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**University of Florida**

*One Administrative View of I/UCRCs*

**Erik Sander, Director**

**UF Engineering Innovation Institute**

# University of Florida

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- Major, public, comprehensive, land-grant, research university
- Annual economic impact ~\$8.76B/year; ~106,000 jobs.
- ~50,000 student in 16 colleges and 200+ research, service and education centers, bureaus and institutes
- \$700 million in research expenditures in 2014
- ~300 inventions; 85 technology licenses; 17 spinoffs annually
- Cross-campus entrepreneurship and innovation programs - ~10-15 student spinoff companies annually
- Offensively challenged football team

“Research universities are the key to educational access for millions and underlie the economic and social growth that has seen our nation climb from a colony in rebellion to a global leader.”

Time Magazine-October 7, 2013

# College of Engineering (COE) Academic Units

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## COE Departments

- J. Crayton Pruitt Family Biomedical (**BME**)
- Chemical (**ChE**)
- Computer & Information Science (**CISE**)
- Electrical & Computer (**ECE**)
- Industrial & Systems (**ISE**)
- Materials Science (**MSE**)
  - includes Nuclear Eng. Program (**NEP**)
- Mechanical & Aerospace (**MAE**)

## COE Schools

- Engineering School of Sustainable Infrastructure & Environment (**ESSIE**)
  - includes Civil & Coastal Engineering (**CCE**) & Environmental Engineering Sciences (**EES**)

## College of Agricultural and Life Sciences (CAL S)

- Agricultural & Biological (**ABE**)

# Engineering Faculty

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## 276 Tenured/Tenure-Track Faculty

- Led by **Dean Cammy Abernathy** since 2009
- Over 55 faculty have won NSF CAREER or Young Investigator Awards, including 2 PECASE Awardees

### College on the Move

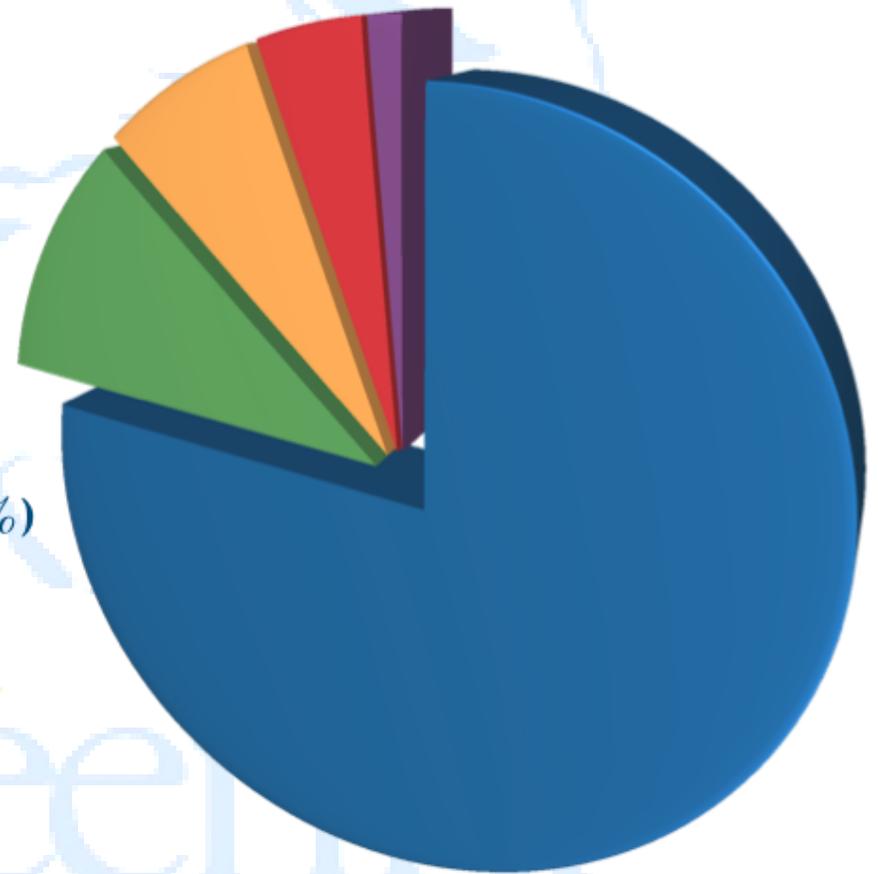
- Preeminence designation by the State of Florida will bring in over 30 faculty members with expertise in:
  - Advanced Manufacturing
  - Autonomous Systems
  - Big Data
  - Cybersecurity
  - Human Centered Computing
  - Materials Innovation
  - Renewable Energy & Storage

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# COE Research Awards by Prime Sponsor Type

\$61.9M total for FY13-14

- Federal Agencies - \$48.1M (78%)
- Corporations & Companies - \$6.3M (10%)
- Florida State Agencies - \$4.1M (7%)
- Local & Regional Gov't/Others - \$2.6M (4%)
- Foundations & Societies - \$800K (1%)



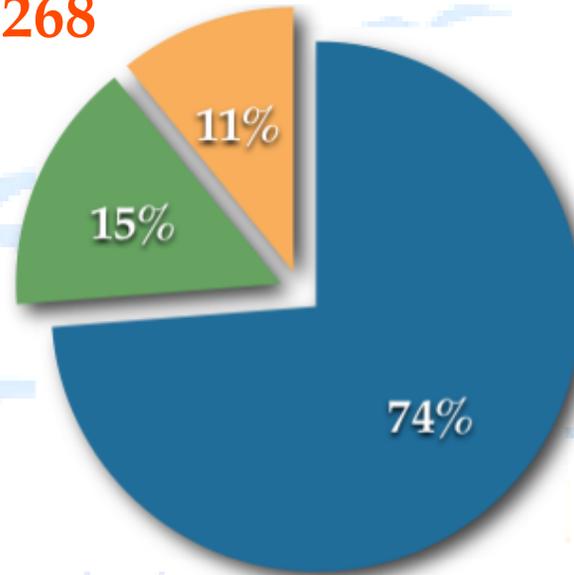
Engineering  
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# College of Engineering Enrollment – Fall 2014

Total UF Enrollment: 49,555

Total COE Enrollment: 8,644

MS/PhD: 2,268



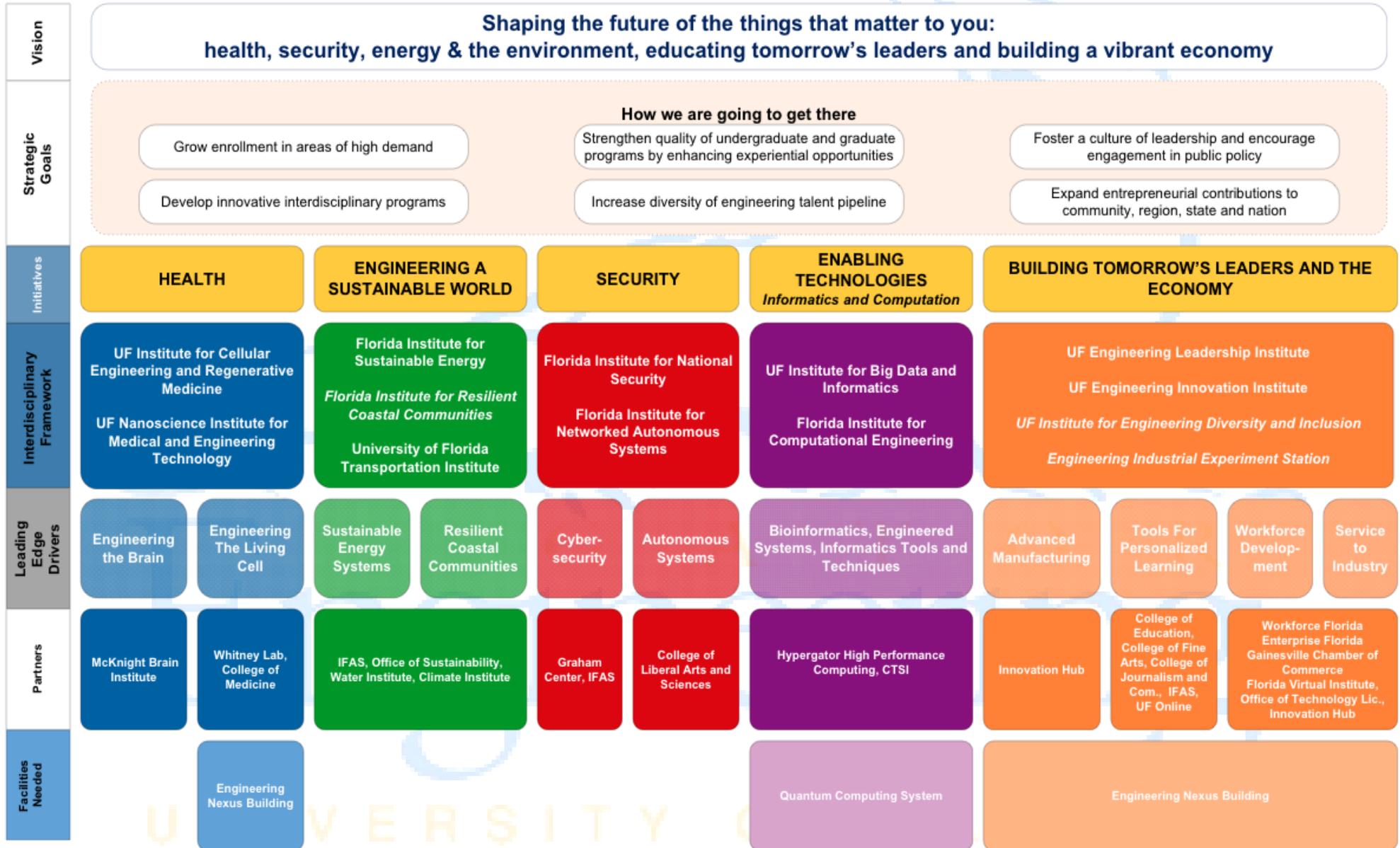
Undergraduate (UG):  
6,376

● UG ● MS ● PhD

COE has the **second largest** student population at UF

# COE – Strategic Plan

## University of Florida College of Engineering – Powering the New Engineer



# Innovation

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In Gator Engineering over the last five years:

- **556** invention disclosures submitted
- **904** US and Foreign patent applications submitted
- **266** US and Foreign patents issued
- **202** executed license and option agreements
  - **~25%** were exclusive
- **35** start-up companies
  - **5-6** annually since 2000
- **2X** the national average per research dollar in patents issued
- **4X** the national average per research dollar in the number of start-up companies

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# NSF I/UCRCs

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- I/UCRCs led by COE center directors:
  - Center for High-Performance Reconfigurable Computing (**CHREC**)
  - Center for Particulate and Surfactant Systems (**CPaSS**)
  - Cloud and Autonomic Computing (**CAC**) Center
  - Multi-functional Integrated System Technology (**MIST**) Center
- Additionally:
  - COE faculty members are project PIs in the Center for Cyber-Physical Systems for the Hospital Operating Room (**CybHOR**)
  - UF leads the I/UCRC in Advanced Forestry Systems

*UF is one of two institutions with the **most I/UCRCs as the Lead University Site** out of the 65 active centers in the program*

# I/UCRCs – One Administrator's View

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## **How and why I/UCRCs support our strategic vision – why are they important**

- An industry driven indicator of research of interest in current and future fields
- Fill the gap between basic research and industry applications
- Engage junior to senior faculty with industry

## **What you have done to promote the success of I/UCRCs**

- Planning meeting support
- Industry Programs Office - Links to industry, Help with C&G

## **Benefits to the institution in the short and long term**

- Industry recognition from NSF designation
- Gateway to further federal / industry funding
- A means to prove ourselves to industry
- Demonstrable innovation