



## **FLBOG Facilities Committee Workshop**

Marshall Student Union University of South Florida Tampa, Florida October 18, 2016

## University of Florida Projects



**Presented by:** Dr. Charlie Lane - Senior Vice President & Chief Operating Officer Dr. Joe Glover - Senior Vice President & Provost Mr. Curtis Reynolds - Vice President Business Affairs Mr. Norb Dunkel - Associate Vice President Student Affairs





## University of Florida Projects



- Norman Hall Remodeling & Addition
- Data Science and Information Technology Building
- UF Health & Recreation Center
- Music Building Remodeling & Addition (time permitting)



#### Renovation & Addition to Nuclear Sciences Building \$55.4 M (\$8.6M Funding Remaining)





- ✓ Will double engineering startup companies from 5 to 10 per year
   ✓ Five-year forecast of \$4 million increase in industry research funding
- ✓ \$10 million increase in multidisciplinary research funding
- ✓ Will provide necessary infrastructure and focus to recruit and support high-tech companies in Florida (Engineering Experiment Station)
- ✓ Will improve state economic competitiveness
- ✓ Renovations to 50-year old facility and new utility infrastructure core will increase efficiencies and reduce costs



#### **DEMAND METRICS**

- ✓ Projected five-year increase of 300 engineering degrees through retention and recruiting
- ✓ Will increase STEM research in Biotechnology and Advanced Manufacturing
- ✓ Facilities to transform engineering education, involving Global Innovation Network of alumni, experts and student/faculty teams in pursuing real-world team approach to innovation
- ✓ Updating the university's 50-year old facility will re-purpose existing space, providing for cutting-edge education and research opportunities and increasing the number of students earning engineering degrees



#### Renovation & Addition to Nuclear Sciences Building \$55.4 M

REQUEST

Total project budget:	\$ <u>55.4M</u>
UF Funds	\$27M
Appropriated 2015-16	\$6M
Appropriated 2016-17	\$13.8M
Request for 2017-18 ✓ Anticipated construction	\$8.6M start date: December 2016

✓ Estimated completion date: October 2018



## NORMAN HALL REMODELING & CONFERENCE CENTERADDITION \$31.5 M(1st Year Funding Already Received)











#### STATEWIDE IMPACT

- ✓ Impact in every public high school and all 67 major school districts across state, enhancing learning of 1 million 6<sup>th</sup>−12<sup>th</sup> grade math students and providing professional development to 10,000 math teachers via Algebra Nation and Math Nation
- ✓ Empowering <u>55,000 early learning teachers serving 400,000 children across entire</u> <u>state</u> with *FL Early Learning Florida Initiative*
- ✓ Improving effectiveness of teachers and school leaders serving students with disabilities <u>across Florida</u> and 14 other states via \$25M federally-funded CEEDAR Center
- Producing outstanding teachers for state's classrooms while blazing the trail for improved educator preparation via FLDOE-funded *Center of Excellence in Elementary Teacher Preparation*



#### STATEWIDE IMPACT (CONT.)

- ✓ One in 3 children are not prepared to learn when starting kindergarten; college hosting *For the Life of a Child: Early Childhood Health, Education, & Policy National Summit* to produce solutions for all young children
- ✓ Online Learning Institute supporting effectiveness of UF Online's statewide mission
- Employment outlook: Very high demand due to teacher shortage; exceptionally high demand for STEM, special education, and language specialties. Strong overall employment forecast = 20% growth over next 5 years
- ✓ Starting salaries: Undergraduate = \$36K (9-month), graduate = \$56K



- College ranked #1 among COEs in Florida, #1 among public institutions in southeastern region of nation, and #20 among all public universities in nation. Five Top 20 academic programs
- ✓ <u>84 projects summing to \$86.3M in active externally-funded projects</u>, renovations will increase capacity for greater funded research and training
- ✓ Growing research output requires improved laboratories and infrastructure
- Expansion of e-learning/distance outreach to FL students and educators requires updated production space
- ✓ Ability to host statewide professional development seminars supporting educational leadership and reform
- ✓ Implement learning/teaching supports for next generation curriculum areas



- Create secure facilities for confidential state and federal educational policy analyses edatabases
- ✓ Provide demonstration site for solving statewide critical shortage areas of STEM, foreign language, and special education educators
- ✓ Facility gains significant energy efficiencies and reduced operational costs via upgraded mechanical systems and building envelope (roof, windows, brick) repairs
- ✓ Eliminate significant critical deferred maintenance backlog for 82-year-old facility, with renovated facility complying with fire code and ADA standards
- ✓ Cost savings from renovation, with existing facility transformed into modern, efficient space
- ✓ Listed on National Historic Registry, Norman Hall is cornerstone of UF; restoration/upgrades will enable continued service in support Florida's critical educational needs



#### **DEMAND METRICS**

- ✓ Constructed as K-12 school in 1934, facility is outdated and hazardous unsuitable for preparing top educators, leaders, reformers, & innovators
- ✓ Current enrollment: 2,800 across 28 undergraduate and graduate programs
   Projected enrollment growth: 27% over five years
- ✓ COE develops innovations in STEM education and advances technology-assisted instruction addressing needs of all learners across the state (e.g., Algebra Nation, Math Nation, Early Learning Florida, and Online Learning Institute)
- Home to national centers including: Lastinger Center for Learning; Anita Zucker Center for Excellence in Early Childhood Studies; Center for Disability Studies & Outreach; Institute for Higher Education; and Collaboration for Effective Educator Development, Accountability & Reform Center
- ✓ Continuing growth in externally-funded research currently at \$86.3M, outstanding 99% growth over last 4 years



#### REQUEST

Total project budget:	\$ <u>31.5M</u>
Previous funding:	\$14.1M
Request for 2017-18	\$10.4M
Request for 2018-19	\$ 7.0M

Anticipated construction start date: June 2017 Estimated completion date: August 2019







## Building Project Theme: Faculty Collaboration Supporting Data Centric Solutions:

- ✓ Aligned with UF's Preeminence plan, this unique facility will be an Interdisciplinary Hub supporting Teaching and Research focused on development and application of computing, communication, and cyber technologies across the areas of health care, security, technology development, and fundamental science.
- ✓ 150,000 gross square feet will be added to house new faculty and undergraduate, graduate, and post doc students from Engineering, Health Sciences, Agriculture, and Life Sciences.



- ✓ 5-year projected increase in Electrical & Computer Engineering, Computer Engineering, and Computer Science & Engineering degrees= 120
- ✓ Average Starting Salaries for students with these Engineering degrees= \$67,000-\$112,000.
- ✓ 5-year projected increase in Biomedical Informatics and Health Outcomes degrees= 120
- ✓ Average Starting Salaries for Biomedical Informatics= \$55,000-\$120,000.
- ✓ 100% increase in research funding for Computer Engineering areas over 10 yrs( \$16M to \$33M)
- ✓ 33% increase in research funding for selected Health Care areas over 10 yrs (\$27M to \$36M)



- ✓ Collaboration among UF scientists is aimed at receiving Federal designation as a Federal Statistical Research Data Center or RDC, thus providing direct access to detailed Census information allowing for more in depth analyses, positioning UF for a range of studies including precision population health initiatives, health disparities research, and analyses involving social detriments of health.
- Creation of an environment for continued development of team-based approaches to solving major state and national issues involving scientists across more than a dozen areas across UF's campus (transdisciplinary environment)
- ✓ Students will receive advanced training & mentoring in a transdisciplinary environment, thus better preparing them for their careers upon graduation.



### THE NEW FACILITY WILL HOUSE:

- ✓ 21st Century Teaching and Research Lab Space
- ✓ Informatics Institute
- ✓ State-of-the-art Smart Data Center
- ✓ Data Science and Cyber Technology Center
- ✓ Advanced Center for Data Capabilities in Health Care
- ✓ Intelligent Health Care Lab
- ✓ Department of Health Outcomes and Policy Research
- ✓ Headquarters for IT students in the National Society of Black Engineers, Society of Hispanic Professional Engineers, Women in Science and Engineering, and Women in Computer & Information Science & Engineering.
   ✓ OneFlorida Minority Education Program in Implementation Science



### **DEGREE PROGRAMS TO BE EXPANDED:**

- ✓ Programs in the Engineering field: Electrical and Computing Engineering;
   Computer Engineering; Computer Science and Engineering.
  - Focused on technological growth areas including human centered & reconfigurable computing, intelligent healthcare, cybersecurity, & application in artificial intelligence.
- ✓ Degree Programs in the Health Care field: Biomedical Informatics; Health Outcomes/Population Science
  - Focused on development of novel clinical trials and precision population health initiatives.
  - Translation of findings into clinical practice-"implementation science".
  - Novel approaches for acquiring, validating, enriching, and linking health care data.
  - Development & application of "mHealth" technology- use of wireless technology.



### **DEMAND METRICS**

- Advances in computing, communication, and cyber technologies are providing for unprecedented opportunities to impact society using data, thus impacting nearly every area of our economy and lifestyle going forward.
- ✓ Those recognizing this capability will have a significant advantage in the high tech business of computation and communication; health care; engineering design; retail; scientific discovery; and other fields where leveraging this data explosion will prove to be vital in global competition.
- ✓ In the fast changing area of health care, UF has a pressing need to create an environment where the best minds working on the collection, analysis and preparation of data can work collaboratively to speed the development of new scientific breakthroughs and to better understand factors affecting health and disease. The 138 employees currently associated with the Advanced Center for Data Capabilities in Health Care, and which are housed in 22,000 sq feet of temporary trailer space, will be located in the new facility as well as another 40 associated staff located in leased space at a distant location.



### **DEMAND METRICS (CONT.)**

- Employment Opportunities: 4,200 current openings in Florida (127,000 nationwide) in Biomedical Informatics and 1,238(26,000 nationwide) openings for majors in health outcomes/population science in Florida
- ✓ Employment Opportunities: 10,000 current openings in Florida( 350,000 nationwide) for majors in electrical engineering, computer engineering and computer science
- Creating 21<sup>st</sup> Century Data Capabilities for clinical research and the translation of scientific discoveries into treatment advances will capitalize on UF strengths, and position UF to compete nationally and internationally for new opportunities.
- ✓ Additional space is needed to co-locate faculty, students, and professional staff in a setting with state-of-the-art teaching classrooms, data centers to support hands-on experiences with health care data, and collaboration areas for faculty, student, and professional staff to interact and foster team-science.



REQUEST	
Total project budget:	\$ <u>69.8M</u>
2017-18 Request	\$25.0M
2018-19 Request	\$25.0M
2019-20 Request	\$19.8M

✓ Anticipated construction start date: July 2018

✓ Estimated completion date: December 2020



## CITF – UF 13<sup>TH</sup> Street Health and Recreation Center - \$93M





## CITF – UF 13<sup>TH</sup> Street Health and Recreation Center - \$93M



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#### THE PROPOSAL

- ✓ A new facility consisting of 235,000 Gross square feet; a mixed-use facility to be built on the east side of UF's campus. Fully supported by UF's students.
- ✓ Replaces UF's Infirmary built in 1931, and will provide a much-needed indoor student recreation component, for the student population living on or near campus.
- ✓ Fixed Capital Outlay Cost: Construction=\$70M; Other= \$23M
   Construction Cost: Funded from Student Capital Improvement Fees
   (CITF).
- ✓ Operating Cost: Funded from Student Activity & Service Fees, Student Health Fee and Auxiliary funds.



- ✓ The partnering of Student Health Care and RecSports will bring together in one location multiple wellness service offerings for students. The blending of these within one facility can optimize service to students while also sending a message to the campus community about the importance of life long wellness.
- ✓ New space would improve the clinic offerings for students, staff, and faculty, co-locate primary care and specialty services for maximum efficiency, and provide therapy, pharmacy, lab and imaging space under one roof.



#### **DEMAND METRICS**

- ✓ Drastically increased student population density last 2-3 years (see maps).
- ✓ UF has less than 45% of the indoor recreation space for our enrollment based on Space Planning Guidelines for Campus Recreational Sport Facilities (NIRSA:Leaders in College Recreation).
- Current Recreation facilities capacity are inadequate for Institution size and student population living on or near campus.
- ✓ Current Student Health Care facilities inadequate and woefully outdated. New space would improve the clinic offerings for students, staff, and faculty, co-locate primary care and specialty services for maximum efficiency, and provide therapy, pharmacy, lab and imaging space under one roof.



## CITF - UF 13<sup>th</sup> Street Health and Recreation Center - \$93M

#### PEER INSTITUTION BENCHMARKING



Southeastern Conference Indoor Recreation Space



## CITF - UF 13th Street Health and Recreation Center - \$93M

#### PEER INSTITUTION BENCHMARKING



Similar Universities Indoor Recreation Space (Gross Square Feet)

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## CITF - UF 13<sup>th</sup> Street Health and Recreation Center - \$93M

PEER INSTITUTION BENCHMARKING

Gross Square Feet of Indoor Recreation Space Per Student





**REQUEST – (Bonded Capital Improvement Fees-CITF)**Total project budget:\$93MRequest for2017-18\$93M

#### ✓ Anticipated construction start date: TBD

✓ Estimated completion date: TBD









## THE PROPOSAL

- ✓ Renovates 55,000 GSF in UF's Music Building, originally constructed in 1970.
- ✓ Expands the Music Building by 49,000 GSF in order to provide modern and efficient Teaching Labs and Studio spaces.
- ✓ Improvements will include: a new recital hall, practice rooms, and climate controlled spaces to store and utilize very valuable musical instruments and equipment; renovations to correct deficiencies in- the building envelope, fire code, HVAC and electrical systems; as well as providing for enhanced programmatic delivery.
- ✓ A permanent home will be provided for the Center for Arts in Medicine faculty which will facilitate better collaboration among the Music and associated Medical faculty for which a new graduate certificate program in Music and Medicine is being developed.



- Eliminates significant critical deferred maintenance backlog for a 45-year-old building, bringing the renovated facility into compliance with fire code and ADA standards and addresses student, faculty and staff health and safety issues.
- Extends the useful life of the facility, as well as cost savings from renovation, with the facility transformed into modern, efficient space thus expanding and improving the educational and outreach experiences.
- ✓ Significant energy efficiencies and reduced operational costs realized due to upgraded mechanical systems and building envelope (walkway enclosures) upgrades.
- ✓ BOG Performance Funding Metrics: 100% job placement rate for students in Music Education Programs meets #1; \$49,000 Median wages far exceeds #2; 4 & 6 year graduation rates are well above metric #5.



- ✓ Protection of very valuable acoustic instruments/other music equipment.
- ✓ The proposed project will enable the School of Music to offer Music and Technology as well as Music and Business courses, both of which will expand enrollment opportunities and lead to new industry partnerships, internships, and jobs.
- Proposed addition of a dedicated lecture hall will support an increase in live large-enrollment course offerings, resulting in 400-800 additional seats per semester.
- Proposed expansion will allow the School of Music to provide rehearsal and performance space to dozens of registered student organizations and nonmusic majors.



#### **DEMAND METRICS**

- ✓ Florida Department of Economic Opportunity's 2015-23 Occupational Forecast identifies Music Education as one of the "Fastest Growth" occupations in Florida.
- ✓ It is anticipated that demand for Music-related occupations in Florida will grow by an average 10.95% between 2015-2023, with approximately 1952 new positions added, not including replacements (Florida Department of Economic Opportunity's 2015-23 Occupational Forecast). Median salary: \$49,000.
- Future plans for the school include the offering of Music and Technology and Music and Business courses, thus leading to new industry partnerships, internships, and jobs.
- ✓ Usable square footage: the current building design results in thousands of unusable and wasted gross square footage space; the current facility is undersized for the future mission of UF School of Music.



#### **DEMAND METRICS**

- Acoustics: walls lack insulation to prevent sound transfer; rooms lack proper sound treatments to absorb or attenuate sound. Concrete and rebar design conducts sound throughout the building.
- ✓ HVAC and Climate: 2016 UF Environmental Health and Safety Indoor Quality Assessment recommended a full replacement of the system.
- ✓ Utility Infrastructure: primary components of the system are 45 years old, underpowered to meet the current demands of the school.
- Health & Safety: open-air design allows for outside elements to impact the interior building climate (temperature, rain intrusion, floor icing) thus students faculty and staff are subjected to various health issues.
- ✓ Facility deficiencies have been cited by the National Association of Schools of Music (NASM).



#### REQUEST

 Total project budget:
 \$<u>38.4M</u>

 Request for 2017-18
 \$12.5M

 Request for 2018-19
 \$20.0M

 Request for 2019-20
 \$ 5.9M

Anticipated construction start date: June 2018 Estimated completion date: December 2020