



Item: SP: I-3

**STRATEGIC PLANNING AND INFORMATION TECHNOLOGY
COMMITTEE**

Wednesday, October 20, 2010

**SUBJECT: INSTITUTE FOR SCIENCE AND TECHNOLOGY AT FAU ON THE
MacARTHUR CAMPUS IN JUPITER**

PROPOSED COMMITTEE ACTION

Request: For Information Only

BACKGROUND INFORMATION

Florida Atlantic University's life science programs stand at a crossroad of historical importance. Dynamic regional events (creating a "biocluster") have created an environment of enormous opportunity, as well as significant institutional challenge.

A plan is proposed to capitalize on the nearly one billion dollars that the taxpayer has invested to attract world class biomedical research institutions to our region. The plan outlines a joint venture between the Colleges of Science, Engineering and Computer Science and Medicine with our regional partners, the Max Planck Florida Institute, Scripps Florida and the Torrey Pines Institute for Molecular Studies to create world class science and technology programs on the MacArthur Campus of Florida Atlantic University in Jupiter, Florida.

Specifically, it is proposed that an Institute for Science and Technology (IST) be created in Jupiter that will initially focus on three areas of science and technology that complement the current strengths of FAU colleges and the partner institutions. These areas will include a Program in Integrative Neuroscience; a Program in Biomaging Informatics that will use advanced computational and imaging tools to address problems in Systems Biology; and a Program in Biotechnology and Drug Discovery. These three programs complement the research interests of Scripps Florida, the Max Planck Florida Institute and the Torrey Pines Institute for Molecular Studies.

The anticipated timeline to fully establish the IST is five years (by Fall 2015) at which time there will be 45 regular and research faculty, 30 post-docs and at least 60 graduate students participating in IST programs

IMPLEMENTATION PLAN/DATE

.N/A at this time

FISCAL IMPLICATIONS

N/ A at this time.

Supporting Documentation:

Presented by: Dr. Diane Alperin, Interim Provost

Executive Summary

Phone: 561-297-3068

Institute for Science and Technology at FAU on the MacArthur Campus in Jupiter

Executive summary

Florida Atlantic University's life science programs stand at a crossroad of historical importance. Dynamic regional events (creating a "biocluster") have created an environment of enormous opportunity, as well as significant institutional challenge. By the year 2015, FAU life scientists will be working in an environment that simply could not have been imagined a few years ago. A plan is proposed to capitalize on the nearly one billion dollars that the taxpayer has invested to attract world class biomedical research institutions to our region. The plan outlines a joint venture between the Colleges of Science, Engineering and Computer Science and Medicine with our regional partners, the Max Planck Florida Institute, Scripps Florida and the Torrey Pines Institute for Molecular Studies to create world class science and technology programs on the MacArthur Campus of Florida Atlantic University in Jupiter, Florida.

Specifically, we propose that an Institute for Science and Technology (IST) be created in Jupiter that will initially focus on three areas of science and technology that complement the current strengths of FAU colleges and the partner institutions (see schematic below). These areas will include a Program in Integrative Neuroscience designed to provide cutting edge research associated with oxidative stress and neurodegenerative disorders; a Program in Biomaging Informatics that will use advanced computational and imaging tools to address problems in Systems Biology; and a Program in Biotechnology and Drug Discovery primarily targeted to aging and cancer research and the development of potential therapeutics. These three programs complement the research interests of Scripps Florida, the Max Planck Florida Institute and the Torrey Pines Institute for Molecular Studies. Initially, FAU faculty would provide the core strengths in key areas with participation of the faculty of the partner institutions. A plan is proposed that will afford current regular faculty at FAU on the Boca Raton campus the opportunity to move their research operation to the MacArthur campus in Jupiter to become part of the IST while retaining their position in their home college. Research faculty, individually or as part of a research team, will be expected to provide their own source of support from research grants and contracts, although a budget will be developed to provide support for research faculty for a limited time when full grant support is interrupted.

As part of the development of the IST, a primary goal will be to create world-class graduate and post-doctoral training programs. Initially, PhD programs already existing at FAU such as those in Integrative Biology, Chemistry or Complex Systems and Brain Sciences will serve to recruit outstanding students in to these programs. Masters programs such as those in Bioengineering or Biotechnology Business will also allow graduate students to participate in IST programs. As needed new graduate programs will be developed. The presence of the Honors College in Jupiter will provide unparalleled opportunities for undergraduate honors students both at the Honors College and in department specific honors programs.

The IST will be located initially in buildings MC 17 and MC 19 on the MacArthur campus of FAU in Jupiter thus providing optimal access to the partnering institutions in Jupiter. However, it is anticipated that a new building, constructed close to our partner institutions on the MacArthur campus, comprising about 120,000 NSF of state-of-the-art research facilities, classrooms and offices will be needed to sustain development of the IST beyond Year 05 of its operations. This will allow for additional faculty and researchers to not only expand the programs already part of the IST, but also to create new innovative programs in state-of-the-art areas such as nanotechnology and nanomedicine.

Grant-research intensive faculty from FAU as well as new research track faculty and postdoctoral scientists will be recruited to provide a critical mass of scientists on the Jupiter campus. The anticipated timeline to fully establish the IST is five years (by Fall 2015) at which time there will be 45 regular and research faculty, 30 post-docs and at least 60 graduate students participating in IST programs. Each program will be led by a Program Director who will report to the Director of the Institute. The IST Director will report to a Governing Board composed of the Deans of Science, Engineering and Computer Science and Medicine, and the Vice President for Research. In addition, the IST will have an External Advisory Board composed of members from the partner research institutes as well as other stakeholders from the region.

The funding stream necessary to support regular faculty assignments in Jupiter will be initially from university E&G funds, but with a mixed model of funding from E&G and research grant sources developed as part of the ongoing Institute operating costs. The steady state recurring budget at Year 05 will be approximately \$5.5 million (excluding campus and building operating costs) with an anticipated \$5 million one time start up cost over the first five years. A recurring appropriation of \$4million has been requested through the SUS New Florida Initiative and has been approved by the FAU Board of Trustees. Sponsored research funding is expected to reach \$8.5 million in five years generating \$3.8 million in indirect costs annually (assuming primarily Federal funding of research grants at an indirect cost rate of 45%). By the fifth year the Institute will be fully established in MC 17 and MC 19 on the MacArthur campus of FAU in Jupiter.

