MINUTES STATE UNIVERSITY SYSTEM OF FLORIDA BOARD OF GOVERNORS ACADEMIC AND RESEARCH EXCELLENCE COMMITTEE FLORIDA INTERNATIONAL UNIVERSITY MIAMI, FLORIDA JANUARY 30, 2019

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1. Call to Order and Opening Remarks

Governor Jordan convened the meeting of the Academic and Research Excellence Committee at 3:20 p.m. with the following members present: Governors Tripp, Patel, and Zachariah. A quorum was established.

2. <u>Minutes of Committee Meeting</u>

Governor Jordan asked for a motion to approve the September 13, 2018 minutes of the Committee. Governor Tripp moved to approve the minutes, Governor Patel seconded the motion, and the motion carried unanimously.

3. World Class Faculty and Scholar Program Report

Governor Jordan informed the Committee that the next item on its agenda was to consider approval of the World Class Faculty and Scholar Program Report. As part of Senate Bill 4 that passed March 2018, the Legislature established the World Class Faculty and Scholar Program and required the Board of Governors to submit an annual report on the program to the Legislature in March. The Legislature provided \$70.5 million in 2017-18 and an additional \$20 million in 2018-19 to support the efforts of State University System (SUS) institutions to recruit and retain exemplary faculty and research scholars. Board staff collected the statutorily required data points from SUS institutions in the fall of 2018. The 2019 report provides baseline information on the initiative. Governor Jordan then called on Ms. Emily Sikes, Assistant Vice Chancellor for Strategic Initiatives and Economic Development, to provide an overview of the World Class Faculty and Scholar Program Report.

Ms. Sikes provided an overview of the World Class Faculty and Scholar Program Report. She noted that, as mentioned by Governor Jordan, this program was formally established in statute in March 2018, but the Legislature provided funding for it in 2017-

18 and in 2018-19. In the report, high-level information is provided on how the system spent or intends to spend the funds as this report is being submitted in the middle of a fiscal year. The information included in the report is from institution reports to the Board office submitted fall 2018 and from the Board's Office of Data Analytics.

Ms. Sikes stated that the intent of this program is to recruit and retain exemplary faculty and research scholars and to elevate the national competitiveness of Florida's universities. In the first two years of the program, the System has devoted almost all of the funds to faculty recruitment, retention, and research. Some examples of faculty recruitment and retention efforts include: research centric cluster hires, awards for outstanding faculty performance, professional development, and overall hiring and retention of faculty. Examples of research efforts include: commercialization efforts, instruction and research infrastructure enhancements, student research initiatives, and postdoctoral fellowships.

Ms. Sikes reported that as of fall 2018, institutions reported recruiting approximately 376 faculty full-time equivalent. These faculty transferred approximately \$66.3 million in research funding to the institutions and have more than \$77 million in research proposals currently under development or review. If this trend continues, this program will continue to increase the research profile and national ranking of the SUS.

Also included in the report are the 4-year graduation rates and university rankings. Ms. Sikes indicated that it may take several years before any advancements in these metrics are realized as a result of this program.

Governor Jordan asked for a motion to approve the World Class Faculty and Scholar Program Report. Governor Tripp moved to approve the report, Governor Patel seconded the motion, and the motion carried unanimously.

4. <u>Professional and Graduate Degree Excellence Program Report</u>

Governor Jordan reported that the next item on the agenda was to consider approval of the Professional and Graduate Degree Excellence Program Report. This program was also established by Senate Bill 4 and requires the Board of Governors to submit an annual report on the program to the Legislature in March 2018. The Legislature provided \$50 million in 2017-18 and an additional \$10 million in 2018-19 to SUS institutions to enhance the quality and excellence of professional and graduate schools and degree programs in medicine, law, and business. Board staff collected the statutorily required data points from SUS institutions in the fall of 2018. The 2019 report provides baseline information on the initiative.

Governor Jordan then called on Ms. Sikes to provide an overview of the Professional and Graduate Degree Excellence Program Report.

Ms. Sikes reported that, similar to the World Class Faculty and Scholar Program, the Professional and Graduate Degree Excellence Program was formally established in statute in March 2018, but the Legislature provided funding for it in 2017-18 and 2018-19. In the report, high-level information is provided on how the system spent or intends to spend the funds.

Ms. Sikes explained that the purpose of this Program is to enhance the quality and excellence of graduate schools and degree programs in medicine, law, and business. She stated that for context, the SUS includes six medical schools, four law schools, and ten institutions with graduate level business programs. New College of Florida and Florida Polytechnic University did not receive any funding from this Program. Institutions received funding based on prior performance on indicators such as licensure exam pass rates, employment outcomes, and numbers of graduates. In 2017-18, SUS institutions awarded 698 medical degrees, 793 law degrees, and over 4,600 graduate level business degrees.

Ms. Sikes stated that most of the funds from the Professional and Graduate Degree Excellence Program were used to recruit and retain faculty and support student success initiatives. Over the last two years, the Legislature allocated \$110 million to SUS institutions to support the program. Of this, 42% was used to recruit and retain faculty and 26% was used to support students through a variety of mechanisms. Some examples of student support activities include financial aid, licensure examination preparation, career placement, and advising.

Ms. Sikes stated that when examining the funds across the program areas of medicine, law, and business, the majority of the funds supported faculty and students. For medicine over the last two years, SUS institutions spent more than \$40 million to support graduate education while 23% supported other initiatives such as expanded outreach efforts in medical school pipeline programs, IT expenses, and support staff. For law, SUS institutions spent approximately \$32.2 million supporting activities that include initiatives to increase bar passage rates, IT expenses to support improved student learning, and other enhancements to existing learning environments. Finally for business, SUS institutions spent approximately \$35 million on graduate education. Examples of activities in business include graduate student stipends, advising, and expenses for a master's of logistics program.

Since the report is being submitted in the middle of a fiscal year, some institutions have obligated funds, but not yet spent the funds. Funds are committed to support faculty start-up packages, recruitment efforts necessary to attract and retain exemplary faculty, and student scholarships.

Ms. Sikes conveyed that for this report required information includes first-time pass rates on the United States Medical Licensing Examination and first-time pass rates on the Florida Bar Examination. Additionally, the following data is required and included in the report: the percentage of graduates enrolled or employed to reflect the added value of a graduate-level business degree; the advancement in the rankings of medicine, law, and graduate level programs; and the added economic benefit of the universities to the state. Ms. Sikes noted that it is too early to tell the type of impact this program may have had on these metrics, so data in this report will be considered as a baseline for future reports.

Ms. Sikes concluded her presentation by reiterating that while the full effects of the Professional and Graduate Degree Excellence Program are not yet known, the program has provided an opportunity for SUS institutions to support and enhance professional and graduate education in the state.

Governor Jordan asked for a motion to approve the Professional and Graduate Degree Excellence Program Report. Governor Tripp moved to approve the report, Governor Patel seconded the motion, and the motion carried unanimously.

5. SUS Research Collaboration Highlight: Center for Aquatic Chemistry and Environment

Governor Jordan reported that the final item on the agenda is a presentation highlighting a SUS research collaboration. At each meeting, the Committee will learn about a research collaboration among two or more SUS institutions. This allows the Board to learn about innovative partnerships and collaborations across the system. Governor Jordan then stated that the Committee will hear a presentation from researchers at the Center for Aquatic Chemistry and the Environment at the National Science Foundation's Centers of Research Excellence in Science and Technology. This Center is a collaborative effort between Florida International University (FIU), the University of South Florida (USF), and Florida Atlantic University (FAU) scientists and also includes Florida Keys Community College, Miami Dade College, and Miami Dade Public Schools. Governor Jordan mentioned that the focus of the center is water quality, a topic very important to Florida and a key issue of importance to the new Governor.

Governor Jordan then called on Dr. Todd Crowl, Principal Investigator and Director of the Center for Aquatic Chemistry and Environment at FIU and Dr. Donny Smoak, Professor of Environmental Science, USF to deliver the presentation.

Dr. Crowl explained that the Center for Aquatic Chemistry and Environment focuses on water quality and is designed to understand the sources, transportation, and impacts of

pollutants and contaminants in the south Florida area. The Center is only about two and a half years old and it includes students and faculty from 14 departments, 4 colleges, 2 centers and the STEM Transformation Institute. The Center partners with the USF, FAU, University of Puerto Rico, Miami Dade College, and the Florida Keys Community College, as well as a number of state and federal resource agencies.

Dr. Crowl stated that the Center has three research foci: the detection and identification of contaminants and pollutants; the fate and transport of contaminants; and the impacts of these things on natural communities. The Center's research work takes place in the Everglades and also in mangroves and shallow marine habitats.

Dr. Crowl offered some highlights of the Center's research initiatives. First, researchers at the Center are currently investigating how fertilizers get into aquatic systems and what impacts they have. Another area of research that the Center is working on is to better understand the harmful algal blooms by monitoring the genetic makeup of oyster beds. This research could provide an early warning system to identify potential harmful blooms.

Dr. Crowl conveyed that the Center is also about education, as it is an integration of research and training for graduate students, but also includes undergraduate research opportunities. In terms of undergraduate education, the Center has developed discovery learning courses, where students are asked to develop environmental questions and then find data related to address the questions. The Center has been successful in retaining people in the STEM pipeline using this approach.

Dr. Crowl then described initiatives the Center is undertaking related to technology development and technology transfer. One example is a collaborative effort between students from the Center and computer science majors to develop a more sophisticated search engine to facilitate academic research. This effort was a student-driven enterprise that had some wonderful results. Dr. Crowl mentioned the Center is also spending time building sensor buoy systems for early warning detection of mercury and broken sewer pipes. The Center is also partnering with FIU's robotics lab in order to reduce the cost of the sensors and increase access to communities and users.

Dr. Crowl explained that in the future the Center will be focusing on emerging pollutants such as pharmaceuticals as endocrine disruptors, climate and infectious diseases, and aquatic stressors and the brain.

Governor Kitson commented that when people think of Florida, natural springs, the Everglades, coastlines, rivers, and why people visit, it would be phenomenal if the university system could be part of the solution when it comes to water quality and public perception of those issues.

Governor Patel stated that these issues have a major impact on tourism and are very important to study and address. He applauded Dr. Crowl's initiatives in this area and expressed that the awareness of this research is very important. Governor Patel also noted that it is important to ensure that the media is aware that the SUS is looking for solutions to address water quality problems.

Governor Jordan thanked Dr. Crowl and his team for the presentation.

6. Closing Remarks and Adjournment

Having no further business, Governor Jordan adjourned the meeting at 3:56 p.m.

	Alan Levine, Chair
Roger Strickland	

Roger Strickland
Director, Economic Development