

DIVERSITY ACROSS SCIENCE AND ENGINEERING FACULTIES

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<http://cheminfo.chem.ou.edu/~djn/djn.html>

Characteristics

1. Good grades.
2. Work hard.
3. Persistence.
4. Network.
 - a. Learn from community.
 - b. Give to community.
5. Ethics

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JOCEAH



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Quiz

Minorities in Science Faculties

1. Which of the following has the most Native American professors in its “top 50” departments?

a. biological sciences

b. math

c. psychology

d. sociology

1. Which of the following has the most Native American professors in its “top 50” departments?

- | | |
|-------------------------------|----------|
| a. biological sciences | 3 |
| b. math | 3 |
| c. psychology | 5 |
| d. sociology | 2 |

2. Which of the following disciplines has no female underrepresented minority (URM) faculty in its “top 50” departments?

- a. civil engineering**
- b. computer science**
- c. economics**
- d. math**

2. Which of the following disciplines has no female underrepresented minority (URM) faculty in its “top 50” departments?

- | | |
|-----------------------------|--------------|
| a. civil engineering | 2B,3H |
| b. computer science | 0 |
| c. economics | 5B,7H |
| d. math | 2B,7H |

3. Which two disciplines had no Black assistant professors in their “top 50” departments in our first surveys?

- a. astronomy & comp sci**
- b. chemical engr & chemistry**
- c. mechanical engr & math**
- d. physics & civil engr**

3. Which two disciplines had no Black assistant professors in their “top 50” departments in our first surveys?

- | | |
|---|-------------|
| a. astronomy & comp sci | 2,1 |
| b. chemical engr & chemistry | 0,0 |
| c. mechanical engr & math | 8,3 |
| d. physics & civil engr | 4,11 |

4. On average nationally, which has the highest representation of Hispanic professors?

- a. biological sciences**
- b. chemical engineering**
- c. civil engineering**
- d. psychology**

4. On average nationally, which has the highest representation of Hispanic professors?

- | | |
|--------------------------------|-------------|
| a. biological sciences | 1.9% |
| b. chemical engineering | 3.3% |
| c. civil engineering | 3.8% |
| d. psychology | 3.3% |

5. On average nationally, which has the highest representation of Black professors?

a. biology

b. physics

c. political science

d. sociology

5. On average nationally, which has the highest representation of Black professors?

- | | |
|-----------------------------|-------------|
| a. biology | 1.0% |
| b. physics | 0.6% |
| c. political science | 5.0% |
| d. sociology | 6.6% |

6. On average nationally, which has the highest representation of Blacks among BS recipients?

- a. biological sciences**
- b. computer science**
- c. psychology**
- d. sociology**

6. On average nationally, which has the highest representation of Blacks among BS recipients?

- | | |
|-------------------------------|--------------|
| a. biological sciences | 7.7% |
| b. computer science | 10.6% |
| c. psychology | 10.7% |
| d. sociology | 16.7% |

7. On average nationally, which has the highest representation of Hispanics among BS recipients?

- a. biological sciences**
- b. civil engineering**
- c. psychology**
- d. sociology**

7. On average nationally, which has the highest representation of Hispanics among BS recipients?

- | | |
|-------------------------------|-------------|
| a. biological sciences | 7.2% |
| b. civil engineering | 8.6% |
| c. psychology | 8.7% |
| d. sociology | 9.4% |

- 8. Which discipline has the greatest number of URM female professors among its “top 50” departments?**
- a. biological sciences**
 - b. political science**
 - c. psychology**
 - d. sociology**

8. Which discipline has the greatest number of URM female professors among its “top 50” departments?

- | | |
|-------------------------------|---------------------|
| a. biological sciences | 9B, 13H, 0N |
| b. political science | 26B, 6H, 0N |
| c. psychology | 22B, 26H, 3N |
| d. sociology | 32B, 12H, 0N |

Survey Methodology

1. Faculty data from department chairs
2. “Top 50” departments in each discipline, NSF-ranked -> research expenditures
3. Tenured/tenure track faculty data revealing race/ethnicity, gender, and rank
4. Raw data are revealed
5. Consistent method and time frame across disciplines

% Blacks*

DISCIPLINE	STUDENTS			PROFESSORS FY2002			
	BS 2000	PhD 83-92	PhD 93-02	asst	assoc	prof	all
chemistry FY'03	9.1%	1.4%	3.0%	0.6%	2.1%	1.2%	1.2%
math	8.3%	1.4%	1.9%	1.0%	1.1%	0.9%	0.9%
computer sci	10.6%	0.9%	2.6%	0.3%	0.6%	0.2%	0.3%
astronomy FY'04	0.7%	0.6%	0.9%	2.2%	2.2%	0.8%	1.2%
physics	5.0%	1.1%	1.5%	1.5%	0.7%	0.4%	0.6%
chemical engr	6.8%	1.8%	2.6%	-	3.5%	1.4%	1.6%
civil engr	4.5%	2.0%	3.1%	3.8%	1.3%	0.6%	1.5%
electrical engr	6.9%	1.6%	2.9%	2.2%	4.0%	0.6%	1.8%
mechanical engr	5.0%	1.2%	2.6%	3.5%	3.5%	0.9%	2.0%
economics	6.2%	3.7%	4.0%	1.9%	2.0%	1.2%	1.5%
political sci	10.6%	7.6%	7.6%	5.1%	7.4%	3.5%	5.0%
sociology	16.7%	6.6%	8.8%	10.1%	7.7%	4.3%	6.6%
psychology	10.7%	3.8%	5.1%	5.7%	4.1%	1.1%	2.7%
biological sci	7.7%	1.6%	2.6%	1.6%	1.4%	0.7%	1.0%

* Blacks were 12.9% of the 2000 general population.

% Hispanics*

DISCIPLINE	STUDENTS			PROFESSORS FY2002			
	BS 2000	PhD 83-92	PhD 93-02	asst	assoc	prof	all
chemistry FY'03	7.4%	2.6%	3.2%	2.2%	5.4%	1.0%	1.8%
math	5.5%	2.3%	2.6%	5.0%	3.2%	2.0%	2.6%
computer sci	6.5%	1.6%	2.4%	1.8%	1.1%	1.1%	1.3%
astronomy FY'04	4.7%	1.9%	2.4%	3.3%	1.1%	0.7%	1.2%
physics	4.1%	2.0%	2.8%	3.7%	2.1%	1.5%	1.9%
chemical engr	6.7%	2.2%	3.2%	3.4%	4.7%	2.8%	3.3%
civil engr	8.6%	3.3%	3.9%	5.5%	3.5%	3.2%	3.8%
electrical engr	8.4%	2.2%	3.2%	3.2%	4.2%	1.6%	2.5%
mechanical engr	7.1%	1.9%	2.6%	3.5%	1.9%	1.5%	1.9%
economics	5.8%	2.5%	3.6%	4.7%	2.4%	2.1%	2.7%
political sci	8.8%	3.3%	3.7%	2.6%	2.1%	1.0%	1.7%
sociology	9.4%	4.7%	4.8%	4.7%	4.7%	1.9%	3.3%
psychology	8.7%	3.4%	5.7%	6.0%	4.4%	1.9%	3.3%
biological sci	7.2%	2.1%	3.7%	4.0%	1.3%	1.4%	1.9%

* Hispanics were 12.5% of the 2000 general population.

% Native Americans*

DISCIPLINE	STUDENTS			PROFESSORS FY2002			
	BS 2000	PhD 83-92	PhD 93-02	asst	assoc	prof	all
chemistry FY'03	0.5%	0.33%	0.40%	-	0.4%	0.2%	0.2%
math	0.6%	0.21%	0.30%	-	0.3%	0.1%	0.1%
computer sci	0.5%	0.31%	0.28%	-	-	-	-
astronomy FY'04	1.3%	0.29%	0.48%	-	-	-	-
physics	0.4%	0.24%	0.21%	-	-	0.1%	0.1%
chemical engr	0.7%	0.24%	0.47%	-	-	-	-
civil engr	0.9%	0.41%	0.27%	-	-	0.1%	0.1%
electrical engr	0.5%	0.25%	0.19%	-	-	-	-
mechanical engr	0.4%	0.20%	0.45%	-	-	-	-
economics	0.4%	0.18%	0.17%	-	-	0.1%	0.1%
political sci	0.7%	0.30%	0.50%	0.3%	0.3%	-	0.2%
sociology	0.9%	0.54%	0.87%	-	-	0.4%	0.2%
psychology	0.7%	0.40%	0.64%	0.3%	0.9%	0.1%	0.3%
biological sci	0.6%	0.28%	0.34%	0.1%	0.3%	-	0.1%

* Native Americans were 1.5% of the 2000 general population.

Female Underrepresented Minority (URM) Faculty at "Top 50" Science & Engineering Departments

	<u>Black females</u>	<u>Hispanic females</u>	<u>Native American females</u>
chemistry	2	5*	1
math	2	7***	0
computer science	0	0	0
astronomy	2*	2*	0
physics	0	8***	0
chemical eng	2	3	0
electrical eng	7	3	0
mechanical eng	3	2*	0
civil eng	2	3**	0
	===	===	==
total	20	33	1
*URM female full prof	1	11	0

Dream Catchers

Origin in Lakota and Ojibwe

