

Strategic Plan 2010 for UIC College of Engineering

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UIC College of Engineering

- Six departments
- 114 faculty members
- Students
 - 1,684 undergraduates, 387 B.S. graduates
 - 422 Ph.D., 35 Ph.D. graduates
 - 438 M.S., 300 M.S. graduates
- 16,000 alumni
- \$21 million in research

How to Improve UIC Engineering

- Size of school matters
- Strategic areas of excellence
- Cross-disciplinary research
- Strong ties to industry
- High-visibility collaborative projects
- UIC Engineering poised to be strong
- Leverage location of Chicago

Strategic Plan Outline

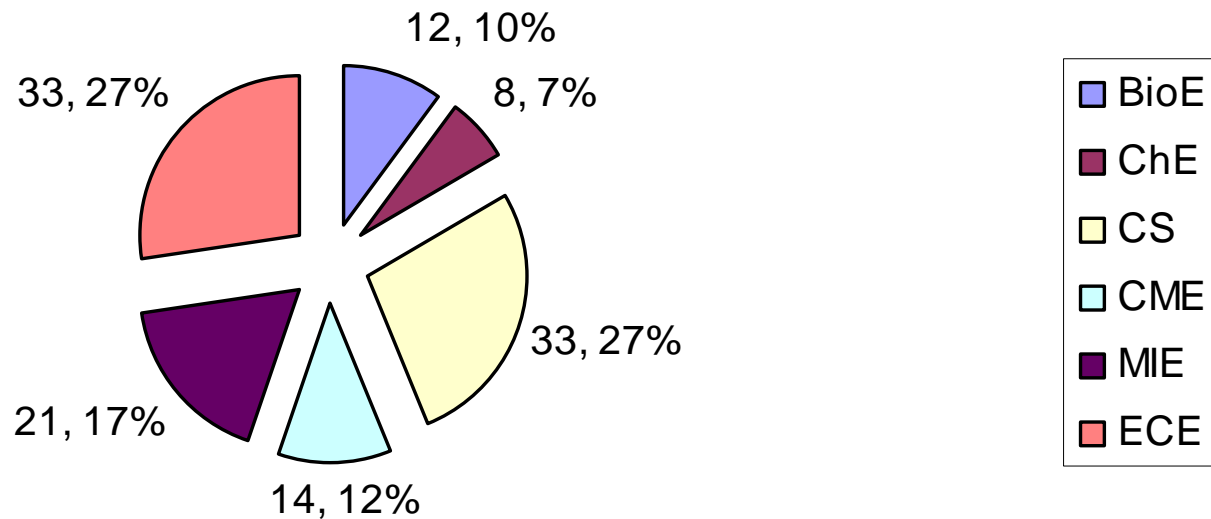
- Faculty
- Research
- Undergraduate Program
- Graduate Program
- ...
- Financial Plan

- Within each issue
 - Where we are
 - Specific goals and objectives for 2010
 - Action Plan (what we want to do in next five years)

Faculty Status

- 114 Faculty, 11 women and minority
- 40 Fellows of Societies
- 21 NSF Career Award, NYI, PYI Awardees

Faculty Distribution

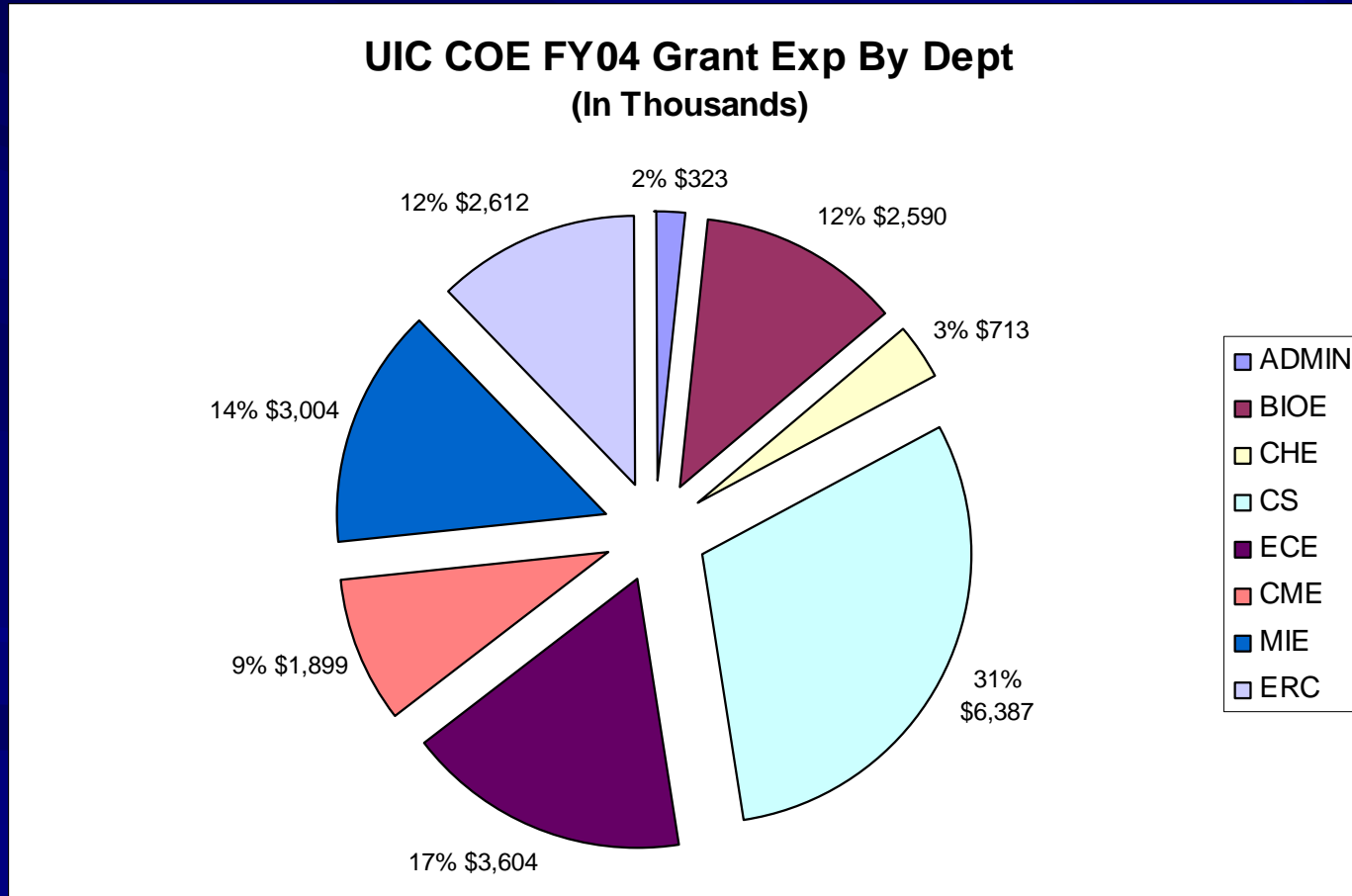


Faculty Action Plan

- Increase faculty size from 114 to 130 faculty
 - Strategic areas of excellence
- Recruit excellent faculty
 - NAE members
- Increase standards for promotions
- Salaries and other incentives
- Teaching and research loads
- Diversity of faculty
- Endowed chairs and professorships

Research Program

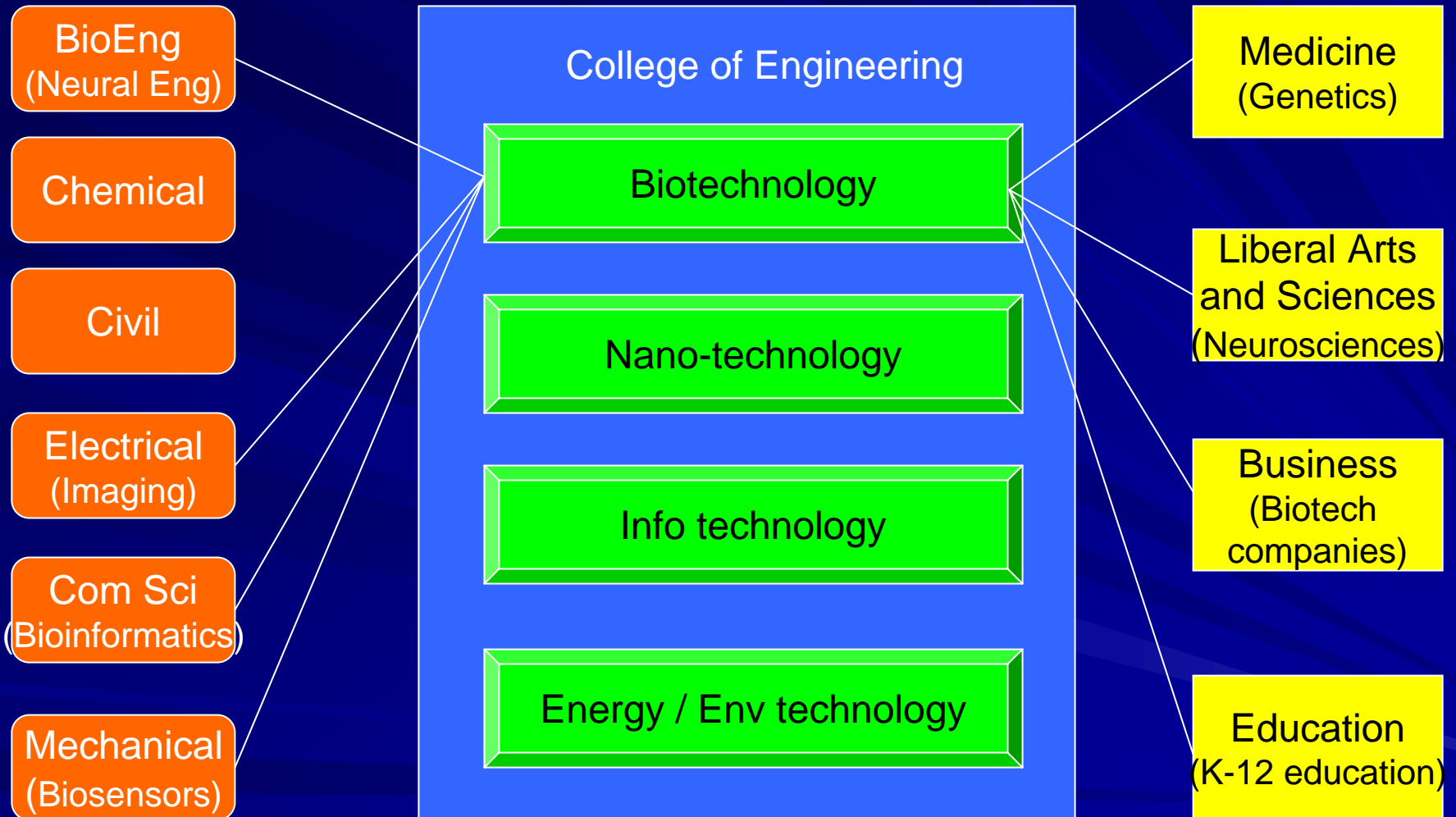
- Research expenditures: \$21 million for 2004
- 365 journal and 373 conference publications
- 422 Ph.D. students, 35 Ph.D. graduates in 2004



Research Action Plan

- Increase the quality of publications
- Increase research funding
- Organize research into interdisciplinary areas
- Submit large collaborative research proposals
- Increased interactions with industry
- Increase number of Ph.D. students
- Incentives to faculty for increased research
- Seed funding for new projects
- Cost sharing for research projects
- Larger startup funding for new faculty hires
- Increased ICR return

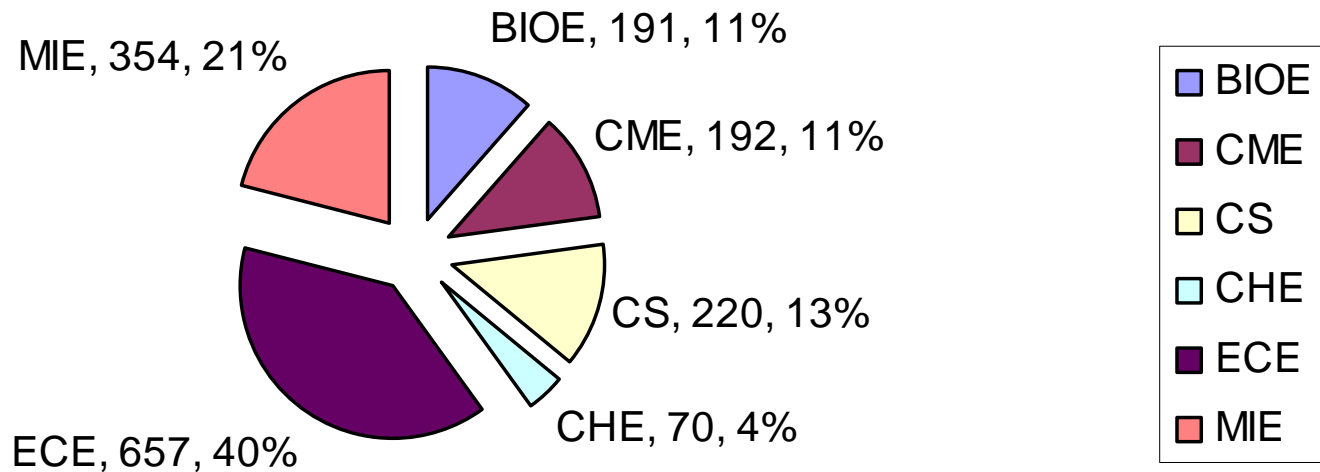
Interdisciplinary Research Clusters



Undergraduate Program

- 1684 total undergraduate students
- 387 B.S. graduates in 2004
- Average ACT score 25.8
- 20% minority students, 30% women

UG Enrollment AY04-05 by Departments



Undergraduate Action Plan

- Increase student enrollment
- Increase average freshman ACT score
- Better recruiting strategies
- Modern undergraduate curriculum
- Undergraduate research
- Exciting instructional labs
- Student internship and career services
- Diversity of students
- Raise funding for undergraduate scholarships

Space Plans

- Current space 250,000 sq. ft.
 - 114 faculty, \$21 million research, 1700 undergrads, 900 grads
- Need 400,000 sq. ft.
 - 130 faculty, \$40 million research, 1900 undergrads, 1000 grads
- New engineering building of **150,000 sq. ft.**
 - *Institute for Nano and Biotechnology*
- Cost **\$45 million**

Alumni and Corporate Fund Raising Plan

- **\$50 million Capital Campaign**
- Endowed chairs and professorships
- Graduate fellowships
- Undergraduate scholarships
- Research funds
- New building
- Gifts in kind

Accomplishments in 2004-05

■ Faculty Recruiting

- Dr. Subrata Chakrabarti hired as Professor of Civil and Mechanical Engineering departments
 - First National Academy of Engineering member hired
- Seven new faculty joined in 2004-05

■ Faculty Awards and Honors

- Two additional Fellows of Societies
- Two additional NSF CAREER or Young Investigator Awards
- Two faculty named Richard and Loan Hill Professors

Accomplishments (Research)

- Received **\$5.5 million** award from the Air Force
- NSF Engineering Research Center Proposals
 - Bio-therapeutics
 - Multimedia Mobile Communications
 - Cyber-Transportation
 - Alternate and Renewable Energy Systems
 - Metropolitan Security

Conclusions

- UIC Engineering poised to become strong
- Recruit, promote, retain the best faculty
- Train our students for the 21st century
- Form interdisciplinary, collaborative centers of research excellence
- Strong ties to industry
- Leverage location of Chicago effectively