

## Council of Graduate Schools Graduate Education Research & Policy Forum

### ***Diversifying Scientific Leadership: Making Effective Faculty Diversity Programs Legally Sustainable***

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CGS Forum, 1-19-11



## **AAAS Capacity Center at a Glance**

- **Origin:** Established as a science & engineering human resource development consulting service August 2004 with 3-year, \$400K grant from Sloan Foundation to AAAS ([www.aaascapacity.org](http://www.aaascapacity.org))
- **Mission:** Through nationally-calibrated research & technical assistance in examining programs & outcomes, foster institutional capacity to . . .
  - **recruit, enroll, & support STEM students**
  - **diversify the faculty**
  - **change programs, structures, & attitudes**
- **Clients/Sponsors:** Institutions of higher education, corporations, federal agencies, & non-profits (e.g., **Harvard-PRISE, HP-Teaching with Technology, LSU-LA STEM, NSF-BPC, NSF-STC, Washington-CAEE, NACME, WEPAN, Florida, Purdue**)

*. . . focus on research, education, and institutional climate*

## Problem Thread of Capacity Center Work

- Who ***participates*** in STEM education & the workforce—who does not and why?
- How can ***institutions*** of higher education improve academic success, career advancement, and utilization of talent—students to faculty and other professionals?
- How does Federal ***policy*** help/hinder?

## Definitions—Mind the Language

- **Diversity:** a condition, a starting point, a means of achieving goals—not an end in itself (*“visible diversity” as symbolism too often displaces “enacted diversity” or deeds*)
- **Underrepresentation:** a statistical concept that measures participation/presence relative to a denominator (*not to be confused with diversity*)
- **Affirmative action:** an action to help accomplish a stated goal, e.g., achieving diversity. As a legal concept, it permits taking certain characteristics of the individual into account, all other things being equal, i.e., meritorious (and *has nothing to do with preferences, quotas, or reverse discrimination*)

### **National Data —Racial/Ethnic Group Representation, U.S. Population, Undergraduates, Faculty in 4-Year Institutions**

Racial/ Ethnic Group	U.S. Population	Under- graduates	Faculty							
			All Fields	Education	Engineer-ing	Human- ities	Life Sci.	Physical, Math and Comp Scis	Prof. Fields	Social Sci.
Native American	1%	1%	0%	1%	0%	0%	0%	0%	0%	0%
Asian/ Pacific Islander	4%	6%	9%	5%	<b>24%</b>	5%	<b>11%</b>	<b>16%</b>	<b>11%</b>	5%
Black	12%	12%	5%	7%	4%	5%	3%	4%	6%	7%
Hispanic	14%	10%	3%	4%	2%	4%	2%	3%	2%	5%
White	67%	68%	81%	81%	68%	85%	82%	77%	79%	82%

Sources: U.S. Census Bureau, Population Estimates Program; U.S. Department of Education, National Center for Education Statistics IPEDS and NSOPF; University Leadership Council analysis, all 2008.

## **Enter the Law**

... Where the answer to any question is seldom “yes” or “no.”

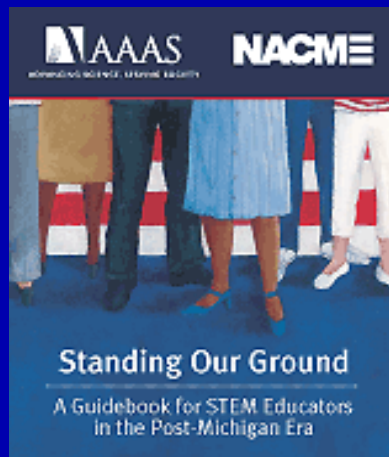
Rather, it depends. Context matters. . .

The university General Counsel can help to interpret risk and advise on a course of action.

**Big Lesson: Operate on the Context, not just the Content**

2004: To help guide program staff & university counsels in interpreting the Grutter and Gratz rulings . . .

2008: Sloan- and NSF-funded pilot project (AAAS/AAU) to identify effective STEM programs & practices for students and faculty, making them legally sustainable



See [http://www.aaas.org/publications/books\\_reports/standingourground/](http://www.aaas.org/publications/books_reports/standingourground/)

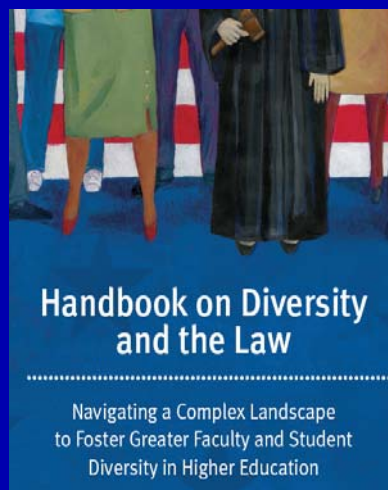
***Handbook on Diversity and the Law—  
Navigating A Complex Landscape to  
Foster Greater Faculty and Student  
Diversity in Higher Education***

The Law Governing Effective Faculty  
and Student Body Diversity Programs  
in STEM and Related Disciplines . . .  
and Its Implications for Institutional  
Policy

AAAS-AAU, April 2010

<http://php.aaas.org/programs/centers/capacity/publications/complexlandscape/>

***Summary and Highlights  
(forthcoming, January 2011)***



## Complicated Legal Landscape: *Different Legal Justifications Required for Employment and Students*

### Employment-Remedial

- Equal Protection Clause
  - Public Institutions
- Title VII (Race, Ethnicity, Gender, Religion)
  - Private (>15 Employees), Public employers
- OFCCP--Executive Orders (Race, Ethnicity, Gender, Religion)
  - Federal Contractors
- Title VI (Race/Ethnicity); Title IX (Gender)
  - If purpose of Federal funding is employment or Educational Benefit it confers
  - Overlaps with Title VII

### Student Programs-Diversity

- Equal Protection Clause (EPC)
  - Public Institutions
- Title VI (race)
  - Operation of Federal funding recipient, incl. employment if it is the purpose of the funding or it confers an educational benefit
  - EPC principles to privates
- Title IX (gender)
  - Operation of Federal funding recipient, incl. employment
  - EPC principles to privates

## Laws Re: Science and Engineering\*

- The Perkins Act of 1978 – to open vocational training, required each state to hire a sex-equity coordinator; truncated in 1998
- Equal Opportunities for Women and Minorities in Science and Technology Act of 1981 – NSF should encourage all groups; offer targeted programs; report national statistics every two years
- Commission on the Advancement of Women and Minorities in Science, Engineering, and Technology Development 1998 – *Land of Plenty* report, a.k.a. Morella Commission; BEST reports, 2002-2004
- U.S. Government Accountability Office Report on Gender Issues 2004 – Title IX applies to science and engineering in higher education more compliance reviews needed as enforcement is inadequate

*\*applies to all federal contractors, e.g., grantee institutions*

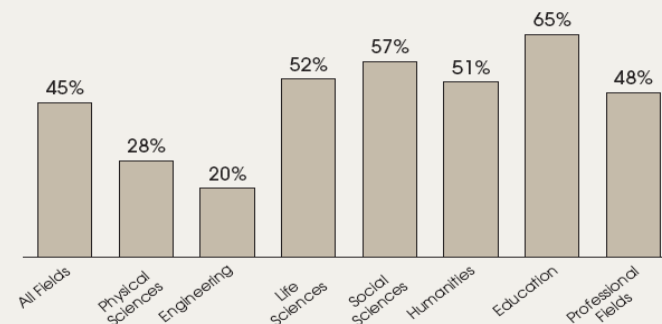
## Data as Basis for Action:

### Mind the Denominator

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Fig. 1.13

#### Women as a Percentage of Doctoral Recipients By Broad Field, 2006



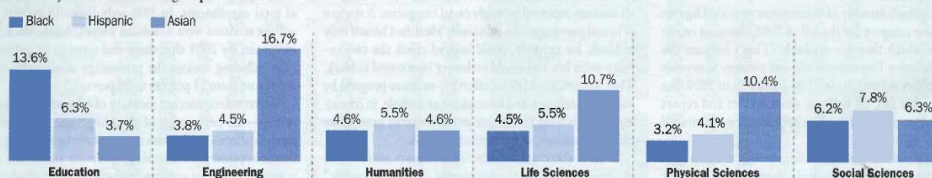
Source: Hoffer, Thomas B., et al., "Doctoral Recipients from the United States Universities, Summary Report 2006," National Opinion Resource Center (NORC) at the University of Chicago.

## Doctoral Diversity: More Degrees for Blacks, Hispanics

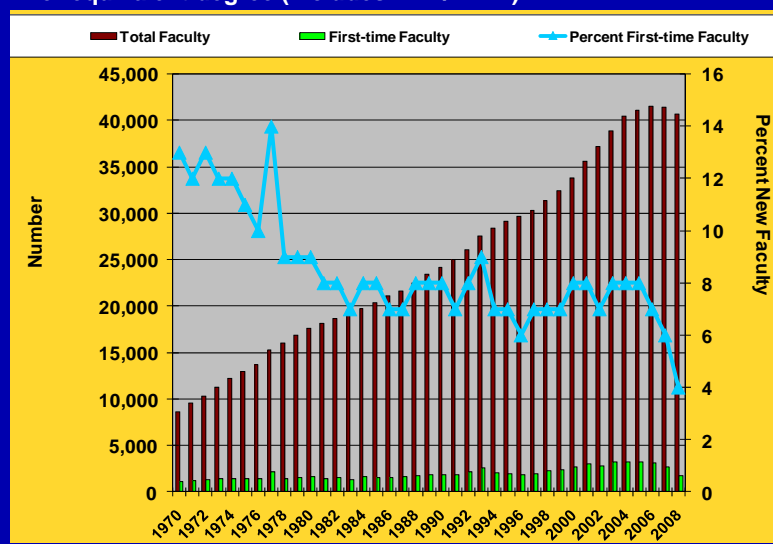
The total number of doctorates awarded to all U.S. citizens and permanent residents has been flat since 1998, but degrees for blacks and Hispanics have grown, by one-quarter and one-third, respectively. The number of women earning doctorates surpassed those received by men in 2002, and has continued to grow.

### Doctorates Earned by Minority-Group Members Who Are U.S. Citizens, 2008

The bars highlight the percentage of all doctorates in each discipline awarded to members of the most prominent racial groups. The table below includes details by field for all racial groups and women.



## Total and New Full-Time Faculty 1970 to 2008 in US Medical Schools with Ph.D. or equivalent degree (includes M.D./Ph.D.)



## Law Distinguishes between Under-utilization v. “Pipeline Problem”

- **Life sciences/academic medicine fraught with under-utilization of women**
  - PhD production at parity by gender, but hiring (and promotion) lags
- **Pipeline problem exists for minority PhDs**
  - Like other science fields, there is an inadequate pool to populate university departments
  - Note that, according to CGS, African Americans complete the PhD in life science disciplines at rates—overall and in time to degree—comparable to Whites/Asians, but are not hired in R1 departments

## Bottom Line: The Faculty Search Process

- Focus on the adequacy of the *outreach process*.
- Task individual faculty members with contacting colleagues to *identify potential candidates*.
- Examine the resulting *diversity of the candidate pool*.
- **If you have not done all possible outreach and the pool is not diverse, the *outreach*, not the pool, is inadequate.**
- **Terminating a search *is* an option.**



## Issues for Discussion

- Programs targeted v. open to all
- Accountability—by department chairs, deans, provost—in the search (outreach-to-hiring) process
- Stigma imposed on new hires
- Postdocs—in the grey area?
- Documentation and evaluation of process and outcome (keeping score)

## Key Sources of My Remarks

- *Handbook on Diversity and the Law: Navigating A Complex Legal Landscape To Foster Greater Faculty and Student Diversity In Higher Education*, Burgoyne et al., AAAS-AAU, 2010, <http://php.aaas.org/programs/centers/capacity/publications/complexlandscape/PDFs/LawDiversityBook.pdf>
- *Prepared for Work, Not the Career: Building Science, Engineering, and Technology Leadership*, A Report of a PAESMEM/AAAS Workshop for Women in Industry, Academia and Government, October 2010, <http://www.lulu.com/product/paperback/paesmem-aaas-workshop-proceedings/12667312> (Bogue, B., Y. Comedy, and D. Chubin).
- *Expanding Underrepresented Minority Participation: America's Science and Technology Talent at the Crossroads*, The National Academies, Sept. 2010, [http://www.nap.edu/catalog.php?record\\_id=12984](http://www.nap.edu/catalog.php?record_id=12984)
- "Bias literacy: A Review of Concepts in Research on Gender Discrimination and the U.S. Context." In A. Cater-Steel & E. Cater (Eds.), *Women in Engineering, Science and Technology: Education and Career Challenges*. Hershey, PA: IGI Global, April 2010 (Sevo, R. and D.E. Chubin).
- *Breakthrough Advances in Faculty Diversity*, University Leadership Council, 2008, [http://www.educationadvisoryboard.com/ulc\\_council\\_services.asp](http://www.educationadvisoryboard.com/ulc_council_services.asp)

**To continue the conversation . . .**

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