this covenant would need to be eliminated by (1) refinancing all existing debt and (2) receiving waivers from the BOG and SBA 579/863



Housing System – Financials

- The Housing System currently has an estimated additional debt capacity per the covenant to support a ~\$100 million project.
 - Funds received from CARES Act (\$7.3
 million in FY2020) are not considered
 operating, and therefore to not factored into
 the calculation
 - Once lower FY2021 figures are used in the debt covenant calculation, we expect debt capacity to be \$0.

Statement of Revenues, Expenses and Changes in Net Position (\$ thousands)

Housing System Revenue Fund

| Operating Revenue | <u>FY2016</u> | <u>FY2017</u> | FY2018* | <u>FY2019</u> | <u>FY2020</u> | Budget FY2021 |
|---|---------------|---------------|---------|---------------|---------------|------------------|
| Residence hall rents | 59,717 | 57,787 | 56,893 | 56,544 | 47,776 | 39,118 |
| Operating Expenses Salaries and related | 04.750 | 00.404 | 00.744 | 0.4.000 | 00.540 | 04.445 |
| fringe benefits | 21,753 | 23,421 | 23,741 | 24,909 | 23,542 | 24,415 |
| Utilities Repairs and | 6,052 | 6,248 | 6,794 | 6,893 | 6,837 | 6,534 |
| maintenance Small furniture and | 7,441 | 5,686 | 4,073 | 5,249 | 3,235 | 3,274 |
| equipement | 1,412 | 1,936 | 875 | 932 | 233 | 633 |
| Depreciation Administrative | 585 | 679 | 771 | 659 | 569 | - |
| overhead | 5,328 | 5,521 | 4,110 | 4,429 | 4,862 | 4,890 |
| Other expenses | 1,533 | 1,829 | 1,825 | 1,499 | 1,211 | 790 |
| Total Operating Expenses | 44,106 | 45,320 | 42,189 | 44,571 | 40,488 | 40,536 |
| Operating Income | 15,611 | 12,467 | 14,704 | 11,973 | 7,288 | (1,418) |
| Debt Service Coverage Add back: Admin | | | | | | |
| overhead | 5,328 | 5,521 | 4,110 | 4,429 | 4,862 | 4,890 |
| Pledged Revenues | 21,524 | 18,667 | 19,585 | 17,061 | 12,719 | 3,472 |
| Existing debt service | 7,906 | 7,865 | 7,826 | 7,808 | 6,874 | 6,893 |

^{*}Reclassified numbers. Reclassification resulted in decreases to financial reporting of certain revenues and expenses.

Housing System – Financing Capacity Option

- Because the current financial covenant looks only at current operations and does not consider prospective operations with additional beds and increased rents, it limits the Housing System's ability to finance projects.
- In order to gain additional debt capacity flexibility, UF may consider restructuring the financial covenant which will require all its \$55 million outstanding dormitory revenue bond debt to be refinanced.
- In the current market environment, restructuring all the housing debt provides minimal annual debt service savings, but fortunately it is possible.
- In restructuring, it would be beneficial to eliminate the financial covenant from the bond documents and instead have the coverage test be an internally managed guideline.
- Internally, we believe a minimum 1.0x coverage test on a proforma basis is prudent
 - Based on projections, the Housing System would have debt capacity to fund a project of approximately \$200 million.
 - Ultimate capacity will depend on what covenants we can eliminate / negotiate with SBA and BOG
- The SBA has indicated that it is supportive of a modification to the covenant structure for UF's housing bonds, although we do not have specific commitment.
- We also are analyzing alternate funding options; however, due to the nature of the new construction we do not believe a P3 is most advantageous and Florida does not permit a P3 arrangement for existing facilities.

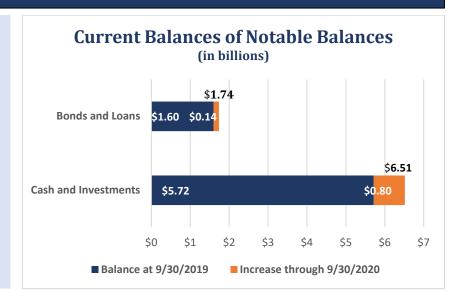


THREE MONTHS ENDED SEPTEMBER 30, 2020

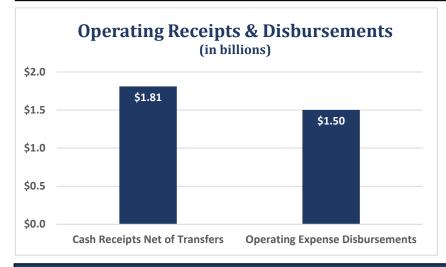
UF Enterprise Notable Assets & Liabilities

From Q1 FY20 to Q1 FY21, as shown by the orange portion on the graph,

- ➤ Total cash and investments for the Enterprise increased 13.9% from \$5.72 billion to \$6.51 billion. (Note 1)
- ➢ Bonds and loans increased by 8.7%, from \$1.60 billion to \$1.74 billion. (Note 2)



UF Enterprise Notable Receipts & Disbursements



For Period July 1st to September 30th

- ➤ Cash Receipts Net of Transfers increased by 3.7% to \$1.81 billion.
- ➤ Operating Expense Disbursements decreased by 2.9% to \$1.50 billion.
- Cash Receipts and Transfers less Operating Expense Disbursements of \$310 million (Note 3) was combined with a \$183 million increase in Other Receipts & Disbursements (Note 4).

UF Enterprise Cash and Investment Analysis

Cash & Investments for the Enterprise consists of the following:

- Generally Available (33%) Mostly Shands hospital operating cash and short-term investments, and University appropriations and tuition funds
- Conditionally Available (18%) Largely University research and auxiliary funds and Self-Insurance Program reserves
- Not Available (49%) Mainly UF Foundation endowed funds and University construction funds

Composition of Cash & Investments (in thousands) (Note 5) \$2,180,930 \$3,178,389 \$1,155,115 Not Available Conditionally Available Generally Available 1 582/863

Notable Financial Balances and Cash Analysis - UF Enterprise

For the Three Months Ended September 30, 2020

Executive Summary

UF Enterprise Notable Assets & Liabilities

- Note 1– Total Cash and Investments are up \$797 million from the prior year due to the large deposits of Medicare Advance payments and CARES Act grants made over the last two quarters. The Medicare Advances are to assist UF Health with operating cash to counter the disruption in submissions and processing of claims during the pandemic. These advances are to be used for incoming Medicare patients. The CARES Act grants were provided to units that experienced a major loss in revenue due to the pandemic and to students in the form of financial aid. In addition, the strong investment earnings during the quarter, as driven by market conditions, boosted the Cash and Investments balances across the Enterprise.
- Note 2– Bonds and Loans for the Enterprise are up \$138 million from the prior year as new debt has been issued over the past year to fund construction projects. Most notably, debt was issued by Shands Teaching Hospital to finance capital improvements at health care facilities (\$175 million) and by UF Jacksonville Physicians to fund construction of the UF Health at Wildlight medical office complex (\$23 million) which were offset by regular debt service payments across the Enterprise over the past year.

UF Enterprise Notable Receipts & Disbursements

- **Note 3–** Enterprise operations generated over \$310 million in net cash receipts and disbursements, an increase of \$109 million over the prior year. This was primarily due to a onetime cash receipt at Shands Jacksonville for CARES Act grants, a private gift of \$30M received by the University of Florida Foundation in support of the University AI initiative, and investment returns at Shands Teaching Hospital due to favorable market conditions. Additionally, operating expense disbursements were down at the University and the University Athletic Association due to restrictions placed on travel and other reductions in operations resulting from the pandemic.
- **Note 4–** Other Receipts & Disbursements activities generated \$41 million in cash and investments during the quarter for the Enterprise, an increase of \$183 million over the prior year. This was driven primarily by large investment gains at the UF Foundation and the University due to favorable market conditions during Q1 FY20.

UF Enterprise Cash & Investment Analysis

Note 5– As of September 30, 2020, the Cash and Investment balance for the Enterprise was \$6.5 billion, a \$351 million increase from the end of fiscal year 2020. The balance consists of 33% generally available, 18% conditionally available, and 49% not available funds. Generally available monies are largely driven by the University and Shands Teaching Hospital, comprising of State

Notable Financial Balances and Cash Analysis - UF Enterprise

For the Three Months Ended September 30, 2020

Executive Summary

appropriations, tuition, and cash and investments held for operations. Conditionally available monies are primarily held by the University and UF Self-Insurance Program, consisting of amounts restricted for research from indirect cost recovery, various auxiliary funds, and insurance programs for payments of claims and losses. Not available monies are mainly carried by the University and the University of Florida Foundation, including monies restricted for construction projects, held on behalf of component units, financial aid, and endowed funds.

Notable Non-GAAP Assets & Liabilities (in thousands)

As of September 30, 2020

| | | versity of Florida | F | versity of Florida undation | 1 | niversity Athletic sociation | 5 | ner Direct Support anizations | ı | Florida Clinical Practice ssociation | | Other Practice Plans | T Ho | Shands eaching espital and Clinics | Jac | Shands cksonville ealthCare | En | otal UF Iterprise 0/30/20 | Er | otal UF nterprise 9/30/19 | \$ | Variance | % Variance |
|--|------|-----------------------|------|-----------------------------------|----|------------------------------------|----|-------------------------------------|----|---|----|----------------------------|---------|---|-----|-----------------------------------|------|---------------------------------|------|---------------------------------|-----------|----------|---------------|
| Cash and Investments | | | | | | | | | | | ' | | | | ' | | | | | | | | |
| Cash in Bank (Note 1) | \$ | 6,103 | \$ | 16,596 | \$ | 10,319 | \$ | 46,036 | \$ | 104,801 | \$ | 66,295 | \$ | 154,045 | \$ | 106,874 | \$ | 511,069 | \$ | 294,239 | \$ | 216,830 | 73.7% |
| State Appropriation (Note 2) | | 130,280 | | - | | - | | - | | - | | - | | - | | - | | 130,280 | | 219,921 | | (89,641) | -40.8% |
| Tuition and Technology Fees | | 135,911 | | - | | - | | - | | - | | - | | - | | - | | 135,911 | | 150,129 | | (14,218) | - 9.5% |
| Research Restricted | | 553,962 | | - | | - | | - | | - | | - | | - | | - | | 553,962 | | 522,689 | | 31,273 | 6.0% |
| Business Activities | | 322,573 | | - | | - | | - | | - | | - | | - | | - | | 322,573 | | 356,498 | | (33,925) | -9.5% |
| Donor Restricted (Note 3) | | 238,086 | | - | | - | | - | | - | | - | | - | | - | | 238,086 | | 199,114 | | 38,972 | 19.6% |
| Student Financial Aid (Note 4) | | 68,982 | | - | | - | | - | | - | | - | | - | | - | | 68,982 | | 51,575 | | 17,407 | 33.8% |
| Construction (Note 5) | | 214,179 | | - | | - | | - | | - | | - | | - | | - | | 214,179 | | 192,014 | | 22,165 | 11.5% |
| Other | | 213,824 | | - | | - | | - | | - | | - | | - | | - | | 213,824 | | 203,946 | | 9,878 | 4.8% |
| Held on Behalf of Component Units | | 236,722 | | - | | - | | - | | - | | - | | - | | - | | 236,722 | | 227,574 | | 9,148 | 4.0% |
| Endowment | | - | 1 | ,961,416 | | - | | - | | - | | - | | - | | - | 1 | 1,961,416 | | 1,838,943 | | 122,473 | 6.7% |
| Component Unit Short-Term Inv (Note 6) | | - | | - | | 44,331 | | 41,453 | | 28,265 | | 248,504 | | 294,157 | | 106,389 | | 763,099 | | 432,542 | | 330,557 | 76.4% |
| Component Unit Long-Term Inv (Note 7) | | | | 138,189 | | 52,825 | | 496 | | 7,481 | | _ | | 955,478 | | 9,862 | | 1,164,331 | | 1,028,580 | | 135,751 | 13.2% |
| Total Cash and Investments | \$ 2 | 2,120,622 | \$ 2 | 2,116,201 | \$ | 107,475 | \$ | 87,985 | \$ | 140,547 | \$ | 314,799 | \$ | 1,403,680 | \$ | 223,125 | \$ 6 | 6,514,434 | \$ | 5,717,764 | \$ | 796,670 | 13.9% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Accounts Receivable | | | | | | | | | | | | | | | | | | | | | | | |
| Contracts and Grants Receivable | \$ | 54,341 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 54,341 | \$ | 63,199 | \$ | (8,858) | -14.0% |
| Donor Receivables (Note 8) | | - | | 90,607 | | - | | - | | - | | - | | - | | - | | 90,607 | | 78,682 | | 11,925 | 15.2% |
| Patient Receivables | | - | | - | | - | | - | | 47,098 | | 14,705 | | 268,563 | | 104,384 | | 434,750 | | 465,332 | | (30,582) | -6.6% |
| Other Accounts Receivable | | 2,819 | | 3,075 | | 25,638 | | 7,597 | | 1,650 | | 27,033 | | | | | | 67,812 | | 61,151 | | 6,661 | 10.9% |
| Total Accounts Receivable | \$ | 57,160 | \$ | 93,682 | \$ | 25,638 | \$ | 7,597 | \$ | 48,748 | \$ | 41,738 | \$ | 268,563 | \$ | 104,384 | \$ | 647,510 | \$ | 668,364 | \$ | (20,854) | -3.1% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Buildings and Equipment | \$ 1 | ,629,760 | \$ | 69,170 | \$ | 172,640 | \$ | 14,352 | \$ | 90,473 | \$ | 42,709 | \$ | 1,371,612 | \$ | 251,695 | \$ 3 | 3,642,411 | \$: | 3,643,674 | \$ | (1,263) | 0.0% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Accounts Payable (Note 9) | \$ | 36,595 | \$ | 3,363 | \$ | 5,939 | \$ | 20,390 | \$ | 3,693 | \$ | 16,084 | \$ | 228,489 | \$ | 123,828 | \$ | 438,381 | \$ | 340,681 | \$ | 97,700 | 28.7% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Due To Component Units | \$ | 236,772 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 236,772 | \$ | 227,574 | \$ | 9,198 | 4.0% |
| | | | | | | | | | | | | | | | | | | | | | | | |
| Bonds and Loans | \$ | 153,659 | \$ | 794 | \$ | 119,375 | \$ | - | \$ | 86,942 | \$ | 28,260 | \$ | 1,123,186 | \$ | 224,529 | \$ 1 | 1,736,745 | \$ | 1,598,299 | \$ | 138,446 | 8.7% |

Note: Excludes items related to Other Post-employment Benefits Liability, Pension Liability, and Compensated Absences Liability

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Notable Non-GAAP Receipts & Disbursements (in thousands) For the Three Months Ended September 30, 2020

| | | | | | | | Ocptonia | | • | | | | | | | | | | | | |
|--|----------------|--------------|---------------|-----|----------|----------|----------|----------|-----------|----------|-----------|------|----------|-----------|-----------|---------------|----------|---------------------------------------|------------|----------|------------|
| | | | | | | | | | Florida | | | | ands | _ | | _ | | | | | |
| | | | Iniversity of | | iversity | | Direct | | Clinical | | Other | | ching | | hands | | tal UF | Total UF | | | |
| | University | | Florida | | thletic | | port | | Practice | | ractice | - | ital and | | ksonville | | erprise | Enterprise | | | |
| | Florida | <u>_</u> | oundation | Ass | ociation | Organi | izations | As | sociation | | Plans | CI | inics | He | althCare | Q1 | FY21 | Q1 FY20 | \$ | Variance | % Variance |
| Cash Receipts | | | | | | | | | | | | | | | | | | | | | |
| Tuition and Fees | \$ 158,10 | | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | | 158,100 | \$ 156,631 | \$ | 1,469 | 0.9% |
| State Appropriations | 185,99 | | - | | 921 | | 2,084 | | - | | - | | 3,556 | | - | | 192,552 | 203,739 | | (11,187) | -5.5% |
| Contracts and Grants | 163,08 | | - | | - | | - | | - | | - | | - | | - | | 163,082 | 173,943 | | (10,861) | -6.2% |
| Federal and State Financial Aid | 108,67 | '9 | - | | - | | - | | - | | - | | - | | - | | 108,679 | 113,058 | | (4,379) | -3.9% |
| Patient Service Revenue | | - | - | | - | | - | | 137,427 | | 74,304 | 5 | 501,252 | | 170,720 | | 883,703 | 864,213 | | 19,490 | 2.3% |
| Contributions/Donations (Note 10) | | - | 52,845 | | - | | 1,663 | | - | | - | | 1,493 | | - | | 56,001 | 41,728 | | 14,273 | 34.2% |
| Investment Income (Note 11) | 6,41 | 4 | 228 | | 3,367 | | 260 | | 909 | | 7,654 | | 42,523 | | 479 | | 61,834 | 19,887 | | 41,947 | 210.9% |
| Licensing and Royalties | - | | - | | 8,934 | | 18,069 | | - | | - | | - | | - | | 27,003 | 20,672 | | 6,331 | 30.6% |
| Sales of Goods & Services (Note 12) | 35,88 | | - | | 6,818 | | 54,437 | | - | | 2,850 | | - | | - | | 99,990 | 127,007 | | (27,017) | -21.3% |
| Other Cash Receipts (Note 13) | 3,40 | | - | | - | | 810 | | - | | - | | 5,133 | | 50,266 | | 59,612 | 24,902 | | 34,710 | 139.4% |
| Total Cash Receipts | \$ 661,55 | <u> </u> | 53,073 | \$ | 20,040 | \$ | 77,323 | \$ | 138,336 | \$ | 84,808 | \$ 5 | 553,957 | <u>\$</u> | 221,465 | \$ 1 , | 810,556 | \$ 1,745,780 | \$ | 64,776 | 3.7% |
| | | | | | | | | | | | | | | | | | | | | | |
| Transfers | | | | | | | | | | | | | | | | | | | | | |
| From Component Units | | | | | | | | | | | | | | | | | | | | | |
| Hospitals and Practice Plans | \$ 182,53 | 3 \$ | - | \$ | - | \$ | - | \$ | 36,151 | \$ | 3,246 | \$ | - | \$ | - | \$ | 221,930 | \$ 227,679 | \$ | (5,749) | -2.5% |
| UF Foundation (Donor Restricted) | 34,78 | 32 | - | | - | | 1,903 | | - | | - | | - | | - | | 36,685 | 31,346 | | 5,339 | 17.0% |
| Other | 6,55 | 8 | - | | 1,258 | | - | | - | | - | | - | | - | | 7,816 | 16,892 | | (9,076) | -53.7% |
| To University/Component Units | | | (36,685) | | - | | (7,816) | | (120,276) | | (49, 139) | | (37,157) | | (15,358) | (| 266,431) | (275,917) | | 9,486 | -3.4% |
| Net Transfers | \$ 223,87 | '3 \$ | (36,685) | \$ | 1,258 | \$ | (5,913) | \$ | (84,125) | \$ | (45,893) | \$ | (37,157) | \$ | (15,358) | \$ | - | \$ - | \$ | - | 0.0% |
| | | | | | | | | | | | | | | | | | | | | | |
| Total Cash Receipts Net of Transfers | \$ 885,42 | 27 \$ | 16,388 | \$ | 21,298 | \$ | 71,410 | \$ | 54,211 | \$ | 38,915 | \$ 5 | 516,800 | \$ | 206,107 | \$ 1, | 810,556 | \$ 1,745,780 | \$ | 64,776 | 3.7% |
| | | | | | | | | | | | | | | | | | | | | | |
| Operating Expense Disbursements | | | | | | | | | | | | | | | | | | | | | |
| Employee Compensation and Benefits | | | | | | | | | | | | | | | | | | | | | |
| Instruction | \$ 121,08 | 31 \$ | _ | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 121,081 | \$ 122,134 | \$ | (1,053) | -0.9% |
| Research | 110,40 | 2 | - | | - | | - | | - | | - | | - | | - | | 110,402 | 108,013 | | 2,389 | 2.2% |
| Patient Services and Other Public Services | 144,95 | 8 | - | | - | | - | | - | | 29,170 | 2 | 239,177 | | 88,338 | | 501,643 | 500,532 | | 1,111 | 0.2% |
| Support | 54,19 |)1 | - | | - | | - | | - | | - | | - | | - | | 54,191 | 54,854 | | (663) | -1.2% |
| Other | 46,53 | 3 | 4,749 | | 14,975 | | 911 | | - | | - | | - | | - | | 67,168 | 63,681 | | 3,487 | 5.5% |
| Total Employee Comp & Benefits | \$ 477,16 | | 4,749 | \$ | 14,975 | \$ | 911 | \$ | _ | \$ | 29,170 | \$ 2 | 239,177 | \$ | 88,338 | \$ | 854,485 | \$ 849,214 | \$ | 5,271 | 0.6% |
| | , | | | | , | | | • | | | , | | • | | · | | , | | | | |
| Other Operating Expense Disbursements | | | | | | | | | | | | | | | | | | | | | |
| Instruction | \$ 6,53 | 8 \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 6,538 | \$ 8,590 | \$ | (2,052) | -23.9% |
| Research | 52,18 | | - | | - | | - | | - | | - | | - | | - | | 52,189 | 58,164 | | (5,975) | -10.3% |
| Patient Services and Other Public Services | 22,74 | | - | | - | | - | | 36,871 | | 14,763 | 2 | 211,120 | | 78,949 | | 364,448 | 386,709 | | (22,261) | -5.8% |
| Support | 24,85 | | - | | - | | - | | _ | | - | | - | | - | | 24,857 | 27,816 | | (2,959) | -10.6% |
| Scholarships and Student Support | 85,06 | | - | | - | | - | | - | | - | | _ | | - | | 85,063 | 79,089 | | 5,974 | 7.6% |
| Other | 37,92 | | 4,256 | | 14,345 | | 56,548 | | _ | | _ | | _ | | _ | | 113,070 | 135,252 | | (22,182) | -16.4% |
| Total Other Operating Expense Disbursements (Note 14) | \$ 229,31 | | | \$ | 14,345 | | 56,548 | \$ | 36,871 | \$ | 14,763 | \$ 2 | 211,120 | \$ | 78,949 | _ | 646,165 | \$ 695,620 | \$ | (49,455) | -7.1% |
| (| , , | | ., | | , | <u> </u> | | | | <u> </u> | , | • | , | <u> </u> | ,. | <u> </u> | , | · · · · · · · · · · · · · · · · · · · | | (10,100) | |
| Total Operating Expense Disbursements | \$ 706,47 | '8 \$ | 9,005 | \$ | 29,320 | \$ | 57,459 | \$ | 36,871 | \$ | 43,933 | \$ 4 | 450,297 | \$ | 167,287 | \$ 1, | 500,650 | \$ 1,544,834 | \$ | (44,184) | -2.9% |
| | | _ = | <u> </u> | | <u> </u> | | | | | | • | | | | <u> </u> | | | | | | |
| Total Cash Receipts and Transfers Less | | | | | | | | | | | | | | | | | | | | | |
| Operating Expense Disbursements | \$ 178,94 | 9 \$ | 7,383 | \$ | (8,022) | \$ | 13,951 | \$ | 17,340 | \$ | (5,018) | \$ | 66,503 | \$ | 38,820 | \$ | 309,906 | \$ 200,946 | | 108,960 | 54.2% |
| The second secon | | | , | _ | (-) | | | <u> </u> | | _ | (-)/ | _ | | | | | | | _ | | |
| Other Receipts & Disbursements | | | | | | | | | | | | | | | | | | | | | |
| Equipment and Building Expenses (Note 15) | \$ (51.83 | 31) \$ | (6,539) | \$ | (3,899) | \$ | (293) | \$ | _ | \$ | (300) | \$ | (23,302) | \$ | (8,302) | \$ | (94,466) | \$ (105,166) | \$ | 10,700 | -10.2% |
| Debt Proceeds/Repayment | (2,54 | | (105) | Ψ | (168) | Ψ | (233) | Ψ | (443) | Ψ | (300) | Ψ | (8,028) | Ψ | (2,168) | | (13,453) | (16,739) | | 3,286 | -19.6% |
| Increase (Decrease) in Fair Value of Investments (Note 16) | 25,70 | • | 125,482 | | (100) | | (251) | | 783 | | _ | | 8,667 | | (2,100) | | 160,390 | 24,034 | | 136,356 | 567.3% |
| Change in Receivables and Payables (Note 17) | (17,70 | | 10,805 | | (8,671) | | (5,159) | | 10,420 | | 6,856 | | (8,612) | | 802 | | (11,267) | (44,346) | | 33,079 | -74.6% |
| Total Other Receipts & Disbursements | | '1) \$ | | \$ | (12,738) | \$ | (5,703) | \$ | 10,420 | \$ | 6,556 | \$ | (31,275) | \$ | (9,668) | \$ | 41,204 | \$ (142,217) | | 183,421 | -129.0% |
| Total Other Recorpts a Dissurating into | Ψ (+0,37 | 1 <i>)</i> Ψ | 123,043 | Ψ | (12,130) | Ψ | (0,100) | φ | 10,700 | Ψ | 3,330 | Ψ | (31,213) | Ψ | (3,000) | Ψ | 71,204 | Ψ (172,21 <i>1)</i> | Ψ | 100,721 | - 123.0 /0 |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ 132,57 | 8 8 | 137,026 | \$ | (20,760) | \$ | 8,248 | \$ | 28,100 | \$ | 1,538 | \$ | 35,228 | \$ | 29,152 | \$ | 351,110 | \$ 58,729 | \$ | 292,381 | 497.8% |
| The same and the s | + 102,01 | <u> </u> | , | | (-3,:30) | | -, | _ | _5,.00 | | -,,,,,, | | , | | | | | | : – | | |

| Note # | Line Description | Explanation |
|--------|---|--|
| 1 | Cash and Investments - Cash in Bank | Increase is due to CARES Act stimulus funds and Medicare Advance payments received in Q4 FY20 and Q1 FY21 in response to COVID-19, a portion of which is being held in cash by Shands Teaching Hospital (\$81M), Shands Jacksonville HealthCare (\$76M) and UF Jacksonville Physicians (\$20M). The remainder of this is being held in short-term investments; see Note 6 below. Additionally, fund held in cash at Florida Clinical Practice Association (FCPA) increased by \$32M due to the operation of new clinics as well as collection on receivables from the Agency for Health Care Administration related to Medicaid. |
| 2 | Cash and Investments - State Appropriations | Decrease is primarily due to greater use of appropriations at the University. |
| 3 | Cash and Investments - Donor Restricted | Increase is due to additional amounts received by the University from the University of Florida Foundation, primarily for construction of the Herbert Wertheim College of Engineering, and construction of the Whitney Lab. |
| 4 | Cash and Investments - Student Financial Aid | Increase is due to additional amounts on hand to fund certain scholarship programs, primarily Florida Bright Futures and UF Law scholarships. Bright Futures disbursements extended into October 2021 due to the delayed start of the semester, and UF Law scholarships are to be awarded during the rest of the academic year. |
| 5 | Cash and Investments - Construction | Increase is primarily due to ongoing construction at the University for large utilities and infrastructure projects. |
| 6 | Cash and Investments - Component Unit Short-Term Inv | Increase is primarily due to CARES Act stimulus funds and additional Medicare Advance payments received by Shands Teaching Hospital and Shands Jacksonville in FY20 and Q1 FY21 in response to COVID-19, a portion of which is being held in short-term investments, as well as residual funding from the proceeds of a bond issued by Shands Teaching Hospital in FY20 to fund capital projects. |

| Note # | Line Description | Explanation |
|--------|--|--|
| 7 | Cash and Investments - Component Unit Long-Term Inv | Increase is due to additional funds designated by the Shands Teaching Hospital board of directors for special projects and placed into investments with UFICO as well as increases in the value of Shands' investments due to market performance. Additionally, the UF Foundation invested the proceeds from a large \$30M private gift into the University's component unit fund. |
| 8 | Donor Receivables | Increase is attributable to new pledges as well as changes in the present value of pledges from the UF Foundation. |
| 9 | Accounts Payable | Increase is primarily due to Medicare Advance payments received by Shands Jacksonville in response to COVID-19, which will be offset against future Medicare claims scheduled to begin in Q4 FY21. |
| 10 | Contributions/Donations | Increase is primarily due to a large \$30M private gift received by the UF Foundation during Q1 FY21. |
| 11 | Investment Income | Increase is due to large gains on investments held by Shands Teaching Hospital during Q1 FY21 due to market conditions. |
| 12 | Sales of Goods & Services | Decrease is due to reduced fees collected by various auxiliaries at the University in the COVID-19 operating environment, including Housing, Transportation and Parking, and other auxiliary enterprises. |
| 13 | Other Cash Receipts | Increase is due to \$45M in CARES Act funding received by Shands Jacksonville in Q1 FY21 in response to COVID-19. |
| 14 | Total Other Operating Expense Disbursements | Decrease is primarily due to very limited travel expenses due to travel restrictions across the University in response to COVID-19 as well as general reduction in operations of athletic programs at the University Athletic Association. Additionally, disbursements at Shands Jacksonville were down due to timing of vendor payments. |
| 15 | Equipment and Building Expenses | Decrease is due to reduced construction activity at FCPA and UF Jacksonville Physicians as construction on the Oaks Mall and Wildlight clinics was completed during FY20. |

| Note # | Line Description | Explanation |
|--------|--|---|
| 16 | Increase (Decrease) in Fair Value of Investments | Increase is primarily due to large gains on investments held by the University and on the endowment at the UF Foundation during Q1 FY21 due to market |
| | | conditions. |

University of Florida

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | ć | 9/30/2020 | 9 | /30/2019 | \$ Variance | % Variance |
|-------------------------------------|----|-----------|----|-----------|----------------|------------|
| Cash and Investments | | | | | | |
| Cash in Bank | \$ | 6,103 | \$ | 11,820 | \$ (5,717) | -48.4% |
| State Appropriation (Note 1) | | 130,280 | | 219,921 | (89,641) | -40.8% |
| Tuition and Technology Fees | | 135,911 | | 150,129 | (14,218) | -9.5% |
| Research Restricted | | 553,962 | | 522,689 | 31,273 | 6.0% |
| Business Activities (Note 2) | | 322,573 | | 356,498 | (33,925) | -9.5% |
| Donor Restricted (Note 3) | | 238,086 | | 199,114 | 38,972 | 19.6% |
| Student Financial Aid (Note 4) | | 68,982 | | 51,575 | 17,407 | 33.8% |
| Construction (Note 5) | | 214,179 | | 192,014 | 22,165 | 11.5% |
| Other | | 213,824 | | 203,946 | 9,878 | 4.8% |
| Held on Behalf of Component Units | | 236,722 | | 227,574 | 9,148 | 4.0% |
| Total Cash and Investments | \$ | 2,120,622 | \$ | 2,135,280 | \$ (14,658) | -0.7% |
| | | | | | | |
| Accounts Receivable | | | | | | |
| Contracts and Grants Receivable | \$ | 54,341 | \$ | 63,199 | \$ (8,858) | -14.0% |
| Other Accounts Receivable | | 2,819 | | 1,503 | 1,316 | 87.6% |
| Total Accounts Receivable | \$ | 57,160 | \$ | 64,702 | \$ (7,542) | -11.7% |
| | | | | | | |
| Buildings and Equipment, Net | \$ | 1,629,760 | \$ | 1,663,158 | \$ (33,398) | -2.0% |
| | | | | | | |
| Accounts Payable | \$ | 36,595 | \$ | 34,396 | \$ 2,199 | 6.4% |
| | | | | | | |
| Due To Component Units | \$ | 236,772 | \$ | 227,574 | \$ 9,198 | 4.0% |
| | | | | | | |
| Bonds and Loans | \$ | 153,659 | \$ | 162,324 | \$ (8,665) | -5.3% |

University of Florida

Notable Non-GAAP Receipts & Disbursements (in thousands)
For the Three Months Ended September 30, 2020

| | C | 1 FY21 | Q | 1 FY20 | \$ ' | Variance | % Variance |
|--|----|----------|----|---|-------------|-----------------|------------|
| Cash Receipts | | | | | | | |
| Tuition and Fees | \$ | 158,100 | \$ | 156,631 | \$ | 1,469 | 0.9% |
| State Appropriations (Note 6) | | 185,991 | | 198,836 | | (12,845) | -6.5% |
| Contracts and Grants (Note 7) | | 163,082 | | 173,943 | | (10,861) | -6.2% |
| Federal and State Financial Aid | | 108,679 | | 113,058 | | (4,379) | -3.9% |
| Investment Income | | 6,414 | | 13,140 | | (6,726) | -51.2% |
| Sales of Goods & Services (Note 8) | | 35,885 | | 57,770 | | (21,885) | -37.9% |
| Other Cash Receipts | | 3,403 | | 2,732 | | 671 | 24.6% |
| Total Cash Receipts | \$ | 661,554 | \$ | 716,110 | \$ | (54,556) | -7.6% |
| | | | | | | | |
| Transfers | | | | | | | |
| From Component Units | _ | | | | | | |
| Hospitals and Practice Plans | \$ | 182,533 | \$ | 177,235 | \$ | 5,298 | 3.0% |
| UF Foundation (Donor Restricted) | | 34,782 | | 29,319 | | 5,463 | 18.6% |
| Other | | 6,558 | | 12,108 | | (5,550) | -45.8% |
| Net Transfers | \$ | 223,873 | \$ | 218,662 | \$ | 5,211 | 2.4% |
| Total Cash Receipts Net of Transfers | \$ | 885,427 | \$ | 934,772 | \$ | (49,345) | -5.3% |
| | | | • | | | | |
| Operating Expense Disbursements | | | | | | | |
| Employee Compensation and Benefits | | | | | | | |
| Instruction | \$ | 121,081 | \$ | 122,134 | \$ | (1,053) | -0.9% |
| Research | | 110,402 | | 108,013 | | 2,389 | 2.2% |
| Patient Services and Other Public Services | | 144,958 | | 140,008 | | 4,950 | 3.5% |
| Support | | 54,191 | | 54,854 | | (663) | -1.2% |
| Other | | 46,533 | | 44,432 | | 2,101 | 4.7% |
| Total Employee Comp & Benefits | \$ | 477,165 | \$ | 469,441 | \$ | 7,724 | 1.6% |
| | | | | | | | |
| Other Operating Expense Disbursements | | | | | | (0.050) | 22.22/ |
| Instruction | \$ | 6,538 | \$ | 8,590 | \$ | (2,052) | -23.9% |
| Research | | 52,189 | | 58,164 | | (5,975) | -10.3% |
| Patient Services and Other Public Services | | 22,745 | | 24,224 | | (1,479) | -6.1% |
| Support | | 24,857 | | 27,816 | | (2,959) | -10.6% |
| Scholarships and Student Support | | 85,063 | | 79,089 | | 5,974 | 7.6% |
| Other | | 37,921 | | 47,457 | | (9,536) | -20.1% |
| Total Other Operating Expense Disbursements (Note 9) | \$ | 229,313 | \$ | 245,340 | \$ | (16,027) | -6.5% |
| Total Operating Expense Disbursements | \$ | 706,478 | \$ | 714,781 | \$ | (8,303) | -1.2% |
| Total operating Expense Bloodiscinionic | Ť | , | Ť | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Ť | (0,000) | 11270 |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | 178,949 | \$ | 219,991 | \$ | (41,042) | -18.7% |
| | | | | | | | |
| Other Receipts & Disbursements | | | | | | | |
| Equipment and Building Expenses | \$ | (51,831) | \$ | (52,484) | \$ | 653 | -1.2% |
| | | | | | | | |
| Debt Proceeds/Repayment | \$ | (2,541) | \$ | (2,299) | \$ | (242) | 10.5% |
| | | | | | | | |
| Increase (Decrease) in Fair Value Investments (Note 10) | \$ | 25,709 | \$ | 3,977 | \$ | 21,732 | 546.4% |
| Change in Descrivables and Devables (Nats 44) | • | (47.700) | Φ. | (50.005) | • | 40.457 | 70.40/ |
| Change in Receivables and Payables (Note 11) | \$ | (17,708) | \$ | (59,865) | \$ | 42,157 | -70.4% |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 132,578 | \$ | 109,320 | \$ | 23,258 | 21.3% |
| 100 Outstand investments for the Times Months Ended September 30, 2020 | | .02,010 | _ | 100,020 | | | 21.070 |

University of Florida

| Note # | Line Description | Explanation |
|--------|---|---|
| 1 | Cash and Investments - State Appropriations | Decrease is primarily due to greater use of appropriations. |
| 2 | Cash and Investments - Business Activities | Decrease is due to utilization of cash reserves by auxiliaries to cover operating expenses while limited revenues were generated. |
| 3 | Cash and Investments - Donor Restricted | Increase is due to additional transfers from the UF Foundation subsequent to Q1 FY20, primarily for construction of the Herbert Wertheim College of Engineering, and construction of the Whitney Lab. |
| 4 | Cash and Investments - Student Financial Aid | Increase is due to additional amounts on hand to fund certain scholarship programs, primarily Florida Bright Futures and UF Law scholarships. Bright Futures disbursements extended into October 2021 due to the delayed start of the semester, and UF Law scholarships are to be awarded during the rest of the academic year. |
| 5 | Cash and Investments - Construction | Increase is primarily due to ongoing construction at the University for large utilities and infrastructure projects. |
| 6 | State Appropriations | Decrease is due to reduced funding from the State for Public Education Capital Outlay (PECO) as the State is not providing PECO funding for maintenance projects in FY21. |
| 7 | Contracts and Grants | Decrease is due to limited research activities due to COVID-19. Contracts and grant revenues were down in July and August when comparing FY21 and FY20, but rebounded in September as part of the Research Resumption Plan. |
| 8 | Sales of Goods & Services | Decrease is due to reduced fees collected by various auxiliaries in the COVID-19 operating environment, including Housing, Transportation and Parking, and other auxiliary enterprises. |
| 9 | Total Other Operating Expense Disbursements | Decrease is primarily due to very limited travel expenses due to travel restrictions across the University in response to COVID-19, as well as decreases in other discretionary expenses. |

University of Florida

| Note # | Line Description | Explanation |
|--------|--|--|
| 10 | Increase (Decrease) in Fair Value of Investments | Increase is due to large gains in July and August of FY21 on investments held by the University due to market conditions. |
| 11 | Change in Receivables and Payables | Increase is due to larger balances held on behalf of component units, as well as lower amounts receivable on contracts and grants. |

University of Florida Foundation

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | 9/30/2020 | 9 | 9/30/2019 | \$ Variance | % Variance |
|---------------------------------------|-----------------|----|-----------|----------------|------------|
| Cash and Investments | | | | | |
| Cash in Bank | \$ 16,596 | \$ | 11,686 | \$ 4,910 | 42.0% |
| Endowment (Note 1) | 1,961,416 | | 1,838,943 | 122,473 | 6.7% |
| Component Unit Long-Term Inv (Note 2) | 138,189 | | 116,703 | 21,486 | 18.4% |
| Total Cash and Investments | \$ 2,116,201 | \$ | 1,967,332 | \$ 148,869 | 7.6% |
| | | | | | |
| Accounts Receivable | | | | | |
| Donor Receivables (Note 3) | \$ 90,607 | \$ | 78,682 | \$ 11,925 | 15.2% |
| Other Accounts Receivable | 3,075 | | 4,207 | (1,132) | -26.9% |
| Total Accounts Receivable | \$ 93,682 | \$ | 82,889 | \$ 10,793 | 13.0% |
| | | | | | |
| Buildings and Equipment | \$ 69,170 | \$ | 62,034 | \$ 7,136 | 11.5% |
| | | | | | |
| Accounts Payable | \$ 3,363 | \$ | 782 | \$ 2,581 | 330.1% |
| | | | | | |
| Bonds and Loans | \$ 794 | \$ | 911 | \$ (117) | -12.8% |

University of Florida Foundation

Notable Non-GAAP Receipts & Disbursements (in thousands)

For the Three Months Ended September 30, 2020

| | Q1 FY21 | | Q1 FY20 | | \$ Variance | | % Variance |
|--|---------|----------|---------|----------|-------------|---------|------------|
| Cash Receipts | | | | | | | |
| Contributions/Donations (Note 4) | \$ | 52,845 | \$ | 32,538 | \$ | 20,307 | 62.4% |
| Investment Income | | 228 | | 284 | | (56) | -19.7% |
| Total Cash Receipts | \$ | 53,073 | \$ | 32,822 | \$ | 20,251 | 61.7% |
| Transfers | | | | | | | |
| To University/Component Units | \$ | (36,685) | | (29,319) | \$ | (7,366) | 25.1% |
| Net Transfers | \$ | (36,685) | \$ | (29,319) | \$ | (7,366) | 25.1% |
| Total Cash Receipts Net of Transfers | \$ | 16,388 | \$ | 3,503 | \$ | 12,885 | 367.8% |
| Operating Expense Disbursements | | | | | | | |
| Employee Compensation and Benefits | | | | | | | |
| Other | \$ | 4,749 | \$ | 4,245 | \$ | 504 | 11.9% |
| Total Employee Comp & Benefits | \$ | 4,749 | \$ | 4,245 | \$ | 504 | 11.9% |
| Other Operating Expense Disbursements | | | | | | | |
| Other | | 4,256 | | 4,706 | | (450) | -9.6% |
| Total Other Operating Expense Disbursements | \$ | 4,256 | \$ | 4,706 | \$ | (450) | -9.6% |
| Total Operating Expense Disbursements | \$ | 9,005 | \$ | 8,951 | \$ | 54 | 0.6% |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | 7,383 | \$ | (5,448) | \$ | 12,831 | -235.5% |
| Other Receipts & Disbursements | | | | | | | |
| Equipment and Building Expenses | \$ | (6,539) | \$ | 631 | \$ | (7,170) | -1136.3% |
| Debt Proceeds/Repayment | \$ | (105) | \$ | (1,104) | \$ | 999 | -90.5% |
| Increase (Decrease) in Fair Value of Investments (Note 5) | \$ | 125,482 | \$ | 19,320 | \$ | 106,162 | 549.5% |
| Change in Receivables and Payables | \$ | 10,805 | \$ | 7,524 | \$ | 3,281 | 43.6% |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 137,026 | \$ | 20,923 | \$ | 116,103 | 554.9% |
| net Cash and investments for the Three Months Ended September 30, 2020 | Ą | 137,020 | Ψ | 20,323 | Ψ | 110,103 | 334.3% |

University of Florida Foundation

| Note # | Line Description | Explanation |
|--------|--|---|
| 1 | Endowment | Increase is due to large gains on endowment investments in Q1 FY21 due to market conditions. |
| 2 | Component Unit Long-Term Inv | Increase is due to additional amounts deposited by UF Foundation into the University's component unit fund due to a large \$30M private gift related to the University AI initiative received during Q1 FY20. |
| 3 | Donor Receivables | Increase is attributable to new pledges as well as changes in the present value of pledges subsequent to Q1 FY20. |
| 4 | Contributions/Donations | Increase is primarily due to a large \$30M private gift received by the UF Foundation during Q1 FY21. |
| 5 | Increase (Decrease) in Fair Value of Investments | Increase is driven by gains on endowment investments in Q1 FY21 due to market conditions. |

University Athletic Association

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | 9. | /30/2020 | 9 | /30/2019 | \$ Variance | % Variance |
|--|----|----------|----|----------|----------------|------------|
| Cash and Investments | | | | | | |
| Cash in Bank | \$ | 10,319 | \$ | 10,502 | \$ (183) | -1.7% |
| Component Unit Short-Term Inv (Note 1) | | 44,331 | | 73,171 | (28,840) | -39.4% |
| Component Unit Long-Term Inv | | 52,825 | | 51,236 | 1,589 | 3.1% |
| Total Cash and Investments | \$ | 107,475 | \$ | 134,909 | \$ (27,434) | -20.3% |
| | | | | | | |
| Accounts Receivable | | | | | | |
| Other Accounts Receivable | \$ | 25,638 | \$ | 23,774 | \$ 1,864 | 7.8% |
| Total Accounts Receivable | \$ | 25,638 | \$ | 23,774 | \$ 1,864 | 7.8% |
| | | | | | | |
| Buildings and Equipment | \$ | 172,640 | \$ | 188,439 | \$ (15,799) | -8.4% |
| | | | | | | |
| Accounts Payable | \$ | 5,939 | \$ | 6,534 | \$ (595) | -9.1% |
| | | | | | | |
| Bonds and Loans | \$ | 119,375 | \$ | 126,025 | \$ (6,650) | -5.3% |

University Athletic Association

Notable Non-GAAP Receipts & Disbursements (in thousands)

For the Three Months Ended September 30, 2020

| | Q1 FY21 | Q1 FY20 | \$ Variance | % Variance |
|--|------------------------|------------------------|-------------------|------------|
| Cash Receipts | | | | |
| State Appropriations | \$ 921 | \$ 1,704 | \$ (783) | -46.0% |
| Investment Income | 3,367 | 732 | 2,635 | 360.0% |
| Licensing and Royalties | 8,934 | 4,921 | 4,013 | 81.5% |
| Sales of Goods & Services | 6,818 | 9,116 | (2,298) | -25.2% |
| Total Cash Receipts | \$ 20,040 | \$ 16,473 | \$ 3,567 | 21.7% |
| Transfers | | | | |
| From Component Units | | | | |
| Other | 1,258 | 4.784 | (3,526) | -73.7% |
| To University/Component Units | 1,200 | (105) | 105 | -100.0% |
| Net Transfers | \$ 1,258 | \$ 4,679 | \$ (3,421) | -73.1% |
| | · , | , | . , , | |
| Total Cash Receipts Net of Transfers | \$ 21,298 | \$ 21,152 | \$ 146 | 0.7% |
| On antique Formance Bishaman and | | | | |
| Operating Expense Disbursements | | | | |
| Employee Compensation and Benefits | A 44 075 | A 44 040 | Φ 000 | 0.00/ |
| Other Special Common & Reposition | \$ 14,975 \$ 14,975 | \$ 14,043 \$ 14,043 | \$ 932 \$ 932 | 6.6% |
| Total Employee Comp & Benefits | \$ 14,975 | \$ 14,043 | \$ 932 | 6.6% |
| Other Operating Expense Disbursements | | | | |
| Other (Note 2) | 14,345 | \$ 27,920 | (13,575) | -48.6% |
| Total Other Operating Expense Disbursements | \$ 14,345 | \$ 27,920 | \$ (13,575) | -48.6% |
| Total Operating Expense Disbursements | \$ 29,320 | \$ 41,963 | \$ (12,643) | -30.1% |
| Total Operating Expense Disbursements | \$ 29,320 | \$ 41,903 | φ (12,043) | -30.1 /6 |
| Total Cash Receipts and Transfers Less | | | | |
| Operating Expense Disbursements | \$ (8,022) | \$ (20,811) | \$ 12,789 | -61.5% |
| Other Receipts & Disbursements | | | | |
| • | \$ (3,899) | \$ (4.399) | \$ 500 | -11.4% |
| Equipment and Building Expenses | \$ (3,699) | \$ (4,399) | \$ 500 | -11.470 |
| Debt Proceeds/Repayment | \$ (168) | \$ (233) | \$ 65 | -27.9% |
| Change in Receivables and Payables | \$ (8,671) | \$ (418) | \$ (8,253) | 1974.4% |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ (20,760) | \$ (25,861) | \$ 5,101 | -19.7% |

University Athletic Association

| Note # | Line Description | Explanation |
|--------|---|--|
| 1 | Component Unit Short-Term Inv | Decrease is primarily due to the use of proceeds from the bond issued to cover construction expenses on the new baseball/softball stadium subsequent to Q1 FY20, which will be completed in Q2 FY21. |
| 2 | Operating Expense Disbursements - Other | Decrease is due to the postponement of sports programs such as football, soccer, and volleyball as well as a general reduction of team operations resulting from COVID-19. |

Other Direct Support Organizations

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| 9/ | 30/2020 | 9/ | 30/2019 | \$ Variance | | % Variance |
|----|----------------|-----------------------------------|--|---|---|--|
| | | | | | | |
| \$ | 46,036 | \$ | 40,997 | \$ | 5,039 | 12.3% |
| | 41,453 | | 38,667 | | 2,786 | 7.2% |
| | 496 | | 492 | | 4 | 0.8% |
| \$ | 87,985 | \$ | 80,156 | \$ | 7,829 | 9.8% |
| | | | | | | |
| | | | | | | |
| \$ | 7,597 | \$ | 6,168 | \$ | 1,429 | 23.2% |
| \$ | 7,597 | \$ | 6,168 | \$ | 1,429 | 23.2% |
| | | | | | | |
| \$ | 14,352 | \$ | 13,609 | \$ | 743 | 5.5% |
| | | | | | | |
| \$ | 20,390 | \$ | 15,907 | \$ | 4,483 | 28.2% |
| | \$ \$ \$ | \$ 7,597 \$ 7,597 \$ 14,352 | \$ 46,036 \$ 41,453 496 \$ \$ 87,985 \$ \$ \$ 7,597 \$ \$ \$ 7,597 \$ \$ \$ \$ 14,352 \$ | \$ 46,036 \$ 40,997 41,453 38,667 496 492 \$ 87,985 \$ 80,156 \$ 7,597 \$ 6,168 \$ 7,597 \$ 6,168 \$ 14,352 \$ 13,609 | \$ 46,036 \$ 40,997 \$ 41,453 38,667 496 492 \$ 87,985 \$ 80,156 \$ \$ 7,597 \$ 6,168 \$ \$ 7,597 \$ 6,168 \$ \$ \$ 14,352 \$ 13,609 \$ | \$ 46,036 \$ 40,997 \$ 5,039 41,453 38,667 2,786 496 492 4 \$ 87,985 \$ 80,156 \$ 7,829 \$ 7,597 \$ 6,168 \$ 1,429 \$ 7,597 \$ 6,168 \$ 1,429 \$ 14,352 \$ 13,609 \$ 743 |

Other Direct Support Organizations
Notable Non-GAAP Receipts & Disbursements (in thousands)
For the Three Months Ended September 30, 2020

| | Q1 FY21 | | Q1 FY20 | | \$ Variance | | % Variance |
|--|---------|---------|---------|----------|-------------|---------|------------|
| Cash Receipts | | | | | | | |
| State Appropriations | \$ | 2,084 | \$ | 1,436 | \$ | 648 | 45.1% |
| Contracts and Grants | | - | | - | | - | 0.0% |
| Contributions/Donations | | 1,663 | | 5,328 | | (3,665) | -68.8% |
| Investment Income | | 260 | | 430 | | (170) | -39.5% |
| Licensing and Royalties | | 18,069 | | 15,751 | | 2,318 | 14.7% |
| Sales of Goods & Services | | 54,437 | | 58,138 | | (3,701) | -6.4% |
| Other Cash Receipts | | 810 | | 1,065 | | (255) | -23.9% |
| Total Cash Receipts | \$ | 77,323 | \$ | 82,148 | \$ | (4,825) | -5.9% |
| Transfers | | | | | | | |
| From Component Units | | | | | | | |
| UF Foundation (Donor Restricted) | \$ | 1,903 | \$ | 2,027 | \$ | (124) | -6.1% |
| To University/Component Units (Note 1) | | (7,816) | | (17,987) | | 10,171 | -56.5% |
| Net Transfers | \$ | (5,913) | \$ | (15,960) | \$ | 10,047 | -63.0% |
| Total Cash Receipts Net of Transfers | \$ | 71,410 | \$ | 66,188 | \$ | 5,222 | 7.9% |
| · | | | | | | | |
| Operating Expense Disbursements | | | | | | | |
| Employee Compensation and Benefits | | | | | | | |
| Other | \$ | 911 | \$ | 961 | \$ | (50) | -5.2% |
| Total Employee Comp & Benefits | \$ | 911 | \$ | 961 | \$ | (50) | -5.2% |
| | | | | | | | |
| Other Operating Expense Disbursements | | | | | | | |
| Other | \$ | 56,548 | \$ | 55,169 | \$ | 1,379 | 2.5% |
| Total Other Operating Expense Disbursements | \$ | 56,548 | \$ | 55,169 | \$ | 1,379 | 2.5% |
| Total Operating Expense Disbursements | \$ | 57,459 | \$ | 56,130 | \$ | 1,329 | 2.4% |
| | | | | | | | |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | 13,951 | \$ | 10,058 | \$ | 3,893 | 38.7% |
| Other Receipts & Disbursements | | | | | | | |
| Equipment and Building Expenses | \$ | (293) | \$ | (779) | \$ | 486 | -62.4% |
| -γγ | | (=33) | | (112) | | | |
| Increase (Decrease) in Fair Value of Investments | \$ | (251) | \$ | 272 | \$ | (523) | -192.3% |
| Change in Receivables and Payables | \$ | (5,159) | \$ | 1,690 | \$ | (6,849) | -405.3% |
| Change in reconvasios and r ayasios | φ | (0,108) | φ | | φ | | |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 8,248 | \$ | 11,241 | \$ | (2,993) | -26.6% |

Other Direct Support Organizations

| Note # | Line Description | Explanation |
|--------|-------------------------------|--|
| 1 | To University/Component Units | Decrease is due to reduced transfers of contributions from Gator Boosters to the |
| | | University Athletic Association due to the disruption of the 2020 Football season, |
| | | as well as reduced transfers from the University of Florida Research Foundation |
| | | to the University in comparison to Q1 FY20 when large startup costs for new |
| | | faculty were incurred. |

Florida Clinical Practice Association

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | 9. | /30/2020 | 9/ | /30/2019 | \$ \ | /ariance | % Variance |
|-------------------------------|----|----------|----|----------|------|----------|------------|
| Cash and Investments | | | | | | | |
| Cash in Bank (Note 1) | \$ | 104,801 | \$ | 72,311 | \$ | 32,490 | 44.9% |
| Component Unit Short-Term Inv | | 28,265 | | 26,315 | | 1,950 | 7.4% |
| Component Unit Long-Term Inv | | 7,481 | | 8,844 | | (1,363) | -15.4% |
| Total Cash and Investments | \$ | 140,547 | \$ | 107,470 | \$ | 33,077 | 30.8% |
| | | | | | | | |
| Accounts Receivable | | | | | | | |
| Patient Receivables | \$ | 47,098 | \$ | 44,231 | \$ | 2,867 | 6.5% |
| Other Accounts Receivable | | 1,650 | | 1,975 | | (325) | -16.5% |
| Total Accounts Receivable | \$ | 48,748 | \$ | 46,206 | \$ | 2,542 | 5.5% |
| | | | | | | | |
| Buildings and Equipment | \$ | 90,473 | \$ | 88,834 | \$ | 1,639 | 1.8% |
| | | | | | | | |
| Accounts Payable | \$ | 3,693 | \$ | 3,355 | \$ | 338 | 10.1% |
| | | | | | | | |
| Bonds and Loans | \$ | 86,942 | \$ | 89,571 | \$ | (2,629) | -2.9% |

Florida Clinical Practice Association

Notable Non-GAAP Receipts & Disbursements (in thousands) For the Three Months Ended September 30, 2020

| | Q1 FY21 | | | Q1 FY20 | | /ariance | % Variance |
|--|---------|-----------|----|-----------|----|----------|------------|
| Cash Receipts | | | | | | | |
| Patient Service Revenue (Note 2) | \$ | 137,427 | \$ | 123,485 | \$ | 13,942 | 11.3% |
| Investment Income | | 909 | | 737 | | 172 | 23.3% |
| Other Receipts | | - | | - | | - | 0.0% |
| Total Cash Receipts | \$ | 138,336 | \$ | 124,222 | \$ | 14,114 | 11.4% |
| Transfers | | | | | | | |
| From Component Units | | | | | | | |
| Hospitals and Practice Plans | \$ | 36,151 | \$ | 32,392 | \$ | 3,759 | 11.6% |
| To University/Component Units | | (120,276) | | (116,504) | | (3,772) | 3.2% |
| Net Transfers | \$ | (84,125) | \$ | (84,112) | \$ | (13) | 0.0% |
| Total Cash Receipts Net of Transfers | \$ | 54,211 | \$ | 40,110 | \$ | 14,101 | 35.2% |
| Operating Expense Disbursements | | | | | | | |
| Other Operating Expense Disbursements | | | | | | | |
| Patient Services and Other Public Services | | 36,871 | | 35,343 | | 1,528 | 4.3% |
| Total Other Operating Expense Disbursements | \$ | 36,871 | \$ | 35,343 | \$ | 1,528 | 4.3% |
| Total Operating Expense Disbursements | \$ | 36,871 | \$ | 35,343 | \$ | 1,528 | 4.3% |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | 17,340 | \$ | 4,767 | \$ | 12,573 | 263.8% |
| Other Receipts & Disbursements | | | | | | | |
| Equipment and Building Expenses | \$ | - | \$ | (6,000) | \$ | 6,000 | -100.0% |
| Debt Proceeds/Repayment | \$ | (443) | \$ | (355) | \$ | (88) | 24.8% |
| Increase (Decrease) in Fair Value of Investments | \$ | 783 | \$ | (924) | \$ | 1,707 | -184.7% |
| Change in Receivables and Payables (Note 3) | \$ | 10,420 | \$ | (3,058) | \$ | 13,478 | -440.7% |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 28,100 | \$ | (5,570) | \$ | 33,670 | -604.5% |

Florida Clinical Practice Association

| Note # | Line Description | Explanation |
|--------|-------------------------------------|---|
| 1 | Cash in Bank - Cash and Investments | Increase in additional cash generated from operations, primarily from increased patient service revenues due to the growth of operations into new clinic as well as collections on receivables from the Agency for Health Care Administration related to Medicaid that were due at 6/30/20. |
| 2 | Patient Service Revenue | Increase is due to regional growth, primarily due to the additions of new clinics in Lake City, Ocala and Starke and of a new contractual agreement with Central Florida Health. |
| 3 | Change in Receivables and Payables | Increase is due to collection of \$15.7M from the Agency for Health Care Administration related to Medicaid which were receivable at 6/30/20. |

Other Practice Plans

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | 9 | /30/2020 | 9. | /30/2019 | \$ \ | Variance | % Variance |
|----------------------------------|----|----------|----|----------|-------------|-----------------|------------|
| Cash and Investments | , | | | | _ | | |
| Cash in Bank (Note 1) | \$ | 66,295 | \$ | 42,862 | \$ | 23,433 | 54.7% |
| Component Unit Short-Term Inv | | 248,504 | | 239,864 | | 8,640 | 3.6% |
| Total Cash and Investments | \$ | 314,799 | \$ | 282,726 | \$ | 32,073 | 11.3% |
| | | | | | | | |
| Accounts Receivable | | | | | | | |
| Patient Receivables | \$ | 14,705 | \$ | 14,784 | \$ | (79) | -0.5% |
| Other Accounts Receivable | | 27,033 | | 23,524 | | 3,509 | 14.9% |
| Total Accounts Receivable | \$ | 41,738 | \$ | 38,308 | \$ | 3,430 | 9.0% |
| | | | | | | | |
| Buildings and Equipment (Note 2) | \$ | 42,709 | \$ | 28,274 | \$ | 14,435 | 51.1% |
| | | | | | | | |
| Accounts Payable | \$ | 16,084 | \$ | 8,210 | \$ | 7,874 | 95.9% |
| | | | | | | | |
| Bonds and Loans (Note 3) | \$ | 28,260 | \$ | 11,795 | \$ | 16,465 | 139.6% |

Other Practice Plans

Notable Non-GAAP Receipts & Disbursements (in thousands) For the Three Months Ended September 30, 2020

| | Q1 FY21 | | Q1 FY20 | | \$ Variance | | % Variance |
|--|---------|----------|---------|----------|-------------|----------|------------|
| Cash Receipts | | | | | | | |
| Patient Service Revenue | \$ | 74,304 | \$ | 71,824 | \$ | 2,480 | 3.5% |
| Investment Income | | 7,654 | | 3,624 | | 4,030 | 111.2% |
| Sales of Goods & Services | | 2,850 | | 1,983 | | 867 | 43.7% |
| Other Receipts | | - | | - | | - | 0.0% |
| Total Cash Receipts | \$ | 84,808 | \$ | 77,431 | \$ | 7,377 | 9.5% |
| Transfers | | | | | | | |
| From Component Units | | | | | | | |
| Hospitals and Practice Plan (Note 4) | \$ | 3,246 | \$ | 18,052 | \$ | (14,806) | -82.0% |
| To University/Component Units | | (49,139) | | (49,996) | | 857 | -1.7% |
| Net Transfers | \$ | (45,893) | \$ | (31,944) | \$ | (13,949) | 43.7% |
| Total Cash Receipts Net of Transfers | \$ | 38,915 | \$ | 45,487 | \$ | (6,572) | -14.4% |
| Operating Expense Disbursements | | | | | | | |
| Employee Compensation and Benefits | | | | | | | |
| Patient Services and Other Public Services | \$ | 29,170 | \$ | 27,679 | \$ | 1,491 | 5.4% |
| Total Employee Comp & Benefits | \$ | 29,170 | \$ | 27,679 | \$ | 1,491 | 5.4% |
| Other Operating Expense Disbursements | | | | | | | |
| Patient Services and Other Public Services | \$ | 14,763 | \$ | 16,648 | \$ | (1,885) | -11.3% |
| Total Other Operating Expense Disbursements | \$ | 14,763 | \$ | 16,648 | \$ | (1,885) | -11.3% |
| Total Operating Expense Disbursements | \$ | 43,933 | \$ | 44,327 | \$ | (394) | -0.9% |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | (5,018) | \$ | 1,160 | \$ | (6,178) | -532.6% |
| Other Receipts & Disbursements | | | | | | | |
| Equipment and Building Expenses | \$ | (300) | \$ | (6,112) | \$ | 5,812 | -95.1% |
| Debt Proceeds/Repayment | \$ | - | \$ | 3,789 | \$ | (3,789) | -100.0% |
| Increase (Decrease) in Fair Value of Investments | \$ | - | \$ | - | \$ | - | 0.0% |
| Change in Receivables and Payables | \$ | 6,856 | \$ | 13,596 | \$ | (6,740) | -49.6% |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 1,538 | \$ | 12,433 | \$ | (10,895) | -87.6% |

Other Practice Plans

| Note # | Line Description | Explanation |
|--------|---|--|
| 1 | Cash In Bank | Increase is driven by the additional Medicaid Upper Payment Limit funding, CARES Act funding and Medicare Advance payments received by UF Jacksonville Physicians in Q4 FY20 due to COVID-19. |
| 2 | Buildings & Equipment | Increase is due to construction and capitalization of the new UF Health at Wildlight medical office complex and a new stand alone radiology imaging center (Baymeadows Imaging) by UF Jacksonville Physicians subsequent to Q1 FY20. |
| 3 | Bonds and Loans | Increase is primarily due to debt issued by UF Jacksonville Physicians to fund construction of the UF Health Wildlight medical office complex subsequent to Q1 FY20. |
| 4 | Transfers from Hospitals and Practice Plans | Decrease is due to timing of transfers from Shands Jacksonville HealthCare, as scheduled payments at the end of FY19 were delayed and subsequently paid in FY20 Q1. |

Shands Teaching Hospital and Clinics

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | 9/30/2020 | (| 9/30/2019 | \$ Variance | % Variance |
|--|-----------------|----|-----------|----------------|------------|
| Cash and Investments | | _ | | | |
| Cash in Bank (Note 1) | \$ 154,045 | \$ | 73,214 | \$ 80,831 | 110.4% |
| Component Unit Short-Term Inv (Note 2) | 294,157 | | 30,277 | 263,880 | 871.6% |
| Component Unit Long-Term Inv (Note 3) | 955,478 | | 841,456 | 114,022 | 13.6% |
| Total Cash and Investments | \$ 1,403,680 | \$ | 944,947 | \$ 458,733 | 48.5% |
| | | | | | |
| Accounts Receivable | | | | | |
| Patient Receivables | \$ 268,563 | \$ | 285,618 | \$ (17,055) | -6.0% |
| Total Accounts Receivable | \$ 268,563 | \$ | 285,618 | \$ (17,055) | -6.0% |
| | | | | | |
| Buildings and Equipment | \$ 1,371,612 | \$ | 1,354,337 | \$ 17,275 | 1.3% |
| | | | | | |
| Accounts Payable | \$ 228,489 | \$ | 233,860 | \$ (5,371) | -2.3% |
| | | | | | |
| Bonds and Loans (Note 4) | \$ 1,123,186 | \$ | 972,686 | \$ 150,500 | 15.5% |

Shands Teaching Hospital and Clinics
Notable Non-GAAP Receipts & Disbursements (in thousands)
For the Three Months Ended September 30, 2020

| | Q1 FY21 | | Q1 FY20 | | \$ Variance | | % Variance |
|--|----------|----------|----------|----------|-------------|----------|------------|
| Cash Receipts | | | - | | | | |
| State Appropriations | \$ | 3,556 | \$ | 1,763 | \$ | 1,793 | 101.7% |
| Patient Service Revenue | | 501,252 | | 512,732 | | (11,480) | -2.2% |
| Contributions/Donations | | 1,493 | | 3,862 | | (2,369) | -61.3% |
| Investment Income (Note 5) | | 42,523 | | 685 | | 41,838 | 6107.7% |
| Other Cash Receipts (Note 6) | | 5,133 | | 16,463 | | (11,330) | -68.8% |
| Total Cash Receipts | \$ | 553,957 | \$ | 535,505 | \$ | 18,452 | 3.4% |
| Transfers | | | | | | | |
| To University/Component Units | \$ | (37,157) | \$ | (36,224) | \$ | (933) | 2.6% |
| Net Transfers | \$ | (37,157) | \$ | (36,224) | \$ | (933) | 2.6% |
| Total Cash Receipts Net of Transfers | \$ | 516,800 | \$ | 499,281 | \$ | 17,519 | 3.5% |
| Operating Expense Disbursements | | | | | | | |
| Employee Compensation and Benefits | | | | | | | |
| Patient Services and Other Public Services | \$ | 239,177 | \$ | 238,199 | \$ | 978 | 0.4% |
| Total Employee Comp & Benefits | \$ | 239,177 | \$ | 238,199 | \$ | 978 | 0.4% |
| Total Employee Comp & Benefits | Ψ | 200,177 | Ψ | 200,100 | Ψ | 370 | 0.470 |
| Other Operating Expense Disbursements | | | | | | | |
| Patient Services and Other Public Services | \$ | 211,120 | \$ | 218,272 | \$ | (7,152) | -3.3% |
| Total Other Operating Expense Disbursements | \$ | 211,120 | \$ | 218,272 | \$ | (7,152) | -3.3% |
| Total Operating Expense Disbursements | \$ | 450,297 | \$ | 456,471 | \$ | (6,174) | -1.4% |
| Total Operating Expense disbursements | <u> </u> | 430,237 | <u>Ψ</u> | 430,471 | <u>Ψ</u> | (0,174) | -1.470 |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | 66,503 | \$ | 42,810 | \$ | 23,693 | 55.3% |
| Other Receipts & Disbursements | | | | | | | |
| Equipment and Building Expenses | \$ | (23,302) | \$ | (32,668) | \$ | 9,366 | -28.7% |
| Debt Proceeds/Repayment | \$ | (8,028) | \$ | (7,776) | \$ | (252) | 3.2% |
| Increase (Decrease) in Fair Value of Investments | \$ | 8,667 | \$ | 1,389 | \$ | 7,278 | 524.0% |
| more (2000000) in Fair Value of investments | Ψ | 0,007 | Ψ | 1,009 | Ψ | 1,210 | J24.070 |
| Change in Receivables and Payables | \$ | (8,612) | \$ | 1,031 | \$ | (9,643) | -935.3% |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 35,228 | \$ | 4,786 | \$ | 30,442 | 636.1% |

Shands Teaching Hospital and Clinics

| Note # | Line Description | Explanation |
|--------|-------------------------------|---|
| 1 | Cash in Bank | Increase is primarily due to CARES Act stimulus funds and additional Medicare Advance payments received in Q4 FY20 in response to COVID-19, a portion of which is being held in cash. |
| 2 | Component Unit Short-Term Inv | Increase is primarily due to CARES Act stimulus funds and additional Medicare Advance payments received in Q4 FY20 in response to COVID-19, a portion of which is being held in short-term investments, as well as residual funding from the proceeds of a bond issuance in FY20 which are being held in a short-term trust investments to fund capital projects. |
| 3 | Component Unit Long-Term Inv | Increase is due to additional funds designated by the Shands Board of Directors for special projects and invested with UFICO, as well as increases in the value of investments held with UFICO due to strong market performance. |
| 4 | Bonds and Loans | Increase is due to a bond issued in Q2 FY20, which included a portion used to refund existing debt and terminate related interest rate swaps as well as additional debt (\$175M) used to finance and reimburse certain capital improvements to health care facilities. |
| 5 | Investment Income | Increase is due to large gains on investments with UFICO during Q1 FY21 due to market conditions. |
| 6 | Other Cash Receipts | Decrease is due to timing of reimbursement related to other operations, primarily for services provided by Shands employees under contractual agreements. |

Shands Jacksonville HealthCare

Notable Non-GAAP Assets & Liabilities (in thousands)
As of September 30, 2020

| | 9 | /30/2020 | 9 | /30/2019 | \$ Variance | % Variance |
|--|----|----------|----|----------|----------------|------------|
| Cash and Investments | | | | | | |
| Cash in Bank (Note 1) | \$ | 106,874 | \$ | 30,847 | \$ 76,027 | 246.5% |
| Component Unit Short-Term Inv (Note 2) | | 106,389 | | 24,248 | 82,141 | 338.8% |
| Component Unit Long-Term Inv | | 9,862 | | 9,849 | 13 | 0.1% |
| Total Cash and Investments | \$ | 223,125 | \$ | 64,944 | \$ 158,181 | 243.6% |
| | | | | | | |
| Accounts Receivable | | | | | | |
| Patient Receivables (Note 3) | | 104,384 | | 120,699 | \$ (16,315) | -13.5% |
| Total Accounts Receivable | \$ | 104,384 | \$ | 120,699 | \$ (16,315) | -13.5% |
| | | | | | | |
| Buildings and Equipment | \$ | 251,695 | \$ | 244,989 | \$ 6,706 | 2.7% |
| | | | | | | |
| Accounts Payable (Note 4) | \$ | 123,828 | \$ | 37,637 | \$ 86,191 | 229.0% |
| | | | | | | |
| Bonds and Loans | \$ | 224,529 | \$ | 234,987 | \$ (10,458) | -4.5% |
| | | | | | | |

Shands Jacksonville HealthCare

Notable Non-GAAP Receipts & Disbursements (in thousands) For the Three Months Ended September 30, 2020

| | Q1 FY21 | | | Q1 FY20 | \$ ' | Variance | % Variance | | |
|--|---------|----------|----|----------|------|----------|------------|--|--|
| Cash Receipts | | | | | | | | | |
| Patient Service Revenue | \$ | 170,720 | \$ | 156,172 | \$ | 14,548 | 9.3% | | |
| Contributions/Donations | | - | | - | | - | 0.0% | | |
| Investment Income | | 479 | | 255 | | 224 | 87.8% | | |
| Other Cash Receipts (Note 5) | | 50,266 | | 4,642 | | 45,624 | 982.9% | | |
| Total Cash Receipts | \$ | 221,465 | \$ | 161,069 | \$ | 60,396 | 37.5% | | |
| Transfers | | | | | | | | | |
| To University/Component Units (Note 6) | \$ | (15,358) | \$ | (25,782) | \$ | 10,424 | -40.4% | | |
| Net Transfers | \$ | (15,358) | \$ | (25,782) | \$ | 10,424 | -40.4% | | |
| Total Cash Receipts Net of Transfers | \$ | 206,107 | \$ | 135,287 | \$ | 70,820 | 52.3% | | |
| | | | | | | <u> </u> | | | |
| Operating Expense Disbursements | | | | | | | | | |
| Employee Compensation and Benefits | | | | | | | | | |
| Patient Services and Other Public Services | \$ | 88,338 | \$ | 94,646 | \$ | (6,308) | -6.7% | | |
| Total Employee Comp & Benefits | \$ | 88,338 | \$ | 94,646 | \$ | (6,308) | -6.7% | | |
| Other Operating Expense Disbursements | | | | | | | | | |
| Patient Services and Other Public Services (Note 7) | \$ | 78,949 | \$ | 92,222 | \$ | (13,273) | -14.4% | | |
| Total Other Operating Expense Disbursements | \$ | 78,949 | \$ | 92,222 | \$ | (13,273) | -14.4% | | |
| Total Operating Expense Disbursements | \$ | 167,287 | \$ | 186,868 | \$ | (19,581) | -10.5% | | |
| Total Cash Receipts and Transfers Less | | | | | | | | | |
| Operating Expense Disbursements | \$ | 38,820 | \$ | (51,581) | \$ | 90,401 | -175.3% | | |
| Other Receipts & Disbursements | | | | | | | | | |
| Equipment and Building Expenses | \$ | (8,302) | \$ | (3,355) | \$ | (4,947) | 147.5% | | |
| Debt Proceeds/Repayment | \$ | (2,168) | \$ | (8,761) | \$ | 6,593 | -75.3% | | |
| Change in Receivables and Payables | \$ | 802 | \$ | (4,846) | \$ | 5,648 | -116.5% | | |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 29,152 | \$ | (68,543) | \$ | 97,695 | -142.5% | | |

Shands Jacksonville HealthCare

Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | Explanation |
|--------|--|--|
| 1 | Cash in Bank | Increase is primarily due to CARES Act stimulus funds and Medicare Advance payments received in FY20 and Q1 FY21 in response to COVID-19, a portion of which is being held in cash. |
| 2 | Component Unit Short-Term Inv | Increase is primarily due to CARES Act stimulus funds and Medicare Advance payments received in FY20 and Q1 FY21 in response to COVID-19, a portion of which is being held in SPIA. |
| 3 | Patient Receivables | Decrease in receivables was driven by lower patient volumes and the suspension of elective services and surgeries at the end of FY20 as a result of COVID-19. Additionally, significant collection efforts were made to improve cash balances. |
| 4 | Accounts Payable | Increase is primarily due to Medicare Advance payments received in response to COVID-19, which will be offset against future Medicare claims. Repayments of remaining balance of Medicare Advance payments are scheduled to begin April 2021. |
| 5 | Other Receipts | Increase is due to \$45M in CARES Act funding received in Q1 FY21 in response to COVID-19. |
| 6 | Transfers To University/Component Units | Decrease is due to timing of transfers to UF Jacksonville Physicians. |
| 7 | Operating Expense Disbursements - Patient Services and Other Public Services | Decrease is due to timing of payments to vendors. |

University of Florida Enterprise - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | Generally Available | Conditional Availability | Not Available | | | |
|-----------------|------------------------|-----------------------------|---------------|-----------|--|--|
| Total | | | | | | |
| \$ 6,163,324 | \$ 2,001,789 | \$ 1,111,662 | \$ | 3,049,873 | | |
| 351,110 | 179,141 | 43,453 | | 128,516 | | |
| \$ 6,514,434 | \$ 2,180,930 | \$ 1,155,115 | \$ | 3,178,389 | | |

University of Florida Enterprise Cash and Investment Balances by Restriction as of September 30, 2020

University of Florida University of Florida Foundation University Athletic Association Other Direct Support Organizations

Florida Foundation Seed Producers

Citrus Research & Development Foundation

Gator Boosters

University of Florida Development Corporation

GatorCare Health Management Corporation

University of Florida Research Foundation

Florida Clinical Practice Association

Other Practice Plans

Faculty Associates

College of Pharmacy Practice Plan

UF Jacksonville Physicians

Veterinary Medicine Faculty Association

UF Self-Insurance / HealthCare Education Insurance

Shands Teaching Hospital and Clinics

Shands Jacksonville HealthCare

Total UF Enterprise

| | Generally Available | onditional vailability | No | t Available |
|-----------------|------------------------|---------------------------|----------------|-------------|
| Total | | | | |
| \$ 2,120,622 | \$ 399,572 | \$ 773,078 | \$ | 947,972 |
| 2,116,201 | \$ 21,960 | \$ 84,738 | 65 | 2,009,503 |
| 107,475 | \$ 63,931 | \$ - | 65 | 43,544 |
| | | | | |
| 15,953 | \$ - | \$ 15,953 | \$ | - |
| 4,304 | \$ 4,304 | \$ - | \$ | - |
| 3,491 | \$ 2,995 | \$ - | \$ | 496 |
| 2,797 | \$ 2,797 | \$ - | \$ | - |
| 58,485 | \$ 58,485 | \$ - | \$ | - |
| 2,955 | \$ - | \$ 2,955 | (S) | - |
| 140,547 | \$ 19,710 | \$ 29,303 | 65 | 91,534 |
| | | | | |
| 13,824 | \$ 13,824 | \$ - | () | - |
| 3,374 | \$ 3,374 | \$ - | \$ | - |
| 51,556 | \$ 51,556 | \$ - | \$ | - |
| 6,823 | \$ 6,823 | \$ - | \$ | - |
| 239,222 | \$ - | \$ 239,222 | \$ | - |
| 1,403,680 | \$ 1,318,340 | \$ - | \$ | 85,340 |
| 223,125 | \$ 213,259 | \$ 9,866 | \$ | - |
| \$ 6,514,434 | \$ 2,180,930 | \$ 1,155,115 | \$ | 3,178,389 |

UF EnterpriseNotes to Cash and Investment Balances by Restriction For the Fiscal Year Ended September 30, 2020

| Line Description | Amoun | nt (in thousands) | Explanation |
|---------------------------------|-------|-------------------|---|
| University of Florida | \$ | 2,120,622 | |
| Generally Available | \$ | 399,572 | Consists of State appropriations (\$107M), unrestricted student tuition and fees (\$112M), monies in the University's Strategic fund (\$43M), overhead charged to campus to fund support units (\$63M), and institutional investments (\$75M). |
| Conditional Availability | \$ | 773,078 | Consists primarily of amounts restricted for research from indirect cost recovery (\$332M), residual amounts on Contracts and Grants (\$72M), allocations of royalties from UF Research Foundation restricted for research and sponsored training (\$50M), and the UF strategic fund for research (\$18M); amounts in various auxiliary funds (\$220M); amounts held for infrastructure projects (\$48M); State appropriations for recruitment, program enhancement, and online programs (\$23M); and student fees for UF Online (\$10M). |
| Not Available | \$ | 947,972 | Consists primarily of monies restricted for construction projects (\$167M); monies transferred from component units, including donor restricted amounts from UF Foundation (\$238M) and Practice Plans (\$34M) to pay clinical faculty salaries; investments held on behalf of component units (\$237M); financial aid (\$75M) and other amounts related to Contracts and Grants (\$82M); and student fees restricted for instructional technology (\$14M). |
| UF Foundation | \$ | 2,116,201 | |
| Generally Available | \$ | 21,960 | Consists of amounts on hand to fund general administration and operations of the UF Foundation. |
| Conditional Availability | \$ | 84,738 | Consists of temporarily restricted earnings on UF Foundation investments and non- endowed monies that have not yet been transferred to the University. |
| Not Available | \$ | 2,009,503 | Consists of permanently restricted endowed funds held by the UF Foundation as well as split-interest agreements intended to benefit endowment funds. |
| University Athletic Association | \$ | 107,475 | |
| Generally Available | \$ | 63,931 | Consists of amounts on hand to fund general administration and operations of the University Athletic Association. |
| Not Available | \$ | 43,544 | Consists primarily of amounts on hand to satisfy debt covenants (\$30M) and certain donor restricted funds (\$13M). |

UF EnterpriseNotes to Cash and Investment Balances by Restriction

For the Fiscal Year Ended September 30, 2020

| 5 | _ | | |
|--|----|------------------|--|
| Line Description | | t (in thousands) | Explanation |
| Florida Foundation Seed Producers | \$ | 15,953 | |
| Conditional Availability | \$ | 15,953 | Consists of amounts on hand from sale of seeds that are restricted to IFAS departments for research. |
| Citrus Research and Development Foundation | \$ | 4,304 | |
| Generally Available | \$ | 4,304 | Consists of amounts on hand from State appropriations to Citrus Research and Development Foundation to carry out its mission of researching diseases impacting citrus crops. |
| Gator Boosters | \$ | 3,491 | |
| Generally Available | \$ | 2,995 | Consists of amounts on hand to fund general administration and operations of Gator Boosters. |
| Not Available | \$ | 496 | Consists of amounts on hand from donor contributions and restricted for various purposes as specified by the donors. |
| UF Development Corporation | \$ | 2,797 | |
| Generally Available | \$ | 2,797 | Consists of amounts on hand to fund general administration and operations of UF Development Corporation. |
| GatorCare Health Management Corporation | \$ | 58,485 | |
| Generally Available | \$ | 58,485 | Consists primarily of amounts held in reserve to fund current and future claims payable on behalf of participating organizations. Also includes amounts on hand to fund general administration and operations. |
| UF Research Foundation | \$ | 2,955 | |
| Conditional Availability | \$ | 2,955 | Consists of amounts generated by the various intellectual properties related to the University and restricted for distribution to inventors, programs, and UF colleges and departments. |

UF EnterpriseNotes to Cash and Investment Balances by Restriction

For the Fiscal Year Ended September 30, 2020

| Line Description | Amoun | t (in thousands) | Explanation |
|---|-------|------------------|---|
| Florida Clinical Practice Association | \$ | 140,547 | Expialiation |
| Generally Available | \$ | 19,710 | Consists of amounts on hand to fund general administration and operations of the Florida Clinical Practice Association (FCPA). |
| Conditionally Available | \$ | 29,303 | Consists of the FCPA investment portfolio held in reserve for contingencies or strategic initiatives. |
| Not Available | \$ | 91,534 | Consists of amounts set aside and restricted for construction (\$26M), payroll funding (\$20M), employment contracts (\$15M), Medicaid (\$15M) and to satisfy debt covenants (\$10M), as well as FCPA's joint venture investment in UF Health South Central (\$6M). |
| Faculty Associates | \$ | 13,824 | |
| Generally Available | \$ | 13,824 | Consists of amounts on hand to fund general administration and operations of Faculty Associates. |
| College of Pharmacy Practice Plan | \$ | 3,374 | |
| Generally Available | \$ | 3,374 | Consists of amounts on hand to fund general administration and operations of the College of Pharmacy Practice Plan. |
| UF Jacksonville Physicians | \$ | 51,556 | |
| Generally Available | \$ | 51,556 | Consists of amounts on hand to fund general administration and operations of UF Jacksonville Physicians. |
| Veterinary Medicine Faculty Association | \$ | 6,823 | |
| Generally Available | \$ | 6,823 | Consists of amounts on hand to fund general administration and operations of the Veterinary Medicine Faculty Association. |
| UF Self-Insurance / HealthCare Education Insurance | \$ | 239,222 | |
| Conditional Availability | \$ | 239,222 | Consists of amounts held by UF Self-Insurance and HealthCare Education Insurance programs in reserve for the payment of claims, losses, and loss adjustment expenses. |

UF EnterpriseNotes to Cash and Investment Balances by Restriction For the Fiscal Year Ended September 30, 2020

| Line Description | Amou | nt (in thousands) | Explanation |
|--------------------------------------|------|-------------------|--|
| Shands Teaching Hospital and Clinics | \$ | 1,403,680 | |
| Generally Available | \$ | 1,318,340 | Consists primarily of amounts designated by the Shands Teaching Hospital Board of Directors for specific purposes, such as to support capital projects and other health programs (\$870M). Also includes amounts on hand to fund general administration and operations (\$448M). |
| Not Available | \$ | 85,340 | Consists of amounts reserved to fund construction projects (\$63M) and satisfy debt covenants (\$22M) |
| Shands Jacksonville HealthCare | \$ | 223,125 | |
| Generally Available | \$ | 213,259 | Consists primarily of amounts on hand to fund general administration and operations of Shands Jacksonville (\$194M) as well as amounts internally designated by the Shands Jacksonville Board of Directors for clinical support, education, research, and other health programs (\$19M). |
| Conditionally Available | \$ | 9,866 | Consists of amounts on hand to satisfy debt covenants. |

University of Florida Enterprise - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

| Cash Receipts Tuition and Fees State Appropriations Contracts and Grants Federal and State Financial Aid Patient Service Revenue Contributions/Donations Investment Income Licensing and Royalties Sales of Goods & Services Other Cash Receipts Total Cash Receipts |
|--|
| Transfers From Component Units Hospitals and Practice Plans UF Foundation (Donor Restricted) Other To University/Component Units Net Transfers |
| Total Cash Receipts Net of Transfers |
| Operating Expense Disbursements Employee Compensation and Benefits |
| Operating Expense Disbursements |
| Total Operating Expense Disbursements |
| Total Cash Receipts and Transfers Less Operating Expense Disbursements |
| Other Receipts & Disbursements Equipment and Building Expenses |
| Debt Proceeds/Repayment |
| Increase (Decrease) in Fair Value of Investments |
| Change in Receivables and Payables |
| Net Cash and Investments for the Three Months Ended September 30, 2020 |

| | | Gene | rally Available | Condi | itional Availability | N | ot Available |
|----------|-----------|------|-----------------|-------|----------------------|----------|--------------|
| | Total | | | | | | |
| | 10141 | | | | | | |
| \$ | 158,100 | \$ | 44,993 | \$ | 51,533 | \$ | 61,574 |
| | 192,552 | · | 172,976 | · | 10,270 | · | 9,306 |
| | 163,082 | | - | | 30,658 | | 132,424 |
| | 108,679 | | - | | - | | 108,679 |
| | 883,703 | | 883,703 | | - | | - |
| | 56,001 | | 3,176 | | 44,415 | | 8,410 |
| | 61,834 | | 53,250 | | 7,711 | | 873 |
| | 27,003 | | 8,934 | | 18,069 | | - |
| | 99,990 | | 62,060 | | 23,342 | | 14,588 |
| | 59,612 | | 55,602 | | 1,117 | | 2,893 |
| \$ | 1,810,556 | \$ | 1,284,694 | \$ | 187,115 | \$ | 338,747 |
| | | | | | | | |
| | | | | | | | |
| \$ | 221,930 | \$ | 39,397 | \$ | 1,053 | \$ | 181,480 |
| | 36,685 | | 1,903 | | - | | 34,782 |
| | 7,816 | | - | | 6,052 | | 1,764 |
| | (266,431) | | (132,008) | | (64,333) | | (70,090 |
| \$ | - | \$ | (90,708) | \$ | (57,228) | \$ | 147,936 |
| \$ | 1,810,556 | \$ | 1,193,986 | \$ | 129,887 | \$ | 486,683 |
| | | | | | | | |
| \$ | 854,485 | \$ | 562,595 | \$ | 52,896 | \$ | 238,994 |
| | 646,165 | | 450,531 | | 37,255 | | 158,379 |
| \$ | 1,500,650 | \$ | 1,013,126 | \$ | 90,151 | \$ | 397,373 |
| — | 1,000,000 | | 1,010,120 | Ť | 55,151 | <u> </u> | 001,010 |
| | | | | | | | |
| \$ | 309,906 | \$ | 180,860 | \$ | 39,736 | \$ | 89,310 |
| | | | | | | | |
| \$ | (94,466) | \$ | (43,491) | \$ | (11,446) | \$ | (39,529 |
| \$ | (13,453) | \$ | 4,225 | \$ | (202) | \$ | (17,476 |
| \$ | 160,390 | \$ | 47,537 | \$ | 826 | \$ | 112,027 |
| \$ | (11,267) | \$ | (9,990) | \$ | 14,539 | \$ | (15,816 |
| \$ | 351,110 | \$ | 179,141 | \$ | 43,453 | \$ | 128,516 |

University of Florida - Cash and Investments Reconciliation

As of September 30, 2020

| | Gen | ieraliy Avalla | bie | Conditional Availability | | | | Not Available | | | | | | | | |
|--------------|--------------------------|--|--|--|--|---|---|---|---|---|--|--|---|--|---|--|
| | | | | | | | | | | | | | | | | Held on |
| | | | | | | | | | | | | | | | | Behalf of |
| | State | | | State | | Research | Business | | | Research | Business | Donor | Student | | | Component |
| Total | Appropriation | Tuition | Other | Appropriation | Tuition | Restricted | Activities | Construction | Tech Fees | Restricted | Activities | Restricted | Financials | Construction | Other | Units |
| \$ 1,988,044 | \$ 58,734 | \$ 94,558 | \$ 136,988 | \$ 21,939 | \$ 6,411 | \$ 480,636 | \$ 201,960 | \$ 47,473 | \$ 11,670 | \$ 47,243 | \$ 86,512 | \$ 234,625 | \$ 68,584 | \$ 175,755 | \$ 115,613 | \$ 199,343 |
| | | | | | | | | | | | | | | | | |
| 132.578 | 48,495 | 17.819 | 42.978 | 1.297 | 3.241 | (8.227) | 18.254 | 94 | 2.212 | 34.310 | 15.847 | 3.461 | 6.316 | (9.143) | (81.755) | 37,379 |
| , | 10,100 | , | 12,010 | ., | -, | (0,==1) | | | _,, | ., | , | 2,121 | ,,,,, | (3,112) | (,) | , , , |
| \$ 2,120,622 | \$ 107,229 | \$ 112,377 | \$ 179,966 | \$ 23,236 | \$ 9,652 | \$ 472,409 | \$ 220,214 | \$ 47,567 | \$ 13,882 | \$ 81,553 | \$ 102,359 | \$ 238,086 | \$ 74,900 | \$ 166,612 | \$ 33,858 | \$ 236,722 |
| | 1,988,044 132,578 | State Appropriation \$ 1,988,044 \$ 58,734 132,578 48,495 | State Tuition \$ 1,988,044 \$ 58,734 \$ 94,558 132,578 48,495 17,819 | Total Appropriation Tuition Other \$ 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 132,578 48,495 17,819 42,978 | Total State Appropriation Tuition Other Appropriation State Appropriation \$ 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 \$ 21,939 132,578 48,495 17,819 42,978 1,297 | Total State Appropriation Tuition Other Appropriation State Appropriation Tuition \$ 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 \$ 21,939 \$ 6,411 132,578 48,495 17,819 42,978 1,297 3,241 | Total State Appropriation Tuition Other Appropriation State Appropriation Tuition Restricted \$ 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 \$ 21,939 \$ 6,411 \$ 480,636 132,578 48,495 17,819 42,978 1,297 3,241 (8,227) | Total State Appropriation Tuition Other Appropriation State Appropriation Tuition Tuition Research Restricted Activities \$ 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 \$ 21,939 \$ 6,411 \$ 480,636 \$ 201,960 132,578 48,495 17,819 42,978 1,297 3,241 (8,227) 18,254 | Total State Appropriation Tuition Other Appropriation State Appropriation Tuition Restricted Research Restricted Business Activities Construction \$ 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 \$ 21,939 \$ 6,411 \$ 480,636 \$ 201,960 \$ 47,473 132,578 48,495 17,819 42,978 1,297 3,241 (8,227) 18,254 94 | Total State Appropriation Tuition Other Appropriation State Appropriation Tuition Tuition Research Restricted Restric | Total 1,988,044 \$ 58,734 \$ 94,558 \$ 136,988 \$ 1,297 3,241 (8,227) 18,254 94 2,212 34,310 | State Total State Appropriation Tuition Other Appropriation Tuition State Appropriation Tuition State Appropriation Tuition Tuition Restricted Activities Construction Tech Fees Research Restricted Activities Activities Activities State Appropriation Tuition Tech Fees Restricted Activities Activities State Activities State Appropriation Tuition Tech Fees Restricted Activities Activities State State | Total State Appropriation Tuition Other Appropriation Tuition State Appropriation Tuition Tuition State Appropriation Tuition Tuition State Appropriation Tuition Tuition State Appropriation Tuition Tuition Restricted Activities Construction Tech Fees Research Restricted Activities Restricted Activities Restricted Activities Tech Fees Restricted Activities Activities Restricted Activities Tech Fees Restricted Activities Activities Tech Fees Tech Fees Restricted Activities Activities Tech Fees Tech Fees | State Total Appropriation Tuition Other Appropriation Tuition Other Appropriation Tuition Tuition Tuition Tuition Tuition State Activities A | Total Appropriation Tuition Other Appropriation Tuition Other Appropriation Tuition Tuition | Total State Appropriation Tuition Other Appropriation Tuition State Appropriation Tuition Tuition State Appropriation Tuition Tuition State Activities Activities Construction Tech Fees Research Restricted Restricted Restricted Activities Restricted Activities Restricted Restricted Activities Restricted Restricted Activities Activities Restricted Activities A |

University of Florida - Analysis of Cash Receipts and Disbursements For the Three Months Ended September 30, 2020

| Cash Receipts Tuition and Fees State Appropriations Contracts and Grants Federal and State Financial Aid Investment Income Sales of Goods & Services Other Cash Receipts Total Cash Receipts |
|--|
| Transfers From Component Units Hospitals and Practice Plans UF Foundation (Donor Restricted) Other Within the University Net Transfers |
| Total Cash Receipts Net of Transfers |
| Operating Expense Disbursements Employee Compensation and Benefits |
| Operating Expense Disbursements |
| Total Operating Expense Disbursements |
| Total Cash Receipts and Transfers Less Operating Expense Disbursements |
| Other Receipts & Disbursements Equipment and Building Expenses |
| Debt Proceeds/Repayment |
| Increase (Decrease) in Fair Value of Investments |
| Change in Receivables and Payables |
| Net Cash and Investments for the Three Months Ended September 30, 2020 |

| | Gen | eral | lly Availa | ble | | | (| Cond | itional Ava | ilabi | ility | | | | | | | Not A | vaila | ble | | | | | |
|---|--|------|------------|-----|------------------------|---------------------------------|--------|-------------------------|------------------------|----------------|------------------------|----------------------|----|--------------------------------|------------------|--------------------------|---|------------------------|-------|--------------------------------------|----------|-------------------------------|-------|--------------------------------|--|
| Total | State ropriation | | Tuition | (| Other | tate priation | Tuitio | n | Research Restricted | | Business Activities | Construction | Te | ech Fees | Resea Restric | | Business Activities | Donor stricted | | student nancials | Construe | ction | Ot | ther | Held on Behalf of Component Units |
| \$ 158,100 185,991 163,082 108,679 6,414 35,885 | \$ - 167,336 - - - - | \$ | 44,346 | \$ | - - 6,109 184 | \$ 9,349 - - - - | \$ 4, | 958 - - - - | | - - 2 | 23 - 2 21,111 | \$ - - - 93 | \$ | 3,514 - - - - - | | - ,247 - 4 - | \$ 8,730 2,467 246 - 14,588 | \$ - | \$ | 40,776 - 931 108,679 170 | 6 | - 839 - - 36 - | \$ | 8,554 - - - - - | \$ - - - - - |
| \$ 3,403 661,554 | \$ 167,336 | \$ | 44,353 | \$ | 202 7,142 | \$ 9,349 | \$ 4, | 958 | 6 \$ 30,70 | - | 235 67,946 | \$ 93 | \$ | 3,514 | \$ 131 | ,251 | \$ 26,035 | \$ - | \$ | 162 150,718 | | 727 602 | \$ | 8,554 | \$ - |
| \$ 182,533 34,782 6,558 | \$ | \$ | 93,438 | \$ | - - - 7,204 | \$ - | \$ | | \$ 6,05 (6,48 | - \$ - 2 | | | \$ | | \$ 4 | | \$ 181,480 - 361 (5,707) | 28,754 - (6,754) | \$ | 1,815 145 (73,163) | \$ | - - - 637 | \$ | , | \$ - - - |
| \$ 223,873 | \$ (11,225) | \$ | 93,438 | \$ | 7,204 | \$ - | \$ | - | | 6) \$ | | \$ - | \$ | - | | ,579 | | \$ 22,000 | \$ | (71,203) | | 637 | \$ | (469) | \$ - |
| \$ 885,427 | \$ 156,111 | \$ | 137,791 | \$ | 14,346 | \$ 9,349 | \$ 4, | 958 | \$ 30,26 | 7 \$ | 56,160 | \$ 93 | \$ | 3,514 | \$ 133 | 3,830 | \$ 202,169 | \$ 22,000 | \$ | 79,515 | \$ 27 | 239 | \$ | 8,085 | \$ - |
| \$ 477,165 229,313 | 37,299 | | 119,973 | | 5,049 5,230 | 6,739 1,370 | | 716 | 14,58 | 2 | 13,869 | - | \$ | 692 735 | 50 | 7,879 0,358 | 19,057 | \$ 14,070 4,336 | | 72,592 | \$ | - | • | 10,372) 9,885 | - |
| \$ 706,478 | \$ 98,705 | \$ | 119,973 | \$ | 10,279 | \$ 8,109 | \$ 1, | 716 | \$ 34,78 | 9 \$ | 37,947 | \$ - | \$ | 1,427 | \$ 118 | 3,237 | \$ 184,785 | \$ 18,406 | \$ | 72,592 | \$ | - | \$ | (487) | \$ - |
| \$ 178,949 | \$ 57,406 | \$ | 17,818 | \$ | 4,067 | \$ 1,240 | \$ 3, | 242 | \$ (4,52 | 2) \$ | 18,213 | \$ 93 | \$ | 2,087 | \$ 15 | 5,593 | \$ 17,384 | \$ 3,594 | \$ | 6,923 | \$ 27 | 239 | \$ | 8,572 | \$ - |
| \$ (51,831) | \$ (9,792) | \$ | - | \$ | (400) | \$ (78) | \$ | - | \$ (4,11 | 0) \$ | (1,076) | \$ - | \$ | - | \$ (2 | 2,349) | \$ (1,993) | \$ (1,176) | \$ | - | \$ (30 | 806) | \$ | (51) | \$ - |
| (2,541) | - | | - | | - | - | | - | | - | (40) | - | | - | | - | (371) | - | | - | (1 | 978) | | (152) | - |
| 25,709 | - | | - | | 39,121 | - | | - | | - | - | - | | - | | - | - | - | | - | | - | (* | 13,412) | - |
| (17,708) | 881 | | 1 | | 190 | 135 | | (1) | 40 | 5 | 1,157 | 1 | | 125 | 21 | ,066 | 827 | 1,043 | | (607) | (3 | 598) | (7 | 76,712) | 37,379 |
| \$ 132,578 | \$ 48,495 | \$ | 17,819 | \$ | 42,978 | \$ 1,297 | \$ 3, | 241 | \$ (8,22 | 7) \$ | 18,254 | \$ 94 | \$ | 2,212 | \$ 34 | ,310 | \$ 15,847 | \$ 3,461 | \$ | 6,316 | \$ (9 | 143) | \$ (8 | 81,755) | \$ 37,379 |

University of Florida Foundation - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | Generally Available | | onditional vailability | No | t Available |
|-----------------|------------------------|-----|---------------------------|-----|-------------|
| Total | Board Designated | Doi | nor Related | Dor | nor Related |
| \$ 1,979,175 | \$ 18,611 | \$ | 66,050 | \$ | 1,894,514 |
| 137,026 | 3,349 |) | 18,688 | | 114,989 |
| \$ 2,116,201 | \$ 21,960 | \$ | 84,738 | \$ | 2,009,503 |

University of Florida Foundation - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

| | | | | | | | _ | |
|-----|----|----|----|---|---|---|-----|---|
| ots | ın | ഫ | 'Δ | R | n | 2 | (:a | ı |
| ונ | ю | ce | æ | ĸ | n | S | Lа | ı |

Contributions/Donations Investment Income **Total Cash Receipts**

Transfers

To University/Component Units **Net Transfers**

Total Cash Receipts Net of Transfers

Operating Expense Disbursements

Employee Compensation and Benefits

Operating Expense Disbursements

Total Operating Expense Disbursements

Total Cash Receipts and Transfers Less Operating Expense Disbursements

Other Receipts & Disbursements

Equipment and Building Expenses

Debt Proceeds/Repayment

Increase (Decrease) in Fair Value of Investments

Change in Receivables and Payables

Net Cash and Investments for the Three Months Ended September 30, 2020

| | | Generally | | onditional | Not Av | ailable |
|----|---------------|--------------------|--------------|--------------|---------|--------------|
| | | Available Board | P | vailability | | |
| | Total | Designated | Do | nor Related | Donor F | Related |
| | | | | | _ | |
| \$ | 52,845 228 | \$ 20 | \$ | 44,415 15 | \$ | 8,410 213 |
| \$ | 53,073 | \$ 20 | \$ | 44,430 | \$ | 8,623 |
| | | | | | | |
| \$ | (36,685) | \$ 837 | \$ | (37,522) | \$ | - |
| \$ | (36,685) | \$ 837 | \$ | (37,522) | \$ | - |
| \$ | 16,388 | \$ 857 | \$ | 6,908 | \$ | 8,623 |
| | , | · | | , | | |
| ¢. | 4 740 | \$ 4,749 | _C | | ¢. | |
| \$ | 4,749 | \$ 4,749 | \$ | - | \$ | - |
| | 4,256 | 312 | | 2,528 | | 1,416 |
| \$ | 9,005 | \$ 5,061 | \$ | 2,528 | \$ | 1,416 |
| | | | | | | |
| \$ | 7,383 | \$ (4,204) | \$ | 4,380 | \$ | 7,207 |
| | | | | | | |
| \$ | (6,539) | \$ (597) | \$ | (5,889) | \$ | (53) |
| | (105) | (100) | | (E) | | |
| | (105) | (100) | | (5) | | - |
| | 125,482 | - | | 43 | 1 | 25,439 |
| | 10,805 | 8,250 | | 20,159 | (| 17,604) |
| • | 427.020 | ¢ 2.240 | • | 40.600 | ¢ 4 | 44.000 |
| \$ | 137,026 | \$ 3,349 | \$ | 18,688 | \$ 1 | 14,989 |

University Athletic Association - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | Generally Available | Conditional Availability | Not Available | | | | | | |
|---------------|----------------------------|-----------------------------|---------------------|-------------------|----------------------|--|--|--|--|
| Total | General Admin & Operations | State Appropriation | Donor Restricted | Debt Covenants | Contracts Payable | | | | |
| \$ 128,235 | \$ 81,851 | \$ - | \$ 15,044 | \$ 29,844 | \$ 1,496 | | | | |
| (20,760) | (17,920) | - | (1,843) | - | (997) | | | | |
| \$ 107,475 | \$ 63,931 | \$ - | \$ 13,201 | \$ 29,844 | \$ 499 | | | | |

University Athletic Association - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

| Cash | |
|------|--|
| | |
| | |

State Appropriations Contribution/Donations Investment Income Licensing and Royalties Sales of Goods & Services

Total Cash Receipts

Transfers

From Component Units
Other
To University/Component Units
Net Transfers

Total Cash Receipts Net of Transfers

Operating Expense Disbursements

Employee Compensation and Benefits

Operating Expense Disbursements

Total Operating Expense Disbursements

Total Cash Receipts and Transfers Less Operating Expense Disbursements

Other Receipts & Disbursements

Equipment and Building Expenses

Debt Proceeds/Repayment

Change in Receivables and Payables

Net Cash and Investments for the Three Months Ended September 30, 2020

| | Generally Available | Conditional Availability | | Not Available | |
|------------------------------|-------------------------------|-----------------------------|---------------------|-------------------|----------------------|
| Total | General Admin & Operations | State Appropriation | Donor Restricted | Debt Covenants | Contracts Payable |
| \$ 921 | \$ - | \$ 921 | \$ - | \$ - | \$ - |
| - | - | - | - | - | - |
| 3,367 | 3,367 | - | - | - | - |
| 8,934 | 8,934 | - | - | - | - |
| \$ 6,818 20,040 | 6,818 \$ 19,119 | \$ 921 | \$ - | \$ - | \$ - |
| \$ 1,258 - | \$ - | \$ - - | \$ 1,258 - | \$ - | \$ - |
| \$ 1,258 | - | \$ - | \$ 1,258 | - | - |
| \$ 21,298 | \$ 19,119 | \$ 921 | \$ 1,258 | \$ - | \$ - |
| \$ 14,975 14,345 | \$ 13,978 13,424 | \$ - 921 | \$ - | \$ - | \$ 997 |
| \$ 29,320 | \$ 27,402 | \$ 921 | \$ - | \$ - | \$ 997 |
| \$ (8,022) | \$ (8,283) | \$ - | \$ 1,258 | \$ - | \$ (997) |
| \$ (3,899) | \$ (798) | \$ - | \$ (3,101) | \$ - | \$ - |
| (168) | (168) | - | - | - | - |
| (8,671) | | | - | - | - |
| \$ (20,760) | \$ (17,920) | \$ - | \$ (1,843) | \$ - | \$ (997) |

Other Direct Support Organizations - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | Generally | Available | Conditional Availability | Not Available |
|--------------|-------------------------|-------------------------------|-----------------------------|---------------------|
| Total | State Appropriations | General Admin & Operations | Research Restricted | Donor Restricted |
| \$ 79,737 | \$ 3,978 | \$ 60,995 | \$ 14,268 | \$ 496 |
| 8,248 | 326 | 3,282 | 4,640 | - |
| \$ 87,985 | \$ 4,304 | \$ 64,277 | \$ 18,908 | \$ 496 |

Other Direct Support Organizations - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

| Casi | h D | 000 | inte |
|------|-----|-----|------|
| Ca5 | | CUC | ipto |

State Appropriations
Contracts and Grants
Contributions/Donations
Investment Income
Licensing and Royalties
Sales of Goods & Services
Other Cash Receipts
Total Cash Receipts

Transfers

From Component Units
UF Foundation (Donor Restricted)
To University/Component Units

Net Transfers

Total Cash Receipts Net of Transfers

Operating Expense Disbursements

Employee Compensation and Benefits

Operating Expense Disbursements

Total Operating Expense Disbursements

Total Cash Receipts and Transfers Less Operating Expense Disbursements

Other Receipts & Disbursements

Equipment and Building Expenses

Increase (Decrease) in Fair Value of Investments

Change in Receivables and Payables

Net Cash and Investments for the Three Months Ended September 30, 2020

| | | Generally | Available | Conditional Availability | Not Available |
|----|----------------------|-------------------------|----------------------------|---|---------------------|
| | Total | State Appropriations | General Admin & Operations | Research Restricted | Donor Restricted |
| \$ | 2,084 | \$ 2,084 | \$ - | \$ - | \$ - |
| | - 1,663 | - 420 | 1,243 | - | - |
| | 260 | 19 | 230 | 11 | - |
| | 18,069 | - | - | 18,069 | - |
| | 54,437 | - | 54,033 | 404 | - |
| \$ | 810 77,323 | \$ 2,523 | (6) \$ 55,500 | \$ 19,300 | \$ - |
| | | | | | |
| \$ | 1,903 (7,816) | \$ - | \$ 1,903 (1,101) | \$ - (6,715) | \$ - |
| \$ | (5,913) | \$ - | \$ 802 | \$ (6,715) | \$ - |
| | | | | | |
| \$ | 71,410 | \$ 2,523 | \$ 56,302 | \$ 12,585 | \$ - |
| | | | | | |
| \$ | 911 | \$ 101 | \$ 654 | \$ 156 | \$ - |
| | 56,548 | 3,346 | 52,095 | 1,107 | - |
| \$ | 57,459 | \$ 3,447 | \$ 52,749 | \$ 1,263 | \$ - |
| | , | · · · | , | , | |
| \$ | 13,951 | \$ (924) | \$ 3,553 | \$ 11,322 | \$ - |
| Ť | , | · (c=3) | ,,,,,, | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | T |
| \$ | (293) | \$ - | \$ - | \$ (293) | \$ - |
| | (251) | - | (251) | - | - |
| | (5,159) | 1,250 | (20) | (6,389) | - |
| \$ | 8,248 | \$ 326 | \$ 3,282 | \$ 4,640 | \$ - |

Florida Clinical Practice Association - Cash and Investments Reconciliation As of September 30, 2020

| | | | Generally Available | Conditional Availability | | | Not Av | ailable | | |
|--|--------|------|------------------------|-----------------------------|---------------|--|--------------|-----------|------------|-----------|
| | | | General Admin | | | Investment in UF Health South Central, | | | Employment | Payroll |
| | Tota | | & Operations | | Debt Covenant | · · · · · · · · · · · · · · · · · · · | Construction | Medicaid | Contracts | Funding |
| Cash and Investment Balance as of 6/30/2020 | \$ 112 | ,447 | \$ 20,513 | \$ 28,488 | \$ 10,000 | \$ 6,856 | \$ - | \$ 14,590 | \$ 15,000 | \$ 17,000 |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | 28 | ,100 | (803) | 815 | - | (412) | 25,500 | - | - | 3,000 |
| Cash and Investment Balance as of 9/30/2020 | \$ 140 | ,547 | \$ 19,710 | \$ 29,303 | \$ 10,000 | \$ 6,444 | \$ 25,500 | \$ 14,590 | \$ 15,000 | \$ 20,000 |

Florida Clinical Practice Association - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

| (amounts expressed in thousands) | lÍ | | _ | | | | | | | | |
|--|----------|-----------|------------------------|-----|-----------------------------|----------------------|----------------|--------------|----------|------------|----------|
| | | | Generally Available | | Conditional Availability | | | Not A | vailable | | |
| | | | Available | ť | Availability | | Investment in | | | | |
| | | | | | | | UF Health | | | | |
| | | | General Admin | | | | South Central, | | Medicare | Employment | Payroll |
| | | Total | & Operations | | Other | Debt Covenant | LLC | Construction | Advance | Contracts | Funding |
| Cash Receipts | | | | | | | | | | | |
| Patient Service Revenue | \$ | | \$ 137,427 | \$ | | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Investment Income | | 909 | 877 | | 32 | - | - | - | - | - | - |
| Other Receipts | <u> </u> | - | - | _ | - | - | - | - | - | - | - |
| Total Cash Receipts | \$ | 138,336 | \$ 138,304 | \$ | 32 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Transfers | | | | | | | | | | | |
| From Component Units | | | | | | | | | | | |
| Hospitals and Practice Plans | \$ | 36.151 | \$ 36,151 | \$ | _ | \$ - | \$ - | \$ - | \$ - | | \$ - |
| To University/Component Units | Ι* | (120,276) | (120,276) | | _ | _ | - | | _ | | - |
| Net Transfers | \$ | (84,125) | | | - | \$ - | \$ - | | \$ - | \$ - | \$ - |
| | | , , , | . , , | ļ · | | | | | | | |
| Total Cash Receipts Net of Transfers | \$ | 54,211 | \$ 54,179 | \$ | 32 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | | | |
| Operating Expense Disbursements | | | | | | | | | | | |
| Employee Compensation and Benefits | \$ | - | \$ - | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | | | | | | | | | | |
| Operating Expense Disbursements | | 36,871 | 36,871 | | - | - | - | - | - | - | - |
| | <u> </u> | | | _ | | _ | _ | _ | | _ | |
| Total Operating Expense Disbursements | \$ | 36,871 | \$ 36,871 | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Total Ocale December and Total Complete | | | | | | | | | | | |
| Total Cash Receipts and Transfers Less | ١. | 47.040 | 47.000 | ١, | | • | • | | _ | | • |
| Operating Expense Disbursements | \$ | 17,340 | \$ 17,308 | Þ | 32 | \$ - | \$ - | | \$ - | \$ - | \$ - |
| Other Descints & Bishumanusta | | | | | | | | | | | |
| Other Receipts & Disbursements | | | ¢ | φ. | | • | • | c | Φ. | Φ. | œ. |
| Equipment and Building Expenses | \$ | - | 5 - | \$ | - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Debt Proceeds/Repayment | | (443) | (443) | | | | _ | | | _ | |
| Debt i Toceeus/Nepayment | | (443) | (443) | | - | - | - | _ | _ | _ | - |
| Increase (Decrease) in Fair Value of Investments | | 783 | _ | | 783 | _ | _ | _ | _ | _ | _ |
| 12-12-13/11/14/11/4/14/4/4/14/14/14/14/14/14/14/ | | . 30 | | | . 00 | | | | | | |
| Change in Receivables and Payables | | 10,420 | (17,668) | | - | - | (412) | 25,500 | - | _ | 3,000 |
| · | | | , | | | | , , | · | | | |
| Net Cash and Investments for the Three Months Ended September 30, 2020 | \$ | 28,100 | \$ (803) | \$ | 815 | \$ - | \$ (412) | \$ 25,500 | \$ - | \$ - | \$ 3,000 |
| | - | | | | | | | | | | |

Other Practice Plans - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | G | enerally | Co | onditional |
|---------------|----|--------------------------|----|-------------------------|
| | A | Available | A۱ | vailability |
| Total | | eral Admin Operations | | -Insurance estricted |
| \$ 313,261 | \$ | 78,847 | \$ | 234,414 |
| 1,538 | | (3,270) | | 4,808 |
| \$ 314,799 | \$ | 75,577 | \$ | 239,222 |

Other Practice Plans - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

Cash Receipts

Patient Service Revenue Contributions/Donations Investment Income Sales of Goods & Services Other Receipts

Total Cash Receipts

Transfers

From Component Units Hospitals and Practice Plans To University/Component Units

Net Transfers

Total Cash Receipts Net of Transfers

Operating Expense Disbursements

Employee Compensation and Benefits

Operating Expense Disbursements

Total Operating Expense Disbursements

Total Cash Receipts and Transfers Less Operating Expense Disbursements

Other Receipts & Disbursements

Equipment and Building Expenses

Debt Proceeds/Repayment

Increase (Decrease) in Fair Value of Investments

Change in Receivables and Payables

Net Cash and Investments for the Three Months Ended September 30, 2020

| | nerally ailable | nditional ailability |
|-------------------------|-------------------------|---------------------------|
| Total | al Admin erations | Insurance stricted |
| \$ 74,304 | \$ 74,304 | \$ - |
| 7,654 2,850 | 96 1,025 | 7,558 1,825 |
| \$ 84,808 | \$ 75,425 | \$ 9,383 |
| \$ 3,246 (49,139) | \$ 3,246 (48,370) | \$ - (769) |
| \$ (45,893) | \$ (45,124) | \$ (769) |
| | , , , | ` ' |
| \$ 38,915 | \$ 30,301 | \$ 8,614 |
| \$ 29,170 14,763 | \$ 29,170 11,885 | \$ 2,878 |
| \$ 43,933 | \$ 41,055 | \$ 2,878 |
| \$ (5,018) | \$ (10,754) | \$ 5,736 |
| \$ (300) | \$ (300) | \$ - |
| - | - | - |
| - | - | - |
| 6,856 | 7,784 | (928) |
| \$ 1,538 | \$ (3,270) | \$ 4,808 |

Shands Teaching Hospital and Clinics - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | Generally | Available | Not Available | | | | |
|-----------------|----------------------------|---------------------|---------------|--------------|--|--|--|
| Total | General Admin & Operations | Board Designated | Debt Reserves | Construction | | | |
| \$ 1,368,452 | \$ 474,617 | \$ 788,147 | \$ 28,482 | \$ 77,206 | | | |
| 35,228 | (26,415) | 81,991 | (5,823) | (14,525) | | | |
| \$ 1,403,680 | \$ 448,202 | \$ 870,138 | \$ 22,659 | \$ 62,681 | | | |

Shands Teaching Hospital and Clinics - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

| Cash Receipts | ts | in | cei | e | R | h | as | C |
|---------------|----|----|-----|---|---|---|----|---|
|---------------|----|----|-----|---|---|---|----|---|

State Appropriations
Patient Service Revenue
Contributions/Donations
Investment Income
Other Cash Receipts

Total Cash Receipts

Transfers

To University/Component Units **Net Transfers**

Total Cash Receipts Net of Transfers

Operating Expense Disbursements

Employee Compensation and Benefits

Operating Expense Disbursements

Total Operating Expense Disbursements

Total Cash Receipts and Transfers Less Operating Expense Disbursements

Other Receipts & Disbursements

Equipment and Building Expenses

Debt Proceeds/Repayment

Increase (Decrease) in Fair Value of Investments

Change in Receivables and Payables

Net Cash and Investments for the Three Months Ended September 30, 2020

| | | Generally Available | | | | | Not Av | aila | ble |
|----|------------------|---------------------|---------------------------|----|--------------------|-----|-------------|------|-------------|
| | Total | | neral Admin Operations | D | Board esignated | Dek | ot Reserves | C | onstruction |
| \$ | 2 556 | \$ | 2 556 | \$ | | \$ | | \$ | |
| Φ | 3,556 501,252 | Φ | 3,556 501,252 | Φ | - | Φ | - | Φ | - |
| | 1,493 | | 1,493 | | _ | | _ | | |
| | 42,523 | | 82 | | 41,991 | | _ | | 450 |
| | 5,133 | | 5,133 | | | | _ | | - |
| \$ | | \$ | 511,516 | \$ | 41,991 | \$ | - | \$ | 450 |
| | | | | | | | | | |
| | | | | | | | | | |
| \$ | (37,157) | \$ | (37,157) | \$ | - | \$ | - | \$ | - |
| \$ | (37,157) | \$ | (37,157) | \$ | - | \$ | - | \$ | - |
| \$ | 516,800 | \$ | 474,359 | \$ | 41,991 | \$ | - | \$ | 450 |
| Ė | | | , | | , | | | • | |
| | | | | | | | | | |
| \$ | 239,177 | \$ | 239,177 | \$ | - | \$ | - | \$ | - |
| | 044.400 | | 044.400 | | | | | | |
| | 211,120 | | 211,120 | | - | | - | | - |
| \$ | 450,297 | \$ | 450,297 | \$ | - | \$ | - | \$ | - |
| | | | | | | | | | |
| \$ | 66,503 | \$ | 24,062.00 | \$ | 41,991.00 | \$ | | \$ | 450.00 |
| ۳ | 00,503 | Ψ | 24,002.00 | Ψ | 41,991.00 | Ψ | | Ψ | 430.00 |
| | | | | | | | | | |
| \$ | (23,302) | \$ | (23,302) | \$ | _ | \$ | _ | \$ | _ |
| * | (20,002) | ľ | (20,002) | Ψ | | Ψ | | Ψ | |
| | (8,028) | | 6,947 | | - | | - | | (14,975) |
| | 0.607 | | 0.667 | | | | | | |
| | 8,667 | | 8,667 | | - | | - | | - |
| | (8,612) | | (42,789) | | 40,000 | | (5,823) | | _ |
| | (0,0.2) | | (.2,.00) | | .0,000 | | (3,023) | | |
| \$ | 35,228 | \$ | (26,415.00) | \$ | 81,991.00 | \$ | (5,823.00) | \$ | (14,525.00) |

Shands Jacksonville HealthCare - Cash and Investments Reconciliation

As of September 30, 2020

(amounts expressed in thousands)

Cash and Investment Balance as of 6/30/2020

Net Cash and Investments for the Three Months Ended September 30, 2020

Cash and Investment Balance as of 9/30/2020

| | Generally | Available | Conditional Availability | | | | |
|---------------|----------------------------|---------------------|--------------------------|-----------|--|--|--|
| Total | General Admin & Operations | Board Designated | Construction | Debt | | | |
| \$ 193,973 | \$ 164,450 | \$ 19,500 | \$ 4 | \$ 10,019 | | | |
| 29,152 | 29,309 | - | - | (157) | | | |
| \$ 223,125 | \$ 193,759 | \$ 19,500 | \$ 4 | \$ 9,862 | | | |

Shands Jacksonville HealthCare - Analysis of Cash Receipts and Disbursements

For the Three Months Ended September 30, 2020

(amounts expressed in thousands)

| Cash Re | ceip |)ts |
|---------|------|-----|
|---------|------|-----|

Patient Service Revenue Contributions/Donations Investment Income Other Cash Receipts Total Cash Receipts

Transfers

To University/Component Units

Net Transfers

Total Cash Receipts Net of Transfers

Operating Expense Disbursements

Employee Compensation and Benefits

Operating Expense disbursements

Total Operating Expense disbursements

Total Cash receipts and transfers less Operating expense disbursements

Other Receipts & Disbursements

Equipment and Building Expenses

Debt Proceeds/Repayment

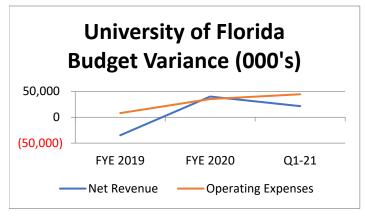
Change in Receivables and Payables

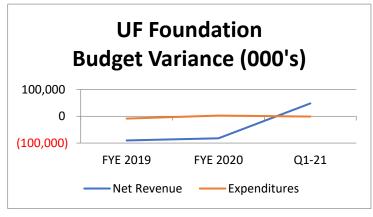
Net Cash and Investments for the Three Months Ended September 30, 2020

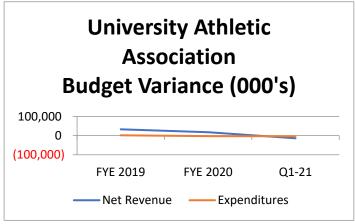
| | | G | enerally Availab | le | Conditional Availability | | | |
|----|----------|-------------------------------|---------------------|-------------------------|--------------------------|----------|--|--|
| | Total | General Admin & Operations | Board Designated | Capital Expenditures | Construction | Debt | | |
| \$ | 170,720 | \$ 170,720 | \$ - | \$ - | \$ - | \$ - | | |
| | - 479 | - 479 | - | - | - | - | | |
| | 50,266 | 50,266 | - | - | - | - | | |
| \$ | 221,465 | \$ 221,465 | \$ - | \$ - | \$ - | \$ - | | |
| | | | | | | | | |
| \$ | (15,358) | | | \$ - | \$ - | \$ - | | |
| \$ | (15,358) | \$ (15,358) | \$ - | \$ - | \$ - | \$ - | | |
| \$ | 206,107 | \$ 206,107 | \$ - | \$ - | \$ - | \$ - | | |
| _ | | + | <u> </u> | • | · | | | |
| | | | | | | | | |
| \$ | 88,338 | \$88,338 | \$ - | \$ - | \$ - | \$ - | | |
| | 78,949 | 78,949 | _ | _ | _ | _ | | |
| | | | | | | | | |
| \$ | 167,287 | \$ 167,287 | \$ - | \$ - | \$ - | \$ - | | |
| | | | | | | | | |
| \$ | 38,820 | \$ 38,820 | \$ - | \$ - | \$ - | \$ - | | |
| | | | | | | | | |
| \$ | (8,302) | \$ (8,302) | \$ - | \$ - | \$ - | \$ - | | |
| | | | | | | | | |
| | (2,168) | (2,011) | - | - | - | (157) | | |
| \$ | 802 | 802 | - | - | - | - | | |
| \$ | 29,152 | \$ 29,309 | \$ - | \$ - | \$ - | \$ (157) | | |
| Ψ | 29, 132 | Ψ 29,309 | Ψ - | Ψ - | Ψ - | Ψ (137) | | |

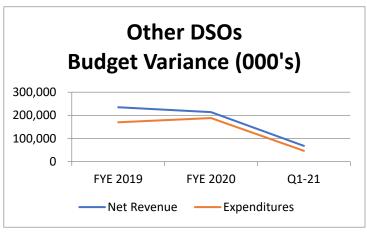
University of Florida Enterprise

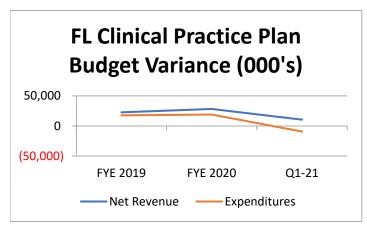
Budget Variances at a Glance

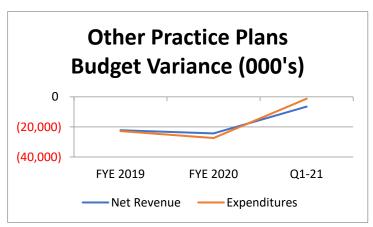


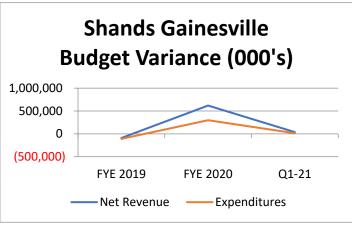


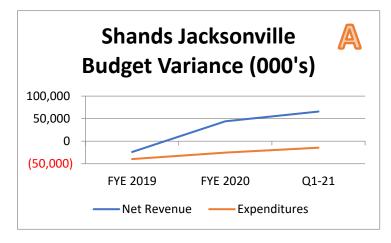












(A) Results include \$46M in unbudgeted CARES stimulus funds as well as a delay in repayment of Medicare advance payments

University of Florida

Budget to Actual (in thousands)

As of September 30, 2020

| | | Actual | | Budget | \$ ' | Variance | % Variance |
|---|----|---------|----------|---------|-----------|----------|------------|
| Cash Receipts | · | | | | | | |
| Tuition and Fees | \$ | 158,100 | \$ | 152,617 | \$ | 5,483 | 3.59% |
| State Appropriations | | 185,991 | | 178,970 | | 7,021 | 3.92% |
| Contracts and Grants | | 163,082 | | 162,678 | | 404 | 0.25% |
| Federal and State Financial Aid | | 108,679 | | 106,751 | | 1,928 | 1.81% |
| Investment Income | | 6,414 | | 12,660 | | (6,246) | -49.34% |
| Sales of Goods & Services | | 35,885 | | 30,853 | | 5,032 | 16.31% |
| Other Cash Receipts | | 3,403 | | 525 | | 2,878 | 548.19% |
| Total Cash Receipts | \$ | 661,554 | \$ | 645,054 | \$ | 16,500 | 2.56% |
| | | | | | | | |
| Transfers | | | | | | | |
| From Component Units | | | | | | | |
| Hospitals and Practice Plan | \$ | 182,533 | \$ | 172,817 | \$ | 9,716 | 5.62% |
| UF Foundation (Donor Restricted) | | 34,782 | | 32,106 | | 2,676 | 8.33% |
| Other | | 6,558 | | 13,981 | | (7,423) | -53.09% |
| Net Transfers | \$ | 223,873 | \$ | 218,904 | \$ | 4,969 | 2.27% |
| Total Cash Receipts Net of Transfers | \$ | 885,427 | \$ | 863,958 | \$ | 21,469 | 2.48% |
| Operating Evpense Dishurasments | | | | | | | |
| Operating Expense Disbursements | ф | 477.465 | ው | 467.445 | ው | 0.750 | 2.09% |
| Employee Comp & Benefits Other Operating Function Dishurant (Note 1) | \$ | 477,165 | \$ | 467,415 | \$ | 9,750 | |
| Other Operating Expense Disbursements (Note 1) | \$ | 229,313 | _ | 194,578 | _ | 34,735 | 17.85% |
| Total Operating Expense Disbursements | \$ | 706,478 | \$ | 661,993 | <u>\$</u> | 44,485 | 6.72% |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | \$ | 178,949 | \$ | 201,965 | \$ | (23,016) | -11.40% |

University of Florida Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | <u>Explanation</u> |
|--------|--------------------------|---|
| | | |
| 1 | Other Operating Expenses | Operating expenditures have not decreased as dramatically as originally anticipated |

University of Florida Foundation

Budget to Actual (in thousands)

As of September 30, 2020

| | Actual | | Budget | \$ Variance | % Variance |
|--|----------------|----|----------|----------------|------------|
| Cash Receipts | | | | | |
| Contributions/Donations (Note 1) | \$ 52,845 | \$ | 15,343 | \$ 37,502 | 244.42% |
| Investment Income | 228 | | - | 228 | 0.00% |
| Other Cash Receipts | - | _ | | | 0.00% |
| Total Cash Receipts | \$ 53,073 | \$ | 15,343 | \$ 37,730 | 245.91% |
| Transfers | | | | | |
| From Component Units | | | | | |
| Other | \$ - | \$ | - | \$ - | 0.00% |
| To University/Component Units (Note 2) | (36,685) | | (46,996) | 10,311 | -21.94% |
| Net Transfers | \$ (36,685) | \$ | (46,996) | \$ 10,311 | -21.94% |
| Total Cash Receipts Net of Transfers | \$ 16,388 | \$ | (31,653) | \$ 48,041 | -151.77% |
| Operating Expense Disbursements | | | | | |
| Employee Comp & Benefits | \$ 4,749 | \$ | 4,320 | \$ 429 | 9.93% |
| Other Operating Expense Disbursements | 4,256 | | 5,815 | (1,559) | -26.81% |
| Total Operating Expense Disbursements | \$ 9,005 | \$ | 10,135 | \$ (1,130) | -11.15% |
| Total Cash Receipts and Transfers Less | | | | | |
| Operating Expense Disbursements | \$ 7,383 | \$ | (41,788) | \$ 49,171 | -117.67% |

University of Florida Foundation Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | Explanation |
|--------|-------------------------|---|
| | | |
| 1 | Contributions/Donations | Variance driven by large private gifts and increased gifts overall. |
| | | |
| 2 | Transfers to University | Variance driven by timing of the transfer of non-endowed gifts to the University. |

University Athletic Association

Budget to Actual (in thousands)

As of September 30, 2020

| | A | ctual | Budget | | \$ Variance | | % Variance |
|--|---------------------|------------|--------|--------|-------------|----------|------------|
| Cash Receipts | | | | | | | |
| State Appropriations | \$ | 921 | \$ | 1,240 | \$ | (319) | -25.73% |
| Contributions/Donations | | - | | - | | - | 0.00% |
| Investment Income | | 3,367 | | 163 | | 3,205 | 1972.00% |
| Licensing and Royalties | | 8,934 | | 16,581 | | (7,647) | -46.12% |
| Sales of Goods & Services | | 6,818 | | 8,375 | | (1,557) | -18.59% |
| Other Cash Receipts | | <u>-</u> _ | | 101 | | (101) | -100.00% |
| Total Cash Receipts | \$ | 20,040 | \$ | 26,460 | \$ | (6,420) | -24.26% |
| | | | | | | | |
| Transfers | | | | | | | |
| From Component Units | | | | | | | |
| UF Foundation (Donor Restricted) | \$ | - | \$ | - | \$ | - | 0.00% |
| Other | | 1,258 | | 8,620 | | (7,362) | -85.41% |
| To University/Component Units | | - | | - | | - | 0.00% |
| Net Transfers | \$ | 1,258 | \$ | 8,620 | \$ | (7,362) | -85.41% |
| Total Cash Receipts Net of Transfers | \$ | 21,298 | \$ | 35,079 | \$ | (13,781) | -39.29% |
| Operating Expense Disbursements | | | | | | | |
| Employee Comp & Benefits | \$ | 14,975 | \$ | 15,547 | \$ | (572) | -3.68% |
| Other Operating Expense Disbursements | | 14,345 | | 17,004 | | (2,659) | -15.64% |
| Total Operating Expense Disbursements | \$ | 29,320 | \$ | 32,551 | \$ | (3,231) | -9.93% |
| Total Cash Receipts and Transfers Less | | | | | | | |
| Operating Expense Disbursements | <u> \$ </u> | (8,022) | \$ | 2,528 | \$ | (10,550) | -417.29% |

Other Direct Support Organizations

Budget to Actual (in thousands)
As of September 30, 2020

| | Actual | Budget | \$ Variance | % Variance |
|--|---------------|----------------|----------------|------------|
| Cash Receipts | | | | |
| State Appropriations | \$ 2,084 | \$ 1,796 | \$ 288 | 16.04% |
| Contracts and Grants | - | - | - | 0.00% |
| Contributions/Donations | 1,663 | 4,693 | (3,030) | -64.56% |
| Investment Income | 260 | 106 | 154 | 145.28% |
| Licensing and Royalties | 18,069 | 12,556 | 5,513 | 43.91% |
| Sales of Goods & Services (Note 1) | 54,437 | 792 | 53,645 | 6773.36% |
| Other Receipts | 810 | 1,075 | (265) | -24.65% |
| Total Cash Receipts | \$ 77,323 | \$ 21,018 | \$ 56,305 | 267.89% |
| | _ | | | |
| Transfers | | | | |
| From Component Units | | | | |
| UF Foundation (Donor Restricted) | \$ 1,903 | \$ - | \$ 1,903 | 0.00% |
| To University/Component Units (Note 2) | \$ (7,816) | \$ (17,770) | \$ 9,954 | -56.02% |
| Net Transfers | \$ (5,913) | \$ (17,770) | \$ 11,857 | -66.72% |
| Total Cash Receipts Net of Transfers | \$ 71,410 | \$ 3,248 | \$ 68,162 | 2098.58% |
| Operating Expense Disbursements | | | | |
| Employee Comp & Benefits | \$ 911 | \$ 1,157 | \$ (246) | -21.29% |
| Other Operating Expense Disbursements (Note 3) | \$ 56,548 | \$ 9,488 | \$ 47,061 | 496.03% |
| Total Operating Expense Disbursements | \$ 57,459 | \$ 10,645 | \$ 46,814 | 439.78% |
| | | | | |
| Total Cash Receipts and Transfers Less | | | | |
| Operating Expense Disbursements | \$ 13,951 | \$ (7,397) | \$ 21,348 | -288.61% |

Other Direct Support Organizations Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | Explanation |
|--------|--|--|
| 1 | Sales of Goods & Services | Employer contributions reported by GatorCare in their cash receipts are not included in their budget. |
| 2 | Transfers 'To University/Component Units | Timing issue - distribution of program royalties to the Florida Agricultural Experiment Station/UF will be made in Q2 instead of Q1. |
| 3 | Other Operating Expense Disbursements | Claim expenses reported by GatorCare in their cash disbursements are not included in their budget |

Florida Clinical Practice Plan

Budget to Actual (in thousands) As of September 30, 2020

| | Actual | Budget | \$ Variance | % Variance |
|--|----------------|----------------|----------------|------------|
| Cash Receipts | | | | |
| Patient Service Revenue (Note 1) | \$ 137,427 | \$ 122,061 | \$ 15,366 | 12.59% |
| Investment Income | 909 | 200 | 709 | 354.50% |
| Other Cash Receipts | | | - | 0.00% |
| Total Cash Receipts | \$ 138,336 | \$ 122,261 | \$ 16,075 | 13.15% |
| Transfers | | | | |
| From Component Units | | | | |
| Hospitals and Practice Plan | \$ 36,151 | \$ 40,750 | \$ (4,599) | -11.29% |
| To University/Component Units | (120,276) | (119,303) | (973) | 0.82% |
| Net Transfers | \$ (84,125) | \$ (78,553) | \$ (5,572) | 7.09% |
| Total Cash Receipts Net of Transfers | \$ 54,211 | \$ 43,708 | \$ 10,503 | 24.03% |
| Operating Expense Disbursements | | | | |
| Employee Comp & Benefits | \$ - | \$ - | \$ - | 0.00% |
| Other Operating Expense Disbursements | 36,871 | 46,133 | (9,262) | -20.08% |
| Total Operating Expense Disbursements | \$ 36,871 | \$ 46,133 | \$ (9,262) | -20.08% |
| Total Cash Receipts and Transfers Less | | | | |
| Operating Expense Disbursements | \$ 17,340 | \$ (2,425) | \$ 19,765 | -815.05% |

Florida Clinical Practice Plan Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | Explanation |
|--------|-------------------------|--|
| | | |
| 1 | Patient Service Revenue | Increase is due to regional growth, primarily due to the addition of new clinics in Lake City, Ocala and |
| | | Starke, and a new contractual agreement with Central Florida Health during FY20 |

Other Practice Plans

Budget to Actual (in thousands) As of September 30, 2020

| | Actual | Budget | \$ \ | /ariance | % Variance |
|--|----------------|----------------|-------------|----------|------------|
| Cash Receipts | | | | | |
| Patient Service Revenue | \$ 74,304 | \$ 77,859 | \$ | (3,555) | -4.57% |
| Contributions/Donations | - | - | | - | 0.00% |
| Investment Income | 7,654 | 3,607 | | 4,047 | 112.18% |
| Sales of Goods & Services | 2,850 | 959 | | 1,891 | 197.18% |
| Other Receipts | | | | - | 0.00% |
| Total Cash Receipts | \$ 84,808 | \$ 82,425 | \$ | 2,383 | 2.89% |
| Transfers | | | | | |
| From Component Units | | | | | |
| Hospitals and Practice Plan | \$ 3,246 | \$ 11,436 | \$ | (8,190) | -71.62% |
| To University/Component Units | (49,139) | (48,455) | | (684) | 1.41% |
| Net Transfers | \$ (45,893) | \$ (37,019) | \$ | (8,874) | 23.97% |
| Total Cash Receipts Net of Transfers | \$ 38,915 | \$ 45,406 | \$ | (6,491) | -14.30% |
| Operating Expense Disbursements | | | | | |
| Employee Comp & Benefits | \$ 29,170 | \$ 29,375 | \$ | (205) | -0.70% |
| Other Operating Expense Disbursements | \$ 14,763 | \$ 15,774 | \$ | (1,011) | -6.41% |
| Total Operating Expense Disbursements | 43,933 | \$ 45,149 | \$ | (1,216) | -2.69% |
| Total Cash Receipts and Transfers Less | | | | | |
| Operating Expense Disbursements | \$ (5,018) | \$ 258 | \$ | (5,276) | -2048.74% |

Shands Teaching Hospital and Clinics

Budget to Actual (in thousands)

As of September 30, 2020

| | Actual | Budget | \$ Variance | % Variance |
|--|----------------|----------------|----------------|------------|
| Cash Receipts | | | | |
| State Appropriations | \$ 3,556 | \$ 1,763 | \$ 1,793 | 101.70% |
| Patient Service Revenue | 501,252 | 506,550 | (5,298) | -1.05% |
| Contributions/Donations | 1,493 | 2,007 | (514) | -25.61% |
| Investment Income (Note 1) | 42,523 | 4,000 | 38,523 | 963.08% |
| Other Receipts (Note 2) | 5,133 | 14,058 | (8,925) | -63.49% |
| Total Cash Receipts | \$ 553,957 | \$ 528,378 | \$ 25,579 | 4.84% |
| | | | | |
| Transfers | | | | |
| To University/Component Units (Note 3) | \$ (37,157) | \$ (49,417) | \$ 12,260 | -24.81% |
| Net Transfers | \$ (37,157) | \$ (49,417) | \$ 12,260 | -24.81% |
| Total Cash Receipts Net of Transfers | \$ 516,800 | \$ 478,961 | \$ 37,839 | 7.90% |
| Operating Expense Disbursements | | | | |
| Employee Comp & Benefits | \$ 239,177 | \$ 227,260 | \$ 11,917 | 5.24% |
| Other Operating Expense Disbursements | 211,120 | 209,569 | 1,551 | 0.74% |
| Total Operating Expense Disbursements | \$ 450,297 | \$ 436,829 | \$ 13,468 | 3.08% |
| Total Cash Receipts and Transfers Less | | | | |
| Operating Expense Disbursements | \$ 66,503 | \$ 42,132 | \$ 24,371 | 57.84% |

Shands Teaching Hospital and Clinics Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | Explanation | | |
|--------|---|---|--|--|
| | | | | |
| 1 | Investment Income | Increased investment income compared to budget due primarily to the positive investment performance during Q1 FY2021. Change in fair market values of investments are not budgeted. | | |
| | | | | |
| 2 | Other Receipts | Other receipts were below budget by \$9 million due to timing of cash receipts from other operations, specifically for contractual agreements for services provided by Shands employees to other organizations. | | |
| | | | | |
| 3 | Transfers to University/Component Units | Difference in timing of transfers made during Q1 compared to budget | | |

Shands Jacksonville HealthCare

Budget to Actual (in thousands)

As of September 30, 2020

| Actual | | Budget | \$ | Variance | % Variance |
|----------------------|--|---|---------------------------|--|---------------------------------|
| | | | | | |
| \$ 170,720 | \$ | 146,635 | \$ | 24,085 | 16.42% |
| - | | | | - | 0.00% |
| 479 | | 262 | | 218 | 83.17% |
| 50,266 | | 2,957 | | 47,309 | 1599.90% |
| \$ 221,465 | \$ | 149,854 | \$ | 71,611 | 47.79% |
| | | | | | |
| | | | | | |
| \$ (15,358) | \$ | (9,528) | \$ | (5,830) | 61.19% |
| \$ (15,358) | \$ | (9,528) | \$ | (5,830) | 61.19% |
| | | | | | |
| \$ 206,107 | \$ | 140,326 | \$ | 65,781 | 46.88% |
| | | | | | |
| | | | | | |
| \$ 88,338 | \$ | 92,302 | \$ | (3,964) | -4.29% |
| 78,949 | | 89,378 | | (10,429) | -11.67% |
| \$ 167,287 | \$ | 181,680 | \$ | (14,393) | -7.92% |
| | | | | | |
| | | | | | |
| \$ 38,820 | \$ | (41,354) | \$ | 80,174 | -193.87% |
| \$ \$ \$ \$ | \$ (15,358) \$ (15,358) \$ (15,358) \$ (206,107) \$ 88,338 78,949 \$ 167,287 | \$ 170,720 \$ 479 50,266 \$ 221,465 \$ \$ (15,358) \$ \$ (15,358) \$ \$ 206,107 \$ \$ 88,338 \$ 78,949 \$ 167,287 \$ | \$ 170,720 \$ 146,635 | \$ 170,720 \$ 146,635 \$ 479 262 50,266 2,957 \$ 221,465 \$ 149,854 \$ \$ (15,358) \$ (9,528) \$ \$ (15,358) \$ (9,528) \$ \$ 206,107 \$ 140,326 \$ \$ 88,338 \$ 92,302 \$ 78,949 89,378 \$ 167,287 \$ 181,680 \$ | \$ 170,720 \$ 146,635 \$ 24,085 |

Shands Jacksonville HealthCare Notes to Notable Non-GAAP Financial Information For the Three Months Ended September 30, 2020

| Note # | Line Description | Explanation |
|--------|---------------------------------------|--|
| 1 | Patient Service Revenue | Medicare advance payments originally budgeted for repayment have been delayed until April 2021 |
| | Other Descipto | OAE CM of unburdanted CADEC Act Otimulus received 7/45/2020 |
| 2 | Other Receipts | \$45.6M of unbudgeted CARES Act Stimulus received 7/15/2020. |
| 3 | Other Operating Expense Disbursements | Expenditures for resident/housestaff payment originally budgeted as operating expense, but have been recategorized as transfers to the University. |



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS Friday, December 4, 2020 1:20 p.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville FL

Morteza "Mori" Hosseini (Chair), David L. Brandon, Richard P. Cole, James W. Heavener, Rahul

Committee Members:

Patel. Anita G. Zucker

5.0

6.0

7.0

Relations and University Secretary

Call to Order and WelcomeMori Hosseini, Chair 1.0 2.0 Verification of QuorumVice President Liaison Review and Approval of Minutes......Mori Hosseini, Chair 3.0 May 28, 2020 June 4, 2020 4.0 Action ItemsMori Hosseini, Chair GGRIA1 Direct Support Organization Appointments.....Amy Hass, Vice President and **General Counsel** GGRIA2 UF Regulations......Amy Hass GGRIA3 UF BOT Bylaws......Amy Hass GGRIA4 UF BOT Committee ChartersAmy Hass GGRIA5 UF BOT United Faculty of Florida Collection Bargaining Agreement Amendment Amy Hass

Discussion ItemMori Hosseini, Chair 5.1 Legislative Update...... Mark Kaplan, Vice President for Government and Community

New BusinessMori Hosseini, Chair

AdjournMori Hosseini, Chair



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS, AND INTERNAL AFFAIRS

Pre-Meeting Minutes
Virtual Meeting
May 28, 2020

Time Convened: 4:01 p.m Time Adjourned: 4:18 p.m.

Committee and Board members present:

Rahul Patel (Committee Chair), David L. Brandon, Morteza Hosseini (Board Chair), Daniel T. O'Keefe, Marsha D. Powers, Robert G. Stern, Ray G. Thomas, and Anita G. Zucker

Others present were:

W. Kent Fuchs, President; Amy Hass, Vice President and General Counsel; Mark Kaplan, Vice President for Government and Community Relations and University Secretary, David Norton, Vice President of Research, members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Rahul Patel welcomed everyone in attendance and called the meeting to order at 4:01 p.m.

2.0 Roll Call

Board Staff conducted a roll call of all Committee and Board members present.

3.0 Action Items for June 4, 2020 Meeting

Committee Chair Patel reminded the committee that no action will be taken on today's call. We will preview the Action Items for the June 4 Board meeting and briefly review our key discussion items.

GGRIA1 DSO Appointments

Committee Chair Patel presented the proposed DSO board appointments for the following DSOs: UF Foundation, UF Leadership and Education Foundation, and University Athletic Association. These nominations have been made by the above DSO boards and vetted by the UF leader liaison for each DSO.

GGRIA2 UF Regulations

Vice President and General Counsel Amy Hass indicated that there will be an action item to approve amendments to the Collective Bargaining Agreement between the University of Florida Board of Trustees and the UFF ("CBA") related to annual evaluations, tenure and assignments.

GGRIA3 UF BOT Bylaws Amendment

Committee Chair Patel pointed out that the action item to amend the UF BOT bylaws ensures that the Governance Standards are incorporated formally therein, as well as to update any additional provisions that need amending now that our Governance policies and protocols have been implemented.

GGRIA4 Facility Security Clearance

Vice President Norton indicated he will seek for the board to vote to continue to designate President Fuchs and Vice President Norton for security clearance so that the two new trustees do not need to go through that process to comply with federal requirements.

GGRIA5 Presidential Assessment FY2020 GGRIA6 Presidential Goals FY2021

Committee Chair Patel indicated the committee will review and vote on the President Fuchs' FY 2020 Assessment and FY 2021 Goals at the June 4 meeting. Prior to the Board meeting, President Fuchs will review his assessment and goals with Chair and Vice Chair of the UF Board of Trustees, as well as the Chair of the Board of Governors.

4.0 Discussion Items

Committee Chair Patel introduced the following discussion items that will be covered in more detail at the June meeting.

4.1 Use of Brand Project

Committee Chair Patel discussed that they have begun a project looking at our enterprise-wide processes and procedures for licensing our marks to third parties and allowing third parties the use of the UF brand and will have detailed information to present at the June 4 meeting. As part of the background work on the Governance project, we have prepared a presentation for our June Board meeting and will share the following in that presentation: Current UF processes and practices (this includes all of our DSO and Affiliates), benchmarking of peer institutions around the country, best practices, recommendations for a working group, and a timeline of goals for that group.

4.2 Legislative Update

Vice President and University Secretary Mark Kaplan indicated that due to COVID-19 the Governor has not received the legislative budget to approve yet. He expects that it will be presented and acted on before the end of the current fiscal year on June 30, 2020. In the meantime, the Government and Community Relations team has begun to prepare for next session.

5.0 New Business

Committee Chair Patel indicated that he looks forward to seeing everyone in person next week, as well as hearing about UF's plan to reopen, which will be presented to the Board of Governors by June 23.

6.0 Adjourn

There being no further discussion, Committee Chair Patel adjourned at the meeting at 4:18 p.m.





COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS, AND INTERNAL AFFAIRS

Meeting Minutes June 4, 2020

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville, FL Time Convened: 4:15 p.m

Time Adjourned: 5:02 p.m.

Committee and Board members present:

Rahul Patel (Committee Chair), David L. Brandon, Sylvain Doré, Morteza Hosseini (Board Chair), Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Trevor J. Pope, Marsha D. Powers, Jason J. Rosenberg, Robert G. Stern, Ray G. Thomas, and Anita G. Zucker

Others present were:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; Amy Hass, Vice President and General Counsel; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; D'Andra Mull, Vice President for Student Affairs; David Nelson, Senior Vice President for Health Affairs and President of UF Health; David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs; Scott Stricklin, Director of Athletics, members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Committee Chair Rahul Patel welcomed everyone in attendance and called the meeting to order at 4:15 p.m.

2.0 Verification of a Quorum

Vice President Amy Hass verified a quorum with all members present.

3.0 Review and Approval of Minutes

Committee Chair Patel asked if there were any additions and/or corrections to the minutes of the Committee meeting on March 29, 2020. Hearing none, he asked for a motion to approve the minutes, which was made by Trustee Rosenberg and a second, which was made by Trustee Kuntz. The Committee Chair asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

4.0 Action Items

GGRIA1 DSO Appointments

Committee Chair Patel presented the proposed DSO board appointments for the following DSOs: UF Foundation, UF Leadership and Education Foundation, and University Athletic Association. These nominations have been made by the above DSO boards and vetted by the UF leader liaison for each DSO.

Committee Chair Patel asked for any questions or further discussion. He then asked for a motion to approve Action Item GGRIA1 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Zucker, and a second, which was made by Trustee Rosenberg. Committee Chair Patel asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

GGRIA2 UF Regulations

Vice President and General Counsel Amy Hass indicated that there is an action item to approve amendments to the Collective Bargaining Agreement between the University of Florida Board of Trustees and the UFF ("CBA") related to annual evaluations, tenure, and assignments.

Committee Chair Patel asked for any questions or further discussion. He then asked for a motion to approve Action Item GGRIA2 for recommendation to the Board for its approval on the Consent Agenda, which was made by Board Chair Hosseini, and a second, which was made by Trustee Zucker. Committee Chair Patel asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

GGRIA3 UF BOT Bylaws Amendment

Committee Chair Patel reminded Trustees as mentioned in our last Governance Committee meeting in March and during our pre-call, that we undertook a review of the Board of Trustees Bylaws to ensure that we reflect the Governance Standards clearly in our Bylaws. We have now done so and the updated Bylaws are included in your materials.

Committee Chair Patel asked for any questions or further discussion. He then asked for a motion to approve Action Item GGRIA3 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Kuntz, and a second, which was made by Trustee Rosenberg. Committee Chair Patel asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

GGRIA4 Facility Security Clearance

Vice President David Norton reviewed that the Board of Trustees designates the University President and the Vice President of Research to serve as our UF representatives who maintain a security clearance in keeping with requirements for certain restricted and classified research. Each time a new trustee joins the BOT in June, we ask the Board to vote to approve this designation on our consent agenda. Trustee Sylvain Doré (Faculty Senate Chair) and Trustee Trevor Pope (Student Body President) are new to our Board and therefore this action is needed to comply with federal requirements.

Committee Chair Patel asked for any questions or further discussion. He then asked for a motion to approve Action Item GGRIA4 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Rosenberg, and a second, which was made by Board Chair Hosseini. Committee Chair Patel asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

GGRIA5 Presidential Assessment FY2020

Committee Chair Patel indicated that our 5th Action Item is the President's Performance Assessment for the fiscal year 2020. As noted in our pre-call, the President's Performance Assessment is reviewed under our process prior to this meeting with the Board Chair, the Vice Chair, and the Chair of the Board of Governors.

All trustees have received a copy of the President's Performance Assessment to review in advance of this meeting. As a brief summary, the President had 8 goals that the Governance Committee and Board approved last June. The President must substantially meet 6 of the 8 goals to achieve 100% performance. And, for the Fiscal year 2020, the President substantially met 7 of the 8 goals, thus achieving 100% performance

GGRIA6 Presidential Goals FY2021

Committee Chair Patel indicated that our 6th Action Item is the President's Goals for the fiscal year 2021. As noted in our pre-call, the President's Goals are reviewed under our process prior to this meeting with the Board Chair, the Vice Chair, and the Chair of the Board of Governors. Patel noted that all trustees have received a copy of the President's Goals to review in advance of this meeting. As a brief summary, the President has 9 overarching goals for the fiscal year 2021 that the Governance Committee and Board will be asked to approve. The President must substantially meet 8 of the 9 goals to achieve 100% performance. Committee Chair Patel asked our Board Chair for comments.

Board Chair Hosseini praised President Fuchs for the phenomenal job he has done as the leader of the University. Under President Fuchs leadership we have achieved many goals, as everyone is working together towards our goals. The University is on its way to reaching Top 5, 16:1 faculty student ratio, \$1B in research, and a new goal of 600 new faculty members. With President Fuchs and the cabinets' leadership UF has become a great asset to the state of Florida. Board Chair Hosseini highly recommends our approval of the assessment and goals.

Vice Chair Kuntz indicated that we are fortunate that President Fuchs takes these goals seriously.

Trustee and Committee Chair Patel thanked President Fuchs for the measurable goals.

Trustee Zucker congratulated President Fuchs. She added that the goals show her that we are pushing to perform better and not afraid to set goals that will help us reach Top 5 status.

Committee Chair Patel asked for any questions or further discussion. He then asked for a motion to approve Action Item GGRIA5 for recommendation to the Board for its approval on the Consent Agenda, which was made by Board Chair Hosseini, and a second, which was made by Trustee Kuntz. Committee Chair Patel asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

Committee Chair Patel asked for any questions or further discussion. He then asked for a motion to approve Action Item GGRIA6 for recommendation to the Board for its approval on the Consent Agenda, which was made by Trustee Kuntz, and a second, which was made by Trustee Rosenberg. Committee Chair Patel asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

5.0 Discussion Items

Mr. Patel then introduced the first discussion item.

5.1 Use of Brand Project

Committee Chair Patel discussed that the committee has begun a new governance project looking at our enterprise-wide processes and procedures for licensing our trademarks to third parties and allowing third parties the use of the UF brand with the involvement and input of UF Health, Athletics, the Foundation, Strategic Communications, and our legal team. Mr. Patel then went over a deck summarizing the goals of the project and next steps.

5.2 Legislative Update

Vice President and University Secretary Mark Kaplan indicated that due to COVID-19 the Governor has not received the legislative budget to approve yet. He expects that it will be presented and acted on before the end of the current fiscal year on June 30, 2020. In the meantime, the Government and Community Relations has been busy at the Federal level with the following congressional issues:

- 1. Additional COVID-19 funding
- 2. Immigration restrictions
- 3. Uniform standards for Name, Image, and Likeness
- 4. Foreign influence and the research enterprise

6.0 New Business

There was no new business to come before the committee.

7.0 Adjourn

There being no further discussion, Committee Chair Patel adjourned at the meeting at 5:02 p.m.





COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS ACTION ITEM GGRIA1 December 4, 2020

SUBJECT: Direct Support Organization-Board Appointments

BACKGROUND INFORMATION

Pursuant to University of Florida Governance Enhancements adopted by the University of Florida Board of Trustees on December 4, 2020, all appointments of Directors to University Direct Support Organizations must be approved by the University of Florida Board of Trustees.

The Direct Support Organizations listed below have requested the following individuals be approved to their board:

University of Florida Investment Corporation (UFICO) Board of DirectorsRobert Cousin

UF Advancement

Swati Patel
Howard Sheridan
Linda S. Parker Hudson
Nicholas Banks
Chris Cowen
Christina Gardner-McCune

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations and Internal Affairs is asked to approve the individuals listed above and in the board materials for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

None

Supporting Documentation Included: <u>See attached biographies for University of Florida</u> Investment Corporation (UFICO) Board of Directors and UF Advancement

Submitted by: W. Kent Fuchs, President

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary
661/863



DIRECT SUPPORT ORGANIZATIONS BOARD APPOINTMENTS FOR UF BOARD OF TRUSTEE APPROVAL

University of Florida Investment Corporation (UFICO) Board of DirectorsRobert Cousin

UF Advancement

Swati Patel Howard Sheridan Linda S. Parker Hudson Nicholas Banks Chris Cowen Christina Gardner-McCune



UFICO Board of Directors

Robert Cousin JP Morgan 320 Park Avenue, 15th Floor New York, NY 10022



Robert J. Cousin, Managing Director, Portfolio Manager, joined J.P. Morgan in 1997 as a founding member of the Private Equity Group. Prior to J.P. Morgan, Mr. Cousin was with AT&T Investment Management Corp.'s team responsible for managing private equity assets. Previously, he was an account manager at The Travelers. Mr. Cousin is a CFA charterholder. He earned his BA from Tulane University and an MBA from the University of Florida. Currently, Mr. Cousin serves on the advisory boards of Austin Ventures, Clarion Capital, Collaborative Fund, Domain Associates, Escalate Capital, Intersouth Partners, GTCR, Kinderhook Capital Partners, Morgenthaler Partners, NextCoast Ventures, and Quad C Partners. He also serves as board member/board observer for ACV Enviro, Goja Digital and 8 Minute Energy. Mr. Cousin is a board member of the University of Florida Investment Corporation.





Swati Patel—Atlanta, GA
Caiman Management – President, Founder and Owner
Executive Board Elected Director
2-year term

Swati Patel has a 20-year history in the real estate, vacation property, and hotel industry. She has been ranked among the top hotel owners/franchisees in Florida. With an MBA from Duke University and a Bachelor of Science in Psychology from the University of Florida, Patel leverages the intersection of human behavior and business strategy to

catalyze financial and operational results.

During her tenure with Caiman Management, she has managed over 100 employees, more than 6 different properties, and championed service for the most prestigious names in hotels, including Hilton, Hampton Inn, and Holiday Inn. Patel has also served as a member of the Asian American Hotel Owners of America organization for over 25 years.

Dedicated to her family and community, Patel actively serves on several boards committed to increasing access to quality education, network capital and worldwide health. She has served on the boards for Odyssey (former chair) and the US Fund for UNICEF's Southeast Region. She also serves on the alumni board for Duke University's Fuqua School of Business. Patel supports the Atlanta Speech School and the Georgia Campaign for Adolescent Power and Potential (GCAPP), as well as multiple other local and global organizations.

Both graduates from the University of Florida, Patel and her husband, Rahul, have been generous supporters of the Fred Levin College of Law endowment, Athletics and the Machen Florida Opportunity Scholarships. Patel served on the Student Affairs Campaign Council for the University's *Florida Tomorrow* campaign and the Student Affairs Development Advisory board for the beginning of the current *Go Greater* campaign.

The couple live in Atlanta, Georgia with their two children, Anyssa and Selena.





Howard Sheridan—Fort Myers, FL 21st Century Oncology — Retired Co-founder and Chair Executive Board Elected Director 2-year term

Howard Sheridan practiced diagnostic and interventional radiology and nuclear medicine in Fort Myers, FL for over 30 years, where he also served as president of the medical staff of Southwest Florida Regional Medical Center and chair of its radiology department. After planning and developing the area's first high-energy linear accelerator radiation therapy center, he

co-founded and became chair of Radiation Therapy Services, Inc. (RTSI).

RTSI operates and manages radiation treatment centers primarily under the name 21st Century Oncology and is a leading provider of advanced radiation therapy and other integrated cancer care services to cancer patients in the US and Latin America. Its centers also participate in clinical research trials for cancer treatment. Sheridan also co-founded 21st Century CARE, a non-profit dedicated to provide cancer assistance to the needy, cancer education and research.

Sheridan is a founding director of Edison National Bank and chair of its holding company, Edison Bancshares. He is a member of the American Medical Association, the Florida Medical Association, and the American College of Radiology. He also currently serves as the Chair of the Tulane University School of Medicine Board of Governors.

The Sheridans are community activists committed to conservation. The Florida Wildlife Federation named them "Water Conservationists of the Year" in 2008 for their contributions toward making Southwest Florida more sustainable, and their efforts to protect the Caloosahatchee River, the manatee and its habitat.

The couple have been generous supporters of UF, primarily to the Department of Chemistry where Sheridan serves on the Chemistry Leadership Board. They have contributed to student scholarships and fellowships, and were the first to donate to the new chemistry building for the Dr. Howard and Brenda Sheridan Auditorium. Sheridan, an award-winning nature photographer, also donated several photos that are on display in the building. In 2017, the College of Liberal Arts and Sciences awarded the Sheridans the Lasting Legacy award for their philanthropic support.

Sheridan earned a bachelor's degree in chemistry from the University of Florida in 1965 and graduated from Tulane University School of Medicine in 1969.





Linda S. Parker Hudson—*Gainesville, FL*Cardea Group — Strategic Advisor, Retired Founder, Chair and CEO
Executive Board Elected Director
2-year term (final)

Linda Hudson is a retired executive and entrepreneur with a background in engineering, production operations, program management and business development. Her career in the defense, aerospace and security industries

spanned 42 years until she started the Cardea Group in Charlotte, NC in 2014. Cardea Group is a consultancy that specializes in C-suite transitions, strategic business transformations, and critical organizational changes. She retired from the business in January 2020.

In 2014, Hudson retired as president and CEO of BAE Systems, a global, U.S.-based defense, aerospace and security company that she joined in 2006. Prior to becoming BAE Systems CEO, she was president of BAE Systems Land & Armaments operating group, the world's largest military vehicle and equipment business. Before BAE, Hudson held leadership roles with several defense contractors. She served as vice president of the General Dynamics Corporation and was president of General Dynamics Armament and Technical Products and began her career with the Harris Corporation and Ford Aerospace. She and went on to lead organizations at Martin Marietta through the Lockheed Martin merger and a subsequent divestiture to General Dynamics.

Hudson has received numerous accolades and recognitions for her professional accomplishments and philanthropic activities, including her election into the National Academy of Engineering (NAE) in 2019 and the United Service Organization's 2011 Woman of the Year Distinguished Service Award for her commitment to the military and their families.

Hudson serves on the board of Bank of America and previously served as a director of Southern Company and Ingersoll Rand. She has been a member of the International Women's Forum and C200, the premier global organization of women business leaders. In 2011, she received C200's Luminary Award for Corporate Innovation.

Hudson has been generous in her service, leadership, and philanthropic support to UF, where she received her bachelor's degree in systems engineering in 1972. Since her retirement, she moved to Gainesville, FL where she continues to serve on the UF Foundation Executive Board, the Herbert Wertheim College of Engineering (HWCOE) Leadership Institute Advisory Board and the HWCOE Dean's Advisory Board. Hudson created the Linda P. Hudson Scholarship and Fellowship in Industrial and Systems Engineering, the Linda P. Hudson Engineering Leader-in-Residence Program Fund, and the Linda P. Hudson Florida Opportunity Scholarship. UF honors include an Honorary Doctorate in Science, a Distinguished Alumnus Award, 2017 Gator of the Year and inaugural membership in the Industrial and Systems Engineering Hall of Fame.





Nicholas Banks—Gainesville, FL

Avison Young — Principal and Managing Director

Executive Board Ex-Officio Director

Chair, Philanthropy & Donor Relations Advisory Committee

2-year term

Nick Banks has over 25 years of experience in the commercial real estate industry. In 2002, he founded Front Street Commercial Real Estate Group, a full-service commercial real estate brokerage and property management company. Over seventeen years in business, Banks led his firm's growth into six North

Florida markets and fostered relationships with several large clients, including The University of Florida, UF Health, Santa Fe College and the City of Gainesville. Front Street was a Gator100 honoree four times, in 2015 and every year from 2017 to 2019.

In 2019, Banks and Front Street were acquired by Avison Young, one of the world's fastest-growing, full-service commercial real estate services. At Avison Young, Banks specializes in capital markets, landlord representation and retail leasing and is responsible for overseeing the company's strategic growth in Gainesville and across North Florida. Banks is also the global leader of the firm's Retail Affinity Group and a member of their US Executive Committee.

Banks is actively involved in several community and professional organizations. He is a member of the International Council of Shopping Centers (ICSC), where he has been a frequent panelist, and was also the founding co-chair of the Gainesville committee for the North Florida chapter of Urban Land Institute (ULI). He recently served as the board chair for the United Way of North Central Florida and is a former member of the board of directors of the Gainesville Area Chamber of Commerce, where he served as a member of the executive board and as a member of the Business Development Committee. He is a graduate of Leadership Gainesville, which is a year-long leadership program hosted by the Chamber.

Banks earned a bachelor's degree in business administration with a major in finance and a concentration in real estate from the UF Warrington College of Business in 1990. He is a generous supporter of the UF Bergstrom Center for Real Estate Studies, where he is also an advisory board and executive board member. In 2018, he became a member of the UF Foundation National Board where he serves on several committees. In March of 2020, Banks was honored with a Bergstrom Real Estate Center Alumnus of the Year award.



Chris Cowen—Gainesville, FL
University of Florida – Senior Vice President and Chief Financial Officer
Executive Board Ex-Officio Director
Presidential Appointee

Chris Cowen joined UF in August of 2020, bringing over 30 years of experience in finance and investment banking. In his new role, Cowen provides financial oversight and planning for the entirety of the institution's portfolio of operations, which includes the university's 16 direct support organizations. He serves on the boards of UF Health Shands, the UF Athletic Association, the UF Foundation, and the UF Research Foundation.

Previously, Cowen served as managing director for three major financial institutions where he managed the firms' respective higher education finance practices. Most recently, he worked at Bank of America from 2014 to 2020, where he also served as an LGBTQ Executive Council member. Prior to that, he spent four years at Goldman, Sachs & Co. and eighteen years at Prager, Sealy & Co. He started his career in 1990 as a financial analyst for Merrill Lynch & Co.

Cowen is passionate about supporting organizations that serve the LGBTQ community and that strengthen access to education for marginalized populations. He is on the board of the San Francisco AIDS Foundation, an advisor for Studentmentor.org, and chair of the University of Pennsylvania San Francisco Alumni Interview Committee. He established the Christopher J. Cowen Endowed Scholarship for any student with a demonstrated financial need who attends undergraduate school at the University of Pennsylvania, with preference given to students who self-identify as LGBTQ.

Cowen earned two bachelor's degrees at the University of Pennsylvania in 1990, one in economics from the Wharton School and one in history from the School of Arts and Sciences. In 1999, he received his MBA from the University of California, Berkeley, Haas School of Business.





Dr. Christina Gardner-McCune—Gainesville, FL

UF Herbert Wertheim College of Engineering — Associate Professor, Computer & Information Science & Engineering; Director, Engaging Learning Lab

Executive Board Ex-Officio Director

Faculty Representative

2-year term

As part of UF's Artificial Intelligence (AI) Initiative, Dr. Christina Gardner-McCune engages stakeholders in the State of Florida to bring AI Education to Florida K-12 students and teachers. In the Engaging Learning Lab, Gardner-McCune and her students research and develop hands-on learning experiences in the areas of AI, cybersecurity, robotics, mobile app development, game design, and Introductory programming. Through her work, Gardner-McCune aims to spark interest in computing, equip students with skills to develop technologies and inspire them to envision their future as computational thinkers and professionals.

Gardner-McCune is also the co-chair of the AI for K-12 Initiative (AI4K12.org). The AI for K-12 Initiative is developing national guidelines that articulate what students should know and be able to do with AI: how AI works, the power of AI to solve problems, and how to use and evaluate AI responsibly.

As a 2019 Google Faculty in Residence Fellow, Gardner-McCune designed and offered research-based workshops that help to better prepare UF Computer Science students for careers in industry. She has recently been appointed to the IEEE STC on Broadening Participation and to the ACM Educational Advisory Committee Ethics sub-committee to continue her work on broadening participation in computing, promoting equity and inclusion, and creating resources for faculty and student to promote ethics in computing disciplines. She also served on the inaugural College Board's Advance Placement Computer Science Principles Exam Development Committee from 2013 to 2015, which has since been designed to make computer science concepts accessible to more students. This exam continues to break records for diversity and inclusion for women and students of color since 2018. She was awarded the Inaugural Faculty Career Influencer Award by UF's Career Connection Center and the 2019 UF Graduate Student Champion Award.

Gardner-McCune has a bachelor of science degree in Computer Engineering from Syracuse University, a masters and a doctorate in Computer Science from Georgia Tech with specializations in Software Engineering and Learning Sciences and Technology. She also completed a postdoctoral research position in Computer Science Education at Georgia Tech.



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS ACTION ITEM GGRIA2 December 4, 2020

SUBJECT: University of Florida Regulations

BACKGROUND INFORMATION

Regulation 2.004: The proposed regulation amendment re-writes Regulation 2.004 in its entirety and provides the process for using University space, identifies to whom this Regulation applies, and identifies the University business unit responsible for implementing this Regulation and the affiliated policies.

Regulation 2.016: The proposed regulation amendment renames Regulation 2.016 to "Campus, Fishing and Hunting on Campus Prohibited" and prohibits certain activities on campus lands. Prohibition of hunting and fishing is being added to accurately reflect current safety practices.

Regulation 4.006: This proposed regulation amendment clarifies that it applies to all persons, regardless of affiliation to the University, and that the Vice President for Business Affairs or designee is the authorized University official responsible for approving commercial activity in accordance with this regulation and applicable University policy.

Regulation 4.040: This proposed regulation amendment further aligns UF's student conduct code with the top 5 public institutions in the country as well as ensures compliance with new federal and state legal requirements, including the Florida Board of Governors' regulations.

Current regulations 2.005, 2.008, 2.012, 6C1-2.0161, and 6C1-2.0163 will be repealed and relevant content is being subsumed in the proposed regulation amendment 2.004 and in the University's use of space policies

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations and Internal Affairs is asked to approve regulation amendments and repeals to University of Florida Regulations 2.004, 2.016, 4.006, 4.040, 2.005, 2.008, 2.012, 6C1-2.0161, 6C1-2.0163 as contained in the attached for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

None

Supporting Documentation Included: See attached UF Regulations: <u>2.004</u>, <u>2.016</u>, <u>4.006</u>, <u>4.040</u>, <u>2.005</u>, <u>2.008</u>, <u>2.012</u>, <u>6C1-2.0161</u>, <u>6C1-2.0163</u>

Submitted by: Amy Hass, Vice President and General Counsel

Approved by the University of Florida Board of Trustees, December 4, 2020

670/8667 Fuchs, President and Corporate Secretary

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

2.004 Use of University Space

- (1) The University of Florida is committed to promoting the free exchange of ideas on its campus while ensuring the safety of its students, faculty, staff and guests. The University's buildings, grounds and facilities (its "Space) are valuable resources and should be used to promote the University's mission of excellence in education, research, and service, the University's administrative functions and the students' campus-life activities. Accordingly, the University may limit access to or use of its Space to ensure the safe and effective operation of the University.
- (2) Faculty, staff, students, and parties not affiliated with the University shall follow the University of Florida policies concerning access to and use of University Space.
- (3) The Vice President of Business Affairs shall be responsible for implementing this Regulation and affiliated policies.

Authority: BOG Regulation 2.004.

History: New 9-29-75, Amended 9-15-83, Formerly 6C1-2.04, Amended 7-27-98, 6-24-99, Formerly 6C1-2.004, Amended 4-1-16, 3-17-17, _______.

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

- 2.004 Use of University Facilities; Definitions; Priorities in Use; General Restrictions on Use.
- (1) For the purposes of University of Florida Regulations 2.004 through 2.020, the following definitions shall apply:
- (a) "University campus" or "campus" shall include those lands located in the City of Gainesville, Florida, occupied or controlled by the University of Florida, and bounded generally by 13th Street on the east, University Avenue on the north, 34th Street on the west and Archer Road on the south, along with any other educational or residential facilities occupied or controlled by the University within Alachua County, Florida.
- (b) "University facilities" shall include all buildings and other facilities, including all athletic facilities and recreational fields, on the University campus.
- (c) "Instructional space" shall include all University facilities used primarily for the conduct of scheduled classes, laboratories, seminars and other uses related to the academic process.
- (d) A "public function" is an event that is held in University facilities and is open to attendance by all members of the University community and/or to the general public either with or without charge for admission.
- (e) A "private function" is defined as one held in University facilities and is open to attendance only by members and invited guests of the sponsoring group, organization or person.

 A private function must be held in a defined and/or controlled access space, one able to confine and control entry and exit of guests, whether indoors or outdoors, to be considered a private

function.

- (f) "University groups and organizations" are defined as officially constituted colleges, schools, divisions, departments, agencies and other corporate organizational units which are a part of or operate on behalf of the University, including but not limited to, direct support organizations, foundations and alumni organizations officially recognized by the University, and student organizations, honor societies, fraternities and sororities officially registered or recognized by the University.
- (g) "University persons" are defined as students and all employees of the University, including Academic Personnel (AP): Technical, Executive, Administrative and Managerial Support (TEAMS); University Support Personnel System (USPS), Law Enforcement Officer (LEO) and Other Personnel Services (OPS) personnel, including graduate assistants.
- (h) "University related groups and organizations" are defined as those that although not officially recognized or registered by or affiliated with the University or otherwise failing to meet the definition in paragraph (f) immediately above, are related to the University because of the promotion of the interests of the University community, the academic professions and other related interests of the faculty, staff or students, or which perform other service to the University and its community, such as credit unions, academic professional associations, professional fraternities/sororities, employee organizations, charitable community organizations, other public educational institutions, and the like.
- (i) "Non-university persons, groups and organizations" are defined as persons, groups or organizations which do not meet the definitions of persons, groups or organizations as defined in paragraphs (f), (g) and (h) immediately above, including candidates for election to public office and organizations supporting such candidates, and those groups and organizations which exist primarily for the purpose of carrying on commercial activity for profit, or which

otherwise exist primarily for private individual gain or benefit.

- (2) The following priorities will be observed by authorities responsible for scheduling University facilities:
 - (a) University groups and organizations;
 - (b) University persons;
 - (c) University related groups and organizations; and
 - (d) Non-university groups, organizations and persons.
- (3) Scheduling of University facilities shall give priority to University programs and functions. No person, group, or organization shall be excluded from this policy because they have collective bargaining as one of their objectives.
- (4) Requests for scheduling events in University facilities, except for instructional space, should be directed to the authority controlling the facility. Scheduling of instructional space is governed under the provisions of University of Florida Regulation 2.008.
- (5) A condition for the use of University facilities may be that the sponsoring person, organization, or group obtain adequate insurance coverage and/or that adequate security can be provided by the University Police Department. The costs of such insurance or security shall be borne by the sponsoring person, organization, or group.
- (6) Persons, groups, or organizations utilizing University facilities are responsible for providing programmatic access to individuals with disabilities, i.e. deaf, deaf-blind, hard of hearing, and visually impaired. All costs associated with providing programmatic access are the responsibility of the sponsoring person, group, or organization.
- (7) University facilities that are otherwise available for such use under University regulations will not be made available for commercial purposes unless approved in advance by the Vice President for Business Affairs who shall review the request in light of the University's

contractual and other legal requirements, the relationship of the activity to the University's mission, and the benefit of the activity to the University and the State of Florida.

(8) A University employee may use his or her office or other University facilities or services in conducting outside activities, such as private practice or consulting, only if approved pursuant to subsection (7) above.

Authority: BOG Regulation 1.001.

History: New 9-29-75, Amended 9-15-83, Formerly 6C1-2.04, Amended 7-27-98, 6-24-99, Formerly 6C1-2.004, Amended 4-1-16, 3-17-17.

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

- 2.016 <u>Public Functions Policy; Use of Campus Lands; Camping, Fishing and Hunting on Campus Prohibited.</u>
- (1) Tents and other temporary structures, regardless of size, are prohibited on lands of the University of Florida campus except when utilized in connection with activities of academic or administrative units or agencies of the University.
- (2) Tents and other temporary structures may be erected on the lands of University of Florida campus by academic or administrative units or agencies only for activities directly related to the mission of the unit and only after first obtaining written approval of the Office of Vice President for Business Affairs, which shall consider space, traffic, and other safety and aesthetic factors.
- (3) Student Government and registered student groups and organizations may secure approval for use of tents and temporary structures for activities described above by request to the Office of Student Activities and Involvement.
- (4) Certain approved temporary structures, including tents, greater thank 120 square feet must comply with this regulation and also must comply with the policies established by Environmental Health and Safety that pertain to the erection of temporary structures on campus-as described on the Environmental Health and Safety website found at http://www.ehs.ufl.edu/programs/buildcode/temporary_structures/.
- (5) —Camping, fishing and hunting are is prohibited on lands of the University of Florida campus except when such camping, fishing or hunting is in connection with an official activity of the University, such as an activity of an academic or administrative unit, Prior written approval for such camping must be granted and approved in writing by the

Office of the Vice President for Business Affairs, or designee. taking into consideration the health, safety and welfare of the participants, the University community, and guests of the University.

Authority: BOG Regulation 1.001.

History--New 9-29-75; Amended, 11-11-85, Formerly 6C1-2.16, Amended 9-16-99,

Formerly 6C1-2.016, 4-1-16 (technical changes only).

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

- 4.006 Commercial Activity; Selling of Merchandise, Activities Involving Off-Campus Vendors.
- (1) The regulation of commercial activity on the campus is necessary in order to preserve the educational mission of the University, to prevent unnecessary distraction during classes and study periods, to provide for the safety of University students, and faculty and staff members, and to protect the property of students, faculty, staff, and the University.
- University personnel, are prohibited from entering the grounds or buildings for the purpose of conducting commercial activity without express written permission from the Vice President for Business Affairs or designee, in accordance with University policy with students, faculty, other personnel or visitors. This regulation will not be deemed to prohibit the sale of merchandise by University budgetary units or commercial activity pursuant to a contract between the University and a vendor which provides goods or services to the University community.
- (3) The term "commercial activity" shall mean any act or event which results in financial gain to the salesperson, individual(s) or organization(s).
 - (4) The term "commercial activity" shall not include:
- (a) Solicitation and collection of funds or the sale of new merchandise or printed material by registered student organizations for the benefit of any charitable institution or organization as defined in § 501(c)(3) of the Internal Revenue Code of the United States or for the

benefit of programs and/or projects of an educational nature sponsored by the registered student organization, in accordance with subsection (5) below.

- (b) The sale of new merchandise, solicitation and collection of funds by registered student organizations for the benefit of any student organization related project and approved by the Director of Student Activities and Involvement or the director's designee at the J. Wayne Reitz Union, in accordance with subsection (5) below.
- (c) The solicitation of membership or the collection of dues from members of a registered student organization which inure to the benefit of that organization.
- (d) Contact between a salesperson and a student or student organization which was invited by the individual student or organization involved for his or her or its own benefit and not to involve persons not associated with the student or organization.
- (e) The distribution or sale of printed material pursuant to the requirements of University of Florida Regulation 2.003.
- (5) Registered student organizations wishing to sell or distribute new merchandise excluding food products, such as t-shirts, hats, bumper stickers, buttons or the like, or_printed material or to solicit or collect funds pursuant to paragraphs (4)(a) or (4)(b) above may be allowed under the following conditions:
- (a) Registered student organizations must first seek an Event Permit from the Director of Student Activities and Involvement or designee at the J. Wayne Reitz Union. Event Permits will not be issued if the manner of solicitation or collection will disrupt the educational function of the University or if the activities do not meet the requirements of paragraphs (4)(a) or (4)(b) above. Instructions on how to submit an Event Permit Request can be found at https://www.studentinvolvement.ufl.edu/Event-Planning/Submit-an-Event-Permit-Request. Event

Permits are valid for the date of the specific event. Any groups failing to show a valid Event Permit may be removed from campus at the request of the University Police Department.

- (b) A statement must be provided with the request indicating how the funds raised will be used.
- (c) The following areas are approved for such fundraising activities: the Plaza of the Americas, the area in front of Turlington Hall, and reservable outdoor space at the J. Wayne Reitz Union (colonnade, North Lawn, and South Terrace). Other areas will be approved by the Director of Student Activities and Involvement or designee and the administrator responsible for the area only in unusual circumstances and only when the group is programmatically associated with that area.
- (d) The Director of Student Activities and Involvement may limit the number of permits issued for a particular area in order to maintain the educational function of the University. In such case the permits will be issued in the order that requests from those student organizations or groups meeting the requirements of this regulation are received in the Director's office.
 - (e) Registered student organizations are not permitted to sell food products.Distribution of food products is allowed only under the provisions of subsection (6) below.
- (6) Registered student organizations may sponsor on-campus activities involving a commercial off-campus vendor including food vendors only under the following conditions:
- (a) Registered student organizations must first seek an Event Permit from the Director of Student Activities and Involvement or designee at the J. Wayne Reitz Union. Event Permits will not be issued if the manner of solicitation or collection will disrupt the educational function of the University or if the activities do not meet the requirements of paragraphs (4)(a) or (4)(b) above.
- (b) Instructions on how to submit an Event Permit Request can be found at https://www.studentinvolvement.ufl.edu/Event-Planning/Submit-an-Event-Permit-Request. Event

Permits are valid for the date of the specific event. Any groups failing to show a valid Event Permit may be removed from the campus at the request of the University Police Department.

- (c) The registered student organization sponsoring the activity is totally responsible for all aspects of the activity, including the production and/or approval of all publicity and advertising, staffing and distribution of product and all clean up.
- (d) Any food product must be donated by the vendor, except as referenced in this paragraph. The registered student organization and vendor or agency representing the vendor may not have any payment or exchange of funds, as that constitutes a sale and not a donation by the vendor, unless the requirements of University Regulation 2.020 are satisfied.
- (e) The following areas are approved for food distribution activities: Plaza of America, Norman Field, Hume Field, Maguire Field, the North Lawn of the Reitz Union after 6 pm and Turlington Plaza. Other areas will be approved by the Director of Student Activities and Involvement or designee and the administrator responsible for the area only in unusual circumstances, taking into consideration any potential conflict with University contracts and when the group is programmatically associated with that area.
- The Director of Student Activities and Involvement may limit the number of permits issued for a particular area in order to maintain the educational function of the University.

 Distribution_of food products will be limited to one time/event per day per vendor. In such case the permits will be issued in the order that requests from those student organizations or groups meeting the requirements of this regulation are received in the Director's office.
- (f)(g) Advertising and publicity must reflect sole sponsorship of the activity as being that of the registered student organization.
- (g)(h) Any advertising concerning the activity, including but not limited to, poster(s), flyer(s), radio and newspaper advertisement(s), tee-shirt(s), banner(s), may reflect a commercial off-

campus vendor's support, but must not indicate or convey sponsorship by the vendor, such as using the vendor's name in the program title, or display prominent advertising with only the off- campus vendors name and/or logo. All publicity must follow University of Florida Regulation 2.003 Distribution of Printed Material.

- (h)(i) No cooking facilities (mobile or otherwise) will be permitted unless approved by the Office of the Vice President for Business Affairs.
- (7) Except as provided above or in University Regulation 2.020 sale items in direct competition with contract vendors or University budgetary units shall not be sold on campus without special approval by the Office of the Vice President for Business Affairs and would be made only in unusual cases in which it is determined that the overall benefit to University programs justifies the exception.

Authority: BOG Regulation 1.001

History--New 9-29-75, Amended 1-28-80, 8-26-81, 5-14-85, Formerly 6C1-4.06,

Amended 4-17-90, 5-19-93, 7-11-94, 10-31-99, 7-8-01, 2-5-03, Formerly 6C1-4.006,

Amended 3-17-17,______.

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

4.040 Student Honor Code and Student Conduct Code. 4

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⁴ As University regulations and their implementation are subject to applicable law, the University will comply with the Department of Education Regulation 34 C.F.R. § 106, Nondiscrimination on the Basis of Sex In Education Programs or Activities Receiving Federal Financial Assistance, as amended and effective August 14, 2020, also known as Title IX, 20 U.S.C. §§1681–1688 (2020). The University will respond to allegations of sexual harassment consistent with Title IX's prohibition against sex discrimination in education programs and activities. Any provision in this University of Florida Regulation 4.040 "Student Honor Code and Student Conduct Code" that conflicts or is not compliant with Title IX will not apply to sexual harassment cases governed by Title IX; instead, the University incorporates by reference all Title IX regulations and requirements of the Office for Civil Rights, Department of Education's Final Rule.

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- and to influence the next generation and beyond for economic, cultural, and societal benefit. The University strives to protect and to guide the educational community by establishing a Student Honor Code, a Student Conduct Code, and a Student conduct system. These codes and systems promote individual and social responsibility and are enforced through University Regulations. By becoming a member of the University of Florida community, a Student agrees to adhere to its Student Honor Code and its Student Conduct Code. Students acting as individuals or as members of Student Organizations are expected to follow all applicable Laws and Regulations. University Regulations have been designed to promote the safety of people and the campus community, to create an environment conducive to learning, and to achieve the mission of the Institution.
- (a) Principles. The University principles address our respect for people and property, for fairness, for Laws and Regulations, and for academic integrity. Nothing in this Regulation shall be interpreted to limit the constitutional or statutory rights of any Student, including but not limited to expressive rights protected by the First Amendment.
- 1. Respect for people and property. Students are encouraged both to conduct themselves in a manner that exemplifies respect for all people and property and to adhere to their personal values without imposing those on others.
- 2. Respect for fairness. Rules and established procedures are intended to ensure both fundamental fairness and an educational experience for Students and Student Organizations.
- 3. Respect for Laws and Regulations. Students and Student Organizations are expected to follow all applicable Laws and Regulations.
- 4. Respect for academic integrity. Academic honesty and integrity are fundamental values of the University. Students commit to holding themselves and their peers to the high

standard of honor required by the Student Honor Code. Any Student who becomes aware of a violation of the Student Honor Code is encouraged to report the violation to the appropriate University Official.

(b) Scope. Each Student and every Student Organization is required to abide by the Student Honor Code and the Student Conduct Code when on University-controlled property, at University sponsored events, or off campus in accordance with sections 3 and 4 of this Regulation.

The University <u>conductdisciplinary</u> process is educational and designed to address

Student behavior; therefore, the University will address any alleged violations of its Student

Honor Code or its Student Conduct Code independently of any criminal or civil court process.

Unless otherwise noted, use of the term "Student" in this document applies both to the Student as an individual and to a Student Organization as a single entity, as applicable. The officers or the leaders of a particular Student Organization usually will be expected to represent the organization during the Student Conduct Process. A Student may be held responsible for their actions as an individual and as a member of a Student Organization.

Any question about how to interpret or apply the Student Conduct Code or Student Honor Code should be directed to the Dean of Students or designee.

- (c) Off-Campus Conduct. The University may apply the Student Conduct Code and Student Honor Code to Students whose conduct may have an adverse impact on the health, safety, or welfare of people, property, the University Community, or the pursuit of its objectives, regardless of where such conduct occurs, even if off campus.
- (2) Definitions. The following definitions are used solely for the purpose of this Regulation.

| Accused Student | A Student who has been accused of a violation of the Student Conduct Code or the Student Honor Code. |
|-------------------|--|
| Advisor | Any one person chosen by an Accused Student or a Reporting Person to assist them throughout the Student Conduct Process. Any Advisor serves at the Student's own expense and initiative. A person may not serve in this capacity if their service would unreasonably conflict with the fair administration of the Student Conduct Process, as determined by the Director of Student Conduct and Conflict Resolution or designee. The University is not responsible for selecting an Advisor for any Student navigating the Student Conduct Process. It is the Student's responsibility to make appropriate arrangements for their Advisor to attend meetings, which will not be delayed due to scheduling conflicts of the chosen Advisor. The Advisor may be present to advise the Accused Student or the Reporting Person but cannot speak for the Student, present the Student's case, serve as a Witness, or otherwise participate directly in any meeting or Hearing. |
| Appeal Authority | Any person or people authorized by the Student Conduct Code or Student Honor Code to determine the outcome of an appeal. No person may hear or decide an appeal if they conducted or participated in the disciplinary proceeding being reviewed on appeal. |
| Business Days | Any weekday Monday through Friday during which University of Florida is in operation. Business Days do not include University holidays and closures. |
| Chair | The member of the Conduct Committee who acts as the chairperson of the Hearing and leads Hearing deliberations. The Conduct Committee Advisor selects the Chair from the Hearing Body. |
| Charge(s) | A potential violation of the Student Conduct Code or the Student Honor Code. |
| <u>Class Days</u> | Any weekday the University of Florida is in operation and holding classes. Class Days do not include University holidays, closures, or breaks when classes are not in session |
| Coercion | Measured by a reasonable person standard, an attempt to cause another person to act or to think in a certain way by use of force, threats, or intimidation. Examples of Coercion include but are not limited to: • Causing the deliberate Incapacitation of another person; • Requiring a person to submit to sexual acts to receive an academic benefit or an employment advantage; |

| | • Threatening to harm oneself if the other person does |
|---------------------|---|
| | - |
| | not performengage in a specific sexual act; and |
| | • Threatening to disclose a person's sexual orientation, |
| | gender identity, or other sensitive, personal information if |
| | the person does not <u>submit to the requestor's will.engage in a</u> |
| | sexual act. |
| Conduct Committee | The Director of Student Conduct and Conflict Resolution or |
| Advisor | designee may convene a Conduct Committee and advise the |
| | Conduct Committee throughout the Hearing process on |
| | procedure, questioning, relevant information, policy, and |
| | Regulation. The Conduct Committee Advisor will review all |
| | information, Witnesses, and questions to advise the Conduct |
| | Committee on relevancy determinations. The Conduct |
| | <u>*</u> |
| | Committee Advisor will make relevancy determinations, |
| | prior to the Hearing, on documents, exhibits, and Witnesses |
| | allowable in a Hearing. A Student The Conduct |
| | Administrator may make Committee Advisor is not a |
| | charging decision and serve asmember of the Conduct |
| | Committee Advisor for the same case. The Conduct |
| | Committee Advisor is present during committee |
| | deliberations to advise the committee on Regulations, policy |
| | and procedure but is not a member of the Conduct |
| | Committee and but does not vote. |
| Conflict Resolution | Conflict Resolution services and education are available to |
| | Students both to aid them in resolving conflict productively |
| | and to develop their abilities to handle conflict effectively. |
| Consent | Consent is an act or statement that is knowing, freely given, |
| | and mutually understood to communicate a willingness to |
| | engage in the activity. It is the responsibility of each person |
| | involved in any sexual act to ensure that they have the |
| | Consent of the other(s). |
| | The existence of a dating or sexual relationship |
| | |
| | between the people involved, or the existence of a past |
| | sexual encounter, is not by itself an indication of Consent for |
| | any current or future sexual encounter. |
| | • Consent cannot be obtained by force, threat, |
| | Coercion, or by causing a reasonable fear of imminent |
| | injury. |
| | • For sexual activity to be consensual, Consent must be |
| | ongoing throughout the sexual encounter. A person mayean |
| | withdraw Consent at any time. Consent to one sexual act |
| | does not automatically constitute Consent to another sexual |
| | act. |
| | A person withdraws Consent by clearly |
| | communicating withdrawal through words or actions. |
| | communicating withdrawar unough words or actions. |

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| | Consent to engage in sexual activity with one person does not automatically constitute Consent to engage in sexual activity with another person. Lack of protest or resistance, alone, is not Consent. A person who is Incapacitated cannot give Consent. |
| Correspondence | Written or electronic communication from the University sent to a Student. The University may use either the Student's UFL email address, if the Student is a current Student, or the physical address on file with the Registrar. Correspondence includes but is not limited to written or electronic communication from the Student through the Student's UFL email address. |
| Educational Conversation About Behavior ("ECaB") | A required meeting related to reported information, which is not investigatory in nature and does not result in Charges. This meeting is intended to address reported information that does not support initiating a formal Student Conduct Processeonduct process but does require an educational discussion about the content of the Student Conduct Code and the expectations of the University community. |
| Faculty | Any person hired or appointed by the University to conduct classroom, teaching, or research activities; the individual with grading responsibility for a course. For the purpose of this Regulation, Faculty are responsible for submission of reports and supporting information for alleged Student Honor and Conduct Code violations, and participation in Hearings to provide direct knowledge about any alleged Student Honor and Conduct Code violation. |
| Hearing | A proceeding through which a Hearing Body determines whether a Student is responsible or not responsible for Charges and imposes Sanctions if appropriate. A Hearing Body conducts Hearings in accordance with the Student Conduct Code or the Student Honor Code. |
| Hearing Body | Any person or people authorized in the Student Conduct Code or the Student Honor Code to conduct Hearings, to make relevancy determinations during Hearings, to make findings after Hearings about whether a Student has violated the Student Conduct Code or the Student Honor Code, and to recommend or to issue Sanctions if appropriate. |
| Impaired | Impaired means a person's normal faculties are diminished in some material respect. Normal faculties include but are not limited to the ability to see, hear, walk, talk, judge distances, drive an automobile, make judgments, act in emergencies and, in general, to normally perform the many mental and physical acts of daily life. |
| Incapacitation/ Incapacitated | Incapacitation is a temporary or permanent state in which a person is physically or mentally unable to communicate a |

| | willful, voluntary, and knowing decision. A person can be incapacitated because of age, alcohol or drug consumption, being unconscious or asleep, a disability, or any other circumstance that prevents a Student from having the capacity to give Consent. For a person to be rendered Incapacitated by alcohol or drugs, the person must be so Impaired that they are unable to give Consent. This level of impairment must be obvious to a Reasonable person; it is not enough for a person to be merely under the influence of, or to have impaired judgment because of, alcohol or drugs. |
|-----------------------------------|---|
| Incident Review Committee ("IRC") | The Director of Student Conduct and Conflict Resolution or designee may convene a committee to review a reported organizational incident or an allegation originating from one of the four Greek councils: the Interfraternity Council (IFC), the Multicultural Greek Council (MGC), the National Pan-Hellenic Council (NPHC), or the Panhellenic Council (PC). This committee gives perspective on whether sufficient information exists for a Reasonable Hearing Body to determine if an accused Student Organization violated the Student Conduct Code. If such information exists, the Director of Student Conduct and Conflict Resolution or designee may issue Charges. Informed by the perspective of the IRC, the Director of Student Conduct and Conflict Resolution or designee will |
| | decide if an organizational Charge is appropriate. |
| Information Meeting | A meeting between an Accused Student and a Student Conduct Administrator after a Notice of Charges has been sent. The meeting includes reviewing a Student's rights in the Student Conduct Process, reviewing the Charges, and reviewing potential outcomes. The Information Meeting determines the next course of action in the Student Conduct Process. |
| Intake Meeting | A meeting between An individual meeting between (1) the Director of Student Conduct and Conflict Resolution or designee and any person or people participating in the Student Conduct Process or (2) a Student Conduct Administrator and any person with whom the Student Conduct Administrator needs to discuss the details of a received report to decide which resolution options are appropriate. An Intake Meeting may occur at any point before or during the Student Conduct Process at the discretion of the Director of Student Conduct Administrator and Conflict Resolution or designee. |
| Investigation | The gathering of information related to a reported incident or allegation. Investigations may by conducted by Student |

| | Conduct and Conflict Resolution or by other investigatory units. |
|----------------------------------|---|
| Investigation Meeting | A meeting that includes the opportunity for the Director of Student Conduct and Conflict Resolution or designee to interview people who may have information relevant to a potential Charge, to explain the Student Conduct Process, to explain the rights of Students, and to review of the nature of the allegation. |
| Laws | All applicable Any Laws, Regulations, codes, and ordinances, including whether they originate from a Florida municipality or county, the State of Florida, the United States, or when in another state or country, the applicable Laws of the that state or country where the alleged violation occurred. |
| Mutual Agreement | An informal resolution whereby the Reporting Person (or designee if reporting as a University Official), Accused Student and University all agree to resolve the allegations through a written contract. Allegations may be resolved through Mutual Agreement at any time before or during a Student Conduct Process. |
| Notices of Charges | Written notice sent in Correspondence to a Student that includes specific Student Conduct Code or Student Honor Code Charges, brief description of the allegation, where to review the Student Rights and an invitation to attend an Information Meeting. |
| Preponderance of the Information | The University's burden of proof for any disciplinary proceeding is preponderance of the evidence, but for the purpose of this Regulation it will be referred to as "Preponderance of the Information". "Preponderance of the Information" means that the information presented by the University, as a whole, supports the finding that it is more likely than not that the charged violation occurred. Tolm order to satisfy this burden, the University must present some information that would not be deemed inadmissible hearsay in a court of Law. This standard shall be used in resolving all Student Conduct or Student Honor Code cases under this Regulation. |
| Reasonable | A term used as an objective standard for evaluating appropriateness. Having sound judgment; rational and sensible; not extreme or excessive. Referenced throughout section 4. Violations of the Student Conduct Code as "Reasonable person", "Reasonable fear" and "Reasonable expectation of privacy". This definition does not apply to reasonable accommodations. |

| Recording | Any recording in any medium using any technology. This includes but is not limited to visual recordings, such as photographs and videos, and audio recordings. |
|---------------------------|---|
| Regulations—— | University of Florida Regulations, policies, or rules. |
| Relationship Violence | Relationship Violence encompasses both dating and |
| reducionship violence | domestic violence. Dating violence is violence or a threat of harm between people who have or have had a relationship of a romantic or intimate nature, not living together in the same household. Domestic violence is violence or a threat of harm between family members or individuals living in the same |
| D t' D | household. |
| Reporting Person | The Any person who has reported another person's alleged victim of or person harmed by another's violation of the Student Code of Conduct. Code. The Reporting Person is the person who files a report or on whose behalf a report is filed. |
| Sanction | A mandatory requirement established by the University, |
| | given to a Student who has accepted responsibility for, or |
| | whom a Hearing Body has found responsible for, a violation |
| | of the Student Conduct Code or the Student Honor Code. |
| Semester | A period of instruction. The University has three Semesters: |
| | Fall, Spring, and Summer. |
| Separation/Disaffiliation | A type of Sanction for a Student or a Student Organization that includes suspension, expulsion, or disaffiliation. |
| Service Indicator | Formerly known as a "hold". A Service Indicator prevents |
| | access to some University processes, such as class |
| | registration and graduation, until it is removed by the |
| Collaborative Resolution | originating office. |
| Collaborative Resolution | A Student Conduct Process that may be offered to registered Student Organizations to resolve alleged violations of the |
| | Student Organizations to resolve an eged violations of the Student Honor Code and Student Conduct Code by |
| | partnering with a Student Conduct Administrator in the |
| | investigation and sanction determination. The Student |
| | Conduct Administrator will determine, at their discretion, if |
| | a Student Organization may be offered participation in |
| | Collaborative Resolution, as outlined in section 6 of this |
| | Regulation. At any point during the Collaborative Resolution |
| | process, the Student Conduct Administrator may cease |
| | Collaborative Resolution and refer the case to a Greek |
| | Conduct Committee for resolution. |
| Student | Any person <u>currently</u> admitted, enrolled, or registered for |
| | any University Program, regardless of the medium of the |
| | program, -or degree-seeking status, or when not enrolled or |
| | registered for a particular Semesterterm, who is eligible to |
| | enroll in future terms without seeking readmission. For the |
| | purpose of this Regulation, the term "Student" may also refer |
| | to a person previously admitted, enrolled, or registered for |

| Student Conduct Administrator | any University Program where the University receives an allegation that the Student violated the Student Honor Code or Student Conduct Code while they were admitted, enrolled, or registered for any University Program, and the term "Student" is interchangeable with "Student Organization" when the term "Student Organization" is not directly specified. A person or administrative unit whose duties include the administration of the Student Conduct Code or the Student Honor Code process. Student Conduct Administrators are designated by the Dean of Students and may include, but are not limited to, the Director of Student Conduct and Conflict Resolution, staff members in Student Conduct and Conflict |
|----------------------------------|---|
| | Resolution, and <u>staff members</u> in Housing and Residence Life Education. |
| Student Conduct Process | The processes outlined in this Regulation to resolve alleged violations of the Student Conduct Code and the Student Honor Code. |
| Student Organization | An association or group of persons that has complied with the formal requirements for University recognition or is in the formal process of obtaining recognition. For the purpose of this Regulation, the term "Student" is interchangeable with "Student Organization" when the term "Student Organization" is not directly specified. |
| Support Person | Any one person chosen to provide comfort and emotional support to an Accused Student or a Reporting Person throughout the Student Conduct Process. Any Support Person serves at the Student's own expense and initiative. A person may not serve in this capacity if the Director of Student Conduct and Conflict Resolution or designee determines that their service would unreasonably conflict with the fair administration of the Student Conduct Process. The University is not responsible for providing a Support Process of the Student Conduct Process. |
| University/Institution | Person for anyone navigating the Student Conduct Process. It is the Student's responsibility to make appropriate arrangements for their Support Person to attend meetings, which will not be delayed due to scheduling conflicts of the chosen Support Person. The Support Person may not serve as a secondary Advisor or a Witness, nor can the Support Person perform any other function except for providing comfort and emotional support to the Accused Student or the Reporting Person. The Support Person cannot speak for a Student, present the Student's case, or otherwise participate directly in any meeting or Hearing. The University of Florida. |

| University Activity or | Any event, program, or activity that is hosted, sponsored, or |
|------------------------|---|
| University Program | organized by any University group, office, or organization. |
| | This definition applies only to this Regulation and not in any |
| | other context. |
| University | All land, buildings, facilities, and other property the |
| Campus/Premises | University possesses, owns, leases, operates, supervises, or |
| | controls, including adjacent streets and sidewalks. |
| University Community | University Officials, Faculty, other employees, Students, and |
| | other people who or entities that participate in any University |
| | Activity or University Program. |
| University Official | Any person the University employs, contracts, or appoints to |
| _ | perform assigned teaching, research, administrative, |
| | professional, or other responsibilities. |
| Witness | A Relevant Witness is a person with direct knowledge about |
| | or involvement in a reported incident or allegation. Relevant |
| | Witnesses may participate in person during the Student |
| | Conduct Process. Other Witnesses, including character |
| | Witnesses, may not participate in person during the Student |
| | Conduct Process but may submit statements pursuant to the |
| | submission guidelines outlined in the Student Rights section |
| | of this Regulation. |

(3) Violations of the Student Honor Code. <u>Every University Student is subject to the following Honor Pledge:</u>

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Student Honor Code. On all work submitted for credit by Students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

- (a) Cheating. A Student <u>shall not use or attempt to eannot</u> use unauthorized materials or resources in any academic activity for academic advantage or benefit. Cheating includes but is not limited to:
- Using any materials or resources prepared by another Student without the other
 Student's express Consent or without proper attribution to the other Student.

- 2. Using any materials or resources, through any medium, which the Faculty has not given express permission to use and that may confer an academic benefit to the Student.
- 3. Using additional time, or failing to stop working when instructed, on any timebound academic activity.
- 4. Failing to follow the directions of a proctor of any academic activity, when such conduct could lead to an academic advantage or benefit.
- 5. Collaborating with another person, through any medium, on any academic activity, when Faculty has expressly prohibited collaboration.
- 6. Commissioning or seeking to commission another person, with or without compensation, to produce or complete academic work or to impersonate a student in any academic activity.
- 7. Impersonating another person in any academic activity or providing an unfair academic advantage to another person by producing or completing academic work or activities on behalf of another person, with or without compensation.
- (b) _Complicity in Violating the Student Honor Code. Attempting, aiding, encouraging, facilitating, abetting, conspiring to commit, hiring someone else to commit, giving or receiving bribes to secure, or being a participant (by act or omission) in any act prohibited by this Regulation.the Student Honor Code.
 - (c) False or Misleading Information.
- 1. A Student must not make a false or misleading statement during the Investigation or resolution of an alleged Student Honor Code violation.
- 2. A Student must not make a false or misleading statement for the purpose of procuring an improper academic advantage for any Student.

- 3. A Student must not use or present fabricated information, falsified research, or other findings if the Student knows or reasonably should be aware that the information, research, or other finding is fabricated or falsified.
 - (d) Interference with an Academic Activity.
- 1. ____A Student must not take any action or take any material for the purpose of interfering with an academic activity, through any means over any medium.
- 2.- A Student must not be disruptive to the testing environment or other academic activity.
- (e) Plagiarism. A Student must not represent as the Student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:
 - 1. Stealing, misquoting, insufficiently paraphrasing, or patch-writing.
- 2. Self-plagiarism, which is the reuse of the Student's own submitted work, or the simultaneous submission of the Student's own work, without the full and clear acknowledgment and permission of the Faculty to whom it is submitted.
 - 3. Submitting materials from any source without proper attribution.
- 4. Submitting a document, assignment, or material that, in whole or in part, is identical or substantially identical to a document or assignment the Student did not author.
- (f) Submission of Academic Work Purchased or Obtained from an Outside Source. A Student must not submit as their own work any academic work in any form that the Student purchased or otherwise obtained from an outside source, including but not limited to: academic materials in any form prepared by a commercial or individual vendor of academic materials; a collection of research papers, tests, or academic materials maintained by a Student Organization or other entity or person, or any other sources of academic work.

- (g) Unauthorized Recordings. A Student must not, without express authorization from Faculty, make or receive any Recording, through any means over any medium, of any academic activity, including but not limited to a Recording of any class or of any meeting with Faculty. Students registered with the Disability Resource Center who are provided reasonable accommodations that include allowing such Recordings must inform Faculty before making such Recordings.
- (h) Unauthorized Taking or Receipt of Materials or Resources to Gain <u>or Provide</u> an Improper Academic Advantage. A Student, independently or with another person or other people, must not without express authorization take, give, <u>post or submit</u>, transmit, or receive materials, information, or resources in any manner, through any medium, for the purpose of gaining or providing an improper academic advantage to any Student.
 - (4) Violations of the Student Conduct Code.
 - (a) Alcoholic Beverages Violations.
- 1. Under-age possession or consumption. Possession or consumption of alcoholic beverages by a Student under twenty-one (21) years old.
- 2. Distribution or sale of alcoholic beverages. Distribution or sale of an alcoholic beverage to any person under twenty-one (21) years old.
- 3. Possession of common source containers. Unless explicitly approved in advance in writing by the Division of Student Affairs or Business Affairs for a particular occasion, a Student or Student Organization cannot possess or use of kegs, mini kegs, or other common source containers of alcoholic beverages, such as trash cans, tubs, or similar containers of alcohol, when such possession or use occurs on campus, in the housing of any University of Florida organization or group, or in connection with a University Activity.

- 4. Alcohol abuse. Regardless of the age of those involved, facilitating, arranging, or participating in any extreme alcohol consumption activity that constitutes, facilitates, or encourages competitive, rapid, or excessive consumption of alcohol when such activity occurs on campus, in the housing of any University of Florida organization or group, or in connection with a University Activity.
- Any other violation of the Alcoholic Beverages Regulation, University of Florida
 Regulation 2.019.
- (b) Complicity in Violating the Student Conduct Code. Attempting, aiding, encouraging, facilitating, abetting, conspiring to commit, hiring someone else to commit, giving or receiving bribes to secure, or being an accessory to any act prohibited by this RegulationCode.
- (c) Disruptive Conduct. Conduct that is materially or substantially disruptive to the normal operations of the University, or that incites others to do so, in any of the following activities: teaching, research, administrative functions, disciplinary proceedings, other University Activities whether on or off campus, and other authorized activities that take place on campus. In evaluating whether conduct is materially or substantially disruptive, the University may consider the totality of factors, including but not limited to whether there was an intent to prevent the activity or event from continuing to completion and whether the conduct was a sustained and continuous disruption. Disruptive conduct does not include any conduct protected by the First Amendment. Examples of Disruptive Conduct include but are not limited to:
 - 1. Disruption of University Officials in the performance of their work.
 - 2. Disruption of a University Activity or event.
- 3. Disruption of a class or curricular activity. Classroom or other academic workplace behavior that interferes with either:

- a. The instructor's authority or ability to conduct the class or
- b. Otherother Students' ability to benefit from the instructional program.
- 4. Conduct that is disorderly or a breach of the peace under Law.
- 5. Public intoxication, which is disrupting a University Activity while under the influence of alcohol or another mind-altering substance.
- 6. Interference with the rights of others to carry out their activities or duties at or on behalf of the University.
- 7. Violation of the Disruptive Behavior Regulation, University of Florida Regulation 1.008.
- 8. Violation of the Campus Demonstration Regulation, University of Florida Regulation 2.002.
- (d) <u>Driving under the Influence.</u> Driving under the influence of alcohol, drugs, or other mind-altering substance. Operation of a motor vehicle while Impaired by drugs, alcohol, or other mind-altering substance or while having an unlawful blood or breath alcohol level.
 - (e) Drug Violations.
- 1. Use, possession, manufacturing, distribution, or sale of a controlled substance that is prohibited by Law. Knowingly inhaling or ingesting substances that will alter a Student's mental state. Use of legal medication outside the parameters of the medical authorization.

 Possession or use of prescription medications not prescribed to the user.
 - 2. Possession of drug paraphernalia.
 - (f) Endangering Behavior.

- 1. Unwanted physical contact causing physical injury. Other conduct, including but not limited to Relationship Violence, which does or could endanger the health, safety, or welfare of any person or people, including oneself.
- 2. Interference with the freedom of movement of any member or guest of the University.
- 3. Stalking/cyberstalking, which is a course of conduct committed with the intent to kill, injure, harass or intimidate another person that either places the person in Reasonable fear of the death of, or serious bodily injury to, that person, an immediate family member, a spouse or an intimate partner of that person; or causes, attempts to cause, or would be reasonably expected to cause substantial emotional distress to a person listed above.
- (g) Failure to Comply with Directive. Failure to comply with a lawful directive of law enforcement or a University Official.
- (h) Dangerous Chemicals. Possession of dangerous chemicals or use of any such items in a manner that harms, threatens, or reasonably causes fear to others, on University Property or at University sponsored events, with limited exceptions, is prohibited. Exceptions to this prohibition:
 - 1. A sworn law enforcement officer may carry chemical spray.
- 2. Any person may carry chemical spray that is used solely for self-defense and is in a compact vessel that contains no more than two ounces of chemical.
 - (i) Fire Safety Violations.
- 1. Conduct that causes or attempts to cause a fire or explosion or possession or use of fireworks unless authorized by the University in advance in writing.

- 2. Tampering with fire safety equipment or failure to evacuate during a fire alarm on the University Premises or at any University Activity.
 - (j) <u>Furnishing</u> False Information.
- (j)1. Furnishing false or misleading information to the University or to any University Official. This includes but is not limited to forging documents or other data; or omitting facts that are material to the purpose for which the information is submitted.
- 2. Falsifying documents or University communications, falsifying signatures of
 University Officials, impersonating University Officials, utilizing documents or other records in
 any medium that purport to be from the University or one of its employees without express
 written permission from the University or the employee, or unauthorized alteration of documents
 or communication of the University.
- (k) Harassment. Threats, intimidation, Coercion, or any other conduct that places a Reasonable person in fear of physical harm, through words or actions, or objectively disrupts a person's daily activities, including education and employment. Harassment does not include conduct protected by the First Amendment.
- (l) Hazing. Any action or series of actions that recklessly or intentionally endangers the mental health, physical health or safety of a Student for any purpose, including but not limited to initiation into, admission into, or affiliation with, or the perpetuation or furtherance of a tradition or ritual of any Student group or Organization organization. Hazing occurs if a person or group:
- 1. Causes or attempts to cause physical injury or other harm to a Student, including but not limited to emotional distress, or engages in any conduct that presents a threat to the Student's health or safety. Hazing includes but is not limited to any physical brutality, such as

whipping; beating; branding; exposure to the elements; forced consumption of any food, alcohol, drug or other substance; or other forced physical activity that could adversely affect the physical health, mental health or safety of any Student and any activity that would subject the Student to extreme mental stress, such as sleep deprivation, forced sexual conduct or forced exclusion from social contact.

- 2. Engages in an action or activity that has a tendency to or is intended to demean, disgrace, humiliate or degrade a Student. This includes, but is not limited to, forced conduct that could result in extreme embarrassment, requiring or servitude, or other forced activity that is considered hazing under Florida law and could adversely affect the mental health or dignity of the Student.
- 3. Conduct that by design, intent or recklessness causes a Student to be reasonably unable to pursue, interferes with, or attempts to interfere with a Student's academic schedule or performance; or
- 4. Causes, induces, pressures, coerces or requires a Student to violate the Law or any University of Florida Regulation.
 - 5. In response to allegations of hazing under this Regulation, it is not a defense that:
 - a. The <u>affected</u> person <u>harmed</u> gave Consent to the conduct.
- b. The conduct was not part of an official organizational event or sanctioned or approved by the organization.
 - c. The conduct was not done as a condition of membership in the organization.
 - (m) Invasion of Privacy and Unauthorized Recording.
- 1. Making, using, disclosing or distributing a Recording of a person in a location or situation in which that person has a Reasonable expectation of privacy and is unaware of the

Recording or does not Consent to it; and any other conduct that constitutes an invasion of the privacy of another person under applicable Laws and Regulations. Such conduct includes, without limitation, unauthorized Recording of personal conversations, images, meetings or activities.

- 2. Unauthorized Recording of a class or of organizational or University meetings, where there exists a legal expectation of privacy, and any use, disclosure, or distribution of any such Recording.
- 3. Engaging in acts of voyeurism, peeping, spying, or recording another in any location where a Reasonable expectation of privacy exists.
- 4. Any notice, Consent or other requirement under applicable Laws and Regulations must be fulfilled in connection with authorizing, making, using, disclosing or distributing any Recording, where there is a legal expectation of privacy.
- 5. Refer also to University Regulation 1.006(4) Non-Discrimination/Harassment/ Invasion of Privacy Regulation which governs all University personnel including Students.
 - (n) Misuse or Unauthorized Possession or Use of Public or Private Property.
- 1. Theft, misuse, taking or unauthorized use or possession of public or private property or unauthorized use or acquisition of services.
- 2. Destroying, damaging or littering of any property. Conduct that destroys, damages or litters any property of the University or any property of a person or group.
- 3. Misuse of the identification number or card issued to a Student through alteration, forgery or duplication, or through use of an identification card that has not been issued to the user. It is also a violation to grant or authorize use by a third party of one's own identification

number or card for any purpose except to obtain Student block seating in accordance with University Athletic Association procedures for Student block seating.

- 4. Unauthorized sale of Student tickets. Unauthorized sale or purchase of Student tickets on University Campus to any University of Florida function or event.
- 5. Use or possession of fake identification materials, including the use of another person's government issued identification.
- 6. Unauthorized transfer of registered access. Unauthorized sale/barter/or compensation in exchange for reserved seat(s), registration-based access, or otherwise limited access to functions, events, academic course registration, or services of the University.
 - (o) Misuse or Unauthorized Use of University Computer Resources.
- 1. Any action without authorization from the University that does, or causes a person to, access, use, modify, destroy, disclose or take data, programs or supporting documentation residing in or relating in any way to a University of Florida computer, computer system or computer network or causes the denial of computer system services to an authorized user of such system.
- 2. Unauthorized downloading or facilitating others to download copyrighted music and films without authorization.
- 3. Any other violation of the Policies on Information Technology and Security Regulation, University of Florida Regulation 1.0102 or any policy referenced through that Regulation.
- 4. The use of the University's computer resources to violate any Laws or Regulations or Board of Governors' Regulation.

- (p) Obstruction of the <u>Student University</u> Conduct Process. Interference with or obstruction of the Student Conduct Process, by any means and through any medium, including but not limited to the following:
 - 1. Knowingly filing a false report that a violation was committed.
- 2. Falsification, distortion or misrepresentation of information before a Hearing Body or a Student Conduct Administrator.
- 3. Disruption or interference with the orderly conduct of a Hearing or meeting as outlined in this Regulation.
- 4. Attempting to influence the impartiality of a Hearing Body prior to, or during the course of, a Student Conduct Process
- 5. Harassment or intimidation of a Hearing Body, and/or participant, prior to, during or after a Hearing or meeting as outlined in this Regulation.
- 6. Influencing or attempting to influence another person to commit an obstruction of the Student Conduct Process.
- 7. Preventing or attempting to prevent another person, through words or actions, from reporting a violation of the Student Conduct Code.
 - 8. Failure to complete or violation of conditions for assigned sanctions
- (q) Public indecency. Examples include but are not limited to public urination and exposure of sexual organs. Breastfeeding a child is not public indecency and does not violate this Regulation.
 - (r) Sexual Misconduct.
- 1. Sexual violence: any sexual act perpetrated against a person's will, including but not limited to the use of physical force or threats, or in circumstances in which the person is

unable, due to Incapacitation, to give Consent. Acts falling into the category of sexual violence include but are not limited to nonconsensual sexual intercourse.

- 2. Nonconsensual intimate touching: any unwelcome intentional intimate touching of another, which does not constitute sexual violence, without the Consent of the other person or in circumstances in which the person is unable, due to Incapacitation, to give Consent.
- 3. Sexual harassment: unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature directed at a person that places another person in Reasonable fear of physical harm, or objectively disrupts employment, education, research, living or other activities.
- (s) Unauthorized Entry to University Facilities. Unauthorized access or entry to University property, buildings, structures or facilities. Unauthorized possession, duplication or use of keys or access cards for any such University property.
- (t) Violation of Law. <u>Any behavior that allegedly violates Violation of</u> any municipal or county ordinance, any Law, Regulation, or requirement of the State of Florida, the United States or, when in another state or country, that state or country. <u>Including, but not limited to For example</u>:
- 1. Florida Statute 790.115 Possessing or discharging weapons or firearms at a school-sponsored event or on school property prohibited; penalties; exceptions.
 - 2. Florida Statute 1004.097 Free expression on campus.
- (u) Violation of University Policy. Violation of any Regulation or policy of the University of Florida, the Florida Board of Governors or the State of Florida including, but not limited to the University of Florida, Department of Housing and Residence Life Education Community Standards.

- (5) Student Rights.
- (a) Accused Student Rights. Any Accused Student or Student Organization will be afforded the following rights throughout the <u>Student Conduct Process. University conduct process.</u> Any Student may also be given the opportunity to waive specific rights, in writing, to expedite the resolution process if appropriate as determined by the Director of Student Conduct and Conflict Resolution or designee. Accused Students have the right to:
- 1. Access and review all relevant University of Florida policies and procedures related to the Student Honor Code or Student Conduct Code.
- 2. <u>Notice of Written notification in Correspondence of any</u> Charges resulting from an alleged violation of the Student Honor Code or the Student Conduct Code.
- 3. Privacy of their student education records, except to the extent <u>disclosure is</u> permitted or required by Law.
- 4. Have an Advisor and/or Support Person present during any Hearing or meeting with a Student Conduct Administrator or Hearing Bodyand Conflict Resolution. A Student who chooses to have an Advisor and/or Support Person present during any Hearing or meeting, must provide the identity of the person(s) and the appropriate signed privacy waiver(s) to the Director of Student Conduct and Conflict Resolution or designee at least two (2) ClassBusiness Days in advance and must provide the appropriate executed privacy waiver(s) during this notification and notify their advisor of the advisor's obligation to follow all University regulations, rules, policies and procedures throughout the Student Conduct Process. Failure to comply with the requirements of this section may result in the Advisor and/or Support Person not being permitted to attend the hearing or meeting.

- 5. A Hearing to determine responsibility of any alleged violations of the Student Honor Code or the Student Conduct Code. A single postponement request for the Hearing for up to thirty (30) calendar days may be submitted to Student Conduct and Conflict Resolution if a legal case resulting from the same incident is pending.
- 6. Decline to answer any questions or provide self-incriminating information to the Hearing Body at any point during the resolution process. Accused Students may also elect not to participate in a Hearing with the understanding that a decision, including any appropriate Sanctions, will be made using the information available at the time of the Hearing in their absence.
- 7. An opportunity to ask staff member(s) in Student Conduct and Conflict Resolution questions regarding the <u>Student Conduct Processeonduct process</u>, and have those questions answered to the extent that staff is permitted and able.
- 8. Provide and review appropriate information, including any potential Witnesses that could be used in the decision-making process to Student Conduct and Conflict Resolution.
- a. All information must be provided to Student Conduct and Conflict Resolution by 5:00 p.m. at least <u>four (4) Classeight (8) Business</u> Days before the scheduled Hearing. No new information, including potential Witnesses, will be accepted for consideration after this date, absent the express written permission of the Director of SCCR or designee.
- b. An Accused Student and their Advisor, if any, have the right to inspect the case file at least three (3) Classfive (5) Business Days before the scheduled Hearing.
- 9. Have all information, including any potential Witnesses, that could be used in the decision-making process reviewed preliminarily for relevance by Student Conduct and Conflict Resolution prior to the Hearing. The determination of relevance will rest with the Director of

Student Conduct and Conflict Resolution or designee. Relevance decisions will be communicated directly with the Accused Student, with rationale, in writing prior to the Hearing. Relevancy determinations regarding information directly related to the Reporting Person's character or prior conduct will also be communicated directly with the Reporting Person in the same manner. Relevancy determinations may be reversed or modified through an appeal to the Dean of Students or designee.

- 10. Participate in a Hearing, including provide information, listen to Witnesses and ask questions, through the Hearing Body, of Witnesses providing information during a Hearing.
 - 11. Have a decision made based on the Preponderance of the Information standard.
- Process, if the Accused Student has a disability. At accordance with applicable Laws. Students in need of reasonable accommodations at any point during the Student Conduct Process a student may conduct process due to a disability should contact the Disability Resource Center (DRC) to discuss their access needs as soon as possible.
- 13. Appeal a decision of a Hearing Body, in writing and in accordance with section(9) Appeals of this Regulation.
- 14. Request permission to participate via audio or live-video from another location, and/or participate in a manner that avoids direct contact with Reporting Persons and/or Witnesses as long as such participation does not infringe on the Accused Student's right to question the Reporting Person or Witnesses during the Hearing or infringe on the University's implementation of the Student Conduct Processeonduct process.
- 15. Provide a written impact statement to the Conduct Committee Advisor before the start of a Hearing to be considered if Sanctions are to be issued.

- 16. Have any University status remain unchanged pending a final outcome through the <u>Student Conduct Process</u>eonduct process; except in cases involving a threat or serious potential threat to the health, safety, or welfare of the <u>University Community or University</u> property where interim restrictions are in place, as outlined in sections (11) Interim Restrictions for Students and (12) Interim Restrictions for Student Organizations of this Regulation.
 - 17. Be notified of the final outcome of the case.
- 18. To select a Hearing Body as outlined in section (6)()-(g)2c-2-e Process. In cases involving Sexual Misconduct violations, if the Reporting Person and Accused Student disagree on the type of Hearing Body, the Hearing Body will be a University Officials Board.

 Reporting Person's Person Rights.
- (b) Any Reporting Person will be afforded the following rights throughout the Student Conduct Process University conduct process. Reporting Persons have the right to:
- 1. Participate individually in an Intake Meeting with a Student Conduct

 Administrator to review the allegations, the Charges, possible Sanctions, Reporting Person rights and explain the Student Conduct Processconduct process, and any available forms of resolution.

 Reasonable efforts will be made to hold this Intake Meeting at least five (5) Classten (10)

 Business Days before any scheduled Hearing.
- 2. Ask staff member(s) in Student Conduct and Conflict Resolution questions regarding the conduct process, and have those questions answered to the extent that staff is permitted and able.
- 3. Provide appropriate information, including any potential Witnesses that could be used in the decision-making process to Student Conduct and Conflict Resolution.

- a. All information must be provided to Student Conduct and Conflict Resolution by 5:00 p.m. at least <u>four (4) Classeight (8) Business</u> Days prior to the scheduled Hearing. No new information, including potential Witnesses, will be accepted for consideration after this date, absent the express written permission of the Director of SCCR or designee.
- b. Reporting Person and their Advisor have the right to review the Reporting

 Person's own written statement, and their own submitted information at least three (3) Classfive

 (5) Business Days prior the scheduled Hearing. A Reporting Person will not have access to review the entire case file.
- c. Have all information directly related to the Reporting Person's character or prior conduct, including any potential Witnesses, that could be used in the decision-making process reviewed preliminarily for relevance by Student Conduct and Conflict Resolution before the Hearing. Relevance decisions will be communicated directly to the Reporting Person and Accused Student, with rationale, in writing before the Hearing. Relevancy determinations may be reversed or modified through an appeal to the Dean of Students or designee.
- 4. To participate in a Hearing and have an Advisor and/or Support Person present during any Hearing or meeting. Participation may include providing information, providing Witnesses to present relevant information and/or submitting questions to be asked of the Accused Student and Witnesses, by the Hearing Body. A Student who chooses to have an Advisor and/or Support Person present during any Hearing or meeting, must provide the identity of the person(s) to the Director of Student Conduct and Conflict Resolution or designee at least two (2) ClassBusiness Days in advance, and must provide the appropriate executed privacy waiver(s) during this notification and must notify their advisor of the advisor's obligation to follow all University regulations, rules, policies and procedures during the Student Conduct

Process. Failure to comply with the requirements of this section may result in the Advisor and/or Support Person not being permitted to attend the hearing or meeting.

- 5. To be notified of any recommendations of a Hearing Body, and the final outcome of the case.
- 6. To appeal on the same grounds as the Accused Student, as outlined in section (9) Appeals of this Regulation.
- 1.7. To review the Hearing Body selection of the Accused Student as outlined in section (6)(g)2c Process. In cases involving Sexual Misconduct violations, if the Reporting Person does not agree with the Hearing Body selected by the Accused Student, the Hearing Body will be a University Officials Board.
- 7.8. To request permission to participate via audio or live-video from another location, and/or participate in a manner that avoids direct contact with the Accused Student and/or Witnesses as long as such participation does not infringe on the Accused Student's right to question the Reporting Person or Witnesses during the Hearing or infringe on the University's implementation of the Student Conduct Processeonduct process.
- 8.9. Decline to answer any questions or provide self-incriminating information to the Hearing Body at any point during the resolution process.
- 9.10. To provide a written impact statement to the Conduct Committee Advisor before the start of a Hearing. In the event that the Accused Student accepts responsibility, or is recommended or found responsible, the impact statement would then be provided to the Hearing Body to be considered in recommending or issuing Sanctions.

- 11. Request reasonable accommodations in the Student Conduct Process, if the Reporting Person has a disability. At any point during the Student Conduct Process, a student may contact the Disability Resource Center (DRC) to discuss their access needs.
 - (6) Process.
- (a) Hearing Bodies. Any specific procedures used by Hearing Bodies will comply with the requirements of the Student Conduct Code and Student Honor Code. Hearing Bodies are selected annually, with the approval of the Vice President for Student Affairs, and receive training from the Office of Student Conduct and Conflict Resolution.
- The Director of Student Conduct and Conflict Resolution (and designee(s)) may conduct Hearings.
- 2. Individual Hearing Officers (IHO) or Individual Honor Hearing Officers (HHO) designated by the Dean of Students may conduct Hearings.
- 3. The Dean of Students may appoint an IHO or HHO Individual Hearing Officer who is not an employee of the University, with the approval of the Vice President for Student Affairs. This is an administrative decision of the University and not a specific choice a Student may select during an Information Meeting.
- 4. The Dean of Students and Associate Dean(s) of Students may conduct both informal and formal Hearings.
- 5. The Student Conduct Committee (SCC) may conduct formal Hearings. Student Conduct Committees are composed minimally of three (3) ormembers and at maximum five (5) members, consisting of Faculty/University Officials, staff and Students. Student Conduct Committees are selected by the Director of Student Conduct and Conflict Resolution or designee and at least one-half of the committee must be Students regardless of committee size. The

Director of Student Conduct and Conflict Resolution will designate a Conduct Committee Advisor for each Hearing.

- 6. A University Officials Board (UOB) may conduct Hearings. A UOB is composed of three (3) Faculty/University Officials or staff members selected by the Director of Student Conduct and Conflict Resolution or designee. The Director of Student Conduct and Conflict Resolution will designate a Conduct Committee Advisor for each Hearing.
- 7. Health Science Conduct Committee (HSCC) may conduct formal Hearings. HSCCs will resolve alleged violations of the Student Honor Code and violations of the Health Insurance Portability and Accountability (HIPAA) or any other applicable Law concerning patient privacy within the Health Science Center colleges where the alleged violation occurs in a Health Science Center college course and the Accused Student is majoring in a Health Sciences Program.- Health Science Conduct Committees are composed minimally of three (3) or five (5) members, with one (1) member being a Faculty/University Official/Studentrepresentative from a Health Science college, and at maximum five (5) members, with three (3) members of a Health Science Conduct Committee are representatives from Health Science colleges. Student Conduct Committees are selected by the Director of Student Conduct and Conflict Resolution or designee, who will determine which cases will be heard by a HSCC. This decision is final. At least one and at least one-half (1/2) of the committee must be comprised of Students, regardless of committee size, and the remaining committee comprised of other members will be Faculty/University Officials, with at least one (1) Faculty/University Official/Student from a Health Science college. - The Director of Student Conduct and Conflict Resolution will designate a Conduct Committee Advisor for each Hearing.

- 8. Greek Conduct Committee may conduct formal Hearings. Greek Conduct Committees are convened for the purposepurposed of Hearing cases involving an organization that is a member of the Interfraternity Council (IFC), the Multicultural Greek Council (MGC), the National Pan-Hellenic Council (NPHC), or the Panhellenic Council (PC). Greek Conduct Committees are composed minimally of three (3) or five (5) members and must include: the Executive Vice President or President from the council of which the accused chapter is a member, a Student from any of the four (4) councils, and a Faculty/University Official. Any additional committee members must be students. If a conflict of interest exists among the committee membership listed above as determined by the Director of Student Conduct and Conflict Resolution, the Director of Student Conduct and Conflict Resolution or designee will determine the composition of the Greek Conduct Committee. eouncils, and a Faculty/staff member. At maximum Greek Conduct Committees are composed of five (5) members: the Executive Vice President from the council of which the accused chapter is a member, two (2) Students from the same council as the accused organization, one (1) Student from one of the other three councils, and one (1) Faculty/staff member. The Director of Student Conduct and Conflict Resolution will designate a Conduct Committee Advisor for each Hearing.
- 9. Law School Honor Committee may conduct formal Hearings only as outlined in Regulation 4.0410434. The Law School Honor System is separate from the resolution procedures outlined herein, and only applies to Student Honor Code violations within the Levin College of Law as outlined in Regulation 4.0410434.
- 10. Housing and Residence Life Education staff members may serve as Student Conduct Administrators, Conduct Committee members, University Officials Board members, and Individual Hearing Officers, as designees of the Dean of Students. The Office of Conduct

and Community Standards in Housing and Residence Life Education will designate these Student Conduct Administrators and Individual Hearing Officers annually.

- (b) Reporting.
- 1. Any person or entity may submit information in the following ways:
- 1.a. Filing a police report with the University of Florida Police Department or by requesting another law enforcement agency police report be sent to the University of Florida Police Department and forwarded to Student Conduct and Conflict Resolution.
- 2.b. Providing a written narrative to Student Conduct and Conflict Resolution or the Office of Conduct and Community Standards in Housing and Residence Life Education, or providing a written statement through a secure University reporting function.
- 3.c. Reporting information directly to the Office of Accessibility and Gender

 EquityTitle IX Compliance and selecting to have a final report from the Office of Accessibility

 and Gender EquityTitle IX Compliance sent to Student Conduct and Conflict Resolution for review.
 - (c) Time Limits.
 - 1. Student Conduct Code:-
- a. No Student may be Charged with a violation of the Student Conduct Code if the incident was reported to the University more than one (1) year after the alleged violation occurred, absent extenuating circumstances.
- b. In extenuating circumstances, the Dean of Students or designee has the sole discretion to extend this time period.
 - 2. Student Honor Code:

- a. Reports must be made to Student Conduct and Conflict Resolution before submission of a final grade for the course.
- b. In extenuating circumstances, the Dean of Students or designee has <u>sole</u> discretion to extend this time period. For example: the matter is not brought to the attention of the Faculty member until after grades are submitted.
- (d) Investigation. Investigations may be conducted as needed and within the following guidelines:
- 1. In any case involving alleged sexual misconduct, relationship violence or stalking, an Investigation maywill be conducted by the Office of Accessibility and Gender Equity Title IX

 Compliance at the direction of the Assistant Vice President for Accessibility and Gender

 Equity/Title IX Coordinator.
- 2. The Director of Student Conduct and Conflict Resolution or designee may conduct an Investigation or convene a group of one or more campus partners to conduct an Investigation. Correspondence will be sent to a Student(s) requesting participation in an Investigation Meeting(s). An Investigation may be conducted with others as related to the incident or report.
- 3. Housing and Residence Life Education staff may conduct Investigations for incidents that occur within housing, or may conduct other Investigations at the designation of the Director of Student Conduct and Conflict Resolution. Correspondence will be sent to a Student requesting participation in an Investigation Meeting(s). An Investigation may be conducted with others as related to the incident or report.
- 4. The Director of Student Conduct and Conflict Resolution <u>or designee</u> may request the University of Florida Police Department conduct an Investigation of a Student Organization.

(e) Charging. After reviewing the information reported and/or gathered during anthe Investigation, the Director of Student Conduct and Conflict Resolution or designee will determine if sufficient information exists for a reasonable Hearing Body to concluded etermine a violation(s) of the Student Honor Code or Student Conduct Code or Student Honor Code was committed by the accused Student, using the preponderance of the information. If this standard. If sufficient information exists is met, then Charges may be issued.

The Director of Student Conduct and Conflict Resolution or designee may convene, at their discretion, a committee, including, but not limited to the Incident Review Committee, for evaluation of the information before making a charging decision related to allegations involving Student Organizations.

Nothing in this Regulation prevents the disposition of an allegation through educational meeting, Collaborative Resolution, Conflict Resolution, oradministratively by Mutual Agreement.written agreement with mutual Consent of the Reporting Person and the Accused Student(s) involved. Such disposition, if utilized, must be consistent with all Laws.and Regulations. Such disposition is at the discretion of the Director of Student Conduct and Conflict Resolution or designee and is final.

If an allegation is not handled through other appropriate channels, is not dismissed, or is not resolved informally as described above, then the Director of Student Conduct and Conflict Resolution or designee may issue a Motionenties of Charges to the Accused Student(s) through Correspondence.

- (f) Notice.
- Written notice sent in Correspondence to a Student will include:

- 1. Notice of Charges. Notice of Charges will be sent via Correspondence and will include specific Student Conduct Code or Student Honor Code Charges; brief description of the allegation; where to review the Student Rights; and an invitation to attend an Information Meeting. A Student issued a Notice of Charges for an alleged Student Honor Code violation will not be permitted to drop or withdraw from the course at issue and will have a temporary grade of "Incomplete/No Grade" issued until the final resolution of the case.
- a. A Student issued a Notice of Charges for alleged violations of both the Student

 Conduct Code and Student Honor Code will have one resolution process; the available resolution

 processes will be determined by the Director of Student Conduct and Conflict Resolution or

 designee.
- b. A Student issued a Notice of Charges after the last day of classes for any

 Semester will be required to have an Information Meeting by the end of their next enrolled

 Semester. A Student may request to have this meeting occur earlier. The Information Meeting

 will be scheduled at the discretion of the Director of Student Conduct and Conflict Resolution or designee.
- c. A Student issued a Notice of Charges who does not attend the Information

 Meeting or respond in a timely manner to correspondence from University Officials will not

 delay resolution of the alleged incident. The University may move forward with the Student

 Conduct Process in the absence of the Accused Student, including but not limited to scheduling a

 Hearing or placing a Service Indicator.
- 1.2. Notice of Hearing. The Office of Student Conduct and Conflict Resolution will use reasonable efforts to provide the Notice of Hearing five (5) Classten (10) Business Days before the scheduled Hearing, absent emergency circumstances as determined by the Director of

Student Conduct and Conflict Resolution or waiverunless waived by an Accused Student on forms provided by the Office of Student Conduct and Conflict Resolution. Absent emergency circumstances, or waiver by an Accused Student, the Notice of Hearing will be provided at least five (5) Business Days before the schedule Hearing. This notice will include finalized Student Conduct Code or Student Honor Code Charges, a brief description of the allegation, where to review the Student Rights, and the date, time and location for a Hearing. Hearings will be scheduled at the convenience of the Hearing Body.

- (g) Resolution Processes.
- 1. Student Honor Code.
- a. Information meeting. This is an individual meeting between a Student and a Student Conduct Administrator after a Notice of Charges Charge letter has been sent. The meeting consists of reviewing a Student's rights in the Student Conduct Process conduct process, reviewing the Charges, and affording affords the Student the opportunity to choose "Responsible" or "Not Responsible" to the Charges, and "Agree" or "Do Not Agree" to the Sanctions proposed by the Faculty member. These decisions determine the next course of action in the Student Conduct Process; conduct process, resolution choices will be made during the Information Meeting information meeting. Charges may be adjusted or withdrawn by a Student Conduct Administrator during this meeting, prior to a Student selecting "Responsible responsible" or "Not Responsible responsible."
 - b. Hearing.
- i. 1) If an Accused Student chooses "Not Responsible" to Charges or "Do Not Agree" with proposed Sanctions on a first time Student Honor Code allegation, a Hearing is required. If the allegation is a second Student Honor Code violation, the case must be resolved

by Hearing, even if the Student is willing to accept responsibility for the Charges and accept the proposed Sanctions. The Faculty member involved <u>has the ability to view the case file prior to</u> the hearing and may choose to participate in <u>either the entirety of</u> the Hearing <u>or inas</u> a <u>portion of</u> the Hearing <u>Person or</u> as a Witness.

- 2) Student Honor Code allegations being resolved by a Hearing:
- a) Cases that will not result in Separation, will be heard by one of the following, as selected by the Student:
 - i) An Individual Honor Hearing Officer Hearing, or
- ii. <u>ii) Aa Student Conduct Committee/Health Science Conduct Committee</u>

 Hearing, except;
- Health Science Center college course where the Accused Student is majoring in Separationa

 Health Sciences Program, then the case will be heard by a Student the Health Science Conduct

 Committee/Health Science Conduct Committee Hearing.
 - 2. Student Conduct Code.
 - a. Information meeting.
- Administrator after a Notice of Charges Charge letter has been sent. The meeting consists of reviewing a Student's rights in the Student Conduct Process conduct process, reviewing the Charges, potential outcomes (including possible Sanctions), and affords the Student the opportunity to choose "Responsible" or "Not Responsible" to the Charges, which determines the next course of action in the Student Conduct Process. Charges may be adjusted or withdrawn by

a Student Conduct Administrator during this meeting, prior to a Student selecting "Responsible" or "Not Responsible."

- <u>ii.2)</u> A Reporting Person may be invited to an individual Intake Meeting with a Student Conduct Administrator. This meeting may consist of reviewing a Student's rights in the <u>Student Conduct Process</u>conduct process, reviewing the Charges, potential outcomes (including possible Sanctions), and any forms of resolution available.
 - b. Administrative review/Collaborative Resolution. / shared governance.
- it an individual Student has accepted responsibility for the Charges and the potential outcome would not be Separation, then a Student may be offered the option of an administrative review with a Student Conduct Administrator. This meeting is educational in nature, allows the Student to share their perspective of the incident, discuss circumstances of the case, as well as educating the Student on ways to repair any harm and return to good standing in the University Community. This meeting informs the Student Conduct Administrator's sanctioning decision, which will be communicated in Correspondence. Witnesses are not called, but a Student Conduct Administrator may seek additional information as needed.
- may be offered if a Student Organization has accepted responsibility for the alleged behavior and the potential outcome would not result in the organization's Separation from the Institution.

 Additionally, to be eligible, at least two full academic Semesters must have concluded, since the end of a Semestersemester where a Collaborative Resolution shared governance resolution was issued.

- a) This meeting is educational in nature and is a way of supporting an organization's internal accountability, collaboration between multiple vested entities, and shared responsibility for the success of our University Community.
- b) Organizations participating in <u>Collaborative Resolutionshared governance</u> will be asked to complete a full internal Investigation, provide documentation showcasing action steps that have been taken to respond to the incident, and the plans the organization has to implement longer term education to avoid similar incidents in the future, which will be provided to the Student Conduct Administrator.
- <u>c)</u> This information informs the Student Conduct Administrator's issued outcomes and potential Sanctions which will be communicated in Correspondence.
 - c. Hearings.
- i-1) If an Accused Student chooses "Not Responsible" to Charges, or regardless of accepting or denying responsibility for Charges, if Separation is a potential outcome, a Hearing is required. The Director of Student Conduct and Conflict Resolution or designee determines whetherwould determine if a case could result in Separation.
- <u>a)</u> Cases that <u>willmay</u> not result in Separation, <u>will be heard by one of the following</u>, as selected by the Accuseda Student: <u>may select:</u>
 - i. An Individual Hearing Officer Hearing, or
 - → <u>ii.</u> A Student Conduct Committee Hearing
- <u>b)</u> Cases that <u>mayeould</u> result in Separation, <u>will be heard by one of the</u>

 following, as selected by the Accuseda Student <u>may select</u>:
 - <u>i.</u> A University Officials Board, or
 - <u>ii.</u> A Student Conduct Committee Hearing

- c) Cases originating from one of the four Greek councils (IFC, MGC, NPHC, PC): If the organization is not eligible, as defined above, for a Collaborative ResolutionShared Governance resolution, the case will be resolved through the Greek Conduct Committee.
 - (h) Hearing Guidelines.
- 1. All Hearings will be decided by a majority vote, using the Preponderance of the Information standard.
- 2. The University, not the Accused Student, has the burden of proof in a <u>Student</u>

 <u>Conduct Process.disciplinary proceeding.</u> The burden of proof is the Preponderance of the

 Information. The Hearing Body will evaluate the weight given to information and the credibility of Witnesses.
- 3. The formal rules of evidence governing criminal and civil <u>litigationeourt</u> are not applied in Student Conduct Code and Student Honor Code proceedings.
- 4. The facts of the case will be determined during deliberation after the close of the Hearing, by the Hearing Body. The decision of responsible or not responsible on the Charges will be based solely on the information presented at a Hearing.
- 5. Pertinent records, reports, exhibits and/or written statements may be accepted as information for consideration in the disciplinary proceeding. Any records, reports, exhibits and/or written statements will be reviewed for relevance by the Conduct Committee Advisor and outlined in section (5) Student Rights. Any of the above information that was preliminarily excluded as not relevant by the Conduct Committee Advisor may be resubmitted for consideration through an appeal as outlined in section (5) Student Rights. The Conduct Committee will consider all relevant information during the Hearing.

- 6. Hearings will be audio recorded. This is the only Recording allowed and is the sole property of the University. Recording failures will not require a delay or affect the validity of a Hearing. In the instance of a recording failure, the Conduct Committee Advisor may provide a written summary of the Hearing to the Appeal Authority upon their request.
 - 7. Only relevant past behavior of a Student will be allowed at the Hearing.
- 8. In instances of alleged sexual misconduct, past sexual history of the Reporting Person and Accused Student is not allowed, unless deemed relevant by the Conduct Committee Advisor or through an appeal as outlined in section (5) Student Rights.
- 9. An Accused Student and Reporting Person will have the opportunity to present relevant information.
 - 10. Witnesses.
- a. In addition to Witnesses invited by the University, if any, Reporting Persons and Accused Students participating in the Hearing may arrange for Witnesses to voluntarily present relevant information during the Hearing. The Chair of the Conduct Committee will facilitate the questioning of Witnesses. Witnesses at Hearings will not be sworn in. Each Witness will be told that they are required to tell the truth. A Student giving untrue testimony at a Hearing may be subject to Student conduct Charges. Questions will be reviewed and may be disallowed by the Hearing Body, or Conduct Committee Advisor preliminarily, if deemed not relevant.
- b. Failure of a Witness to participate in a Hearing, does not invalidate the Hearing.

 The inability of the Accused Student or Reporting Person to question a Witness who has provided only a written statement, is not a violation of rights under this Regulation when, during the hearing, both the Accused Student and the Reporting Person have the opportunity to hear and respond to written statements read aloud and may offer information to rebut Witness statements

and other information presented at the Hearing. During the Hearing, all Witness statements considered by the Hearing Body will be read into the record and the Reporting Person and Accused Student will have an opportunity to respond.

- A Student or Witness may choose not to answer any and all questions posed by a Hearing Body.
- 12. An Accused Student or Reporting Person may submit a challenge to the impartiality of an Individual Hearing Officer or Individual Honor Hearing Officer, in writing with the basis of the challenge, to the Dean of Students or designee within three (3)

 ClassBusiness Days of notification. If a challenge is not received within the allotted three (3)

 ClassBusiness Days, the assigned Individual Hearing Officer or Individual Honor Hearing

 Officer will remain as scheduled. Decisions on challenges by the Dean of Students or designee are final and not subject to appeal.
- 13. All Hearings will be conducted in private. Hearing Bodies in training, or other University employees may be permitted to observe a Hearing at the discretion of the Director of Student Conduct and Conflict Resolution or designee.
- 14. The following is a guide to the format of a Hearing. The Hearing Body may question the Reporting Person, Accused Student and Witnesses directly. This format may be altered at the discretion of the Hearing Body or the Conduct Committee Advisor.
 - a. Review Hearing procedures.
 - b. Review of the Charges.
 - c. Introductory statement(s) of Accused Student and Reporting Person as applicable.
 - d. Presentation of information by and questioning Questioning of Witnesses.

- d.e. Presentation of information by the Reporting Person and questioning of the Reporting Person (as applicable).
- e.f. Presentation of information by the Accused Student and questioning of the Accused Student.
 - f.g. Closing statements.
 - g.h. Deliberation (not recorded).)
- h.i. The Hearing Body may, at their discretion, share verbally to the Accused Student(s), Reporting Person, or Faculty member) its recommendations or findings as applicable.

 Recommendations and final outcome are shared in writing as outlined in section 5.
- 15. Prior records of Student conduct action and impact statements are considered by the Hearing Body only in the Sanctioning phase of deliberations and will not be shared prior to or used in determining responsibility.
- 16. In cases involving multiple Students Charged, information provided at one Hearing may be used in the related case(s), so long as all other procedural requirements contained within this Regulation are satisfied.
 - (i) Hearing Decisions.
- 1. Individual Hearing Officers make a decision on responsibility for each <u>Student</u> <u>Conduct Code</u> Charge as well as determine Sanctions as applicable. The outcome of an Individual Hearing Officer Hearing will be communicated in writing, through Correspondence, to the Accused Student and the Reporting Person <u>as applicable</u>, within a reasonable period of time and will include applicable appeal information.

- 2. <u>Individual Honor Hearing Officers</u>, University Officials <u>Boards</u>, <u>Board</u> and Conduct Committees make a recommendation of "responsible" or "not responsible" for each separate Charge and recommend Sanctions as applicable to the Dean of Students or designee.
- a. The Dean of Students or designee will review the recommendations of the applicable Hearing Body, and will then make a decision as to the Charges(s) in question which may consist of adopting or rejecting the recommendation of "responsible" or "not responsible", remanding the matter for rehearing to a new Hearing Body, or reconvening of the same Hearing Body with directions considerations for additional fact finding.
- b. The Dean of Students or designee will review the recommended Sanctions, as applicable, and will then make a decision which may consist of adopting. or modifying or rejecting, the recommended Sanctions of the Hearing Body.
- c. Any differences between the recommendation arising out of the Hearing Body and the Dean of Students or designee's decision will be communicated in the outcome with rationale.
- d. The outcome of a Hearing will be communicated in writing, through

 Correspondence, to the Accused Student and the Reporting Person or Faculty Member, as

 applicable, within a reasonable period of time and will include applicable appeal information for the Accused Student and Reporting Person.
- (7) Sanctions. Students/Student Organizations found responsible for violating the Student Honor Code or the Student Conduct Code will be subject to Sanctions appropriate for the violation(s), with consideration of any mitigating circumstances; including but not limited to the Student's/Student Organization's previous conduct record. Sanctions include any combination of the following outcomes dependent on the violation itself:

For a violation(s) of the Student Honor Code, a Student/Student Organization will receive one or more of the following academic Sanctions, in addition to any appropriate status and educational Sanctions. For a violation(s) of the Student Conduct Code, a Student/Student Organization will receive one or more of the following appropriate status and educational Sanctions:

- (a) Academic Sanctions: outcomes that impact official University of Florida course grades where violation(s) under the Student Honor Code have occurred.
- 1. Assignment grade penalty with resubmission: A point/grade reduction on the assignment/assessment in question, and with the permission of the Faculty member, an opportunity to resubmit the assignment/assessment with the addition of the implemented point/grade reduction.
- 2. Assignment grade penalty: A point/grade reduction on the assignment/assessment in question.
- 3. Course grade penalty with drop: A point/grade reduction for the entire course. However, the Student will be permitted to drop or withdraw the course with approval from the Director of Student Conduct and Conflict Resolution or designee. Requests for drop consideration must be submitted in writing with rationale to the Director of Student Conduct and Conflict Resolution or designee, where the final approval rests and is not eligible for independent appeal outside of the formal conduct appeal process.
- 4. Course grade penalty: A point/grade reduction for the entire course. There will be no ability to drop or withdraw from the course for any reason.
- (b) Status Sanctions: outcomes that impact a Student's/Student Organization's standing with the University of Florida, including any privileges associated with being a

University of Florida Student/Student Organization, which could also include the ability to be a University of Florida Student/Student Organization.

- Written reprimand: Official notice and recognition that the behavior of a Student/Student Organization has violated the Student Honor Code and/or the Student Conduct Code.
- 2. Conduct review: An official notice that the Student/Student Organization conduct has violated the Student Honor Code and/or the Student Conduct Code, but is not sufficiently serious to warrant expulsion, suspension or probation. A Student/Student Organization on conduct review shall have their conduct under review for a specified period of time. This Sanction may require regular meetings with an appropriate official to ascertain and evaluate compliance with rules. Additional restrictions or conditions also may be imposed, depending on the nature and seriousness of the misconduct. Students/Student Organizations placed on this Sanction remain in good standing with the University. If there is a finding of responsibility for subsequent violations of the rules during this period of time, more severe Sanctions may be administered.
- 3. Probation: A period of time where a Student/Student Organization is deemed not in good standing with the University of Florida. Should the Student/Student Organization be found responsible for any additional violations of University policy or fail to complete any assigned Sanctions by the assigned deadline(s), they will be subject to additional Sanctions; including but not limited to increased status Sanctions. Probation mayean also include the loss of specific University privileges as deemed appropriate by the Hearing authority. Determination of whether a Student may represent the University as a Student athlete will be made by the University Athletic Association.

- 4. Loss of University privileges: Loss of University privileges mayean include but is not limited to: Attendance at athletic functions, holding leadership positions within Student Organizations as defined by Student Activities and Involvement or individual Student Organization by-Laws/constitutions, representing the University in any extracurricular activity or official function, study abroad, unrestricted University facility use, parking privileges, University computer usage, loss of social/philanthropy activities, ability to participate in intramurals, ability to reserve space for meetings/events on-campus, loss of block seating, ineligibility to receive future Institutional funding.
- 5. Deferred suspension: Deferred suspension from the University of Florida is a period of review where the Student/Student Organization is not in good standing with the University and must demonstrate an ability to comply with University rules, Regulations, and all other stipulated requirements; which includes a loss of University privileges. If, during the period of the deferred suspension, the Student/Student Organization is found responsible for any additional violations of University policy or fails to complete any assigned Sanctions by the assigned deadline(s), the Student/Student Organization may be immediately suspended from the University for a minimum of one Semestersemester and until any outstanding Sanctions are complete.
- 6. Suspension: The Student/Student Organization will be separated from the University for a specified period of time and/or until certain conditions are met.
- 7. Expulsion: The Student/Student Organization will be permanently separated from the University and will not have the ability to return as a Student/Student Organization at any point in time.

- (c) Educational Sanctions: outcomes that provide a Student/Student Organization with opportunities to repair the harm of their actions and to engage in meaningful developmental experiences that will help the Student/Student Organization in avoiding future violations of University policy.
- 1. Educational Sanctions <u>mayean</u> include but are not limited to completion of a seminar, assignment, substance consultation/evaluation, psychological consultation/evaluation, restitution and community service.
- 2. Residence hall transfer or removal: A requirement to transfer residence halls or leave the residence halls for a specified or indefinite period of time.
- 3. No contact directive: which will prohibit, for a period of time, both (all) parties from communicating directly or indirectly with one another, or through intermediaries, and restrict them from being in the same physical space simultaneously.
 - (8) Withdrawing or Revoking a Degree.
- (8)(a) Withdrawing. A degree may be withdrawn afterwhen a Student has graduated where a violation of Student Conduct Code or Student Honor Code and an incident occurred before graduation in the following circumstances:
- (a) 1. The Student <u>hadhas</u> a pending <u>Student Conduct Code or Student Honor</u>

 <u>Code allegation or chargeconduct Hearing</u> that was <u>not resolved prior to scheduled before or as</u>

 the Student's graduationStudent graduated.
- (b) 2. The At any time after the Student has graduated or received a degree, the University becomes aware of an incident involving an alleged violation of the Student Conduct Code or Student Honor Code that took place before the Student graduated or received a degree from the University.

The Student will receive the degree once the matter is resolved and any Sanctions (where appropriate) are completed unless the Sanction is expulsion, in which case the degree <u>maywill</u> be revoked.

- (e)(b) Revoking a degree. A former Student may have their degree revoked under the provisions above, which include but are not limited to a determination through the Student Honor Code or the Student Conduct Code process that a significant violation occurred and resulted in expulsion took place, or upon a finding of research misconduct under Regulation 6C1-1.0101., provided that the relevant Dean and the Provost are consulted before making this decision and that the Vice President for Student Affairs concurs in the decision.
- (9) Appeals. Any decision reached through Administrative Review or Hearing by a Hearing Body, is eligible for appeal. All appeals must be in writing and submitted to the appropriate office within ten (10) ClassBusiness Days from the date of the decision letter. No person may hear or decide an appeal if they conducted or participated in the disciplinary proceeding being reviewed on appeal.
- (a) Administrative Review/Collaborative ResolutionShared Governance Appeals.

 The basis for filing an appeal arising from an Administrative Review/Collaborative

 ResolutionShared Governance is limited to the following grounds: The Sanction(s) imposed were not appropriate for the violation, taking into account both prior Student Conduct Code violationsmisconduct and mitigating circumstances.
- (b) Administrative Review/Collaborative ResolutionShared Governance Appeal Authorities are as follows:
- 1. Appeals of decisions originally made by Housing and Residence Education staff should be directed to the Director of Student Conduct and Conflict Resolution or designee.

- 2. Appeals of decisions originally made by Student Conduct and Conflict Resolution staff should be directed to the Dean of Students or designee.
- 3. Appeals of decisions originally made by the Dean of Students should be directed to the Vice President of Student Affairs or designee.
- (b)(c) Hearing Appeals. Except as required to explain the basis of new information, appeals are limited to a review of the verbatim record of the Hearing and supporting documents.

 In the instance of a recording failure, the Conduct Committee Advisor may provide a written summary of the Hearing to the Appeal Authority upon their request. The basis for filing an appeal on all other Student conduct proceedings is limited to one or more of the following grounds:
- 1. The Student's or Student Organization's rights were violated in the Hearing process in a manner which materially affected the outcome of the case.
- 2. New relevant material or information has been provided that could be sufficient to alter a decision, and was unknown by the person making the appeal at the time of the Hearing.
- 3. The Sanction(s) imposed were not appropriate for the violation, taking into account both prior misconduct and mitigating circumstances.
 - (d) Hearing Appeal Authorities:
- 1. Appeals of decisions that did not result in Separation, or did not originate from a Sexual MisconductTitle IX based allegation, will be reviewed by the Vice President of Student Affairs or designee.
- 2. Appeals of decisions that resulted in Separation, or originated from a Hearing of a Sexual MisconductTitle IX based allegation, will be reviewed by an appeal panel designated by

the Vice President of Student Affairs. Appeal panel members will be selected and trained annually. Each panel will be comprised as follows:

- a. One (1) Student
- b. <u>b.</u> Two (2) Faculty or staff members

(e)(e) Procedure.

- 1. If the underlying case involves a Reporting Person and Accused Student, any appeal by one will be shared with the other, and the non-appealing person will be provided an opportunity to submit a written response within a designated period of time.
- 2. The decision on an appeal should be made and communicated in Correspondence within a reasonable period of time. The decision of the Appeal Authority is the final decision of the University and no further appeals within the University are allowed.
- 3. If the appeal is granted, the Appeal Authority may modify the Sanctions imposed or may remand the case for a rehearing with a new Hearing Body or reconvene the same Hearing Body with direction. The Appeal Authority may overturn a finding of responsible when it determines the University failed to meet its burden of proof.re-opened or new Hearing. The Appeal Authority must state the rationale in the appeal decision Correspondence.
- 4. A Student remains eligible to attend classes and University activities pending the Hearing Body's decision and until any appeal is concluded, except as set forth below:
- a. In cases where the Vice President of Student Affairs or designee determines that the health, safety, or welfare of the Student or a member of the University Community is <u>at riskinvolved</u>, the Student may be restricted on an interim basis as outlined in this Regulation.

- b. In cases where the Sanction(s) determined by the Hearing Body include Separation, the Student's privileges at the University, including the ability to attend classes and engage in University activities may be immediately revoked.
- (10) Records. An accurate and complete record of each Student Conduct Code and Student Honor Code case will be made and preserved as outlined below and is subject to the General Records Schedule GS5 for Public Universities and Colleges.

The transcripts, degree certifications, diplomas and future registration records of Students subject to Student conduct action may have a service indicator placed in accordance with the following guidelines:

- (a) The Students subject to Student Conduct Code action may have a Service

 Indicator placed on their records at the discretion of the Dean of Students, or designee, in certain scenarios including but not limited to the following: Office will place a service indicator on the records where:
- 1. A Student was found responsible for a Student has committed Student
 Honor Code or Student Conduct Code violation resulting in Separation.
- 2. <u>Aa</u> Student <u>washas been</u> issued a limited activity directive or interim suspension as outlined under Restrictions in this Regulation.
 - 3. Aa Student has been charged with a violation of this Regulation.
- 3.4. A Student failed to appear before a Student Conduct Administrator or Hearing Body after notification of a required meeting.
 - 4.5. Aa Student failedfails to complete required Sanctions by the assigned deadline.
- 6. A Student had a degree revoked or withdrawn pending final resolution of an allegation(s) and completion of any issued sanctions.

- 5. a Student with severe behavior problems is no longer attending the University, and it is the determination of the Dean of Students or designee that a complete review of the Student's record is to be made before re-enrollment
- (b) When a Student requests issuance of their transcript to another educational institution, outside agency or person, such transcript will be issued subject to the following guidelines:
- 1. If the Dean of Students Office has placed a <u>Service Indicator</u>service indicator on the transcript of a Student, the Dean of Students or designee will review the record to determine and decide whether the transcript will be issued.
- 2. If the transcript is issued, the transcript willwould have an overlay which states that the Student is not in good standing with the University and to contact the Dean of Students Office for additional information.
 - (c) Records Retention and <u>Release Expungement</u> of Records.
- 1. Student conduct records will be maintained in the Dean of Students Office <u>for a minimum of seven (7) years from through</u> the <u>date of the final outcome of the case. Student's graduation from the University. In cases where the Student does not graduate, the record will be maintained as long as the Student remains eligible to re-enroll.</u>
- 2. Student conduct records <u>may</u>must be maintained for longer <u>than seven (7)</u>

 <u>yearsperiods of time or permanently</u> if <u>athe</u> Student was <u>separated or</u> blocked from enrollment, <u>if</u>

 <u>a student was separated from found responsible for a significant violation of the University, if a student Student Honor Code</u>, has a <u>Service Indicatorhold</u> or <u>a transcriptan</u> overlay, or <u>wherein</u>

 <u>situations that may result in future litigation is imminent or ongoing.</u>

- 3. If during the year of Upon receipt of a request from a collegethe Student's graduation, the Student requests in writing that their conduct record be expunged, and the Student can demonstrate that he or university, professional school, she has applied to graduate program, employer, accrediting body, the record may be considered for expungement. If the determination is made to review the record, it may be considered for expungement provided the Student committed relatively minor Student Conduct Code violations and did not:
 - a. Violate the Student Honor Code;
 - b. Cause personal injury;
 - c. Cause significant property damage;
 - d. Commit a felony violation of a state controlled substance Law;
 - e. Disrupt the orderly operation of the University;
- f. Commit a violation of law related to firearms or other third party for weapons/explosives; or
- g. Rise to the student conduct records level of magnitude, or impact of violations described above in a-f.
 - 4. Criteria to be utilized for considering an expungement includes:
 - a. Any ongoing and/or uncompleted Sanctions;
 - b. Any ongoing contact restrictions;
- e. The graduation date of the requesting Student, after and/or of Reporting Person(s) associated with the case;
 - d. The present demeanor of the Student provides;
 - e. The conduct of the Student subsequent to the violation;

- f. The nature of the violation and the severity of any applicable privacy waiver, damage, injury, or harm resulting from it;
- g. Any other information that the Dean of Students or designee will provide information from records only when (1) violations resulted in a sanction of deferred suspension, suspension, or expulsion; (2)eonsiders pertinent to the decision.
- 5.3. Students are not entitled to have their Student conduct records expunged. This decision to review a Student has an Interim Restriction in place. In addition, conduct record and the decision to expunge a Student conduct record is at the sole discretion of the Dean of Students or designee will release records as required by Law. The decision to expunge or not expunge a disciplinary record is final and is not appealable.
- (11) Interim Restrictions <u>for Students</u>. The Dean of Students or designee determines if restrictions are warranted of a Student's <u>or Student Organization</u>, <u>or of a Student or Student</u> Organization's privileges, based upon an assessment of the safety of the University Community. There are three <u>(3)</u> categories of restrictions:
- (a) No contact directive -- which will prohibit, for a period of time or indefinitely, both (all) parties from communicating directly or indirectly with one another, or through intermediaries. Criteria includes:
- 1. A reasonable belief that further contact between two or more persons involved in the alleged interactions could result in perpetuation or escalation of undesirable behavior.
- 2. When used alone, a reasonable belief that no further restrictions are appropriate for the circumstances.

3. When used in conjunction with a limited access/activity directive or with an interim suspension, a reasonable belief that further restrictions are appropriate for the circumstances.

(To utilize either of the next two levels of response, there must be allegations of conduct that could reasonably cause harm to members of the University Community or property.)

- (b) Limited access/activity directive -- which will restrict, for a period of time, one, both, or all parties from being in specific buildings, specific locations, or from participating in specific activities, and/or restricting movement on campus and/or requiring the traveling of specific routes into and from campus locations. This will allow access to classes and instruction and other educational support while limiting when and/or where access is granted. Criteria includes:
- 1. <u>Allegations allegations</u> of conduct that could reasonably cause harm to members of the University Community or property.
- 2. An reasonable belief that further contact between two or more persons involved in the alleged interactions could result in perpetuation or escalation of behavior.
- 3. An reasonable belief that a Student's continued unlimited access to campus or campus activities could endanger one or more other person's health, safety, or property and that limited access will ameliorate safety for the University Community.
- 4. An reasonable belief that access to classes and instruction and other educational support is within the best interests of the University and the Student.
- 5. An reasonable belief that no further restrictions are appropriate for the circumstances.

- 6. <u>Anan</u> opportunity to appeal to the Vice President for Student Affairs (VPSA) or designee within three (3) <u>ClassBusiness</u> Days to request modification or nullification.
- (c) Interim suspension which will prohibit access to campus and <u>may</u> preclude access to classes, instruction, and other educational support. Criteria includes:
- 1. <u>Allegations allegations</u> of conduct that could reasonably cause harm to members of the University Community or property.
- 2. An reasonable belief that a Student's continued access to campus or campus activities could endanger one or more other person's health, safety, or property and that prohibiting access will ameliorate safety for the University Community.
- 3. An reasonable belief that further contact between two or more persons involved in the alleged interactions could result in perpetuation or escalation of behavior.
- 4. An reasonable belief that limited access is not a viable option under the circumstances.
 - 5. Aa requirement of a Student conduct Hearing as soon as practicable.
- 6. Recommendation to, and final approval, by the Associate Vice President for Student Affairs (Assoc. VPSA).
- 7. <u>Anan</u> opportunity to appeal to the VPSA or designee within three (3)

 <u>ClassBusiness</u> Days to request modification or nullification.
- 8. If a Student is placed on interim suspension and the Student is subsequently found not responsible for the violation, the University will:
- a. Correct any record of the change in enrollment status in the Student's permanent records and reports in a manner compliant with Laws and Regulations; and

- b. Refund to the Student a pro rata portion of any charges for tuition and out-of-state fees, as appropriate, if the interim suspension of the Student's ability to attend classes lasts for more than ten (10) ClassBusiness Days.
- (d) Monitoring of Interim Restrictions. The Dean of Students or designee will monitor any interim restriction placed upon a Student-or Student Organization, and if information comes to light during an Investigation or Student Conduct Process that warrants a different interim restriction or the removal of an interim restriction, that action shall be taken as soon as is reasonably possible.
- (12) Interim Restrictions for Student Organizations. The Dean of Students or designee determines if interim restrictions are warranted of a Student Organization's privileges, in their sole discretion, based on prior conduct history and the nature of the allegation. Student Organizations subject to interim restrictions will have an opportunity to appeal to the VPSA or designee within three (3) Class Days to request modification or nullification. There are three (3) categories of restrictions:
- (a) No contact directive which will prohibit, for a period of time or indefinitely, specific parties from communicating directly or indirectly with one another, or through intermediaries.
- (b) Limited access/activity directive which may include a loss of certain privileges and access to certain campus resources and services, for a period of time, including, but not limited to, the use of University space, participation in University programs, activities, events and services, and registration of gatherings and events.
- (c) Interim suspension which will include a loss of all privileges and access to all campus resources and services, for a period of time, including, but not limited, to the use of

University space, participation in University programs, activities, events and services, and registration of gatherings and events.

- (d) Monitoring of Interim Restrictions. The Dean of Students or designee will monitor any interim restriction placed upon a Student Organization, and if information comes to light during an Investigation or Student Conduct Process that warrants a different interim restriction or the removal of an interim restrictions, that action shall be taken as soon as is reasonably possible.
- (13) Conflict Resolution. Consistent with the <u>University's</u> educational mission, <u>formal</u> and informal of the Student Conduct Code, Conflict Resolution services are available to help Students manage and resolve <u>peer conflicts and alleged</u>. The Director of Student Conduct <u>Code violations</u>. While notand Conflict Resolution or designee, may refer reported incidents through Conflict Resolution services. Not all cases are appropriate for Conflict Resolution, the Director of Student Conduct and Conflict Resolution or designee at their discretion, may refer Students to Conflict Resolution services.

Students may also request. Informal and formal Conflict Resolution services if they think their case has the potential to be resolved through this method. Before any incident may be referred to Conflict Resolution services at a Student's request, a Student Conduct Administrator will determine the following: (a) whether all peopleare available to Students impacted by peer conflicts or misconduct. All persons personally involved in and directly impacted by the conflict or allegationsmust agree to Conflict Resolution; (b) whether the Director of Student Conduct and Conflict Resolution or designee has determined that the case is appropriate for Conflict Resolution; and (c) whether the case is likely to resolve through Conflict Resolution. attempt resolution through any of the Conflict Resolution services. Participation in Conflict

Resolution these services is voluntary and may or may not result in resolution. If Conflict Resolution services do result in an agreement or resolution, that . Mutually agreed upon resolutions may not be appealed. If resolution is final and cannot be appealed.

(14) Title IX Sexual Harassment

The University complies with the Department of Education Regulation 34 C.F.R. § 106, Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance, as amended and effective August 14, 2020, also known as Title IX, 20 U.S.C. §§1681-1688 (2020). The University will respond to allegations of sexual harassment consistent with Title IX's prohibition against sex discrimination in education programs and activities, as outlined in the University of Florida's Gender Equity Policy. Alleged incidents of Title IX Sexual Harassment will be addressednot achieved through the procedures outlined in the University's Gender Equity Policy. Alleged incidents of sexual misconduct that do not meet the conditions of Title IX Sexual Harassment outlined in the University's Gender Equity Policy are subject to the Student Conduct Process outlined in this Regulationan attempt at Conflict Resolution and the matter involves a pending Student Conduct Code allegation, the Accused Student has the choice of accepting responsibility and attending an Administrative Review, or proceeding to a Hearing.

Conflict Resolution services may be used in the Student Conduct and Conflict Resolution process in the following ways:

(a) Conflict Coaching. Conflict coaching is a one-on-one consultation process designed to assess and develop conflict management strategies or talk about current and ongoing conflicts. These meetings empower Students to consider their approach to Conflict

Resolution, to generate solutions to existing conflict they may be experiencing, and/or to prepare for mediations.

- (b) Facilitated Dialogue. A facilitated dialogue is a structured conversation between Students to share their thoughts in a neutral, private space. Facilitated dialogues allow ideas and opinions to be shared to work toward a mutual understanding of one another's beliefs.
- (c) Mediation. Mediation is a structured conversation between Students to talk about their experiences related to conflict, explore mutually agreeable solutions, and negotiate an agreement that resolves the dispute. This conversation is led by a trained, neutral third-party Mediator.
- (d) Restorative Justice Practices. Restorative justice practices provide an opportunity for community members to address harmful behavior in a process that explores community standards, impacted party's feelings, and impacted party's responsibilities. This resolution option requires necessary engagement of University of Florida Students, Faculty, staff, and community members in a circle setting.

Services are free, private, and completely voluntary with recommendation from Student Conduct and Conflict Resolution. These services can be accessed for a variety of types of conflict, including roommate disputes, disagreements within or between Student Organizations, and other types of Student interpersonal conflict. Cases involving Student Honor Code violations, sexual misconduct, interpersonal violence, or other serious violence may not be eligible for Conflict Resolution services at the discretion of the Director of Student Conduct and Conflict Resolution or designee.

A committee created by the Vice President for Student Affairs or designee, which must include Student representatives, will review this Regulation at least every three (3) years.

Authority: BOG Regulation 1.001 and 6.0105-

History: New 6-07-18₂; Amended 8-27-20,______.

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

- 2.005 Use of University Facilities; Outdoor Areas.
- (1) Events in outdoor areas of the campus are to be scheduled and approved as follows:
- (a) Academic areas are outdoor areas near classrooms, libraries, laboratories, hospitals, auditoriums and research facilities. Non-academic use of such areas is to be scheduled through—the Office of Student Activities and Involvement at the J. Wayne Reitz Union in the case of student groups and organizations or the Office of the Vice President for Business Affairs for all—other persons, groups, and organizations. Areas near hospitals and clinical facilities are—unavailable for non-academic uses.
- (b) Union areas and outdoor areas adjacent to the J. Wayne Reitz Union building must be scheduled through the Director of the Union and approval must be secured through the Office of Student Activities and Involvement for student groups and organizations or the Office of the Vice President for Business Affairs for all other persons, groups, and organizations.
- (c) Residential areas are outdoor areas in the vicinity of residence halls, fraternities, sororities and villages. Events in each of these areas are scheduled by the residential unit.
- (d) Facilities of the Department of Recreational Sports, including university athletic facilities, playing fields, stadiums, courts, and so forth, are considered instructional space and must be scheduled pursuant to University of Florida Regulation 2.008; however, the Department of Recreational Sports may schedule the use of facilities under its management in accordance with policies located on its website at http://recsports.ufl.edu/.
- (2) Approval and scheduling of events in the above areas must be consonant with

 University of Florida Regulation 2.004, including the assessment of fees, and other University

 regulations. As a condition of approval, the University may impose safety, security and liability

requirements consistent with the use to be made of the area, and the area to be used must be adequate for the nature of the event.

- (3) Informal Use of Outdoor Areas. Outdoor areas on the campus which are not committed to a specific use or assigned to a specific University agency, such as the Plaza of the Americas, are free to be used for informal, unscheduled and unamplified expressions of opinion or musical events by persons participating as individuals without registration or approval. These impromptu speakers or musical performers will be held responsible for orderly behavior and for no disruption of academic activities, scheduled public functions, or pedestrian or other traffic, and they must follow University regulations governing those areas.
- (4) Formal Use of Outdoor Areas. Events using public address systems or other electrical amplification and events involving a substantial outdoor area of the campus are permissible when approved and scheduled as set forth in subsection (1) above, provided:
- (a) They are sponsored by a University group or organization or a University related group or organization. Generally, University persons and non-university persons, groups and organizations will not be permitted formal use of outdoor areas. Registered student groups—should-submit an event permit on Gator Connect, available through the Office of Student—Activities and Involvement at https://www.studentinvolvement.ufl.edu/.
- (b) They do not interfere with academic processes, previously scheduled events, other campus activities, or pedestrians or other traffic.
 - (5) Electrically amplified sound in outdoor areas.
- (a) Any use of sound amplification equipment on the outdoor areas of campus must have prior approval through the Office of Student Activities and Involvement for student groups and organizations or the Office of the Vice President for Business Affairs for all other persons, groups or organizations.

- (b) Events held in the outdoor areas of campus must maintain a reasonable sound level.

 A reasonable sound level is defined as a level which (i) falls within the permissible limits of City
 of Gainesville, Florida, Code of Ordinances, Ch. 15 (2016), and (ii) meets the communication
 needs of the event without excessive penetration to the adjacent areas. A recommended procedure
 for monitoring the sound level as the designation of an individual by the sponsoring group or
 organization to visit the peripheral buildings, render a value judgment and adjust the amplifiers if
 necessary.
- (c) In academic areas, the use of electronically amplified instruments will generally notbe allowed on class days (Monday through Friday). If a public address system is permitted inthese areas, the sponsoring group or organization is responsible for maintaining a reasonable—sound level as mandated by the City of Gainesville Florida noise ordinance.

Authority: BOG Regulation 1.001.

History New 9-29-75, Formerly 6C1-2.05, Amended 7-27-98, 6-24-99, 7-8-01, Formerly 6C1-2.005, Amended 4-1-16.

REGULATIONS OF THE

UNIVERSITY OF FLORIDA

2.008 Use of University Facilities; Instructional Space; Use of P.K. Yonge Developmental Research School Facilities and Grounds.

- (1)—All instructional space with the exception of that located in the J. Hillis Miller-Health Center, and the P.K. Yonge Developmental Research School is under the assignment and control of the Office of the University Registrar. Such facilities may be used for private functions of or sponsored by University groups or organizations, and by private functions of or sponsored by University related groups and organizations. Such groups or organizations may be required to pay in advance the incidental and incremental cost of such usage. Permission for the use must be obtained from the Office of the Vice President for Business Affairs, which will forward the approved request to the Office of the University Registrar. Permission for the use of instructional space in the J. Hillis Miller Health Center must be obtained from the Office of the Senior Vice-President for Health Affairs. Permission for the use of space at the P.K. Yonge Developmental Research School must be obtained from the Director of the P.K. Yonge Developmental Research School. Permission for such use shall be granted only when the use is consistent with the academic use of the facilities and any restrictions applicable to the particular space.
- (2) Public functions sponsored by University groups and organizations or University related groups and organizations may also be held in instructional space when other facilities are unavailable and when such use has been authorized by the appropriate authorities and under the conditions stated above.
 - (3) Instructional space will not be available for non-university persons, groups or

organizations.

(4) The following policies also govern the use of the facilities and outdoor areas of the P.K. Yonge Developmental Research School:

(a) Loitering on the P.K. Yonge Developmental Research School Campus is prohibited between the hours of 6:30 p.m. and 7:00 a.m. Monday through Thursday and between the hours of 6:30 p.m. on Friday and 7:00 a.m. on Monday. This regulation will be enforced by the University Police Department and any other appropriate authority.

(b) The above provision does not prohibit use of the school premises within the above times for the following purposes:

1. Use of school grounds and facilities by P.K. Yonge students under the supervision of an approved sponsor, faculty member and/or coach.

2. Use of the tennis courts by University and P.K. Yonge Developmental Research School students and faculty.

3. Use of the softball, baseball, and athletic fields when special permission has been granted.

4. Use of the school grounds and facilities under terms specified in a written authorization issued by the Director of P.K. Yonge prior to use of the facilities.

Authority: BOG Regulation 1.001.

History-New 9-29-75, Formerly 6C1-2.08, Amended 7-27-98, Formerly 6C1-2.008, Amended 2-11-16 (technical changes only).

REGULATIONS OF THE UNIVERSITY OF FLORIDA

- 2.012 Use of University Facilities and Services; Charges for Use and Admissions-Charges.
- (1) Fees for use of University facilities, including the use of outdoor areas as permitted under University of Florida Regulation 2.005, shall be charged as follows:
- (a) Fees shall be charged to non-university groups, organizations and persons for the use of University facilities. The fees shall be set by the authority controlling the facility and approved by the President or President's designee. Any additional services required by the user will be billed separately to the user by the department performing the service.
- (b) University groups, organizations or persons and University affiliated persons, organizations, and groups shall be charged for the direct cost of services they require in the use of University facilities.
- (2) Borrowing fees shall be charged for University of Florida library users who have no University of Florida affiliation.
- (a) The fee shall be \$40.00 for four (4) months or \$100.00 for one (1) year for the general public. Members of the University of Florida Alumni Association or the Howe Society (the Friends of the University of Florida Libraries Special Collections) shall pay \$30.00 for four (4) months or \$75.00 for one (1) year.
- (b) Individuals paying this fee will be entitled to borrow up to ten (10) items for a 3three (3)—week loan period, but shall not be entitled to remote access to databases licensed by the Libraries—or the use of interlibrary loan.
- (3) The President or designee shall have the authority to waive or reduce any fee authorized under subsections (1) and (2) above if the President or designee determines that such action furthers specific University program(s) and the University's mission.
- (4) Photographic reproductions (negatives, slides, and prints) of materials owned by the University of Florida Libraries are made only upon payment of the appropriate fee. The requestor must obtain all necessary permissions for the copying, including copyright permissions, and must indemnify the University of Florida for any claims arising from the reproduction. The "George A. Smathers Libraries, University of Florida Reproduction and Use of Images Fee

Schedule" (5-01) and "George A. Smathers Libraries, University of Florida Policy on Reproduction and Use of Images" (5-01), which must be signed by the requestor, can be obtained from the George A. Smathers Libraries.

- (5) Certificate of eligibility processing and enrollment status verification fee. A charge of \$50.00 shall be assessed in each fall and spring semester to a student requiring processing of a certificate of eligibility for F-1 or J-1 student status and enrollment status verification services.
- (6) Transcript charge for Non-Students. A charge of \$12.00 shall be assessed for each transcript ordered by a person who is not a currently enrolled student.
 - (7) Admission Charges.
- (a) Student groups and organizations permitted to use University facilities may charge an admission fee or provide for voluntary contributions only pursuant to University of Florida Regulation 4.006.:
- (b) Except pursuant to a contract with the University, other groups, organizations, and persons permitted to use University facilities may charge an admission fee or provide for a voluntary contribution under the following conditions:
- 1. The fee or contributions are in an amount that covers the costs of the event only,
- 2. The net proceeds are for a charitable institution or organization as defined in §501(c)(3) of the Internal Revenue Code of the United States.
- 3. A financial accounting is required to be made to the University in the case of either subparagraph 1. or 2. above.
- (c) Fees and contributions may not be collected by groups, organizations or persons allowed to use instructional space.
- (8) The Anatomical Board promulgates a schedule of fees for its services. Fees are reviewed annually, are based on expenses, and are adopted by members of the Anatomical Board at its annual meeting. Information on current fees is available at the Office of the State—Anatomical Board. equests may be made to the Anatomical Board at CG-96, J. Hillis Miller—Health Science Center, University of Florida, Gainesville, Florida 32610 or email to—anatbd@dean.med.ufl.edu.

Authority: BOG Regulation 1.001.

History: New 9-29-75, Formerly 6C1-2.12, Amended 6-28-98, 6-24-99, 7-8-01, 3-12-03, 7-7-05, 3-14-08, Formerly 6C1-2.012, Amended 6-8-12.

RULES OF

UNIVERSITY OF FLORIDA

6C1-2.0161 University of Florida; Banner Policy.

- (1) The hanging and draping of banners on the interior or exterior of campus buildings or on poles installed specifically for such support is authorized under the following conditions:
- (a) Only University departments and officially registered University organizations are allowed to hang or drape banners on campus.
- (b) Organizations planning to hang or drape banners on campus must file a banner permit application entitled "Banner Permit Application, Form: SAC-2, Rev. 10-15-02," and incorporated herein by reference, with the Student Activities Center in the J. Wayne Reitz-Union for approval by the Director of Student Activities. A copy of this form can be obtained from the Office of Student Activities Center, 300 J. Wayne Reitz Union, Gainesville, Florida. The Director or the Director's designee will review the application to determine whether the proposed banner complies with University of Florida Rules, including, but not limited to, Rules 6C1-2.019 and 4.016, F.A.C. Permits will be approved no more than twenty (20) days before the day the banner is to be hung. Organizations may reserve a maximum of five (5) days of banner space per month.
- (2) Banners to be hung outdoors from banner poles must meet the following specifications:
 - (a) Banners must be hung from the banner poles using the existing ropes and hardware.
 - (b) Banners must be no more than 10 feet wide and no more than 8 feet tall.

- (c) Banners must be constructed of heavy cloth, heavy vinyl or heavy plastic, properlysewn and vented. Banners must have grommets to attach the banners using the clips provided.
- (d) Banners should not touch the ground. Any banner that is too large or is sagging will be removed. (Note: This is a safety precaution so that individuals cannot hide behind the banners.)
- (e) All rope guys must be marked to be visible day and night. No wire guys shall be used.
- (3) Banners to be hung indoors or on the exterior of a building, in addition to being approved in accordance with paragraph (1) (b) above, must meet the physical specifications setforth by the dean, director or other University official responsible for the building in which the banner is to be hung. Such officials may prohibit the hanging of all banners in or on the building.
- (4) Banners that are hung at fraternity and sorority houses must be no more than 100 square feet in total area.
- (5) No banners may be placed on building roofs, over a campus road or roadway or placed in such a manner as to impede the normal passage of foot or bicycle traffic.
- (6) No banner shall be placed under or in the immediate area of utility (electrical or telephone) lines or facilities.
- (7) The organization requesting approval of the banner must defray its cost and be responsible for the erection and removal of, and any damage caused by, such banner.
- (8) Advertising or sponsorship involving commercial, off-campus vendors inconsistent with University policy will not be allowed. Refer to Rule 6C1-4.006, F.A.C.

Specific Authority 1001.74(4) FS.

Law Implemented 1001.74(6), (10), (19) FS.

History New 4-27-88, Amended 5-28-92, 9-16-99, 7-8-01, 6-3-03.

RULES OF

UNIVERSITY OF FLORIDA

6Cl-2.0163 Finance and Administration; Chalking Policy

- (1) Chalking is defined as the use of a water-soluble substance or substance washable by rain that is for the purpose of writing or drawing on concrete/paved sidewalks.
- (a) Chalking on campus is limited to recognized student organizations and University of Florida departments, and is permitted ONLY on the paved South Terrance of the Reitz Union.
- (b) Use of this area for chalking by student groups and University departments mustbe scheduled through the Director of the Reitz Union or his or her designee.
- (c) Chalking must be done in open portions on the paved South Terrace that can be directly washed by rain.
- (d) The substance used for chalking must be water-soluble and easily washable by water or rain.
- (e) Chalking is prohibited on walls, benches, glass, windows, doors, pilings, columns, planters, painted surfaces, trees, traffic signs, light posts, emergency call phones, fixtures, newsstands, ad dispensers, utility boxes, private property, and any other objects, except the area designated above.
- (f) Chalking must be clear and legible, must bear the name of the student-organization or department, and must provide current contact information.
- (g) Chalking making reference to the use, sale, consumption or distribution of alcohol or illegal drugs is prohibited.
- (h) The Office of Student Activities will notify the students, student organizations, and University departments responsible for improper chalking and shall provide the said party a

24-hour period to clean up any chalking in violation of this rule. Should the offending party notremove the chalking within the 24-hour period, the party will be billed for all costs associated with the clean-up of the chalk.

(i) The Office of the Vice President for Finance and Administration will notify persons and groups other than those listed above that are responsible for improper chalking and will require that party to clean up the chalking done in violation of this rule within 24 hours.

Should the offending party not remove the chalk within the 24-hour period, that party will be billed for all costs associated with the clean-up of the chalk.

Specific Authority 1001.74(4) FS.

Law Implemented 1001.74(6), (10), (19) FS.

History-New 6-3-03.



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS, AND INTERNAL AFFAIRS ACTION ITEM GGRIA3 December 4, 2020

SUBJECT: Amendments to University of Florida Board of Trustees Bylaws

BACKGROUND INFORMATION

The Board of Trustees bylaws have been updated to align with the current public comment process and technological upgrades to the process.

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations, and Internal Audit is asked to approve GGRIA3, amended UF Bylaws for recommendation to the Board of Trustees for approval on the Consent agenda.

SIGNIFICANT POLICY ISSUES FOR COMMITTEE TO CONSIDER

| Board of Governors approval is not required. | | | | |
|--|--|--|--|--|
| Supporting Documentation Included: | See attached lined changes. | | | |
| Submitted by: Amy Hass, Vice Preside | ent and General Counsel | | | |
| Approved by the University of Florida | a Board of Trustees, December 4, 2020 | | | |
| | | | | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | | | |

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UNIVERSITY OF FLORIDA BOARD OF TRUSTEES BYLAWS

ARTICLE I STATEMENT OF PURPOSE

The University of Florida (the "University") Board of Trustees is vested by law with all the powers and authority to effectively govern and set policy for the University of Florida in accordance with the laws of the State of Florida and with regulations and rules of the Board of Governors. In order to more effectively discharge its responsibilities and duties in connection therewith, the University of Florida Board of Trustees hereby adopts these Bylaws.

ARTICLE II THE BOARD

Section 2.1 CORPORATE NAME - The Board of Trustees is a public body corporate called "the University of Florida Board of Trustees," with all the powers of a body corporate under the laws of the State of Florida. The Board of Trustees shall be hereinafter referred to as the "Board."

Section 2.2 COMPOSITION - The Board is composed of thirteen (13) Trustees, six (6) of whom shall be appointed by the Governor and five (5) of whom shall be appointed by the Board of Governors. The other two (2) members shall be the President of the University of Florida Student Government and the Chair of the University of Florida Faculty Senate. The appointed members shall be confirmed by the Senate of the State of Florida.

Section 2.3 POWERS AND DUTIES OF THE BOARD - The Board shall serve as the governing body of the University of Florida. It shall select the President of the University of Florida to serve at the pleasure of the Board and shall hold the President responsible for the University's operation and management, performance, its fiscal accountability,

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and its compliance with federal and state laws and regulations, including those of the Board of Governors and the Governance Standards adopted by the Board of Trustees in December 2018 (attached hereto and as amended from time to time). The Board shall have the authority to carry out all lawful functions permitted by the Bylaws, its Operating Procedures, its Governance Standards, Board of Governors regulations, or law. The Board may adopt regulations and policies consistent with the University mission, with law, and with the regulations of the Board of Governors, in order to effectively fulfill its obligations under the law.

Section 2.4 CORPORATE SEAL - The corporate seal shall be used only in connection with the transaction of business of the Board and of the University. The Corporate Secretary may affix the seal on any document signed on behalf of the corporation. Permission may be granted by the Corporate Secretary for the use of the seal in the decoration of any University building or in other special circumstances. The corporate seal of the Board shall be consistent with the following form and design:

ARTICLE III THE TRUSTEES

Section 3.1 TERM OF OFFICE - Trustees shall serve for staggered 5-year terms, as provided by law.

Section 3.2 REMOVAL – To the extent permitted by law, the Governor or the Board of Governors, whichever is the appointing authority, may remove a Trustee for cause. Unexcused failure to attend three (3) consecutive regular board meetings in any fiscal year shall be grounds for removal.

Section 3.3 VACANCIES - Vacancies shall be filled by appointment of the Governor or the Board of Governors, as appropriate under law, subject to confirmation by the Senate of the State of Florida.

Section 3.4 COMPENSATION - Trustees shall receive no compensation but may be reimbursed upon request for travel and per diem expenses as provided by Florida law and Board travel reimbursement policies.

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ARTICLE IV OFFICERS OF THE BOARD

Section 4.1 OFFICERS - The Officers of the Board shall be the Chair, Vice Chair, and President who serves as the Corporate Secretary, and any Assistant Secretary. The Chair and Vice Chair shall be Trustees. No other Board Officers shall be members of the Board.

Section 4.2 SELECTION - The Board shall elect its Chair and Vice Chair from the appointed members at its regular meeting immediately preceding July 1 in the year when the term of the incumbent is due to expire. Except as otherwise provided in these Bylaws, the incumbents of the Chair and Vice Chair shall each serve for two years beginning on the July 1st immediately following the June 30th when his or her predecessor's term expires, and may be reelected by a vote of two-thirds (2/3) of the Trustees then serving for one additional consecutive 2-year terms in accordance with section 1001.71(4), Florida Statutes.

Section 4.3 VACANCY DURING TERM - In the event of a vacancy in the position of Chair or Vice Chair prior to the expiration of the two-year term of the incumbent, the vacancy shall be filled as provided in this Section.

The Vice Chair then-serving, if any, shall fill the vacancy in and succeed to the position of Chair upon a vacancy in that position. If there is no Vice Chair then serving, the Board shall elect a successor to serve as Chair. The Board shall elect a new Vice Chair to fill a vacancy in that position. The person filling a vacancy in the unexpired term of Chair or Vice Chair shall serve for the following period:

- (a) If the vacancy occurs during the first six months of the first year of any two-year term, the person filling the vacancy shall serve for the remainder of the unexpired term.
- (b) If the vacancy occurs during the second six months of the first year of any twoyear term, the person filling the vacancy shall serve for the remainder of those

- six months, plus two years beginning on the July 1 first occurring after the vacancy.
- (c) If the vacancy occurs in the first six months of the second year of any term, the person filling the vacancy shall serve for the remainder of the second year of the unexpired term, plus one year beginning on the July 1 first occurring after the vacancy.
- (d) If the vacancy occurs in the second six months of the second year of any term, the person filling the vacancy shall serve for the remainder of those six months, plus two years beginning on the July 1 first occurring after the vacancy.

In the event the filling of a vacancy during an unexpired term requires election of a successor, the Board shall elect the successor at a special meeting called by the Chair or Corporate Secretary for that purpose or at the next regular Board meeting, whichever occurs first.

A vacancy shall be deemed to occur upon the incapacity, death, resignation or removal of the incumbent. Incapacity (which includes abandonment) shall be deemed to occur when, for any reason and regardless of intent, the incumbent does not or cannot fulfill the material duties of the position for 30 consecutive days or 45 days total in any six- month period, unless the Board resolves not to treat such circumstances as a vacancy. Incapacity shall also occur upon the incumbent's acknowledgement in writing that he or she intends not to perform, or is or will be unable to perform, the material duties of the position for at least either of such period of days, unless the Board resolves not to treat such circumstances as a vacancy. Removal shall be deemed to occur upon the exercise of a legal right to remove the incumbent. The Corporate Secretary shall notify all Trustees upon the occurrence of a vacancy. If questioned, the Board's determination, made at a special meeting held for that purpose within 14 days after the Corporate Secretary's notice, shall be binding.

Section 4.4 CHAIR - The duties of the Chair shall include presiding at all meetings of the Board, calling special meetings of the Board, appointing committee chairs, determining the composition of all Board committees, attesting to actions of the Board, and otherwise

serving as spokesperson for the Board. The Chair shall perform such duties in consultation with the University President.

Section 4.5 VICE CHAIR - The duty of the Vice Chair is to act as Chair during the temporary absence, incapacity or disability of the Chair (not meeting the definition of a vacancy) and to succeed the Chair in the event of a vacancy during the unexpired term of the Chair. The Vice Chair may or may not be elected to succeed the incumbent at the expiration of the incumbent's full two-year term as Chair.

Section 4.6 UNIVERSITY PRESIDENT - The University President shall serve as the Chief Executive Officer of the University. The University President shall be responsible for the operation and administration of the University, including efficient and effective budget and program administration, leading the University to accomplish its education missions and goals, monitoring educational and financial performance, consulting with the Board in a timely manner on matters appropriate to its policy-making and fiduciary functions, and serving as the University's key spokesperson. The President shall have the authority to execute all documents on behalf of the University and the Board consistent with law, the Governance Standards, and the best interests of the University.

Section 4.7 CORPORATE SECRETARY - The University President shall serve as Corporate Secretary of the Board, and in the capacity of Corporate Secretary, shall be responsible for giving notice of all meetings of the Board and its committees, setting the Agenda and compiling the supporting documents for meetings of the Board in consultation with the Chair, recording, posting within 2 weeks after a board meeting, and maintaining the minutes of any Board or committee meeting, including a record of all votes cast, in accordance with sections 286.011(2) and 1001.71(5), Florida Statutes, executing or attesting to all documents which have been executed by the Board, and shall be custodian of the Corporate Seal. The Corporate Secretary may designate one or more individuals to serve as Assistant Secretary(ies) to the Board.

ARTICLE V COMMITTEES

Section 5.1 COMMITTEES - The Board shall establish standing and ad-hoc committees, as it deems appropriate to discharge its responsibilities. The Board Chair shall appoint members of committees and their chairs. Each committee shall consist of no less than three members. Members of committees shall hold office until the appointment of their successors. Any vacancies on the standing committees shall be filled by appointment of the Board Chair. Unless specifically delegated or as otherwise provided in these Bylaws, authority to act on all matters is reserved to the Board and the duty of each committee shall be to consider and to make recommendations to the Board upon matters referred to it. Each committee shall have a written statement of purpose and primary responsibilities as approved by the Board. The Chairs of all committees shall perform their duties in consultation with the University President (or designated administrative liaison(s)ee).

Section 5.2 AD-HOC COMMITTEES - Ad-hoc committees shall be appointed by the Board Chair upon authority of the Board with such powers and duties and period of service as the Board Chair may determine, provided that no ad-hoc committee shall be created to act upon any matter appropriate to be acted upon by a standing committee. The Chairs of any ad-hoc committees shall be appointed by the Board Chair and shall perform their duties in consultation with the University President.

Section 5.3 QUORUM – A quorum of any committee for the conduct of business shall be a majority of members then serving on the committee, and any committee so convened may act by majority vote of the members in attendance.

ARTICLE VI

All meetings of the Board and its committees shall be open to the public at all times, and no resolution, regulation, or other formal action shall be considered binding except as taken or made at such meeting in accordance with section 286.011, Florida Statutes, unless the matter being discussed falls within the provisions of law allowing closed

sessions. Notwithstanding any other provision of these Bylaws, and except to the -extent a waiver is prohibited by Florida law, any infirmity in notice or other procedure relating to the calling or conduct of a meeting or particular business, shall be deemed waived by any participant in the relevant meeting who does not expressly object on the record to the infirmity at the beginning of the meeting. At the discretion of the Chair, any member of the Board may participate in any meeting by teleconference or other technology allowing all participants in the meeting to hear and be heard by one another and allowing the public attending the meeting to hear all participants.

Section 6.1 REGULAR MEETINGS - There shall be not less than four (4) regular meetings a year as the Board may determine. A regular meeting means business meetings and Board retreats held at regular intervals; provided that time shall be made available when needed for the conduct of business at or around the time of any retreats. These meetings shall be held on such dates and at such times as the Board may determine. The month of a regular meeting may be changed by an affirmative vote of a quorum of the Board; the time and date may be changed by the Chair upon sending notice to all Trustees at least five days in advance.

Section 6.2 SPECIAL MEETINGS - Special meetings of the Board may be held at the call of the Board Chair, the Corporate Secretary, or upon request of seven (7) Trustees. The Corporate Secretary shall send written notice of such special meeting to all Trustees, along with a statement of the purpose of the meeting, at least 48 hours in advance. No matter may be considered at any special meeting that was not included in the call of that meeting except by an affirmative vote of a majority of the Trustees at the meeting.

Section 6.3 QUORUM - A quorum for the conduct of business by the full Board shall consist of seven (7) Trustees. A quorum having been established, no business shall be transacted without a majority vote of all Trustees present except as otherwise provided in these Bylaws.

Section 6.4 RULES OF PROCEDURE - Except as modified by these Bylaws or any other specific resolution, rule or policy enacted by the Board, Robert's Rules of Order Newly Revised, as in effect at the time, shall constitute the rules of parliamentary procedure applicable to all meetings of the Board and its committees.

Section 6.5 APPEARANCES BEFORE THE BOARD – Individuals or representatives of groups who desire to appear before the Board regarding any item being considered on a meeting agenda of the Board of Trustees must submit their requests to_ufbot@ufl.edu, specifying the agenda item about which they wish to speak. Such a request, along with any supporting documentation, must be submitted at least three-two (32) working days prior to the start of the meeting. The President, in consultation with the Board Chair (and legal counsel as needed), will determine whether the item will be heard and when it will be heard. There will be a 5-minute-time limit on any presentation for public comment, which will be set by the Corporate Secretary or Assistant Secretary and shall not exceed 5-minutes. The Board Chair may decline to hear any matter determined by the President and Chair not to relate to a particular agenda item or that is outside the Board's jurisdiction, or because it is not practicable for a particular meeting.

ARTICLE VII MISCELLANEOUS

Section 7.1 CONFLICT OF INTEREST POLICY - Trustees stand in a fiduciary relationship to the University. Therefore, Trustees shall act in good faith, with due regard to the interests of the University, and shall comply with the fiduciary principles and Florida law set forth in the Code of Ethics for Public Officers and Employees-. The Board shall adopt a written conflict of interest policy, to be included in the Board-Operating-Operating-Operating-Operating-Operating-Operating-Operations-

Section 7.2 INDEMNIFICATION - Whenever any civil (including administrative) or criminal action or threat of action has been asserted against a current or former Trustee or President for any act or omission arising out of and in the course of the performance

of his or her University duties and responsibilities, the University shall defray all costs of defending such action or threat of action, including reasonable attorney's fees and expenses together with costs of appeal, and shall save harmless and protect such person from any financial loss resulting from the performance of his or her duties and responsibilities unless (a) indemnification is prohibited by law, or (b) the Board determines by a vote of at least two-thirds (2/3) of its members then serving that said individual acted in bad faith or with willful misconduct. Claims based on such actions or omissions may be settled prior to, during, or after the filing of suit or commencement of other formal process thereon. The Board may arrange for and pay the premium for appropriate insurance to cover all such losses and expenses. University duties and responsibilities shall include service to other entities, including service on affiliate -boards or committees, where such service is assigned, required or requested by the University or is due to University responsibilities or roles. Nothing in this Section shall waive or derogate from the application or protection of insurance, or of sovereign or other immunity under any law or constitution. Any available insurance and immunity shall provide primary protection. However, indemnification under this Section shall be provided to an affected current or former Trustee or President who qualifies for indemnification under this Section when he or she is not promptly or adequately protected by insurance or immunity on the following condition. The indemnified person shall first agree in writing to use best reasonable efforts to provide, to the extent possible, for the University to obtain the benefit of the indemnified person's right to insurance coverage or other protection, whether by assignment, cooperation, subrogation or other means.

Section 7.3 LIMITATION OF LIABILITY - The Board is a public body corporate primarily acting as an instrumentality or agency of the state pursuant to Florida law for purposes of sovereign immunity.

Section 7.4 AMENDMENTS - These Bylaws may be amended at any regular meeting of the Board by the affirmative vote of not less than two-thirds (2/3) of the members of the Board then serving, provided that notice of any proposed amendment including a draft thereof shall have been filed in writing with the Corporate Secretary and a copy of

the draft shall have been <u>electronically</u> mailed to each Trustee <u>or posted in the online</u> <u>Board database</u> at least ten (10) days prior to the meeting at which the amendment is to be voted upon.

Section 7.5 SUSPENSION OF OPERATING PROCEDURES - Any provision of these Bylaws may be suspended in connection with the consideration of a matter before the Board by an affirmative vote of not less than two-thirds (2/3) of the members of the Board then serving.

Section 7.6 PROXIES - The use of proxies for purposes of determining a quorum, for voting, or for any other purposes is prohibited.



COMMITTEE ON GOVERNANCE, GOVERNMENT REALTIONS, AND INTERNAL AFFAIRS ACTION ITEM GGRIA4 December 4, 2020

SUBJECT: Committee Charter Revisions

BACKGROUND INFORMATION

The State University System Florida Board of Governors (BOG) Regulation 4.002(2) requires the Audit and Compliance Committee Charter (Charter) be reviewed and approved by the Board of Trustees, at least every three years and as deemed necessary for consistency with applicable BOG and university regulations, professional standards, and best practices. Accordingly, the Charter was reviewed and updated to provide clarity regarding the responsibilities and duties of the Audit and Compliance Committee for financial reporting and disclosure, internal audit and compliance oversight. A copy of the approved charter and any subsequent changes shall be provided to the Board of Governors.

The Committee on Academic, Faculty, Student Affairs and Experience and Marketing, Public Relations and Strategic Communications have been combined. This is consistent with a unified strategy to advance the University's reputation with a full range of stakeholders. The new combined Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications has endorsed the changes.

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations, and Internal Affaris is asked to approve the proposed revisions to the Committee on Audit and Compliance and Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications charters. Upon approval by the Committee on Governance, Government Relations, and Internal Affairs the Board of Trustees will be asked for its approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governor's approval is not required. Submission to the Board of Governors of the new committee charter is required after approval by the Governance, Government Relations, and Internal Affairs Committee.

Supporting Documentation Included: Revised Audit and Compliance Committee Charters and Combined Academic, Faculty, and Student Success, Public Relations and Strategic Communications Committee Charter

| Submitted by: Amy Hass, Vice President and General Counsel | | | | |
|--|--|--|--|--|
| Approved by the University of Florida | Board of Trustees, December 4, 2020 | | | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | | | |

UNIVERSITY OF FLORIDA BOARD OF TRUSTEES

Board Operations

Adopted: June 13, 2003 Amended: December 15, 2017

AUDIT AND COMPLIANCE COMMITTEE CHARTER -DRAFT

Purpose

This Charter governs the operations of the Audit and Compliance Committee (the 'Committee'). The Committee assists the Board of Trustees (the 'Board') in fulfilling its oversight responsibilities relating to the following:

- Integrity of the university's financial statements
- The effectiveness of the university's internal controls over financial reporting
- Compliance with legal and regulatory requirements
- Effectiveness of the university's risk management program
- · Performance of the internal audit and compliance functions
- Other governance oversight responsibilities, as assigned by the Board

In accordance with the State University System Florida Board of Governors (BOG) Regulation 4.002(2), the Committee will review this Charter at least every three years and as deemed necessary for consistency with applicable BOG and university regulations, professional standards, and best practices and recommend the Charter to the Board of Trustees for approval.

Composition, Staff Liaisons, and Meetings

The Committee will be comprised of a minimum of four trustees. The Chairman of the Board shall appoint the members of the Committee. All members of the Committee should collectively have a working familiarity with the principles governing higher education and basic finance and accounting practices

University staff liaisons may include the Senior Vice President and Chief Operating Officer, the Vice President and General Counsel or designee, the Chief Audit Executive, and the Chief Compliance Officer.

The Committee will meet at least three times annually. Additional meetings may occur as necessary to discharge the Committee's responsibilities under this charter. The Committee will invite members of management, auditors, compliance professionals, and/or others to attend meetings and provide pertinent information, as necessary.

The quorum for the Committee will be a majority of the members.

Responsibilities and Duties

The Committee, in carrying out its responsibilities, will utilize flexible procedures in order to best react to changing conditions and circumstances. The Committee will take appropriate actions to monitor the overall organizational tone for quality financial reporting, sound business risk practices, compliance with applicable laws and regulations, policies, and ethical behavior.

In discharging its responsibilities, the Committee shall conduct or authorize investigations within its scope of responsibilities and is empowered to retain and compensate independent counsel, accountants, experts, and other advisors as it deems necessary.

The Committee shall make reports to the Board, as it deems necessary, to report Committee actions and other matters as required under this charter.

The following shall be the principal duties and responsibilities of the Committee. These matters are set forth as a guide with the understanding that the Committee may supplement them as appropriate.

Financial Reporting and Disclosure Responsibilities

University management is responsible for:

- The preparation, presentation, and integrity of the university's annual financial statements;
- The appropriateness of the accounting principles and reporting policies that are used by the university;
 and
- Establishing and maintaining internal control over financial reporting.

The Committee shall review and discuss the annual audited financial statements and any matters required to be communicated to the Committee by the independent auditors under professional accounting standards.

The Committee's review of the financial statements shall include: (1) major issues regarding accounting principles and financial statement presentations, including any significant changes in the university's selection or application of accounting principles, and major issues as to the adequacy and effectiveness of the university's internal control over financial reporting and any specific remedial actions adopted in light of significant deficiencies or material weaknesses; (2) discussions with management and the independent auditor regarding significant financial reporting issues and judgments made about the preparation of the financial statements and the reasonableness of those judgments; (3) consideration of the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the financial statements; (4) consideration of the judgment of both management and the independent auditor about the quality, not just the acceptability, of accounting principles; and (5) the completeness and clarity of the disclosures and notes in the financial statements.

The Committee shall make inquiries of university management and external auditors concerning the adequacy of the university's system of internal controls.

The Committee shall review, accept, and recommend to the Board approval of the university's annual financial statements and the report on internal controls and compliance.

Internal Audit Oversight and Responsibilities

The BOG Regulation 4.002 requires all universities to have an Office of Chief Audit Executive with oversight by the Committee. In fulfilling its oversight responsibilities, the Committee shall:

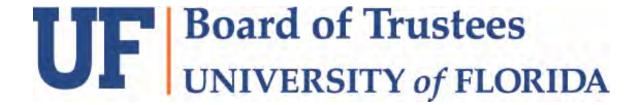
- Provide governance oversight of the Office of Chief Audit Executive, which acts as a point for coordination
 of and responsibility for activities that promote accountability, integrity, and efficiency in the operations of
 the university.
- Review with management and concur in the appointment, replacement, reassignment, and dismissal of the Chief Audit Executive.
- Review and approve the internal audit plan and any significant changes to the plan.
- Review and discuss with internal audit the scope, progress, and results of executing the internal audit plan.
- Receive reports on the status of significant findings and recommendations, and management's responses.
- Inquire of the Chief Audit Executive regarding any difficulties encountered during audits conducted, including any restrictions on the scope of work or access to required information or any lack of cooperation.
- Periodically review the internal audit charter, organization reporting relationship, activities, staffing, and credentials of the internal audit office for consistency with applicable BOG and university regulations, professional standards, and best practices.
- Review the annual performance of the internal audit function, including receiving periodic reports of any quality assurance and performance measure results.
- Review procedures for receiving complaints and concerns under an employee "hotline" or other direct access program.

 Obtain approval from the Florida Board of Governors prior to fully outsourcing the entire internal audit or investigative function.

Compliance Oversight and Responsibilities

The BOG Regulation 4.003 requires all universities to have an office of the chief compliance officer with oversight by the Committee. In fulfilling its oversight responsibilities, the Committee shall:

- Provide governance oversight for the university-wide compliance and ethics program, which acts as a
 point for coordination of and responsibility for activities that promote ethical conduct and maximize
 compliance with applicable laws, regulations, policies, and procedures.
- Coordinate with the President and appropriate Cabinet members in the designation of a senior-level administrator as chief compliance officer.
- Approve the compliance office charter and review, at least every three years, for consistency with applicable BOG and university regulations, professional standards, and best practices.
- Approve the compliance program plan and any subsequent changes.
- Review, at least every five years, an external assessment of the compliance program's design and effectiveness and approve any recommendations for program improvements.
- Review the Chief Compliance Officer's annual report on the effectiveness of the compliance program.
- Ensure the Chief Compliance Officer has the independence, resources, and appropriate authority to perform the responsibilities of the function.
- Inquire of the Chief Compliance Officer regarding any difficulties encountered in the course of the compliance program implementation and monitoring activities, including any restrictions on the scope of work or access to required information or any lack of cooperation.
- Review significant compliance findings identified through audits, investigations, reviews, or other means. Review resulting corrective actions and any reasonable steps taken to prevent future similar behavior.
- Ensure failures in compliance or ethics are addressed through appropriate and consistent measures, including education and disciplinary actions, and that action is taken to prevent similar violations from occurring in the future.



CONSOLIDATED CHARGE AND RESPONSIBILITIES

ACADEMIC POLICY AND STRATEGIC COMMUNICATIONS (APSC)

APSC addresses policies and initiatives that enhance academic quality and student experiences and advance the university's national prominence.

The Committee evaluates academic policies and student life programs for recommendation to the Board. It also reviews and recommends to the Board communications and marketing strategies that enhance the University stature and reputation while promoting its teaching, research, and service missions in the local, state, national, and international communities.

APSC SHALL FULFILL ITS GENERAL OVERSIGHT DUTIES AND RESPONSIBILITIES TO INCLUDE THE FOLLOWING:

- Review and recommend policies for the academic, curricular, and student co-curricular experiences and programs.
- Review Admissions recruiting efforts.
- Provide high-level input and guidance on institutional strategic communications and marketing priorities.
- Review and recommend policies pertaining to public relations, branding, advertising, internal and external communications, news, and information.
- Identify trends and issues that affect the University and higher education in general.
- Review and recommend policies impacting the University's national reputation and brand.

The working title for this committee is: ACADEMIC POLICY & STRATEGIC COMMUNICATIONS



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS ACTION ITEM GGRIA5 December 4, 2020

SUBJECT: Ratification of Amendment to Collective Bargaining Agreement between the University of Florida Board of Trustees and United Faculty of Florida Related to House Bill 641's Salary Increases for K-12 Teachers

BACKGROUND INFORMATION

In June 2020, the Governor signed into law House Bill 641, which, among other things, established a minimum salary of \$47,500 for public K-12 teachers, or to the maximum amount achievable based on funds allocated to schools. This law applies to the University of Florida's development research school, P. K. Yonge. The University and United Faculty of Florida, the union that represents P. K. Yonge teachers, entered into an MOU tentatively agreeing to amend the Collective Bargaining Agreement to allocate these funds among P. K. Yonge teachers.

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations and Internal Affairs is asked to approve ratification of this amendment to the Collective Bargaining Agreement for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required

| Supporting Documentation Included: November 9, 2020 MOU between the University of |
|--|
| Florida and United Faculty of Florida tentatively agreeing to the amendment related to P. K. |
| Yonge salary allocation. |
| |

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary

PKY Salary Memorandum of Understanding Version #1 (Tentative Agreement)

October 29, 2020

1 **MEMORANDUM OF UNDERSTANDING** 2 SALARY ADJUSTMENTS FOR P.K. YONGE FACULTY 3 The University of Florida Board of Trustees and the United Faculty of Florida at the University of Florida agree to adjust the salaries of faculty members at the P.K. Yonge Developmental Research School 4 5 according to the following provisions: 6 Performance adjustments, as specified in Appendix F of the 2017-2019 Collective Bargain 7 Agreement, shall be distributed prior to disbursement of any funds associated with Florida House Bill 641 (HB641); 8 9 Eighty (80) percent of the funds allocated under HB641, amounting to \$186,070.47 shall, as 10 required by the law, be distributed among returning faculty members and new faculty hires to raise 11 their annual salaries to \$48,650, plus fringe, as enumerated in the attached spreadsheet, and; 12 Twenty (20) percent of the funds allocated under HB641, amounting to \$34,629.90, shall be 13 distributed among returning faculty to address salary compression and inversion issues, as permitted by the law. To remedy this issue, the parties agree to pay returning faculty a salary supplement, plus fringe, 14 amounting to \$37.17 for each year of certified experience at P.K. Yonge and \$23.27 for each year of 15 certified experience outside of P.K. Yonge, as specified in the attached spreadsheet. 16 17 Additionally, as per HB 641, the new base entry level salary for newly hired faculty at P.K. Yonge is 18 \$44,150.

Approved: William Connellan for University of Florida

Board of Trustees

Date: 11/9/2020 | 10:41 AM EST

Approved: Helene Huet

United Faculty of Florida

Date: 11/9/2020 | 10:29 AM EST

778/863



BOARD MEETING AGENDA Friday, December 4, 2020 ~2:30 p.m.

President's Room 215B, Emerson Alumni Hall University of Florida, Gainesville FL

| 1.0 | Call to | Order and WelcomeMorteza "Mori" Hosseini, Chair | | |
|-----|--|---|--|--|
| 2.0 | Verification of QuorumMark Kaplan, University Secretary | | | |
| 3.0 | Public Comment, if anyAmy Hass, Vice President and General Counsel | | | |
| 4.0 | RecognitionMori Hosseini, Chai | | | |
| 5.0 | Action | Items (Consent)Mori Hosseini, Chair | | |
| | | of Trustees | | |
| | BT1 BT2 | August 27, 2020 Minutes September 29, 2020 Minutes | | |
| | AC1 AC2 AC3 AC4 | Review Charters 1.1 Audit and Compliance Committee Charter 1.2 Office of Internal Audit Charter 1.3 UF Compliance and Ethics Charter University of Florida Performance Based Funding and Preeminent Status Metrics – Data Integrity (Audit Report) and Annual Data Integrity Certification Institutional Compliance Annual Report Office of Internal Audit Work Plan January 1, 2021 - June 30, 2021 | | |
| | | RSC2 New Degree RSC3 Degree Termination RSC4 Degree Program Changes | | |

Committee on Facilities and Capital Investments (FCI)

| | Committee on Governance, Government Relations and Internal Affairs (GGRIA) |
|-----|--|
| | GGRIA1 Direct Support Organization Appointments |
| | GGRIA2 UF Regulations |
| | GGRIA3 UF BOT Bylaws |
| | GGRIA4 UF BOT Charters |
| | GGRIA5 UF BOT United Faculty of Florida Collection Bargaining Agreement |
| | Amendment |
| 6.0 | Action Items (Non-Consent) |
| | Committee on Facilities and Capital Investments (FCI) |
| | FCI2 & R20-253 Naming: The DeLuca Preserve |
| | FCI3 & R20-254 Naming: The Archer Aviation eVTOL Lab |
| | FCI4 & R20-255 Naming: The Ronald Young Family Berm |
| | FCI5 & R20-256 Naming: The Henry and Nell Davis Pavilion |
| | FCI6 & R20-257 Naming: The Ken and Linda McGurn Exhibition Hall |
| | Committee on Finance, Strategic Planning, and Performance Metrics (FSPPM) |
| | FSPPM1 & R20-258 Housing Rental Rates |
| | FSPPM2 & R20-252 UAA Bond Initiative |
| 7.0 | New Business |
| 8.0 | Comments of the Chair of the BoardMori Hosseini, Chair |
| 9.0 | AdjournMori Hosseini, Chair |

Campus Master Plan Amendment 2020-2030

FCI1



BOARD RETREAT MINUTES

August 27-28, 2020

Embry-Riddle Aeronautical University, Daytona Beach, FL

Time Convened: 9:01 a.m. Time Adjourned: 9:31 a.m.

Board members present:

Morteza "Mori" Hosseini (Board Chair), David L. Brandon, Richard P. Cole, Sylvain Doré, James W. Heavener, Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Trevor J. Pope, Marsha D. Powers, Jason J. Rosenberg, and Anita G. Zucker

Others present:

W. Kent Fuchs, President; Chris Cowen, Senior Vice President and Chief Financial Officer; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; J. Scott Angle, Vice President for Agriculture and Natural Resources; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Amy Hass, Vice President and General Counsel; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; D'Andra Mull, Vice President for Student Affairs; David Nelson, Senior Vice President for Health Affairs and President of UF Health; David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs; Scott Stricklin, Director of Athletics; members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Board Chair Hosseini welcomed everyone in attendance and called the meeting to order at 9:01 a.m. He thanked Embry-Riddle Aeronautical University (ERAU) for hosting the University of Florida Board of Trustees. He also thanked the Trustees and President's Cabinet for coming to Daytona Beach for the retreat. He then reviewed the agenda items highlighting UF Health reaching #1 ranking in the state of Florida by U.S. News and World Reports. President Fuchs also thanked ERAU for hosting us and indicated that he looks forward to a productive retreat.

2.0 Verification of Quorum

Vice President and University Secretary Kaplan verified a quorum with all members present.

3.0 Public Comment

Board Chair Hosseini asked Vice President and General Counsel Amy Hass if there were any requests for public comment at today's meeting. VP Hass informed the Board there was no public comment to come before the Board.

- 4.0 Action Items (Consent)
- BT1 June 4-5, 2020 Minutes
- BT2 July 21, 2020 Minutes
- BT3 Textbook & Instructional Material Affordability Annual Report
- BT4 University Press of Florida Annual Report
- **BT5** Tenure Upon Hire
- BT6 Direct Support Organizations and Affiliate Budgets
- **BT7** Regulation Amendments
- BT8 Bylaw and Articles Updates
- BT8.1 BOT Bylaws
- **BT8.2 Florida Foundation Seed Articles**
- **BT9 DSO** Appointments
- **BT10** Collective Bargaining Amendments
- BT11 Legislative Budget Request IFAS Workload

Board Chair Hosseini asked for any questions or discussion on Board Consent Action Items BT1 through BT11, noting that all materials were provided in advance and reviewed prior to the meeting. He then asked for a motion to approve Board Consent Action Items BT1 through BT11 for their approval, which was made by a Vice Chair Kuntz and seconded by Trustee Zucker. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

5.0 Action Items (Non-Consent)

BT12 & R20-245 Naming: Mendenhall Family Camellia Walk at the Wilmot Botanical Gardens

Board Chair Hosseini asked for a motion to approve Action Item BT12 & R20-245, which was made by Trustee Brandon, and seconded by Trustee Johnson. Board Chair Hosseini asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT13 & R20-246 Naming: Dizney Grove at the Florida Ballpark

Board Chair Hosseini asked for a motion to approve Action Item BT13 & R20-246, which was made by Trustee Brandon, and seconded by Trustee Johnson. Board Chair Hosseini asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT14 & R20-247 Naming: Pace Taylor Pavilion at the UF/IFAS Nature Coast Biological Station

Board Chair Hosseini asked for a motion to approve Action Item BT14 & R20-247, which was made by Trustee Brandon, and seconded by Trustee Johnson. Board Chair Hosseini asked for further discussion, and then asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

6.0 New Business

There was no new business to come before the Board.

7.0 Adjourn

There being no further Board business, the meeting was adjourned at 9:31 a.m. and the retreat began.

Artificial Intelligence (AI)

Provost Joe Glover began by defining AI and reviewing the AI Initiative. With Nvidia's gift to UF of the most sophisticated supercomputer in the world, Provost Glover believes this initiative will distinguish UF and set us apart from every other university. In the AI Initiative, AI will be conceptualized across the entire University and its curriculum. He also reviewed the timeline for installing the supercomputer and implementing the AI Initiative. Provost Glover indicated UF will offer an AI Certificate program. He also highlighted the potential benefits of the initiative to the state and nation.

Vice President David Norton discussed that AI will be a game changer at UF in cross-disciplinary research and education. He also introduced the UF AI research working group that will help integrate AI across campus. VP Norton highlighted the working groups work to connect with external partners such as corporations, external researchers, and government agencies.

Dean Cammy Abernathy highlighted AI opportunities and research in the Herbert Wertheim College of Engineering (HWCOE). She also discussed AI partnerships being formed across campus, in our community, across Florida, including workforce development programs partnership activities.

Go Greater Campaign/Artificial Intelligence Fundraising Initiative

Vice President Tom Mitchell reviewed the current fundraising efforts indicating they are in the final capstone phase of the campaign and will reach the \$3B goal ahead of schedule. He also shared some comparable fundraising data, including public universities in the state of Florida, the SEC schools, and the top public universities. VP Mitchell then discussed Advancements' AI Fundraising Initiative with a goal of raising \$175M. He also highlighted some details associated with their initiative including naming opportunities, engagement events, an Advancement team, an AI Global Leadership Council, and other proposed partners. When VP Mitchell concluded his presentation Board Chair Hosseini emphasized that people want to support success; people want to invest in quality.

President Fuchs pointed out after seeing the comparable fundraising data in the presentation, that compared to our competition we are young in the endowment space. Michigan has had 100 years to grow their endowment to the level reflected in the presentation.

Board Chair Hosseini asked for VP Mitchell to share research institutions comparable data at the next meeting.

Board Chair Hosseini also referenced the support UF has received from the state of Florida and indicated that this year will be a tough year for the state. He pointed out that the AI Initiative is not just about UF it is about the state of Florida and nation. We need to get the message across to everyone and asked for speaking points to be prepared for everyone indicating that we are looking for AI partners.

Update on Campus Activities

Athletic Director Scott Stricklin gave an update on athletics reviewing student-athlete return to campus, plans for 2020-2021 athletic competition, including required testing and a financial and construction update. He noted that they continue to work with UF Health to ensure a safe environment for athletic competitions. Finally, he shared Name, Image, and Likeness (NIL), which will go into effect in Florida on July 1, 2021 and athletics' social justice program, Listen, Learn, and Act. Trustee Cole asked about the city of Gainesville's concerns about athletic events and fans in Gainesville. AD Stricklin indicated they have been communicating with the city of Gainesville to address concerns, as well. Trustee Pope asked about football ticket and if students will have access to any tickets. AD Stricklin indicated that they have not determined yet, though they do plan to be able to offer some student tickets. Trustee Brandon emphasized that we need to remember how much the athletes have supported the University and as the Gator Nation it is our turn to support the athletes and athletics.

Senior Vice President and President of UF Health David Nelson presented a COVID-19 update. He reviewed UF Health visits indicating they have returned to normal levels pre-COVID. He reviewed the return to campus summary, including the campus surveillance testing strategy going forward. Trustee Cole asked if UF has received US government CARES Act funds. CEO for UF Health Shands Ed Jimenez indicated we have received \$30M.

Trustee O'Keefe asked about the student experience with students being tested as they return to Gainesville. SVP Nelson indicated that now all have returned, they plan to have more mobile pop up testing in convenient locations on campus, and possibly saliva testing in the near future.

Trustee Doré thanked UF Health for their work and asked if they are working with Santa Fe College and if the data being tracked includes the VA and nursing homes. SVP Nelson indicated they are not working with Santa Fe College and the VA and nursing home numbers are included in the numbers reported by the Department of Health (DOH). He highlighted the great relationship UF Health has with the DOH, as Alachua County has 10 times more contact tracers than any other area in the state of Florida.

Board Chair Hosseini and Trustee Patel questioned UF Health's testing turnaround times and capacity. SVP Nelson indicated they have the capacity to continue to test up to 5,000 a day with testing result turnaround times of typically 24 hours, but within 3-5 days.

Senior Vice President and COO Charles Lane gave a campus reopening update and reviewed the timeline since the beginning warnings about COVID-19, including supplies purchased and residence hall occupancy. He discussed campus events and gatherings and concluded by highlighting points of collaboration across campus and Gainesville. Board Chair Hosseini

expressed concern and asked if Student Government Association (SGA) has been involved in COVID planning and messaging. VP Mull and Trustee Pope indicated that they have engaged students and have promoted behavior expectations. Board Chair Hosseini asked for the Universities plan to handle COVID outbreaks and behaviors. VP Mull indicated that they have a plan and will share it the Trustees. Trustee Cole asked if the plan includes fraternity and sororities. VP Mull indicated that it did and pointed out that all fraternities and sororities had to submit COVID-19 plan for approval.

Diversity and Inclusion

President Fuchs introduced the diversity and inclusion presentation. He emphasized the important role we all must play to facilitate to change the culture at the University of Florida. He turned the program over to Chief Diversity Officer Antonio Farias.

Chief Diversity Officer Antonio Farias discussed leading a diverse and inclusive top 5 university. He highlighted the goal of the Universities strategy as an exceptional academic environment that reflects the breadth of thought essential for preeminence, achieved by a community of students, faculty, and staff who have diverse experiences and backgrounds. CDO Farias also discussed engaging our core strengths and pursuing a national and regional cohort approach.

Board Chair Hosseini asked to have a metrics to track our progress at the next meeting.

Student Experience and Surveys

Vice President D'Andra Mull discussed the student experience and reviewed their mission and approach. She presented the results of the healthy behavior survey. She pointed out the messaging to students about what is expected, being socially engaged yet physically distant. She shared Student Affairs plan to educate, engage, and enforce COVID-19 behaviors and the GatorSafe app. She also highlighted support for students including Gator Care Kit, support for students needing self-isolation or quarantine, and virtual mental health services. VP Mull reviewed the communication timeline. She highlighted community engagement and partnerships being formed to promote consistency. She completed her discussion by reviewing ongoing efforts to promote social engagement while remaining physically distant.

Associate Provost Angela Lindner discussed the UF remote student success initiative and gave an overview on survey results to date. She shared the ongoing student success efforts and highlighted remote student success activities. She concluded by discussing how they will address those concerns and continued efforts including surveys in the fall and spring to address student concerns. Board Chair Hosseini asked that they continue their work during COVID and present results at a future meeting.

The retreat concluded at 5:00 p.m.

August 28, 2020, Embry-Riddle Aeronautical University, Daytona Beach, FL Board members present:

Morteza "Mori" Hosseini (Board Chair), David L. Brandon, Richard P. Cole, Sylvain Doré, James W. Heavener, Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Trevor J. Pope, Marsha D. Powers, Jason J. Rosenberg, and Anita G. Zucker

Others present:

W. Kent Fuchs, President; Chris Cowen, Senior Vice President and Chief Financial Officer; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; J. Scott Angle, Vice President for Agriculture and Natural Resources; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Amy Hass, Vice President and General Counsel; Edward Jimenez, Chief Executive Officer for UF Health Shands; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; D'Andra Mull, Vice President for Student Affairs; David Nelson, Senior Vice President for Health Affairs and President of UF Health; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs; Scott Stricklin, Director of Athletics; members of the University of Florida community, and other members of the public.

The retreat began at 9:15 a.m.

UF Health Rankings, Future Expansion and Strategy

Senior Vice President David Nelson started the UF Health discussion by reviewing the mission of the University and UF Health being named the #1 hospital in Florida. He discussed the link between patient care and the academic mission with clinical enterprise supporting the academic mission. He indicated that they would like the Healthcare system to increase the amount of money they contribute to academics. He reviewed research awards and rankings for the 6 healthcare colleges. He also gave an update on the search for a new Dean in the College of Medicine and expressed his gratitude to the tremendous job Dr. Adrian Tyndal has done as Interim Dean over the last two years. He discussed the continued growth and expansion of UF Health in central Florida and along the I95 corridor. He then discussed ONEUF Health's vision to build one of the top academic health centers in the country.

Dean Leon Haley presented UF Health Jacksonville Campus Strategic Priorities. He recapped on the impact of COVID-19, including losses and CARES Act funding. He reviewed the rankings highlighting UF Health Jacksonville's successes and challenges, including areas that require additional focus. He presented the strategic growth planning along the I-95 corridor. He also discussed the needs of the downtown campus, growth and future expansion sharing unique challenges of the location, which involves a financial relationship with the city. Board Chair Hosseini thanked Dean Haley for the tremendous job he has done over the last several years. Board Char Hosseini suggested having an outside firm review our plans for growth. Board Vice Chair Kuntz asked about the growth over the last two years including revenue. Dean Haley indicated that the downtown hospital loses approximately \$2M a year and the north locations profits of \$4M helps to cover the losses. The north location has been able to realize those profits within the 3 years since it's opening. There was some discussion about the unique

situation between the city and the need for the city to continue to invest in and support the downtown hospital. Board Vice Chair Kuntz asked for Dean Haley to provide some additional details at the next meeting to include a financial comparison showing financials of UF Health Jacksonville pre-north location, current, and future projections, including the city's contributions. Board Chair Hosseini stated his commitment to continue to work with the city.

Chief Executive Officer for UF Health Shands Ed Jimenez gave an update on UF Health Shands. He indicated that UF Health has had losses of \$46M related to COVID and received CARES Act funds to cover some of their loses. He indicated the hospitals are back to pre-COVID capacity. He discussed UF Health Shands plans to support and serve UF, the state of Florida, and nation. They will focus on great patient outcomes, investing in our medical school and health center, and increasing regional and national stature. He gave an update on construction projects and discussed the southern strategy. He also discussed the potential need for pediatric inpatient care determining its need through a targeted approach. He reviewed UF Health Shands national recognition and rankings and concluded his presentations highlighting UF Health ranking as #1 hospital in the state of Florida by U.S. News and World Reports. Trustee Powers was impressed by UF Health's excellent strategy. She agreed with tremendous opportunity ahead of UF Health with the potential growth in central Florida of 3000 homes per year. Board Chair Hosseini also agreed with the growth potential of central Florida.

Academic Reputation and Rankings

Assistant Provost Cathy Lebo discussed academic reputation and rankings. She indicated that the latest U.S. News rankings will be released Sept 14. AP Lebo reviewed the changes to the 2021 survey that might affect future rankings. Lebo also reviewed a few other things that we may need to understand their relation to rankings including special programs, research, and writing in the discipline. AP Lebo gave an update on our competitive position among the Top 20 Public Universities in reference to student, faculty, finance, and graduation performance. She highlighted that UF has the lowest predicted graduation rate. She compared UF's graduation performance, full-time faculty count, average alumni giving rate (two-year ave.) with top public universities.

AP Lebo then discussed factors related to academic reputation indicating the reputation score is a tough measurement to move. She pointed out the relationship between ranking and reputation, noting that ranking influences reputation. People tend to highly rate institutions that are highly ranked.

Story Telling and Strategy

Vice President Nancy Paton discussed brand and reputation, UF continues to make significant inroads in earned and social media being a leader in positive sentiment and brand awareness. UF is benefitting from the proactive and thoughtful approach to COVID-19 communications with the website gaining national attention with social media stories. She reviewed how UF is demonstrating elite reputation management throughout COVID-19 compared to top 5 public universities. VP Paton indicated that UF is building a best-in-class issues management, crisis preparedness capability, and infrastructure to drive long term success. VP Paton explained the acceleration of national brand prominence with a comprehensive institution-wide media

strategy realizing 115% increase in coverage of UF as expert in the media. UF is gaining on the top 5 peers in reputation thanks to storytelling efforts including a podcast series that highlights faculty. UF is driving strengthened reputation through a national paid media campaign that targeted influential audiences.

VP Paton reviewed the brand strategy development timeline highlighting UF's strong top-of-mind position with prospective students. She indicated they will use a tailored approach to engage audiences. She then introduced the strategy for 2020-2021 to build UF's reputation score. She reviewed peer surveys highlighting the characteristics that represent institutional quality.

Associate Provost Cathy Lebo reviewed U.S. News peer assessment timeline with results being released in September 2021. She also reviewed other national and international rankings and reviewed what factors will influence our academic reputation score in the 2022 rankings.

Board Chair Hosseini questioned if the voters listened to podcasts. VP Paton indicated that they targeted voters with a podcast on LinkedIn and data from LinkedIn supported its influence.

Construction Project Update

Vice President Curtis Reynolds gave an update on the construction, improvement, repair, and renovation projects. He also gave an update on transportation improvements, utility projects, and landscape masterplan implementation and projects. He reviewed projects still in planning stages.

Board Vice Chair Kuntz expressed his concern for projects to remain on target to be sure the cost doesn't exceed thresholds which would require a technical committee review.

Board Chair Hosseini expressed his concern on the timeline for the Honors dorm project. He asked for meetings to be scheduled to move this project along as soon as possible. He emphasized the importance of this project to our rankings and to support the Provost, Student Affairs, and Enrollment Management. Board Vice Chair Kuntz agreed that this project needs to be expedited.

Board Chair Hosseini and Board Vice Chair Kuntz also expressed his concern on moving forward with the landscape master plan, which was already approved by the Board. Board Chair Hosseini emphasized the work that Charlie Lane and others put into it.

SVP Lane and Board Chair Hosseini mentioned holding on the biomedical building due to financial concerns arising from COVID. Trustee Doré expressed his concern about this because of the limited research space available for faculty and the importance of these facilities to reach the \$1B research goal. Board Chair Hosseini assured him this is important, and they will move forward at the right time.

Board Chair Hosseini restated that all projects should stay within budget.

Trustee Discussion: Priorities for the Future

Board Chair Mori Hosseini invited everyone to listen to one of the most important discussions of the retreat which focuses on UF's future priorities and the future of higher education.

President Fuchs pointed out that this discussion is a priority driven by SVP Lane and Provost Glover.

Vice President and University Secretary Mark Kaplan introduced the capstone discussion of the retreat on the future of the University of Florida. He introduced the workgroup of Deans, Cabinet Members, and University leadership who prepared a white paper on the Future of Higher Education. The workgroup began the process of preparing their thoughts by reviewing the goals of the University which can be found in the Universities Decade Ahead. To organize their work, the workgroup divided the major functions of the University of Florida into four broad categories: teaching and learning; research and discovery; service and engagement; and economic development. They vetted their thoughts with internal and external constituents. Ultimately, the workgroup believes AI will help set us apart and lead us into the future. The following focus areas emerged including residential campus experience, diversity equity and inclusion, AI initiative, and economic impact. Dean Julie Johnson was asked to share more details on the teaching aspect.

Board Chair Hosseini thanked Dean Johnson for the great work she has completed in the College of Pharmacy and asked her to share Pharmacy's accomplishments.

Dean Johnson briefly highlighted the accomplishments of the College of Pharmacy and their rise in ranking from #14 in 2012 to #5 in 2020. Dean Johnson then discussed teaching and learning — the reimagined residential experience. The workgroup predicts residential education, particularly at top public universities, will continue to be highly valued but will have to change. Dean Johnson pointed out that UF has the opportunity to meet diverse student needs through an exceptional residential experience and a fully online option. UF is well ahead of its peers in technology-enabled education, which allowed us to adapt to remote learning quickly. UF must use its technological advantage to build a new kind of residential experience. She discussed on their vision of a reimagined residential education with faculty teams both remote and in person teaching students both remote and in person. Traditional classroom lectures would be taped and streamed, and classroom time would be used for active experiential interactive learning promoting relationships and comradery. Ultimately, the reimagined residential experience would allow the University to offer exceptional, interactive residential and online education combined, where we will lead the nation in higher education, and creating a highly educated and skilled workforce that drives the states and nations' economies.

Board Vice Chair Kuntz asked if this new type of learning would stress faculty and if it requires more teaching time. Dean Johnson indicated the College of Pharmacy has already gone through this transformation. She indicated they did lose some faculty, but the current faculty love the new interactive learning. The ability to tape lecture and use them multiple times and she does not believe it requires more time to be spent.

Dean Cammy Abernathy discussed research and economic impact in the future. She highlighted the fact that the U.S. leads the world in the number of doctoral graduates. She reviewed the demographics of doctoral students and faculty and compared that to the racial population of the US. Dean Abernathy pointed out recruiting domestic talent by optimizing the employee experience promoting and inclusive diverse environment, professional development, flexibility in location & time and evaluation metrics, and impact. She indicated that interdisciplinary research requires partnerships, across disciplines and with the academic and non-profit institutions. Maximizing the economic impact on Florida by focusing on problem relevant to our state, reexamining our tech transfer objectives, and diversifying our approaches and our metrics. Ultimately, the future of research and economic development will be increasingly domestic and diverse, distributed geographically and temporally, and we will work with interdisciplinary teams on problems relevant to society and foster job and start up creation.

Vice President Tom Mitchell discussed the workgroups thoughts that the future is based on building relationships and engagement. VP Mitchell pointed out the importance of engagement with principal partners that is individualized and personalized with intentional profound engagement. COVID has given us the opportunity to change, rethink, revisit, and reimagine. Opportunities expressed by the workgroup include collaboration with the state and federal priorities, an exceptional interactive residential education, new ways of partnering, and principle partners and profound engagement. VP Mitchell then asked the group to share what they think are the University of Florida's opportunities to lead.

Board Chair Hosseini thought the discussion was outstanding and thanked the group. He asked everyone to think about the transformation in UF Health over the last 2 years, ultimately becoming #1 in the State of Florida. He too has a vison for UF's future that is big and audacious. He thinks that AI will be the curriculum of the 21st century and student will have jobs in this field after graduation. UF's vision of the future is forward thinking and will offer the state a great return on their investment. He also believes this will be a great return on the student investment. Board Chair Hossieni then asked each Trustee to share thoughts on what they think is UF's opportunity to lead.

President Fuchs thanked everyone for their thoughts. He believes our persistence will make a difference and he can't think of a any other team he'd like to be working with. He indicated that with classes starting on Monday, UF will have a challenging couple of weeks. He looks forward to the students signing their pledges and winning the student pledge challenge with FSU because he doesn't want to wear FSU's colors or sing their song.

VP Mitchell closed the discussion by indicating it is our time to be the modern age engaged land-grant University with a bias for action and persistence. We are committed to diverse equity and inclusion. The AI Initiative is a national strategy that will impact Florida, the nation, and the world. UF is a leader, continuing to strive for excellence, and is ranked among the very best universities. It starts with the students, in which we provide a platform for the rest of their lives. We develop talent and recruit the best. Ultimately, we help others achieve their best.

Provost Glover added that AI is an initiative. It is a project in systemic change, in which AI data science will be added to all curriculums and incorporated across the entire University.

The retreat concluded at 5:00 p.m.





BOARD MINUTES
September 29, 2020
Virtual Meeting
University of Florida, Gainesville, FL
Time Convened: 10:31 a.m.

Time Adjourned: 12:20 p.m.

Board members present:

Morteza "Mori" Hosseini (Board Chair), David L. Brandon, Richard P. Cole, Sylvain Doré, James W. Heavener, Leonard H. Johnson, Thomas G. Kuntz (Board Vice Chair), Daniel T. O'Keefe, Rahul Patel, Marsha D. Powers, Jason J. Rosenberg, and Anita G. Zucker

Others present:

W. Kent Fuchs, President; Winfred Phillips, Executive Chief of Staff; Chris Cowen, Senior Vice President and Chief Financial Officer; Joseph Glover, Provost and Senior Vice President for Academic Affairs; Charlie Lane, Senior Vice President and Chief Operating Officer; David Nelson, Senior Vice President for Health Affairs and President of UF Health; Elias Eldayrie, Vice President and Chief Information Officer; Zina Evans, Vice President for Enrollment Management and Associate Provost; Antonio Farias, Chief Diversity Officer and Senior Advisor to the President; Jodi Gentry, Vice President for Human Resources; Amy Hass, Vice President and General Counsel; Mark Kaplan, Vice President for Government and Community Relations and University Secretary; Thomas Mitchell, Vice President for Advancement; D'Andra Mull, Vice President for Student Affairs; David Norton, Vice President for Research; Nancy Paton, Vice President for Strategic Communications and Marketing; Curtis Reynolds, Vice President for Business Affairs; Michael Lauzardo, Deputy Director of Emerging Pathogens Institute at UF, members of the University of Florida community, and other members of the public.

1.0 Call to Order and Welcome

Board Chair Hosseini called the meeting to order and welcomed all Trustees, the administration and all in attendance at the meeting.

2.0 Verification of Quorum

Vice President and University Secretary Kaplan verified a quorum with all members present except Trustee Trevor Pope, who was unable to attend.

3.0 Public Comment

Vice President and General Counsel Amy Hass indicated there were individuals signed up to provide public comment at today's meeting. Nine individuals made public comment related to

agenda item BT7 including: Jeremiah Tattersall, Jason Fults, Paul Ortiz, Fi Stewart-Taylor, Bobby Mermer, Meridith Miska, Sheila Payne, Amanda Pritzlaff, and Tomer Zilbershtein.

Board Chair Hosseini commented that the Board of Trustees and UF Leadership care about all students, faculty and staff and that adding furloughs to Regulation 1.017 is only a tool to use as a last resort instead of having to layoff anyone. The Board's goal is not to furlough employees but reach Top 5.

4.0 Campus Update

President Fuchs introduced Senior Vice President and President of UF Health David Nelson, Vice President D'Andra Mull, and Deputy Director of Emerging Pathogens Institute at UF Dr. Michael Lauzardo for a campus update.

Senior Vice President and President of UF Health David Nelson indicated that as of today the number of COVID-19 cases in the area are half of what they were when they peaked in July. He introduced Dr. Lauzardo, Deputy Director of Emerging Pathogens Institute at UF to give a COVID-19 status brief. Dr. Lauzardo, reviewed current status of COVID-19 cases, he pointed out that they have been aggressively testing and tracing, isolated and quarantining, which has resulted in the number of cases going down. He indicated that they have been successful through the screen, test protect initiative and the contact tracing process where they have identified asymptomatic people before they infect others.

Board Chair Hosseini thanked Drs. Nelson and Lauzardo for their work. He requested for them to make it as easy as possible for students to get tested as we move forward anticipating a normal spring semester with classes in person. Dr. Lauzardo indicated UF Health continues to expand testing and make it easier thanks to the Pathology Dept., validation of saliva testing, and partnerships with information technology to accommodate on-site testing with the swipe of Gator One cards.

Vice President D'Andra Mull thanked Dr. Lauzardo and his team for their partnership through COVID-19. She highlighted the support Student Affairs has provided students for COVID-19. She also discussed the support they have provided for all students highlighting the virtual student union and recent career showcase.

President Fuchs thanked everyone for their leadership during COVID-19.

5.0 Action Items

BT1 Depository Payment Signatory Authority

Board Chair Hosseini reviewed the action item. He then asked for any questions or discussion on Board Action Item BT1, noting that all materials were provided in advance and reviewed prior to the meeting. He then asked for a motion to approve Board Action Item BT1, which was made by Trustee Zucker and seconded by Trustee O'Keefe. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT2 Fixed Capital Outlay Budget Fiscal Year 2020-21

Board Chair Hosseini explained that this item has been vetted by Trustees serving on the Facilities and Capital Investment Committee but not vetted by the committee as a whole. Chair Hosseini requested that Vice President Reynolds provide an explanation of the materials regarding the Fixed Capital Outlay Budget Fiscal Year 2020-21. VP Reynolds commented that this year's approval includes amendment budget increases to two major projects, Norman Hall phase three and the Data Science Building. Trustee O'Keefe asked if the Norman Hall budget increase is due to the additional scope of project. VP Reynolds confirmed that additional money is needed to complete the basement.

Board Chair Hosseini asked for any questions or discussion on Board Action Item BT2. He then asked for a motion to approve Board Action Item BT2, which was made by Trustee O'Keefe and seconded by Trustee Johnson. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT3 Carry Forward Spending Plan

Board Chair Hosseini explained that due to timing this action item has been vetted by Trustees serving on the Finance, Strategic Planning, and Performance Metrics Committee but not vetted by the committee as a whole. Vice Chair Kuntz stressed the importance of making sure action items are vetted appropriately through the committee process to allow Trustees to carry out their fiduciary responsibility before needing approval and going to the Board of Governors.

Chair Hosseini requested that Christopher Cowen, Senior Vice President and Chief Financial Officer, provide an explanation of the materials and reviewed the plan in detail.

Vice Chair Kuntz asked for confirmation that the spending plan does not include recurring expense or any expenses that are not allowed under legislative rules for carry forward funds, which was provided by CFO Cowen. Vice Chair Kuntz also suggested creating a process to ensure carry forward funds adhere to all regulations and restrictions.

Board Chair Hosseini noted that due to potential state carry forward shortfalls related to COVID-19, as in the past, the state may request some of these funds be transferred back to the state. He emphasized the importance of explaining how all of these funds are spent and used appropriately. Vice President and University Secretary Mark Kaplan agreed.

Board Chair Hosseini asked for any questions or discussion on Board Action Item BT3. He then asked for a motion to approve Board Action Item BT3, which was made by Vice Chair Kuntz and seconded by Trustee Brandon. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT4 Direct Support Organization Appointments

Board Chair Hosseini reviewed the action item. He then asked for any questions or discussion on Board Action Item BT4, noting that all materials were provided in advance and reviewed prior to the meeting. He then asked for a motion to approve Board Action Item BT4, which was made by Trustee Brandon and seconded by Vice Chair Kuntz. Board Chair Hosseini asked for further

discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT5 Collective Bargaining Agreement

Chair Hosseini requested that Vice President and General Counsel Amy Hass provide an explanation of the materials regarding the action item, which was a temporary amendment to the faculty union bargaining agreement to address operational modifications and safety enhancements made during the Fall 2020 semester. Board Chair Hosseini asked if this agreement includes Spring 2021 or just Fall 2020 semester. VP Hass confirmed that this is only a temporary agreement for the Fall 2020 semester.

Board Chair Hosseini asked for any questions or discussion on Board Action Item BT5. He then asked for a motion to approve Board Action Item BT5, which was made by Trustee Johnson and seconded Trustee Zucker. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT6 Facility Security Clearance

Board Chair Hosseini reviewed the action item. Vice President David Norton added that the Board of Trustees designates the University President and the Vice President of Research to serve as our UF representatives who maintain a security clearance in keeping with requirements for certain restricted and classified research. Each time a new trustee joins the Board of Trustees, we ask the Board to vote to approve this designation on our consent agenda.

Board Chair Hosseini asked for any questions or discussion on Board Action Item BT6. He then asked for a motion to approve Board Action Item BT6, which was made by Trustee Johnson and seconded by Trustee Zucker. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

BT7 Regulation Amendment

Board Chair Hosseini reviewed the action item and reiterated that changing the amendment to include furloughs is only a tool that will be used as a last resort and would be a very difficult decision.

Vice President Jodi Gentry added that amending the regulation would give UF the ability to have a tool as an alternative instead of layoffs, if needed. She also stated that the policy would exclude graduate assistants. She indicated that she will be vetting details of the policy with the Faculty Senate. Trustee Doré expressed concerns to the Board as the representative on the Board for the Faculty Senate. He asked if this could be tabled until a later meeting when there is more time to consider all of the details. Board Chair Hosseini asked for Trustee Doré, VP Gentry, VP Hass, and others necessary, including if needed President Fuchs, to work together on a policy. He emphasized the importance of the University's faculty and staff. He expressed the importance of approving the amendment now to protect faculty and staff; and be prepared as an alternative to layoffs, if needed. He thanked Trustee Doré for being a great representative of the faculty. President Fuchs added that all of the concerns of the faculty are legitimate and that they would all be addressed prior to anything being implemented. Trustee Heavener suggested we approve

the amendment and have VP Gentry present the policy they formulate at the next meeting. Vice Chair Kuntz emphasized the importance of having something other than layoffs to protect employees. Trustee Zucker added, as with all regulations, they can be changed. She also said that furloughs would be a last choice to protect faculty and staff from layoffs.

Board Chair Hosseini asked for any questions or discussion on Board Action Item BT7. He then asked for a motion to approve Board Action Item BT7, which was made by Trustee Heavener and seconded by Vice Chair Kuntz with the caveat that VP Gentry come to the December Board meeting with details on the policy and process. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously. Chair Hosseini concluded the discussion by asking Trustee Doré to give his regards to faculty and let them know the Board supports them.

6.0 Action Items (Non-Consent)

BT8 & R20-250 Naming: Joanne W. Gauntt Foundation Small Animal Hospital Atrium Board Chari Hosseini asked Vice President Tom Mitchell to review the naming. VP Mitchell noted, all due diligence had been completed following all fundraising guidelines, governance policies and naming policies for the proposed naming.

Board Chair Hosseini asked for any questions or discussion on Board Action Item BT8 & R20-250. He then asked for a motion to approve Board Action Item BT8 & R20-250, which was made by Vice Chair Kuntz, and seconded by Trustee Powers. Board Chair Hosseini asked for further discussion, after which he asked for all in favor of the motion and any opposed, and the motion was approved unanimously.

7.0 New Business

Trustee Cole thanked President Fuchs and let him know that we all enjoyed his enthusiasm by painting his hair orange and blue. President Fuchs gave an update on the student safety pledge.

8.0 Comments of the Chair of the Board

Board Chair Hosseini thanked everyone for their input and emphasized our goal of being a Top 5 Public University. He asked new Board Committee Chairs to stay on top of the committees and reach out to him with any issues. He indicated the next meeting will be December 3 in Gainesville, which will include the Data Sciences and Information Technology Building groundbreaking. He expressed his deep gratitude to all.

9.0 Adjourn

There being no further Board business, the meeting was adjourned at 12:20 p.m.



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC1.1 December 3, 2020

SUBJECT: Audit and Compliance Committee Charter Revision

BACKGROUND INFORMATION

The State University System Florida Board of Governors (BOG) Regulation 4.002(2) requires the Audit and Compliance Committee Charter (Charter) be reviewed and approved by the Board of Trustees, at least every three years and as deemed necessary for consistency with applicable BOG and university regulations, professional standards, and best practices. Accordingly, the Charter was reviewed and updated to provide clarity regarding the responsibilities and duties of the Audit and Compliance Committee for financial reporting and disclosure, internal audit and compliance oversight. A copy of the approved charter and any subsequent changes shall be provided to the Board of Governors.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the proposed revisions to the committee charter, as presented. The committee is asked to recommend to the GGRIA committee for approval.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors of the new committee charter is required after approval by the GGRIA committee.

Supporting Documentation Included: Original and Revised Audit and Compliance Committee Charters

Submitted by: Dhanesh Raniga, Chief Audit Executive and Terra DuBois, Chief Compliance, Ethics and Privacy Officer

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC1.2 December 3, 2020

SUBJECT: Internal Audit Charter

BACKGROUND INFORMATION

The Internal Audit Charter (Charter), which defines the duties and responsibilities of the Office of Internal Audit, derives its authority through the Board of Governors Regulation (BOG) 4.002 and adoption by the Audit and Compliance Committee of the University of Florida Board of Trustees. In accordance with BOG Regulation 4.002(3), this Charter shall be reviewed every three (3) years, and as deemed necessary, for consistency with applicable BOG and University regulations, professional standards and best practices. A copy of the approved charter and any subsequent changes shall be provided to the BOG. The Charter was previously revised on December 1, 2016.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the revised Internal Audit Charter.

ADDITIONAL COMMITTEE CONSIDERATIONS

Supporting Documentation Included: Original and Revised Internal Audit Charters

Submitted by: Dhanesh Raniga, Chief Audit Executive

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC1.3

December 3, 2020

SUBJECT: Compliance and Ethics Office Charter

BACKGROUND INFORMATION

The Board of Governors Regulation 4.003 requires the compliance and ethics office charter to be reviewed at least every three years for consistency with applicable Board of Governors and university regulations, professional standards, and best practices. The revised charter includes minor modifications necessary to reflect changes to the administrative organization of the compliance program as a result of the appointment of a new chief compliance officer in July 2020.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the revisions of the Compliance and Ethics Office Charter as presented. The Committee is asked to recommend this item to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors is required after approval by the Board of Trustees.

Supporting Documentation Included: <u>Original</u> and <u>revised</u> UF Compliance and Ethics Office Charter

Submitted by: Terra DuBois, Chief Compliance, Ethics, and Privacy Officer

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC2 December 3, 2020

SUBJECT: University of Florida Performance Based Funding and Preeminence – Data Integrity (Audit Report) and Annual Data Integrity Certification

BACKGROUND INFORMATION

Florida Statutes 1001.92 and 1001.7065 promulgate the establishment of the funding for the State University System Performance-based Incentive ('performance-based funding' or 'PBF') and the Preeminent State Research Universities Program. Florida Statute section 1001.706 (5) (C) requires each university to conduct an annual audit to verify that the data submitted complies with the data definitions established by the Board of Governors. The results of the annual audit are required to be submitted to the BOG Office of Inspector General as part of the university's annual certification process.

On June 25, 2020, the Chairman of the BOG instructed each university president to execute a Data Integrity Certification. The certification document shall be signed by the university president and board of trustees' chair after being approved by the board of trustees.

The Board of Governors Chair further instructed each university board of trustees to direct its chief audit executive to perform an audit of the university's processes that ensure the completeness, accuracy and timeliness of data submissions. He further requested that these audits include testing of data that supports performance funding metrics, as well as preeminence or emerging preeminence metrics for those universities so designated, as testing is essential in determining that processes are in place and working as intended.

The Office of Internal Audit has performed such an audit and on November 10, 2020 issued audit report No. 20-744-07, Performance Based Funding and Preeminence – Data Integrity.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to accept the University of Florida Performance Based Funding and Preeminence - Data Integrity audit report as presented, and to approve the Performance Based Funding Data Integrity Certification, as executed by the President. The Committee is asked to recommend these items to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors is required after action by the Board of Trustees and certification by the Board of Trustees Chair.

Supporting Documentation Included: <u>Performance Based Funding and Preeminence – Data Integrity</u> (Audit Report No. 20-744-07) and Data Integrity Certification Form

| Submitted by: Dhanesh Raniga, Chief | Audit Executive |
|---------------------------------------|--|
| Approved by the University of Florida | a Board of Trustees, December 4, 2020 |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC3 December 3, 2020

SUBJECT: Institutional Compliance Annual Report

BACKGROUND INFORMATION

The Board of Governors Regulation 4.003 requires the chief compliance officer to report at least annually on the effectiveness of the compliance and ethics program. The regulation further requires the Board of Trustees to review and approve the Institutional Compliance Annual Report prior to submission to the Board of Governors.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to approve the 2019-2020 Institutional Compliance Annual Report as presented. The Committee is asked to recommend this item to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required. Submission to the Board of Governors is required after approval by the Board of Trustees.

Supporting Documentation Included: See attached <u>2019-2020 Institutional Compliance Annual</u> Report and Compliance Program Update

Submitted by: Terra DuBois, Chief Compliance, Ethics, and Privacy Officer

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON AUDIT AND COMPLIANCE ACTION ITEM AC4 December 3, 2020

SUBJECT: January 1, 2021 – June 30, 2021 Office of Internal Audit Work Plan

BACKGROUND INFORMATION

The Board of Governors Regulation 4.002 (6) states the chief audit executive shall develop audit plans based on the results of periodic risk assessments. The plans shall be submitted to the board of trustees for approval. A copy of approved audit plans will be provided to appropriate university management and the Board of Governors.

The Office of Internal Audit (OIA) establishes its audit coverage with a work plan that identifies the activities and issues they plan to cover. The current work plan was prepared to reflect the planned projects for the period from January 1, 2021 to June 30, 2021.

PROPOSED COMMITTEE ACTION

The Committee on Audit and Compliance is asked to review and approve the OIA work plan through June 30, 2021. The Committee is asked to recommend this item to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Submission to the Board of Governors of a copy of the Office of Internal Audit Work Plan is required, but Board of Governors approval is not required.

| Supporting Documentation Included: Work Plan | Office of Internal | Audit Ja | anuary – | <u>June</u> | 2021 | Proposed |
|--|--------------------|----------|-----------|-------------|------|----------|
| Submitted by: Dhanesh Raniga, Chief A | audit Executive | | | | | |
| Approved by the University of Florida | Board of Trustees, | Deceml | ber 4, 20 | 20 | | |
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Morteza " Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC1 December 3, 2020

SUBJECT: Tenure Upon Hire

BACKGROUND INFORMATION

The Chairs and Deans have recommended to the Provost and Senior Vice President for Academic Affairs that one newly appointed faculty member be granted tenure commencing with their appointment. This individual meets the criteria set forth in the University's tenure and permanent status policy and has been recommended by the Provost to receive tenure. Attached is a Summary of the Tenure Upon Hire case.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the Tenure Upon Hire case listed on the attached Summary for recommendation to the Board of Trustees for its approval on the Consent Agenda. While any administrative appointment is noted, tenure is granted only for the faculty appointments.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is required.

Supporting Documentation Included: See attached summary.

Submitted by: Joseph Glover, Provost and Senior Vice President for Academic Affairs

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC2 December 3, 2020

SUBJECT: New Degree

BACKGROUND INFORMATION

The proposed Ph.D. in Plant Breeding in the College of Agricultural and Life Sciences will fill a demand for breeding research and for educating new plant breeding graduates. It will create a framework and administrative structure to leverage resources, faculty, courses and student recruitment which attract federal and private funding and increase the number of graduate STEM degrees awarded at UF. The program will prepare breeders proficient to work in both academia and industry. The Ph.D. in Plant Breeding in the College of Agricultural and Life Sciences (CIP Code 01.1104) was approved by the Curriculum Committee and then by the Faculty Senate at their September 17, 2020 meeting.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the Ph.D. in Plant Breeding (CIP Code 01.1104) in the College of Agricultural and Life Sciences for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is required.

| Supporting Documentation Included: | See attached proposal. |
|--------------------------------------|---|
| Submitted by: Joseph Glover, Provos | et and Senior Vice President for Academic Affairs |
| Approved by the University of Florid | la Board of Trustees, December 4, 2020 |
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| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC3 December 3, 2020

SUBJECT: Degree Program Termination

Morteza "Mori" Hosseini, Chair

BACKGROUND INFORMATION

The Board of Governors requires periodic reviews of all academic degree programs to determine whether they remain viable academic offerings. Degree programs that have been inactive or which are not planned to be reactivated must be closed.

The College of Public Health and Health Professions is requesting to terminate the Ph.D. in Health Services Research (CIP Code 51.0701). This program was replaced with the Ph.D. in Public Health, Health Services Research Concentration and has not had any new enrollment since Fall 2017. All students graduated from the program in Fall 2019. The Faculty Senate approved this request at its September 17, 2020 meeting.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the above degree program termination for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors final approval will be required for termination of all doctoral and professional degree programs only.

Supporting Documentation Included: See attached proposal.

Submitted by: Joseph Glover, Provost and Senior Vice President for Academic Affairs

Approved by the University of Florida Board of Trustees, December 4, 2020

W. Kent Fuchs, President and Corporate Secretary



COMMITTEE ON ACADEMIC, FACULTY AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC4 December 3, 2020

SUBJECT: Degree Program Changes

BACKGROUND INFORMATION

The College of Design, Construction and Planning is requesting to remove a 3 credit MAC 1140 course in the first semester to keep it at 15 credits and the total for the B.S. in Sustainability in the Built Environment at 120 credits (CIP Code 30.3301). This change was approved by the Curriculum Committee and then by the Faculty Senate at their August 25, 2020 meeting.

The College of Agricultural and Life Sciences is requesting modifications to the Common Prerequisite Manual for 13 majors within the College. These changes would allow transfer applicants statewide to meet the prerequisite courses needed in order to be admitted into these majors. These changes were approved by the Curriculum Committee and then by the Faculty Senate at their September 17, 2020 meeting.

PROPOSED COMMITTEE ACTION

The Committee on Academic, Faculty and Student Success, Public Relations and Strategic Communications is asked to approve the above degree program changes for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is required.

| Supporting Documentation Included: | See attached proposals. |
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| Submitted by: Joseph Glover, Provost | and Senior Vice President for Academic Affairs |
| Approved by the University of Florida | a Board of Trustees, December 4, 2020 |
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| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



COMMITTEE ON ACADEMIC, FACULTY, AND STUDENT SUCCESS, PUBLIC RELATIONS AND STRATEGIC COMMUNICATIONS ACTION ITEM AFSSPRSC5 December 3, 2020

SUBJECT: Academic, Faculty, and Student Success, Public Relations and Strategic Communications Committee Charter Revision

BACKGROUND INFORMATION

It is proposed to combine the Committee on Academic, Faculty, Student Affairs and Experience and Committee on Marketing, Public Relations and Strategic Communications and update their charter to combine the scope of both committees' responsibilities. This is consistent with a unified strategy to advance the University's reputation with a full range of stakeholders. The new combined Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications will be asked to endorse the changes, which reflect the committee's current practice and posted charter.

PROPOSED COMMITTEE ACTION

The new combined Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications is asked to endorse the updates to its charter, as shown on the attached lined copy. Upon approval by the Committee on Governance, Government Relations, and Internal Affairs and endorsement by the Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications, the Board of Trustees will be asked for its approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governor's approval is not required. Submission to the Board of Governors of the new committee charter is required after approval by the GGRIA committee.

Supporting Documentation Included: <u>Combined Academic, Faculty, and Student Success, Public</u> Relations and Strategic Communications Committee Charter

Submitted by: Joe Glover, Provost and Senior Vice President and Nancy Paton, Vice President, Strategic Communications and Marketing

Approved by the University of Florida Board of Trustees, December 3, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



SUBJECT: Campus Master Plan Amendment, 2020-2030

BACKGROUND INFORMATION

Because of the unique relationship between the state universities and the local governments in which they are situated, the Florida Legislature determined in the early 1990's that state university campuses should follow a master plan process for campus planning and concurrency requirements instead of the traditional growth management laws followed in and by local communities. By law, university master plans must be updated at least every five years. At the current time, it is necessary for the University of Florida to update its Campus Master Plan (CMP).

At this board's meeting on December 5, 2019, the board was notified that the CMP amendment process was beginning for the 2020-2030 period. The plan and its supporting analysis are now complete consistent with statute and Florida Board of Governors Regulations, Chapter 21. The University has determined that this plan amendment does not require interagency reviews and a public hearing adoption process because it does not meet criteria established in Chapter 1013.30(9) F.S. that would require these steps. Therefore, the board will be asked to adopt the Campus Master Plan Amendment for 2020-2030 at its December meeting. At the same time, the board will be asked to authorize the University to negotiate a Campus Development Agreement with the City of Gainesville and Alachua County to be brought to the board at its March 2021 meeting. The CMP analysis concluded that the university's projected growth through 2030 does not create impacts to public facilities and services that require mitigation to the host local governments through financial compensation.

The updates of this plan amendment cycle incorporate the growth patterns, projections and projects developed in the recent Campus Framework Plan, Housing Master Plan, Transportation & Parking Strategic Plan, and Landscape Master Plan prepared in 2018-2019.

An informal public information session will be conducted in November along with other community outreach. The City of Gainesville and Alachua County are also invited to submit comments on the plan prior to the December adoption. Opportunity for public comment should be provided at the meeting when the board adopts this plan amendment. Plan documents are posted at https://facilities.ufl.edu/plan/campusmasterplan.html .

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to recommend to the Board of Trustees (i) approval on the Non-Consent Agenda of the Campus Master Plan Amendment 2020-2030, and (ii) authorization of University staff to commence negotiation of an updated Campus Development Agreement with the City of Gainesville and Alachua County.

ADDITIONAL COMMITTEE CONSIDERATIONS

| Board of Governors approval is not required | | |
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| Supporting Documentation Included: | See attached | |
| Submitted by: Charles E. Lane, Senior | Vice President and Chief Operating Officer | |
| Approved by the University of Florida | Board of Trustees, December 4, 2020 | |
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| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | |



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS ACTION ITEM GGRIA1

December 4, 2020

SUBJECT: Direct Support Organization-Board Appointments

BACKGROUND INFORMATION

Pursuant to University of Florida Governance Enhancements adopted by the University of Florida Board of Trustees on December 4, 2020, all appointments of Directors to University Direct Support Organizations must be approved by the University of Florida Board of Trustees.

The Direct Support Organizations listed below have requested the following individuals be approved to their board:

University of Florida Investment Corporation (UFICO) Board of DirectorsRobert Cousin

UF Advancement

Swati Patel
Howard Sheridan
Linda S. Parker Hudson
Nicholas Banks
Chris Cowen
Christina Gardner-McCune

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations and Internal Affairs is asked to approve the individuals listed above and in the board materials for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

None

Supporting Documentation Included: <u>See attached biographies for University of Florida</u> Investment Corporation (UFICO) Board of Directors and UF Advancement

Submitted by: W. Kent Fuchs, President

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary
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COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS ACTION ITEM GGRIA2 December 4, 2020

SUBJECT: University of Florida Regulations

BACKGROUND INFORMATION

Regulation 2.004: The proposed regulation amendment re-writes Regulation 2.004 in its entirety and provides the process for using University space, identifies to whom this Regulation applies, and identifies the University business unit responsible for implementing this Regulation and the affiliated policies.

Regulation 2.016: The proposed regulation amendment renames Regulation 2.016 to "Campus, Fishing and Hunting on Campus Prohibited" and prohibits certain activities on campus lands. Prohibition of hunting and fishing is being added to accurately reflect current safety practices.

Regulation 4.006: This proposed regulation amendment clarifies that it applies to all persons, regardless of affiliation to the University, and that the Vice President for Business Affairs or designee is the authorized University official responsible for approving commercial activity in accordance with this regulation and applicable University policy.

Regulation 4.040: This proposed regulation amendment further aligns UF's student conduct code with the top 5 public institutions in the country as well as ensures compliance with new federal and state legal requirements, including the Florida Board of Governors' regulations.

Current regulations 2.005, 2.008, 2.012, 6C1-2.0161, and 6C1-2.0163 will be repealed and relevant content is being subsumed in the proposed regulation amendment 2.004 and in the University's use of space policies

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations and Internal Affairs is asked to approve regulation amendments and repeals to University of Florida Regulations 2.004, 2.016, 4.006, 4.040, 2.005, 2.008, 2.012, 6C1-2.0161, 6C1-2.0163 as contained in the attached for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

None

Supporting Documentation Included: See attached UF Regulations: <u>2.004</u>, <u>2.016</u>, <u>4.006</u>, <u>4.040</u>, <u>2.005</u>, <u>2.008</u>, <u>2.012</u>, <u>6C1-2.0161</u>, <u>6C1-2.0163</u>

Submitted by: Amy Hass, Vice President and General Counsel

Approved by the University of Florida Board of Trustees, December 4, 2020

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COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS, AND INTERNAL AFFAIRS ACTION ITEM GGRIA3 December 4, 2020

SUBJECT: Amendments to University of Florida Board of Trustees Bylaws

BACKGROUND INFORMATION

The Board of Trustees bylaws have been updated to align with the current public comment process and technological upgrades to the process.

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations, and Internal Audit is asked to approve GGRIA3, amended UF Bylaws for recommendation to the Board of Trustees for approval on the Consent agenda.

SIGNIFICANT POLICY ISSUES FOR COMMITTEE TO CONSIDER

| Board of Governors approval is not required. | | |
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| Supporting Documentation Included: | See attached lined changes. | |
| Submitted by: Amy Hass, Vice Preside | ent and General Counsel | |
| Approved by the University of Florida | a Board of Trustees, December 4, 2020 | |
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| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | |



COMMITTEE ON GOVERNANCE, GOVERNMENT REALTIONS, AND INTERNAL AFFAIRS ACTION ITEM GGRIA4 December 4, 2020

SUBJECT: Committee Charter Revisions

BACKGROUND INFORMATION

The State University System Florida Board of Governors (BOG) Regulation 4.002(2) requires the Audit and Compliance Committee Charter (Charter) be reviewed and approved by the Board of Trustees, at least every three years and as deemed necessary for consistency with applicable BOG and university regulations, professional standards, and best practices. Accordingly, the Charter was reviewed and updated to provide clarity regarding the responsibilities and duties of the Audit and Compliance Committee for financial reporting and disclosure, internal audit and compliance oversight. A copy of the approved charter and any subsequent changes shall be provided to the Board of Governors.

The Committee on Academic, Faculty, Student Affairs and Experience and Marketing, Public Relations and Strategic Communications have been combined. This is consistent with a unified strategy to advance the University's reputation with a full range of stakeholders. The new combined Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications has endorsed the changes.

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations, and Internal Affaris is asked to approve the proposed revisions to the Committee on Audit and Compliance and Committee on Academic, Faculty, and Student Success, Public Relations and Strategic Communications charters. Upon approval by the Committee on Governance, Government Relations, and Internal Affairs the Board of Trustees will be asked for its approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governor's approval is not required. Submission to the Board of Governors of the new committee charter is required after approval by the Governance, Government Relations, and Internal Affairs Committee.

Supporting Documentation Included: Revised Audit and Compliance Committee Charters and Combined Academic, Faculty, and Student Success, Public Relations and Strategic Communications Committee Charter

| Submitted by: Amy Hass, Vice President and General Counsel | | |
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| Approved by the University of Florida | Board of Trustees, December 4, 2020 | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | |



COMMITTEE ON GOVERNANCE, GOVERNMENT RELATIONS AND INTERNAL AFFAIRS ACTION ITEM GGRIA5 December 4, 2020

SUBJECT: Ratification of Amendment to Collective Bargaining Agreement between the University of Florida Board of Trustees and United Faculty of Florida Related to House Bill 641's Salary Increases for K-12 Teachers

BACKGROUND INFORMATION

In June 2020, the Governor signed into law House Bill 641, which, among other things, established a minimum salary of \$47,500 for public K-12 teachers, or to the maximum amount achievable based on funds allocated to schools. This law applies to the University of Florida's development research school, P. K. Yonge. The University and United Faculty of Florida, the union that represents P. K. Yonge teachers, entered into an MOU tentatively agreeing to amend the Collective Bargaining Agreement to allocate these funds among P. K. Yonge teachers.

PROPOSED COMMITTEE ACTION

The Committee on Governance, Government Relations and Internal Affairs is asked to approve ratification of this amendment to the Collective Bargaining Agreement for recommendation to the Board of Trustees for approval on the Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required

| Supporting Documentation Included: <u>November 9, 2020 MOU between the University of</u> |
|--|
| Florida and United Faculty of Florida tentatively agreeing to the amendment related to P. K. |
| Yonge salary allocation. |

Yonge salary allocation.

Submitted by: Joseph Glover

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



December 4, 2020

SUBJECT: Naming: DeLuca Preserve

BACKGROUND INFORMATION

In grateful recognition of the generous donation of a 27,000-acre preserve to the University of Florida by Elisabeth DeLuca to be used for education, research, and conservation, the University and the University of Florida Foundation seek to name the 27,000-acre preserve in Osceola County (Intersection of SR 60 & 441) the "DeLuca Preserve."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-253 to name the 27,000-acre preserve in Osceola County (Intersection of SR 60 & 441) the "DeLuca Preserve," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution #R20-253

Approved by the University of Florida Board of Trustees, December 4, 2020

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |
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December 4, 2020

SUBJECT: Naming: Archer Aviation eVTOL Lab

BACKGROUND INFORMATION

In recognition of the generous support of the Herbert Wertheim College of Engineering by Adam Goldstein, Brett Adcock and Archer Aviation, the University and the University of Florida Foundation seek to name the College's electric vehicle (EV) design lab the "Archer Aviation eVTOL Lab."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve R20-254 to name the Herbert Wertheim College of Engineering's electric vehicle (EV) design lab the "Archer Aviation eVTOL Lab," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached <u>materials</u> and <u>Resolution # R20-254</u>
Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Approved by the University of Fiorida | a Board of Trustees, December 4, 2020 |
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| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



December 4, 2020

SUBJECT: Naming: Ronald Young Family Berm at Katie Seashole Pressly Stadium

BACKGROUND INFORMATION

In recognition of the generous support of the University of Florida by Ronald Young, the University, the University of Florida Foundation, and the University of Florida Athletic Association seek to name the Right Field Berm at Katie Seashole Pressly Stadium the "Ronald Young Family Berm."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-255 to name the Right Field Berm at Katie Seashole Pressly Stadium the "Ronald Young Family Berm," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution # R20-255

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

Approved by the University of Florida Board of Trustees, December 4, 2020

Morteza "Mori" Hosseini, Chair

W. Kent Fuchs, President and Corporate Secretary



December 4, 2020

SUBJECT: Naming: Henry and Nell Davis Pavilion

BACKGROUND INFORMATION

In recognition of the generous support of UF/IFAS Extension 4-H Camp Cherry Lake by Morris and Judy Steen, the University and the University of Florida Foundation seek to name the pavilion at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL the "Henry and Nell Davis Pavilion," to honor the Davis' legacy as 4-H champions for local and state youth.

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-256 to name the pavilion at UF/IFAS Extension 4-H Camp Cherry Lake in Madison, FL the "Henry and Nell Davis Pavilion," for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution # R20-256

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Approved by the University of Florida Board of Trustees, December 4, 2020 | | |
|---|--|--|
| | | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | |



December 4, 2020

SUBJECT: Naming: Ken and Linda McGurn Exhibition Hall

BACKGROUND INFORMATION

In recognition of the many generous and significant contributions made by Ken and Linda McGurn to the University of Florida and the Florida Museum of Natural History, the University and the University of Florida Foundation seek to name the Florida Museum of Natural History's Thompson Earth Systems Institute addition the "Ken and Linda McGurn Exhibition Hall."

PROPOSED COMMITTEE ACTION

The Committee on Facilities and Capital Investments is asked to approve Resolution R20-257 to name the Florida Museum of Natural History's Thompson Earth Systems Institute addition the "Ken and Linda McGurn Exhibition Hall" for recommendation to the Board of Trustees for approval on the Non-Consent Agenda.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors approval is not required, but Board of Governors' regulations require all facility, road, and landscape naming to be approved separately on the Non-Consent Agenda. [Note: BOG Reg. 9.002]

Supporting Documentation Included: See attached materials and Resolution #R20-257

Submitted by: Thomas J. Mitchell, Executive Vice President, University of Florida Foundation and Vice President for Advancement

| Approved by the University of Florida Board of Trustees, December 4, 2020 | | |
|---|--|--|
| | | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary | |



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS ACTION ITEM FSPPM1 December 4, 2020

SUBJECT: Housing Rental Rates for the Fiscal Year Ending June 30, 2022

BACKGROUND INFORMATION

The UF Housing experience should be a catalyst for preeminence. By improving both conditions and the program of the existing housing facilities, the University will support students' social and academic engagement in a way that is unique to the University of Florida. This means creating community at every scale of each residence hall while using the residential experience to connect students with the support and rich experiences UF has to offer. While the student housing system is robust with over 10,000 beds, there is significant need to prioritize capital projects addressing the conditions of existing buildings.

The residence halls built in the Mid-Century (1950-1967) represent over half of the University's undergraduate housing stock. With an average age of 62 years, most of these buildings have their original mechanical, electrical, and plumbing (MEP) systems in place. Systems on the whole are beyond their useful life and are experiencing issues that need immediate attention. The facilities lack the kind and quality of common spaces that can support a vibrant student life. These halls are, as a rule, in need of renovation and replacement.

To create the Housing experience expected of a preeminent institution, UF Housing is requesting that the Board approve a rental rate increase up to 4 ½ percent annually for the next 5 years, beginning Fall 2021.

Currently, UF Housing maintains highly competitive rates in relation to the off-campus market (see Figure 1). UF's average rate for an on-campus apartment is \$657/month, compared to an average of \$1,000/month for an off-campus apartment, and falls 52% below market average (see Figure 2). UF's average rate for traditional and suite-style units is \$697/month, standing at 44% below market average for similar off-campus nearby properties (see Figure 3). Similarly, in comparison to peer institutions, UF offers affordable housing options (refer to Attachment A). On average, the semester rate for a traditional double occupancy room is 21% less than the average at peer institutions. Single occupancy rates are between 15% and 30% less than the average at peer institutions. Among the Florida SUS, UF Housing's rents are 10% to 30% less than other member institutions. Moreover, among public universities in the South, UF Housing's rents are among the lowest (refer to Attachment B).

Assuming the maximum rental rate increase annually, the proposed rental rates for single student housing and graduate and family housing are outlined in Attachment C and Attachment D, respectively. Given this assumption, and no changes to the housing inventory, the average rate for an on-campus apartment would be \$819/month and remain 22% below market average compared to off-campus

properties. The average rate for a non-apartment, on-campus unit would be \$868/month, remaining 15% below market average.

The Board of Trustees has the authority to set local fees for the Fiscal Year ending June 30, 2022 effective July 1, 2021, including student housing rental rates. The last year that the Department of Housing and Residence Life received a rate increase was 2015. These proposed rates are reasonable in the context of demand for, and cost of providing, University of Florida student housing, as well as local market conditions.

PROPOSED COMMITTEE ACTION

The Finance, Strategic Planning, and Performance Metrics Committee is asked to recommend to the Board of Trustees, on its non-consent agenda, approval of the proposed rental rate increase up to 4 ½ percent annually for the next 5 years, beginning with the Fiscal Year ending June 30, 2022.

ADDITIONAL COMMITTEE CONSIDERATIONS

| Board of Governors approval is not rec | quired. |
|--|--|
| Supporting Documentation Included: | See attached. |
| Submitted by: D'Andra Mull, Vice Pres | sident for Student Affairs |
| Approved by the University of Florida | Board of Trustees, December 4, 2020 |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |



RESOLUTION

Number: R20-258

Subject: FSPPM1 Housing Rental Rates FY2021-22

Date: December 4, 2020

At a meeting duly held on the above date the University of Florida Board of Trustees ("Board") hereby adopts the following resolution:

WHEREAS, the University of Florida's Housing experience should be a catalyst for preeminence and should support students' academic and social engagement in a way that is unique to our flagship institution;

WHEREAS, there is a critical need to prioritize capital projects that will address the conditions of existing Housing buildings, over half of which were constructed in the Mid-Century and continue to have their original mechanical, electrical, and plumbing systems in place;

WHEREAS, the systems in these buildings, on the whole, are well beyond their useful life and are experiencing issues that need immediate attention and lack the kind of quality of common spaces that can support a vibrant student experience;

WHEREAS, the University's Housing function maintains highly competitive rates in relation to the off-campus market (e.g., UF's average rate for an on-campus apartment is \$657/month, compared to an average of \$1,000/month for an off-campus apartment, and falls 52% below market average. UF's average rate for traditional and suite-style units is \$697/month, standing at 44% below market average for similar off-campus nearby properties;

WHEREAS, in order to best meet student housing needs, the University has adopted a Residence Master Plan which will inform decisions regarding renovation, demolition and new construction as part of an overall facilities strategy;

WHEREAS, the University of Florida is authorized to establish local Housing Rental Rates by section 1009.24, Florida Statutes and Florida Board of Governors Regulation 7.003;

WHEREAS, the last year that the University's Housing function received a rate increase was 2015; and

WHEREAS, the University has the proposed rates are reasonable in the context of demand for, and cost of providing, University of Florida student housing, as well as local market conditions;

WHEREAS, the University of Florida wishes to establish a rental rate increase of up to 4 ½ percent annually for the next five (5) years, beginning with the Fiscal Year ending June 30, 2022;

WHEREAS, to ensure that the University maintains its commitment to both student affordability and maintaining and improving its student housing, the Board will be provided with a market rate update and update on facility reinvestment annually at its December meeting;

NOW, THEREFORE, The University of Florida Board of Trustees hereby resolves to authorize the rental increase as described above, and to delegate such authority to the President.

| Adopted this 4 th day of Decemb | per, 2020, by the University of Florida Board of Trustees. |
|--|--|
| | |
| Morteza "Mori" Hosseini, Chair | W. Kent Fuchs, President and Corporate Secretary |

Figure 1: Student Oriented Off-Campus Housing Market Rental Rates (1-mile radius)

| | Studio | 1BR | 2BR | 3BR | 4BR |
|---------------------------------|---------|---------|---------|-------|-------|
| 13th Street | | \$1,309 | \$809 | \$749 | \$709 |
| Archstone Luxury Apartments | \$1,149 | \$1,429 | \$929 | \$779 | \$814 |
| Ashton Lane II | | \$1,389 | \$937 | \$819 | \$819 |
| Ashton Lane Phase I | | \$1,339 | \$874 | \$785 | \$819 |
| Avenyl | | \$1,455 | \$955 | \$975 | \$895 |
| Camden Court | | | \$899 | \$804 | \$774 |
| Cascades Luxury Apartments | \$1,239 | \$1,419 | \$949 | \$844 | \$844 |
| College Manor | \$769 | \$814 | | \$620 | |
| Courtyards Student Apartments | | | \$790 | | \$559 |
| Greystone Luxury Apartments | \$1,165 | \$1,399 | \$874 | \$819 | \$804 |
| Heritage Oaks Luxury Apartments | | \$1,285 | \$817 | | |
| Latitude 29 | | \$1,299 | \$879 | | |
| LynCourt Square | \$1,250 | \$1,325 | \$930 | \$885 | \$845 |
| Royal Village | | | | \$764 | \$724 |
| Royale Palms | | \$1,344 | \$874 | \$809 | |
| Sabal Palms | | | | \$814 | \$805 |
| Social 28 | | | \$994 | \$944 | \$814 |
| Solaria 1024 | \$1,224 | \$1,459 | \$949 | \$849 | \$854 |
| The Estates at Sorority Row | \$1,079 | \$1,449 | \$919 | \$835 | |
| The NINE of Gainesville | | \$1,404 | \$1,004 | \$884 | \$819 |
| The Standard at Gainesville | | \$1,280 | \$1,205 | | |
| Average | \$1,125 | \$1,337 | \$922 | \$822 | \$793 |

NOTE: Average rent for student-oriented properties within a 1-mile radius of campus is \$1,000. This is derived from average rent for unit types listed above (\$4,999/5).

Figure 2: Off-Campus Market Rental Rate Comparison to UF Apartments Fall 2020 Rates (all rates are per person per month)

| | Student-Oriented (1 mile) Average: \$1,000 | |
|-----------------------------------|---|--------------------|
| UF Unit Type | Average UF Rate | Difference from UF |
| Undergrad Apartment - Single Occ. | \$734 | 36% |
| Undergrad Apartment - Double Occ. | \$632 | 58% |
| Grad/Family Housing | \$605 | 65% |
| Average | \$657 | 52% |

Figure 3: Off-Campus Market Rental Rate Comparison to UF Non-apartment Units Fall 2020 Rates (all rates are per person per month)

| | | Student-Oriented (1 mile) Average: \$1,000 |
|---------------------------|-----------------|---|
| UF Unit Type | Average UF Rate | Difference from UF |
| Traditional - Single Occ. | \$633 | 58% |
| Traditional - Double Occ. | \$591 | 69% |
| Suite - Single Occ. | \$822 | 22% |
| Suite - Double Occ. | \$741 | 35% |
| Average | \$697 | 44% |

Attachment A

Comparison of Housing Rates to Peer Institutions and the Florida SUS

HOUSING RATES

When comparing University of Florida's housing rates against its peer institutions, UF offers more affordable opportunities to students. On average, the semester rate for a traditional double-occupancy unit is 21% less than the average across peer institutions for the same bed type. UF's single-occupancy rates for traditional and double-occupancy suite-style units are more closely aligned in pricing with its peers. UF's undergraduate apartment rates are between 15% and 30% less than the average rate of its peer institutions. A full comparison of housing rates for undergraduate bed types is provided in Figure 4 and 5.

Figure 4. Undergraduate Traditional and Suite Style Monthly Rates per Bed

| Institution | Traditional Double Occupancy | Semi-Suite Double Occupancy | Full Suite Double Occupancy |
|-----------------------|------------------------------------|-----------------------------------|-----------------------------------|
| FSU | NA | \$3,348 | NA |
| OSU | \$3,298 | \$3,529 | \$4,236 |
| UGA | \$2,896 | \$3,305 | \$3,349 |
| UM | \$3,502 | NA | \$4,105 |
| UNC | \$3,305 | \$3,305 | \$3,657 |
| UVA | \$3,130 | \$3,625 | NA |
| UF | \$2,661 | \$3,375 | \$3,898 |
| Peer Average | \$3,226 | \$3,422 | \$3,837 |
| Peer Difference to UF | +21% | +1% | -2% |

Figure 5. Undergraduate Apartment Monthly Rates per Bed

| Institution | Undergraduate Apt. 2BR Single Occupancy | Undergraduate Apt. 2BR Double Occupancy | Undergraduate Apt. 4BR Single Occupancy | |
|---------------------------------------|--|--|--|--|
| FSU | \$3,900 | \$3,060 | \$3,655 | |
| OSU | NA | \$4,236 | NA | |
| UGA | \$3,853 | \$3,530 | \$3,620 | |
| UM | NA | \$4,196 | NA | |
| UNC | \$4,211 | \$3,783 | \$4,211 | |
| UVA | \$3,790 | \$3,380 | \$3,790 | |
| UF | \$3,429 | \$2,845 | \$3,174 | |
| Peer Average Peer Difference to UF | \$3,939 +15% | \$3,698 +30% | \$3,819 +20% | |

UF's housing rates for graduate apartments at Tanglewood, Corry, Diamond, Maguire and UVS are priced significantly less than its peer institutions. On average UF's studio, one-bedroom and two-bedroom apartments rent for 68% less than the average monthly rate of graduate apartments at peer institutions. This comparison is shown in Figure 6.

Figure 6. Graduate Apartment Rates per Unit

| Institution | Studio | 1BR | 2BR | 3BR | 4BR |
|--------------------------|--------|---------|---------|---------|---------|
| FSU | NA | NA | NA | NA | NA |
| OSU | \$885 | \$995 | \$1,938 | \$2,526 | \$3,304 |
| UGA | NA | \$725 | \$794 | NA | NA |
| UM | \$893 | \$951 | \$1,186 | \$1,277 | NA |
| UNC | NA | \$1,055 | \$1,165 | NA | NA |
| UVA | NA | \$820 | \$1,015 | \$1,205 | NA |
| UF | \$533 | \$586 | \$666 | NA | NA |
| Peer Average | \$889 | \$909 | \$1,220 | \$1,669 | \$3,304 |
| Peer Difference to UF | +67% | +55% | +83% | NA | NA |

^{*}Average monthly rent per bed for The Continuum, a University-affiliated property is \$903 and units come furnished.

SUS RENTAL RATE COMPARISON

As previously mentioned, B&D also compared UF's housing rates against its member SUS institutions to understand its competitive position. The research demonstrated that UF's housing is priced below many of the SUS institutions.

B&D compared rates across non-apartment (single- and double-occupancy) and singleoccupancy apartment units. On average UF's housing rents are 10-30% less than other member SUS institutions. The results are depicted in the table below (Figure 8).

May 2019

Figure 8. SUS Price Comparison

| SUS Peer | Non-Apartment Double- Occupancy | Non-Apartment Single- Occupancy | Apartment Single- Occupancy |
|-----------------------|---------------------------------------|---------------------------------------|-----------------------------------|
| USF | \$3,706 | \$4,796 | \$4,431 |
| FSU | \$3,487 | \$3,784 | \$3,762 |
| FPU | \$3,440 | \$4,284 | NA |
| FAU | \$3,360 | \$4,453 | \$4,490 |
| NCF | \$3,123 | \$4,028 | \$4,489 |
| FAMU | \$3,086 | \$3,619 | \$3,224 |
| UWF | \$2,950 | \$3,240 | \$3,380 |
| UNF | \$2,806 | \$4,489 | \$4,062 |
| UCF | \$2,701 | \$2,905 | \$3,126 |
| FIU | \$2,650 | \$3,350 | \$4,021 |
| FGCU | \$0 | \$3,237 | \$2,983 |
| UF | \$2,790 | \$2,961 | \$3,302 |
| Peer Average | \$3,067 | \$3,835 | \$3,797 |
| Peer Difference to UF | +10% | +30% | +15% |

May 2019

Attachment B

Comparison of Housing Rates to Selected Public Institutions in the South

2020 - 2021 Rental Rates

for Student Housing in Selected Public Universities in the South

| | Residen | ce Halls | - | Graduate Apartme | | |
|---|-------------------------|--------------------------|---------------------------------|---------------------------------|---------------|---|
| | A/C Room Double Room | A/C Room Double Suite | Num 1 | nber of Bedrooms 2 | 3 | Requested Increase Over Current Rate |
| | (per ter | m cost) | (0 | cost per month) | | |
| AUBURN UNIVERSITY | \$3,120 - \$5,930 | \$3,120 - \$5,930 | N/A | N/A | N/A | 2% |
| FLORIDA STATE UNIVERSITY | \$3,115 | \$3,440 - \$3,890 | Removed from inventory | Removed from inventory | N/A | TBD |
| LOUISIANA STATE UNIVERSITY | \$3,030 - \$4,165 | \$4,115 - \$4,405 | \$1,458 | \$750 - \$976 | \$815 - \$971 | 3 - 5% |
| MISSISSIPPI STATE UNIVERSITY | \$2,344 - \$3,854 | N/A | N/A | N/A | N/A | 3.5% |
| NORTH CAROLINA STATE UNIVERSITY | \$3,170 - \$3,430 | N/A | \$3,170 - \$3,758 (per sem.) | \$3,825 - \$4,455 (per sem.) | N/A | TBD |
| TEXAS A & M UNIVERSITY | \$2,000 - \$4,388 | \$4,388 | \$933 - \$1,024 | \$1,164 - \$1,378 | N/A | 5% |
| UNIVERSITY OF ALABAMA | \$2,950 - \$3,850 | \$4,700 - \$5,100 | N/A | N/A | N/A | TBD |
| UNIVERSITY OF ARKANSAS | \$3,098 - \$4,415 | \$4,415 | NA | N/A | N/A | 3% |
| UNIVERSITY OF FLORIDA | \$2,648 - \$3,574 | \$2,740 - \$3,729 | \$484 - \$628 | \$542 - \$745 | N/A | 4.5% |
| UNIVERSITY OF GEORGIA | \$2,664 - \$3,359 | \$3,554 | N/A | N/A | N/A | 3% |
| UNIVERSITY OF KENTUCKY | \$3,050 - \$4,950 | N/A | N/A | N/A | N/A | 3% |
| UNIVERSITY OF MISSISSIPPI | \$2,675 - \$3,132 | N/A | Removed from inventory | Removed from inventory | N/A | TBD |
| UNIVERSITY OF MISSOURI | \$3,000 - \$3,635 | \$4,263 - \$4,998 | N/A | N/A | N/A | TBD |
| UNIVERSITY OF NORTH CAROLINA – CHAPEL HILL | \$3,438 | \$3,805 | \$1,100 - \$1,205 | \$1,180 - \$1,380 | N/A | TBD |
| UNIVERSITY OF SOUTH CAROLINA | \$3,876 | \$4,530 | N/A | N/A | N/A | TBD |
| UNIVERSITY OF TENNESSEE | \$2,274 - \$3,245 | \$3,060 - \$3,480 | N/A | N/A | N/A | TBD |
| UNIVERSITY OF VIRGINIA | \$3,355 | \$3,355 | \$870 | \$1,120 | \$1,290 | TBD |
| VANDERBILT UNIVERSITY | \$5,770 | \$5,770 | N/A | N/A | N/A | TBD |

Attachment C

Proposed Rental Rates for Single Student Housing

UNIVERSITY OF FLORIDA DEPARTMENT OF HOUSING & RESIDENCE LIFE RESIDENCE HALLS ROOM RENTAL RATES FOR FALL/SPRING SEMESTER 2021-2026 (Rates Listed are Per Person, Per Semester)

Broward Area

Yulee Area

| Resident Hall | Room Type | 2021-2022 Proposed Rate | 2022-2023 Proposed Rate | 2023-2024 Proposed Rate | 2024-2025 Proposed Rate | 2025-2026 Proposed Ra |
|---------------|--------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------|
| Buckman | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,4 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| Fletcher | Single | 2,817 - 3,177 | 2,944 - 3,320 | 3,076 - 3,469 | 3,214 - 3,625 | 3,359 - 3,78 |
| 1 lotoner | Double | 2,767 - 2,817 | 2,892 - 2,944 | 3,022 - 3,076 | 3,158 - 3,214 | 3,300 - 3,3 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| | Two Room Double | 2,817 - 3,177 | 2,944 - 3,320 | 3,076 - 3,469 | 3,214 - 3,625 | 3,359 - 3,7 |
| | Three Room Triple | 2,973 - 3,177 | 3,107 - 3,320 | 3,247 - 3,469 | 3,393 - 3,625 | 3,546 - 3,7 |
| Murphree | Double | 2,942 | 3,074 | 3,212 | 3,357 | 3,5 |
| | Triple | 2,565 | 2,680 | 2,801 | 2,927 | 3,0 |
| | Two Room Double | 2,942 - 3,177 | 3,074 - 3,320 | 3,212 - 3,469 | 3,357 - 3,625 | 3,508 - 3,7 |
| | Three Room Triple | 2,942 - 3,177 | 3,074 - 3,320 | 3,212 - 3,469 | 3,357 - 3,625 | 3,508 - 3,7 |
| Sledd | Single | 2,565 - 3,163 | 2,680 - 3,305 | 2,801 - 3,454 | 2,927 - 3,609 | 3,059 - 3,7 |
| Sicua | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| | Two Room Double | 2,817 - 3,051 | 2,944 - 3,188 | 3,076 - 3,331 | 3,214 - 3,481 | 3,359 - 3,6 |
| | Two Room Triple | 2,817 - 3,177 | 2,944 - 3,320 | 3,076 - 3,469 | 3,214 - 3,625 | 3,359 - 3,7 |
| | Three Room Quad | 2,817 | 2,944 | 3,076 | 3,214 | 3,3 |
| | Shared Bedroom Apartment | 2,863 | 2,992 | 3,127 | 3,268 | 3,4 |
| Thomas | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,4 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| | Quad | 2,338 | 2,443 | 2,553 | 2,668 | 2,78 |
| Broward | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,49 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,30 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,8 |
| Rawlings | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,4 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | Two Room Quad | 2,817 | 2,944 | 3,076 | 3,214 | 3,3 |
| | Double Suite | 2,863 | 2,992 | 3,127 | 3,268 | 3,4 |
| Cypress | Single | 3,953 | 4,131 | 4,317 | 4,511 | 4,7 |
| | Double Suite | 3,735 | 3,903 | 4,079 | 4,263 | 4,4 |
| | Super Suite | 3,735 | 3,903 | 4,079 | 4,263 | 4,4 |
| Mallory | Single | 2,817 - 2,930 | 2,944 - 3,062 | 3,076 - 3,200 | 3,214 - 3,344 | 3,359 - 3,49 |
| - | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,8 |
| Reid | Single | 2,930 - 3,163 | 3,062 - 3,305 | 3,200 - 3,454 | 3,344 - 3,609 | 3,494 - 3,7 |
| - | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,9 |
| | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,8 |
| Yulee | Single | 2,817 - 2,930 | 2,944 - 3,062 | 3,076 - 3,200 | 3,214 - 3,344 | 3,358 - 3,49 |
| | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,3 |
| | | | | | | |

| | Resident Hall | Room Type | 2021-2022 Proposed Rate | 2022-2023 Proposed Rate | 2023-2024 Proposed Rate | 2024-2025 Proposed Rate | 2025-2026 Proposed Rate |
|-----------------------|------------------|------------------|---------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Jennings Area | | | | | | | |
| | Jennings | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| Graham Area | a . | a: 1 | 2.020 | 2.042 | 2 200 | 2244 | 2 101 |
| | Graham | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | Cimmoon | Cinala | 2,930 | 2.062 | 3,200 | 3,344 | 2 404 |
| | Simpson | Single Double | 2,767 | 3,062 2,892 | 3,022 | 3,158 | 3,494 3,300 |
| | | Double | 2,707 | 2,092 | 3,022 | 3,136 | 3,300 |
| | Trusler | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | Trusici | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| Hume Area (Honors) | | Double | 2,707 | 2,072 | 3,022 | 3,130 | 3,300 |
| Trume Tireu (Tionors) | Hume | Single | 3,953 | 4,131 | 4,317 | 4,511 | 4,714 |
| | 1141110 | Double | 3,735 | 3,903 | 4,079 | 4,263 | 4,455 |
| Springs Complex | | Double | 5,755 | 3,703 | .,077 | 1,203 | 1,100 |
| Springs complex | Springs | Single Suite | 3,433 | 3,587 | 3,748 | 3,917 | 4,093 |
| | Springs | Double Suite | 3,198 | 3,342 | 3,492 | 3,649 | 3,813 |
| Tolbert Area | | | -,-,- | -, | -, | 2,017 | 2,022 |
| | East | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | 1 | , | | , | <u> </u> | |
| | North | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| Tolbert Area | | | | | | | |
| | Riker | Single | 2,930 - 2,973 | 3,062 - 3,107 | 3,200 - 3,247 | 3,344 - 3,393 | 3,494 - 3,546 |
| | | Double | 2,767 - 2,942 | 2,892 - 3,074 | 3,022 - 3,212 | 3,158 - 3,357 | 3,300 - 3,508 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| | | | | | | | |
| | Tolbert | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | Economy Triple | 2,381 | 2,488 | 2,600 | 2,717 | 2,839 |
| | *** | 6: 1 | 2.020 | 2.0.0 | 2 200 | 224 | 2 101 |
| | Weaver | Single | 2,930 | 3,062 | 3,200 | 3,344 | 3,494 |
| | | Double | 2,767 | 2,892 | 3,022 | 3,158 | 3,300 |
| | | Triple | 2,441 | 2,551 | 2,666 | 2,786 | 2,911 |
| | | | | | | | |
| Apartment Style | Beaty Towers | Shared Bedroom | 2,973 | 3,107 | 3,247 | 3,393 | 3,546 |
| | ., | | _,,,,, | - , | - ,= | - ,5,7 | - , |
| | Keys Complex | Private Bedroom | 3,317 | 3,466 | 3,622 | 3,785 | 3,955 |
| | | | -,,, | -, | -, | - , | - ,- ,- |
| | Lakeside Complex | Shared Bedroom | 2,973 | 3,107 | 3,247 | 3,393 | 3,546 |
| | * | Private Bedroom | 3,583 | 3,744 | 3,912 | 4,088 | 4,272 |
| | - | | · · · · · · · · · · · · · · · · · · · | | | | |

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|----------|-----|------------|---|---|--------|-----|---|
| \vdash | LLC | コし | | | \Box | ΙIL | ப |

Proposed Rental Rates for Graduate and Family Housing

UNIVERSITY OF FLORIDA DEPARTMENT OF HOUSING & RESIDENCE LIFE GRADUATE & FAMILY HOUSING RENTAL RATES 2021-2026

(Rates would be effective July 1, 2021)

| Residential Village | Apartment Type | 2021-2022 Proposed Rate (Monthly) | 2022-2023 Proposed Rate (Monthly) | 2023-2024 Proposed Rate (Monthly) | 2024-2025 Proposed Rate (Monthly) | 2025-2026 Proposed Rate (Monthly) |
|--------------------------|--|---|---|---|---|---|
| | | (====================================== | (| (====================================== | (====================================== | (====================================== |
| Corry Village | | | | | | |
| | One Bedroom | 506 | 529 | 553 | 578 | 604 |
| | One Bedroom/Remodeled Apartment | 656 | 686 | 717 | 749 | 783 |
| | Two Bedroom | 566 | 591 | 618 | 646 | 675 |
| | Two Bedroom/Remodeled Apartment | 719 | 751 | 785 | 820 | 857 |
| | Two Bedroom/Deluxe Remodeled Apartment | 779 | 814 | 851 | 889 | 929 |
| Diamond Village | | | | | | |
| - | One Bedroom | 656 | 686 | 717 | 749 | 783 |
| | Two Bedroom | 719 | 751 | 785 | 820 | 857 |
| Tanglewood Apartments | | | | | | |
| | Efficiency | 536 | 560 | 585 | 611 | 638 |
| | Efficiency w/Remodeled Kitchen | 577 | 603 | 630 | 658 | 688 |
| | One Bedroom | 614 | 642 | 671 | 701 | 733 |
| | One Bedroom w/Remodeled Kitchen | 656 | 686 | 717 | 749 | 783 |
| | Two Bedroom | 675 | 705 | 737 | 770 | 805 |
| | Two Bedroom w/Remodeled Kitchen | 719 | 751 | 785 | 820 | 857 |
| | Townhouse | 737 | 770 | 805 | 841 | 879 |
| | Townhouse w/Remodeled Kitchen | 779 | 814 | 851 | 889 | 929 |
| University Village South | | | | | | |
| | One Bedroom | 585 | 611 | 638 | 667 | 697 |
| | One Bedroom w/Remodeled Kitchen | 626 | 654 | 683 | 714 | 746 |
| | Two Bedroom | 645 | 674 | 704 | 736 | 769 |
| | Two Bedroom w/Remodeled Kitchen | 688 | 719 | 751 | 785 | 820 |
| Maguire Village | | | | | | |
| | One Bedroom | 585 | 611 | 638 | 667 | 697 |
| | One Bedroom w/Remodeled Kitchen | 626 | 654 | 683 | 714 | 746 |
| | Two Bedroom | 645 | 674 | 704 | 736 | 769 |
| | Two Bedroom w/Remodeled Kitchen | 688 | 719 | 751 | 785 | 820 |



COMMITTEE ON FINANCE, STRATEGIC PLANNING AND PERFORMANCE METRICS ACTION ITEM FSPPM2, RESOLUTION R20-252 December 4, 2020

SUBJECT: UAA Bond Initiative

BACKGROUND INFORMATION

The University Athletic Association, Inc. ("UAA") proposes to finance, through the issuance of fixed rate or variable rate bonds, as determined by the UAA, a portion of the cost (to include reimbursement to UAA for amounts expended prior to bond issuance) of the following capital improvements relating to student-athlete facilities on the main campus (collectively, the "Projects"): (a) the acquisition, construction, and equipping of the \$85 million James W. "Bill" Heavener Football Training Center, a new stand-alone football team complex and dining hall and lounge for all student athletes, and (b) the construction of \$7.5 million in improvements to the existing Lacrosse facility and the construction of a Soccer facility to house all Soccer program functions in one complex.

These projects will provide the University and UAA with state-of-the-art modernized facilities for the student athletes and coaches and will contribute to the overall well-being of the student athletes and staff. The bonds will be issued in a total principal amount not to exceed \$50 million, and the balance of the Project's costs will be paid by the UAA. The bonds will be general obligations of the UAA, payable from available revenues of UAA including, but not limited to, ticket sales, conference revenues, auxiliary sales, sponsorships, and such other revenues that may be used pursuant to section 1010.62, *Florida Statutes*. The planning and design portions of the Project have already commenced.

Detailed information regarding the proposed \$50 million bond issuance is provided in the accompanying supporting documentation.

The Board is asked to approve the issuance of the bonds and adopt the authorizing resolution as required by the Board of Governors' Debt Management Guidelines. The Board of Trustees' review and general endorsement of the Project is also sought.

PROPOSED COMMITTEE ACTION

The Committee on Finance, Strategic Planning and Performance Metrics is asked to recommend to the Board of Trustees, on its Non-Consent Agenda, approval of the Project and adoption of the attached Resolution R20-252 (i) authorizing the issuance of the bonds to fund a portion of the

Project and pay costs associated with the bonds; (ii) requesting that the Board of Governors approve the issuance of the bonds; and (iii) authorizing the President of the University, any officer of UAA, and other authorized representatives of the University and UAA, to take all necessary or desirable actions in connection with the execution, sale, and delivery of the bonds.

ADDITIONAL COMMITTEE CONSIDERATIONS

Board of Governors' approval of the bond issuance, which is being requested at its March meeting, is required. Legislative approval of the financing for the Project was previously obtained through the 2020 General Appropriations Act.

| Supporting Documentation Included: | See attached Resolution and appendix |
|---|--|
| Submitted by: Scott Stricklin, Athletic | Director |
| Approved by the University of Florid | a Board of Trustees, December 4, 2020 |
| | |
| Morteza "Mori" Hosseini. Chair | W. Kent Fuchs. President and Corporate Secretary |

University Athletic Association, Inc. Tax-Exempt Bond Issue

The University Athletic Association, Inc. ("UAA") is seeking approval for a not to exceed \$50 million tax-exempt bond issue to provide funds for capital projects and improvements.

The UAA has a conservative yet proactive practice regarding debt. The UAA has made a significant commitment to buildings and improvements, and \$174.2 million has been spent on capital assets since 2010. The funding for these projects has come primarily from operating funds and private capital contributions, with 46% funded through the issuance of debt. With annual revenues of \$161 million in 2020, the UAA currently has only \$114.3 million in debt.

While the UAA has been affected by the COVID-19 pandemic like all athletic programs throughout the nation and world, the UAA has experienced steady rates of growth in its operating revenues and expenses over the last ten years through FYE 2020. Operating revenues have grown by 43% from \$111 million to \$157 million and operating expenses have grown by 34% from \$104 million to \$139 million. During this period, the UAA steadily grew its net position by 70% from \$118 million in 2011 to \$201 million in 2020, which assists in its response to the COVID-related challenges.

Operating
Funds
12%

Private Capital
Contributions
43%

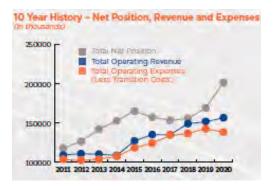
Gin thousands)

Scool
Funds

Annual Capitalized Projects - 2010 through 2020

Bond Issuance

The UAA experienced positive revenue increases prior to March 2020 and significant savings in expenses after March due to no competition, which is unprecedented in the history of college athletics. The UAA experienced a net increase in total assets of \$7.6 million in 2020, which included a decrease of \$31.2 million in current assets due to the timing of ticket-related contributions for the 2020 football season. With construction of the Florida Ball Park near completion, the UAA's capital assets increased by \$40.8 million.



The UAA also paid down its debt by \$6.7 million and experienced an increase in net position of \$32.2 million in FYE 2020.

| | | | 2020-2 | 2019 | | 2019-2 | 2018 |
|--|------------|------------|------------|-------------------|------------|------------|-------------------|
| | 2020 | 2019 | (decrease) | Percent change | 2018 | (decrease) | Percent change |
| Operating revenues | | | | | | | |
| Sales of goods and services | \$ 41,138 | \$ 35,470 | 5 5,668 | 15.98% | \$ 40,348 | s (4,878) | -12.09% |
| SEC and NCAA distributions | 46,591 | 47,670 | (1,079) | -2.26% | 45,420 | 2,250 | 4.95% |
| Contributions | 37,890 | 38,635 | (745) | -1.93% | 36,976 | 1,659 | 4.49% |
| Royalties and sponsorships | 24,203 | 21,363 | 2,840 | 13.29% | 19,414 | 1,949 | 10.04% |
| Other | 6,835 | 8,311 | (1,476) | -17.76% | 7,091 | 1,220 | 17.20% |
| Total operating revenues | 156,657 | 151,449 | 5,208 | 3.44% | 149,249 | 2,200 | 1.47% |
| Nonoperating revenues | 4,648 | 5,154 | (506) | -9.82% | 4,734 | 420 | 8.87% |
| Total revenues | 161,305 | 156,603 | 4,702 | 3.00% | 153,983 | 2,620 | 1.70% |
| Operating expenses | | | | | | | |
| Salaries, wages and benefits | 63,008 | 59,862 | 3,146 | 5.26% | 70,585 | (10,723) | -15.19% |
| Direct team expenses | 26,178 | 32,239 | (6,061) | -18.80% | 29,667 | 2,572 | 8.67% |
| Scholarships and athlete support services | 20,402 | 22,227 | (1,825) | -8.21% | 22,203 | 24 | 0.11% |
| Administrative services and facilities | 18,479 | 17,653 | 826 | 4.68% | 17,834 | (181) | -1.01% |
| Camps and depreciation | 10,446 | 10,695 | (249) | -2.33% | 10,925 | (230) | -2.11% |
| Total operating expenses | 138,513 | 142,676 | (4,163) | -2.92% | 151,214 | (8,538) | -5,65% |
| Nonoperating expenses | | | | | | | |
| Interest on capital related debt Contributions to University of Florida | 3,401 | 3,696 | (295) | -7.98% | 2,003 | 1,693 | 84,52% |
| and UF Foundation | 1,741 | 3,352 | (1,611) | -48.06% | 7,426 | (4,074) | -54.86% |
| Total nonoperating expenses | 5,142 | 7,048 | (1,906) | -27.04% | 9,429 | (2,381) | -25.25% |
| Total expenses | 143,655 | 149,724 | (6,069) | -4.05% | 160,643 | (10,919) | -6.80% |
| Capital contributions from Gator | | | | | | | |
| Boosters, Inc. and others | 14,611 | 6,366 | 8,245 | 129.52% | 9,039 | (2,673) | -29.57% |
| ncrease in net position | 32,261 | 13,245 | 19,016 | 143.57% | 2,379 | 10,866 | 456,75% |
| Net position, beginning of year | 168,996 | 155,751 | 13,245 | 8,50% | 153,372 | 2,379 | 1.55% |
| Net position, end of year | \$ 201,257 | \$ 168,996 | \$ 32,261 | 19.09% | \$ 155,751 | 5 13,245 | 8,50% |

While conservatively limiting our use of debt, the UAA is aggressive in the active debt management of its obligations to minimize interest cost, deftly respond to the changing economic and financial markets, and ensure that our mix of fixed and variable rate debt is appropriate for our mission and risk profile.

Since 1991, the UAA has utilized a combination of weekly and daily variable rate debt, and 1 – 20-year fixed rate tranches. The UAA's asset profile includes cash and investments includes a 5-year average annualized balance of \$75 million with a balance of \$118 million at June 30, 2020. When daily and weekly variable rate debt has been outstanding, the UAA has monitored the interest rates on a daily basis, and responded quickly when events affected the variable rate market such as the financial crisis in 2008 and the downgrades of the previous credit provider, SunTrust. In response to each of these events, the UAA's finance team immediately met to review the available alternatives, such as alternate credit providers and conversion to fixed rate debt. The UAA is fully aware of the risks associated with variable rate financing and carefully considers these risks in addition to the benefits of lower interest cost, asset-liability management, and flexibility.

Over the past 10 years, the UAA estimates an average variable rate debt cost of under 2.0%, including remarketing and liquidity fees.

The UAA's current debt profile consists of the following:

University of Florida Athletic Association Outstanding Principal as of 11/1/20

| | A. | В. | C. | | D. | | E. | F. | | | | |
|---------|--|---|--|--|--------------|---|---|--|-------------------|-------------|---------------|---------|
| | Fixed Rate at 1.78% with JP Morgan | 6 Year Fixed Rate at 1.91% with SunTrust, mand tender 10/1/23 | Weekly Variable w/ US Bank at SIFMA +.47% | 10 Year Fixed Rate at 2.08% with US Bank, mandatory tender 10/01/26 | | 10 Year Fixed at 1.94% through 10/1/30 w/ JP Morgan | 2018 Note w/ SunTrust at 3.43% (20 yr mand tender, 25 yr amort) | unTrust at .43% (20 yr and tender, | | | | |
| | Series 2001 | Series 2001 | Series 2001 | Series 2007 | Series 2011 | Total | Series 2015 | Series 2018 | | | Mandatory | |
| Date | Principal | Principal | Principal | Principal | Principal | Principal | Principal | Principal | Principal | Balance | Tenders | Date |
| 10/1/21 | | \$ - | \$ - | \$ 500,000 | | | \$ 750,000 | \$ 1,375,000 | \$ 6,585,000 | | \$ 14,235,000 | 10/1/21 |
| 10/1/22 | 3,350,000 | - | - | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,425,000 | 6,775,000 | 100,900,000 | - | 10/1/22 |
| 10/1/23 | 3,490,000 | - | - | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,475,000 | 6,965,000 | 93,935,000 | 15,950,000 | 10/1/23 |
| 10/1/24 | 3,640,000 | - | - | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,525,000 | 7,165,000 | 86,770,000 | - | 10/1/24 |
| 10/1/25 | - | 2,005,000 | 1,790,000 | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,580,000 | 7,375,000 | 79,395,000 | | 10/1/25 |
| 10/1/26 | - | 2,090,000 | 1,865,000 | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,635,000 | 7,590,000 | 71,805,000 | 4,250,000 | 10/1/26 |
| 10/1/27 | - | 2,175,000 | 1,945,000 | 500,000 | 750,000 | 1,250,000 | 750,000 | 1,690,000 | 7,810,000 | 63,995,000 | - | 10/1/27 |
| 10/1/28 | - | 2,270,000 | 2,025,000 | - | 750,000 | 750,000 | 750,000 | 1,750,000 | 7,545,000 | 56,450,000 | - | 10/1/28 |
| 10/1/29 | - | 2,365,000 | 2,115,000 | - | 750,000 | 750,000 | 750,000 | 1,810,000 | 7,790,000 | 48,660,000 | - | 10/1/29 |
| 10/1/30 | - | 2,470,000 | 2,200,000 | - | 750,000 | 750,000 | 750,000 | 1,875,000 | 8,045,000 | 40,615,000 | 3,750,000 | 10/1/30 |
| 10/1/31 | - | 2,575,000 | 2,295,000 | - | 750,000 | 750,000 | 750,000 | 1,940,000 | 8,310,000 | 32,305,000 | - | 10/1/31 |
| 10/1/32 | - | - | - | - | - | - | 750,000 | 2,010,000 | 2,760,000 | 29,545,000 | - | 10/1/32 |
| 10/1/33 | - | - | - | - | - | - | 750,000 | 2,080,000 | 2,830,000 | 26,715,000 | - | 10/1/33 |
| 10/1/34 | - | - | - | - | - | - | 750,000 | 2,150,000 | 2,900,000 | 23,815,000 | - | 10/1/34 |
| 10/1/35 | - | - | - | - | - | - | 750,000 | 2,225,000 | 2,975,000 | 20,840,000 | - | 10/1/35 |
| 10/1/36 | - | - | - | - | - | - | - | 2,305,000 | 2,305,000 | 18,535,000 | | 10/1/36 |
| 10/1/37 | - | - | - | - | - | - | - | 2,385,000 | 2,385,000 | 16,150,000 | | 10/1/37 |
| 10/1/38 | - | - | - | - | - | - | - | 2,465,000 | 2,465,000 | 13,685,000 | 13,685,000 | 10/1/38 |
| 10/1/39 | - | - | - | - | - | - | - | 2,550,000 | 2,550,000 | 11,135,000 | | 10/1/39 |
| 10/1/40 | - | - | - | - | - | - | - | 2,640,000 | 2,640,000 | 8,495,000 | | 10/1/40 |
| 10/1/41 | - | - | - | - | - | - | - | 2,735,000 | 2,735,000 | 5,760,000 | | 10/1/41 |
| 10/1/42 | - | - | - | - | - | - | - | 2,830,000 | 2,830,000 | 2,930,000 | | 10/1/42 |
| 10/1/43 | - | - | - | - | - | - | - | 2,930,000 | 2,930,000 | - | | 10/1/43 |
| , | \$ 13,690,000 | \$ 15,950,000 | \$ 14,235,000 | \$ 3,500,000 | \$ 8,250,000 | \$ 11,750,000 | \$ 11,250,000 | \$ 47,385,000 | \$ 114,260,000 | | \$ 51,870,000 | |
| | | | 12% | | | % Variabl | e Rate/Subject to | Interest Rate Ris | k at Remarketing | | 45% | |
| | | | | | | | | % Amortiz | ing at Fixed Rate | | 55% | |
| UAA Ou | ıtstanding Debt | | | | | | | ,001 612 | Total | | 100% | |
| % Total | Amount | | | | | | | | ·otai | | .3070 | |

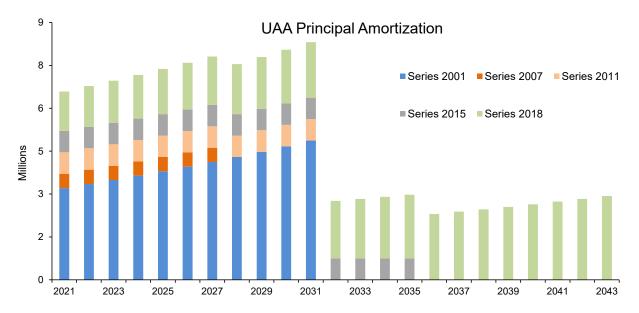
| % Total | Amount | |
|---------|-------------|--|
| 12% | 13,690,000 | A. Fixed rate at 1.78% with JP Morgan. Prepayable in whole or part on any Interest Date with make-whole provision. |
| 14% | 15,950,000 | B. 6 year fixed rate at 1.91% with SunTrust, mand. tender 10/01/23. Optional redemption in whole or part at par w/ notice not less than 15 days and not more than 60 days prior. |
| 12% | 14,235,000 | C. Direct placement weekly variable rate with US Bank, mandatory tender 10/01/21. Subject to optional redemption on any interest payment date without premium. |
| 10% | 11,750,000 | D. 10 year fixed rate at 2.08% with US Bank, mandatory tender 10/01/26. ¹ |
| 10% | 11,250,000 | E. Fixed rate at 2.39% through 10/1/20, 1.94% with mandatory tender 10/1/30 with JP Morgan. Prepayable in whole or part on any Interest Date with make-whole provision. |
| 41% | 47,385,000 | F. 20 year fixed rate with 25 year amortization at 3.43% w/ SunTrust, mand. tender 10/01/38. Make-whole until 10/1/28; optional redemption at par on or after 10/01/28. |
| 100% | 114,260,000 | |

¹ Original rate of 1.71%; rate change due reduction of corporate tax rate effective 01/01/2018

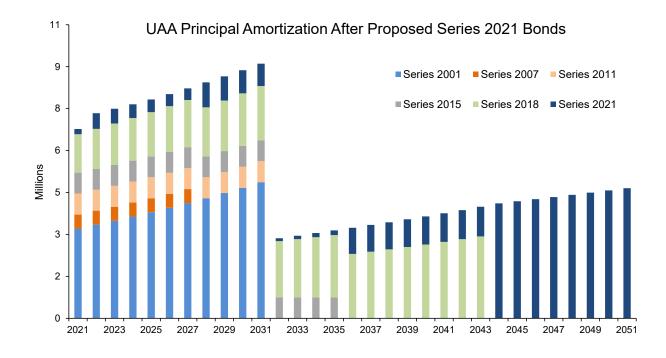
² Original spread of .41%; rate change due reduction of corporate tax rate effective 04/02/2018, extended tender from 10/1/19 to 10/01/2021

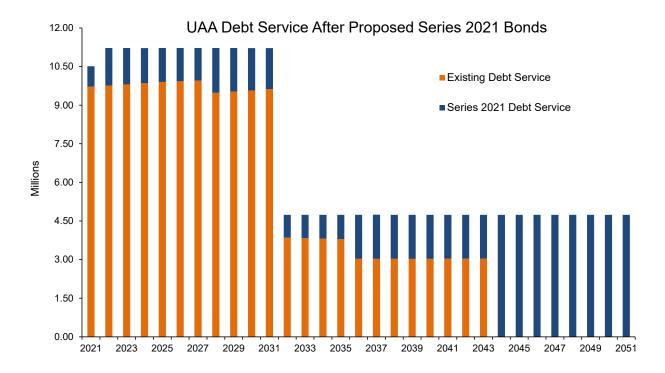
³ Original rate of 1.97%; rate change due to reduction of corporate tax rate effective 1/1/2018

The UAA's principal amortization currently increases to approximately \$8.3 million in 2031 and then drops off to under \$3 million as illustrated below.



Continuing with our active debt management, the UAA expects to issue \$50 million in new debt as variable rate bonds or bonds with a fixed rate for a shorter period, such as 11 years to coincide with the decline in principal payments after 2031. However, we respectfully request the financial flexibility to issue all or a portion of the bonds with a shorter or longer fixed rate period depending on market conditions at the time of issuance. The new bond will have a 30 year final maturity. Due to the current debt pattern, we propose smaller amortizations through 2031 and increased annual principal payments thereafter to provide more of an overall level debt service pattern. Below are charts of the UAA's principal amortization and aggregate debt service after the proposed issue.





We have utilized conservative assumptions in our forecasts, and still project debt service coverage of 1.11x, which includes negative operating income for FY21, over the next 5 years.

The UAA seeks the UFBOT's adoption of the Resolution permitting the debt issuance.

A RESOLUTION AUTHORIZING THE ISSUANCE OF DEBT AND REQUESTING THE FLORIDA BOARD OF GOVERNORS TO APPROVE THE ISSUANCE OF DEBT IN AN AMOUNT NOT TO EXCEED \$50,000,000 TO FINANCE OR REIMBURSE THE COSTS OF (I) THE CONSTRUCTION AND EQUIPPING OF THE JAMES W. "BILL" HEAVENER FOOTBALL TRAINING CENTER, AND (II) THE CONSTRUCTION OF A SOCCER AND LACROSSE STADIUM COMPLEX, EACH ON THE CAMPUS OF THE UNIVERSITY OF FLORIDA AND PROVIDING AN EFFECTIVE DATE.

BE IT RESOLVED BY THE BOARD OF TRUSTEES (all capitalized terms not otherwise defined herein will be as defined in the Amended and Restated Trust Indenture, dated as of October 1, 2011, between The University Athletic Association, Inc. ("UAA") and U.S. Bank National Association, or its successors or assigns (the "Trustee"), as heretofore amended and supplemented, particularly as amended and supplemented by a Ninth Supplemental Trust Indenture, dated as of its date, between UAA and the Trustee (collectively, the "Indenture"):

Section 1. The University of Florida Board of Trustees (the "Board of Trustees") hereby authorizes the issuance of tax-exempt debt in an amount not to exceed FIFTY MILLION DOLLARS (\$50,000,000) (the "Debt") by UAA on behalf of the Board of Trustees, such authorization conditioned upon UAA having heretofore authorized the issuance of the Debt. The Board of Trustees hereby requests the State University System of Florida Board of Governors (the "Board of Governors") to approve the issuance of the Debt for the purpose of (i) financing or reimbursing the costs of (a) the construction and equipping of the James W. "Bill" Heavener Football Training Center, a new stand-alone football team complex and dining hall and lounge for all student athletes, and (b) the construction of improvements to the existing Lacrosse facility and the construction of a Soccer facility to house all Soccer program functions in one complex (collectively, the "Project"), all as more particularly described on Schedule A hereto, on the campus of the University of Florida (the "University") and (ii) paying certain costs relating to the Debt. The Board of Trustees hereby affirms the existence and the purposes of UAA.

Section 2. The Florida legislature has authorized the Project pursuant to the 2020-21 General Appropriations Act, effective July 1, 2020. The Project is reflected on the approved master plan for the University and is consistent with the mission of the University because the Project will provide additional and renovated facilities for use by the students and employees of the University and UAA. Construction of the Project began in July 2020 and is expected to be completed by December 2023. Proceeds of the Debt are not anticipated to be sufficient to complete the construction of the Project without the use of additional funds. Additional necessary funding in the amount of approximately \$42.7 million will be obtained from capital gifts as well as unrestricted cash and investments contributed by UAA. Prior to the issuance of the Debt, approval of the Board of Governors will be obtained. No proceeds of the Debt will be used to finance operating expenses of the University or UAA.

Section 3. The Debt will be a general obligation of UAA and UAA is legally authorized to secure the payment of the Debt with available revenues of UAA, including but not limited to, ticket sales, conference revenues, auxiliary sales, sponsorships and such other revenues that may be used, pursuant to Section 1010.62, Florida Statutes, as amended, to pay and secure debt (with the exception of (i) the Athletic Fees described in Section 1009.24(12), Florida Statutes, as amended and (ii) any capital gifts and donations). The Debt is expected to be issued on parity and with the same benefit and security of the Indenture as all other Debt issued thereunder and no Athletic Fees, as described in Section 1009.24(12), Florida Statutes, as amended, or capital gifts and donations will be pledged for payment of the debt service on the Debt. The Debt may be secured by a Credit Facility that will be chosen through a competitive selection process analyzing the cost of the Credit Facility and the expected interest cost savings resulting from its use. UAA is committed to ensuring that sufficient revenues will be generated to fulfill UAA's obligations with respect to the Debt.

Section 4. The Debt will mature not more than thirty (30) years after issuance, including any extensions or renewals thereof. The estimated average useful life of the Project of thirty (30) years does not exceed the anticipated final maturity of the Debt. The Debt will bear interest in a fixed or variable rate mode as determined by UAA. The Board has determined the UAA has the requisite technical expertise to determine the initial interest rate mode for the Debt that will be in the best interest of UAA as the market would dictate at the time of issuance. Variable rate debt will be managed in accordance with the Debt Management Guidelines adopted by the Board of Governors on June 17, 2016, as heretofore amended, and as may be amended from time to time by the Board of Governors (the "Debt Management Guidelines") and UAA's post-issuance tax compliance and monitoring procedures policy on file with UAA.

Section 5. The Board has determined the UAA has the requisite technical expertise to properly manage the risks and the execution of the Debt in any interest rate mode through its staff, including the Director of Athletics, the Associate Athletics Director and UAA's Bond Financial Advisor. UAA's Chief Financial Officer will be responsible for monitoring the variable interest rates paid on the Debt, if any, and if necessary, establishing a variable rate debt service budget for the Debt and preparing the annual reports on variable rate debt required pursuant to the Debt Management Guidelines.

Section 6. It is expected that the Debt will be sold pursuant to a negotiated sale. A negotiated sale is necessary because of prevailing market conditions, because delays caused by soliciting competitive bids could adversely affect the ability to issue and deliver the Debt at presently favorable interest rates, and because the nature of the security for the Debt and the sources of payment of debt service on the Debt requires the participation of a purchaser, an underwriter, a placement agent and/or remarketing agent in structuring the Debt. An analysis was provided to the Division of Bond Finance and the Board of Governors demonstrating that a negotiated sale is desirable as referenced in Appendix A hereto. Any selection of a purchaser, an underwriter, a placement agent and/or remarketing agent will be accomplished through a competitive selection process.

- **Section 7.** The Board of Trustees will comply, and will require the University and UAA to comply, with all requirements of federal and state law relating to the Debt, including but not limited to, laws relating to maintaining any exemption from taxation of interest payments on the Debt and continuing secondary market disclosure of information regarding the Debt.
- **Section 8.** The Board of Trustees and UAA shall comply with post-issuance considerations stipulated in the Debt Management Guidelines and UAA's post-issuance tax compliance and monitoring procedures policy in connection with the issuance of the Debt.
- **Section 9.** The President of the University, any officer of UAA and other authorized representatives of the University and UAA are hereby authorized to take all actions and steps, to execute all instruments, documents, and contracts, and to take all other actions as they may deem necessary or desirable, in connection with the execution, sale and delivery of the Debt.
- **Section 10.** In making the determination to finance the Project, the Board of Trustees has reviewed additional information relevant to such determination. Such information is set forth in Appendix A hereto.
- **Section 11.** These resolutions shall take effect immediately upon their adoption, subject to the approval of the Board of Governors.

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CERTIFICATE OF THE CORPORATE SECRETARY

The undersigned, Corporate Secretary of The University of Florida Board of Trustees, does hereby certify that the attached resolution is a true and accurate copy as adopted by The University of Florida Board of Trustees on December 3, 2020.

| | THE UNIVERSITY OF FLORIDA BOARD OF TRUSTEES |
|--------------|--|
| Dated:, 2020 | |
| | By: |

Appendix A

[FOLLOWS]

Appendix A Project Summary University of Florida University Athletic Association, Inc. Athletic Improvements

Project Description:

The University of Florida's University Athletic Association (the "UAA") is proposing an athletic improvement project. The proposed project includes two components: (i) renovation and expansion of Soccer and Lacrosse Stadium Complex and (ii) new Bill Heavener football training center (collectively, the "Project").

Bill Heavener Football Training Center

The facility will serve as the new day-to-day home for Florida football student-athletes and staff. Florida's meeting rooms, locker room, strength and conditioning area, training room and coaches' offices will all be adjacent to the practice field, creating maximum efficiency within the program. The front lower quadrant of the building will be for <u>all</u> student-athletes and will feature a dining hall and lounge, along with outdoor activities and amenities.



Soccer and Lacrosse Stadium Complex

UAA desires to construct improvements to the existing Lacrosse and Soccer Practice facility. The Lacrosse facility improvements will include a reception area, coaches offices, storage and work areas. The Soccer facility will be an addition to the current Lacrosse building and provide all Soccer program functions including: coaches offices, locker room, training area, equipment storage, and other program spaces. This will allow the Soccer program to be more efficient by being housed at their practice and game facility rather than several other current locations. In addition to the

individual program upgrades, a common multi-purpose classroom/team meeting room is also programmed.



The Project is included in the University Master Plan.

Facility Site Locations: The Project is located in several areas of the main campus.

(See Schedule I - map)

Projected Start and Opening Date:

The Bill Heavener football training complex construction started in July 2020 with the demolition of the existing baseball stadium. Completion is expected in Spring 2022. Renovation and expansion of the Soccer and Lacrosse facility is currently in the design phase and construction is expected to take 12 months. An official start date would be no sooner than August 2021.

Approvals:

The UAA Board is expected to approve the proposed financing terms of the Project in November 2020 (the "UAA Resolution"). The University Board of Trustees will review and approve the Project on December 3, 2020.

Specific legislative approval of the Project financing has been obtained, effective July 1, 2020.

Demand Analysis:

Bill Heavener Football Training Center

This facility will benefit all UF Student-Athletes. The front lower quadrant of the building will be for all student athletes, featuring a dining hall and lounge, along with outdoor activities and amenities. It will serve as the new daily home for Florida Football and includes a prominent and visible entrance that is intended to capture the attention of recruits and fans. The team locker room and meeting areas will now be housed right next to their practice

field, creating maximum efficiency. The weight room will be a new state-of-the-art strength and conditioning space dedicated to the football program and adjacent to the indoor practice facility.

The coaches' offices and player areas will allow for more face-to-face time with players, and having a dedicated team and lounge space will be inviting for players and recruits alike. The enhanced sports medicine and rehabilitation facility with hydrotherapy will have state-of-the-art resources to treat the student-athletes and to ensure their health and development.

With the daily activities of the football program moving out of Ben Hill Griffin Stadium, these spaces will be available for future development to benefit other student-athletes and fans. Plans for these spaces are under development and will be announced at a later date.

Soccer and Lacrosse Stadium Complex

In 2016, the UAA engaged a consultant on a feasibility study to evaluate the necessary modifications needed to permanently relocate UF Soccer to the UF Lacrosse site. At the time of the study, the soccer competition field was a shared space with the track and field stadium. The dimensions of the playing field precluded the UAA from hosting post-season championships at this site. Subsequent to this study, Soccer has permanently relocated to the original lacrosse stadium for all competition.

With the permanent relocation of the soccer competition site and our need to fully support our student-athletes in a first-class manner, the UAA would like to move all of the related support services for these teams to the current competition and practice site.

Study of Private Sector Alternatives:

The Project consists of athletic facilities managed and operated by the UAA for the benefit of student-athletes and the athletic programs at the University. The programs and services offered at these proposed facilities are directly correlated and impacted by the physical proximity to athletic facilities, housing, dining and academic programs. The UAA is also convinced that the advantages of proximity also affect student-athlete recruitment and retention.

As a result, there are no private sector alternatives that can provide the same level of access and service as the proposed Project.

Project Cost and Financing Structure:

The total project cost for the two facilities is estimated at \$92.5M and will be funded through an estimated \$50 million in debt

proceeds. The remaining \$42.5M will be a combination of contributions from private donors and unrestricted UAA cash.

| Project | Cost |
|--|--------------|
| Soccer and Lacrosse Stadium Complex | \$7,500,000 |
| Bill Heavener Football Training Center | \$85,000,000 |
| Total: | \$92,500,000 |

(See Schedule II - Estimated Sources and Uses of Funds)

Accordingly, what the UAA is seeking in the UAA Resolution is flexibility to issue the debt using the financial structure that is most advantageous to the UAA at the time of issuance, which could include some combination of publicly offered bonds and privately placed debt. If all or a portion of the debt is placed directly with a bank, this will be done via a negotiated process. The portion of the debt that may be issued via a bank loan is planned to be issued with a term of as short as 5 years or as long as 30 years.

The UAA is seeking this flexibility with regards to financing methods due to current uncertainty in the market as to the direction of both short-term and long-term interest rates. The UAA's goal is to issue debt using the method that is projected to result in the lowest cost of capital, while maintaining a conservative risk profile. Based on market conditions closer to the time of sale, the UAA will review the all-inclusive interest costs, terms, and advantages/disadvantages of a public offering compared to a direct placement and determine the financing method and structure at the time. In making this decision, the UAA's considerations will include, but not be limited to, the UAA's outstanding debt characteristics, the shape of the yield curve, interest rates, available direct placement structures, and market conditions at the time.

The debt will be structured with a 30-year final maturity, and a manner which is accordance with the Debt Management Guidelines.

Security/Lien Structure: The debt will be issued on a parity basis with the outstanding UAA debt, totaling \$114,260,000 as of October 1, 2020. This balance is comprised of \$59.3M, or 52%, of variable rate and short-term fixed rate debt and \$54.8M in debt that has a fixed rate through its final maturity. Once the debt is issued, the UAA will have \$164.3M in outstanding debt, of which approximately 67% will be in variable rate and short-term fixed rate modes.

> Debt service payments are structured on a generally level basis as specified in the Debt Guidelines.

The debt will be a general obligation, payable from available revenues of the UAA pursuant to Section 1010.62, Florida Statutes, but excluding (i) Athletic Fees described in Section 1009.24(12), Florida Statutes and (ii) any capital gifts and donations.

Pledged Revenues and Debt Service Coverage:

The revenues available to pay debt service consist of revenues of the UAA (excluding Athletic Fees and capital gifts and donations). These revenues come mainly from ticket sales and conference revenues related to football and basketball; however, significant revenues are derived from other sports, auxiliary sales, camps, royalties and sponsorships. To understand the operations of the UAA and the likelihood that debt service will be paid in full and on time, it is important to review the financial operations and performance of the UAA, taking into consideration all revenues and expenses. This review includes the Athletic Fees and capital gifts and donations, even though they are not pledged, since they are available to pay other expenses of the UAA.

(See Schedule III - Financial Statement History and Pro Forma Projections)

The proposed Project will generate less in net revenues than in new debt service, accordingly, the UAA is projecting a decline in net implied debt service coverage from a 4 year historical average of 3.08X to a projected 5 year average of 1.10X coverage. The 5-year projection includes a negative debt service coverage ratio for FY21 due to pandemic effected revenues. As noted in the pro-forma the Association is projecting a two-year recovery period prior to the revenue stream normalizing. This conservative approach indicates financial strength even in this unprecedented time.

As a general obligation pledge, the UAA's debt is further secured by its estimated available unrestricted investments of \$49.2M as of June 30, 2020 and the ability to significantly reduce expenses if required to make debt service coverage.

Projected revenues available to pay debt service are projected to decline from historical years primarily because of conservative projections (which do not include any capital contributions or any annual increase to the Athletic Fee). Over the past 5 years, capital contributions averaged \$9.6M and the total Athletic Fee averaged \$2.5M. While not legally pledged to UAA debt, these revenues would be available to pay other expenses of the UAA.

Projections are based on an increase of 2% for most revenues and 3% for expenses, which is a conservative approach and intended to stress test the revenue streams. Projections have also been adjusted for FY22 in anticipation of possible further disruption from the pandemic. Growth in revenues is primarily based on the

expected growth in SEC revenue, football revenue, and men's basketball revenue.

Management of Variable Rate Debt:

The debt is expected to be issued for an initial term shorter than maturity using a direct placement note with a bank and not on a fixed rate basis. Under the Debt Management Guidelines, debt whose term is less than the full maturity is treated as variable debt. Accordingly, the UAA's demonstrated experience and variable debt rate management plan should be carefully considered, as well as the fact that the UAA has a significant amount of outstanding variable rate debt and also has some fixed rate debt of shorter duration that have characteristics of variable rate debt.

The UAA's expertise and financial strength indicate that they have an adequate understanding of the risks and complexities associated with variable rate debt. With regard to managing interest rate risks, the UAA budgets for variable rate debt each year consider the volatility of short-term interest rates and their impact on the budget, as well as expectations regarding interest rates. The current practice is to budget based upon the highest monthly rate for the preceding twelve months with a review of predicted future fed rate increases. Quarterly monitoring of debt service expenditures, projections and variations from budget will be performed by the Director of Athletics, the Association Finance Committee, and the chair of the Association Audit Committee so that any budgetary concerns can be recognized and quickly addressed.

The UAA has determined that it will also maintain appropriate amounts of short-term and long-term investments as a partial hedge against rising interest rates on its debt. The financing documents (on previously issued debt) require the UAA to maintain unrestricted cash and marketable securities of at least 25% of its outstanding indebtedness. The short-term investments average approximately \$54M on a quarterly basis. Based on current projections, this amount will need to be \$42M to match the new debt total of \$164M. On June 30, 2020, long-term investments totaled \$49.2M, almost 43% of outstanding debt. The short-term investments are invested with the State's Treasury Investment Pool and earn interest at a variable monthly rate.

The short-term investments should perform as a direct hedge against approximately one-fifth of the outstanding and proposed variable rate debt because the interest received on the investments should increase as the interest rate paid on the variable rate debt increases. The long-term investments are currently invested primarily in equity funds, which can be converted to cash within 90 days. These investments might not perform in the same manner as the variable rate debt because their value and earnings under

varying market conditions could decline when the interest rate on the variable rate debt is rising. Although investing in equity funds does not provide the most stable or predictable hedging tool, the \$49.2M in those funds, along with the \$54M in short-term investments, provides significant protection to the UAA in the event of an increase in interest rates. The outstanding debt in the short-term fixed rate mode also provides budgetary stability during the fixed rate period.

The UAA does not intend to use derivatives for this transaction.

Quantitative Metrics:

Bill Heavener Football Training Center

The current student-athlete dining hall facility is undersized and underserves the needs of the student-athletes. Currently, over 450 students utilize the training table facility on a daily basis for all of their nutritional needs. The area has seating and serving capacity for 125 students when there is an actual need of simultaneous service for closer to 250 students. The new facility will allow for food choice and staffing dedicated to the needs of the student-athletes.

The sports health training room and hydrotherapy spaces in the new facility will greatly improve the overall health and well-being of the student-athletes. The current space is significantly undersized and underserves the students. The hydrotherapy pools, which play a significant role in the student-athletes' rehab and recovery, are also undersized. The new facility will both triple the number of available pools and provide access to the best rehab practices and technology available, which in turn will have a positive impact on the student-athletes' quality of life.

The removal of the baseball stadium has created the opportunity to house all team operations, activities, and needs of the football team within adjacent buildings. The location of the current facilities in relation to the practice fields is not ideal. The proposed new facility would be co-located with the practice fields, solving the current issues with travel time and safety concerns for athletes crossing the road fully dressed for practice. Expansion of the existing space was considered but was deemed sub-optimal due to the lack of proximity and a connection to the facility itself and the need for co-location to the practice fields.

While this facility will not be a revenue generating facility, it will allow our staff and students to maximize their time and resources. It will allow our staff and student-athletes the ability to more easily navigate inclement weather due to the connectivity to the indoor practice facility. The new training center will also aid in recruiting prospective student-athletes by way of elevating our facilities to an elite category in college athletics.

The new facility also creates future opportunities. With the daily activities of the football program moving out of Ben Hill Griffin Stadium, these spaces will be available for future development to benefit other student-athletes and fans.

Soccer and Lacrosse Stadium Complex

The UAA desires to construct improvements to the existing Lacrosse and Soccer Practice facility.

The current Lacrosse facility does not include the coaches' offices. The current office location is in the Lemerand Center near the O'Connell Center, creating inefficiencies and coordination efforts that will be resolved with the new addition to the facility. The addition to the existing facility will provide a larger Coaches Suite, providing space for not only the head coach, but the assistant coaches and support staff as well. This space will also support a dedicated conference room for the staff to use.

While the soccer practice field is located at the facility and the soccer team games are in the adjacent stadium, there are no support facilities at the site. The team utilizes offices located in the Lemerand Center near the O'Connell Center and other temporary facilities, creating inefficiencies and coordination efforts that will be resolved with the new addition.

The new facility will provide roughly 2,800 square feet of new space to the Lacrosse team, roughly 10,950 square feet of new space for the Soccer team, and a 1,200 square foot multi-purpose classroom to be used by both teams.

The existing facilities also create a Title IX equity issue. Currently, these two female sports are the only sports that do not have the ability to house their team functions (and are forced to travel across campus to do so), unlike their male counterparts. This new expansion and renovation would alleviate these inequities.

Type of Sale:

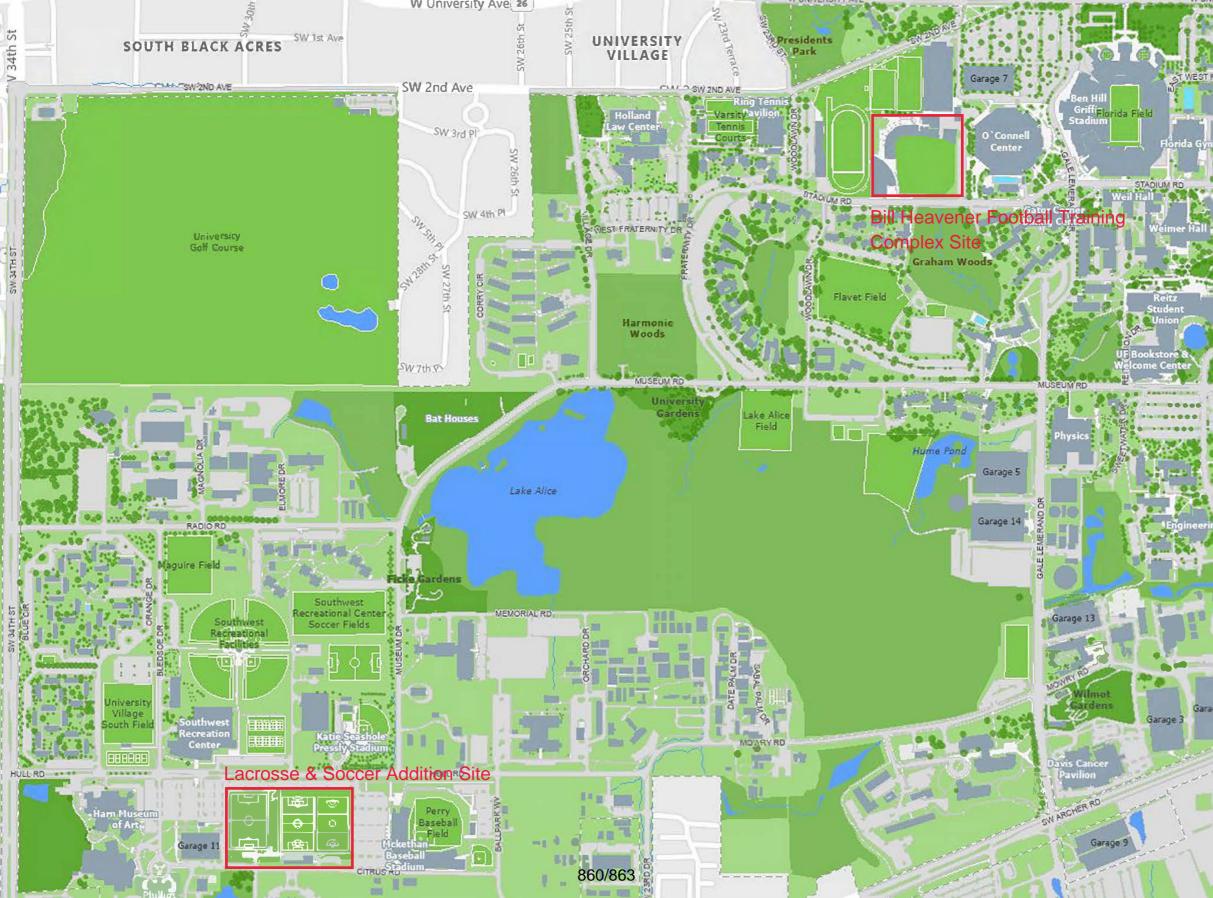
The UAA is requesting approval for a negotiated sale of the debt and/or a direct placement with a bank via a competitive/negotiated process. Based on the UAA negotiated sale analysis, the factors indicate a negotiated sale is appropriate and in the UAA's best interest.

Selection of Professionals:

The professionals involved in this transaction were selected through a competitive process. The bond counsel for the debt will be McGuireWoods LLP and the financial advisor will be RBC Capital Markets. These professionals have been in place for ten years.

Analysis and Recommendation:

The proposed financing complies with the Florida Statutes governing the issuance of university debt and complies with the Board of Governors' Debt Management Guidelines. Accordingly, the UAA requests approval of the financing proposal and associated Project.



Schedule II STATE UNIVERSITY SYSTEM OF FLORIDA BOARD OF GOVERNORS

UF University Athletics Association, Inc.
Athletic Improvement Project

Estimated Sources and Uses of Funds of \$50,000,000

Sources of Funds

| Bond Par Amount | \$ 50,000,000 |
|--|------------------|
| Private donors & Cash Contribution ¹ | 42,655,000 |
| | |
| Total Sources of Funds | \$ 92,655,000 |
| | |
| Uses of Funds | |
| Project Cost: Soccer/Lacrosse Stadium | \$ 7,500,000 |
| Project Cost: Bill Heavener Football Training Center | 85,000,000 |
| Cost of Issuance ² | 155,000 |
| | |
| | \$ 92,655,000 |
| | |

¹⁾ Primarily donor contributions, to a lesser extent UAA capital.

²⁾ Costs are based on a full issuance of the \$50 million and will be less based on actual amount of debt issued and includes: Bond Counsel 50,000 - Underwriters Discount 45,000 - Financial Advisor 15,000 - Rated Agency fees 20,000 - Trustee Fees 5,000 - Miscellaneous 20,000.

Schedule III STATE UNIVERSITY SYSTEM OF FLORIDA BOARD OF GOVERNORS

UF University Athletics Association, Inc.
Athletic Improvements Project

Historical and Projected Debt Service Coverage

| | | | Audited | | | | | Projected 1, 2 | | |
|--|---------------|---------------|----------------|---------------|---------------|---------------------|---------------|----------------|---------------|---------------|
| | FY2015-16 | FY2016-17 | FY2017-18 | FY2018-19 | FY2019-20 | FY2020-21 | FY2021-22 | FY2022-23 | FY2023-24 | FY2024-25 |
| Operating Revenues | | | | | | | | | | ' |
| Ticket Sales (face value) | \$ 29,216,432 | \$ 25,868,675 | \$ 32,234,135 | \$ 32,432,340 | \$ 34,356,368 | \$ 13,687,147 | \$ 27,715,733 | \$ 32,318,337 | \$ 32,952,451 | \$ 33,589,165 |
| Booster Contributions (ticket related) | 35,731,403 | 36,624,248 | 36,975,975 | 38,635,095 | 37,889,677 | 8,544,800 | 31,733,959 | 37,034,850 | 37,761,318 | 38,483,417 |
| SEC and NCAA distributions | 41,528,787 | 44,250,133 | 45,420,076 | 47,669,824 | 46,591,415 | 46,270,000 | 46,040,290 | 47,359,009 | 48,297,312 | 64,238,752 |
| Royalties and sponsorships | 20,663,251 | 19,712,941 | 19,414,042 | 21,362,635 | 24,202,943 | 14,451,074 | 19,828,727 | 21,626,128 | 22,061,231 | 22,499,826 |
| Student fees | 2,431,579 | 2,535,847 | 2,708,530 | 2,618,076 | 2,418,615 | 2,585,000 | 2,573,214 | 2,631,201 | 2,682,406 | 2,733,934 |
| Direct state support ³ | 1,998,856 | 1,567,806 | 2,331,865 | 2,261,773 | 2,545,481 | 1,312,536 | 2,003,892 | 2,331,468 | 2,377,181 | 2,423,471 |
| Camps | 1,485,301 | 1,204,589 | 1,485,607 | 1,695,002 | 1,787,129 | - | 1,234,465 | 1,581,562 | 1,613,053 | 1,644,134 |
| Other sports revenue | 371,429 | 1,297,385 | 6,628,188 | 1,342,976 | 4,994,081 | 545,400 | 2,961,606 | 4,061,347 | 4,128,147 | 4,208,873 |
| Other revenue | 1,897,417 | 1,998,344 | 2,050,730 | 3,431,638 | 1,871,036 | 1,623,595 | 2,195,069 | 2,434,861 | 2,484,524 | 2,529,451 |
| Total Operating Revenue | 135,324,455 | 135,059,968 | 149,249,148 | 151,449,359 | 156,656,745 | 89,019,552 | 136,286,954 | 151,378,763 | 154,357,622 | 172,351,022 |
| Operating Expenses | | | | | | | | | | |
| Salaries, wages and benefits | 49,912,720 | 54,742,847 | 56,127,339 | 59,862,204 | 63,008,061 | 56,923,950 | 58,132,880 | 59,911,359 | 61,718,218 | 63,538,996 |
| Football transition expenses | | - | 14,458,350 | - | - | - | - | - | - | - |
| Direct sports team expenses | 27,866,778 | 28,233,801 | 29,666,514 | 32,239,385 | 26,178,404 | 19,539,964 | 27,171,614 | 28,036,033 | 28,888,224 | 29,715,281 |
| Scholarships | 14,164,218 | 14,185,365 | 14,508,308 | 14,663,676 | 13,687,766 | 14,849,792 | 14,378,981 | 14,808,272 | 15,239,812 | 15,675,673 |
| Student-athlete support services | 6,147,924 | 7,171,391 | 7,694,752 | 7,562,914 | 6,714,086 | 6,925,569 | 7,213,742 | 7,432,634 | 7,649,559 | 7,867,134 |
| Administrative services | 9,108,098 | 12,045,866 | 10,287,786 | 10,251,622 | 10,121,427 | 8,601,237 | 10,261,588 | 10,568,506 | 10,877,529 | 11,191,247 |
| Facility maintenance and overhead | 6,477,457 | 6,702,265 | 7,545,773 | 7,401,517 | 8,357,937 | 7,082,018 | 7,417,902 | 7,648,325 | 7,879,518 | 8,114,296 |
| Camps | 1,080,726 | 1,089,787 | 842,688 | 1,134,425 | 1,042,238 | - | 821,828 | 850,636 | 879,505 | 906,461 |
| Depreciation | 9,639,491 | 9,776,321 | 10,082,721 | 9,560,592 | 9,403,776 | 9,694,952 | 9,703,672 | 9,994,303 | 10,284,271 | 10,579,666 |
| Total Operating Expenses | 124,397,412 | 133,947,643 | 151,214,231 | 142,676,335 | 138,513,695 | 123,617,482 | 135,102,207 | 139,250,068 | 143,416,635 | 147,588,755 |
| Operating Income (Loss) | \$ 10,927,043 | \$ 1,112,325 | \$ (1,965,083) | \$ 8,773,024 | \$ 18,143,050 | \$ (34,597,930) | \$ 1,184,747 | \$ 12,128,695 | \$ 10,940,986 | \$ 24,762,267 |
| Depreciation | 9,639,491 | 9,776,321 | 10,082,721 | 9,560,592 | 9,403,776 | 9,694,952 | 9,703,672 | 9,994,303 | 10,284,271 | 10,579,666 |
| Capital contributions from Gator Boosters, Inc. and others | 9,194,026 | 8,510,386 | 9,039,324 | 6,366,163 | 14,611,395 | - | - | - | - | - |
| Investment income | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 | 650,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Amount Available for Debt Service: | \$ 30,260,560 | \$ 19,899,032 | \$ 17,656,962 | \$ 25,199,779 | \$ 42,658,221 | \$ (24,252,978) | \$ 11,388,420 | \$ 22,622,998 | \$ 21,725,257 | \$ 35,841,933 |
| Debt Service | | | | | | | | | | |
| Current Debt (Principal + Interest) 4 | 5,904,193 | 7,135,658 | 7,142,861 | 8,946,483 | 10,051,147 | 8,221,242 | 9,539,511 | 9,581,526 | 9,749,726 | 9,836,658 |
| Projected interest only for \$50M Series @ 2.5% | - | - | - | - | - | 412,500 | 1,250,000 | 1,250,000 | 1,250,000 | 1,250,000 |
| Total Debt Service | 5,904,193 | 7,135,658 | 7,142,861 | 8,946,483 | 10,051,147 | 8,633,742 | 10,789,511 | 10,831,526 | 10,999,726 | 11,086,658 |
| Debt Service Coverage | 5.13 | 2.79 | 2.47 | 2.82 | 4.24 | (2.81) ⁵ | 1.06 | 2.09 | 1.98 | 3.23 |
| Maximum Debt Service Coverage (occurs in 2025 @ \$11.08M) | - | - | - | - | - | (2.19) | 1.03 | 2.04 | 1.96 | 3.23 |

Assumptions

¹⁾ FY20-21 estimated revenues and expenses based on budgeted and year-to-date performance projected through remainder of the year.

²⁾ FY21-22 revenue and expenses based on 5-year average, inclusive of FY20-21 to impart lower, more conservative estimates in light of potential legacy impact from COVID. FY22-23 and beyond assume normal operations; estimates based on 4-year average, excluding FY20-21, and assumes 2% growth in revenues, 3% growth in expenses. Minimal SEC revenue increase until FY25.

³⁾ Per Section 1006.71(2)(c) F.S., sales tax on ticket sales retained by the university to support women's athletics.

⁴⁾ Current debt service based on actual amortization and interest rates

⁵⁾ Debt service will be covered by UAA reserves (cash & investments)

Schedule A

| <u>Project</u> | Estimated Cost | Actual/Estimated Construction Start Date | Estimated Completion Date | Estimated Date Bond Proceeds Required | <u>Useful</u> <u>Life</u> |
|---|----------------|--|---------------------------|---------------------------------------|------------------------------|
| James W. "Bill" Heavener Football Training Center | \$85,000,000 | July 2020 | Spring 2022 | February 1, 2021 ¹ | 30 Years |
| Soccer/Lacrosse Stadium Complex Expansion | \$7,500,000 | August 2022 | December 2023 | February 1, 2021 ¹ | 25 Years |

¹ UAA will reimburse the construction costs upon receipt of the bond proceeds.

The draw schedule will be based on the construction period for each of the projects with all bond proceeds being fully drawn down by February 1, 2023.

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