Spring Faculty Meeting
2005
Faculty Activity Reports

Classic Peanuts®

I HATE THIS TIME OF YEAR!

1. How many rabbits have you chased?
   "NONE". How embarrassing...

2. How many cats have you chased?
   "NONE". That's a good way to get racked up!

3. How many owls did you howl at?
   "TWELVE, BUT I SAW ONLY TWO...STUPID OWLS!"

4. Did you take part in any Fox Hunts?
   "NO... I HAVE NO DESIRE TO BE STOMPED ON BY A CLUMSY HORSE!"

5. Relationships with humans....
   a. How did you treat your master?
   b. Were you friendly with neighborhood children?
   c. Did you bite anyone?
   THESE ARE VERY PERSONAL QUESTIONS...

Return the yellow form to the Head Beagle with your dues, and keep the blue form for your files. Report must be postmarked no later than Jan. 15th.

What a Nuisance...

I'd really like to just forget the whole thing...

Except that someday I may get to be the head beagle!

By Charles Schulz
College of Engineering
Teaching

http://www.coe.utah.edu/faculty
Instructor Scores (by Faculty Rank)

Assistant  Associate  Professor  Aux

MEDIAN

Utah Engineering
Instructor Scores (by class size)

Utah Engineering
University Faculty Awards

- Early Career Teaching Award        Matthew Flatt

Utah Engineering
PhD Students

- Assistant: 3 graduated
- Associate: 9 graduated
- Professor: 17 graduated
- Aux: 1 graduated
Degree Production

Year
Number of Degrees
0 50 100 150 200 250 300 350 400
BS
MS/ME
PhD
Utah Engineering
College SCH Trends

Thousands of SCH

- Total
- Undergrad
- Grad

FY01 FY02 FY03 FY04 FY05 FY06

Utah Engineering
SCH Growth (> 1,000)
Undergraduate SCH Trends

Thousands of SCH

FY01 FY02 FY03 FY04 FY05 FY06

SofC ME ECE CvEE BioE ChE MSE

Utah Engineering
Graduate SCH Trends

Thousands of SCH

FY01 FY02 FY03 FY04 FY05 FY06

SofC ME ECE CvEE BioE ChE MSE

Utah Engineering
Productivity Increases to Date: $1,767,387

Thousands

$0 $100 $200 $300 $400 $500

BI OE
ME
SofC
ECE
CvEE
CHE
MSE

Utah Engineering
Publications (by Faculty Rank)
Research Expenditures

Utah Engineering

Assistant  Associate  Professor  Aux

$1.8 million
College of Engineering
Strategic Plan
CoE Strategic Plan

- Department/School Strategic Plans
- Industrial Advisory Board Meeting Feb. ’04
- Engineering National Advisory Board Meeting June ’04
- Administrative Committee
- Executive Committee
- Faculty Input on Final Draft
Mission Statement

The mission of the University of Utah College of Engineering is:

• to prepare students for leadership positions and professional practice in academia, industry and government;

• to improve the productivity, health, safety and enjoyment of human life through leading-edge research; and

• to stimulate and grow the economy
  – by providing qualified engineering professionals, and
  – by transferring the technologies developed in College of Engineering research to the private sector.
Vision

Bring the quality of teaching, research and service in the College of Engineering to a level comparable to that of the best engineering schools in the world.

• Faculty will feel that the University of Utah is the best place for them to build their careers because of its research and teaching environment.

• Students will enjoy a stimulating, supportive climate that gives them not only a solid engineering education, but also communication skills, and exposure to business, law and other complementary disciplines.
**Strategic Objective**

Grow the College of Engineering research enterprise with high-impact interdisciplinary research.

- Motivate through research incentives
- Expanded industrial funding

- Announcements from OSP
- Proposal-writing Workshops
- Better Accessability to Industry
- New Financial Model
  - 50% of overhead returned from Sr. VP for Academics
  - 15% of overhead returned through tuition waiver

  More than $3M/yr to Engineering (>30%)
Overhead Collected

In millions of dollars

CofE  SCI  Overall

Utah Engineering
Strategic Objective

Improve College recognition through high-visibility research, and through a focus on public relations ranging from an improved web presence to national press coverage.

- Pres. Young is our Ambassador
- Sharing of Accomplishments
- Press Releases
  - Artificial Eye Project
- Delaware Study
Improving Stature

• Undergraduate
  – COE ranks 60\textsuperscript{th} (up from 66\textsuperscript{th})

• Graduate (2004 US News Rankings)
  – COE ranks 56\textsuperscript{th} of 185 schools (up from 63\textsuperscript{rd})
  – 15\textsuperscript{th} in Biomedical Engineering
  – 29\textsuperscript{th} in Computer Science
  – 45\textsuperscript{th} in Computer Engineering
  – 47\textsuperscript{th} in Material Science
  – 54\textsuperscript{th} in Electrical Engineering
  – 66\textsuperscript{th} in Mechanical Engineering

• Why do we care?
  – Faculty Recruiting, Student Recruiting, Career Opportunities
Reaching Our Potential

• Have COE resemble Top Engineering Colleges
  – Research Volume          Ph.D.s/faculty
    1-10        $656 K/FTE      4.5
    11-20       $585 K/FTE      3.9
    21-30       $459 K/FTE      3.6
    31-40       $404 K/FTE      3.0
    41-50       $363 K/FTE      2.9
    51-60       $353 K/FTE      2.6
    U of Utah   $416 K/FTE      2.3
  – Research Impact
    Publications
    Keynote/Plenary Talks
  – External Service
  – Web Presence
  – Growth
  – Faculty Communication
Strategic Objective

Expand current research strengths by leveraging interdisciplinary opportunities.

- SCI
- ICES
- ARUP
- Brain Institute
- High Temperature Electrochemistry Center
Strategic Objective

Position the College to become a leader in nanotechnology and homeland security.

- **Engineering Research Council**
  - NSF Budget focused on Nanotechnology
  - [http://www.asee.org/about/events/conferences/erc/2005.cfm](http://www.asee.org/about/events/conferences/erc/2005.cfm)
  - Password: skytiger, Click “View Presentations”

- **Economic Initiative – National Security**
  - Recognition, Detection and Communication

- **Associated Labs**

- **Microfabrication Facility**
Strategic Objective

Assist faculty in their career development through individual mentoring, professional development, leadership training, and performance feedback.

- Individual Mentoring
- Assistant Professor Meetings
- Uniform FAR
Strategic Objective

Strengthen the academic experience of students by instituting an Engineering Honors Program, expanding undergraduate research experiences, and continuing to lead engineering educational reforms.

- Engineering Honors Program
- Academic Coordinator position
  - Recruitment, retention and improved of the academic experience
- Engineering Residence Hall
Strategic Objective

Increase real-world exposure and improve student placement through help in finding internships and permanent positions, and through encouraging companies to recruit Utah Engineering students.

• Bring real-world experience into classroom
• Internships
• Career Services
Strategic Objective

Strengthen the climate of community among Engineering students by expanding peer mentoring, and by providing an academic home for study and socialization in the Warnock Engineering Building that will inspire and motivate students.

- Engineering Ambassadors
  - K-12
  - Campus Tours
- Peer Mentoring
- Alumni Mentoring
Strategic Objective

Develop brand recognition for “Utah Engineering” and use scholarship and fellowship funds more effectively to attract the best students from Utah families, from the rest of the United States, and internationally.

- Public Relations
  - Graphics Standards, Redesigned Website, Newsletters
- Gallery of Warnock
- Engineering Scholars Program
  - 15-17 first year scholarships at $3,000
- Presidential Scholarship and Honors at Entrance
- Coordinate and Refocus College and Dept. Scholarships
- Out of State Scholarships
- 5-yr Commitments to Graduate Students

Utah Engineering
Strategic Objective

Stimulate the economy of Utah through increasing the number of licensed technologies and spin-out companies from the College of Engineering, through better communication with local industry, and through helping make technology transfer and research contracting more industry-friendly.

- VP for Technology Venture Development
- Search status for TTO Director
- L-3
- Bard Access
- Sarcos

Utah Engineering
**Strategic Objective**

Nurture alumni relationships by establishing an Engineering Alumni Association, and by involving young alumni in recruiting and mentoring Engineering students.

- **Engineering Alumni Association Established March 22**
  - Sue Dintelman, MS CS ’77, Pres.
  - Matt Hirst, BS Civil and Env ’81, Vice Pres.
  - Marilyn Davies, Secretary
- **Board of 18 (including JoAnn Lighty and Bob Kessler)**
- **No Dues**
- **Committees**
  - Promote Engineering, Outreach, Mentoring, Placement, Social
Strategic Objective

Broaden and strengthen the Engineering donor base to realize strategic development goals including endowed chairs, graduate fellowships and the College endowment.

- Successful Engineering Development Campaign
- Successful Engineering Initiative
  $3.5M new base funds (state and UofU)
  $3.2M one-time funds
  $4.6M remodeling funds
  $15M for Warnock Engineering Building
- Recruiting Major Gifts Officer
- Building Dedication
- Connect to Younger Alumni
Summary

- Congratulations on a Good 2004
- Let’s do Better in 2005