

# QEM NETWORK MENTORING WORKSHOP FOR UNDERREPRESENTED MINORITY UNDERGRADUATE STUDENTS & FACULTY/STAFF ADVISORS

A Glance at Disturbing Trends in  
STEM Education for Minorities

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November 13, 2009

# STEM STATISTICS – UNDERGRADUATE<sup>1,2</sup>

- ◆ The % of BSc. degrees in engineering awarded to black students declined from 3.3 % in 1995 to 2.5% in 2005.
- ◆ African Americans, Latinos, & Native Americans are ~30 % of the overall undergraduate population in the US, but receive only ~12 % of the degrees awarded in engineering
- ◆ Of the 68,000 BSc. degrees in engineering awarded in the US in 2006; 8,500 were to under-represented minorities;

## STEM STATISTICS – GRADUATE<sup>1,2</sup>

- ◆ Of 6,404 PhDs in engineering awarded in 2006, 100 went to African American students; 98 went to Latinos and 9 went to Native Americans and Alaska Natives;
  - ◆ Of these doctoral degree recipients, 55 were women;
  - ◆ Women of all ethnic backgrounds account for less than 20 % of the engineering degree recipients at every level
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# US SCIENCE & ENGINEERING WORKFORCE<sup>3</sup>

- Employment in S&E occupations will increase at ~ double the growth rate for all occupations through 2014
  - ~73% of projected increase is in computer-related jobs
- African Americans, Hispanics and Native Americans/Alaskans made up only 10% of degreed individuals working in S&E occupations – but make up 13 % of the total college graduates
  - African Americans were ~4% of computer scientists and mathematicians, 3% of physical scientists and engineers and 2% of life scientists
  - Hispanics were about 2.5-4% of each S&E field
- Asians/Pacific Islanders were about 5% of the U.S. population, but accounted for 7% of college graduates and 14% of degreed individuals employed in S&E occupations



# REFERENCES

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2. Babco, Eleanor, "Trends in African American and Native American Participation in STEM Higher Education ," Commission on Professionals in Science and Technology, New York, NY. May 2003.  
([ttp://www.inpathways.net/STEM.pdf](http://www.inpathways.net/STEM.pdf))
3. NSF Science and Engineering Indicators, 2008 (2006 data)

