

MINUTES
STATE UNIVERSITY SYSTEM OF FLORIDA
BOARD OF GOVERNORS
ACADEMIC AND RESEARCH EXCELLENCE COMMITTEE
UNIVERSITY OF NORTH FLORIDA
JACKSONVILLE, FLORIDA
March 28, 2018

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and its committees are accessible at <http://www.flbog.edu/>.*

1. Call to Order and Opening Remarks

Governor Levine convened the meeting of the Academic and Research Excellence Committee at 2:15 p.m. Members in attendance were Governors Tripp, Jordan, Link, Jay Patel, and Zachariah. A quorum was established. Other Board members in attendance were Governors Cerio, Frost (telephone), Kitson, Lautenbach, Morton, Kishane Patel, Tyson, and Valverde.

2. Approval of March 29, 2017 Minutes

Governor Levine asked for a motion to approve the March 29, 2017 minutes of the Committee's predecessor, the Task Force on University Research. He reminded members that at the January 2018 Board meeting Board Chair Lautenbach rolled the former Task Force into a newly created Academic and Research Excellence Committee. A motion was made by Governor Tripp, seconded by Governor Jordan, and the motion carried unanimously.

3. Committee Two-year Work Plan

Chair Levine advised the Committee that the next item on its agenda was to consider for approval its Two-year Work Plan. He said that the Committee's charge is to develop System-level initiatives to enhance the national prominence of all twelve State University System (SUS) institutions and noted that the Committee will need to develop strategies for promoting academic programs of distinction; for increasing university research and research opportunities for students and faculty; and for hiring, developing, and retaining world-class researchers and scholars.

Chair Levine indicated that he recently had an excellent meeting with the Council of SUS Vice Presidents for Research (Council) and several provosts with regard to Board Chairman Lautenbach's vision for the Committee. Mr. Levine said that the

Committee's charge included strategies associated with legislation that was passed regarding research and programs of distinction. He indicated that the conversation with the Council and provosts emphasized that, if each university identified five to ten programs of distinction, the SUS will have identified an inordinate number and that seeking funding from the Legislature will be very difficult. Chair Levine added that programs of distinction must further objectives important to Florida.

Chairman Levine said that he saw the Committee's objective as aligning a small number of major priorities for Florida with SUS research to arrive at programs of distinction. This alignment would address Florida's needs while also enhancing the reputation of each university. He then called on Vice Chancellor Ignash to present the Work Plan.

Vice Chancellor Ignash said that the timeline for the Work Plan began with the March 2, 2018 meeting in Tampa with the provosts and vice presidents for research and Gov. Levine. She reminded the Committee that its predecessor, the Task Force on University Research, was created several years ago by Board Chair Kuntz, and that the substantial work that had been done by the Task Force was now being rolled into the new Academic and Research Excellence Committee.

The focus of the new Committee was to promote academic programs of distinction and to increase the national and international reputations of SUS institutions. She noted that the Committee's agenda included a review of the first ever SUS Research Dashboard. She then provided a document, "SUS Research: Responding to Florida's Needs," that had been created in 2017 for Mr. Brent Jaquet, the SUS representative in Washington, D.C., to take to Florida Delegation members to inform them of the types of research being conducted in the SUS.

Vice Chancellor Ignash noted that the legislation creating the initiative requires the Committee to be on a very fast schedule. A list of programs is to be submitted to the Legislature by September 1st. Dr. Ignash added that, fortunately, the Legislative Session begins in March 2019 rather than in January, allowing more time to work. She noted, however, that, while identifying programs may be difficult enough, the Board will also need to identify the resources necessary to catapult these programs to a level of prominence. Considerations may include whether more faculty and sufficient laboratories are necessary, and the extent to which resources might be required for potential cross-institutional academic and research collaboration. Finally, Dr. Ignash noted the potential of a Legislative Budget Request if the Board can clearly articulate the resources necessary to create such programs, as well as their expected outcomes.

Chair Levine noted that, although the legislation references academic degree programs of excellence, the provosts and vice presidents for research stressed that many programs of excellence cross multiple program areas. As an example, the SUS might choose to identify improving public health as one of its top areas to address and that areas such as

improving mental health or addressing the opioid crisis could be included. Continuing the example, Governor Levine said that the University of South Florida (USF) might cultivate mental health programs of distinction for which goals could be established while the University of Florida (UF) might identify opioid addiction. Accordingly, USF and UF would each contribute to improving public health, thereby creating programs of distinction with objectives and long-term goals. Chair Levine indicated that this would result in returning to the Legislature with a plan to grow particular, focused programs of distinction. He noted that not every university may be contributing to any one area.

Chair Levine said that the model had the potential to focus on what resources would be needed to conduct the research most relevant to Florida while, at the same time, enhancing programs of distinction. He said that taking the identification of necessary resources and measurable outcomes to the Legislature would be far more effective than asking it to entertain a long list, the components of which may not have the scale to appreciably improve an area critical to Florida.

As a second example, Chair Levine said that improving Florida's social environment could serve as another broad area under which programs of distinction in music or the arts might be identified. Governor Levine asked whether any provosts or vice presidents for research wished to comment on the model he proposed. USF Provost Wilcox said that he thought the model was a good one, and he agreed with Chair Levine that the meeting with the provosts and research vice presidents had been productive.

Finally, Governor Levine indicated that the model had the potential to increase collaboration among multiple universities, each of which would contribute toward goals for the state. He then called for a motion to approve the Committee's Two-year Work Plan. A motion was made by Governor Link and seconded by Governor Jordan.

In discussion, Governor Tripp said that the Work Plan needed a marketing strategy. He said that the SUS needed to communicate to out-of-state cutting-edge researchers with significant grant dollars in order to advise them that the SUS is building programs ready to flourish. Governor Levine agreed. He said that the highest priorities for faculty were the status of facilities and the number and quality of graduate students to adequately support their research. He took Governor Tripp's point as an amendment to the motion to approve the Work Plan. There being no further questions or observations, a vote was taken and the motion passed unanimously.

4. State University System Research Dashboard Update

Governor Levine said that the last item on the Committee's agenda was to review the Board's first SUS Research Dashboard. He then called on Vice Chancellor Ignash to

make a presentation. Vice Chancellor Ignash invited all the Vice Presidents for Research in attendance to come to the table for a more interactive discussion. She reminded the Committee that at the Board's March 2017 meeting it approved a Research Dashboard to document progress that the System is making to achieve national and international prominence. She added that the Dashboard is comprised of 19 metrics and that, where possible, she would provide comparisons with other states and with federal funding trends. This Research Dashboard will be repeated every year and presented to the Board. She also noted that certain metrics have been captured for some time and provide trend information, but others are new and require time for trends to be seen.

As background, Vice Chancellor Ignash indicated that beginning with Board Chair Kuntz and continuing with Chair Lautenbach the Board has made research a primary focus area. Beginning in August 2014, the SUS Vice Presidents for Research began meeting again on a regular basis. They identified a list of 32 areas of research throughout the SUS, whittling the list down to key areas: health-related, big data, advanced manufacturing, and marine/coastal. Dr. Ignash stated that those four areas have been used to develop the agendas for the System's annual federal R&D workshops in Washington, D.C. The workshops, commencing in Fall 2013, involved interactive sessions with directors and assistant secretaries of key federal agencies that fund research. Approximately 60 to 70 SUS participants attend the workshops every year. As another accomplishment, Vice Chancellor Ignash noted that a shared/common IRB, crafted by members of the Council and SUS general counsels, was signed on January 29th, 2016.

Vice Chancellor Ignash indicated that the Research Dashboard is organized into four major categories: Contracts and Grants, Innovation, People, and Return on Investment. She said that eight of the 19 metrics are new. One metric -- the number of contracts and grants between two or more SUS institutions -- needs to be more clearly defined and Dr. Ignash hoped to have that accomplished by the Committee's June meeting.

Turning to R&D expenditures, Vice Chancellor Ignash said that the total expenditures for the SUS climbed to \$2.2B in 2016-17, reflecting a 25% growth rate over the last five years. The System is on pace to reach the 2025 *System Strategic Plan* goal of \$2.29B. Dr. Ignash noted, further, that R&D expenditures are increasing in both science and engineering and in non-medical contracts and grants. Approximately 43% (\$948M) of all R&D expenditures were from federal R&D sources and that this is a figure the System should endeavor to increase. Between fiscal year 2011 and 2016, however, the amount of federal R&D expenditures in all U.S. universities declined by 5% while SUS expenditures from external sources increased by 8% during the same time-period. Dr. Ignash provided a chart demonstrating the volatility of the federal funding environment but indicated that National Institutes of Health (NIH) funding is increasing, which is encouraging news for health- and health-related researchers in the

SUS. The same is true of Department of Defense science and technology funding, which could bode well for Florida, with its approximately 27 military bases and installations.

Vice Chancellor next turned the Committee's attention to the seven metrics associated with the Innovation category. She pointed out that there were over 1,000 patents awarded over a three year period. Although it is difficult to realize consistent increases in the number of patents, the SUS has nevertheless continued to improve. As to other Innovation metrics, Dr. Ignash noted that the number of industry-related contracts and grants totaled 4,646, that industry-related R&D expenditures totaled \$192.5M, that the number of startups totaled 54, that the number of national academy of inventors members totaled 63, that the number of I-Corps teams totaled 38, and that the number of licenses and options executed totaled 441. Because over half of the Innovation metrics are new, trends for those data are not yet available. Vice Chancellor Ignash said, however, that the number of patents and industry-related R&D expenditures have been tracked since 2009-10 and that both have improved over time. As to industry-related R&D expenditures, the overall trajectory for both business and non-profit funding has also continued to increase substantially and this past year saw a \$23M gain.

Vice Chancellor Ignash next discussed the People category. She noted, first, that data for the "Number of Undergraduate Students Engaged in Research" metric is not available. This metric is also in the Board's *2025 System Strategic Plan* and has not yet been defined. It is a difficult metric to define and will require input from the provosts and others on the campuses to define the metric. Regarding other metrics under the "People" category, the number of doctoral degrees awarded has increased by 200 and the number of post-doctoral appointees has increased by 156. The number of National Academy Members, currently 58, is new so new trend data is available.

Dr. Ignash said that the three metrics in the Return on Investment category are all new. She pointed out, however, that the SUS supported almost 19,000 jobs from external funding of research, that the economic impact of state funding was well over \$500M, and that the economic impact of federal funding was \$2.84B. According to data from the United for Medical Research Group's *2018 Annual Report*, Florida is second in the U.S. in return on investment, defined as the state's economic activity divided by the dollar amount of NIH awards. Dr. Ignash also pointed out that Florida's jobs ratio is the highest in the country, with almost 16 high quality jobs per \$1M in NIH funds.

In closing, Vice Chancellor Ignash said that key take-aways from the Dashboard are that in a highly competitive economic climate SUS research has grown 25% over the last five years and is on pace to reach the 2025 System Strategic Plan goal of \$2.29B; that progress is being made on Innovation metrics, with patents and industry-related R&D expenditures increasing; that Florida is an efficient state, showing excellent return for the research dollars invested; and that the SUS is now 4th among public systems in overall research rankings.

Chair Levine noted that research dollars are directly correlated to the number of faculty and that the Board needs to make sure that the SUS acquires the faculty necessary to increase research funding. FIU Vice President of Research Andres Gil added that the quality of facilities and laboratories is also critical. Governor Levine said that it might be useful to compare UF to the University of Michigan, and that other systems and universities could be compared to the SUS as a whole and to its universities.

Governor Tripp said it was important to examine the type of research that will be relevant in the future and in the resources needed to make the SUS competitive. Chair Levine agreed, adding that it was important to understand the correlation between the number of faculty and research dollars. He asked staff to provide that information for the Committee's June meeting. Chancellor Criser said that the six years of federal workshops have borne fruit and that the SUS needs to focus on a few areas of research, to collaborate, and to aggressively recruit talent from other universities. Governor Morton said that the University of Miami's cluster hiring of the entire DNA research team from Duke University resulted in a dramatic increase in receiving NIH grants.

Governor Link mentioned that the Florida Council of 100 is looking at Florida's research potential. She pointed out that other states have devised ways to increase their research dollars. She asked whether the Committee can take advantage of the Council of 100's research. Governor Levine said that he was meeting with the Council's President and that perhaps the Council could make a presentation at the Committee's June meeting.

5. Closing Remarks and Adjournment

There being no further business to come before the Committee, the meeting was adjourned at 3:07 p.m.

Alan Levine

R.E. LeMon, Ph.D.
Associate Vice Chancellor