Diversity & Inclusion Highlights: Cornell Engineering

Last update October 8, 2013
Alan Zehnder
Associate Dean for Diversity and Faculty Development
“When it comes to diversity who says that engineers have to be white males? By recruiting over 40% women undergraduates, doubling the number of faculty of color since 2000, and tripling the number of women faculty since 1990, Cornell Engineering is breaking the rules on who gets to be an engineer. We are doing this because it makes us stronger, better able to take advantage of ideas no matter where they originate, and better able to serve an increasingly diverse student body.”
Why Emphasize Diversity?

“The answer to the problem (of increasing America’s STEM talent pool) lives next door, around the block, or across town. Increasing the presence of underrepresented minority (URM) Americans in the study of STEM disciplines must be a primary part of the ultimate solution to the problems of the United States’ endangered competitiveness.”

*National Action Council for Minorities in Engineering (NACME) 2008 report, Confronting the New American Dilemma*

“Only 1.3 percent of the women graduating from U.S. colleges and universities are engineers! The fact remains that engineering is attracting only a small share of the fastest growing segment of college students. This is a huge waste of talent ... our two largest racial minority groups comprise about one third of the college-age kids in our country, and that fraction is steadily growing. But ... they earn less than 13 percent of the engineering degrees.

*Charles M. Vest, President, NAE, 2011*

“Radical innovations often happen at the intersections of disciplines... The more diverse the problem solving population, the more likely a problem is to be solved.”

*Harvard Business Review, 2007*
The Changing Pipeline

Racial/Ethnic Distribution of High School Graduates

- White non-Hispanic
- Hispanic
- Black non-Hispanic
- Asian/Pacific Islander
- American Indian/Alaskan native
Cornell Engineering Demographics: Gender

Representation of Women – National Averages:

Undergraduate: 18%
Graduate: 23%
Faculty: 14%
Cornell Engineering Demographics: Race/Ethnicity

Representation of Underrepresented Minorities (URM) – Cornell and National Averages:

<table>
<thead>
<tr>
<th></th>
<th>Undergraduates</th>
<th>Graduates</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornell:</td>
<td>14%</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>National:</td>
<td>16%</td>
<td>7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

- White
- Asian American
- Multi-URM
- Hispanic
- Black
- Native American
- Other
- International
Undergraduate Women & URM

- Class of 2017:
  - 42% women
  - 15% URM
Faculty Demographics

- Cornell Women
- Cornell URM
- US women
- US URM

Year:
- 1990
- 1994
- 1998
- 2002
- 2006
- 2010
- 2014

Percentage:
- 0%
- 5%
- 10%
- 15%
## Overall Composition

### Student Composition:

<table>
<thead>
<tr>
<th></th>
<th>Cornell: Enrolled</th>
<th>Cornell: Degrees</th>
<th>National Average: Enrolled</th>
<th>National Average: Degrees</th>
<th>USNWR Top 20: Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.S.</td>
<td>37%</td>
<td>34%</td>
<td>19%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>M.Eng.</td>
<td>28%</td>
<td>32%</td>
<td>23%</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>30%</td>
<td>26%</td>
<td>23%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td><strong>URM:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.S.</td>
<td>14%</td>
<td>12%</td>
<td>17%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>M.Eng.</td>
<td>7.4%</td>
<td>7.7%</td>
<td>14%</td>
<td>12%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>7.0%</td>
<td>2.8%</td>
<td>10%</td>
<td>8.2%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

### Faculty Composition:

<table>
<thead>
<tr>
<th></th>
<th>Cornell</th>
<th>National Average</th>
<th>USNWR Top 20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td>15.5%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td><strong>URM</strong></td>
<td>6.9%</td>
<td>6.6%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

* USNWR = US News and World Report Top 20 Engineering Schools
Key Steps Taken to Promote Diversity and Inclusion in the College

• Faculty
  – Oversight of faculty hiring and use of inclusive search practices
  – Support for dual career and diverse hires
  – Faculty affinity groups and mentoring for all junior faculty

• Graduate Students
  – Cornell Sloan and Cornell Colman Scholars programs provide 3-year fellowships for exceptional URM Ph.D. students
  – Cornell Sloan Scholars Program provides professional, academic, mentoring, and leadership development programming for URM graduate students
  – Seminars and conferences offered by Diversity Programs Engineering (DPE) provide professional development programming for the greater engineering graduate population

• Undergraduate Students
  – Women in Engineering and Diversity Hosting Weekends for prospective students
  – Diversity Programs Engineering (DPE) supports student success and retention through initiatives including the Ryan Scholars Program, Peer Mentoring, Tutoring, and the National Science Foundation funded Cornell STEP and LSAMP Programs

• For further information visit: http://www.engineering.cornell.edu/about/towardnewdestinations.cfm or http://www.engineering.cornell.edu/diversity/