Jupiter Research Building Renovation & Addition

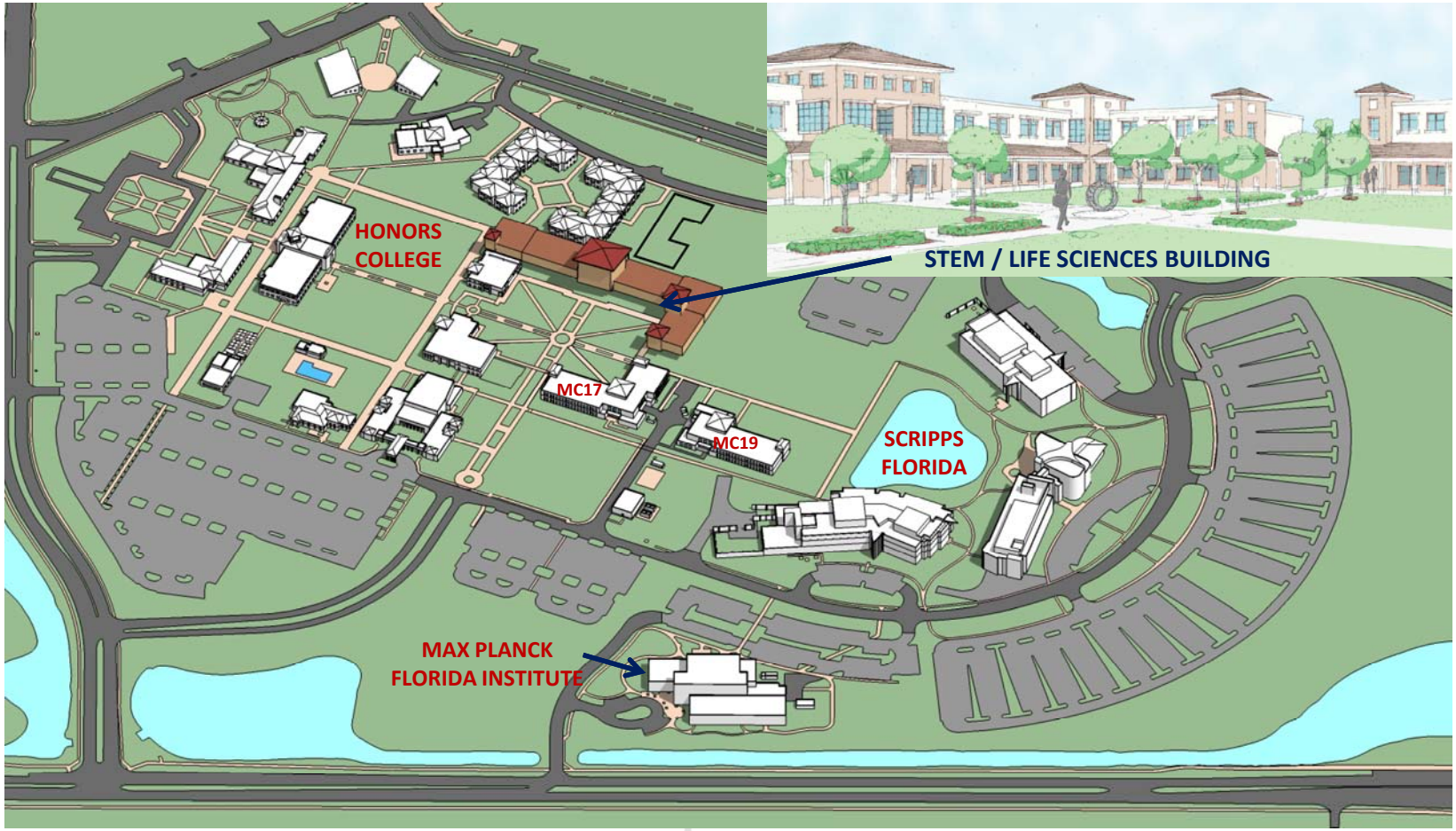
STEM / LIFE SCIENCE BUILDING

FLORIDA ATLANTIC UNIVERSITY.

Making Waves

FLORIDA ATLANTIC UNIVERSITY. FAU

FAU STEM / LIFE SCIENCE BUILDING - $29 M



Making Waves

FAU STEM / LIFE SCIENCE BUILDING - $29 M

ROI

- **Create a Life Science focused STEM campus by "re-purposing" FAU's MacArthur Campus in Jupiter to leverage the State and County investment (~$1 billion) in Scripps Florida and the Max Planck Florida Institute for Neuroscience located on this campus of FAU.** The MacArthur Campus houses FAU's Wilkes Honors College and prior to the economic turndown was developing as a "full service" campus to meet the needs of projected population growth in northern Palm Beach, Martin and Indian River Counties.

- **Meet BOG Strategic Plan goals to increase undergraduate and graduate degrees awarded in STEM and other strategic emphasis areas.** Create new world class science and technology programs, e.g., Bachelor of Science Honors Degree specifically targeted to high achieving students with aspirations to pursue medical school or graduate school in the life sciences. Faculty from Scripps and Max Planck will participate in these STEM programs providing students with access to world-class scientists. Indeed, a new joint program has already been established – the PhD program in Integrative Biology and Neuroscience that will be developed to be a nationally top-ten program in neuroscience.

- **FAU's Strategic Plan 2012-17 sets goals to increase undergraduate STEM degrees from 20% in 2012 to 28% in 2017, and graduate degrees from 16% to 19% in 2017.**
  A revision of FAU's Strategic Plan is currently underway with plans to increase these goals to 40% undergraduate, STEM-related degrees by 2025, and increase STEM-related graduate degrees by 30% by 2025.
  Transitioning the MacArthur Campus to a STEM-focused campus will be critical to the success of these institutional goals.

FAU STEM / LIFE SCIENCE BUILDING - $29 M

ROI continued

- **The STEM/LS Building will provide for increased enrollment of students in the STEM fields of Biology, Bioengineering, Bioinformatics, Chemistry, Computational Biology, Engineering and Neuroscience.** Currently, undergraduate enrollment in the STEM areas on the Jupiter Campus represents an undergraduate headcount of ~75, and a graduate headcount of 20 students. By 2025, we expect STEM enrollment to increase to 1500 undergraduates and ~100 graduate students. Enrollment in the Wilkes Honors college will increase from the current 332 students to a 650 students.

- **Meet BOG Strategic Plan goals to increase Federal and other research funding. The STEM/LS building will allow for expansion of collaborative research in the STEM areas, especially in specific targeted areas such neuroscience, biotechnology, bioengineering, bioinformatics/data science, chemistry.** The additional research infrastructure will also allow greater collaboration and cooperative grant funding between FAU faculty and Scripps and Max Planck faculty. Currently, the average annual funding for STEM faculty on the MacArthur campus is ~$60,000 per faculty member and total STEM research funding is ~$750,000 per year. By 2025, we expect annual faculty research funding to be greater than $100-150,000 per faculty, and a total of ~$5-8 million annually

- **Increase licensing activity of intellectual property and "spinout" companies based on FAU IP.** Currently, four patents have been awarded to STEM faculty who recently moved from the Boca Raton Campus to the MacArthur Campus in Jupiter. These patents have been licensed to two Biotech startups in the Jupiter area. With expansion of STEM activity on the MacArthur Campus a significant increase in technology licensing activity by FAU will be expected.

- **Job creation**
  - 45 regular and research faculty positions
  - 35+ postdocs and 75+ graduate students
  - 500+ construction jobs

FLORIDA ATLANTIC UNIVERSITY. FAU

FAU STEM / LIFE SCIENCE BUILDING - $29 M

DEMAND METRICS

- **72,000 gross / 45,000 net square feet**
- **Provides additional teaching and instructional space, needed to support projected enrollment of STEM honors students on the Jupiter campus.** The Wilkes Honors College will increase enrollment from 332 to 650 by 2025. Increased enrollment will also come from additional STEM students completing Honors-in-the-Major programs, such as in Biology or Chemistry, with overall enrollment increasing to ~3000 students
- **Reallocation of current instructional space will rebuild capacity (to 2003-04 levels) in other programs through increases in the number of students majoring in related disciplines such as Education, Psychology and Business.** Such a model exists on FAU's Davie Campus in Broward County where the headcount is about 4000 students majoring in multiple disciplines, including STEM
- **Provides for new teaching laboratories and support space in core STEM areas.** Biology, chemistry, engineering and computer science and mathematics
- **Provides for new classroom/instructional space.** Includes distance learning classrooms and computer instructional labs
- **Provides additional research and office space needed to support new STEM faculty.** Anticipated 45 additional regular and research faculty.
- Provides for new faculty research laboratories, research support space and research staff offices. Anticipated ~75 graduate students and ~35 postdoctoral fellows
- Anticipated construction start date: **October 2016**
- Estimated completion date: **February 2018**

Making Waves

FLORIDA ATLANTIC UNIVERSITY. FAU

FAU STEM / LIFE SCIENCE BUILDING - $29 M

PECO REQUEST

2015/16 – (Planning & Construction*)	$	14,650,000
2016/17 – (Construction)	$	10,000,000
2017/18 – (Furnishings & Equipment)	$	4,350,000
TOTAL PROJECT COST	**$**	**29,000,000**

*$2.5 M planning

PO&M - PLANT OPERATIONS & MAINTENANCE

Building Classification – Research/Advanced Technology	Facility Class F
2014-15 PO&M Rate / Sq. Ft. – Class F	$18.27
Building Gross Square Footage	72,000 GSF
Total Projected Annual PO&M	**$1,315,440**

Making Waves

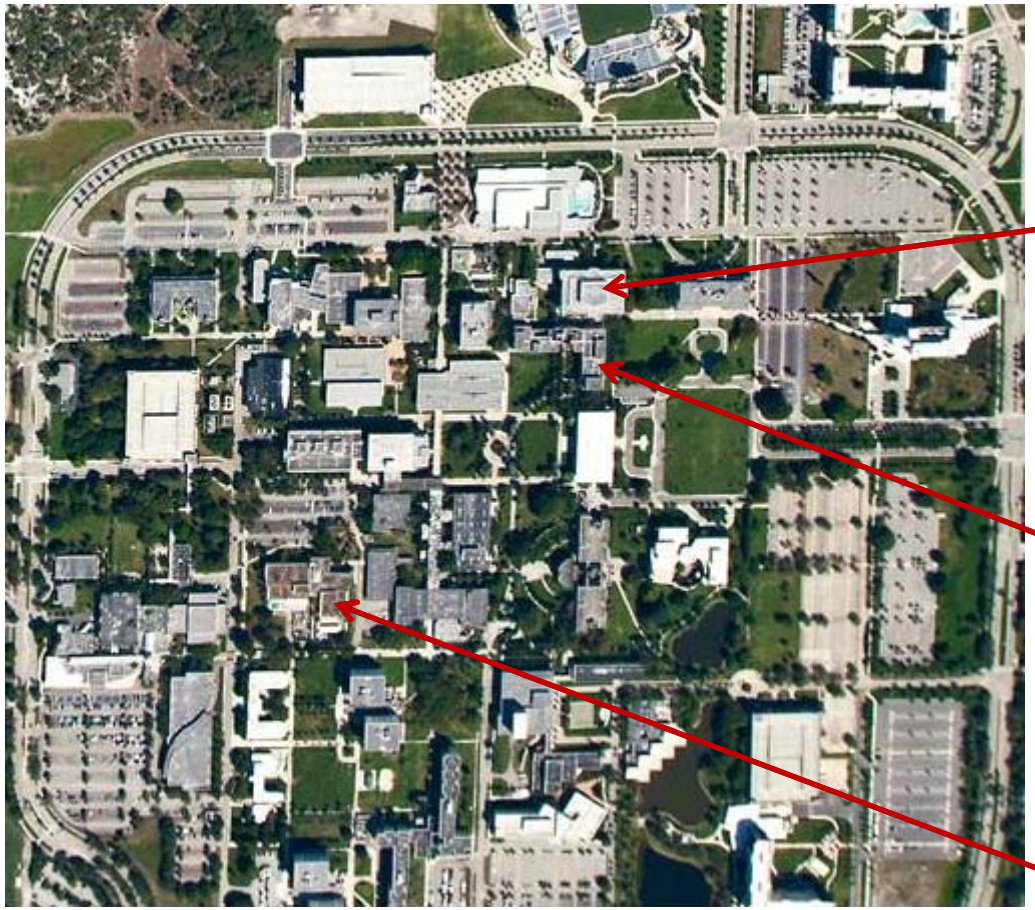
Boca Raton Campus

Colleges of Science and Engineering Buildings Renovation (36, 43 & 55)

FLORIDA ATLANTIC UNIVERSITY.

Making Waves

COLLEGES OF SCIENCE AND ENGINEERING BULDINGS RENOVATION - $10M



Science – bldg. 43
128,000 GSF

Physical Science – bldg. 55
97,000 GSF

Engineering West – bldg. 36
59,000 GSF

COLLEGES OF SCIENCE AND ENGINEERING BULDINGS RENOVATION - $10M

ROI

- Average age of the Science and Engineering buildings exceeds 25 years
- Due to their age, these buildings need major attention to upgrading of existing building systems, including: electrical, HVAC, lighting, controls, chilled water system, fire alarms systems, elevators, roofs, and overall building envelope.
- These buildings house classrooms, teaching labs, research labs and other space critical to supporting STEM programs
- This project is an investment in the University's and the State's facilities assets to ensure that these buildings remain open and operational to serve existing programs
- Job creation
  - Same faculty and staff jobs as currently exists
  - 180+ construction jobs

COLLEGES OF SCIENCE AND ENGINEERING BULDINGS RENOVATION - $10M

DEMAND METRICS

- The renovated facilities will enhance the quality of academic programs and research in the STEM disciplines
- Upgraded systems and modernized facilities will help attract top rated students and faculty to existing programs
- State-of-the-art facilities are needed to expand research activities
- Anticipated construction start date: **March 2016**
- Estimated completion date: **August 2017**

PECO REQUEST

2015/16 – (Planning , Construction & FF&E) **$ 10,000,000**

PO&M - PLANT OPERATIONS & MAINTENANCE

No increase in current state funding to support PO&M; however, the renovated facilities will be more energy efficient and require less maintenance