



**FLORIDA INTERNATIONAL UNIVERSITY**  
**BOARD OF TRUSTEES**  
**GOVERNANCE COMMITTEE**

Wednesday, January 14, 2015  
12:30 p.m. *approximate start time*  
Florida International University  
Modesto A. Maidique Campus  
Graham Center Ballrooms

**Committee Membership:**

Albert Maury, *Board Chair*; Michael M. Adler, *Board Vice Chair*; Sukrit Agrawal; Cesar L. Alvarez;  
Jose J. Armas; Jorge L. Arrizurieta; Claudia Puig

**AGENDA**

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|---|--------------|
| 1. Call to Order and Chair's Remarks                            | Albert Maury |
| 2. Welcome and Introduction: Charge of the Governance Committee | Albert Maury |
| 3. Action Item  |              |
| G1. President's Management Review, 2013-14                      | Albert Maury |
| 4. New Business <i>(If Any)</i>                                 | Albert Maury |
| 5. Concluding Remarks and Adjournment                           | Albert Maury |

*Next Governance Committee Meeting is scheduled for Wednesday, June 3, 2015*

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**THE FLORIDA INTERNATIONAL UNIVERSITY**  
**BOARD OF TRUSTEES**  
**Governance Committee**

January 14, 2015

**Subject: President's Management Review, 2013-14**

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**Proposed Committee Action:**

Albert Maury, Chair of the Florida International University Board of Trustees (the BOT) will (1) lead the discussion on the President's performance during the 2013-14 academic year based on his achievement of the mutually agreed upon specified goals and objectives and such other criteria as the Committee deems appropriate, and (2) the Committee shall provide University President Mark B. Rosenberg with a written assessment of its evaluation, and (3) the Committee shall present its written assessment and recommended performance rating for Board of Trustees' approval.

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**Background Information:**

President Mark B. Rosenberg will provide an update on the University's progress towards meeting the goals and targets delineated in the 2013-14 Work Plan. The report will present an overview of the key indicators and achievements contained within the University's 2013-14 Annual Accountability Report to the Florida Board of Governors, which addresses FIU-specific initiatives and System-wide goals that enhance the System's commitment to accountability and driving improvements in three primary areas of focus: 1) academic quality, 2) operational efficiency, and 3) return on investment.

The recently extended employment agreement between the BOT and President Rosenberg states that Dr. Rosenberg shall initiate the evaluation process for the academic year that began in August of the previous calendar year by submitting to the Committee a self-appraisal of such period's performance. This appraisal, along with the university's Annual Accountability Report, shall address Dr. Rosenberg's performance related to each of the goals and objectives identified in the preceding year's University Work Plan. After Dr. Rosenberg has submitted this self-appraisal, the Committee shall evaluate Dr. Rosenberg's performance during the academic year based on his achievement of the mutually agreed upon goals and objectives and such other criteria as the Committee deems appropriate. The Committee shall provide Dr. Rosenberg with a written assessment of its evaluation. The Committee shall present its written assessment and recommended performance rating to the Board for its approval. The BOT shall conduct the evaluation process no later than January 31 following the previous academic year.

In accordance with Florida Board of Governors Regulation 1.001 (5)(f), each board of trustees shall conduct an annual evaluation of the president.

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**Supporting Documentation:** University and President Performance Goals and Results 2013-14 Academic Year, *Self Evaluation Scorecard*  
*Key Achievements and Narrative:* FIU's 2013-14 Annual Accountability Report to the Florida Board of Governors  
Executive Performance Ratings

**Facilitator/Presenter:** Mark B. Rosenberg  
Albert Maury

**University and President's Performance Goals and Results, Academic Year 13-14**  
**Self-Evaluation Scorecard**

OBJECTIVE		Not Achieved	Partially Achieved	Achieved	Exceeded	Far Exceeded	2013-2014 Goals from Work Plan	2013-2014 Actuals
<b>BOG PERFORMANCE BASED FUNDING MODEL GOALS</b>								
1	<b>GOAL: ≥70 percent of bachelor's graduates employed and/or continuing their education further 1 year after graduation (3 points)</b>							
	Seventy-seven percent of 2012-13 graduates were employed full-time or continued their education one year after graduation, representing 5 improvement points.				✓		≥70%	77%
2	<b>GOAL: Median average of ≥\$35,000 for full-time wages of undergraduates employed in Florida 1 year after graduation</b>							
	The median average wages of 2012-13 graduates who were employed full-time one year after graduation is \$36,200, representing 4 excellence points			✓			≥\$35,000	\$36,200
3	<b>GOAL: Average cost of ≤\$27,500 per undergraduate degree to the institution</b>							
	Average cost per undergraduate degree is estimated at \$26,682, representing a potential gain of 2 excellence points <sup>8</sup>			✓			≤\$27,500	\$26,682 <sup>8</sup>
4	<b>GOAL: Achieve six-year graduation rate of ≥49% for full- and part-time FTIC students</b>							
	The six-year graduation rate for FTICs increased from 50% (Cohort 2007) to 53% (Cohort 2008), representing 3 improvement points			✓			≥3%	53%
5	<b>GOAL: Increase academic progress rate by ≥3%</b>							
	The academic progress rate for full-time FTICs increased from 75% (2012 cohort) to 76% (2013 Cohort), representing 1 improvement point	✓					≥3%	1%
6	<b>GOAL: Award ≥40% of bachelor's degrees in areas of strategic emphasis</b>							
	Forty-six percent of 2013-14 bachelor's degrees were awarded in areas of strategic emphasis, representing 4 excellence points				✓		≥40%	46%
7	<b>GOAL: Achieve university access rate of ≥30%</b>							
	Total undergraduates receiving Pell grants increased by 1% to a total of 51%, representing 5 excellence points			✓			≥30%	51%
8	<b>GOAL: Award ≥50% of graduate degrees in areas of strategic emphasis</b>							
	Fifty-two percent of 2013-14 graduate degrees were awarded in areas of strategic emphasis, representing 3 excellence points			✓			≥50%	52%
9	<b>GOAL: Award 70% of bachelor's degrees without excess hours</b>							
	Seventy-one percent of 2013-14 bachelor's degrees were awarded without excess credit hours, representing 3 excellence points.			✓			≥70%	71%
10	<b>GOAL: Award ≥200 additional bachelor's degrees to minorities</b>							
	In 2013-14, 368 additional bachelor's degrees (6,219 total) were awarded to minorities, representing 5 excellence points			✓			≥200	6,219
<b>Target performance points for 2013-14 equal 34; final performance points equal 35.</b>								

**University and President's Performance Goals and Results, Academic Year 13-14**  
**Self-Evaluation Scorecard**

OBJECTIVE	Not Achieved Partially Achieved	Achieved Exceeded Far Exceeded	2013-2014 Goals from Work Plan	2013-2014 Actuals
PRESIDENTIAL INCENTIVE GOALS (11-17)				
11 GOAL: Increase research doctoral degrees awarded from 156 to 166				
Total research doctoral degrees awarded increased by 2% to 159	✓		166	159
12 GOAL: Achieve research expenditures of \$126 million				
Total research expenditures exceeded \$130M <sup>1</sup>		✓	\$126M	\$130M
13 GOAL: Increase endowment from \$149.3M to \$185.8M				
Endowment value increased to \$176.5M, representing a gain of 5 improvement points	✓		\$185.8M	\$176.5M
14 GOAL: Increase number of start-up companies from 1 to 2				
BOG-recognized start-up companies increased to 2. <sup>2</sup> Total start-ups amount to 12, including 10 from the recently launched Small Business Development Center at FIU.		✓	2	12
15 GOAL: Increase number of students participating in internships to ≥4,600				
Total students participating in internships increased to 4,737 <sup>3</sup>		✓	4,600	4,737
16 GOAL: Increase number of first-generation college graduates				
Total graduates who were first-generation college students increased by 340		✓	not specified	1,982
17 GOAL: One-time priorities; significant non-recurring events or milestones of major impact to the University (i.e. other major FIU development, community and engagement initiatives)				
See attached Key Achievements from 2013-14 Annual Accountability Report		✓		
WORK PLAN GOALS (CON'T)				
ACADEMIC QUALITY				
18 GOAL: Increase average SAT score of enrolled FTIC students from 1704 to 1710				
Average SAT scores for enrolled FTIC students increased to 1714		✓	1710	1714
19 GOAL: Increase average high school GPA from 3.7 to 3.75 (on a 4.0 scale) for enrolled FTIC students				
Average high school GPA increased to 3.8 for enrolled FTIC students		✓	3.75	3.8
OPERATIONAL EFFICIENCY				
20 GOAL: Increase freshman (first to second year) retention rate to 82%				
First year to second year retention increased to 84 percent <sup>4</sup>		✓	82%	84%

**University and President's Performance Goals and Results, Academic Year 13-14**  
**Self-Evaluation Scorecard**

OBJECTIVE		Not Achieved	Partially Achieved	Achieved	Exceeded	Far Exceeded	2013-2014 Goals from Work Plan	2013-2014 Actuals
21	<b>GOAL: Achieve FTIC 4-year graduation rates of 24% and 6-year graduation rates of 49%</b>							
	4-year graduation rates held steady at 24 percent <sup>4</sup>			✓			24%	24%
	6-year graduation rates increased to 53 percent <sup>4</sup>				✓		49%	53%
22	<b>GOAL: Increase AA transfer 2-year graduation rates from 21% to 23% and 4-year graduation rates from 61% to 63%</b>							
	2-year graduation rates increased to 22 percent for AA transfers <sup>4</sup>		✓				23%	22%
	4-year graduation rates increased to 64 percent for AA transfers <sup>4</sup>			✓			63%	64%
<b>RETURN ON INVESTMENT</b>								
23	<b>GOAL: Increase bachelor's degrees awarded from 7,746 to 8,019</b>							
	Bachelor's degrees awarded totaled 8,067 <sup>5</sup>			✓			8,019	8,067
24	<b>GOAL: Increase percent of bachelor's degrees in STEM from 15.5% to 16.25%</b> <sup>6</sup>							
	Percent of bachelor's degrees awarded in STEM fields increased to 16.1 percent. Total STEM degrees increased by 9 percent over 2012-13.		✓				16.25%	16.1%
25	<b>GOAL: Increase graduate degrees awarded from 3,440 to 3,987</b>							
	Total graduate degrees awarded increased by 170 to 3,610.		✓				3,987	3,610
26	<b>GOAL: Increase percent of graduate degrees in STEM to 15.25%</b> <sup>6</sup>							
	Percent of graduate degrees awarded in STEM fields increased to 17.7 percent				✓		15.25%	17.70%
27	<b>GOAL: Increase annual gifts received from \$24.7M to \$43.6M</b>							
	Total annual gifts received total \$21.3M		✓				\$43.6M	\$21.3M
28	<b>GOAL: Increase bachelor's degrees awarded to minorities from 5,851 to 6,372</b> <sup>7</sup>							
	Bachelor's degrees awarded to minorities increased to 6,219		✓				6,372	6,219
29	<b>GOAL: Award 3,333 bachelor's degrees in areas of strategic emphasis</b> <sup>6</sup>							
	Bachelor's degrees awarded in areas of strategic emphasis increased to 4,014				✓		3,333	4,014
30	<b>GOAL: Award 1,485 graduate degrees in areas of strategic emphasis</b> <sup>6</sup>							
	Graduate degrees awarded in areas of strategic emphasis increased to 1,893				✓		1,485	1,893
31	<b>GOAL: Achieve science &amp; engineering research expenditures totaling \$89.3M</b>							
	Total science & engineering research expenditures totaled \$89.58M <sup>1</sup>			✓			\$89.3M	\$89.58

**University and President's Performance Goals and Results, Academic Year 13-14**  
**Self-Evaluation Scorecard**

OBJECTIVE		Not Achieved	Partially Achieved	Achieved	Exceeded	Far Exceeded	2013-2014 Goals from Work Plan	2013-2014 Actuals
32	<b>GOAL: Increase patents issued and maintain licenses/options executed to 3 each</b>							
	Total patents issued increased to 3 <sup>1</sup>			✓			3	3
	Total licenses executed remain at 3 <sup>1</sup>			✓			3	3
33	<b>GOAL: Maintain science &amp; engineering R&amp;D expenditures in non-medical/health sciences at \$82.1M</b>							
	Total science & engineering R&D expenditures in non-medical/health sciences totaled \$82.35M <sup>1</sup>			✓			\$82.1M	\$82.35M
34	<b>GOAL: Increase professional doctoral degrees awarded from 251 to 290</b>							
	Professional doctoral degrees awarded increased to 255	✓					290	255
35	<b>GOAL: Increase percentage of student credit hours offered fully online to 20.5%</b>							
	Student credit hours offered fully online increased to 22.5 percent				✓		20.5%	22.5%
36	<b>GOAL: Increase licensing income received from \$20,000 to \$50,000</b>							
	Total licensing income received increased to \$50,000 <sup>1</sup>			✓			\$50,000	\$50,000

<sup>1</sup> Figures represent preliminary conservative estimates prepared for the annual Higher Education Research and Development Survey to the National Science Foundation. Updated figures may differ from those reported in 2013-14 Annual Accountability Report.

<sup>2</sup> The number of start-up companies that were dependent upon the licensing of University technology for initiation, as reported in the university's Annual Accountability Report to the Board of Governors.

<sup>3</sup> Figures represent academic and non-academic internships reported through internship course completions as well as placements through Career Services (Student Affairs) and Career Management Services (College of Business).

<sup>4</sup> Preliminary figures based on the November 17, 2014 file from the Board of Governors.

<sup>5</sup> Represents first majors only; discounts double majors as not to duplicate headcounts.

<sup>6</sup> As of November 2013, the Board of Governors has modified this metric to expand the list of degree programs approved for STEM and strategic emphasis designations.

<sup>7</sup> Following the submission of the 2013-14 Work Plan, this metric was modified to narrow definition of qualified minorities to Blacks and Hispanics only.

<sup>8</sup> Figures represent preliminary estimates prepared by the FIU Office of Financial Planning.





## Key Achievements (2013 -2014)

### STUDENT AWARDS/ACHIEVEMENTS

1. FIU's undergraduate construction management student team won second place overall in the Associated Builders and Contractors (ABC) student chapter Construction Management Competition held in Las Vegas, Nevada. The team competed amongst nationally renowned construction management programs such as Auburn University, Clemson University, Colorado State, Georgia Tech, Purdue University and University of Florida among others.
2. Two FIU doctoral students were named National Science Foundation (NSF) fellows as part of the NSF Graduate Research Fellowship Program in recognition of their outstanding research.
3. A recent graduate of FIU's Chaplin School of Hospitality and Tourism Management won the Badia Spices competition with her original "Holy Smokes" spice blend, which Badia has launched.

### FACULTY AWARDS/ACHIEVEMENTS

1. Dr. Pedro "Joe" Greer, associate dean for Community Engagement at FIU's Herbert Wertheim College of Medicine (HWCOC), was awarded the 2014 National Jefferson Award for Greatest Public Service Benefiting the Disadvantaged. Governor Scott also named him a "Great Floridian." This honor denotes a significant contribution to the progress and prosperity of Florida.
2. Dr. Georg Petroianu, chair, Department of Cellular Biology and Pharmacology at FIU's HWCOC, was inducted into the Academy of Pharmacology Educators of the American Society for Pharmacology and Experimental Therapeutics, the highest honor for a pharmacology educator.
3. Denise Duhamel, professor of FIU's Creative Writing program, was named a 2014 Guggenheim Fellow; one of only three awarded within the state of Florida this year.

### PROGRAM AWARDS/ACHIEVEMENTS

1. FIU's College of Law moved into the Top 100 in the *U.S. News & World Report* 2015 edition of Best Law Schools and ranked second in Florida for the success of its graduates in job attainment.
2. FIU's Undergraduate International Business program moved from 11th to 8th in the *U.S. News and World Report* 2015 edition of Best Colleges.
3. FIU's College of Law and the Herbert Wertheim College of Medicine were ranked 1st and 9th respectively for diversity practices by HispanicBusiness.com.

### RESEARCH AWARDS/ACHIEVEMENTS

1. Dr. Angela Laird, associate professor of FIU's Department of Physics, was named one of the world's most highly cited researchers by Thomson Reuters in its report, "The world's most influential scientific minds of 2014."
2. Dr. Madhavan Nair, distinguished professor of FIU's Department of Immunology (HWCOC), received the Joseph Wybran Award from the Society of NeuroImmune Pharmacology.
3. Kate MacMillin, assistant professor, and Dr. Juliet Pinto, associate professor of FIU's School of Journalism and Mass Communication, produced the documentary "South Florida's Rising Seas" which received local and national recognition and won first prize at the DocMiami Film Festival.

### INSTITUTIONAL AWARDS/ACHIEVEMENTS

1. FIU's Graduation Success Initiative (GSI) was recognized with the Most Visible Progress (MVP) award by the Association of Public and Land Grant Universities (APLU).
2. The Council of Graduate Schools awarded FIU for Innovation in Promoting Success in Graduate Education for its Academy of Graduates for Integrative Learning Experiences (AGILE) model.
3. FIU was ranked a top 25 National University (24th out of 277 higher education institutions) in the annual ranking by *Washington Monthly* for the university's contributions to the public good.



# Narrative

## INTRODUCTION

Miami-Dade County voters sent a strong message on November 4, 2014, in a rare (as per public university practices) referendum on their public university's role in their community. The voters made it clear that they want FIU to expand—to provide more and better educational opportunities for their community, by a near landslide vote of 65 percent in favor. The 2013-14 year marked a significant milestone for this work – as all of the university's efforts culminated and coalesced in working with our community partners and the Miami-Dade Commission. This positive vote caps a five-year strategic plan that pivoted around inserting FIU into the greater Miami community through an expansion of access to eligible qualified students; new win-win partnerships with high profile community institutions; and a solutions-center approach to significant problems in the community associated with K-12 student achievement, health, transportation, environment, and global affairs.

We are justifiably proud of this unprecedented public support because it is complemented by significant gain in BOG priorities, including FIU's graduation rates, high employability and major growth in research funding. FIU is committed to increasing access to higher education and successful degree completion for our students who are typically underrepresented in degrees at all levels of higher education. Enrollment at FIU accounts for 16 percent of the total enrollment in the State University System (SUS). FIU awards 14 percent of the total degrees awarded in the SUS.

Our demography is our destiny. FIU graduates more Hispanics than any other university in the country and continues to be the national leader in awarding STEM bachelor's degrees to underrepresented minorities. Eighty percent of our students are from minority backgrounds, making FIU a national leader for the development of creative teaching and learning programs targeting student academic success.

## Teaching and Learning

### STRENGTHEN QUALITY AND REPUTATION OF ACADEMIC PROGRAMS AND UNIVERSITIES

FIU is committed to excellence while promoting access and diversity for qualified students. According to the Diverse Issues of Higher Education's report "Top Producers of Minorities Degrees 2014," FIU is the leader in the State of Florida and the nation in awarding bachelors and masters degrees to Hispanics and is ranked second in total minority bachelor's degree production for all disciplines combined.

According to recently-released rankings of national universities by *Washington Monthly*, FIU ranked 24th out of 277 higher education institutions for its contributions to the public good. The University also ranked 38th in federal work-study funds allocated to service, 47th in graduation rate and 16th in community service participation and hours served. FIU was again named one of the world's best new universities according to *Times Higher Education* (THE) magazine 2014 rankings of top 100 universities under 50 years old. FIU is the only university in Florida to make this list.

FIU's College of Law was ranked among the top 100 in the *U.S. News and World Report* 2015 edition of Best Law Schools. The *Hispanic Business Magazine* ranked FIU Law the #1 College of Law for Hispanics in the country. FIU's College of Law and the Herbert Wertheim College of Medicine were ranked 1st and 9th respectively for diversity practices by HispanicBusiness.com. Our undergraduate International Business program continues to be ranked in the top 10 programs (#8) in the nation by *U.S. News and World Report*. *Bloomberg Businessweek* ranked our full-time MBA Program #56 in the



country; marking the first time we have been ranked among the top 100 in this very prestigious report. FIU's College of Business was ranked in the highly respected University of Texas Dallas 100 (#99); a respected measure of business schools' research productivity.

### **INCREASE DEGREE PRODUCTIVITY AND PROGRAM EFFICIENCY**

During the academic year 2013-14, FIU awarded nearly 12,500 total degrees, a four percent increase over 2012-13. Seventy-five percent of our total degrees were awarded to minority students and 86 percent were awarded to Florida residents of the state of Florida. FIU total degrees account for 14 percent of the degrees awarded in the SUS.

#### **Graduation Success Initiative (GSI)**

FIU's Graduation Success Initiative (GSI) has been recognized with the Most Visible Progress (MVP) award by the Association of Public and Land Grant Universities (APLU) during the 2013-14 year. This recognition celebrates FIU's continued focus on increasing our graduation rate and the success of our students. FIU's six-year graduation rate for our FTICs stands at 53 percent (2008 cohort) and is currently one of the best graduation rates in the nation for a minority-serving institution.

The GSI, a program implemented in 2011 at FIU, is now supported by 62 undergraduate academic advisors. GSI helps students: find the right major early on, make steady progress toward their academic goal and finish on time, which can mean anywhere between four and six years, depending on the student's ability to limit outside work and enroll full-time.

#### **AGILE**

FIU's University Graduate School received the Educational Testing Service (ETS)/Council of Graduate Schools' (CGS) award for Innovation in Promoting Success in Graduate Education: From Admission through Completion. This award recognizes FIU for its efforts to help students complete their graduate degrees. FIU won for its new program Academy of Graduates for Integrative Learning Experiences (AGILE) that helps underrepresented minority Ph.D. students with their professional development and completion of their degrees. The award comes with a grant of \$20,000 per year for two years.

#### **Fostering Panther Pride**

National statistics indicate that less than 10 percent of foster care youth enroll in college and less than three percent graduate with a degree. Given our metropolitan location, during the fall of 2013, we strengthened our efforts to assist former foster care and homeless youth by creating Fostering Panther Pride, a comprehensive program that provides customized services to help students succeed academically and graduate. Historically, nearly a third of the former foster care and homeless students at FIU were on academic probation with grade point averages of less than 2.0. The program includes: academic support, mentoring, career development, financial literacy and other opportunities. In developing solutions to identify and diminish the barriers to college success for this population, FIU is developing a model for state and national replication. We are prepared to step up our involvement for our former foster care students who are eligible for and deserving of a fair chance at a university education.

#### **Mastery Mathematics Laboratory**

The Mastery Math Laboratory, established in fall 2012 and aimed at improving student performance in College Algebra – a critical course for predicting graduation success – continues to be successful at raising the passing rate from 33 percent in 2012 to 54 percent in 2013, and to 63 percent in 2014. It is expected to improve the passing rate to 73 percent or above by 2016. We also made this lab available for low performing students from Miami-Dade County Public Schools to enhance their end of year pass rates in their math courses.



### **Algebra Online Math Pilot**

The Online Math Project implemented a fully redesigned, state-of-the-art online College Algebra course in 2013-14. The new version of the course includes active learning instruction and online Learning Assistants. The redesigned course resulted in a pass rate of 64 percent, better than the 63 percent pass rate for face-to-face Mastery Math Algebra and markedly improved from the previous historical pass rate of 14 percent for online Algebra courses.

## **INCREASE THE NUMBER OF DEGREES AWARDED IN S.T.E.M. AND OTHER PROGRAMS OF STRATEGIC EMPHASIS**

### **Degree Production in STEM**

FIU continues its efforts to increase production of STEM degrees and to improve recruitment efforts to attract students who are underrepresented in these fields. FIU STEM degrees account for 11 percent of the total STEM degrees awarded in the SUS. In 2013-14, FIU awarded 1,398 STEM bachelor's degrees, a six percent increase over the previous year. Out of those, 83 percent were earned by underrepresented minorities. We are proud to continue to be the national leader in awarding STEM bachelor's degrees to underrepresented minorities. At the graduate level, 55 percent of the 638 STEM degrees were awarded to underrepresented minorities.

We are also expanding our STEM degree offerings. A new professional science master's (PSM) degree in Forensic Science was approved in 2013 and enrolled its first cohort in fall of 2014. The degree is an innovative PSM degree that combines forensic science with business management and leadership training. We also recruited the first cohort of students into the professional master's degree in Environmental Policy and Management. This 36-credit professional degree prepares students for careers in the private and public sectors in environmental policy and management. Students pursue advanced training in science, while simultaneously developing valuable business skills. We continue to leverage our strength with industries' needs as the professional science master's programs combine rigorous study in science or mathematics with coursework in management, policy, or law, to align with emergent workforce needs right here in Florida.

### **STEM Transformation Institute**

We have been intentional in our efforts to broaden STEM education and research. Our STEM Transformation Institute was awarded a \$1.45 million grant from the National Math and Science Initiative to replicate its successful UTeach program in Miami. UTeach is a secondary STEM teacher preparation initiative that produces highly qualified math and science teachers across the country. With this grant, FIU will create FIUTeach which reaffirms FIU's commitment to the learning of science and mathematics in South Florida. Our goal is for over 50 students to advance each year towards graduation as well-prepared mathematics and science teachers. FIUTeach maximizes career opportunities for our graduates while serving our community, as the majority of our teachers will be employed in local public schools.

### **Degree Production in other Areas of Strategic Emphasis**

FIU continues to increase degree production in disciplines designated as areas of strategic emphasis. FIU's total degrees awarded in areas of strategic emphasis accounts for 13 percent of the total degrees awarded in targeted areas in the SUS. In the area of "Globalization," the University awarded 1,134 total degrees in the academic year 2013-14. An increase of 14 percent was achieved in the area of "Gap Analysis" where FIU awarded 1,173 total degrees. Finally, in the area of "Health," FIU awarded 1,015 total degrees which represents a 10 percent increase from the previous year.





## Nursing - Veterans Affairs Partnerships

FIU's Nicole Wertheim College of Nursing and Health Sciences has developed a focus on educating its students to better serve veterans and providing opportunities for veterans to become nurses through the Veterans Affairs Nursing Academic Partnership (VANAP) and the FIU Medic-to-Nurse program. VANAP was funded for \$8.25 million and is tailored to promote innovation in nursing education and practice that will enable substantive change in how VA facilities and nursing schools everywhere can work together to treat and care for this unique military patient population. The FIU Medic-to-Nurse program is a special project funded jointly by the Nicole Wertheim College of Nursing and Health Sciences and a grant from the Health Resources Services Administration.

## Scholarship, Research and Innovation

### STRENGTHEN QUALITY AND REPUTATION OF SCHOLARSHIP, RESEARCH AND INNOVATION

FIU faculty continue to engage in fundamental and applied research and scholarship that expand the frontiers of science and lead to solutions to societal and world challenges. Below are some highlights of accomplishments in this arena:

FIU's **Center for Children and Families (CCF)**, one of FIU's premier centers and among the top in the nation in research and treatment of child and adolescent mental and behavioral health, continued to secure substantial external funding of over \$7M and conduct innovative research of significant scientific impact, as highlighted below:

**Dr. Jonathan Comer**, associate professor of FIU's Department of Psychology and a faculty member within CCF, received significant national media coverage (CBS, NBC, Time Magazine, NPR, Fox, and US News, among others) for his study on the impact of the Boston Marathon bombing and the ripple effects that followed. The study, published in *Pediatrics*, found an even stronger link between broad mental health problems among children with dramatic exposure to the manhunt than among children with similar sensory experience of the bombing itself. Dr. Comer is the Director of the Mental Health Interventions and Technology (MINT) Program, an interdisciplinary clinical research laboratory devoted to expanding the quality, scope and accessibility of mental health care for youth. Dr. Comer was recently named one of the Association for Psychological Science's "rising stars," the second junior faculty member of the CCF to be named on that list.

**Dr. Aaron Mattfeld**, assistant professor of FIU's Department of Psychology and a faculty member within CCF, has focused his research on understanding the neurobiological mechanisms that support learning and memory, and how these mechanisms change as a result of development and neurodevelopmental disorders. In a recently published article in *Brain*, Dr. Mattfeld and collaborators showed for the first time that there are biological differences in the brain pattern of those with persistent or remittent attention deficit hyperactivity disorder (ADHD).

An FIU study led by **Dr. Erica D. Musser**, assistant professor of FIU's Department of Psychology and faculty member within CCF, demonstrated a link between parents with ADHD and their children with ADHD or autism spectrum disorder (ASD). Recently published in the *Journal of Child Psychology and Psychiatry*, the study is the first to find that mothers with ADHD are six times more likely to have children diagnosed with ADHD and two-and-a-half times more likely to have children diagnosed with ASD than mothers who do not have ADHD.



**Dr. Fenfei Leng**, professor of FIU's Department of Chemistry and Biochemistry, and his team published a research article on the DNA topological barrier models. His research made the cover story of *IUBMB Life Journal*—the flagship journal of the International Union of Biochemistry and Molecular Biology.

**Dr. Kirsten Bohn**, professor of FIU's Department of Biology, discovered the rare, trumpet-eared Eumops bat. Dr. Bohn's research recently caught the attention of the editors at *Science* magazine, one of the world's leading outlets for scientific news, commentary and cutting-edge research.

**Dr. Atorod Azizinamini**, professor of FIU's Department of Civil and Environmental Engineering, received a University Transportation Center grant from the U.S. Department of Transportation which will focus research leading to Accelerated Bridge Construction. The mission of the research center will be to reduce the societal costs of bridge construction by reducing the duration of work zones, focusing special attention on preservation, service life, construction costs, education of the profession, and development of a next-generation workforce fully equipped with Accelerated Bridge Construction knowledge.

**Dr. Steve Oberbauer**, professor of FIU's Department of Biology, and his colleagues produced a seminal publication from long-term observational research addressing impacts of climate change in the Florida Everglades and arctic regions. An article published in *PLOS ONE* reported on findings from five years of observations of the carbon balance of the Everglades' ecosystems indicating that changes in El Niño weather patterns will significantly alter the CO<sub>2</sub> dynamics in the Florida Everglades.

#### INCREASE RESEARCH AND COMMERCIALIZATION ACTIVITY

External funding for research has continued to grow at FIU despite reduced funding from the federal government. For 2013-14, the value of external research awards increased by 12.5 percent to \$116M. This represents the 5th consecutive year of external research awards surpassing the \$100M threshold. Research expenditures reported in 2013-14 reached \$128M (for 2012-13), a growth of 8.5 percent.

FIU is fully engaged in partnering with industry to bring innovation to market, as well as to develop applications that can help solve industry needs and human challenges. FIU signed a **Collaborative Research and Development Agreement (CRADA)** with the National Institutes of Health (NIH) and Bristol Meyers-Squibb. This CRADA, with initial funding of \$600,000, paves the way for collaboration to develop novel pharmaceuticals related to relaxin for treatment of human diseases causing fibrosis of various organs - heart, liver, kidney, lung, etc. In ongoing human clinical trials for acute heart failure, treatment with relaxin led to a reduction of 40 percent in patient mortality, measured six months after the incident. For this work, a patent is shared between the NIH (70 percent) and FIU scientists (30 percent), **Drs. Alexander and Irina Agoulnik** from FIU's Herbert Wertheim College of Medicine.

Using two patents developed at FIU's International Forensics Research Institute (IFRI), **Dr. Jose Almirall**, professor of FIU's Department of Chemistry and Biochemistry, and external partners began incubation of a start-up company called **IAD-x, LLC**. The technologies developed will provide solutions in the forensics field to improve detection of clandestine drugs and explosives in cargo containers.

FIU is a partner with three universities (NC State, University of Virginia and Pennsylvania State) on an NSF-funded **Engineering Research Center (ERC)**. As part of this partnership, FIU has created a Plasma Forming Laboratory to develop the conventional thermal spray process into the next generation nano-manufacturing technique for processing virtually any material including bulk nanomaterials, nanocomposites and coatings. FIU leads the industry membership of the ERC and is currently incubating two companies that are part of the ERC industry membership. One company, PicoCal, Inc. originated in Ann Arbor, Michigan, and the second company, Kytaro, Inc. started in Miami, Florida.



FIU's **College of Business** created "The Garage," a group of nine scholar entrepreneurs, to commercialize FIU intellectual property in the fast growth arena of Technology Assisted Learning, including embedded analytics, adaptive learning, and gamification of learning. The College also inaugurated the Small Business Development Center (SBDC@FIU), located at the FIU Downtown on Brickell location, with an \$800,000 grant from the federal government. During its first nine months, the SBDC served over 300 client companies, created 10 new companies, and helped client companies to obtain \$2.3M in new capital investments representing the creation of \$3 for every dollar invested in the SBDC@FIU.

Researchers in **FIU's Adaptive Neural Systems Laboratory** have developed an advanced prosthetic system, a neural-enabled prosthetic hand that will provide sensory feedback to upper extremity amputees using sensors embedded in the prosthetic. Led by **Dr. Ranu Jung**, chair of FIU's Department of Biomedical Engineering, the laboratory is funded by the NIH and the Department of Defense's DARPA. Dr. Jung's group had one non-provisional patent application titled "Low Noise Analog Electronic Circuit Design for Recording Peripheral Nerve Activity."

#### INCREASE COLLABORATION AND EXTERNAL SUPPORT FOR RESEARCH ACTIVITY

Scientists from FIU's **Southeast Environmental Research Center (SERC)** have expanded their research through the transfer of the operation of the **Aquarius Reef Base** (the world's only underwater laboratory) from the National Oceanic and Atmospheric Administration (NOAA) to FIU. Located in the Florida Keys National Marine Sanctuary, at a depth of 63 feet, the laboratory received over \$2M of research funding from NOAA, the National Aeronautics and Space Administration (NASA) and private industry. Through an initial \$1.5M philanthropic gift, the Medina Aquarius Program was established. The program will be dedicated to the study and preservation of marine ecosystems worldwide.

FIU's **International Hurricane Research Center (IHRC)** has a Hurricane Mitigation State of Florida Center of Excellence which operates the Wall of Wind laboratory, the largest and most powerful university research facility of its kind capable of simulating a Category 5 hurricane. FIU has signed a Memorandum of Understanding (MOU) with Allied Prefer, LLC; an international company with a base of operations in Ft. Myers, Florida. This MOU addresses the creation of a startup company that will focus on manufacturing a patented type of roof created by the Wall of Wind scientific team using a new material developed by Allied Prefer, LLC.

FIU's **Extreme Events Institute**, which includes IHRC, received a \$1.9M grant from the US Agency for International Development (USAID) to expand the Institute's research in disaster risk management in the Americas. This research is conducted in conjunction with existing disaster mitigation of the IHRC, which includes the development of better models for storm surge prediction.

FIU's **Global Water for Sustainability (GLOWS)** is a consortium of international organizations led by FIU working to increase social, economic and environmental benefits to people of the developing world. It provides expertise across the policy, governance, educational and technical dimensions of integrated water resources management. GLOWS is an integral component of FIU's School of Environment, Arts and Society within the College of Arts and Sciences and has conducted projects in Peru, Ecuador, India, Morocco, Rwanda, Tanzania, Kenya and the Republic of Georgia. Its WA-WASH program implements technologies and procedures to help increase access to safe water, enhance sanitation, improve hygiene, and assist in policy-making in Ghana, Niger and Burkina Faso. With a new \$1M project in Haiti funded by the Inter-American Development Bank, GLOWS has expanded its research to the Americas.



**Dr. Madhavan Nair**, professor at FIU's Herbert Wertheim College of Medicine, received a \$1.8M grant from the National Institute of Health to continue his cutting-edge research on magnetic nanocarriers to eradicate HIV from latently infected central nervous system cells.

**Dr. Stavros Georgakopolous**, professor of FIU's Department of Electrical and Computer Engineering, received \$800,000 in funding from the US Department of Defense and Northrup Grumman Corporation for research in the development of perpetually reconfigurable and multi-band "origami folding/unfolding" electromagnetic systems for cognitive intelligence applications; essentially, the development of 2D and 3D antennas and antenna arrays with intelligence applications. This work is in collaboration with researchers at Georgia Tech, with the sharing of a patent between FIU and Georgia Tech.

## Community and Business Engagement

### STRENGTHEN QUALITY AND REPUTATION OF COMMITMENT TO COMMUNITY AND BUSINESS ENGAGEMENT

#### ACCESS

Our groundbreaking partnership with Miami-Dade County Public Schools (M-DCPS), the fourth largest school district in the nation, has significantly increased its impact through 18 working groups focused on various key issues facing our public schools. From fall 2009 to present, dual enrollment courses, which enable high school students to earn college credit, have expanded from 425 to over 6,000 instances of enrollment; the number of courses offered has increased from 16 to 127 and the number of participating schools has increased from six to 38. Joint grant applications have increased by 210 percent and awards have increased by 51 percent with \$18M awarded. The ACCESS partnership has received national attention as a model for school transformation with recent visits to FIU and M-DCPS schools from two White House advisors on education.

#### MAST@FIU

Fall 2013 marked yet another milestone for FIU, Miami-Dade County Public Schools (M-DCPS) and the students in our community. Together FIU President Mark B. Rosenberg and M-DCPS Superintendent Alberto M. Carvalho opened MAST@FIU located on FIU's Biscayne Bay Campus (BBC) in North Miami Beach. MAST@FIU is the only four-year high school on a university campus in the Miami-Dade County Public School system. MAST@FIU emphasizes the sciences and leverages leading FIU faculty in the School of Environment, Arts and Society and the School of Journalism and Mass Communication, with a focus on communication and research to enrich the students' learning experience. This partnership supports the state objectives to have more highly-qualified STEM graduates in Florida.

#### The Education Effect

The Education Effect is an innovative university community school partnership between Miami-Dade County Public Schools (M-DCPS) and FIU that began at Miami Northwestern Senior High School in Liberty City in 2011. The program has a focus on improving teaching and learning, promoting 100 percent graduation, college and career readiness, and increasing the engagement of parents and the community. Since the partnership began, the school has achieved its first-ever "A" grade, up from a historical "D/F" grade; graduation rates have increased from 64 percent to 80 percent; and the percentage of students earning a 3.0 GPA or higher has increased from 11 percent to 45 percent. In early 2014, The Education Effect expanded to Booker T. Washington Senior High School in Overtown, an economically disadvantaged and predominantly African American community in Miami. Special emphasis has been placed on Science, Technology, Engineering and Math (STEM), including enhancing the school's existing Engineering Academy.





## INCREASE LEVELS OF COMMUNITY AND BUSINESS ENGAGEMENT

### Life Sciences South Florida

Led by FIU and comprised of 19 institutions including higher education, business development councils and research institutions, the Life Sciences South Florida (LSSF) consortium continues to support the enhancement of the life sciences industry in South Florida and the improvement of K-20 education in STEM. Each year, LSSF organizes the STEM Undergraduate Research Symposium, which encourages students from across the region to explore careers in STEM and present the findings of their original research. In 2013-14, representatives from Enterprise Florida, the Scripps Research Institute, the Vaccine and Gene Therapy Institute of Florida, Torrey Pines Institute for Molecular Studies, Medtronic and Life Sciences & Technology HUB hosted webinars attended by more than 150 people.

### Stocker AstroScience Center

In fall 2013, faculty and staff inaugurated FIU's newest research center. Made possible by a transformational gift from Dr. Carl Stocker, the Stocker AstroScience Center will expand research and educational opportunities for students while offering community members up-close encounters with the stars through public events. The highlight of the center is a Southeastern Association for Research in Astronomy (SARA) control room. SARA is a consortium of 10 universities that are actively engaged in astronomical research.

### Bat Communication Lab

Known as the Miami Bat Squad, and led by Biology professor Dr. Kirsten Bohn, the group has enlisted over 100 community volunteers at local sites in search of the rare, trumpet-eared, Eumops Florida Bonneted Bat. This species was recently discovered by Dr. Bohn and is now listed as endangered by the U.S. Fish and Wildlife Department, thanks to her research and the work of community volunteers.

### School of Environment, Arts and Society

FIU's School of Environment, Arts and Society (SEAS) engages the public through participatory community events such as the Ocean Life, Our Common Future, Speaking Sustainably and the Eat, Think and Be Merry Lecture Series, Family Science Nights, and the Environmental Film Series. SEAS also enhances public environmental literacy through K-12 programs including EcoAcademy, Coastline to Classroom, Discover Our Backyard, Meet the Scientists, Mangrove Restoration, and Tree Campus USA. SEAS also developed a Sea Level Initiative (SLI) that includes over 60 faculty across most academic units at FIU. The SLI is collaborating with the City of Miami Beach to develop best practices and solutions for sea level rise in the areas of flood control, saltwater intrusion, ecosystem services, built infrastructure, urban design, economic tradeoffs, legal frameworks, and communications. In addition to the research initiatives previously noted, the Aquarius Reef Base has provided live and real-time virtual fieldtrips for thousands of K-12 students and reached millions of people worldwide.

### Center for Children and Families

Director Dr. William E. Pelham, Jr. and his team form FIU's Center for Children and Families (CCF), one of the world's leading clinical and translational research centers focused on child and adolescent mental health. Recognized for its pioneer work in the treatment of children and adolescents with Attention Deficit Hyperactivity Disorder (ADHD), the Center staff work with children, parents, educators and physicians to develop plans for treatment based on the needs of the child. In its first four years at FIU, the Center has already treated more than 4,000 families in South Florida, worked with nearly 350 schools in Miami-Dade County and generated nearly \$40M dollars in research funding. Additionally, CCF is making mental health care resources more accessible for families locally, throughout the state, and nationally through its Effective Child Therapy Online Education website ([www.effectivechildtherapy.FIU.edu](http://www.effectivechildtherapy.FIU.edu)). Created in collaboration with the Society of Clinical Child and Adolescent Psychology of the American Psychological



Association and The Children's Trust, the website offers video resources for parents and professionals about evidence-based practices that promote child and adolescent mental health.

## **INCREASE COMMUNITY AND BUSINESS WORKFORCE**

### **Talent Development Network**

In response to the need to build and retain talent in South Florida, FIU partnered with economic development leaders and Miami's seven major educational institutions to launch a regional talent development network. The Talent Development Network will provide local college students with on-the-job experience in one of seven target industries identified by One Community One Goal, the industry strategic plan developed by The Beacon Council: aviation, creative design, hospitality and tourism, international banking and finance, information technology, life sciences and health care, and trade and logistics. Beyond creating an internship culture in South Florida, the initiative seeks to address the historic disconnect between local academic institutions and economic development strategies.

### **Royal Caribbean Cruise Lines Partnership**

Our innovative public-private partnership with the renowned global cruise vacation company Royal Caribbean Cruise Lines (RCL) will advance unprecedented experiential learning and research opportunities for university students and faculty. Building on each entity's assets as engaged anchor institutions locally and globally, the partnership will commence with in-depth experiences for students and faculty in FIU's College of Architecture and the Arts and Chaplin School of Hospitality and Tourism Management. The partnership includes paid internship opportunities for FIU students in arts management, theatre, design and hospitality/tourism management, as well as, a state of the art facility for RCL production training on FIU's Biscayne Bay Campus. FIU faculty and students will also have access to RCL customer data to annually engage in at least eight research projects, including predictive analytics, related to RCL's business operations.

### **Academic Leaders Council**

As part of the One Community One Goal Strategic Plan for county-wide economic growth, FIU and the Academic Leaders Council support the growth of seven target industries by ensuring students are graduating with the skills required by industry. FIU commenced the efforts with the trade and logistics industry, as this sector is forecasting exponential growth. In early 2014, FIU hosted the first in a series of industry events for students, a Trade and Logistics Day attended by more than 75 students. Industry representatives included C.H. Robinson, Hellmann Worldwide Logistics, Interport Group of Companies, Ryder Systems and Wal-Mart.

### **Internships**

Internships continue to be a strong focus at every level of the University. For the 2013-14 academic year, FIU registered its fourth consecutive year of increases in students participating in academic and non-academic internships with 4,652 internships, an increase of 11 percent over the previous year. Through internships, students gain real-world experience and a first-hand opportunity to try out their chosen career while strengthening their resume with actual work experience. We successfully expanded internship opportunities through a concerted effort to engage local chambers of commerce, professional industry associations, and government agencies at the local and national level. Some of our most successful internship initiatives include partnerships with Baptist Health South Florida, Chrysler, Deloitte, Florida Power and Light, Marriott, Miami-Dade County, Miami-Dade County Public Schools, Miami Veterans Administration Healthcare System, OHL, Scripps Howard Foundation, Target and Ultimate Software.

## Executive Performance Ratings

Performance Rating
Superior
Very Good
Satisfactory
Less than Satisfactory
Unsatisfactory

### PERFORMANCE RATINGS

*Determined relative to approved performance goals*

**Superior** - ***Exceeds*** performance expectations on a consistent and uniform basis in areas of responsibility. In addition, makes a unique or significant contribution well beyond performance expectations through remarkable achievement and pacesetting performance. Achievements and abilities are recognized and supported by leadership, faculty, staff and students.

**Very Good** - ***Achieves*** performance expectations and at times exceeds them.

**Satisfactory** - ***Fulfills*** performance expectations. Level of performance is effectively and consistently maintained. Consistently ensures that the organization is following its mission, vision and strategic plan.

**Less than Satisfactory** - ***Fails to consistently fulfill*** performance expectations possibly because of some mitigating circumstances that may or may not have been within the leader's control. Improvement(s) may be required in order to fully achieve expectations on a continuous basis.

**Unsatisfactory** - ***Fails to fulfill many*** of the performance expectations. Regularly fails to meet or exceed required outcomes. Immediate improvements are required by the next performance evaluation.

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