

# EFFECT OF DEMOGRAPHIC COMPOSITION ON STEM FACULTY

## Appendix A

### Department Race and Rank Composition

**Table 7**

<i>Department Race Composition Percentages</i>					<i>Department Rank Composition Percentages</i>				
<b>Departments with less than 25% women faculty</b>	<b>White</b>	<b>Asian</b>	<b>Underrepresented Minorities</b>	<b>Race Not reported</b>	<b>Departments with less than 25% women faculty</b>	<b>Professor</b>	<b>Associate Professor</b>	<b>Assistant Professor</b>	<b>Non-Tenure Track</b>
Computer Science	70.2%	19.1%	2.1%	8.5%	Computer Science	34.0%	27.7%	27.7%	10.6%
Physics	80.6%	12.9%	0.0%	6.5%	Physics	51.6%	25.8%	9.7%	12.9%
Agriculture	78.3%	21.7%	0.0%	0.0%	Agriculture	52.2%	39.1%	0.0%	8.7%
Mathematics	72.7%	16.4%	3.6%	7.3%	Mathematics	40.0%	18.2%	10.9%	30.9%
Astronomy	76.9%	23.1%	0.0%	0.0%	Astronomy	84.6%	0.0%	15.4%	0.0%
Chemistry	84.8%	9.1%	3.0%	3.0%	Chemistry	42.4%	12.1%	15.2%	30.3%
<b>Departments with 25%-35% women faculty</b>	<b>White</b>	<b>Asian</b>	<b>Underrepresented Minorities</b>	<b>Race Not reported</b>	<b>Departments with 25%-35% women faculty</b>	<b>Professor</b>	<b>Associate Professor</b>	<b>Assistant Professor</b>	<b>Non-Tenure Track</b>
Environmental Conservation	84.4%	9.4%	0.0%	6.3%	Environmental Conservation	28.1%	21.9%	34.4%	15.6%
Biochemistry	77.8%	22.2%	0.0%	0.0%	Biochemistry	50.0%	22.2%	16.7%	11.1%
Geosciences	88.5%	7.7%	0.0%	3.8%	Geosciences	34.6%	15.4%	23.1%	26.9%
Microbiology	70.0%	15.0%	5.0%	10.0%	Microbiology	25.0%	15.0%	30.0%	30.0%
<b>Departments with 36%-54% women faculty</b>	<b>White</b>	<b>Asian</b>	<b>Underrepresented Minorities</b>	<b>Race Not reported</b>	<b>Departments with 36%-54% women faculty</b>	<b>Professor</b>	<b>Associate Professor</b>	<b>Assistant Professor</b>	<b>Non-Tenure Track</b>
Food Science	53.8%	30.8%	0.0%	15.4%	Food Science	30.8%	23.1%	46.2%	0.0%
Biology	89.5%	5.3%	2.6%	2.6%	Biology	31.6%	31.6%	15.8%	21.1%
Veterinary & Animal Sciences	95.0%	0.0%	5.0%	0.0%	Veterinary & Animal Sciences	45.0%	20.0%	10.0%	25.0%
Psychological & Brain Sciences	94.2%	5.8%	0.0%	0.0%	Psychological & Brain Sciences	38.5%	17.3%	26.9%	17.3%
<b>Totals</b>	<b>80.8%</b>	<b>12.8%</b>	<b>1.7%</b>	<b>4.5%</b>	<b>Totals</b>	<b>39.8%</b>	<b>21.3%</b>	<b>19.7%</b>	<b>19.0%</b>

**Table 7 Note:** The Civil engineering and Chemical Engineering departments are not included in Table 7 because department-wide faculty race and rank information for these two units is no longer available for 2015, the year when surveys were collected.

Appendix B

Faculty Survey

**Demographics**

What is your primary department or program?:

- ☐ Astronomy (1)
- ☐ Biochemistry and Molecular Biology (2)
- ☐ Biology (3)
- ☐ Chemistry (4)
- ☐ School of Computer Science (5)
- ☐ Environmental Conservation (6)
- ☐ Food Science (7)
- ☐ Geosciences (8)
- ☐ Mathematics and Statistics (9)
- ☐ Microbiology (10)
- ☐ Molecular and Cellular Biology (11)
- ☐ Neuroscience and Behavior (12)
- ☐ Organismic and Evolutionary Biology (13)
- ☐ Physics (14)
- ☐ Plant Biology (15)
- ☐ Polymer Science and Engineering (16)
- ☐ Psychological and Brain Sciences (17)
- ☐ Stockbridge School of Agriculture (18)
- ☐ Veterinary and Animal Sciences (19)

What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)
- ☐ Prefer not to answer (4)

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What is your race?

- ☐ White (1)
- ☐ Black (2)
- ☐ Asian/Pacific Islander (3)
- ☐ American Indian or Alaska Native (4)
- ☐ Multi-racial (5)
- ☐ Other (please clarify): (6) \_\_\_\_\_

Were you born in the Unites States?

- ☐ Yes (1)
- ☐ No (2)

What is your current rank?:

- ☐ Full time lecturer (1)
- ☐ Assistant Professor (2)
- ☐ Associate Professor (3)
- ☐ Full professor (4)
- ☐ Research Faculty (5)

### Professional Satisfaction

How valued do you feel by colleagues in your department/program...

	Not at all valued (1)	Rarely valued (2)	Somewhat valued (3)	Valued (4)	Extremely valued (5)
...for your research? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...for your teaching? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...for your service? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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How satisfied are you with professional interaction you experience with other faculty in your department or program?

- ☐ Very dissatisfied (1)
- ☐ Somewhat dissatisfied (2)
- ☐ Neutral (3)
- ☐ Somewhat satisfied (4)
- ☐ Very satisfied (5)

How satisfied are you with your own research at [name of institution]?

- ☐ Very dissatisfied (1)
- ☐ Somewhat dissatisfied (2)
- ☐ Neutral (3)
- ☐ Somewhat satisfied (4)
- ☐ Very satisfied (5)

How satisfied are you with your teaching assignments?

- ☐ Very Dissatisfied (1)
- ☐ Somewhat Dissatisfied (2)
- ☐ Neutral (3)
- ☐ Somewhat Satisfied (4)
- ☐ Very Satisfied (5)

### **Retention Risk**

Have you ever considered leaving [name of institution]?

- ☐ Yes (1)
- ☐ No (2)

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## Department Climate

Please rate your department/program on the following dimensions

	-2 (1)	-1 (2)	0 (3)	1 (4)	2 (5)
Contentious (-2) to collegial (+2) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disrespectful (-2) to respectful (+2) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individualistic (-2) to collaborative (+2) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competitive (-2) to cooperative (+2) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unsupportive (-2) to supportive (+2) (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inequitable (-2) to Equitable (+2) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unfair (-2) to Fair (+2) (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Isolating (-2) to Inclusive (+2) (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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How transparent are the criteria for tenure and promotion at [THIS UNIVERSITY] and the process by which this decision is made?

- ☐ Not at all transparent (1)
- ☐ A little transparent (2)
- ☐ Moderately transparent (3)
- ☐ Quite transparent (4)
- ☐ Very transparent (5)

How transparent are the decision-making processes about policies, procedures, and personnel actions in your department/program?

- ☐ Never transparent (1)
- ☐ Rarely transparent (2)
- ☐ Sometimes transparent (3)
- ☐ Usually transparent (4)
- ☐ Always transparent (5)

If you have any concerns about departmental issues how often do you communicate these to your Head or Chair?

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Sometimes (3)
- ☐ Usually (4)
- ☐ Always (5)

How often are you asked to take on a leadership role in important committees or initiatives in your department/program?

- ☐ Never (1)
- ☐ Rarely (2)
- ☐ Sometimes (3)
- ☐ Usually (4)
- ☐ Always (5)

## EFFECT OF DEMOGRAPHIC COMPOSITION ON STEM FACULTY

In your opinion, do men and women faculty in your department/program receive equal treatment in areas of recruitment, promotion, and resources?

- ☐ Women often get preferential treatment over men (1)
- ☐ Women sometimes get preferential treatment over men (2)
- ☐ Men and women get treated equally (3)
- ☐ Men sometimes get preferential treatment over women (4)
- ☐ Men often get preferential treatment over women (5)

In your opinion, are male and female faculty equally likely to get helpful career advice from colleagues in your department?

- ☐ Women often get more helpful career advice than men (1)
- ☐ Women sometimes get more helpful career advice than men (2)
- ☐ Men and women get equal career advice (3)
- ☐ Men sometimes get more helpful career advice than women (4)
- ☐ Men often get more helpful career advice than women (5)

In your opinion, do racial minority faculty and White faculty in your department/program receive equal treatment in areas of recruitment, promotion, and resources?

- ☐ Racial minority faculty often get preferential treatment over White faculty (1)
- ☐ Racial minority faculty sometimes get preferential treatment over White faculty (2)
- ☐ Racial minority and White faculty get treated equally (3)
- ☐ White faculty sometimes get preferential treatment over racial minority faculty (4)
- ☐ White faculty often get preferential treatment over racial minority faculty (5)

In your opinion, are racial minority faculty and White faculty equally likely to get helpful career advice from colleagues in your department?

- ☐ Racial minority faculty often get more helpful career advice than White faculty (1)
- ☐ Racial minority faculty sometimes get more helpful career advice than White faculty (2)
- ☐ Racial minority and White faculty get equal career advice (3)
- ☐ White faculty sometimes get more helpful career advice than racial minority faculty (4)
- ☐ White faculty often get more helpful career advice than racial minority faculty (5)

## Peer mentoring for faculty at the university

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During your time at [THIS UNIVERSITY] have you had any formal or informal faculty mentors in your program/department?

- ☐ Yes (1)
- ☐ No (2)

Did you choose these mentor[s], or were they assigned to you?

- ☐ Chose (1)
- ☐ Assigned (2)
- ☐ Both (3)

What was/were the gender[s] of your mentor[s]?

How useful were these mentoring relationships to you?

- ☐ Not at all useful (1)
- ☐ Slightly useful (2)
- ☐ Moderately useful (3)
- ☐ Useful (4)
- ☐ Very useful (5)

During your time at [name of institution] have you had any formal or informal mentors outside your department/program?

- ☐ Yes (1)
- ☐ No (2)

Did you choose these mentor[s], or were they assigned to you?

- ☐ Chose (1)
- ☐ Assigned (2)
- ☐ Both (3)

What was/were the gender[s] of your mentor[s]?



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How useful were these mentoring relationships to you?

- ☐ Not at all useful (1)
- ☐ Slightly useful (2)
- ☐ Moderately useful (3)
- ☐ Useful (4)
- ☐ Very useful (5)