

MINUTES
BOARD OF GOVERNORS
STATE UNIVERSITY SYSTEM OF FLORIDA
ECONOMIC DEVELOPMENT PLENARY
TALLAHASSEE COMMUNITY COLLEGE
ECONOMIC & WORKFORCE DEVELOPMENT BUILDING
TALLAHASSEE, FLORIDA
MARCH 25, 2009

Ms. McDevitt, Chair, convened the Board of Governors for an Economic Development Plenary Session at 10:15 a.m., in the Banquet Hall, Economic & Workforce Development Building, Tallahassee Community College, Tallahassee, Florida, March 25, 2009, with the following members present: Ava Parker, Vice Chair; Ann Duncan; Charlie Edwards; Dr. Stanley Marshall; Frank Martin; Arthur "AJ" Meyer; Tico Perez; Carolyn K. Roberts; Dr. Judith Solano; Gus Stavros; and Norman Tripp.

1. SUS Research, Development, and Return on Investment: An Overview

Ms. McDevitt said she hoped this meeting would showcase success stories and contributions by the universities that had led to economic development and commercialization. She noted that the research activities of the SUS were key to the "knowledge economy." She said legislators were increasingly recognizing the value of the SUS, the graduates who developed businesses and brought jobs to the state, and the research that led to new products and new companies.

She said that since she had taken office as Chair of the Board, she had visited all the institutions and had been introduced to some very exciting research activities and had learned about some of the successes, such as the National High Magnetic Field Laboratory and the Institute for Human and Machine Cognition. She noted that the state had made huge investments in attracting Burnham, Torrey Pines and Scripps to Florida. She said the program today included presentations on projects which might be new to Board members.

Dr. LeMon provided an overview of research and development in the State University System. He explained the critical role of the SUS in changing the culture of Florida from agriculture, tourism, and housing and real estate growth to a knowledge based economy. He described the \$170 million the state had invested in Centers of Excellence, World-class Scholars and Commercialization Assistance Grant Programs, as well as the scope of sponsored research throughout the SUS. He noted that every year, the average public university spent \$284 million, and generated \$5 for every \$1 invested by the states. He said at \$46,000, a U.S. baccalaureate graduate earns, on average,

\$20,000 more a year than a U.S. high school graduate. He said the SUS now brought in \$1.2 billion to Florida yearly; this figure had doubled in ten years.

Ms. McDevitt said she was interested in the compensation of employees working in some university spin-off companies. Dr. M.J. Soileau, UCF, quantified the number of employees and the investment in several UCF spin-offs. He added that the UCF incubator had 100 clients, and over 1,000 jobs with an average annual pay of \$60,000. Mr. Martin said he was also interested in the numbers of jobs created in Florida and the salary averages.

2. Professional Science Master's/Governor's Proclamation and Board of Governors Resolution

Dr. LeMon explained that the SUS Graduate Deans had been working together to explore this new degree, the Professional Science Master's. There was interest across the country in this applied degree program which was being built with industry participation to encourage entrepreneurship.

Ms. McDevitt said she was pleased that Governor Crist had declared the week of March 30, 2009, through April 3, 2009, as "Graduate and Professional Student Appreciation Week." She read the Governor's Proclamation. She said the Board of Governors had also recognized the contributions and the work of graduate and professional students and the development of a competent and talented workforce. She read the Board's Resolution. Dr. Chanta Haywood, Dean of Graduate Studies, FAMU, thanked the Board for this recognition. There were graduate students from FAMU and FSU who stood and were recognized.

3. UF Commercialization Success Stories

Ms. McDevitt recognized Mr. David Day, Director, Office of Technology Licensing, UF. Mr. Day described the growth in research awards, inventions, and patents at UF over the past decade and the direct and indirect impact of UF tech-based start up companies. He noted that UF in 2007-08 had almost 300 invention disclosures, with patent applications on about half of them, and licenses on 75. He said these inventions led to about 10 or 12 start-up companies per year. He said his office helped recruit and retain faculty. He said his office helped find the CEO's for the start-ups developed to bridge the gap between research and actual products. He described one UF spin-off, Regeneration Technologies, Inc., in Gainesville, which earned \$70 million from the sale of its stock. He noted that investors were attracted to clean technology, medical devices, and software.

Ms. McDevitt inquired about the location of the 10 to 12 start-ups. Mr. Day said one-third were in Gainesville, a third in other parts of Florida, and the rest out of state. He added that, if successful, a start-up might have 200 employees in five years. Ms.

McDevitt said she was especially interested in measures of economic development, e.g., the numbers of jobs created; the average salary for these employees. Ms. Duncan noted that the annual reports from the 11 Centers of Excellence included this information.

4. Florida Institute for Commercialization of Public Research: From Lab to Market

Mr. Gary Keller, Director, Florida Institute for the Commercialization of Public Research, said the Institute was created in statute under the auspices of Enterprise Florida and was located in Boca Raton on the campus of FAU. He explained that the Institute was formed in 2007 as a "One Stop" shop to match seasoned entrepreneurs, and venture, angel, and individual investors to start-up companies. He described the public and private partners of the Institute. He said that commercialization of Florida technologies was increasing. In 2007, the Florida SUS reported \$54 million of royalty income. He said it was estimated that this represented \$2.7 billion of product sales, almost all of which was out of state. He said it was the job of the Institute to bring more of those dollars and jobs back to Florida, to find the entrepreneurs and the technology they were interested in funding. He hoped this would make it easier for entrepreneurs to come into the state.

Ms. McDevitt said she had read that Florida did not have the environment to encourage venture capital to come into the state. Mr. Keller said Florida was the first state to establish an Institute with the goal to build a technology economy. He said impediments for Florida growing these businesses were the geographical constraints of a spread-out state. He estimated the economic impact out five years showed 102 companies funded, over 6,000 direct and indirect jobs created, and increased tax revenue of \$106 million. He noted that the average salary in these high tech jobs was \$130,000. Mr. Keller said he had begun visiting all the partner institutions.

President Ammons inquired whether the Board had prioritized its investments. He said that some states had identified priorities for investment based on the strengths of the universities. He inquired whether Florida had determined a focus area to be "best in class." Mr. Keller said that Enterprise Florida had identified six areas of research focus for Florida; the Institute had adopted the same six areas. These included the life sciences, clean technology, aerospace and new energy. Dr. LeMon said there were some excellent research centers in place, such as UCF's Center of Photonics and FSU's Center for Composite Materials.

Mr. Edwards said he felt that when the Board had approved the new medical schools at FIU and UCF, this would be the opportunity for these universities to be medical leaders in the production of doctors and health-related technologies. He suggested that the Institute could be of assistance. Mr. Keller said he spent a decade working with the Illinois Medical Directive. He said this had begun as an integrated approach 60 years ago and there were now four medical centers in a common area. He said this was possible as Florida expanded its medical capacity.

Ms. McDevitt said she would like to achieve that focus. She said as the Board continued its discussions of university compacts and mission alignment, research priorities and focus should be a part of that discussion.

5. UCF Medical School and Economic Development

Dr. Hitt thanked the Board for its support of the UCF College of Medicine. He said the College of Medicine had had a huge local impact since the Board's approval of the College of Medicine in March 2006. He explained that the College of Medicine had become the "anchor" in the development of a "medical city" at Lake Nona. He explained that Lake Nona was the hub for a Life Sciences cluster and was transforming East Orange County. He said what the University had hoped for with the College of Medicine was happening. He described the significant investments in the Burnham Institute and the partnership with UF, the Burnett Biomedical Sciences Building, the M.D. Anderson Cancer Research Institute, the Orlando VA Medical Center, the Nemours Pediatric Health Care Campus, totaling more than \$1 billion in construction costs alone. He said Dean Deborah German was an innovative educator and administrator who had been named the 2008 Central Floridian of the Year. He said there were a huge number of applicants for the first entering class. He said he was proud to report the first student admitted had a perfect score on the MCAT and was a UCF student. He commented that 700 local physicians had offered to serve as volunteer faculty.

Dr. Hitt said UCF had had the Milken Institute study the economic impact of the medical school at the time the College of Medicine was being considered. The study estimated that there would be 6,470 new jobs and an economic impact of \$1.4 billion from the College of Medicine from 2006-2017, and with the addition of a life sciences cluster, the impact would be 25,730 jobs and an economic impact of \$6.4 billion. He said the University had asked the Arduin Group to do a follow-up study which included all the additional activity at Lake Nona. The Arduin study estimated 30,260 Florida jobs created as a part of the cluster by the year 2017, the College's tenth year of operation, with \$2.88 billion in wages and \$459.9 million in tax revenues created. He commented that in two years, 80 percent of the 10-year Milken Cluster Projection had been committed. He added that the funding request this year was very important to the continued development of the College of Medicine.

Mr. Martin inquired whether any of this development would have occurred had the Board not approved the College of Medicine. Dr. Hitt said the Nemours project and the VA hospital might have occurred without the College of Medicine, but not the whole cluster. He said Burnham would not have come to Orlando without the medical school; its researchers sought medical appointments at the school.

Mr. Martin commented that the Board should reinforce this message about both medical schools. President Maidique said that economic studies done for FIU were showing similar results. He said Miami already had a medical infrastructure and

would now have two medical schools. He commented that the medical school was attracting research to FIU which it would not otherwise have gotten.

Ms. McDevitt said the Board should continue to receive regular reports on the progress of the new medical schools, as well as information about the current medical schools.

6. Rini Technologies: A UCF Incubator Success Story

Dr. Dan Rini told the Board that he had been interested in innovation since his childhood. He said the SUS had the key role in the state for developing the talents of its scientists. He said he had graduated from UCF in May 2000 with his Ph.D. in Mechanical Engineering. He said he had begun his company in UCF's incubator building and had received initial funding of \$100,000 from the Department of Defense and \$900,000 in follow-on contracts. He said he had hired graduating students as engineers earning about \$70,000 annually. He explained that in eight years he had had more than 30 contracts from the Department of Defense at an estimated capital influx of \$15 million. He said he was able to sub-contract back with UCF. He said he expected sales of \$30 million a year from the sale of his miniature wearable air conditioning units developed for soldiers in hot climates.

7. Center of Excellence Return on Investment: BuckyPaper - A Commercialization Success Story

Dr. Ben Wang, High-Performance Materials Institute and Center of Excellence in Advanced Materials, explained that advanced composites were a \$110 billion industry that kept growing. He said these super-strong plastics of fiber-reinforced polymers could be used in land, sea, and air vehicles. As they were lightweight, he explained that this could lead to better fuel economy and less dependence on foreign energy sources. He said passenger safety was not compromised, noting that a composite bumper could withstand four times that of a metal bumper. He noted that Florida was in a leadership position in key composite market sectors, e.g., boat building, aerospace, defense, and space.

Dr. Wang provided examples of taking research into the marketplace. He said that two years ago, Georgia Aerospace had sought out the Center. They agreed to fund a major project for \$500,000. As a result of being in Tallahassee, they decided to establish a production facility, incorporated as Green Tech Systems, Inc. Initially, this involved 30 jobs, but in two to three years, he estimated there would be 200 to 300 jobs.

8. ExpertNet: Identification of Statewide Resources

Ms. Becky Augustiniak, Center for Applied Research & Public Service, described Florida ExpertNet. She explained that ExpertNet assisted business, industry, and

government in identifying expertise and resources across Florida's universities; provided a unified knowledge base of SUS applied research; and showcased leading edge research capabilities. She demonstrated the webpage and its capacity to search the databases. Ms. Augustiniak said the site showcased about 7,000 experts and 70,000 projects. ExpertNet identified Technology Licensing Opportunities and contained a directory of speakers and a wide variety of topics for presentations available to organizations and businesses.

Ms. Duncan commented that she understood that there was inconsistent participation in ExpertNet across the SUS. She suggested inquiring of the Vice Presidents for Research whether there should be mandatory participation. Ms. McDevitt said there was also an important role here for the Institute for Commercialization.

In response to a question about funding, Dr. Abele responded that the Center was housed administratively at FSU. He said there were efforts to coordinate the activities of ExpertNet across the SUS.

9. Adjournment

There were no further comments. The Plenary Session on Economic Development of the Board of Governors adjourned at 12:15 p.m., March 25, 2009. Ms. McDevitt said the Board committee meetings would convene following meetings in the Capitol.

Sheila M. McDevitt, Chair

Mary-Anne Bestebreurtje,
Corporate Secretary