



Item: SP: I-1

STRATEGIC PLANNING COMMITTEE

Wednesday, December 14, 2011

SUBJECT: FAU'S NEW DRAFT STRATEGIC PLAN

PROPOSED COMMITTEE ACTION

There is no committee action requested at this time. This item is presented for information only.

BACKGROUND INFORMATION

As charged by President Saunders and after months of review and discussion, FAU's Strategic Planning Steering Committee, which includes representation from faculty, students, staff, the community and the administration, has developed a draft of the Florida Atlantic University 2012-17 Strategic Plan. The draft plan is comprised of four goals and includes three areas of emphasis identified as FAU's Signature Themes.

Three of the four goals embrace and highlight FAU's priorities of enriching the educational experience for students; inspiring research, scholarship and creative activity; and, increasing FAU's community engagement. The plan also includes a goal that addresses the effective and efficient stewardship of FAU's many resources: financial, physical, human, and technological.

A new component to FAU's strategic planning process and its 2012-17 Plan is that of Signature Themes. These themes recognize areas of societal need and concern that impact Florida first, in part, due to its geographic location. Establishing priorities in these areas allows FAU to capitalize on its academic and research strengths, maximize its contributions to its local and regional communities, and provides the framework to bring world-wide recognition to FAU's achievements and success in meeting its strategic goals. Signature themes have been identified in three critical areas: Marine and Coastal Issues; Biotechnology; and, Contemporary Societal Challenges.

The draft plan will be posted on FAU's website for review and members of FAU's internal and external constituencies will be invited to provide comments.

Upon BOT approval, implementation of FAU's Strategic Plan will require the efforts of all colleges and divisions within the University. All of the university's units and departments will develop strategic plans that will focus efforts and initiatives to assure progress in reaching the goals outlined in the FAU Strategic Plan. Performance targets will be identified and established, annual progress evaluations will be conducted, and updates will be provided to the University's leadership team, the Board of Trustees, and shared with the University's communities through the FAU website.

The University recognizes the need and value of providing a process by which its Strategic Plan, and the goals and targets therein, are continuously reviewed and evaluated for progress. This will allow for timely response to the needs of the University's local and regional communities and industries, and for other prevailing impacts on its vibrancy and relevance. Accordingly, the institution will invite feedback from all internal and external stakeholders on a continuous basis. This feedback will be used to refine the plan at regular intervals ensuring a review process that will allow the University to keep the plan relevant and responsive to changes in the environment and the immediate needs of the institution. Targeted groups will include: college deans and senior administrators; faculty, staff, and students; the University's direct support organizations; college and campus-based advisory boards; and, FAU's growing alumni body. The first cycle of such reviews will commence in early spring 2012.

The Strategic Planning Steering Committee will evolve into a standing committee comprised of administration and faculty and appointed by the President. Members will be appointed to two- or three-year terms to provide for University-wide, rotating representation from all divisions and academic colleges. The Committee's charge will be to monitor the University's progress in meeting the goals, receive and evaluate feedback from FAU's internal and external stakeholders, and, recommend enhancements to the plan if appropriate or necessary.

IMPLEMENTATION PLAN/DATE

December 2011- February 2012: Collect and review community advisory results

February 2012: Final draft of the Florida Atlantic University 2012-17 Strategic Plan is presented for consideration of approval by the Board of Trustees

February 2012 – January 2013: Pending BOT approval, colleges/divisions develop departmental strategic plans, set targets, and implement goals and strategies.

May 2013: Evaluate progress toward meeting goals and targets and provide progress reports to senior administration and the Board of Trustees

Fall 2013: Re-evaluate and re-establish goal targets

FISCAL IMPLICATIONS

N/A

Supporting Documentation: Presentation of Progress on FAU's New Draft Strategic Plan
Presented by: Dr. Gitanjali Kaul, VP for Strategic Planning & IT Phone: 561.297.1333



***“Making Waves:
Celebrating and Cultivating Discovery, Diversity, and Distinction”***

**The Florida Atlantic University
2012-17 Strategic Plan**

**DRAFT AS OF 12/7/11
(Presented to the Board of Trustees – December 14, 2011)**

Part I: Introduction

Florida Atlantic University has arrived at a significant moment in its history. The past few years have consolidated FAU's position as a strong institution of higher learning in the region. These years have been marked by FAU's rise in stature in the quality and breadth of its academic programs, its excellence in research, its rapidly growing role as an intellectual and creative resource, and as an economic engine for community transformation in the South Florida region. At this juncture, as FAU concludes its fiftieth anniversary celebrations, it is imperative that the University take stock of its future by consolidating the gains of the past and standing steadfastly behind excellence in all its endeavors. This will allow the University community to chart a successful path to new heights in the future. A clear vision with focused goals will allow FAU to leverage its potential in the midst of new and evolving challenges, some of which will inevitably be beyond the University's control.

Florida Atlantic University Today

Founded in 1961, FAU opened its doors in 1964 as one of the first universities in the country to offer only upper-division undergraduate programs and graduate work, on the theory that freshmen and sophomores could be served by the growing community college system. It was the fifth public University in Florida's State University System (SUS) and there were less than 1,000 students enrolled at the University at that time.

Today, Florida Atlantic University is a multi-campus, high-level research public University that is recognized as a University of first choice for excellence in undergraduate education and the student experience, comprehensive graduate education, visionary and globally relevant research, and transformative engagement with its local, regional, and global communities.

Florida Atlantic University offers over 150 undergraduate, graduate and professional degree programs to more than 29,000 students over seven campuses and sites stretching across 150 miles of Florida's southeast coastline. These 29,000 students comprise the most diverse student body of the 11 institutions that now form Florida's State University System (SUS).

The University has become a vibrant and dynamic learning-centered community, young enough to show its exuberance and excitement for inquiry, discovery and learning and mature enough to impact economic development as a provider of a well-educated, entrepreneurial and

critically thinking citizenry. Further, the University enriches the lives of its constituents as an applier of knowledge through broad community engagement and service.

Mission Statement

Florida Atlantic University is a multi-campus public research University that pursues excellence in our missions of research, scholarship, creative activity, teaching, and active engagement with its communities.

Vision

Florida Atlantic University aspires to be recognized as a University known for excellent and accessible undergraduate and graduate education, distinguished for the quality of its programs across multiple campuses and classified as a very high research institution that is internationally acclaimed for its contributions to creativity and research as well as its collaborations with regional partners.

Values

Florida Atlantic University values an academic environment that facilitates intellectual growth through open and honest expression. The University is committed to excellence at all levels of the educational and creative experience, to success for all students and to development of the capacity to make reasoned and discriminating judgments with respect for differences and diversity in ideas. The University is dedicated to lifelong learning, which encourages the continual use of the mind. The University plays a vital role in the life of the surrounding community, in society and as an engine for economic development. More specifically, the University commits to:

- Prepare students to fulfill a productive destiny in the workplace and in society;
- Value and disseminate scholarship, research, creative activity and use that scholarship to inform the academic discipline, teaching and community engagement; (add to Current Values Statement)
- Promote academic freedom and an atmosphere of free and open inquiry;
- Recognize and reward superior performance, creativity, innovation and entrepreneurship in all facets of University activity;
- Support all those who rely on the University, such as parents, employers of students and graduates, and community partners;
- Account for the sound use and careful stewardship of the resources provided to the University;
- Provide equal access, equal rights and equal justice, and encourage mutual regard for the rights and liberties of all persons;

- Respect all persons and display civility in all interactions;
- Provide a secure environment for the pursuit of learning;
- Foster community service and social responsibility;
- Promote honesty in all spheres, social and moral development, and ethical standards in all areas of human activity;
- Assure clear and open communication and sharing of information.

Attributes of current planning: Context for setting a high bar

As the institution engages in strategic planning in 2011-12, it does so against the backdrop of on-going commitments that have been made in the recent past. One of these commitments has to do with controlled enrollment growth that initially emerged to temper financial pressures stemming from declining state support. However, this initiative also came with the promise of new sources of revenue for securing FAU's financial foundations through tuition and state subsidy and reenergizing the institutional mission. The FAU Board of Trustees has approved a 5-year projected annual average growth rate of 6.7 percent. This calls for an ambitious agenda of sustained and accelerated enhancements to the educational experience of students and faculty. The institution is poised to achieve its full growth potential and achieve economies of scale at the same time and use the resources from growth to fund the commitment to excellence.

At FAU the academic year 2010-11 proved to be one of new beginnings on several fronts: a new President, America's newest medical college, construction of FAU's stadium, additional 1,200 beds in Innovation Village, and five new academic buildings. These new buildings include: Engineering East for the College of Engineering and Computer Science and the Culture and Society Building, both on the Boca Raton Campus; Davie West at FAU's Davie Campus; and the Edwin A. Link Building at FAU's Harbor Branch site. There was another new, unanticipated, beginning that served to both raise campus standards and expand FAU's quest for achieving excellence. This was the doubling of applications for admission of first-time-in-college (FTIC) students from approximately 10,000 in fall 2010 to 21,000 in fall 2011. Over 30,000 applications were received for all levels. This signaled fundamental change in the University's standing as an institution of first-choice in the region. It also allowed the University to recruit not only a larger class, but a better prepared class.

The Board of Trustees has endorsed an expansion of FAU's research mandate. This calls for a doubling of research grants and contracts in five years as well as an increase in public/private collaborations resulting in more of FAU's research product reaching new markets. The renewed research agenda finds its inspiration in the state's investment in internationally known research institutions in the region. It also builds upon FAU's growing strength in the STEM, medical, marine, and other fields that fit into an interdisciplinary approach to addressing

real-life and societal problems of great significance. This convergence of circumstance provides FAU with the opportunity to strengthen its existing private/public partnerships and to develop new ones. For example, these partnerships will support FAU's new College of Medicine by assuring clinical sites, internships and residencies. The cluster of research institutes in the region will also provide a platform from which fruitful research collaborations can assure the University's leadership in resolving contemporary issues – leadership that will well serve FAU's growing local and regional communities. Moving FAU along Carnegie's continuum from high-research to very-high-research will require a commitment to build research infrastructure that includes growing the size of FAU's graduate faculty body, post-docs and other researchers, total R&D expenditures, and doctoral degree production.

FAU is committed to maximizing its competitive edge in attracting highly qualified students as it relates to other universities and state colleges in the SUS. This requires addressing issues of programming by degree level within service areas. The mix of academic programming offered within the SUS is in flux with the new authorization of state colleges to offer 4-year degrees. As the mix of programs at other institutions changes, on-going synchronization of FAU's offerings will be required in order to achieve and maintain a competitive edge.

FAU's retention and graduation rates remain a focus of institutional attention and continue to be a key priority. A sense of urgency about the significance of this institutional attribute calls for sustained effort and resources by all University constituencies. Six-year graduation rates rose by 4% in 2010-11; however, aspirations for being above FAU's peers and in the top of the SUS rankings should guide improvement in this area.

A key aspect of the current planning scenario is the imperative to meet student needs associated with a growing student body. The next few years will require serious attention to the timely addition of new sections and increasing capacity in existing sections. Accommodating a growing student body will require an increase in teaching, advising, housing, and, in general, supporting larger numbers of students by all. In the near-term, the University's commitment to meeting student demand will lead to changes in course scheduling that might include: increasing the number of courses offered via eLearning, extending the instructional calendar to provide for sections offered both earlier and later in the day, on Fridays and weekends, and developing more cohort-based academic programming that would be offered on alternating semesters/years to guarantee timely program completion.

Since early 2000, Florida's Public Education Capital Outlay or PECO provided nearly \$3.5 billion in funds for new SUS building facilities. This fund and other sources of funding covering deferred maintenance has now dried-up and in its wake left institutions struggling for new means for funding future classrooms, labs and academic facilities as well as ongoing maintenance. FAU's projected enrollment growth will require innovative use of current facilities

and the repurposing of other existing buildings to maximize instructional space. The institution's Master Plan will reflect a new realignment to accommodate the drop in taxpayer support and may lead to more public/private partnerships for facility construction.

As a multi-campus University, FAU has strong academic assets and regional commitments along a 150-mile stretch of Florida's most sought after coastline. The institution will continue to be strategic and purposeful in how it utilizes its various campuses by refining their distinct and respective missions. Average annual enrollment growth of 6 percent is anticipated across FAU's campuses overall with differing mixes at each campus. The University will also continue foster a culture that promotes the integration of instructional and research programming on all campuses. This will allow maximum utilization of University facilities, address student demand, and also seed joint research that results from the intentional co-location with major research partners. Further, FAU campuses allow the University to address workforce development and to bring instruction to the doorsteps of wage earners who can sharpen their skills in their own communities and at their own pace and time. As the mix of offerings and expectations of the co-located state colleges evolve, FAU will need to continually address the partner campus missions and mix of lower, upper and graduate offerings.

The campus community will invest in transforming FAU's medical school, the Charles E. Schmidt College of Medicine, into a college noted for its excellence in teaching, research and patient care. The presence of a strong medical college on campus will position the entire University to work with greater synergy in pursuing interdisciplinary research in health care areas. The potential of NSF/NIH and other funding will tie together teaching, research, policy and practice for numerous FAU departments, thus creating opportunities for signature programming. Hospital partnerships for clinical training could be coordinated for all of our health programs.

Steps in creating the plan

In the summer of 2010, FAU's sixth president took office. President Mary Jane Saunders recognized the potential implications of a quickly changing environment for higher education in the state. Changes that would impact the University included: increasing enrollment, steadily declining state funding, a new presidential administration, a new College of Medicine, the acquisition of Harbor Branch Oceanographic Institute, FAU's first on-campus football stadium, a new state-of-the-art residence hall complex, and the state-adopted New Florida initiative which emphasizes the STEM (science, technology, engineering and mathematics) disciplines.

The University reenergized its strategic planning initiatives by appointing a University-wide Strategic Planning Steering Committee and charged the Committee to review the current plan, retain the areas that continue to serve the University well, revisit and refine goals that need

to be updated, and develop and propose goals necessary to address the impact of the changing environment on the University's mission and future priorities.

The Strategic Planning Steering Committee includes faculty across the disciplines, administrative leadership, and student and community leaders. The President asked the committee to consider such questions as: how can the University maximize its relationship with both internal and external units and partners; how can the University grow its honors component; what are the opportunities and challenges associated with continued growth; how does the University continue to achieve academic excellence and position itself in the state system; and how will FAU's partner campuses and sites contribute to the growth and advancement of the institution.

Additionally, the University secured the services of an educational consultant group, the Learning Alliance for Higher Education, to visit the University, interview various constituent groups and summarize the resulting perceptions and comments. The group also conducted a roundtable discussion for key stakeholders to identify characteristics of the institution that could help define and provide direction for the next steps in the University's planning process.

The Learning Alliance prepared summary reports that identified two recurring themes from these reflective exercises: Florida First and Academic Village. Details of these concepts (www.fau.edu/planning/initiatives/campusprogram.php) became the underpinnings for **FAU's Signatures Themes** which are included as part of the University's 2012-17 Strategic Plan.

The Strategic Planning Steering Committee immediately began its work and distributed a series of five questions to various groups within the University community – deans and administration; faculty and staff – in order to gauge current perceptions and beliefs regarding the state of the University. These questions consisted of the following:

- What does FAU do well?
- What should FAU do in the next five years to become a distinctive and distinguished institution?
- What should your unit do in the next five years to become a distinctive and distinguished department?
- What challenges does FAU face today?
- What challenges does your unit face today?

The resulting comments were collected, tallied, and compiled into reports that were reviewed by the steering committee and considered as the committee identified key issues to be addressed through its strategic planning activities.

The committee met throughout the summer and fall of 2011 and drafted a plan that would identify the University as one that is comprehensive in scope yet focused on identified priorities; mindful of its core mission yet responsive to evolving educational, social and political environments; and, committed to the future yet improving the present for its local, regional and global communities.

The Florida Atlantic University 2012-17 Strategic Plan targets key priorities and provides an action plan by which the University will focus its efforts and gauge its progress:

- Goal I: Enrich the educational experience
- Goal II: Inspire research, scholarship and creative activity
- Goal III: Increase FAU's community engagement
- Goal IV: Leverage momentum toward achieving FAU's strategic goals by being good stewards of its human, technological, physical and financial resources

Signature themes have been identified in three critical areas: Marine and Coastal Issues; Biotechnology; and, Contemporary Societal Challenges.

FAU's signature themes, which identify important areas of societal need and concern, provide the framework through which these priorities can be realized, bringing world-wide recognition to FAU's achievements.

University-wide implementation and annual review

Implementation of FAU's Strategic Plan will require the efforts of all colleges and divisions within the University. In consultation with the President, the Provost, and area Vice Presidents, college and unit heads will lead the development of new departmental strategic plans that will focus efforts and initiatives to assure progress in reaching the goals outlined in the FAU Strategic Plan.

Through a dialogue between unit heads and area Vice Presidents, performance targets will be identified and established. Annual progress evaluations will be conducted and updates will be provided to the University's leadership team, the Board of Trustees, and shared with the University community through FAU's website.

Creating the process for continuous feedback and improvement

The University recognizes the need and value of providing a process by which its Strategic Plan, and the goals and targets therein, are continuously reviewed and evaluated for progress, for timely response to the needs of the University's local and regional communities and industries, and for other prevailing impacts on its vibrancy and relevance.

Through FAU's Strategic Planning website, the institution will invite feedback from all internal and external stakeholders. This feedback will be used to refine the plan at regular intervals ensuring a review process that will allow the University to keep the plan relevant and responsive to changes in the environment and the immediate needs of the institution. Targeted groups will include: college deans and senior administrators; faculty, staff, and students; the University's direct support organizations; college and campus-based advisory boards; and,

FAU's growing alumni body. The first cycle of such reviews will commence in early spring 2012.

The Strategic Planning Steering Committee was charged with crafting FAU's 2012-17 Strategic Plan. This committee will evolve into a standing committee comprised of administration and faculty and appointed by the President. Members will be appointed to two- or three-year terms to provide for University-wide, rotating representation from all divisions and academic colleges. The Committee's charge will be to monitor the University's progress in meeting the goals, receive and evaluate feedback from FAU's internal and external stakeholders, and, recommend enhancements to the plan if appropriate or necessary.

Sample timeline for strategic plan implementation and review

December 2011- February 2012	Collect and review community advisory results
January 2012 – January 2013	Colleges/divisions develop departmental strategic plans, set targets, and implement goals and strategies.
May 2013	Evaluate progress toward meeting goals and targets and provide progress reports to senior administration and the Board of Trustees
Fall 2013	Re-evaluate and re-establish goal targets

To assure continued monitoring of outcomes during the transition, progress updates on meeting goals in FAU's current strategic plan will be provided in December 2011 and December 2012.

Part II: The Strategic Plan – DRAFT

Goal I: Enrich the Educational Experience

Florida Atlantic University is a learning-centered community committed to continual improvement of the University educational experience. FAU provides high-quality academic programs that develop critical thinking skills that are essential for lifelong learning, professional success, and meeting the responsibilities of an educated citizenry. The University is also committed to providing the academic support services and student life opportunities that promote success.

Objectives

A. Enhance the quality of undergraduate academic programs

FAU will strive to attract the best students from FAU's broad base of potential students, including freshmen, transfers from state colleges, out-of-state students, and non-traditional students. FAU will help these students achieve their highest potential by providing specialized support programs.

Strategies

A.1 Attract the best qualified students

Metrics: SAT/ACT scores; high school GPA target; AP/IB/AICE courses

Targets:

A.2 Increase scholarships

Metrics: Number of students on scholarship; the amount of scholarship money; foundation endowment

Targets:

A.3 Expand honors education programs to foster a culture of research and scholarship

Metrics: Number of honors programs; number of students participating [QEP]; number of students successfully completing honors programs

Targets:

A.4 Increase support for students seeking help in improving writing skills

Metrics: Number of Writing Center clients

Targets:

- A.5 Increase use of social learning technologies

Metrics: Faculty participation in learning communities; IRM training

Targets:

- A.6 Expand the Science, Technology, Engineering, Mathematics (STEM) initiatives

Metrics: Number of programs in these areas; number of students in these areas; number of students completing programs in these areas; number of funded STEM initiatives; number of proposals to fund STEM initiatives

Targets:

- A.7 Expand programs related to the University's signature themes for teaching and research

Metrics: Number of programs in these areas; number of students in these areas

Targets:

- A.8 Identify and expand programs that develop in students the talents and skills that promote economic development

Metrics: Identification of programs; number of programs in these areas

Targets:

B. Strengthen and expand graduate programs

Strong graduate programs are an important component of a comprehensive public University. In order to support the expansion of FAU's research mission, FAU will further develop its programs for graduate students.

Strategies

- B.1 Use external reviews to assess graduate programs every seven years

Metrics: Number of external assessments

Targets:

- B.2 Improve the graduate degree completion rate in each discipline by providing adequate advising, financial assistance, course availability, and research support

Metrics: Graduation rates in each graduate program; number of students receiving financial assistance; number of Graduate Faculty; number of graduate students funded by grants and contracts

Targets:

- B.3 Expand graduate program support in areas that strengthen the signature themes of the University

Metrics: Amount of funding for signature themes; faculty positions in these areas

Targets:

- B.4 Increase the number of terminal or doctoral degree conferrals to levels consistent with the requirements of a RU/VH research University

Metrics: Number of degrees

Targets:

- B.5 Enhance and nurture the reputation of the College of Medicine and related programs

Metrics: Track and measure medical school trends, GPA, MCAT scores, and demographics against peers using IPEDS and AAMC data

Targets:

- B.6 Provide competitive stipends and benefits for graduate teaching and research assistants

Metrics: student financial aid compared to peers;

Metrics: Environmental Scan using IPEDS data to track demand for graduate programs by area; use IPEDS to monitor FAU market share and demographics compared to peers

Targets:

C. Invest in the faculty

Faculty are central to the core mission of the University. Raising the stature of the University will require increasing the stature of the faculty.

Strategies

- C.1 Provide competitive faculty salaries and benefits

Metrics: Average salaries and compensation of faculty compared to peers over the last five years by rank, gender, and discipline using IPEDS, CUPA, and the Oklahoma State University Study

Targets:

- C.2 Increase hiring of highly-qualified tenured and tenure-track faculty in areas that will advance the University's teaching and research profile, including the signature themes of the University

Metrics: Number of tenured and tenure-earning hires in these areas; performance of hires in areas such as number of grants, graduate student advisees, creative activities, and publications

Targets:

- C.3 Assess the effectiveness of professional development programs for faculty

Metrics: Monitor faculty satisfaction using the HERI Survey to gauge promotion, tenure, professional development concerns of faculty

Targets:

- C.4 Develop a career track for non-tenure-track faculty that includes regular evaluations and an opportunity for promotion

Metric: Development of track and review system

Targets:

D. Support an organizational culture in which all units are dedicated to student success
Overall metrics: retention rates; time to degree; graduation rates as compared to peer institutions.

Strategies

D.1 Identify high risk courses and develop strategies for improving student performance in these courses

Metrics: DFW rates on courses

Targets:

D.2 Use a seamless advising system to monitor student progress and contact students to promote retention and graduation rates

Metrics: Freshman grade report warnings; mid-semester grade reports for core curriculum courses; student satisfaction survey; retention rates; graduation rates; advisor/student ratio

Targets:

D.3 Expand opportunities for experiential learning such as internships, service learning, study abroad and co-curricular programs

Metric: Percentage of students participating in these programs; number of students participating in programs, number of programs offered

Targets:

D.4 Adopt course scheduling policies that promote timely graduation

Metric: Graduation rates; student satisfaction survey; facilities use rates

Targets:

D.5 Expand and enhance student leadership programs

Metric: Number of programs; numbers of students participating in programs

Targets:

D.6 Strengthen the relationship between Student Affairs and academic programs

Metrics: Faculty participation in learning communities; student use of Career Development Center

Targets:

D.7 Foster equality and inclusiveness

Metrics: Number of cultural events; training sessions

Targets:

D.8 Promote student-faculty collaboration on research

Metrics: Number of faculty involved; number of students involved; number of students completing research projects [See QEP.]

Targets:

D.9 Increase classroom support services and technologies that promote e-learning initiatives

Metrics: Survey of classroom teaching techniques

Targets:

D.10 Develop campus missions based on student population, needs and program delivery

Metrics: Missions written

Targets:

D.11 Improve tracking of graduates in order to provide information about the graduates' subsequent educational and career tracks

Metrics:

Targets:

Goal II: Inspire Research, Scholarship and Creative Activity

FAU faculty and researchers conduct research, scholarship and creative activities that are based on inquiry, experimentation and innovation and, in so doing, provide the foundation for vibrant academic experiences for students. They also make vital contributions to the economic development of the southeastern Florida region and the rest of the nation. As a University in a region where environmental and demographic issues facing the nation have emerged first, FAU has the opportunity for its intellectual activity to provide stewardship of its own geographic region as well as to provide leadership in identifying emerging issues in the nation and the world.

The University encourages its faculty and researchers to contribute to dialogues, innovations and solutions. To capitalize on the opportunities fully, FAU aspires to attain the Carnegie Foundation category of “very high research universities.” Such universities are characterized by substantial external research funding, a broad and balanced portfolio of PhD programs, and a somewhat larger faculty and research staff than that of FAU today. The objectives and strategies listed below will move FAU substantially toward this aspiration.

Objectives

A. Increase scholarship and creativity

An increase in scholarship and creative activity will elevate the stature of the University within the respective discipline’s national and international communities. Creative activities also bring recognition to the University by engaging local and regional communities, increasing awareness of the University’s value to the community, and building relationships that can support FAU’s future initiatives.

Strategies

A.1 Work with faculty, department chairs and deans to eliminate the process barriers to identifying research opportunities and increase the submission of grant applications.

Metrics: Number of grant applications increase; faculty satisfaction rate increases; increase in success rate for grant opportunities; increase in research foundation and contract activity

Targets:

- A.2 Maintain and strengthen the necessary facilities, equipment, and staff support in colleges for faculty and researchers to engage in research, scholarship, and creative activity

Metrics: Amount of funding for facilities, equipment, and number of staff in support of research; increase in matching funding for facilities, equipment, and number of staff in support of research; increased initiatives for funding through student technology fee when appropriate

Targets:

- A.3 Review and compare the tenure and promotion criteria for FAU faculty with those used in very high research activity universities.”

Metric: Benchmark FAU’s academic unit promotion and tenure criteria against aspirational peers in very high research activity universities

Targets:

- A.4 Establish a pool of funds to support scholarship and creativity in departments or individuals with the highest performance under this objective

Metrics: Number of scholarship and creative activities including artistic shows/performances, scholarly publications, and intellectual property over a 5-year period; amount of funding for high-achieving departments or individuals

Targets:

B. Increase funded research

An increase in funded research will further the University’s goal of reaching the Carnegie Foundation classification of “very high research universities.” An increase in funded research will also serve to highlight the research activities at the University and stimulate external and internal collaboration in areas that may serve to bring further recognition to FAU researchers and their work in areas of the University’s signature themes.

Strategies

- B.1 Increase funded research

Metrics: The dollar amount of funded research.

Targets:

- B.2 Hire additional faculty and leading scholars in areas where there is high potential for funding and in areas associated with research initiatives or signature themes

Metric: Number of faculty hired with funding; number of faculty hired who secure funding shortly thereafter

Targets:

- B.3 Encourage and facilitate opportunities for faculty to discuss funding for their work with relevant funding source program officers

Metrics: Number of meetings with funding source program officers; number of dollars spent on this initiative; sponsoring roundtable discussions

Targets:

- B.4 Place greater emphasis on seed money from internal resources to develop funded research programs

Metrics: Track the amount of and access to seed money available to fund research

Targets:

C. Enhance the regard and visibility of our research, scholarship and creativity

Research, scholarship and creative activities that are validated through some form of external peer-review provide the University's internal and external research communities with a key indication of the quality and progress of FAU's research thus bringing the opportunity for increased research opportunities, recognition, and collaboration.

Strategies

- C.1 Encourage department chairs and deans to nominate faculty and their activities for external awards and other special recognitions.

Metrics: Number of faculty nominated for external recognition; number of faculty recognized by external groups; number of faculty who serve on national panels; number of faculty who serve on editorial boards

Targets:

- C.2 Ensure that all departments, colleges or other units undergo external review of their faculty's research and scholarly activity every seven years as part of the program review process

Metrics: Guidelines are revised to include external review of programs; new guidelines are implemented

Targets:

- C.3 Require that external review groups include at least one representative from an aspirational program for that field to ensure that feedback comes from representatives in the best of class

Metrics: Increase in use of external reviewers from aspirational programs

Targets:

D. Strengthen and support interdisciplinary research and its visibility in the University

The cross-disciplinary and global nature of contemporary issues facing society today requires a broader research perspective in order to achieve greater impact in resolving these issues. Funding sources are reviewing research proposals with a preference for those with broader interdisciplinary aspects and interactions.

FAU recently invested in three interdisciplinary cross-University research initiatives after a University-wide competition. The strong response by faculty and researchers will foster interdisciplinary work.

Strategies

- D.1 Sponsor events that highlight interdisciplinary research and result in connecting faculty with sources of funding to develop interdisciplinary research

Metrics: Number of events held; participation rates

Targets:

D.2 Catalyze the creativity of faculty teams with workshops to propose funding for interdisciplinary research

Metrics: Number of workshops held; amount of funding for interdisciplinary research

Targets:

E. Involve students at all levels in research, scholarship and creative activity.

Students who conduct research, scholarly or creative activity are more engaged learners. Research has shown that learners develop deeper understanding of material and greater retention of understanding with active, more experiential learning.

Strategies

E.1 Capitalize on the goal of improving the student experience at all levels by having students participate in scholarly and creative activity and/or in funded research

Metric: The number and percentage of students that engage in research or creative activity as part of FAU's QEP program; increase in student presentations and authorship; increase in graduate showcase participation; external funding for students engaged in research

Targets:

E.2 Increase number of University-wide competitive awards for undergraduate research

Metric: Number of awards

Targets:

E.3 Increase the number of graduate student research fellowships to increase our national competitiveness for top-ranked applicants

Metrics: Number of training grants; number of new endowed fellowships

Targets:

F. Foster new types of research funding.

Constraints on the federal and state budgets will reduce government funding available for research over the next five to ten years. In order to increase funded research in this

environment the University will need to promote funding opportunities from other sources, especially from philanthropic sources and private sector partnerships.

Strategies

- F.1 Foster relationships with foundations and other non-governmental organizations that fund sponsored research as part of their mission

Metrics: Number and size of new internal budgets to support this effort; number of sponsored visits to these organizations; number of faculty who participate in this effort; additional research funding received from these organizations

Targets:

- F.2 Ensure intellectual property and publishing policies provide the appropriate incentives to foster these relationships

Metrics: Benchmark FAU's policies against universities with significant funding from these organizations, especially private sector organizations; number of policies and procedures reviewed and/or revised as a result of this benchmarking

Targets:

- F.3 Assure that intellectual property rights provide incentives to all parties

Metrics: ??

Targets:

Goal III: Increase FAU's Community Engagement

Florida Atlantic University will increasingly become a force for positive change through the leadership and actions of its faculty, staff, and students and will be a full participant in the life of its seven-county service region. The University can and should be a source of pride in the community. It will encourage regional cooperation and sustainability and will build partnerships in key areas of community need. FAU will enrich lives through cultural/recreational events, scholarship, lifelong learning, and public service that are intended to promote diversity and the welfare of the surrounding communities.

Objectives

A. Enrich the educational and cultural experiences for students, faculty and the surrounding communities

FAU is dedicated to offering intellectually enriching educational experiences to its students and to the community. Service learning and volunteerism help strengthen social capital in the community and enrich the education experience on campus. Participation in cultural and athletic events is a powerful tool to strengthen school pride, enthusiasm, and spirit amongst students, faculty, staff and the community.

Strategies

- A.1 Create a dynamic University-wide community-University relationship that uses community experts as instructors and career mentors and FAU faculty, staff and alumni as experts to help solve community problems

Metrics: Number of faculty, staff and alumni in leadership positions in community organizations; number of faculty, staff and alumni in leadership positions in national and international professional and civic organizations

Targets:

- A.2 Increase the number of cultural and athletic events

Metrics: Number of cultural events offered per year (this is a summary total; events can be tracked individually); attendance at cultural events; number of athletic events offered per year (this is a summary total; events can be tracked individually); attendance at athletic events

Targets:

- A.3 Increase student, faculty, alumni and staff volunteerism across all campuses

Metrics: Annual student volunteer hours; annual faculty volunteer hours; annual staff volunteer hours; number of organizations served by FAU volunteers

Targets:

- A.4 Systematically assess the community perception of FAU's engagement with the community

Metrics: Community survey results

Targets:

- A.5 Increase commitment to supporting Lifelong Learning (LL)

Metrics: Number of LL classes offered per year; attendance at LL classes; percent involvement of faculty and staff in delivering LL classes; number of places where LL is advertised

Targets:

- A.6 Expand opportunities for experiential learning including internships/externships, service learning, and co-curricular programs

Metrics: Number of internships; number of service learning hours; number of service learning certified courses; percent faculty teaching service learning classes

Targets:

B. Increase the number of community partnerships

Involvement in the local, regional, national and even international communities remains an important objective for FAU. The identification and utilization of community resources and viable partnerships, community linkages, and collaborative efforts with citizens in our multi-cultural community help to provide avenues for our students and faculty to engage in educational, cultural, health, lifelong learning, and vocational arenas outside of our multiple campuses.

Strategies

- B.1 Highlight and emphasize the impact, value and benefit that FAU's various centers have on the health, wellbeing, and life quality of the communities they serve

Metrics: Number and nature of existing community partnerships at various levels; number of health and wellness center partnerships

Targets:

- B.2 Involve college and campus-based advisory bodies in developing partnerships

Metrics: Number and nature of college and campus-based advisory partnerships; number of college and campus-based advisory bodies

Targets:

- B.3 Leverage FAU's presence and engagement in the community to foster private-public partnerships and maximize the value of the University's expertise to its various communities

Metrics: Number of speaker bureau events; number of private-public partnerships; number of internal and external boards or advisory groups; number of faculty and staff represented on FAU's speaker's bureau; number of faculty and staff represented on FAU's expert database

Targets:

C. Focus on the unique opportunities of FAU's stewardship of place

South Florida is a bellwether of issues that confront the nation as a whole. The University is positioned to be a strong and consistent steward of place in South Florida and, in so doing, to provide both regional and national leadership in identified signature themes.

Strategies

- C.1 Recognize and expand the presence and activities of centers and departments in support of identified signature themes

Metrics: Number of volunteer and community outreach programs; number of active patents; number of partnerships within business and industry; number of sponsored research projects

Targets:

- C.2 Recognize and support the expertise of faculty, staff and students and develop more interdisciplinary units of study that serve the community in areas identified as signature themes

Metrics: Number of faculty and staff involved in units of study that serve the community; number of students involved in internships for agencies that serve the community

Targets:

D. Focus resources on increasing FAU's support to the communities it serves

Community engagement refers to the process by which FAU, organizations and individuals build ongoing, permanent relationships for the purpose of applying a collective vision for the

benefit of a community. Community engagement primarily deals with the practice of moving said communities towards positive change.

Strategies

D.1 Establish an Office of Community Engagement

Metrics: Funding for Office of Community Engagement; number of volunteer and community outreach programs; number of active patents; number of partnerships within business and industry; number of sponsored research projects; number of FAU staff, faculty and students providing leadership in the community; number of agencies involved

Targets:

D.2 Apply for the Carnegie Foundation Community Engagement Classification in 2015

Metrics: Number of institutions where teaching, learning and scholarships engage faculty, students and the community in mutually beneficial collaboration; work toward application for the Carnegie Foundation Community Engagement Classification in 2015

Targets:

D.3 Conduct a periodic economic impact study

Metrics: Number of studies; number of people, businesses, agencies participating in study

Targets:

D.4 Develop external funding sources in support of community engagement

Metrics: Money raised in support of community engagement; number of donors; number of prospective donors

Targets:

D.5 Recognize and reward faculty and staff participation in community engagement through awards, release-time, credit toward tenure, etc.

Metrics: Indicators of the value of service in tenure and promotion decisions; more University awards for service or community engagement; more release time to participate in community engagement

Targets:

Goal IV: Leverage momentum toward achieving FAU's strategic goals by being good stewards of its human, technological, physical and financial resources.

Objectives

A. Create outstanding financial management practices and infrastructure to support FAU's core mission.

Strategies

A.1 Establish funding policies that support strategic planning goals

Metrics: Crosswalk table that shows level of expenditures that support strategic goals

Targets:

A.2 Form a Budget Development Advisory Committee that includes the University Faculty Senate Planning and Budget Committee to provide planning support

Metrics: Existence of a Budget Development Advisory Committee

Targets:

A.3 Review historical funding allocations for academic and non-academic units and develop trend analysis that informs the Budget Development Advisory Committee

Metrics: Reports on historical funding allocations at FAU

Targets:

A.4 Develop a new carry forward policy to assure University-wide initiatives are supported by reviewing history and best practices

Metrics: Implementation of a revised budget carry-forward policy

Targets:

A.5 Assess the possibility of a base-funded summer session program in order to enhance credit hour productivity.

Metrics: Issue report on FAU's proposed funding for a base-funded summer session

Targets:

B. Adopt business practices that increase productivity, maximize efficiencies and lower overhead

Strategies

- B.1 Establish an Administrative Services Advisory Committee that uses University-wide feedback to improve services

Metrics: Creation of an Administrative Services Advisory Committee; implementation of the committee charge

Targets:

- B.2. Create and implement guidelines for administrative program review

Metrics: Implement administrative program review on an established schedule and carry out review recommendations demonstrating cost savings or mergers

Targets:

- B.3 Implement University-wide assessment of business practices survey to improve service delivery

Metrics: Results from business practice survey

Targets:

- B.4 Participate in SUS shared services where possible and other purchasing consortiums or contract alliances

Metrics: Number of shared services

Targets:

- B.5 Employ peer student-to-staff ratio analysis to determine appropriate staffing levels in administrative units; utilize higher education benchmarks in accomplishing FAU accountability standards

Metrics: Student/staff ratio relative to professional organization benchmarks

Targets:

- B.6 Assess feasibility of 9- or 10-month employment opportunities to reduce personnel costs during non-peak months

Metrics: Publish feasibility report

Targets:

C. Provide funding to attract and retain diverse highly productive faculty and staff

Strategies

- C.1 Increase competitive compensation to meet or exceed benchmarked national standards for recruitment and retention of faculty and staff

Metrics: Custom and CUPA-HR compensation survey data

Targets:

- C.2 Increase funding to hire faculty and staff to support institutional initiatives in strategic areas

Metrics: Number of new faculty and staff in strategic areas

Targets:

- C.3 Increase the level of diversity within the University's faculty and staff and prioritize recruitment initiatives

Metrics: Number of current employees of diverse backgrounds by college, department; length of service of underrepresented employees; and number of successful hires in priority areas

Targets:

- C.4 Develop effective mentoring programs to mentor faculty and staff

Metrics: Number of mentored faculty and staff who are successfully retained on campus

Targets:

D. Build and sustain a state-of-the-art Information Technology Infrastructure

Strategies

- D.1 Allocate adequate resources to build and strengthen the University's technology infrastructure to ensure quality and responsiveness to address a digital age student population.

Metrics: Age of network backbone equipment; coverage, capacity, and reliability of wireless network; reliability and currency of instructional technology systems and services

Targets:

- D.2 Invest in administrative systems which enhance the level of information sharing and streamline business processes within the institution

Metrics: Improved/added functionality for administrative systems with seamless integration with existing ERP, and prioritize the elimination of unnecessary manual processes

Targets:

- D.3. Maintain continual assessment of the safety and security of all University networks

Metrics: Progress made toward meeting the 2010 security risk assessment

Targets:

- D.4 Increase the number of “next generation” classrooms, video-conferencing and open instructional labs and increase the use of commercially available software products to facilitate productivity

Metrics: Percentage of up-to-date classrooms, videoconference classrooms, and computer labs

Targets:

- D.5 Enhance faculty and staff development opportunities that make it possible for all to utilize new technologies to their fullest potential

Metrics: Increased use of new hardware, software, services and applications by faculty and staff

Targets:

- E. Plan physical structures and campus development initiatives that support improved learning and work environments**

Strategies

- E.1 Align the University Master Plan with changing teaching, enrollment and research needs

Metrics: University master plan that aligns with changes in teaching, enrollment and research needs

Targets:

- E.2 Maximize the utilization of facilities to allow for the academic needs of students to be met assuring progress toward graduation including uses of alternative scheduling

Metrics: space utilization rates; alternative scheduling; reassigning or refurbishing of existing space

Targets:

- E.3 Plan for the development of appropriate residential housing, student support facilities and ancillary needs including conference facilities to meet our growing student enrollment and changing demographics

Metrics: Number of residence halls and appropriate support; number of conference facilities; number of student support facilities

Targets:

- E.4 Assure a safe environment and promote alternative transportation modalities to improve circulation on campuses

Metrics: Number of traffic incidents; number of alternative modes of transportation

Targets:

F. Increase fundraising to support FAU initiatives

Strategies

- F.1 Identify and promote the University's fundraising priorities

Metrics: Fundraising priorities reflecting needs and priorities of University leadership and each college and unit

Targets:

- F.2 Conduct a feasibility study to determine the timing for a capital campaign

Metrics: Develop time frame for announcing the next capital campaign

Targets:

F.3 Develop a mid-range gift program that will engage donors

Metrics: Implement a mid-range gift plan

Targets:

F.4 Develop alumni programs to increase participation both local, state and national alumni

Metrics: Rate of alumni participation and number of events by various demographic classifications

Targets:

F.5 Increase the use of social media to improve communications to targeted groups

Metrics: Number of social media hits and number of followers and Facebook friends

Targets:

F.6 Address the continued needs of donors

Metrics: Number of donor sponsored facilities

Targets:

Part III: Florida Atlantic University's Proposed Signature Themes

Florida Atlantic University aspires to be a comprehensive university with the goal of attaining the Carnegie designation of a very high research institution. In setting this goal the University is extending its role as an intellectual leader and a creative force behind pioneering discoveries to new heights. It is also reexamining its current responsibility as an active community partner and an economic engine for addressing contemporary challenges to determine how it might raise its profile even higher. Identifying signature themes is one strategy that could move the institution in the desired direction. Such themes allow the University to pursue selective initiatives, within a broad smorgasbord of academic and research offerings, to advance targeted areas of distinction and strength. This can lead to the University developing its niche and thus attaining preeminence in notable areas.

A rising tide elevates all programs

FAU's journey towards becoming truly distinctive and distinguished will involve making many key choices along the way. As the University seeks to advance as a whole, it will need to do so, at times, by investing in a few signature themes that lead to the proverbial rising tide elevating the status of all programs. Making signature themes work requires upfront investments that are clear and transparent, and have been vetted by the University community as a whole. The themes proposed in this document represent such priorities for the campus and the University commits to making these priorities succeed.

FAU's three proposed themes

- 1. Marine and Coastal Issues**
- 2. Biotechnology**
- 3. Contemporary Societal Challenges**

Current FAU activity under these themes is summarized in a separate document that provides details on the teaching, research and creative activity, and community engagement related to these three themes.

Characteristics of FAU themes

The FAU themes will model *interdisciplinary* and collaborative partnerships for pursuing common goals. Through these themes FAU will identify and articulate a *clear vision* for opportunities that are worthy of investment at this point in the University's development. The identified themes will reflect true campus *distinction* by noting quality outcomes, relevance of the topic, centrality to mission, and the University's potential for growth.

FAU's signature themes will strive to address an often unmet public need for understanding academic research and its *relevance to local challenges and opportunities*. Signature themes will provide an umbrella for grouping together the work of several academic disciplines to address current and emerging real-life challenges. At the intersection of teaching, research and service, which are concepts that require no further elaboration in academic circles, is a need to extend the role of the campus community as being practitioners and collaborators in a very broad sense. The themes promise to create a platform that would allow moving away

from a University-centric mindset of academic work to one that engages the broader community in more aspects of the institution.

Institutional support for establishing themes

New initiatives take substantial effort and resources to become established. The time lag from inception to the phase in which they yield dividends can be long. During this phase of initial seeding it is important to build a shared sense of campus commitment at the outset. At this time FAU envisions faculty hiring in disciplinary fields involving signature themes. Increased graduate and teaching assistantships are to be allocated to promote the goals of this program. The University will explore the potential for offering centrally funded speaker series in these areas. Increased support will be made available for undergraduate research and attempts will be made to enhance the curriculum to reflect FAU's specialized strength. Community partnerships in these areas will be enhanced due to the visibility of support for new academic programs. Finally, the institution will enhance support for interdisciplinary grant activity under the themes.

Expected dividends from pursuing themes

The identified themes represent *core FAU strength* in various disciplines and offer the promise of elevating the University's profile in tangible ways that can be easily measured. Investing in themes will lead to increased faculty hiring and an increase in funded research, which is in line with the current campus goal of doubling research dollars in the next five years. Other outcomes could include increases in the following areas: grant applications, conferences, roundtables and workshops, major grants and awards, prestigious prizes, new and better prepared students, independent fellowships and key publications, esteem and international standing, and new relationships with regional/national/international funding bodies.

FAU celebrated its 50th anniversary in 2011. The last fifty years have seen a marked rise in our stature as a comprehensive University that contributes and competes effectively in our region. It is important to devote time at this juncture to building a vision for the next 5 to 10 years. The signature themes represent a new and different way of thinking about the future that holds a lot of potential for FAU. As the faculty from FAU's College of Education have proposed, "As researchers, scholars, and educators, we aspire to be a leading resource for research, professional preparation, policy, and public engagement in local, state, national, and international communities." The perspective offered through this statement provides a clear and focused direction for the University for the next decade – a decade of innovative research and community engagement.

SIGNATURE THEMES

MARINE AND COASTAL ISSUES

Academic Programs

FAU has many existing undergraduate and graduate programs that support a comprehensive approach in addressing issues that affect humans in their environment, particularly with regard to the distinctive environments found in coastal and wetland areas across the state, the nation and the world.

Programs providing the most depth in addressing these issues include those in the sciences and ocean-related engineering. Offerings include specialized tracks and certificate programs as well as undergraduate and graduate programs in: biological sciences (including marine and environmental sciences), chemistry and geosciences as well as civil and ocean engineering. FAU's many colleges support this initiative by offering certificate programs that reflect disciplinary perspectives such as: environmental studies offered through the Dorothy F. Schmidt College of Arts & Letters and environmental planning through the College of Design & Social Inquiry.

Providing a distinct institutional and interdisciplinary dimension to the breadth of study on these issues are FAU's programs in: environmental education, urban and regional planning (urban coastal development, disaster management and emergency preparedness), and architecture (water and waste management, thermal comfort, climate responsive design).

Although these programs are active and thriving, the opportunity for growth and emerging areas of related study is unparalleled at this point in the University's history.

Research Initiatives

The University's research initiatives in this area are extensive. At the forefront of the institution's activities are two notable centers that serve as the geographical and academic hub for research activities related to marine and coastal issues: Harbor Branch Oceanographic Institute in Fort Pierce and SeaTech, located at the institution's Dania Beach site. The Southeast National Marine Renewable Energy Center (SNMREC) is housed at SeaTech, reflecting the significance of FAU's research in this area.

Additional FAU's centers and institutes contributing to these research activities include but are not limited to the: Center for Hydrodynamics and Physical Oceanography; Center for Marine Materials; Center for Marine Structures and Geotechniques; Florida Center for Environmental Studies; and, Institute for Ocean & Systems Engineering – SeaTech.

The University's external collaborative partners include the: U.S. Geological Survey; South Florida Water Management District; Army Corps of Engineers; Office of Naval Research; Department of Transportation (State/Federal); Smithsonian Marine Station; National

Oceanographic and Atmospheric Agency; Architectural Research Centers Consortium; and, international entities in Brazil, the Netherlands and China.

Community Engagement

The University supports significant outreach activities with regard to marine and coastal issues to its many communities. In addition to public information sessions and the Summer-by-the-Sea academic programs for both FAU and non-FAU students, the Harbor Branch Oceanographic Institute conducts: high school programs in partnership with the St. Lucie County School District; homeschool programs; activities and field trips for University/college, high school, and middle-school students and teachers; summer camps; public lectures; scientific conferences and workshops and aquaculture workshops.

Under the Pine Jog Environmental School initiative, FAU offers several programs that involve participants from all perspectives and ages: Pine Jog Green schools (program with over 50 K-12 partner schools); the Pine Jog Learn Green conference (held for over 1,000 Florida and national educators); and a for-credit program for high school students (through dual enrollment) and community members.

Additionally, FAU faculty partner with local companies and agencies in research initiatives and, in doing so, contribute to the advancement of the industry as well as the economic development of the regional community. Examples of some of these projects include:

- \$200,000 grant from Petroleum Geo-Services, Inc. for “*Assessment of Shark Attraction to Underwater Towed Arrays*”
- \$250,000 from Edge Tech to study “*Technology Transfer of Chirp Synthetic Aperture*”
- \$150,000 from the Department of Transportation for “*Development of a Methodology for the Assessment and Mitigation of Sea-Level Rise Impacts on Florida’s Transportation Modes and Infrastructures*”
- A grant from Liquid Robotics, Inc. for “*Wave Glider Gulf of Mexico Long Term Water Quality Monitoring and Research Program*”
- A grant from the Caribbean Conservation Corporation to study “*Satellite Tracking Neonate Loggerhead (Caretta caretta) Sea Turtles*”

SIGNATURE THEMES

BIOTECHNOLOGY

Academic Programs

Florida Atlantic University established an early and significant national and international presence in the area of Biotechnology as well as Complex Systems and Neurosciences due, in part, to the research interests of the faculty in the Charles E. Schmidt College of Science and the establishment of the Center for Complex Centers and Brain Sciences, a multi-disciplinary academic unit housed in the college and founded in 1985. The center attracted the attention and the acclaim of many research entities and faculty with similar research interests and activities and provided fertile ground which spawned interest and development of additional areas in the areas of biotechnology and neuroscience.

Current undergraduate and graduate program offerings in support of this theme include: biological sciences; molecular biology; integrative biology; biochemistry; chemistry; complex systems and brain sciences; experimental psychology; psychobiology; psychology; and, the medical program. Further supporting the development of this theme are programs such as: bioengineering and computer engineering (high performance computing and imaging).

Providing breadth and an aspect of institutional novelty to the study of these issues are programs in communication sciences and disorders, applied mathematics and statistics, nursing (advanced holistic nursing, clinical nurse leader, and others) and business biotechnology.

Research Initiatives

Research activities are supported by a broad offering of internal and external research centers and entities including internal centers such as the Center for Complex Systems and Brain Sciences and Center for Molecular Biology and Biotechnology as well as facilities that facilitate research cluster computing and include NMR/Mass/Raman spectrometers, confocal and atomic absorption microscopes and biotech instrumentation.

FAU's external research partners include a cadre of highly acclaimed and internationally focused research institutes including: Scripps; Max Planck; Torrey Pines Institute for Molecular Study (TPIMS); and the Vaccine and Gene Therapy Institute (VGTI). Opportunities for FAU's faculty to engage with a stellar research faculty at these internationally recognized and respected research institutes provide fertile ground for expanded and collaborative research initiatives in this area.

Research relationships with private biotech companies such as Envoy Therapeutics, OPKO Curna, Cytonics, and CHS Inc. and economic development entities such as Bio Florida, the Business Development Board of Palm Beach County and the Workforce Alliance of Palm Beach County, also provide an opportunity for FAU to further its reputation and regard in terms of its contributions to the physical and economic health of the communities it serves.

Community Engagement

In addition to its significant contributions to the community through research activities, FAU faculty engage with companies in the local and regional communities through research partnerships to conduct research vital to the advancement of the industry and the community. Examples of these initiatives include:

- \$250,000 from Motorola for “*Motorola Test Vector*”
- \$50,000 from Océ North America for “High Definition Printers”
- \$60,000 from Calvin Giordano & Associates, Inc. for research on “*Water Quality Review Membrane System Pre-Qualifications, Membrane Testing & Selection*”
- \$20,000 from Protein Delivery Solution, LLC for “*Novel Drug Delivery System*”
- \$50,000 through Enerfuel Cell, Inc. to study “*Hydrogen Technology (HyTech) Electric Vehicle Charge Station.*”

DRAFT

SIGNATURE THEMES

CONTEMPORARY SOCIETAL CHALLENGES

Academic Programs

The theme of Contemporary Societal Challenges is broadly defined to allow the University to focus and highlight its academic and research expertise on addressing issues of concern that the region and the State of Florida experience first. These Florida First issues impact the region due to its geographic location and demographic composition and position the University to demonstrate its leadership as a “Steward of Place.” The University’s focused emphasis on these issues provides it with the best opportunity to serve both its local communities and society in general.

Examples of Florida First contemporary issues include: health and aging (including healthy children, healthy aging); healthy environments (water management, climate change, disaster management); immigration; changing environments; culture and diversity; literacy; global business and economies; global health; information security; ethics; innovation and sustainability; assistive technologies in healthcare (including robotics, human-machine interface, technologies for rehabilitation); wireless technologies and renewable energy.

Undergraduate and/or academic programs that acknowledge contemporary issues include: the arts (creative expression); nursing (aging); education (healthy aging relative to early childhood and adult education, exercise science and wellness); biological sciences (aging); environmental studies (climate change); health administration; media, technology, and entertainment; urban and regional planning; social work; anthropology; performing and fine arts; and business information systems.

Research Initiatives

Many of FAU’s faculty currently conduct research in one or more of these contemporary issues. Research interests include: information and cyber security; cyberbullying; immigration; sustainability; ethics, particularly bioethics; cultural diversity inclusive of literacy, global health, global economy, business ethics and peace studies; entrepreneurship; innovation; aging (nursing, education); innovative design to address aging, crime prevention, and the environment; human rights; conflict resolution; the environment and climate change. Research relationships include collaborative activities with a broad array of public entities such as: public schools; health agencies; public safety and public administrative units; cyber security agencies; and international health, welfare and educational agencies.

Specifically, faculty engage with internal and external centers and agencies such as: the U.S. Department of Defense; the Cyber Security Center/National Security Agency; Workforce Alliance; Louis and Anne Green Memory and Wellness Center; Christine E. Lynn Center for Caring; the Association for Childhood Education International; the NGO Committee on UNICEF; Center for Holocaust and Human Rights Education; Ernest O. Melby Center for

Community Education; Scripps; Max Planck; Torrey Pines Institute for Molecular Study (TPIMS) and the Vaccine and Gene Therapy Institute (VGTI). Through its extensive arts alliances and relationships with cultural and community entities such as the Röss Foundation (and other regional care facilities), Art Basel, the National Museum for Women in the Arts, the Museum of Contemporary Art of Miami, the Lawrence Saunders Foundation Writer-in-Residence Program, and the American Institute of Graphic Arts, the University intersects research with community engagement providing a rich and vibrant canvas from which creativity flourishes and takes form.

Community Engagement

Faculty engage the community extensively in many of these areas and offer a vast array of service initiatives and programs along South Florida's coastline. Examples include public education and health programs offered to immigrant and public school populations through nursing and education; international study abroad and foreign exchange programs; seminars and speakers' series that are held to bring national and international experts to the area; and, many performing and fine arts offerings that add a cultural dimension to healthy living and environments.

FAU faculty also partner with local companies and agencies to conduct research that advances the industry and benefits the community. Examples include:

- \$64,000 from the Robert Wood Johnson Foundation for "*Informing the Design of Funding allocation Formulas in Public Health*"
- \$6M from the Florida Department of Children and Families for "*Title IV-E Child Welfare Education Program*"
- \$170,000 for "*Gateway to Power*" through Florida Power & Light Co.
- \$1.5M from the National Institutes of Health for "*Molecular Analysis of Microdissected Cataractous Human Lenses*" and an additional \$2.6M from the same agency to study "*Structure, Function & Application of Metalloproteinase Inhibitors in Osteoarthritis*"

FAU students contribute to the betterment of their local communities through student organizations, college initiatives, and the organized initiatives of the Weppner Center for Civic Engagement & Services. Students volunteer their time to local children's agencies, hospitals and migrant support agencies and have assisted victims of hurricanes and other disasters. Nursing students work in the community performing health assessments and many participate in a project to assist elderly patients discharged from hospitals into nursing homes. Music and dance students perform at local nursing homes while others work with the Seminole Indian Tribe in cultural preservation initiatives, Habitat for Humanity, and other such community service organizations.

Almost 2,000 full and part-time cooperative and internship opportunities are available to students throughout all colleges providing them with learning opportunities while they assist local businesses and industry. Many colleges require a service-learning or community service component as part of their degree requirements.

Additionally, FAU's Expert Database interfaces directly with the public to provide faculty with the opportunity to share their expertise with local residents and FAU's signature Lifelong Learning program, with an enrollment of over 19,000 lifelong learners, interconnects all components of the University's mission – teaching, research, and service – for its local and regional communities.

DRAFT