



# A NATIONAL ANALYSIS OF DIVERSITY IN SCIENCE AND ENGINEERING FACULTIES AT RESEARCH UNIVERSITIES

*By*

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Revised January 6, 2005

# A NATIONAL ANALYSIS OF DIVERSITY IN SCIENCE AND ENGINEERING FACULTIES AT RESEARCH UNIVERSITIES: EXECUTIVE SUMMARY

The first national and most comprehensive analysis to date of tenured and tenure track faculty in the “top 50” departments of science and engineering disciplines shows that females and minorities are significantly underrepresented.

- There are few tenured and tenure-track women faculty in these departments in research universities, even though a growing number of women are completing their PhDs. Qualified women are not going to science and engineering departments. In some engineering disciplines, there is a better match between the representation of females in PhD attainment versus the faculty, but these disciplines are the ones with very low percentages of females in PhD attainment.
- Underrepresented minority (URM) women faculty are almost nonexistent in science and engineering departments at research universities. In the “top 50” computer science departments, there are no Black, Hispanic, or Native American tenured or tenure track women faculty.
- The percentage of women in BS attainment in science and engineering continues to increase, but they are likely to find themselves without the female faculty needed for optimal role models
- There are few female full professors in science and engineering; the percentage of women among full professors ranges from 3% to 15%. In all but one discipline surveyed, the highest percentage of female faculty is at the level of assistant professor.
- In most science disciplines studied, the percentage of women among recent PhD recipients is much higher than their percentage among assistant professors, the typical rank of recently hired faculty. Even in disciplines where women outnumber men earning PhDs, the percentage of assistant professors who are White male is greater than females. For example, in psychology, 66.1% of the PhDs between 1993 and 2002 were women; while in 2002, they accounted for only 45.4% of the assistant professors.

In some disciplines, it is likely that a woman can get a bachelor of science without being taught by a female professor in that discipline; it is also possible for a woman to get a PhD in science or engineering without having access to a woman faculty member in her field.

The data demonstrate that while the representation of females in science and engineering PhD attainment has significantly increased in recent years, the corresponding faculties are still overwhelmingly dominated by White men.

There is a drastically disproportionate number of male professors as role models for male students. For example, in 2000, 48.2% of the students graduating with a BS in math were women, but in 2002, only 8.3% of the faculty was female.

A cycle is perpetuated. Women are less likely to enter and remain in science and engineering when they lack mentors and role models. In most science disciplines, the percentage of women among faculty recently hired is not comparable to that of recent women PhDs. This results in fewer female faculty to act as role models for female undergraduates and graduate students. Female students observe this in the course of sampling the environment. When female professors are not hired, treated fairly, and retained, female students perceive that they will be treated similarly. This dissuades them from persisting in that discipline.

This is not to say that only women can mentor women and girls. In the absence of female professors, male professors have been mentoring female students for decades. Because of the dearth of female professors and the impact this has on female student perceptions, the male faculty should (1) actively encourage female students to enter science and engineering and offer to become their mentors and (2) insure that the environment for the few female professors currently in science and engineering is one which female students will perceive as appealing. In the end, the presence, treatment, and fate of female professors will be most relevant to the lives, family responsibilities, and careers of typical female students and the choices and obstacles they will face.

*By Dr. Donna J. Nelson*

***"Progress for female and minority faculty at research universities, produced from past attempted solutions combined, has been too slow. If significant progress is to be made within the next couple of decades, new and totally different approaches to solving problems facing women and minority faculty will be needed."***

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## Introduction

The first determination of the representation of both females and minorities among tenured and tenure track faculties of science and engineering departments at research universities reveals that both are underrepresented, in some cases, at levels far below that expected. Females are primarily in the lower professorial rankings, and underrepresented minority female professors are almost nonexistent. Due to the close relationship between faculty and students, this raises other concerns, which are detailed in this report.

Comparison with recent BS attainment by females and minorities reveals their lack of role models and mentors. This is of particular concern, given the national goal to rely more on US citizens, and less on foreign nationals, as a future source for scientists and engineers. In most of the disciplines surveyed, comparison with recent PhD attainment reveals sufficient qualified females and minorities, so that many more could have been hired.

For decades, it has been recognized that the representation of women and minorities in science and engineering generally is far below that needed to insure the national security, economic superiority, and scientific leadership of our country. Because the scientists and engineers required for this must each pass through an educational institution in order to obtain qualifications for employment, problem solving analyses and efforts have come to focus on academic institutions, particularly on science and engineering departments and their supporting organizations. The anticipated large representation of women and minorities in the US future population indicates that they will be among our future leaders; this warrants analysis of the status of these underrepresented groups at research universities, because this is where the majority of our country's leaders will be educated.

Attempts to correct problems facing underrepresented groups have included appeals to conscience, increased funding for females and minorities (predominantly students), and legislation. Progress for female and minority faculty at research universities, produced from past attempted solutions combined, has been too slow. If significant progress is to be made within the next couple of decades, new and totally different approaches will be needed.

In order to measure the effect of past attempts to increase female and minority leaders in science and engineering, it is important to determine and track the status of and environment for female and minority science and engineering faculty at research universities. Female and minority students already perceive the status and environment of these role models and use them to judge how they themselves will be treated should they pursue degrees and employment in those disciplines.

In order to establish the status of underrepresented groups, we surveyed the top 50 departments in each of fourteen science and engineering disciplines, as ranked by the National Science Foundation<sup>1</sup> (NSF) according to research funds expended. Each department chair was asked to provide the gender, race/ethnicity, and rank of each tenured or tenure track faculty member. In this report, we discuss the data for women and underrepresented minorities (URMs), i.e. Blacks, Hispanics, and Native Americans; we also compare the faculty data to those for PhD attainment and for BS attainment in analogous disciplines.

***"Who can look at these numbers and not say that we as a faculty have failed—failed our students, our institution, and most of all, failed our nation?"***

Professor Nancy Hopkins, Professor, Massachusetts Institute of Technology<sup>2</sup>

## WHO TEACHES MATTERS

Female students do not have an adequate number of female role models and mentors. Although in recent years the number of females studying science and engineering has increased significantly, science and engineering faculties are still overwhelmingly dominated by White men. The data show that the gender and racial compositions of the faculty do not reflect those of the student body. Although the student body has diversified considerably, the composition of the faculty has remained relatively stagnant. The result is a drastically disproportionate number of male professors as mentors and role models. For example, in mathematics women receive almost half of the BS degrees but are less than 10% of the faculty.

There is a similar pattern in departments that have even higher percentages of female students. For example, in the biological sciences, where females are 58.4% of the BS recipients, only 20.2% of the faculty are females. Even in psychology where females overwhelmingly dominate at 76.5% of BS recipients, only 33.5% of the faculty are females (Table 1).

**TABLE 1. Gender Distribution of BS Recipients vs. Role Models**

	% Females		% Males	
	Students	Faculty	Students	Faculty
Chemistry	47.3	12.1	52.7	87.9
Math	48.2	8.3	51.8	91.7
Computer Science	27.7	10.6	72.3	89.4
Astronomy	32.7	12.6	67.3	87.4
Physics	21.4	6.6	78.6	93.4
Chemical Engineering	35.7	10.5	64.3	89.5
Civil Engineering	24.5	9.8	75.5	90.2
Electrical Engineering	13.1	6.5	86.9	93.5
Mechanical Engineering	13.9	6.7	86.1	93.3
Economics	32.3	11.5	67.7	88.5
Political Science	50.1	23.5	49.9	76.5
Sociology	70.2	35.8	29.8	64.2
Psychology	76.5	33.5	23.5	66.5
Biological Sciences	58.4	20.2	41.6	79.8

BS degree data are for 2000, from NSF<sup>3</sup>; faculty data are FY2002 except chemistry (FY2003) and astronomy (FY2004)

*"It was discouraging to know that when I went to (the University of) Texas in 1976, I was the second woman in a faculty of about 50, and when I left in 1998, they were again hiring a second woman."*

Professor Marye Anne Fox, *Chancellor*, North Carolina State University <sup>4</sup>

In each discipline examined, the representation of men among faculty is much higher than that among BS degree recipients. Often, female science or engineering majors study in a department in which there is not one female "full" professor; in some departments, there is not a female professor at any rank.

Because of the dearth of female faculty, male faculty should actively encourage female students to enter science and engineering and should offer to become their mentors. It is essential that they provide a fair environment for the few existing female professors in science and engineering in order to convince female students that the same awaits them in their future careers.

It is the paucity of women in science and engineering that is the cause of grave concern. It is likely that a woman could get a bachelor of science without being taught by a female professor in her discipline; it is possible for a woman to get a PhD in science or engineering without having access to a woman faculty member in her field; and, if the student is a woman of color, it is probable she will earn her PhD without ever seeing a minority female professor in her field.

Female student attrition in science and engineering has been attributed, in part, to a lack of female mentors and role models. Many studies have shown that the mere presence of female faculty encourages female students. According to a forum published in *Harvard Magazine*, the percentage of women faculty is "the single most important indicator of academic success for women undergraduates."<sup>5</sup>

Female students are not the only ones affected by the lack of female faculty on campus. Male students are also harmed because they are deprived of access to talented faculty who could be their mentors. In addition, the absence of women sends a message to men that women do not belong in these non-traditional environments and that it is acceptable for them to be marginalized, denied tenure, and given unequal resources.

**Table 2 . Assistant Professors (FY2002) and PhD Attainment (1993 - 2002)<sup>6</sup> in Science and Engineering Disciplines**

Discipline	White Male		Asian Male		Female		URM Male	
	Asst	PhDs	Asst	PhDs	Asst	PhDs	Asst	PhDs
Chemistry (FY2003)	65.4%	54.8%	11.5%	9.6%	21.5%	31.3%	1.6%	4.2%
Math	60.5%	58.1%	15.0%	11.3%	19.6%	27.2%	5.0%	3.3%
Computer Science	62.9%	60.6%	24.3%	15.1%	10.8%	20.5%	2.0%	3.5%
Astronomy (FY2004)	62.6%	69.8%	9.9%	6.6%	22.0%	20.6%	5.5%	2.6%
Physics	70.6%	68.9%	14.9%	13.9%	11.2%	13.3%	3.3%	3.8%
Chemical Engineering	60.7%	58.4%	16.6%	14.8%	21.4%	22.3%	1.4%	4.0%
Civil Engineering	57.9%	58.4%	11.3%	17.0%	22.3%	18.7%	8.6%	5.9%
Electrical Engineering	57.2%	59.1%	27.5%	23.9%	10.9%	11.5%	4.5%	5.5%
Mechanical Engineering	56.1%	63.4%	22.2%	21.2%	15.7%	10.4%	6.1%	5.0%
Economics	59.8%	54.9%	16.1%	9.6%	19.0%	29.3%	5.1%	6.0%
Political Science	54.2%	52.4%	4.5%	3.6%	36.5%	36.6%	4.8%	7.0%
Sociology	37.2%	31.5%	3.5%	3.0%	52.3%	58.9%	7.0%	6.5%
Psychology	46.0%	29.5%	4.6%	1.1%	45.4%	66.1%	4.0%	3.3%
Biological Sciences	55.4%	43.2%	10.7%	8.7%	30.2%	44.7%	3.7%	3.3%

## HIRING INEQUITY REVEALED IN MOST SCIENCES

Data in Table 2 reveal a reasonable match between female PhDs and recently-hired female faculty in engineering and some sciences, but not in seven of the other disciplines studied. In those seven disciplines, there is a gender disparity between recent hires and the hiring pool. The percentage of women among PhD recipients from 1993 – 2002 can be compared to the percentage of women assistant professors. This shows that in many disciplines women may be well-represented among PhD recipients, but this representation is not reflected among assistant professors. In these disciplines, there is a wide gap between the percentage of women among PhD recipients since 1993 versus the percentage of women among assistant professors, the rank most recently hired. In most science disciplines, qualified female candidates exist, but they are not being hired. In three disciplines:

physics, electrical engineering, and mechanical engineering, women have the lowest percentage of female assistant professors, but they also have the lowest percentages of PhD recipients. These low percentages of females among PhD recipients would also be the easiest to match. Nevertheless, the scarcity of female professors in these disciplines is probably at least partially related to the low numbers of women earning a Ph.D.

Even where women outnumber men earning PhDs, White males maintain their hold on the vast majority of assistant professor positions. For example, in the biological sciences, for years females have received the greater percentage of PhDs than White males, but White males still make up more than half of the assistant professors. In computer science, math, and chemistry, there is a similar disparity between the percentages of women among assistant professors versus PhD recipients (Table 2).

## SUFFICIENT WOMEN FILLED THE HIRING POOL

A growing number of women have been completing PhDs in science and engineering. The proportion of women earning a PhD in science or engineering has generally gradually increased over the last 20 years. PhD attainment by women rose an average of 6% between the years 1983 – 1992 versus 1993 – 2001 (Table 3). Data demonstrate that the pool of potential female candidates for faculty positions is plentiful, but faculty search committees and chairs often say they receive few applications from females. This agrees with comments often heard from recent female PhDs; they do not perceive the academic environment as desirable, so they choose not to apply for faculty positions.

*“Women who are eligible for faculty positions have earned a Ph.D. in a chemistry department. They have absorbed the tone of that environment . . . and have decided they don’t want any more of it.”*

Professor Janet Osteryoung, Director, Division of Chemistry, National Science Foundation <sup>4</sup>

TABLE 3. Female PhDs by Years of PhD Attainment <sup>6</sup>

Discipline	1983 – 1992	1993 – 2002
Chemistry	22.8%	31.3%
Math	20.5%	27.2%
Computer Science	17.9%	20.5%
Astronomy	12.7%	20.6%
Physics	9.0%	13.3%
Chemical Engineering	14.4%	22.3%
Civil Engineering	10.2%	18.7%
Electrical Engineering	6.4%	11.5%
Mechanical Engineering	6.0%	10.4%
Economics	22.4%	29.3%
Political Science	31.0%	36.6%
Sociology	51.1%	58.9%
Psychology	55.0%	66.1%
Biological Sciences	36.5%	44.7%

## WOMEN ARE UNDERREPRESENTED

There are very few tenured and tenure-track women faculty in the “top 50” science and engineering departments. Women have made strides as students in science and engineering. However, the data show that while the percentages of women studying science and engineering have significantly increased, the faculties in science and engineering are still overwhelming dominated by men. Data in Table 4 show the distribution by rank of the few female faculty in science and engineering. Because women began with barely any representation on university faculties, and because only minuscule increases have been achieved each year, the progress made has been inadequate. This is exacerbated by female faculty attrition, which is generally perceived to be much higher than that for male faculty.

*“Many smart motivated women have cited isolation and marginalization as reasons for moving out of science and engineering at major research institutions.”*

Abigail Stewart, *Project Director*, Institute for Research on Women and Gender, University of Michigan <sup>7</sup>

TABLE 4. Female Science and Engineering Faculty by Rank (FY2002)

Discipline	Assistant Professor	Associate Professor	“Full” Professor	All Ranks
Chemistry (FY2003)	4.1%	3.0%	5.1%	12.1%
Math	2.8%	2.4%	3.1%	8.3%
Computer Science	2.8%	3.8%	4.0%	10.6%
Astronomy (FY2004)	3.4%	2.6%	6.5%	12.6%
Physics	1.5%	1.4%	3.8%	6.6%
Chemical Engineering	3.8%	4.0%	2.7%	10.5%
Civil Engineering	4.8%	3.2%	1.8%	9.8%
Electrical Engineering	1.8%	2.5%	2.2%	6.5%
Mechanical Engineering	2.5%	2.3%	1.8%	6.7%
Economics	4.3%	3.0%	4.2%	11.5%
Political Science	8.6%	8.2%	6.7%	23.5%
Sociology	12.6%	11.0%	12.2%	35.8%
Psychology	9.6%	8.4%	15.4%	33.5%
Biological Sciences	6.3%	5.4%	8.5%	20.2%

## WOMEN HOLD THE LOWEST ACADEMIC RANK

For those few women who take professorships in science or engineering after attaining PhDs, a new host of concerns arise. The data demonstrate that women are more likely than men to hold lower academic ranks (Table 5).

This phenomenon has been discussed in *Harvard Magazine*. “(T)he gap between the percentage of tenured men and the percentage of tenured women has not changed in 30 years...among those in academia with doctorates in science and engineering, only one-quarter of women had been awarded tenure, compared to one-half of men.”<sup>5</sup>

Our data confirm this pattern. In all but computer science, the rank of assistant professor has the highest percentage of female faculty (Table 5). Conversely, the rank which has highest percentage of male faculty is typically that of “full” professor, and that is the rank held by the majority of male faculty as well.

**TABLE 5. Percentage of Female Faculty within each Rank (FY2002)**

Discipline	Assistant Professor	Associate Professor	“Full” Professor	All Ranks
Chemistry (FY2003)	21.5	20.5	7.6	12.1
Math	19.6	13.2	4.6	8.3
Computer Science	10.8	14.4	8.3	10.6
Astronomy (FY2004)	22.0	16.5	9.5	12.6
Physics	11.2	9.8	4.6	6.6
Chemical Engineering	21.4	19.2	4.4	10.5
Civil Engineering	22.3	11.5	3.5	9.8
Electrical Engineering	10.9	9.8	3.8	6.5
Mechanical Engineering	15.7	8.9	3.2	6.7
Economics	19.0	16.3	7.2	11.5
Political Science	36.5	28.6	13.9	23.5
Sociology	52.3	42.7	13.9	35.8
Psychology	45.4	40.1	13.9	33.5
Biological Sciences	30.2	24.9	14.8	20.2

*“I think a very plausible case can be made that academic departments are an unhealthy—even hostile—environment for women.”*

Dr. Debra Rolison, Naval Research Lab<sup>4</sup>

Assistant professors, who are typically untenured, have little job security or capability to change the culture of their departments or disciplines. Tenure is granted by a laborious process that typically involves recommendations by the department and by external reviewers, followed by approval from the college and the university. While there are some objective criteria, in the final analysis, these decisions have room for a great deal of subjectivity. Hence, assistant professors are uniquely vulnerable to the culture of their departments. Because most female professors are assistant professors, this means that the number of female professors who can safely take steps to change the departmental environment is much smaller than it might first appear.

## UNDERREPRESENTED MINORITY WOMEN FACULTY ALL BUT INVISIBLE.

In some disciplines, there is no representation of URM (Black, Hispanic, or Native American) women on the faculty at all. In the “top 50” computer science departments, there are no women in tenured or tenure-track positions. With the exception of one Black “full” professor in astronomy, there are **no** female Black or Native American “full” professors in the physical science or engineering disciplines surveyed.

Similarly, in physics there are no Black female professors, and in eight of the nine physical science and engineering disciplines surveyed, Native American female professors are nonexistent. URM females fare much better in the social sciences and the life sciences. The few female URM faculty in the “top 50” science and engineering departments are detailed in Table 6 below. These data are in two groups to facilitate comparison and contrast; these are physical sciences and engineering, and social sciences and life sciences.

The data show URM women are less likely than either White women or men of any racial group to be “full” professors and to be awarded tenure. (Table 6). The few “full” professors in each discipline are designated by asterisks after the corresponding number.

**Table 6. Female URM Faculty at “Top 50” Science and Engineering Departments (FY2002).**

<b>Physical Sciences and Engineering</b>	Black females	Hispanic females	Native American females
Chemistry (FY2003)	2	5*	1
Math	2	7***	0
Computer Science	0	0	0
Astronomy (FY2004)	2*	2*	0
Physics	0	8***	0
Chemical Engineering	2	3	0
Electrical Engineering	7	3	0
Mechanical Engineering	3	2*	0
Civil Engineering	2	3*	0
<b>Total</b>	<b>20</b>	<b>33</b>	<b>1</b>
*URM female “full” professor	1	10	0
<b>Social Sciences and Life Sciences</b>			
Economics	5***	7***	0
Political Science	26*****	6	0
Sociology	32*****	12**	0
Psychology	22***	26*****	3
Biological Sciences	9*	13**	0
<b>Total</b>	<b>94</b>	<b>53</b>	<b>3</b>
*URM female “full” professor	19	12	0

Other studies have also concluded that URM minority females are less likely to get tenure than White women or men of any racial group.<sup>5,8</sup> Are universities training an insufficient number of minority women or are qualified women looking outside the academy? The data indicate that both are true, but to varying degrees in different disciplines.

Relatively few URM women earn advanced degrees in science and engineering. The reason for this, according to Professor Cheryl Leggon, is the lack of encouragement they receive. She cites the National Center for Education Statistics that found that “Hispanic and African American women do not persist in science because they are not encouraged to do so.”<sup>8</sup> Professor Leggon believes this lack of encouragement has critical implications. She states that numerous studies have shown that “not encouraging women to persist (in science or engineering) produces the same result as actively discouraging them.”<sup>8</sup>

*“I was surprised that even in 2002, these women (faculty) had so few opportunities in their professional careers to talk and network with other minority women scientists and engineers.”*

Professor Evelynn Hammonds, *Professor*, Harvard University<sup>2</sup>

But the data also show that universities are not taking advantage of the URM women who do complete the PhD. The data find that only fifty-four are faculty at “top 50” physical science and engineering departments.

Anne J. MacLachlin, at the Center for Studies in Higher Education at U.C., Berkeley, believes “the academic experience often led them (URM women who have earned PhDs) to seek another kind of scientific work.”<sup>9</sup>

Finally, we must pose a third possibility that applies to all women of any color earning PhDs in science or engineering. Are qualified women rejected for academic positions because of departmental practices that act as barriers to hiring and retaining women?

## CONCLUSIONS

Disparities in hiring and retention between male and female science and engineering faculty place women at a distinct disadvantage at all levels, from undergraduate to full professor. Women faculty are poorly represented in science and engineering departments of research universities. This has grave repercussions for undergraduate and graduate students who are bereft of female role models and mentors and contributes to the attrition rate of women studying science and engineering.

In most science disciplines studied, qualified female candidates exist, but they are not achieving assistant professorships. Whether hiring and work practices at the nation's top universities actively discriminate cannot be answered by this study. However, the numbers clearly indicate a grave national problem that must be aggressively addressed now.

There is general agreement that few women typically apply for academic positions in science and engineering departments at research universities. Yet the percentage of PhDs attained by women has steadily risen over the last two decades. In some cases, it is reported that female applicants for such openings have even declined from years past. There is not agreement on an explanation for this phenomenon. Is the private sector more receptive to women scientists? Have women found the academy a hostile environment? Do qualified women find themselves rejected by departmental practices that operate as barriers to hiring and retention? The low representation of female professors in these disciplines exacerbates a learning and work environment that is often alienating and unfair.

The reasons need to be explored and solutions found. However, before the problem can be solved, it must be well defined. In order to do this, the problems must be discussed in detail and the barriers identified by those most knowledgeable about them. However, those most familiar with these problems and most well-equipped to identify solutions are often afraid to discuss them openly. The same situation holds for many minorities. Therefore, the first step to solving the problems facing women and minorities in science and engineering must be to generate an atmosphere in which it is acceptable to discuss them.

The low number and percentage of women faculty make it difficult for them to effect the needed changes by themselves, so they will need assistance and support in

this. If all female faculty, both tenured and untenured, in a department work together, their total percentage or number is still usually insufficient to exert much leverage. According to Rosabeth Moss Kantor, underrepresented groups need to be at least 15% of an organization in order to begin to impact that organization's culture, policy, and agenda.<sup>10</sup> Even when combining all ranks, women remain a small fraction of the faculty in any science or engineering discipline in this study, below the 15% mark.

The paucity of female faculty is exacerbated by their predominantly low academic ranking. Most of the women in science and engineering are assistant professors without the protection of tenure. This places them in a particularly vulnerable position within the department and the university. Tenure has a significant effect on the behavior of professors; tenured professors have the security to help create cultural change. "Full" professors with tenure are most likely to take risks because they have the freedom to say and do things, such as suggesting more female hires, without fear of losing their jobs or being denied promotion. Unfortunately, there are far too few female "full" professors than that needed to effect significant change in a reasonable amount of time. Finally, and perhaps, most importantly, when female students see the few female faculty in their own discipline marginalized, treated poorly, or not promoted, it serves as a warning: stay in this profession at your own risk.

As Cheryl Leggon notes,<sup>8</sup> simply adding more women to science and engineering departments is a "necessary but not sufficient" agent of change. According to Harvard Magazine's "Forum on Faculty Diversity",<sup>5</sup> one formidable obstacle to gender parity is an "unaccommodating culture" and a status quo that proves to be "an intractable force." Some of the concerns women frequently point to include: "limited opportunities to participate in departmental and institutional decision-making; excessive and 'token' committee assignments; ...research that's trivialized and discounted..."<sup>5</sup>

In order to diversify successfully and open wide the doors for women, universities have to examine culture, attitudes, and policies they have long followed assuredly. This is a long-overdue and realistic response to a changing world. As Princeton chemist George McLendon observed, "Academic institutions are intrinsically monastic institutions that were created in the 13th century. They might need a little fine-tuning."<sup>11</sup>

## ACKNOWLEDGEMENTS

The following individuals contributed to gathering or analyzing survey data: Dr. Ann Beutel, Christopher Brammer, Diana Rogers, Audra Wendt, Lina Ea, Naquesha Johnson, Natalie Frow, Zachary Cole, Sergio Vasquez, Roxanne LaMothe, Lea Mitchel, Sheleatha Taylor, Brett Beecher, Kimberly Yang, Lindsey Anderberg Torres, Ruibo Li (The University of Oklahoma); Laura Lopez, Dr. Nancy Hopkins (Massachusetts Institute of Technology); Daquant Hornbeak (Langston University).

Dissemination of the survey data was made possible, in part, by grants from the Ford Foundation and the John Simon Guggenheim Foundation. The Ford Foundation and The John Simon Guggenheim Foundation are not responsible for the report's conclusions and do not endorse activities that influence legislation.

## BIOGRAPHICAL SKETCH

Dr. Donna Nelson, is an associate professor of chemistry at the University of Oklahoma. Reared in Eufaula, Oklahoma, she took her BS in Chemistry at the University of Oklahoma in 1974. She obtained her PhD in chemistry at the University of Texas with Michael J. S. Dewar in 1980, did her postdoctorate at Purdue University with Herbert C. Brown during 1980 - 1983, and joined the University of Oklahoma in 1983.

She has an active research group in physical organic chemistry, in which she has developed a new synthetically useful technique for gathering mechanistic information on addition reactions of alkenes. The investigations often permit selection of one mechanism from several which are proposed. She has been recognized for this work, most recently via a Sigma Xi Faculty Research Award and a Guggenheim Award.

She has presented her diversity research results at national meetings of professional societies, at Capitol Hill briefings with the US Congress, and before various other organizations in Washington, DC, and she has served on various national level task forces and committees addressing these issues.

For more information about Dr. Nelson, visit her web site at <http://cheminfo.chem.ou.edu/faculty/djn/djn.html>.

## METHODOLOGY

Data were collected while at the University of Oklahoma between 2000 and 2003 and the Massachusetts Institute of Technology during the Fall, 2003. To investigate the gender, race/ethnicity, and rank of faculty, we surveyed top research departments of fourteen science and engineering disciplines. To sample the top research departments of a discipline, we selected all the departments in each discipline that ranked in the top 50 according to the most recent National Science Foundation annual report on research expenditures available at the time of data collection (National Science Foundation report on 1999 expenditures, except 2000 for chemistry). The ranking for astronomy departments was by the National Research Council, based on research expenditures in 1994. The top 50 departments were different for each discipline.

Over 90% of the departments in our sample are located in universities classified in either the Doctoral/Research Universities-Extensive category or the Doctoral/Research Universities-Intensive category of the Carnegie Classification of Institutions of Higher Education (McCormick 2001).

For each of the top 50 departments in research expenditures, department chairs were contacted and asked to report the gender, race-ethnicity (Asian, Black, White, Hispanic, and Native American), and rank (assistant, associate, and professor) of tenured and tenure-track faculty for fiscal year 2002 (fiscal year 2003 for chemistry and 2004 for astronomy). In a limited number of instances, data were unavailable from department chairs and were collected instead from other sources, such as department websites and published directories.

## CONTACT INFORMATION

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## APPENDICES

Appendix 1. Tables of data on tenured/tenure-track faculty at the “top 50” departments of fourteen science and engineering disciplines by race/ethnicity, by gender, and by rank. In each data entry, the number after the decimal point shows the number of people that are female. For example the total number of chemistry faculty in FY2003 is 1654.200; this means there are 1654 people, 200 of whom are female.

Appendix 2. Tables of data on US citizen and permanent resident PhD attainment in fourteen science and engineering disciplines each year from 1983 through 2002. Data are disaggregated by race/ethnicity and by gender.

## APPENDIX 1

Tables of data on tenured/tenure-track faculty at the “top 50” departments of fourteen science and engineering disciplines by race/ethnicity, by gender, and by rank. In each data entry, the number after the decimal point shows the number of people that are female. For example the total number of chemistry faculty in FY2003 is 1654.200; this means there are 1654 people, 200 of whom are female.

Data are provided for the “top 50” departments in the following disciplines:

Table 1 Chemistry

Table 2 Physics

Table 3 Mathematics

Table 4 Computer Science

Table 5 Chemical Engineering

Table 6 Civil Engineering

Table 7 Electrical Engineering

Table 8 Mechanical Engineering

Table 9 Economics

Table 10 Political Science

Table 11 Sociology

Table 12 Psychology

Table 13 Biological Sciences

Table 14 Astronomy

Table 1. Tenured/Tenure Track Chemistry Faculty at the "Top 50" Chemistry Departments by Race/Ethnicity, by Gender, and by Rank (FY 2003)\*

University	White			Black			Hispanic			Asian			Native Am.			Tot
	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	
U CA Berkeley	44.006	1	7.001	52.007	1	-	-	2	-	2	-	2	-	-	-	0
MA Institute of Tech	20.003	1	5.001	26.004	-	-	0	-	-	0	1	-	2.001	3.001	-	0
U of IL Urbana-Champ	24.002	1.001	7.001	32.004	-	-	0	-	-	1	-	2	-	-	-	29.005
Harvard Univ	15.001	-	3.001	18.002	-	-	0	1	-	-	1	-	3.001	4.001	-	0
Pennsylvania State U	17.001	6.002	9.004	32.007	-	-	0	-	-	0	1	-	2	-	-	35.004
California Inst of Tech	21.002	1	4	26.002	-	1	-	-	-	0	-	1	1.001	2.001	-	0
Texas A&M Univ	34.003	1.001	5	40.004	1	-	1	1	-	2	-	1	1.001	1.001	-	0
U WI-Madison	33.002	-	6.002	39.004	-	-	0	-	-	0	3	-	2	5	-	44.005
Cornell Univ	17.001	4.001	4	25.002	1	-	1	1	-	-	1	-	-	-	-	44.004
U CA Los Angeles	36.005	5.001	7.003	48.009	-	1	-	1	-	-	1	-	2.001	3	-	0
Ohio State Univ	20.001	8.001	5.001	33.003	-	-	0	-	-	0	2	-	1	5	-	0
U of Pennsylvania	19.002	5	3.001	27.003	-	-	0	-	-	0	0	-	1	3	-	1
Stanford Univ	16.001	2	1	19.001	-	-	0	-	-	0	1	-	1	3	-	0
Johns Hopkins U	12	1	4.001	17.001	-	-	0	-	-	0	-	-	0	-	-	17.001
Univ of Oklahoma	14	2	6.001	22.001	1	-	-	0	-	-	0	-	1	3	-	27.003
Rutgers the State U NJ	35.006	9.003	6.001	50.010	-	1	1.001	2.001	-	1.001	-	1.001	1	3.001	-	57.015
U CA San Francisco	12.002	2	4.001	18.003	-	-	0	-	-	1	-	1	1	1	-	20.003
Univ of Colorado	23.005	5	4.001	32.006	-	0	-	-	-	2	-	2	2	-	-	38.007
Florida State Univ	19.003	7	4.001	30.004	-	-	0	-	-	0	1	-	2.002	3.002	-	0
Northwestern Univ	22.001	1.001	4	27.002	-	-	0	-	-	0	-	1	1.001	2.001	-	0
UMA Amherst	10	6.001	3	19.001	-	-	0	-	-	2.001	-	2.001	-	2.002	-	22.002
Purdue Univ	28.003	5.002	8.002	41.007	1	-	1	-	-	1	-	1	-	1	-	47.009
Indiana Univ	16	4.001	6.002	26.003	-	-	0	-	-	1	-	1	-	2	-	29.003
U TX at Austin	33.001	5.001	8	46.002	8.001	-	-	-	-	0	-	1	-	1	-	47.002
U of NC Chapel Hill	25.002	4.002	8.001	37.005	-	0	-	-	-	0	-	1	-	1	-	38.005
Univ of Florida	30.001	10.001	3	43.002	-	1.001	-	1.001	-	1.001	2.001	-	1	-	-	47.004
Univ of Notre Dame	15	7.001	6.002	28.003	1	-	1	-	-	1	-	1	-	2	-	29.003
Georgia Inst of Tech	1.5	3	12.003	30.003	-	-	0	-	-	1	-	1	-	0	-	31.003
Princeton Univ	20	4.003	3	27.003	-	-	0	-	-	0	-	0	-	1	-	28.003
U CA San Diego	31.005	3.001	6	40.006	1	-	1	-	-	0	-	2	2	-	-	48.006
Univ of Arizona	23.004	1	2	26.004	-	0	-	0	-	2	1.001	3.001	-	1	-	31.005
U CA Irvine	22.001	2.001	4	28.002	1	-	1	-	-	0	-	1	-	3.002	-	33.004
U of South Carolina	18.001	2	5	25.001	-	0	-	0	-	0	-	0	-	2.001	-	27.002
U of Washington	33.001	2.001	4.002	39.004	2	-	1	-	-	0	-	2	1	3	-	45.004
Univ of Michigan	24.001	4.001	7.001	35.003	1	-	1	-	-	0	-	1	-	1	-	38.003
Arizona State Univ	22.001	4.001	6.002	32.004	-	0	-	1.001	-	1	2.001	-	1	-	-	35.005
Univ of Chicago	16.001	2	3	21.001	-	0	-	0	-	0	-	3	1.001	1	-	26.002
Louisiana St U System	19	5	4.001	28.001	1	-	1	-	1.001	-	1.001	-	1.001	1	-	0
Univ of Minnesota	19.001	7.002	9.001	35.004	-	0	-	0	-	0	-	1	1	2	-	31.003
Univ of Utah	19.001	4.001	4	27.002	-	0	-	0	-	0	-	1	-	1.001	-	29.003
Univ of Akron	11.002	-	4	15.002	-	0	-	0	-	0	-	1	-	2	-	17.002
Univ of Virginia	19	2.001	1	22.001	-	1	-	1	-	0	-	1	-	1	-	24.001
NC State Univ	13.001	8	6.001	27.002	-	0	-	0	-	1.001	1.001	2	1	3	-	31.003
VA Polytech Inst & St U	14.001	11.002	3	28.003	-	0	-	0	-	0	-	1	-	1	-	29.003
U of So California	18.001	3	1.001	22.002	-	0	-	0	-	0	-	2	4	-	-	26.002
Univ of Pittsburgh	12	8.002	6.001	26.003	-	0	-	0	-	0	-	2	2	-	-	28.003
Michigan State Univ	19.002	11.002	5	35.004	1	-	1	-	-	1	-	1	1	1	-	39.004
Emory Univ	1.2	2	4.001	18.001	-	0	-	0	-	0	-	2	1	3	-	21.001
Univ of Kansas	10.002	7.001	7.004	24.007	-	0	-	0	-	0	-	1	-	1	-	25.007
Columbia U. City of NY	15.001	1	5.001	21.002	-	0	-	0	-	0	-	1	-	1	-	22.002
<b>Chemistry Total</b>	1034.081	199.039	251.047	1484.167	13	5.001	2.001	20.002	10.001	12.005	7.003	29.009	44.002	22.003	52.016	1654.200
<b>Percent within race</b>	71%	1.3%	17%	67%	25%	10%	100%	34%	41%	24%	19%	44%	37%	19%	67%	3.001
<b>Percent of grand total</b>	62.5%	12.0%	15.2%	89.7%	0.8%	0.3%	0.1%	1.2%	0.6%	0.7%	1.8%	2.7%	1.3%	3.1%	7.1%	0.2%
<b>Females in column</b>	6.7%	19.6%	18.7%	11.3%	0%	20.0%	50.0%	10.0%	10.0%	41.7%	42.9%	31.0%	4.5%	13.6%	17.8%	33%

\*By chemical research expenditures FY2000, NSF; numbers after decimals designate females. \*\*Declined; data are from other sources.  
 Reference: "The Nelson Diversity Surveys" Nelson, D.J.; Norman, OK., 2002; <http://cheminfo.chem.ou.edu/faculty/djh/diversity/top50.html>

**Table 2. Tenured/Tenure-Track Faculty at the "Top 50" Physics Departments by Race/Ethnicity, by Gender, and by Rank (FY 2002)\***

University	White			Black			Hispanic			Asian			Native Am.			Total
	Full	Assoc	Asst	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	
Johns Hopkins U	24.002	-	3	27.002	-	-	0	-	-	-	0	4	1	-	5	-
MA Institute of Tech	50.004	5	11.002	66.006	-	-	0	-	-	-	0	2	2	6.002	10.002	-
U CA Berkeley	30.002	6	5	41.002	-	-	0	1	-	-	1	9	2.001	1	12.001	-
California Inst of Tech	41	-	2.001	43.001	-	-	0	-	-	-	0	2.001	1	-	3.001	-
UTX at Austin**	31	8	2	41	-	-	0	1	-	-	1.001	2.001	3	2	1	6
Cornell University	30.001	6.001	4	40.002	-	-	0	0	-	-	1	1	-	-	-	0
Florida State University	24	4.001	5.001	33.002	1	-	1	3.001	-	-	1	4.001	1	2	4	7
U MD at College Park	39.001	10.002	5.001	54.004	1	-	1	-	-	-	0	17	-	-	-	17
Michigan State U	38	4	4	46	-	-	0	-	-	-	0	2.001	1	-	4	-
U CA Los Angeles	47.004	3	5	55.004	1	-	0	2.001	-	-	0	2.001	5	1	-	6
U Illinois Urbana-Cham	36.001	7.001	8.002	51.004	1	-	0	1	1	-	1	4	-	-	-	0
U WI-Madison	36.003	3.001	4	43.004	-	-	0	-	-	-	0	3.001	-	-	5.001	-
Indiana University	27.002	5	4	36.002	-	-	0	-	-	-	0	1	-	-	1	2
U of Alaska Fairbanks	10	3	2.001	15.001	-	-	0	-	-	-	0	0	-	-	-	0
Pennsylvania State U**	25.001	5	3	33.001	-	-	0	1	-	-	1.001	2.001	7	2.001	11.002	-
SUNY at Stony Brook	43.001	5	7	55.001	-	-	1	1	2	-	1.001	3.001	2	-	-	2
Princeton University	25.001	2.001	9	36.002	-	-	0	-	-	-	0	1	-	-	1.001	3.001
U CA San Diego**	22.001	6.001	1	29.002	-	-	0	1	-	-	1	2	1	-	3	-
U CA Santa Barbara	28.001	4.001	4.002	36.004	-	-	0	1.001	-	-	1.001	1	-	-	1	-
U of Pennsylvania	21.002	5	5	31.002	-	-	1	-	-	-	0	0	1	1.001	3	5.001
U of Washington	38.003	2	7.001	47.004	-	-	0	1	-	-	1	-	-	-	-	0
Duke University	11	7.001	4	22.001	1	-	1	-	-	-	0	2	-	-	4.001	6.001
Vanderbilt University	17	5.001	3	25.001	-	-	0	-	-	-	0	0	-	-	0	0
NC State University	20.001	9.001	6.002	35.004	-	-	0	-	-	-	1.001	1.001	2	-	-	0
Rutgers the State U NJ	42.004	9	5.001	56.005	-	-	0	-	-	-	1	1	-	-	-	0
Georgia Inst of Tech	16	3	7	26	-	-	0	-	-	-	0	1.001	1	-	2.001	-
Yale University	19.001	4	7	30.001	-	-	1	1	1	-	0	-	-	-	0	1
Harvard University	38.004	-	3	41.004	-	-	0	1	-	-	1	-	-	-	-	1
University of Colorado	27.002	7.001	7	41.003	-	-	0	-	-	-	0	1	1	-	3	-
U of Iowa	18	5.001	3	26.001	1	-	1	-	-	-	0	2.001	-	-	2.001	-
Ohio State University	32.001	6	6	44.001	-	-	0	1	-	-	0	5.001	2	2	9.001	-
U of Central Florida***	5	3	6.001	14.001	-	-	0	1	1	-	1	1	1	1	2	-
Purdue University	29.002	5	1	35.002	-	-	0	-	-	-	1	6	-	2	8	-
University of Chicago	26.001	4	4	34.001	-	-	0	-	-	-	0	1	1	1	3	-
Texas A&M University	35.001	-	2	37.001	-	-	0	-	-	-	0	2	-	-	3	-
University of Florida	8	3	1	12	-	-	0	1	1	-	1	-	-	-	1	-
U of Tennessee System	22.001	4	-	26.001	1	-	1	1	-	-	1	-	-	-	1	-
Univ of Minnesota	29.002	27	7	63.002	-	-	0	1	1	-	1	6	-	2	8	-
U of NC Chapel Hill	16.002	3	2	21.002	-	-	0	1	-	-	0	1	1	1	3	-
U MA Amherst	21.001	5	3	29.001	-	-	0	1	-	-	1	3	-	1	4	-
U CA Irvine	25.001	1	5.001	31.002	-	-	0	1	-	-	1	4	1.001	2	7.001	-
Louisiana St U System	22	7	4	33	-	-	0	-	-	-	1	0.001	4.004	-	4.004	-
U Alabama Huntsville	12.001	1	1	14.001	-	-	0	-	-	-	0	3	-	1	3	-
University of Rochester	17.001	2.001	3.001	22.003	-	-	0	-	-	-	1	2	-	-	-	0
SUNY at Albany	5.001	1	2.001	8.002	-	-	0	-	-	-	1	2	7	-	1	-
University of Michigan	34.002	7.002	7	48.004	1	-	2	3	1	1	3	2	1	1	4	-
Univ of New Mexico	15	8.003	2	25.003	-	-	0	-	-	-	0	3	-	3	-	0
Kansas State University	15	1	2.001	18.001	-	-	0	-	-	-	0	4.001	3.001	1	8.002	-
Wayne State University	11.001	6	6	23.001	-	-	0	-	-	-	0	5.001	1	6.001	-	0
U CA Santa Cruz	16.001	2.001	-	18.002	-	-	0	-	-	-	0	0	1	1	-	0
<b>Physics Total</b>	1268.061	238.021	209.019	1715.101	6	2	4	12	22.003	6	10.005	38.008	135.011	41.006	46.006	222.023
<b>Percent within race</b>	74%	14%	12%	100%	50%	17%	33%	100%	58%	16%	100%	61%	18%	21%	100%	100%
<b>Percent of grand total</b>	63.8%	12.0%	10.5%	86.3%	0.30%	0.10%	0.60%	1.11%	0.30%	0.50%	1.91%	0.50%	1.79%	2.06%	1.17%	0.05%
<b>Females in column</b>	4.8%	8.8%	9.1%	5.9%	0%	0%	0%	9.1%	0.0%	50.0%	18.4%	8.1%	14.6%	13.0%	10.4%	0%

\*According to physics research expenditures FY1999, NSF; numbers after decimals designate females. \*\*Declined to participate, data are from other sources. \*\*\*CREOL data are not included.  
 Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

Table 3. Tenured/Tenure-Track Faculty at the "Top 50" Mathematics Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White	Black	Hispanic	Asian	Native Am.	Total
	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	Total
Johns Hopkins U	15	-	4,001	19,001	-	22,001
U TX at Austin **	43,003	6,001	1	50,004	-	58,005
G. Washington U	7	3	3	13	-	18,002
Rutgers, St U NJ **	51,003	5	11,001	67,004	-	78,004
Boston College	8,002	11,001	1	20,003	-	21,003
NC State Univ	25,002	13,001	4,002	42,005	3	59,005
U of So Carolina	20,001	11,001	3	34,002	-	37,002
Brown Univ	14,001	2,001	3,001	19,003	-	20,003
Iowa State Univ	22,001	11,001	4,001	37,003	-	46,003
New York Univ	32	4	3,001	39,001	-	48,002
MA Inst of Tech	29	5,001	12,002	46,003	-	51,003
SUNY, Stony Brook	20,002	2	4	26,002	-	27,002
Univ of Minnesota	50	8,001	3	61,001	-	69,002
Univ of Georgia	17	15,003	3	35,003	-	41,003
U CA Los Angeles	38	4	2	44	-	65,003
Univ of Florida	26,002	8	11,003	45,005	1	53,001
Stanford Univ	19	1,001	2,001	22,002	-	56,006
Florida State Univ	20,001	7	5,001	32,002	-	24,002
U CA Berkeley	56,003	2	3	61,003	-	8,001
Georgia Inst Tech**	23	7	8,001	38,001	1	51,001
Carnegie Mellon U	18	3	4	25	-	27,001
U of Washington	32,001	7,001	6	45,002	-	51,004
U Tx Md Andrsn Ctr	7	-	7	-	-	8,001
U WI-Madison***	36,001	7,001	5,001	48,003	-	55,003
Pennsylvania St U	33,003	6,001	5,001	44,005	1	56,008
Purdue University	47,003	8,002	6,003	61,008	1	84,011
Univ of Michigan	45,002	5,001	4,001	54,004	-	60,005
US Nav Postgrd Sch	7	6,001	-	13,001	1	15,001
Texas A&M Univ	40,001	12,001	8,002	60,004	-	71,005
Univ of IL Chicago	42,003	7	10,001	59,004	1	65,004
Cornell University	32,002	2	2,001	36,003	-	40,003
Princeton Univ	22,001	1	6	29,001	0	39,004
Boston University	18,003	8,001	5,001	31,005	0	36,005
Rice University	12	-	1	13	-	14
Univ of Arizona	27,001	17,001	5	49,002	-	61,005
U CA Santa Barbara	20,001	2	2,001	24,002	-	33,003
VA Polytech Inst	31	12,004	2	45,004	1	54,006
W. Michigan U	11,001	6,002	6,004	23,007	1	27,009
U IL Urbana-Cham	42,001	15,002	17,001	74,004	-	77,005
U of So California	19,001	4	3	26,001	0	29,001
Univ of Colorado	9	-	1,001	10,001	1	13,001
Clemson Univ	15,001	9,002	4,001	28,004	1	16,001
San Diego St Univ	14	4,002	5,003	23,005	-	32,004
U of NB, Lincoln	16,001	9,002	5,001	30,004	-	34,004
CO School Mines	7	7,002	1,001	15,003	0	18,003
Harvard Univ	14,001	-	14,001	-	0	14,001
Colorado State Univ	22,001	3	7,003	32,004	-	50,004
U MA Amherst	25,001	4	11,001	41,002	2	54,005
Indiana University	28	8,001	5,001	41,001	0	54,005
<b>Mathematics Total</b>	1241,051	297,039	226,044	1764,134	12,4	2083,173
<b>Percent within race</b>	70%	17%	13%	63%	21%	67%
<b>Percent of grand total</b>	59.6%	14.3%	10.9%	84.7%	0.6%	100%
<b>Females in column</b>	4,1%	13.1%	19.5%	7.6%	0.0%	0.0%

\* According to math research expenditures FY1999, NSF; numbers after decimals designate females. \*\*Declined; data are from other sources. \*\*\*Provided rank/gender data; race/ethnicity data are from other sources.

Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

Table 4. Tenured/Tenure-Track Faculty at the "Top 50" Computer Science Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White	Black	Asian	Native Am.	Total
	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	
Johns Hopkins U	7	1	0	0	17
U of Illinois Urbana-Cham	9	7.001	23.002	6	40.004
Carnegie Mellon U	18.001	13.002	5.002	3.002	43.007
U of Southern California	11	2.001	6	1.001	23.001
U CA San Diego	20.002	5	6	7.002	43.004
MA Institute of Tech	23.004	8.001	7	4	39.003
Georgia Institute of Tech	13.002	13.003	16.004	1.001	45.005
U MD at College Park	19.001	6.002	5.001	30.004	63.010
U TX at Austin	13	9.002	7.003	29.005	40.004
Cornell University	15.002	6.001	10	31.003	32.004
Stanford University	15	8.002	7.001	30.003	33.004
Ohio State University	4.001	7	5	16.001	33.001
Syracuse University	6	5	3.002	14.002	30.002
University of Utah	12.001	5.001	4.001	21.003	30.003
U of Alaska Fairbanks	3.001	6	9.002	18.003	18.003
Rice University	8	4.001	2	14.001	15.002
U MA Amherst	17.003	8.001	3	28.004	32.004
California Inst of Tech	3	2	3	8	10
University of Michigan	21.001	5	6	32.001	39.001
U of NC Chapel Hill	12	4	-	16	23.003
OR Grad Inst Sci & Tech	14.002	3	1	18.002	23.001
U of Pennsylvania	12.002	12.001	4	28.003	20.002
Washington University	3.001	3	7.001	13.002	37.004
U CALos Angeles	12.002	5	3	20.002	16.002
U of Tennessee System	8.001	9	2	19.001	27.003
SUNY at Buffalo	3	5.001	2	10.001	21.001
University of Minnesota	6.001	5	6.001	17.002	24.003
University of Colorado	11	9.002	5.001	25.003	30.003
U WI-Madison	22.002	1.001	7.001	30.004	28.003
Rutgers the State U NJ	-	2	-	2	35.004
U of Alabama Huntsville	2.001	3	5.002	10.003	6.002
New York University	15.002	6	4	25.002	13.003
Purdue University	15.001	6.001	4.001	25.003	28.002
University of Virginia	9.001	5	6	20.001	35.003
New Mexico State Univ	1	2	4	7	21.001
Columbia U, City of NY	13.002	3	6	22.002	10
U of Washington	19.003	6	8	33.003	22.002
U CA Irvine	14.002	12.002	5.002	31.006	36.003
University of Arizona	3	5.001	5	13.001	39.007
Brown University	11	3	6.002	20.002	21.002
Univ of Alabama	1	6.001	2	9.001	12.002
Calif Polytechnic	16.001	6.002	2	24.003	26.004
Princeton University	10.001	1	5	16.001	25.002
University of Florida	3	6.001	7	16.001	28.002
US Naval Postgrad Sch	4	6.001	1	11.001	15.002
U of LA at Lafayette	1	3	5.001	9.001	20.001
SUNY at Stony Brook	9	4.001	9.001	22.002	30.003
University of Oregon	8.001	6.002	2	16.003	17.004
Texas A&M University	11	6.002	3	20.002	28.002
University of Kansas	2	7.002	1	10.002	10.002
<b>Computer Sciences Total</b>	507.045	280.039	245.030	1032.114	1332.141
<b>Percent within race</b>	49%	27%	24%	100%	0%
<b>Percent of grand total</b>	38.1%	21.0%	18.4%	77.5%	100%
<b>Females in column</b>	8.9%	13.9%	12.2%	11.0%	10.6%

\*According to computer science research expenditures FY1999, NSF; numbers after decimals designate females.

Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/cjn/diversity/top50.html>

Table 5. Tenured/Tenure-Track Faculty at the "Top 50" Chemical Engineering Departments by Race/Ethnicity, by Gender, and by Rank (FY 2002)\*

University	White	Black	Hispanic	Asian	Native Am.	Total										
	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot
MA Institute of Tech	21.01	4.01	4	29.02	-	1.01	-	1.01	-	1.01	-	2.01	-	-	-	32.04
NC State University	9.01	4	4	17.01	-	1.01	-	1.01	1	2	-	2	-	-	-	21.02
University of Minnesota	23	6.02	4	33.02	-	0	-	0	-	1	-	1	-	-	-	35.02
Texas A&M University	13.01	1	3.01	17.02	-	0	-	0	-	0	-	0	-	-	-	17.02
UTX at Austin	11	1	3.01	15.01	1	-	-	1	-	1	-	1	3.01	4.01	-	21.02
New Mexico State Univ	3	3.01	1.01	7.02	-	0	1	-	-	1	-	0	-	-	-	8.02
U WI-Madison	6	6.01	3	15.01	-	0	1	-	-	1	-	1	-	-	-	17.01
Stanford University	7.01	-	1.01	8.02	-	0	-	1	-	1	-	1.01	2.01	-	-	11.03
University of Delaware	12	3.01	2.01	17.02	1	-	-	1	-	1	-	1	-	-	-	19.02
U of Oklahoma	7	3	3.01	13.01	-	0	-	2	-	1	1.01	2.01	-	-	-	16.01
U of South Carolina	6	5	3	14	-	0	0	-	-	1	-	2	-	-	-	16.01
Case Western Reserve U	6	2	2.01	10.01	1	-	-	1	-	0	-	0	-	-	-	13.01
Georgia Institute of Tech	13.01	9.01	4	26.02	1	-	-	1	-	0	-	4	1	-	-	32.02
Purdue University	12	1	4	17	-	1	-	0	-	0	4.01	1	-	5.01	-	23.01
University of Florida	7	1	2	10	-	0	-	1	-	1	5	-	2	7	-	18
Johns Hopkins U	5.01	1	4	10.01	-	0	-	0	-	1	2	-	0	1.01	-	10.01
U of Washington	10.01	3.01	1	14.02	1	-	-	0	-	0	-	1	1	-	-	16.02
U of Illinois Urbana-Cham	6	4.01	2	12.01	-	0	-	0	-	0	-	2	-	-	-	14.01
Michigan State U	8	1.01	1	10.01	-	1	-	1	-	1	2	-	1.01	3.01	-	15.02
University of Utah	8.01	3.01	2	13.02	-	0	-	0	-	1	1	-	1	-	-	15.02
NM Inst Mining & Tech	-	2	-	2	-	0	-	0	-	0	-	0	-	-	-	4
U CA Santa Barbara	17	1	1	19	-	0	-	0	-	0	1	-	2	-	-	21
Pennsylvania State U	8.01	4	2.01	14.02	1	-	-	0	-	0	-	1	1	-	-	16.02
University of Arizona	2	4.01	3	9.01	-	0	-	0	-	2	-	0	-	-	-	11.01
Ohio State U	4	3	1	8	-	0	-	0	-	2	-	0	-	-	-	14.01
Colorado School of Mines	9.01	4	2.01	15.02	-	0	-	0	-	0	-	1	1	-	-	16.02
U CA Davis	15.03	2.01	3.02	20.06	-	0	-	0	-	0	3	-	3	-	-	23.06
California Inst of Tech	8.02	1	-	9.02	-	0	-	0	-	1	1	-	1	-	-	11.02
U CA Berkeley	15.01	1.01	2	18.02	-	0	-	0	-	1	1	-	0	-	-	18.02
Auburn University	10.01	1	3	14.01	-	0	-	0	-	0	2	2	-	-	-	17.01
Lehigh University	10	1.01	1	12.01	-	0	2	-	2	2	-	1	3	-	-	17.01
Carnegie Mellon U	10	2	5.01	17.01	-	0	1	-	1	1	-	1	-	0	-	19.01
U MA Amherst	5	3	2.02	10.02	-	0	0	-	0	0	-	2.01	2.01	-	-	12.03
Michigan Tech U	4	5.02	1	10.02	-	0	-	0	-	0	3	-	3	-	-	13.02
Univ of Alabama	4	4	3.01	11.01	-	0	-	0	-	0	-	0	-	0	-	11.01
Arizona State University	7	4.01	3.02	14.03	-	1	-	1	-	1	2	-	1	3	-	19.03
Louisiana St U System	16	5.02	3.01	24.03	-	0	2	-	2	1	-	1	2	-	-	28.03
University of Colorado	9	3.01	2.01	14.02	-	0	-	0	-	0	-	2	-	-	-	16.02
U of Tennessee System	5	4	1	10	-	0	-	0	-	0	-	1.01	-	1.01	-	11.01
Northwestern University	9	2.01	4.01	15.02	-	0	-	1	-	1	1	-	1	-	-	17.03
U of Missouri Columbia	-	2	4.01	6.01	-	0	1	-	1	1	-	1	4	-	-	11.01
VA Polytechnic Inst	7	4.02	2	13.02	-	0	-	0	-	0	2	1	-	3	-	16.02
Princeton University	12.01	1.01	4.01	17.03	-	0	-	0	-	0	2	-	2	-	-	19.03
Rutgers the State U NJ	8	1.01	4.01	13.02	-	0	1	-	1.01	2.01	2	1	-	3	-	18.03
Cornell University	7.01	3	-	10.01	1	-	-	1	-	1	-	1	-	2	-	14.01
U CA Los Angeles	7	2	-	9	-	0	-	0	-	0	1	-	1.01	2.01	-	11.01
University of New Mexico	6.01	3	1	10.01	-	0	-	1	-	1	-	1	-	1	-	12.01
Rensselaer Polytech Inst	12	1	-	13	-	0	-	0	-	0	-	2	2	-	-	15
University of Michigan	6	5.03	1	12.03	1	-	-	1	-	1	2	-	2	-	-	15.03
U of Alabama Huntsville	1	2	3	-	-	0	-	1	-	1	2	-	2	-	-	6
<b>Chem Eng Total</b>	426.20	141.29	111.23	678.72	7***	6.02	0	13.02	14	8	5.03	27.03	56.02	17.02	29.05	102.09
<b>Percent within race</b>	63%	21%	16%	100%	54%	46%	0%	100%	52%	30%	19%	100%	55%	17%	28%	100%
<b>Percent of grand total</b>	51.9%	17.2%	13.6%	82.7%	0.9%	0.7%	0.0%	1.6%	1.7%	1.0%	0.6%	3.3%	6.8%	2.1%	3.5%	12.4%
<b>Females in column</b>	4.7%	20.5%	20.7%	10.6%	0.0%	33.2%	0.0%	15.4%	0.0%	0.0%	59.6%	11.1%	3.6%	11.8%	17.2%	8.8%

\*According to chemical engineering research expenditures FY1999, NSF; numbers after decimals designate females. \*\*One professor is reported in both chemistry & chemical engineering.

Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.on.edu/faculty/diversity/top50.html>

**Table 6. Tenured/Tenure-Track Faculty at the "Top 50" Civil Engineering Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)**

University	White		Black		Hispanic		Asian		Native Am.		Total
	Full	Assoc	Full	Assoc	Full	Assoc	Full	Assoc	Full	Assoc	
Texas A&M University	19.001	14	9.004	42.005	1	-	1	-	4	1	53.006
U CA Berkeley	24.001	11.001	5.001	40.003	-	-	0	3.001	4.001	1	0
MA Institute of Tech	21.001	6.003	5.001	32.005	-	-	1	1	1	1	50.005
U TX at Austin	28.001	9.001	12.005	49.007	-	-	1	-	2	1	38.005
U of IL Urbana-Cham	20	6.003	13.001	39.004	-	-	0	2	1	1	52.007
University of Michigan	16.001	3.002	4.001	23.004	-	1.001	-	1	1	5	48.004
Georgia Inst of Tech	18	14.002	7.002	39.004	-	2.001	2.001	2	1	-	27.005
SUNY at Buffalo	7	6	2	15	-	-	0	-	0	4	46.006
NC State University	14	8.001	3.001	25.002	-	-	1	1	1	5	22.001
Purdue University	19.001	12.001	6.001	37.003	-	-	1	1	3	5	39.002
University of Florida	11	13	12.001	36.001	-	-	1	1	3	2	52.005
VA Polytech Inst & Sv	20	17.002	3.001	40.003	-	1	-	1	1	5	43.001
Univ of Connecticut	8	14	9.003	30.005	-	-	0	1	2	4	46.003
U CA Davis	18.003	5	2	25.003	1	-	1	1	2	4	33.005
Univ of Cincinnati	4	9	4	17	-	-	0	-	0	1	0
U of South Florida	7	5.002	6	18.002	-	-	0	1	-	1	0
Univ of Minnesota	15.002	8.001	6.001	29.004	-	-	0	1	-	1	31.004
University of Utah	1	5.001	2.001	8.002	-	-	1	1	-	1	11.002
U of Tennessee Syst	10	4	4	14	-	-	0	0	0	1	19.001
University of Arizona	1	2	4	7	-	-	0	1	-	1	15
Stanford University	12.001	6.001	1	19.002	-	-	0	1	2	1	20.002
Arizona State Univ	6.001	5	5.002	16.003	-	-	1	1	0	2	0
UMD at College Park	12.001	4	6.001	22.002	1	-	1	2	1	0	29.003
U of Iowa	7	6.001	2.001	15.002	-	-	0	1	-	1	0
Iowa State University	10	9.001	7.002	26.003	-	-	0	1	0	1	32.004
U of Washington	18.002	6	2.001	26.003	-	-	1	1	0	2	0
Johns Hopkins U	1	1	3.002	5.002	-	-	0	0	-	1	8.002
Louisiana St U Syste	10	7.001	6	23.001	-	-	0	1	2	4	29.001
West Virginia Univ	2	4	1	7	-	-	0	1	2	5	14
Univ of New Mexico	9	3.001	1.001	13.002	-	-	0	1	1	1	27.004
Clemson University	8	4	6	18	-	-	0	1	1	2	17.002
Ohio State University	7.001	3.001	7.003	17.005	-	-	1	1	0	1	18
Lehigh University	7	3.001	2	12.001	-	-	0	1	2	1	0
Michigan Tech Univ	9	10.001	8.003	27.004	-	-	0	1	2	5	17.001
University of Delaware	8	4	2	14	-	-	1	1	1	4	22
Cornell University	17.002	4.001	5.004	26.007	-	-	0	1	1	1	27.007
University of Colorado	15.001	9	6.001	30.002	-	-	0	1	1	4	36.002
Rensselaer Polytech	8	2	4.001	14.001	-	-	0	1	0	0	14.001
Drexel University	8.001	2	5.002	15.003	-	-	0	1	2	3	37.002
Colorado State Univ	25.002	4	3	32.002	-	-	0	1	2	3	20
Texas Tech University	8	5	3	16	-	-	0	0	2	1	0
U of So California	12	4	1	17	-	-	0	0	3	2	0
U CA Irvine	7	3.001	3.002	13.003	-	-	0	1	3	1.001	22
Oregon State Univ	10	4	7.002	21.002	-	-	0	2	-	2	18.004
U of Missouri Columb	3	6	5.002	14.002	-	-	0	1	1	3	23.002
U of NB at Lincoln	9	9	5.001	23.001	-	-	0	0	-	0	17.002
Princeton University	7	2.001	-	9.001	-	-	0	2	1	1	0
Northwestern Univ	16	4.001	3	23.001	-	-	0	-	2	-	0
Univ of Oklahoma	4	4	2.001	10.001	-	-	0	1	1	2	12.001
<b>Civil Engr Total</b>	<b>570.023</b>	<b>309.037</b>	<b>226.057</b>	<b>1105.117</b>	<b>4</b>	<b>5.001</b>	<b>11.001</b>	<b>20.002</b>	<b>22.001</b>	<b>13.001</b>	<b>51.003</b>
<b>Percent within race</b>	<b>52%</b>	<b>28%</b>	<b>20%</b>	<b>100%</b>	<b>20%</b>	<b>25%</b>	<b>55%</b>	<b>100%</b>	<b>43%</b>	<b>25%</b>	<b>100%</b>
<b>Percent of grand total</b>	<b>42.3%</b>	<b>22.9%</b>	<b>16.8%</b>	<b>82.0%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.8%</b>	<b>1.5%</b>	<b>1.6%</b>	<b>1.2%</b>	<b>100%</b>
<b>Females in column</b>	<b>4.0%</b>	<b>12.0%</b>	<b>25.2%</b>	<b>10.6%</b>	<b>0.0%</b>	<b>20.0%</b>	<b>9.1%</b>	<b>10.0%</b>	<b>4.5%</b>	<b>7.7%</b>	<b>6.2%</b>

\*According to civil engineering research expenditures FY1999, NSF; numbers after decimals designate females.

Reference: "The Nelson Diversity Surveys" Nelson, D.J.; Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

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Table 7. Tenured/Tenure-Track Faculty at the "Top 50" Electrical Engineering Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White			Black			Hispanic			Asian			Native Am.			Total		
	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst			
Georgia Institute of Tech	44.002	23.004	17.001	84.007	-	-	2	-	-	2	2	2	7	6.001	3	16.001	-	
Johns Hopkins U	11	1	1	13	-	-	1	1	-	1	1	-	-	1	2	-	0	
U CA Berkeley	23.001	3	2	28.001	-	-	0	1	-	-	-	-	8.001	3.001	2	13.002	-	
University of Michigan	44.003	13	11	68.003	-	-	1	-	-	1	-	-	7.001	2	7.001	16.002	-	
Pennsylvania State U	14	13.002	4.002	31.004	-	-	0	1	1	1	1	1	3.001	6	2.001	1	9.001	
Stanford University	23	7.001	8.002	38.003	-	-	2	-	2	1	-	-	6.001	3	3	12.001	25	
U of Illinois Urbana	36	12.002	13.001	61.003	1	1	-	2	-	1	-	1	14	6	5	-	0	
Utah State University	8.001	6.001	3	17.002	-	-	0	-	-	0	-	-	0	1	-	1	0	
MA Institute of Tech	39.003	10.001	4.001	53.005	1	1	1	3	2	-	-	2	9	3	1	13	-	
U CA Los Angeles	16.001	4.001	2	22.002	-	-	0	1	1	-	2	18	1	1	20	-	0	
U of Southern California	1.001	-	-	1.001	-	-	2.001	-	2.001	-	1	4	1	1.001	6.001	-	0	
U CA Santa Barbara	22.002	2	-	24.002	-	-	0	-	-	0	-	8.001	2	2	12.001	-	0	
U CA San Diego	18	4.001	-	22.001	-	-	0	1	-	1	1	13	4	-	17	-	0	
Princeton University	13	1.001	2	16.001	-	-	0	-	-	0	-	9.001	1	1.001	11.002	-	0	
Purdue University	35.002	13.003	3	51.005	-	-	0	-	-	0	-	10	3	3.001	16.001	-	0	
Cornell University	17	5.001	7.002	29.003	1	1	-	2	-	-	0	3	2	2	7	-	0	
VA Polytech Inst & St U	28	13	9.001	50.001	-	1	-	1	-	1	2	9.001	5	4	18.001	-	0	
University of Arizona	17	8.001	3.001	28.002	-	-	0	-	-	2	-	1	1	-	2	-	0	
U MD at College Park	36.001	6	7.002	49.003	-	2.001	-	1	-	1	10	2	6.001	18.001	-	0		
U TX at Austin	30	11.002	3	44.002	-	1	-	1	-	1	9	1.001	-	10.001	-	0		
NC State University	21.001	12.001	6.001	39.003	1	-	1	-	0	4	-	1	5	-	-	0		
Rensselaer Polytech Ins	20	6	3	29	-	-	0	-	-	1.001	1.001	8	-	3	11	-	0	
Carnegie Mellon U	23	4	5.001	32.001	1	1	-	2	-	1	-	6	2	2	10	-	0	
Arizona State University	15	12	3	30	-	-	0	-	0	1	-	7.001	3.001	7.003	17.005	-	0	
Ohio State University	19.001	15.002	4	38.003	-	-	0	-	1	1	2	2	5	2	9	-	0	
California Inst of Tech	10.001	1.001	2	13.002	-	-	0	-	-	0	2	-	2	1	4	-	0	
U of South Carolina	5	4	1	10	-	-	0	-	-	1	2	2	2	2	5	9	-	0
U WI-Madison	18.001	7	2.001	27.002	-	1	1	2	-	0	2	2	2	1	8	-	0	
University of Kansas	7	1	2	10	-	-	0	-	-	1	1	5	2	1	3	-	0	
Univ of New Mexico	14	6.001	5	25.001	-	-	0	-	-	1	1	2	2	1	1	5.001	-	
University of Colorado	15.002	8.001	4	27.003	-	-	0	-	-	1	1	2	3.001	1	2	7.001	-	
University of Cincinnati	7	4	2	13	-	-	1	1	2	-	1	1	5	2	1	8	-	
University of Minnesota	19.001	8	6.001	0	-	-	0	1.001	1.001	1	-	1	5	3	-	0		
Northeastern University	11	16.001	3	30.001	-	-	0	1.001	-	0	0	0	3.001	1	2	6.001	-	
Iowa State University	12	10.001	5.001	27.002	-	-	0	-	-	1.001	-	1.001	7.001	6	4	17.001	-	
Texas Tech University	6	5.001	5.001	16.002	-	-	1	-	1	-	0	2.001	-	-	2.001	-	0	
Clemson University	12.001	6	4	22.001	-	1	-	3.001	-	-	0	2	1	1	4	-	0	
Rutgers the State U NJ	8.002	5.001	5.001	18.004	-	3.001	-	1.001	-	1.001	-	1.001	7.001	6	1	8	-	0
University of IL Chicago	6	-	-	6	-	-	0	-	-	0	-	0	9.001	6	3	18.001	-	0
New Mexico State Univ	7	3	3	13	-	-	0	-	-	2	1	5	2	1	1	4	-	0
University of Delaware	7	4	2	13	-	-	1	-	1	-	2	2	2	1	1	4	-	0
Duke University	11.001	1	2.001	14.002	-	-	0	1.001	-	1	-	0	2	1	1	4	-	0
Northwestern University	9.001	4.001	2	15.002	-	1.001	-	1.001	-	1	-	1	2	5	4	2	-	0
Case Western Reserve	4	7	1	12	-	-	0	-	-	0	-	0	1	-	1	2	-	0
Vanderbilt University	6	4	3	13	-	-	0	-	-	0	-	0	2	7	-	9	-	0
Texas A&M University	20.001	7	2	29.001	-	1.001	-	1.001	1	1	-	2	9.001	4	5	18.001	-	0
U of Alabama Huntsville	10	4.001	4.002	18.003	-	1	1.001	2.001	1	1	-	1	3	1	4	2	-	0
University of Florida	12	7	3	22	-	-	1	1	-	-	2	7.001	4	2	13.001	-	0	
U MA Amherst	10	12.001	3	25.001	-	-	1	1	0	-	0	5	1.001	1	7.001	-	0	
U of Missouri Columbia	8	6	11	25	-	-	0	-	-	0	-	0	5	-	0	-	0	
<b>Electrical Engr Total</b>	<b>827.030</b>	<b>344.034</b>	<b>202.023</b>	<b>1373.087</b>	<b>7</b>	<b>20.005</b>	<b>7.002</b>	<b>34.007</b>	<b>18</b>	<b>21.002</b>	<b>10.001</b>	<b>49.003</b>	<b>266.013</b>	<b>113.008</b>	<b>94.008</b>	<b>473.029</b>	<b>0</b>	<b>0</b>
Percent within race	60%	25%	15%	100%	21%	59%	21%	100%	37%	43%	20%	100%	56%	24%	20%	100%	0%	0%
Percent of grand total	42.9%	17.8%	10.5%	71.2%	0.4%	1.0%	0.4%	1.8%	0.9%	1.1%	0.5%	2.5%	13.8%	5.9%	4.9%	24.5%	0.0%	0.0%
Females in column	3.6%	9.9%	11.4%	6.3%	0.0%	25.0%	28.6%	20.6%	0.0%	9.5%	10.0%	6.1%	4.9%	7.1%	8.5%	6.1%	0%	6.5%

\*According to electrical engineering research expenditures FY1999, NSF; numbers after decimals designate females.

Reference: "The Nelson Diversity Surveys" Nelson, D. J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/diversity/top50.html>

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Table 8. Tenured/Tenure-Track Faculty at the "Top 50" Mechanical Engineering Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White	Black	Hispanic	Asian	Native Am.	Total
	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	Full Assoc Asst	
Johns Hopkins U	9.01	2.01	-	2.02	-	15.03
University of Rochester	14	2	-	16	-	16
MA Institute of Tech	30.01	6	4.01	40.02	1	54.02
Georgia Institute of Tech	28	16.01	7.01	51.02	1	68.04
UTX at Austin	28.01	10.02	6.02	44.05	-	56.06
University of Michigan	12	10.03	7.03	29.06	1	49.07
Pennsylvania State U	22.01	4.01	5.02	31.04	-	42.04
Stanford University	16	7.01	4	27.01	1	33.01
U of Illinois Urbana-Cham	18	11	9.01	38.01	-	44.01
U CA Los Angeles	20.02	1	-	21.02	0	31.02
Texas A&M University	20.01	8	5	33.01	0	49.01
UMD at College Park	14	6.01	11.01	31.02	0	40.02
University of Arizona	12	2	3	17	-	23
University of Dayton	6.01	2	3.01	11.02	0	14.02
VA Polytech Inst & St U	17.01	9.01	5.01	31.03	1	37.03
SUNY at Buffalo	11.01	4	1	16.01	0	25.03
Purdue University	25.01	15.01	5	45.02	-	50.03
Florida State University	7	-	1	8	1.01	2.01
NC State University	7	-	2.02	9.02	1	13.01
Ohio State University	20	6	3	29	-	16.03
Arizona State University	9.01	4.01	4	17.02	-	28.03
West Virginia University	16	2	1	19	-	24
U of Iowa	20.01	7.02	2.01	29.04	-	0
University of Minnesota	3	3	3	9	-	19.01
Florida International U	8	3	2.01	13.01	-	16.03
Rutgers the State U NJ	9	5	-	14	-	44.01
U of Alabama Huntsville	5	6.01	1	12.01	-	15.01
University of Delaware	10	12.01	2	24.01	-	28.01
University of Virginia	11	11.01	8.02	30.03	-	37.07
Michigan Tech University	20.01	1	1	22.01	2	20.01
U CA Davis	24.04	4	4.01	32.05	0	18.02
U CA San Diego	9	7.02	-	16.02	0	15.01
Colorado State University	8	1.01	1	10.01	0	28.02
Case Western Reserve U	13	4	5.02	22.02	-	19.02
U MA Amherst	14	3	2	14	-	21.01
Carnegie Mellon U	7.01	2	19.01	0	10.01	21.02
Duke University	11	4	7.01	22.01	-	20.01
Clemson University	11	2	6	19	-	23.02
University of IL Chicago	11	5	2	12	-	23.01
Louisiana State U System	5	2	1	1	-	21
SUNY at Stony Brook	2	1	2	5	-	0
U of Missouri Rolla	5	4	4	13	-	0
Lehigh University	22	3	-	25	-	29
California Inst of Tech	7.01	1	3	11.01	-	11.01
Woods Hole Ocean Inst	9	9	2.01	20.01	-	21.01
Northwestern University	7	4.01	1	12.01	-	20.03
University of Houston	9	3	1	9	-	18
University of Cincinnati	4	4	4.03	22.04	-	15.01
U CA Santa Barbara	14.01	4	-	0	1	28.04
<b>Mechanical Engr Total</b>	<b>645.20</b>	<b>249.24</b>	<b>156.27</b>	<b>1050.71</b>	<b>7</b>	<b>1421.95</b>
<b>Percent within race</b>	<b>61%</b>	<b>24%</b>	<b>15%</b>	<b>100%</b>	<b>25%</b>	<b>46%</b>
<b>Percent of grand total</b>	<b>45.4%</b>	<b>17.5%</b>	<b>11.0%</b>	<b>73.0%</b>	<b>0.5%</b>	<b>0.6%</b>
<b>Females in column</b>	<b>3.1%</b>	<b>9.6%</b>	<b>17.3%</b>	<b>6.8%</b>	<b>0.0%</b>	<b>0.0%</b>

\*According to mechanical engineering research expenditures FY1999, NSF; numbers after decimals designate females.  
 Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

**Table 9. Tenured/Tenure-Track Faculty at the "Top 50" Economics Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)**

University	White	Black	Asian	Native Am.	Total																
	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	
Harvard University	34.001	3	9.001	46.002	1.001	-	1.001	-	2.001	2.001	1	-	1.001	-	-	-	0	0	0	49.004	
Pennsylvania State U	12	4	1	17	-	-	-	0	-	1	-	-	3.002	8.004	-	-	-	-	-	0	27.005
U WI-Madison	18.001	3	9.002	30.003	-	-	-	0	-	1	-	-	1	2	-	-	-	-	-	0	33.003
University of Georgia	8	5	2	15	-	-	-	0	-	1	2	-	-	1	2	3	-	-	-	0	16
Georgia State University	7.001	8.004	8.003	23.008	-	1	-	1	2	1	-	-	1	2	3	-	-	-	-	0	30.008
University of Michigan	25	3.001	7.001	35.002	1	-	-	1	1	-	-	-	1	6.002	7.002	-	-	-	-	0	44.004
Texas A&M University	13	3	5.001	21.001	-	-	0	1	1	-	-	-	1	1	4	1	-	-	-	1	28.002
U of Ill Urbana-Cham	18.001	5	5.001	28.002	-	-	0	1.001	-	1.001	-	-	1	2.001	7.001	-	-	-	-	0	36.004
Michigan State Univ	26.003	5.001	4.001	35.005	-	-	-	1.001	-	1.001	1.001	-	1	1	2	3	-	-	-	0	38.007
University of Minnesota	14.001	2	5.002	21.003	-	-	-	-	-	-	0	-	1	1	2	6	-	-	-	0	23.003
University of Florida	13.001	3	3.001	19.002	-	-	0	-	-	-	0	-	1	3	2	6	-	-	-	0	21.002
U of Missouri Columbia	3	5	2.001	10.001	-	-	0	-	-	-	0	-	1	3	2	6	-	-	-	0	16.001
UMD at College Park	16.001	10.003	5	31.004	1	-	-	1	4.001	-	1	5.001	1	1	2	4	-	-	-	0	40.006
Washington State U	7	1	1.001	9.001	-	1	-	1	-	-	0	-	1	3.001	4.001	-	-	-	-	0	14.002
Purdue University	41.002	12.003	8.001	61.006	1	-	-	1	-	-	0	-	1	-	0	0	-	-	-	0	62.006
Iowa State University	34.004	8	7.002	49.006	-	-	0	-	-	-	0	-	1	1	3	5	-	-	-	0	54.006
U CA Berkeley	37.007	2	3	42.007	-	-	1.001	1.001	-	1	1	1	2	-	2	4	-	-	-	0	48.008
University of Arizona	12	7.001	1	20.001	-	1	1	-	-	1	1	-	1	1	2	4	-	-	-	0	24.002
Oklahoma State Univ	22.002	1	2	3.001	12.001	-	0	-	-	0	-	0	1.001	-	1	10	-	-	-	0	26.003
Louisiana St U System	7	2	-	12.001	-	-	0	-	-	0	-	0	-	0	2	4	-	-	-	0	12.001
Cornell University	43.004	11.002	12	66.006	-	-	0	-	-	1	1	-	3.003	3.003	-	-	-	-	-	0	70.009
U of Nebraska Lincoln	8	5.002	2.001	15.003	-	-	0	-	-	0	-	-	1	-	1	4	-	-	-	0	16.003
Ohio State University	19.002	6.001	3	28.003	-	-	0	1	-	0	-	1	5	3	2	10	-	-	-	0	39.003
Princeton University	31.002	2	12.001	45.003	1.001	-	1.001	-	-	0	-	0	2	2	4	-	-	-	-	0	51.005
Univ of Memphis, The	8.002	1	-	9.002	2.001	-	2.001	-	-	0	-	0	1	1	4	-	-	-	-	0	15.003
U of Tennessee System	5	2.001	4	14.001	-	-	0	-	-	0	-	-	0	1	2	3	-	-	-	0	14.001
NC State University	32.001	9.001	5	46.002	1	-	1	-	-	0	-	0	1	1	2	3	-	-	-	0	50.002
U of Pennsylvania**	20	1	11.002	32.002	-	-	0	-	-	1	-	1	3	4	2	1	4	-	-	0	40.002
MA Institute of Tech	23.001	1.001	9.001	33.003	-	-	0	1	1	-	0	2	1	-	1	4	-	-	-	0	36.003
Univ of Connecticut	10.003	3	23.004	-	1	-	1	-	-	0	1	1	-	1	2	-	-	-	-	0	26.004
Arizona State Univ	14	3	1	18	-	-	0	-	3	1	4	1	2.001	-	3.001	-	-	-	-	0	25.001
Montana St U Bozeman	12.001	6.002	2	20.003	-	-	0	-	-	0	-	-	0	1	2	3	-	-	-	0	20.003
Indiana University	10	4.001	3	17.001	-	1	1	-	-	0	-	0	1	1	2	4	-	-	-	0	22.001
Carnegie Mellon U	8.001	3	4	15.001	-	-	0	-	-	0	-	0	1	2	3	-	-	-	-	0	18.001
University of Kansas	3	4	2.001	9.001	-	1.001	1.001	-	-	0	-	-	0	1	2	3	-	-	-	0	16.003
University of Oklahoma	6	1	5.003	12.003	-	1	1	-	-	0	-	-	0	1	2	3	-	-	-	0	15.003
Kansas State University	6	3	1.001	10.001	-	0	-	1	-	-	0	-	0	2	2	4	-	-	-	0	14.001
Georgia Inst of Tech	2.001	-	2	4.001	1	-	2	-	-	0	-	-	2.001	2	4.001	-	-	-	-	0	10.002
US Naval Postgrad Sch	5	4.001	2.001	11.002	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	0	11.002
Texas Tech University	3.001	6.001	3	12.002	-	-	0	-	-	0	-	-	0	2	4.001	-	-	-	-	0	12.002
Rutgers, State U NJ**	14.001	6.002	8.002	28.005	-	-	0	-	-	1	-	-	1	3	-	4	-	-	-	0	33.005
U of South Carolina	10	5.002	3.001	18.003	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	0	18.003
Duke University	14.001	2	12.002	28.003	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	0	28.003
Columbia U Teachr Col**	2	-	2	-	-	-	0	-	-	1	-	-	1	1	-	1	-	-	-	0	4
Brown University	14	1	6	21	-	-	0	-	-	1	-	-	1	2	2.001	5.001	-	-	-	0	27.001
New York University	14	3	4.001	21.001	2	-	1.001	-	-	2	3.001	-	3	1	3	7	-	-	-	0	33.002
U CA Los Angeles	25.003	3.003	11.002	39.008	-	-	0	-	-	0	-	-	4	4	-	-	-	-	-	0	43.008
Case Western Reserve U	3	4.002	5.001	12.003	-	-	0	-	-	0	-	-	0	-	-	-	-	-	-	0	12.003
Clemson University	9	3	2	14	-	-	0	-	-	0	-	-	1	-	1	-	-	-	-	0	15
VA Polytech Inst & St U	7.001	5.002	2.001	14.004	-	-	0	-	-	0	-	-	1	-	1	-	-	-	-	0	15.004
<b>Economics Total</b>	747.050	206.038	229.040	1182.128	10.003	5	6.002	21.005	17.003	6.001	15.003	38.007	47.003	34.002	66.015	147.020	1	0	0	1	1389.160
<b>Percent within race</b>	63%	17%	19%	100%	48%	24%	29%	100%	45%	16%	39%	100%	32%	23%	45%	100%	100%	0%	0%	100%	0%
<b>Percent of grand total</b>	53.8%	14.8%	16.5%	85.5%	0.7%	0.4%	1.5%	1.2%	0.4%	1.1%	2.7%	3.4%	2.4%	4.8%	10.6%	0.1%	0.1%	0.1%	0.1%	11.5%	0%
<b>Females in column</b>	6.7%	18.4%	17.5%	10.8%	30.0%	0%	33.3%	23.8%	17.6%	16.7%	20.0%	18.4%	6.4%	5.9%	22.7%	13.6%	0%	0%	0%	0%	11.5%

\*According to economics research expenditures FY1999, NSF; numbers after decimals designate females. \*\*No response: data are from other sources.

Reference: "The Nelson Diversity Survey's" Nelson, D.J.; Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

Table 10. Tenured/Tenure-Track Faculty at the "Top 50" Political Science Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White	Black	Asian	Native Am.	Total															
	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot
Harvard University	29.006	4.001	10.003	43.001	-	-	-	0	1	-	-	1	1	3.002	5.002	-	-	-	-	0
U CA Berkeley	29.004	12.003	1	42.007	-	-	-	0	2	2.001	1	5.001	-	-	-	-	-	-	-	49.012
Princeton University **	19.002	3.001	17.008	39.011	-	-	-	0	1	-	-	1	-	-	-	-	-	-	-	47.008
Indiana University	15.003	7.002	3.001	25.006	-	2.001	-	2.001	-	1	1	-	0	-	-	-	-	-	-	40.011
Rutgers the State U NJ	18.004	8.004	4.001	30.009	-	-	-	0	-	-	-	0	-	-	-	-	-	-	-	27.007
U of Pennsylvania	13.003	4.001	5.003	22.007	-	-	-	1	1	-	-	0	-	-	-	-	-	-	-	33.011
University of Michigan	21.004	7.004	10.003	38.011	1	-	-	1	2	-	-	0	1.001	-	-	-	-	-	-	24.007
U MD at College Park	21	8.002	4.003	33.005	2	3.001	-	5.001	-	-	-	0	1	1.001	2.001	-	1	-	1	41.007
George Mason Univ	7	9.003	8.004	24.007	-	3.002	-	1.001	1.001	-	-	0	-	-	-	-	2	-	-	29.009
U of Washington	13.002	10.004	6.001	29.007	-	1.001	1.001	2.002	-	-	-	0	-	-	-	-	-	-	-	31.009
Vanderbilt University	10.001	1	4.002	15.003	1.001	-	-	1.001	-	-	-	0	-	-	-	-	-	-	-	16.004
Northwestern Univ	13.003	8.002	8.004	29.009	-	1	1	2	-	-	-	0	1	1	-	-	2	-	-	33.009
Carnegie Mellon U	1	-	2	3	-	-	1.001	1.001	-	-	-	0	-	-	-	-	-	-	-	4.001
U of South Carolina	18.004	8.001	7.003	33.008	1	-	-	1	-	-	-	0	1	-	-	-	1	-	-	0
Duke University	14.002	4.001	6	24.003	1.001	-	-	1.001	-	-	-	0	1	-	-	-	2	-	-	27.004
Texas A&M Univ **	20.002	3.001	9.004	32.007	2	-	-	2	-	-	-	1.001	1.001	-	-	-	1	-	-	36.008
University of Chicago	13.003	9	5.001	27.004	1	1.001	1.001	3.002	-	1	1	-	1	-	-	-	1	-	-	32.006
Georgetown University	18.002	12.001	6.001	36.004	-	-	1	1	1	-	-	1	-	-	-	-	2	-	-	41.005
Tufts University	3	6.002	4.002	13.004	-	2.002	1	3.002	-	-	-	0	-	-	-	-	1	-	-	17.006
U CA San Diego	19.002	6.001	4	29.003	1.001	-	-	1.001	1	-	-	1	-	-	-	-	0	-	-	31.004
MA Institute of Tech	10.001	7	4.001	21.002	-	1.001	-	1.001	-	-	-	0	1.001	1	1.001	3.002	-	-	-	25.005
Michigan State Univ	15.003	8	5.001	28.004	1	2	-	3	-	-	-	1.001	1.001	-	-	-	0	-	-	32.005
University of Georgia	13.001	12.001	7.002	32.004	-	-	2.001	2.001	-	-	-	0	1	-	-	-	1	-	-	35.005
Florida State Univ	8	8.002	5.002	21.004	-	1	-	1	-	-	-	1	-	-	-	-	1	-	-	24.004
New York University	16.001	6.001	4.002	26.004	-	1	-	1	-	-	-	0	1	-	-	-	2	3	-	30.004
U CA Irvine	16.004	7.003	2	25.007	1.001	-	-	1.001	-	-	-	1.001	1.001	-	-	-	0	-	-	30.014
Clemson University	4	-	2.002	6.002	-	1	-	1	-	-	-	1	-	-	-	-	1	1	-	8.002
U of Iowa	11	5.001	5.002	21.003	-	-	0	-	1	-	-	1	1.001	2.001	-	-	1	2	-	25.004
U of Missouri St Louis	7.002	2	4.001	13.003	-	3.002	-	3.002	-	1	-	0	-	-	-	-	0	-	-	17.005
U CA Davis	8	6.002	3.001	17.003	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	18.004
George Washington U	16.002	14.004	6.002	36.008	-	-	0	-	-	-	-	0	-	-	-	-	2.001	-	-	38.009
Univ of Minnesota	11.002	6.003	10.003	27.008	1	-	-	1	-	-	-	1	1.001	2.001	-	-	1	2	-	28.008
VA Polytech Inst & St U	7.001	4.001	3.001	14.003	-	0	-	0	-	-	-	0	-	-	-	-	0	-	1	15.003
Ohio State University	13.002	6.002	10.004	29.008	1	-	1	2	-	-	-	0	-	-	-	-	1	1	-	32.008
Pennsylvania State U	7	12.004	-	19.004	-	-	0	-	-	-	-	0	-	-	-	-	1.001	-	1.001	0
SUNY at Albany	11.001	8.002	1.001	20.004	-	-	0	-	1	-	-	1	-	-	-	-	1	-	-	20.005
Univ of New Mexico	4.001	6.002	2	12.003	-	-	0	-	1	-	-	0	-	-	-	-	0	-	-	22.004
Univ of Oklahoma	7	7.001	11.006	25.007	1	-	1	-	1	-	-	1.001	-	2.001	-	-	0	-	-	14.004
Univ of Missouri Columbia	6.001	6.001	8.005	20.007	2	1.001	-	3.001	-	-	-	0	1	-	-	-	0	-	-	27.007
U WI-Madison	24.004	3.002	10.001	37.007	-	-	1.001	1.001	-	-	-	1	-	-	-	-	2.001	2.002	-	24.008
New School University	4.001	2.001	1.001	7.003	-	-	1	-	-	-	-	0	-	-	-	-	2.001	2.002	-	16.006
Arizona State Univ	11.002	7.003	1.001	19.006	-	1	-	1	-	-	-	1	3	4	1	-	1	1	-	0
Georgia State Univ	1	5.001	10.001	16.002	-	1.001	-	1.001	-	-	-	0	-	-	-	-	1	1	-	18.003
Western Michigan U	5	6.001	5.002	16.003	-	1.001	-	1.001	-	-	-	0	-	-	-	-	0	-	-	17.004
US Naval Postgrad Sch	7.001	6.001	4	17.002	-	0	-	0	-	-	-	0	-	-	-	-	0	-	-	17.002
U of IL Urbana-Cham	7.001	5.001	19.004	1.001	1	3.002	-	1	-	-	-	1	1	1	1	1	1	3.002	-	26.008
U Tennessee System	7.001	4.001	3.002	14.004	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-	14.004
U of Nebraska at Lincoln	6	7.002	3.001	16.003	1	1	-	2.001	3.001	-	-	0	-	-	-	-	0	-	-	19.004
U MA Boston	6.002	8.002	14.004	1.001	-	2	-	2	-	-	-	0	-	-	-	-	1	-	-	17.004
<b>Political Science Total</b>	587.081	320.085	259.090	1166.256	22.005	28.015	16.006	66.026	6	8.002	8.004	22.006	16.002	20.006	28.014	64.022	0	1	1	2
<b>Percent within race</b>	50%	27%	22%	33%	42%	24%	100%	27%	36%	36%	100%	25%	31%	44%	100%	0%	0%	0%	0%	2
<b>Percent of grand total</b>	44.5%	24.2%	19.6%	88.3%	1.7%	2.1%	1.2%	5.0%	0.5%	0.6%	1.7%	1.2%	1.5%	2.1%	4.8%	0.0%	0.1%	0.2%	0.0%	23.5%
<b>Females in column</b>	13.8%	26.6%	34.7%	22.0%	53.6%	37.5%	39.4%	0.0%	25.0%	50.0%	27.3%	12.5%	30.0%	50.0%	34.4%	0%	0.0%	0%	0%	1320.310

\*According to political science research expenditures FY1999, NSF; numbers after decimals designate females. \*\*Declined to participate; data are from other sources.  
Reference: "The Nelson Diversity Surveys" Nelson, D.J.; Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

Table 11. Tenured/Tenure-Track Faculty at the "Top 50" Sociology Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White			Black			Hispanic			Asian			Native Am.			Total
	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	
Brandeis University	5.001	2.002	2	9.003	-	-	1.001	1.001	-	-	-	-	3.003	5.003	-	10.004
University of Michigan	15.002	8.005	4.003	27.01	2	-	2	4	-	1.001	-	1.001	2	-	-	0
Pennsylvania State U	17.001	4.002	6.004	27.007	-	1	-	1	-	1	-	1	-	-	-	37.014
Iowa State University	18.006	7.003	9.006	34.015	1.001	-	1.001	2.002	-	-	1	1	-	-	-	29.007
U of NC Chapel Hill	17.005	1	4	22.005	-	-	1.001	1.001	-	-	0	-	-	-	-	37.017
U CA Berkeley	19.007	2.001	2.001	23.009	1	1	-	2	1	1.001	-	2.001	-	1.001	-	24.006
University of Arizona	8.002	4.003	3.001	15.006	1	-	-	1	1	-	-	1	-	-	-	28.011
U WI-Madison	18.006	6	13.005	37.011	1	-	1	2	-	-	0	2.001	-	1.001	3.002	43.013
U of Pennsylvania	17.006	1.001	5.002	23.009	2	-	1.001	3.001	-	-	0	-	1.001	1.001	-	27.011
U CA San Diego	12.002	8.003	5.001	25.006	1.001	1	-	2.001	-	1	-	1	-	0	-	28.007
U CA Los Angeles	25.005	5.001	6.005	36.011	2	-	-	2	2	2.001	1	5.001	1.001	-	1	46.013
U TX at Austin	18.004	4.002	6.003	28.009	1	-	1.001	2.001	1	-	1	-	1	-	-	32.010
Indiana University	15.003	4.003	5.003	24.009	-	1.001	1	2.001	-	-	0	-	1	-	-	27.010
Duke University	10.003	-	5.003	15.006	-	1.001	-	1.001	-	1	-	1	2	-	3	20.007
Florida International U	10.002	10.005	1.001	21.008	-	1	-	1	1.001	2	1.001	4.002	-	-	-	26.010
Indiana State University	2	2.001	2.001	6.002	-	-	0	-	-	0	-	1.001	1.001	-	1	8.003
Columbia U in City of NY	11.001	3.002	3.001	17.004	-	-	1.001	1.001	-	-	0	-	1	-	-	19.005
Johns Hopkins U	5	1.001	-	6.001	-	1.001	-	1.001	-	0	-	1.001	-	1	-	8.003
University of Colorado	6.001	4.001	-	10.002	-	-	0	-	-	0	-	1	2	-	0	12.002
Georgia State University	6.001	3.002	8.004	17.007	-	-	2.001	2.001	-	-	0	-	1	-	-	21.009
Rutgers the State U NJ	12.004	15.009	6.004	33.017	-	2.001	1.001	3.002	-	1	1	-	0	-	-	36.019
U of IL Urbana-Cham	3	2.001	5.004	10.005	-	1.001	2.001	3.002	-	1	1	2	-	1	3	4
SUNY at Albany	11.004	2	23.006	-	1	-	1	-	-	1	-	-	0	-	-	19.007
Texas Tech University	3	3.001	2.001	8.002	-	-	0	-	-	0	-	1	1	2	-	25.006
Washington State U**	9.001	5.001	6.002	20.004	-	-	0	-	-	0	-	1	-	1	-	9.002
University of Akron	6.001	4.003	3.001	13.005	-	2	2	-	-	0	-	0	-	0	-	20.004
Temple University	15.007	7.003	3.001	25.011	1.001	-	1.001	-	1	-	1	-	1	-	-	17.006
University of Delaware	8.003	3.002	3.003	14.008	-	1.001	-	1.001	-	0	-	0	-	0	-	27.012
U of Iowa	4.002	5.003	4.003	13.008	-	-	0	-	-	0	-	0	-	0	-	16.009
Florida State University	11.003	4.002	7.003	22.008	-	-	0	-	-	0	-	1	-	1	-	14.008
U MD at College Park	14.005	6.002	4.002	24.009	-	1	1.001	2.001	-	1	-	1	-	1	-	22.008
U of South Carolina	9.002	1.001	1	11.003	1	-	1	-	-	0	-	1	-	1	-	29.011
University of IL Chicago	5	5.002	6.005	16.007	1	1.001	1	3.001	-	1.001	1.001	-	1	1	2	13.003
Georgetown University	3.001	3.001	1.001	7.003	1.001	-	1.001	-	1	1	-	0	-	0	-	22.009
U of New Hampshire	5.001	3.002	5.003	13.006	-	-	0	-	-	0	-	0	-	0	-	9.004
US Naval Postgrad Sch	1	1	-	2	-	-	0	-	-	0	-	-	-	-	0	13.006
Ohio State University	12.004	10.005	7.004	29.013	1.001	-	2.001	-	1	-	0	-	0	-	0	2.006
University of Georgia	7.002	4	7.003	18.005	-	-	2.001	-	1	-	0	-	1	-	0	33.014
Purdue University	11.001	14.006	4.002	29.009	-	1.001	1.001	2.001	-	-	0	-	1.001	1.001	-	32.011
University of Kentucky	8.001	10.005	4.001	22.007	1.001	1.001	-	2.002	-	1	2.002	3.002	-	1	0	24.009
U of Nebraska at Lincoln	7.003	1.001	3.003	11.007	-	1	-	1	-	-	0	-	0	-	0	15.009
University of Minnesota	10.005	4	8.003	22.008	-	-	0	-	-	0	-	2.001	-	0	-	24.009
Louisiana State U System	8.002	3	2	13.002	1	-	1	-	-	0	-	0	-	1	3	17.002
U of Southern California	6.001	2	2.002	10.003	-	1.001	1.001	2.002	-	1.001	1	2.001	-	1	-	15.006
Univ of Memphis	5.001	5.003	2.001	12.005	-	-	0	-	-	0	-	0	-	0	-	12.005
Michigan State Univ**	11.003	4	3.001	18.004	2.001	-	1	3.001	2.001	-	2.001	-	-	0	-	23.006
U of Missouri Columbia	9.002	-	3.002	12.004	-	1.001	1.001	2.002	-	1.001	1.001	-	1	-	0	15.006
University of Miami	3	2.001	4.004	9.005	2	1.001	-	3.001	-	1.001	1.001	-	0	-	0	13.007
Cornell University	6.002	4.002	4.003	14.007	-	-	0	-	-	0	-	1.001	-	1	-	15.007
University of Chicago**	11.002	1	3.001	15.003	-	1	1	-	-	0	-	0	-	1	-	18.003
<b>Sociology Total</b>	486.119	221.098	203.107	910.324	23.007	21.011	26.014	70.032	10.002	13.004	12.006	35.012	15.002	19.004	217.008	51.014
Percent within race	53%	24%	22%	33%	30%	37%	100%	29%	37%	34%	100%	29%	37%	33%	100%	0%
Percent of grand total	45.5%	20.7%	19.0%	85.2%	22.0%	2.0%	2.4%	6.6%	0.9%	1.2%	1.1%	3.3%	1.4%	1.8%	4.8%	0.2%
Females in column	24.5%	44.3%	52.7%	35.6%	30.4%	52.4%	53.8%	45.7%	20.0%	30.8%	50.0%	34.3%	13.3%	21.1%	47.1%	27.5%

\*According to sociology research expenditures FY1999, NSF; numbers after decimals designate females. \*\*Declined to participate; data are from other sources.

Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/diversity/top50.html>

35.8%

1068.382

Table 12. Tenured/Tenure-Track Faculty at the "Top 50" Psychology Departments\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White			Black			Hispanic			Asian			Native Am.			Total
	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	Full	Assoc	Asst	
U WI-Madison	22.009	3.002	8.001	33.012	-	-	2.001	2.001	-	-	-	-	1.001	1.001	-	35.013
Univ of Oklahoma	6	3.001	7.005	16.006	-	-	2.002	2.002	-	-	-	-	1.001	1.001	-	19.008
Penn State Univ***	20.007	12.004	8.004	40.015	-	-	1	-	1	-	0	-	-	-	-	42.017
U of Washington	20.006	8.004	9.005	37.015	-	-	1	-	1	-	3.001	-	-	0	-	44.017
U CA Los Angeles	37.011	6.002	9.002	52.015	3.001	-	3.001	2	-	1	3	2.002	1.001	5.004	-	63.020
Indiana University	23.004	8.001	7.004	38.009	-	-	0	-	-	0	-	-	0	-	-	38.009
Univ of Michigan	45.018	11.008	9.003	65.029	3.001	1	6.005	10.006	2	2.001	2.002	6.003	-	2.001	7.004	9.005
Rutgers the St U NJ	6.001	3.001	5.002	14.004	-	-	0	-	-	0	1.001	-	-	1.001	-	1.001
Georgia State Univ	8.003	9.005	8.005	25.013	-	-	3	-	3	-	1	2	-	-	1	-
Univ of Colorado	26.006	9.002	9.001	44.009	-	-	0	-	0	-	1.001	-	-	3.002	3.002	-
U of IL Urbana-Champaign	32.007	10.005	6.001	48.013	-	-	1.001	1.001	-	-	1	1	-	2.002	2.002	-
Univ of Memphis	18	3	5.002	26.002	-	1	-	-	-	0	-	0	-	1	-	0
Univ of Minnesota	20.003	7.003	7.002	34.008	-	-	0	-	-	0	-	-	-	3	3	-
U CA Berkeley	26.007	4.002	4.001	34.01	1	-	1	-	1	-	1	-	-	2.001	3.001	-
Univ of Georgia	19.004	9.002	9.004	37.01	-	2.002	2.002	1.001	-	-	1.001	-	-	1	-	41.013
U of South Florida	21.002	9.006	4.002	34.01	-	1	-	-	-	0	-	-	-	1	-	36.010
Cornell University	18.006	2	4	24.006	-	-	0	-	-	0	-	-	-	-	-	24.006
Carnegie Mellon U	14.004	3.002	5.004	22.01	-	-	0	-	-	0	-	-	-	-	-	22.010
Univ of Rochester	10.002	2	2.002	14.004	-	-	0	-	-	0	-	-	-	-	-	14.004
Univ of Miami **	14.004	6.004	3	23.008	-	-	0	1.001	-	4.001	5.002	-	-	0	-	28.010
Arizona State Univ	28.005	8.003	5.004	41.012	-	-	0	3.001	3.002	-	6.003	1	1.001	2.001	-	49.016
U of Connecticut **	25.005	12.005	7.004	44.014	-	-	1.001	1.001	-	1	1	-	-	1	-	47.015
SUNY at Buffalo	10.003	9.003	6.003	25.009	-	-	0	-	-	1.001	1.001	-	-	0	-	26.010
Princeton Univ	19.006	-	2.001	21.007	-	-	1.001	1.001	-	-	0	-	-	1	-	23.008
OR Health Sci U***	2.001	-	-	2.001	-	-	0	-	-	0	-	-	-	0	-	2.001
U AL Birmingham	13.004	8.002	4.002	25.008	-	-	0	-	-	1.001	1.001	-	-	1	-	27.010
U CA San Diego	16.004	3.001	6.002	25.007	-	-	0	-	-	1.001	1.001	1	-	1	-	27.008
New York Univ	25.009	9.002	1	35.011	-	2.001	-	2.001	-	1.001	-	-	-	1	-	39.013
Florida State Univ	19.003	8.002	7.003	34.008	-	-	0	-	-	2.001	-	-	-	1	-	37.009
Harvard University	14.004	3.002	4.002	21.008	-	-	0	-	-	0	-	-	-	3.002	-	24.010
U of New Mexico	13.004	4.002	3.001	20.007	-	-	0	1	-	2	-	-	-	1.001	-	23.008
Univ of Florida	12.005	6.001	3.001	21.007	-	-	0	-	-	0	-	-	-	0	-	21.007
Univ of Pittsburgh	15.004	10.001	4.002	29.007	1.001	-	1.001	-	0	-	0	-	-	1.001	-	31.009
San Diego St Univ	24.008	9.006	9.005	42.019	-	-	0	-	-	2.001	1.001	3.002	-	-	-	46.022
Univ of IL Chicago	12.003	10.003	5.001	27.007	-	1	2.001	3.007	-	2.001	-	2.001	-	-	1.001	-
U of Rhode Island	19.006	3.001	2.002	24.009	-	1.001	2.001	3.002	-	-	0	-	-	1.001	1.001	-
Duke University	12.002	2.001	4.002	18.005	-	-	0	-	-	0	-	-	-	0	-	18.005
Temple Univ***	21.006	4.001	7.001	32.008	1	-	1	-	-	0	-	-	-	0	-	33.008
U of MO Columbia	11.009	6.002	11.006	28.017	-	-	0	1.001	2.001	3.002	-	-	-	1.001	1.001	31.019
Stanford University	16.004	4.001	4.002	24.007	2	-	2	-	-	0	-	-	-	0	-	27.008
U MA Amherst	36.011	5.005	3.002	44.018	-	-	0	-	-	0	-	-	-	1	-	45.018
U of So California	18.003	9.003	4.001	31.007	-	1	1	-	-	0	-	-	-	0	-	34.007
U of South Carolina	17.003	4.002	4.001	25.006	-	1.001	1.001	-	-	1.001	1.001	-	-	0	-	27.008
Ohio State Univ	31.008	19.005	4.002	54.015	-	-	0	-	-	1.001	1.001	1	2.001	3.001	-	58.017
Yale University	13.003	1	11.003	25.006	-	-	0	-	-	0	-	-	-	1.001	-	26.007
U of Pennsylvania	17.004	3.001	5.003	25.008	-	0	-	1	-	-	0	-	-	0	-	26.008
Georgia Inst of Tech	11.003	4.001	4	19.004	-	1.001	1.001	-	-	0	-	-	-	0	-	20.005
Johns Hopkins U	5.001	-	4.002	9.003	-	-	0	-	-	0	-	-	-	0	-	9.003
SUNY Binghamton	14.003	3.003	7.003	24.009	-	-	0	-	1.001	-	1.001	-	-	1.001	-	26.011
Colorado State U	17.001	5.005	5.002	27.008	-	0	-	1	1.001	2.001	-	1	-	1	-	31.009
<b>Psychology Total</b>	910.239	298.118	273.113	1481.470	10.003	14.004	20.015	44.022	18.005	15.009	21.012	54.026	10.006	14.005	33.017	57.028
Percent within race	61%	20%	18%	23%	32%	45%	100%	33%	28%	39%	100%	18%	25%	58%	100%	20%
Percent of grand total	55.5%	18.2%	16.6%	90.2%	0.6%	0.9%	1.2%	2.7%	1.1%	0.9%	1.3%	0.6%	3.5%	0.1%	0.2%	100%
Females in column	26.3%	39.6%	41.4%	31.7%	30.0%	28.6%	75.0%	50.0%	27.8%	60.0%	57.1%	48.1%	60.0%	35.7%	51.5%	66.7%

\* According to psychology research expenditures FY1999, NSF; numbers after decimals designate females. \*\*Declined to participate; data are from other sources. \*\*\*No response; data are from other sources.

Reference: "The Nelson Diversity Surveys" Nelson, D.J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/diversity/top50.html>

Table 13. Tenured/Tenure-Track Faculty at "Top 50" Departments of Biological Sciences\* by Race/Ethnicity, by Gender, and by Rank (FY 2002)

University	White	Black	Hispanic	Asian	Native Am.	Total								
	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full	Assoc	Asst	Tot	Full Assoc Asst Tot	
Baylor Col of Medicine	43.008	29.011	21.010	93.029	-	-	1	2	5.002	-	10.001	15.003	-	
Washington University	47.006	7.001	34.006	88.013	-	-	1	1	4	-	4.001	8.001	-	
U of Pennsylvania	19.003	0	8.004	27.007	-	-	0	-	1.001	-	1	2.001	-	
Rockefeller Univ	11.001	2	2.001	15.002	-	-	0	-	-	1	1	2	-	
Harvard University	61.009	6	11.002	78.011	1	-	1	-	2.002	1.001	1	4.003	-	
U of Washington	56.009	14.008	10.003	80.020	-	1	1	2	-	3	1.001	3.002	5.003	
U WI-Madison	69.007	17.004	19.010	105.021	-	-	0	2	2	4	-	2.002	2.002	-
Johns Hopkins U	16.003	6.004	3.001	25.008	-	-	0	2	-	2	2.001	-	3.001	-
Texas A&M University	80.007	42.006	19.004	141.017	-	-	0	-	1.001	5	6.001	-	2.001	2.001
U CA Berkeley	93.018	28.010	16.006	137.034	1	1	1.001	3.001	3	1	5	8.004	4	1
U of NC-Chapel Hill	40.010	10.003	13.004	63.017	-	1.001	-	1.001	-	0	-	1	2	3
Yale University	21.004	8.002	5.002	34.008	-	-	0	-	-	0	-	4.001	5.001	-
University of Michigan	19.001	8.003	-	27.004	-	-	0	-	-	1.001	1.001	-	-	0
Columbia U in City, NY	40.008	11.002	5	56.010	-	-	0	-	-	0	-	2	5.002	7.002
U TX SW Med Ctr, Dallas	18.003	2.001	12.002	32.006	-	-	0	-	2	2.001	5.001	3	-	-
Tufts University	6.002	7.002	4.003	17.007	-	1.001	1.001	-	1	1	1.001	-	1.001	-
U TX MD Anderson Cnrc	4.001	5	6.002	15.003	-	1.001	1	2.001	-	0	2.001	1.001	1	4.002
University of Georgia***	104.015	32.008	29.009	165.032	1	-	1	-	-	0	2	4	4.002	10.002
20.003	11.001	5.001	36.005	-	-	-	0	-	0	2	1	-	3	-
U CA Davis***	50	24.005	17.006	91.011	-	-	0	1	-	1	3	2.002	1.001	6.003
Duke University	18.001	10.001	6.002	34.004	-	-	0	-	-	0	1.001	2.002	1	4.003
NC State University***	49.010	19.002	13.002	81.014	1	-	1.001	2.001	-	-	-	2.001	2.001	1
Vanderbilt University	30.002	12.003	10.001	52.006	-	-	0	-	-	0	-	1.001	1.001	-
Michigan State U	61.009	18.007	27.011	106.027	2	-	2	3	-	1	4	6	3.002	3
Pennsylvania State U	42.006	16.002	10.003	68.011	-	-	2	2	-	0	4	2	7.001	13.001
U of Minnesota***	73.015	22.009	20.006	115.030	-	-	0	-	-	1	1	4.001	-	5.002
MA Institute of Tech	29.005	10.004	8.003	47.012	-	-	0	-	-	0	3	2	1	6
Northwestern U	34.003	7.001	15.006	56.010	-	-	0	-	2.001	-	1.001	7	1	2
University of Florida	68.009	30.010	19.003	117.022	1	1	1	3	-	1	4	6	3.002	3
Louisiana St U System	85.008	40.008	26.007	151.023	-	1	1	2	-	1	1	4	2	10
University of Arizona***	70.013	30.007	18.008	118.028	-	1	-	1	-	1	1	1	2	4
U Med & Dent of NJ	24.008	6.005	9.001	39.014	-	1.001	-	1.001	-	-	1	3	-	4
Cornell University	98.012	28.008	27.010	153.03	2	-	2	-	-	3.002	3.002	7.002	4.001	8.003
Mt Sinai Sch Med	7.001	3	5	15.001	-	-	0	-	1.001	1.001	3.001	1	2.001	6.002
U CA Irvine***	47.009	8.001	12	67.010	1	-	1	3	-	3	4	2.001	2.001	8.002
SUNY at Buffalo	28.003	10.002	7.004	45.009	1.001	-	1.001	1	-	1.001	2.001	2	1	2
U CALOS Angeles	18.002	1	6.001	25.003	-	-	0	0	2.001	-	2.001	-	0	-
Ohio State University	41.003	28.005	23.007	92.015	-	1	1.001	2.001	-	1	1	6.001	5.003	2
Case Western Res U**	8	2	-	10	-	1	-	1	-	0	-	-	0	-
Purdue University	80.008	29.004	24.009	133.021	1	-	1	-	-	1	2	4	1	5
SUNY at Stony Brook	10	10.004	3	23.004	-	-	0	-	-	0	-	1	1	-
U TX MedBr at Galveston	1.1	1	2	14	-	-	1	-	-	1	1	3	-	1
New York University	9.004	7.001	4.001	20.006	-	-	0	1	-	1	3	4	3.002	10.002
University of Cincinnati	13.003	8.002	4.001	25.006	-	-	0	-	1.001	1.001	-	-	1.001	-
University of Kansas***	22.004	16.004	7.002	45.010	1	-	0	-	-	1	1	1	3	-
Emory University	24.004	8.002	14.004	46.010	1	-	1	2	-	1	1	5.003	6.003	-
University of Colorado	36.006	10.004	11.002	57.012	1	-	1	1	-	1	1	8	-	0
Rutgers the State U NJ	32.006	24.006	13.003	69.015	-	0	2	-	1.001	3.001	4	4	2.001	8.002
Thomas Jefferson U	32.011	15.003	10.003	57.017	-	-	0	-	-	0	4.001	2.001	2	-
SUNY at Albany	17.002	8.001	2	27.003	-	-	0	-	-	1	-	1.001	1	2.001
<b>Biological Sciences Total</b>	1933.285	705.177	594.176	3232.638	15.001	11.003	12.005	37.009	29.002	10.001	30.010	69.013	111.021	64.016
<b>Percent within race</b>	60%	22%	18%	100%	41%	30%	32%	100%	42%	14%	43%	100%	38%	22%
<b>Percent of grand total</b>	53.2%	19.4%	16.3%	88.9%	0.4%	0.3%	1.0%	0.8%	0.3%	1.9%	0.8%	3.2%	1.8%	25%
<b>Females in column</b>	14.7%	25.1%	29.6%	19.7%	0.7%	27.3%	41.7%	24.3%	6.9%	10.0%	33.3%	6.9%	18.9%	25.3%

\*According to biology research expenditures FY1999 NSF; numbers after decimals designate females. \*\*Declined; data are from other sources. \*\*\*All data were supplied by one administrator.

Reference: "The Nelson Diversity Surveys" Nelson, D. J.: Norman, OK, 2002; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.html>

100%  
100%

Table 14. Tenured/Tenure-Track Faculty at PhD-Granting Astronomy/Astrophysics Departments by Race/Ethnicity, by Gender, and by Rank (FY 2004)\*

University	White		Black		Hispanic		Asian		Native Am.		Total
	Full	Assoc	Full	Assoc	Full	Assoc	Full	Assoc	Full	Assoc	
Cal Inst of Tech	17.02	2.01	21.04	-	0	-	0	-	1	1	3
Princeton U	12.02	1	13.02	-	0	-	0	-	0	-	0
U Cal - Berkeley	11.01	1	12.01	1	-	-	1	-	0	0	13.02
Harvard U	13.01	1	2	16.01	-	-	0	-	1.01	1	2.01
U Chicago	25	1	2	28	-	0	0	1.01	0	1	1
U Cal - Santa Cruz	18.03	-	2	20.03	-	0	1	-	0	3	-
U of Arizona	18.03	3	5.01	26.04	-	0	0	1	-	2	2
Cornell U	22.01	1	-	23.01	0	-	0	-	1	-	0
U of Texas-Austin	18.01	-	1	19.01	0	-	0	-	0	2	-
U Hawaii - Manoe	26.02	3.01	3	32.03	0	1	1	2	2.01	1	4.01
U of Col - Boulder	12.01	2.01	4	18.02	0	-	0	-	0	0	18.02
U Ill Urb-Champgr	5	1	7	13	-	0	0	1.01	-	1.01	-
U Wisc - Madison	12.02	1	2.01	15.03	-	1	1	-	-	-	0
Yale U	7	-	1	8	0	-	0	-	2.02	2.02	-
UCLA	12.02	1	1	14.02	-	0	0	-	0	-	0
Columbia U	9.02	3	3.01	15.03	0	-	0	-	1	-	0
UMaryland	7	5.01	3	15.01	0	-	0	-	1	-	0
UMass - Amherst	6.01	1	2	9.01	-	0	0	-	1	2	-
Penn State U	9.01	1	3	13.01	1.01	-	1.01	-	1	1	-
Ohio State U	14.01	4.01	-	18.02	-	0	0	-	1.01	-	2.01
U Minnesota	10.01	-	-	10.01	-	1	-	-	1.01	1.01	-
U Michigan	4	2	3.01	9.01	-	0	-	-	1	1	-
SUNY Stony Brook	6	1	-	7	1	-	0	-	0	0	0
Boston U	11	2.01	2.01	15.02	0	-	0	-	0	0	0
Indiana U	6.02	1	1.01	8.03	0	-	0	-	0	0	0
Iowa State U	4.01	1	2	7.01	0	-	1	0	0	0	0
U Florida	10.01	6	1.01	17.02	0	-	0	-	0	0	0
NM State U	3	2	3.01	8.01	0	-	0	-	0	0	0
Georgia St U	3	5	-	8	0	-	0	-	0	0	0
Brigham Young U	3	2	1	6	0	-	0	-	0	0	0
Clemson U	10	4	4.01	18.01	1	-	1	-	1	1	3
Dartmouth Col	6.01	1	3.01	10.02	-	0	0	-	0	0	0
U Delaware	2	-	1	3	-	1.01	1.01	-	0	0	0
U Denver	4	2	2	8	-	0	0	-	0	0	0
FL Inst Tech	1	1	-	2	0	-	0	-	1	1	3
Johns Hopkins U	12.01	-	-	13.01	0	-	0	-	0	0	0
Michigan State U	4	3.01	-	7.01	0	-	0	-	1	1	0
NM Inst of M & T	3.01	1	2.02	6.03	0	-	0	-	0	0	0
Northwestern U	3	2	1.01	6.01	0	-	0	-	1	1	0
U of Oklahoma	5	-	1.01	6.01	0	-	0	-	1.01	1.01	0
U of Penn	1	3	1.01	5.01	0	-	1	0	1	1	0
U of Pittsburgh	2	2.01	2	6.01	0	-	0	-	0	0	0
Rice University	5.01	2	4	11.01	0	-	0	-	1	1	0
U of Rochester	8.01	1	2.01	11.02	0	-	0	-	0	0	0
Rutgers St U of NJ	4	4	3.01	11.01	0	-	0	-	0	0	0
Texas Christian U	-	1.01	-	1.01	0	-	0	-	0	0	0
U of Toledo	5.01	1.01	1	7.02	0	-	0	-	0	0	0
Tufts U	1	-	1	2	-	0	-	1	-	0	1
Vanderbilt U	-	1.01	1	2	0	0	-	0	-	0	0
U Washington	8.02	1.01	2	11.03	0	0	-	0	0	0	0
<b>Total</b>	418.39	86.12	87.18	591.69	3.01	2.01	2	7.02	4.01	1.01	4
Percent within race	70.7%	14.6%	14.7%	100%	42.9%	28.6%	28.5%	100%	44.5%	11.2%	44.3%
Percent of grand total	64.1%	13.2%	13.4%	90.6%	0.46%	0.31%	0.31%	1.08%	0.61%	0.15%	0.61%
% Females in column	9.3%	14.0%	20.7%	11.7%	35.3%	50.0%	0.0%	28.6%	25.0%	100%	22.2%

\*Ranked by the National Research Council in 1994; numbers after decimals designate females. Departments granting the PhD in astronomy or astrophysics, which are not shown, did not respond.

Reference: "The Nelson Diversity Surveys" Nelson, D. J.: Norman, OK, 2003; <http://cheminfo.chem.ou.edu/faculty/djn/diversity/top50.htm>

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## **APPENDIX 2**

Tables of data on US citizen and permanent resident PhD attainment in fourteen science and engineering disciplines each year from 1983 through 2002. Data are disaggregated by race/ethnicity and by gender.

Data are provided for PhD attainment in the following disciplines:

Table 1 Chemistry

Table 2 Physics

Table 3 Mathematics

Table 4 Computer Science

Table 5 Chemical Engineering

Table 6 Civil Engineering

Table 7 Electrical Engineering

Table 8 Mechanical Engineering

Table 9 Economics

Table 10 Political Science

Table 11 Sociology

Table 12 Psychology

Table 13 Biological Sciences

Table 14 Astronomy

# Chemistry

Table 1. PhDs in Chemistry

	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
US cit & perm res	1424	1415	1432	1413	1472	1451	1383	1497	1461	1441	1400	1616	1624	1462	1439	1466	1400	1241	1230	1227	28494	100%	14105	100%
male	1175	1149	1154	1104	1145	1123	1018	1114	1093	1040	999	1152	1087	1024	1008	1004	980	819	822	807	20817	73.1%	9702	68.8%
female	249	266	278	309	327	328	365	383	368	401	401	464	537	439	431	463	426	422	408	420	7685	27.0%	4411	31.3%
White	1264	1211	1243	1208	1267	1257	1188	1284	1239	1219	1145	1179	1112	1063	1078	1127	1088	988	974	985	23119	82.9%	10739	77.6%
male	1057	988	1013	952	996	981	872	969	926	901	846	872	760	754	773	785	797	665	677	663	17247	61.8%	7592	54.8%
female	207	223	230	256	271	276	316	315	313	299	307	351	308	305	344	293	323	297	322	5874	21.1%	3149	22.7%	
Asians	83	97	112	109	108	85	96	99	122	135	157	332	416	295	235	207	187	121	126	127	3249	11.6%	2203	15.9%
male	60	70	79	74	77	57	73	70	86	79	84	203	269	187	142	134	103	67	65	76	2055	7.4%	1330	9.6%
female	23	27	33	35	31	28	23	29	36	56	71	128	146	108	92	72	80	54	61	51	1184	4.2%	863	6.2%
Native Am.	3	3	2	5	6	5	5	3	9	6	2	4	5	4	6	7	5	7	11	5	103	0.4%	56	0.4%
male	3	3	2	3	4	5	5	3	7	4	1	4	3	3	6	6	3	6	9	5	85	0.3%	46	0.3%
female	0	0	0	2	2	0	0	0	2	2	1	0	3	1	0	1	2	1	2	0	19	0.1%	11	0.1%
Black	16	23	23	17	13	21	26	24	23	17	31	34	33	45	35	45	56	44	42	44	612	2.2%	409	3.0%
male	14	21	17	14	11	14	19	17	18	12	22	25	16	35	26	17	33	25	23	22	401	1.4%	244	1.8%
female	2	2	6	3	2	7	7	7	5	5	9	9	17	10	9	28	23	19	19	22	211	0.8%	165	1.2%
Hispanic	21	33	17	25	44	48	43	57	46	42	51	59	43	35	44	34	42	51	43	38	816	2.9%	440	3.2%
male	7	24	12	19	29	35	26	33	37	26	33	43	29	29	32	25	25	30	26	20	540	1.9%	292	2.1%
female	14	9	5	6	15	13	17	24	9	16	18	16	14	7	12	9	21	21	17	18	281	1.0%	153	1.1%

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Physics

Table 2. PhDs in Physics

	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
US cit & perm res	760	775	662	643	682	681	654	725	739	790	806	1044	1059	949	883	823	742	692	677	586	15372	100%	8261	100%
male	703	716	603	588	620	621	596	663	663	696	712	907	916	815	759	716	647	609	590	495	13635	88.7%	7166	86.7%
female	57	59	59	55	62	60	58	62	76	94	94	137	143	134	124	107	95	83	87	91	1737	11.3%	1095	13.3%
White	655	677	580	571	606	577	555	618	634	641	656	735	687	684	659	651	630	571	557	460	12404	83.3%	6290	78.2%
male	604	628	534	524	553	535	509	570	573	575	590	655	613	594	579	577	555	506	489	388	11151	74.9%	5546	68.9%
female	51	49	46	47	53	42	46	48	61	66	80	74	90	80	74	75	65	68	72	1253	8.4%	744	9.2%	
Asians	53	47	36	31	34	47	57	58	50	88	101	254	311	195	157	111	66	68	70	61	1895	12.7%	1394	17.3%
male	48	40	28	27	29	34	46	47	38	66	78	207	251	162	119	85	53	56	57	49	1520	10.2%	1117	13.9%
female	5	7	8	4	5	13	11	11	12	22	23	47	60	33	38	26	13	12	13	12	375	2.5%	277	3.4%
Native Am.	3	1	0	1	1	3	0	1	6	2	2	2	2	1	3	1	0	2	2	34	0.2%	17	0.2%	
male	9	11	4	8	5	12	5	5	6	7	11	8	14	10	8	16	12	19	193	1.3%	119	1.5%		
female	9	11	3	7	4	11	5	5	9	6	7	7	11	13	7	4	15	11	16	168	1.1%	98	1.2%	
Hispanic	5	14	13	13	12	13	14	13	18	26	26	29	22	18	16	23	15	22	22	367	2.5%	226	2.8%	
male	5	13	11	11	10	13	11	16	23	24	24	21	25	20	16	15	20	11	19	318	2.1%	195	2.4%	
female	0	1	2	2	3	1	2	2	5	4	2	1	3	4	3	4	3	4	3	49	0.3%	31	0.4%	

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Mathematics

Table 3. PhDs in Math

US cit & perm re	457	443	418	402	396	386	428	422	518	507	590	657	771	648	629	669	605	574	524	442	10486	100%	6109	100%
male	371	357	336	329	319	316	327	329	406	390	426	506	588	503	452	471	413	410	370	308	7927	75.6%	4447	72.8%
female	86	82	73	77	70	101	93	112	117	164	151	183	145	177	198	192	164	154	134	2559	24.4%	1662	27.2%	
White	395	380	350	343	319	332	369	372	419	425	476	479	535	478	479	526	506	464	428	369	8444	82.8%	4740	79.4%
male	319	308	280	282	273	281	293	335	332	352	361	409	373	344	376	347	338	308	258	6427	63.0%	3466	58.1%	
female	76	72	70	61	61	59	88	79	84	93	124	118	126	105	135	150	159	126	120	111	2017	19.8%	1274	21.3%
Asians	34	30	33	28	41	33	24	27	57	52	79	142	207	140	97	71	56	70	48	29	1298	12.7%	939	15.7%
male	28	20	27	23	30	22	21	20	39	33	43	116	158	104	69	44	36	49	32	23	937	9.2%	674	11.3%
female	6	10	6	5	11	11	3	7	18	19	36	26	49	36	28	27	20	21	16	6	361	3.5%	265	4.4%
Native Am.	0	3	0	1	0	2	0	1	0	2	1	2	1	1	3	1	2	1	2	3	27	0.3%	18	0.3%
male	0	3	0	0	0	0	2	0	1	0	1	1	2	1	1	1	1	1	2	19	0.2%	12	0.2%	
female	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1	8	0.1%	6	0.1%
Black	3	4	7	6	11	4	8	4	11	4	8	11	5	8	7	16	12	14	19	14	176	1.7%	114	1.9%
male	2	3	7	3	9	4	5	3	7	4	7	8	4	6	5	9	6	7	12	6	117	1.1%	70	1.2%
female	1	1	0	3	2	0	3	1	4	0	1	3	1	2	2	7	6	7	7	8	59	0.6%	44	0.7%
Hispanic	7	11	12	12	11	4	11	10	9	12	16	13	15	10	20	27	15	15	12	257	2.5%	158	2.6%	
male	5	10	7	9	9	4	7	6	5	9	14	10	11	10	14	20	10	8	10	8	186	1.8%	115	1.9%
female	2	1	5	3	2	0	4	4	4	3	2	3	4	0	6	7	5	7	5	4	71	0.7%	43	0.7%

Data source: Survey of Earned Doctorates (NSF/NIHD/USED/DNEH/USDA/NASA)

# Computer Science

Table 4. PhDs in Computer Science

US cit & perm res	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
male	177	168	189	206	221	280	312	313	357	406	400	449	473	423	420	438	387	372	325	324	6640	80.5%	4011	79.5%
female	30	27	24	43	54	46	84	90	94	83	109	94	143	91	100	123	105	86	98	87	1611	19.5%	1036	20.5%
White	174	163	177	193	229	265	319	339	355	378	409	401	450	356	361	412	356	336	322	291	6286	78.6%	3694	75.4%
male	150	139	156	153	184	225	252	282	309	326	326	347	295	295	285	274	262	232	5079	63.5%	2970	60.6%		
female	24	24	21	40	45	40	67	80	73	69	83	75	103	61	66	84	71	62	60	59	1207	15.1%	724	14.8%
Asians	20	20	17	37	26	44	52	48	66	86	77	116	137	111	107	90	87	76	61	86	1364	17.1%	948	19.3%
male	16	18	17	34	20	38	42	41	51	74	58	100	107	95	81	67	68	61	41	60	1089	13.6%	738	15.1%
female	4	2	0	3	6	6	10	7	15	12	19	16	30	16	26	23	19	15	20	26	275	3.4%	210	4.3%
Native Am.	1	0	0	0	3	1	2	0	1	2	1	0	4	1	4	1	1	1	2	2	26	0.3%	16	0.3%
male	1	0	0	0	2	1	1	0	1	2	0	0	2	0	4	0	1	1	2	18	0.2%	10	0.2%	
female	0	0	0	1	0	1	0	0	1	1	0	2	1	0	1	0	0	0	0	8	0.1%	6	0.1%	
Black	3	3	3	1	2	2	1	1	8	5	6	10	11	12	4	14	18	18	15	17	154	1.9%	125	2.6%
male	1	2	3	1	1	2	0	1	4	4	2	8	7	9	3	6	9	13	5	10	91	1.1%	72	1.5%
female	2	1	0	0	1	0	1	0	4	1	4	2	4	3	1	8	9	5	10	7	63	0.8%	53	1.1%
Hispanic	0	3	6	7	4	2	4	5	12	8	7	7	6	16	15	14	14	8	14	168	2.1%	117	2.4%	
male	0	3	4	7	4	2	1	4	11	7	6	7	2	9	14	14	11	4	12	133	1.7%	90	1.8%	
female	0	0	2	0	0	0	3	1	1	1	1	0	4	7	2	1	3	3	4	2	35	0.4%	27	0.6%

Data source: Survey of Earned Doctorates (NSF/NIHD/USED/DNEH/USDA/NASA).

# Chemical Engineering

		Chemical Engineering																							
		83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
US cit & perm res	200	199	292	298	350	408	444	392	399	378	377	380	381	391	409	374	371	382	358	336	7119	100%	3759	100%	
male	185	181	261	256	298	355	375	330	339	296	313	302	293	293	332	298	296	282	265	248	5798	81.4%	2922	77.7%	
female	15	18	31	42	52	53	69	62	60	82	64	78	88	98	77	76	75	100	93	88	1321	18.6%	837	22.3%	
White	152	150	211	227	266	317	345	318	322	284	295	259	256	274	293	275	286	280	269	233	5312	76.3%	2720	73.9%	
male	140	138	190	196	223	272	293	270	277	225	244	211	196	205	241	223	236	213	210	171	4374	62.9%	2150	58.4%	
female	12	12	21	31	43	45	52	48	45	59	51	48	60	69	52	52	50	67	59	62	938	13.5%	570	15.5%	
Asians	32	34	60	58	60	67	77	51	50	54	62	96	101	80	73	65	58	69	53	71	1271	18.3%	728	19.8%	
male	32	29	54	52	54	61	66	40	41	38	55	71	76	62	61	46	44	48	34	49	1013	14.6%	546	14.8%	
female	0	5	6	6	6	11	11	9	16	7	25	25	18	12	19	14	21	19	22	258	3.7%	182	4.9%		
Native Am.	0	2	0	0	1	2	1	0	1	1	1	2	1	4	3	2	1	1	2	26	0.4%	18	0.5%		
male	0	2	0	0	1	2	1	0	0	1	1	2	1	3	0	1	0	1	2	19	0.3%	12	0.3%		
female	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	0	0	7	0.1%	6	0.2%		
Black	3	2	6	4	7	5	10	8	13	6	8	3	12	16	3	11	8	17	12	158	2.3%	96	2.6%		
male	3	2	4	3	4	6	4	8	7	12	3	4	2	7	10	2	7	3	7	6	104	1.5%	51	1.4%	
female	0	0	2	1	0	1	2	1	1	3	4	1	5	6	1	4	5	10	6	54	0.8%	45	1.2%		
Hispanic	6	3	2	4	11	5	9	8	11	16	10	7	13	19	7	13	7	18	7	16	192	2.8%	117	3.2%	
male	5	2	2	2	8	5	5	7	7	12	7	7	11	13	4	13	3	14	2	9	138	2.0%	83	2.3%	
female	1	1	0	2	3	0	4	1	4	3	0	2	6	3	0	4	4	5	7	54	0.8%	34	0.9%		

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Civil Engineering

		Civil Engineering																					
		85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	85-02	%	93-02	%
US cit & perm res	170	192	203	233	247	241	213	215	227	292	309	305	327	297	312	261	269	245	4558	100%	2844	100%	
male	159	177	192	218	207	188	192	195	237	257	258	269	239	251	213	203	189	189	3851	84.5%	2311	81.3%	
female	11	15	11	15	40	34	25	23	32	55	52	47	58	58	61	48	66	56	707	15.5%	533	18.7%	
White	130	152	158	183	191	196	159	166	168	199	194	199	220	217	241	194	194	183	3344	75.3%	2009	72.6%	
male	120	139	149	171	157	167	143	147	143	153	160	168	180	172	194	160	143	143	2809	63.3%	1616	58.4%	
female	10	13	9	12	34	29	16	19	25	46	34	31	40	45	47	34	51	40	535	12.0%	393	14.2%	
Asians	26	26	34	27	36	28	30	34	41	69	91	89	72	38	46	43	37	29	796	17.9%	555	20.1%	
male	25	26	32	26	33	25	26	32	39	65	77	75	58	32	41	33	28	22	695	15.6%	470	17.0%	
female	1	0	2	1	3	3	4	2	2	4	14	14	6	5	10	9	7	101	2.3%	85	3.1%		
Native Am.	0	0	1	1	2	1	0	0	0	2	2	0	2	1	0	0	0	0	14	0.3%	7	0.3%	
male	0	0	1	1	0	2	1	0	0	0	1	1	0	1	0	0	0	0	8	0.2%	3	0.1%	
Black	4	4	4	1	5	1	12	3	5	8	11	8	10	9	6	6	11	13	121	2.7%	87	3.1%	
male	4	3	4	1	5	1	10	3	3	6	8	7	10	7	4	5	11	9	101	2.3%	70	2.5%	
female	0	1	0	0	0	0	2	0	2	3	1	0	2	2	1	0	4	20	0.5%	17	0.6%		
Hispanic	7	7	1	13	8	9	5	7	12	14	11	6	12	16	12	9	9	8	166	3.7%	109	3.9%	
male	7	7	1	12	8	7	3	6	10	11	10	6	11	13	6	8	7	8	141	3.2%	90	3.3%	
female	0	0	1	0	2	2	1	2	3	1	0	1	3	6	1	2	0	25	0.6%	19	0.7%		

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Electrical Engineering

Table 7. PhDs in Electrical Engineering

	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%	
US cit & perm res	287	314	353	410	393	503	539	599	686	719	795	899	971	929	940	804	766	648	559	506	12620	100%	7817	100%	
male	280	305	331	385	378	470	503	552	638	652	715	811	851	823	834	713	685	555	493	440	11414	90.4%	6920	88.5%	
female	7	9	22	25	15	33	36	47	48	67	80	88	120	106	91	81	93	66	66	1206	9.6%	897	11.5%		
<b>White</b>	<b>214</b>	<b>231</b>	<b>259</b>	<b>319</b>	<b>283</b>	<b>363</b>	<b>405</b>	<b>450</b>	<b>478</b>	<b>487</b>	<b>553</b>	<b>548</b>	<b>590</b>	<b>589</b>	<b>579</b>	<b>523</b>	<b>510</b>	<b>443</b>	<b>368</b>	<b>306</b>	<b>8498</b>	<b>69.3%</b>	<b>5009</b>	<b>65.7%</b>	
male	209	227	243	299	271	341	378	411	444	447	504	494	523	523	525	470	466	388	334	276	7773	63.4%	4503	59.1%	
female	5	4	16	20	12	22	27	39	34	40	49	54	67	66	54	53	44	55	34	30	725	5.9%	506	6.6%	
<b>Asians</b>	<b>58</b>	<b>59</b>	<b>63</b>	<b>71</b>	<b>78</b>	<b>103</b>	<b>93</b>	<b>115</b>	<b>140</b>	<b>175</b>	<b>198</b>	<b>303</b>	<b>322</b>	<b>276</b>	<b>256</b>	<b>205</b>	<b>172</b>	<b>141</b>	<b>133</b>	<b>132</b>	<b>3093</b>	<b>25.2%</b>	<b>2138</b>	<b>28.0%</b>	
male	57	54	59	67	75	97	85	109	135	154	173	272	276	246	217	174	146	108	105	106	2715	22.1%	1823	23.9%	
female	1	5	4	4	3	6	8	6	5	21	25	31	46	30	39	31	26	33	28	26	378	3.1%	315	4.1%	
<b>Native Am.</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>26</b>	<b>0.2%</b>	<b>14</b>	<b>0.2%</b>	
male	0	0	1	2	3	0	0	0	1	3	0	1	1	1	1	5	3	1	0	1	0	23	0.2%	13	0.2%
female	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	3	0.0%	1	0.0%
<b>Black</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>3</b>	<b>7</b>	<b>9</b>	<b>8</b>	<b>16</b>	<b>17</b>	<b>15</b>	<b>17</b>	<b>24</b>	<b>22</b>	<b>31</b>	<b>23</b>	<b>30</b>	<b>21</b>	<b>22</b>	<b>16</b>	<b>298</b>	<b>2.4%</b>	<b>221</b>	<b>2.9%</b>	
male	2	3	8	4	3	5	9	7	14	15	13	14	20	17	27	19	25	19	21	12	257	2.1%	187	2.5%	
female	0	0	0	0	0	2	0	1	2	2	2	3	4	5	4	4	5	2	1	4	41	0.3%	34	0.4%	
<b>Hispanic</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>9</b>	<b>6</b>	<b>14</b>	<b>14</b>	<b>13</b>	<b>16</b>	<b>17</b>	<b>17</b>	<b>21</b>	<b>15</b>	<b>27</b>	<b>26</b>	<b>31</b>	<b>30</b>	<b>22</b>	<b>22</b>	<b>30</b>	<b>346</b>	<b>2.8%</b>	<b>241</b>	<b>3.2%</b>	
male	4	8	4	8	6	12	13	12	16	14	14	21	14	23	20	29	26	21	19	26	310	2.5%	213	2.8%	
female	0	0	1	0	2	1	1	0	3	3	0	1	4	6	2	4	1	3	4	36	0.3%	28	0.4%		

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Mechanical Engineering

Table 8. PhDs in Mechanical Engineering

	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
US cit & perm res	192	202	251	267	308	327	325	368	359	426	434	538	563	588	538	516	463	397	427	343	7832	100%	4807	100%
male	186	190	233	254	297	310	306	344	322	401	398	484	514	528	483	466	403	341	389	299	7148	91.3%	4305	89.6%
female	6	12	18	13	11	17	19	24	37	25	36	54	49	60	55	50	60	56	38	44	684	8.7%	502	10.4%
<b>White</b>	<b>146</b>	<b>154</b>	<b>176</b>	<b>210</b>	<b>230</b>	<b>253</b>	<b>241</b>	<b>286</b>	<b>266</b>	<b>326</b>	<b>328</b>	<b>337</b>	<b>339</b>	<b>392</b>	<b>377</b>	<b>371</b>	<b>335</b>	<b>279</b>	<b>301</b>	<b>227</b>	<b>5574</b>	<b>73.1%</b>	<b>3286</b>	<b>70.1%</b>
male	142	143	159	198	219	237	224	267	236	307	296	311	314	353	344	334	290	246	274	207	5101	66.9%	2969	63.4%
female	4	11	17	12	11	16	17	19	30	19	32	26	25	39	33	37	45	33	27	20	473	6.2%	317	6.8%
<b>Asians</b>	<b>34</b>	<b>37</b>	<b>58</b>	<b>31</b>	<b>61</b>	<b>57</b>	<b>66</b>	<b>69</b>	<b>62</b>	<b>78</b>	<b>93</b>	<b>179</b>	<b>188</b>	<b>166</b>	<b>113</b>	<b>89</b>	<b>88</b>	<b>72</b>	<b>76</b>	<b>71</b>	<b>1688</b>	<b>22.1%</b>	<b>1135</b>	<b>24.2%</b>
male	33	36	57	31	61	57	65	66	59	74	90	155	165	149	97	79	77	56	68	56	1531	20.1%	992	21.2%
female	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0.0%	2	0.0%
<b>Black</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>24</b>	<b>23</b>	<b>17</b>	<b>12</b>	<b>18</b>	<b>17</b>	<b>158</b>	<b>21.1%</b>	<b>123</b>	<b>2.6%</b>
male	4	2	3	2	3	1	5	5	2	5	3	6	12	7	11	14	11	13	16	13	138	1.8%	106	2.3%
female	1	0	1	0	0	0	0	1	0	0	1	1	3	1	0	1	0	1	1	1	24	0.3%	18	0.4%
<b>Hispanic</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>5</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>9</b>	<b>11</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>13</b>	<b>14</b>	<b>19</b>	<b>9</b>	<b>12</b>	<b>21</b>	<b>12</b>	<b>177</b>	<b>2.3%</b>	<b>121</b>	<b>2.6%</b>
male	2	5	3	6	5	6	2	4	7	9	5	7	8	13	11	18	8	11	21	7	158	2.1%	109	2.3%
female	0	0	0	0	1	1	2	0	1	1	1	0	0	3	1	1	0	5	19	0.2%	12	0.3%		

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Economics

Table 9. PhDs in Economics

	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
US cit & perm res	652	594	586	617	573	573	575	541	528	522	511	566	626	608	590	578	543	503	459	424	11169	100%	5408	100%
male	531	480	479	484	456	433	435	402	392	377	365	401	442	449	428	406	375	359	305	295	8294	74.3%	3825	70.7%
female	121	114	107	133	117	140	139	136	145	146	165	184	159	162	172	168	144	154	129	2875	25.7%	1583	29.3%	
White	567	501	494	537	476	478	488	455	421	428	417	430	459	450	431	428	417	397	358	327	8959	82.2%	4114	77.7%
male	466	407	401	416	377	360	365	339	314	304	300	296	317	331	314	301	290	283	244	233	6658	61.1%	2909	54.9%
female	101	94	93	121	99	118	123	116	107	124	117	134	142	119	117	127	114	114	94	2301	21.1%	1205	22.8%	
Asians	40	37	29	33	50	51	38	36	41	46	51	93	120	103	89	85	65	48	56	56	1167	10.7%	766	14.5%
male	26	32	20	23	41	41	32	26	24	31	29	72	88	75	56	54	40	32	30	31	803	7.4%	507	9.6%
female	14	5	9	10	9	10	6	10	17	15	22	21	32	28	33	31	25	16	25	364	3.3%	259	4.9%	
Native Am.	0	1	2	2	0	1	1	1	0	1	2	1	1	0	1	1	2	0	19	0.17%	9	0.17%		
male	0	1	1	2	0	0	1	1	0	0	1	1	0	0	0	0	1	1	0	13	0.1%	6	0.1%	
female	0	0	1	0	0	1	0	0	0	1	0	0	1	0	0	0	1	0	0	6	0.1%	3	0.1%	
Black	16	23	21	16	17	19	17	25	29	25	23	25	22	22	23	28	22	12	13	421	3.86%	213	4.02%	
male	12	13	21	15	13	15	14	17	27	24	19	17	21	18	19	17	20	17	10	10	339	3.1%	168	3.2%
female	4	10	0	1	4	4	3	8	2	1	4	6	4	4	3	6	8	5	2	3	82	0.8%	45	0.9%
Hispanic	12	16	17	8	15	12	16	15	16	14	15	15	14	20	25	26	21	22	18	16	333	3.06%	192	3.63%
male	11	14	14	8	12	6	9	12	11	10	12	11	10	14	20	21	16	17	13	10	251	2.3%	144	2.7%
female	1	2	3	0	3	6	7	3	5	4	3	4	4	6	5	5	5	5	6	82	0.8%	48	0.9%	

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Political Science

Table 10. PhDs in Political Science

	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
US cit & perm re	532	542	501	487	461	426	488	536	552	599	618	715	689	743	788	791	805	803	747	729	12552	100%	7428	100%
male	391	396	356	321	312	296	311	388	366	399	413	469	469	481	527	470	502	503	471	402	8243	65.7%	4707	63.4%
female	141	146	145	166	149	130	177	148	186	200	205	246	220	262	261	321	303	300	276	327	4309	34.3%	2721	36.6%
White	439	436	406	402	385	360	410	429	450	490	513	570	560	592	655	633	640	637	586	575	10168	83.5%	5961	82.5%
male	319	318	292	267	255	246	259	300	295	318	336	365	379	391	438	377	396	414	374	319	6658	54.6%	3789	52.4%
female	120	118	114	135	130	114	151	129	155	172	177	205	181	201	217	256	244	223	212	256	3510	28.8%	2172	30.1%
Asians	11	22	12	21	12	13	20	25	25	36	30	48	51	46	45	42	46	38	36	33	612	5.0%	415	5.7%
male	9	16	9	15	10	10	22	18	25	24	34	35	30	29	26	28	24	15	17	406	3.3%	262	3.6%	
female	2	6	3	6	2	3	10	3	7	11	6	14	16	16	18	14	21	16	206	1.7%	153	2.1%		
Native Am.	1	1	0	2	1	2	1	3	3	0	4	2	4	4	3	7	4	5	3	51	0.42%	36	0.50%	
male	1	1	1	0	2	0	1	1	3	2	0	3	2	2	0	2	1	1	33	0.3%	21	0.3%		
Black	34	35	45	34	31	29	40	48	38	42	45	52	49	59	37	55	59	61	71	61	925	7.59%	549	7.60%
male	23	27	30	18	21	24	29	36	28	31	28	35	30	32	25	26	40	28	43	31	585	4.8%	318	4.4%
female	11	8	15	16	10	5	11	12	10	11	17	17	19	27	12	29	19	33	28	30	340	2.8%	231	3.2%
Hispanic	19	15	14	16	20	10	9	20	22	19	20	24	21	29	19	35	31	28	21	36	428	3.51%	264	3.65%
male	14	11	7	11	16	7	5	17	13	16	16	17	18	15	22	15	17	14	19	284	2.3%	167	2.3%	
female	5	4	7	5	4	3	4	3	9	3	4	7	3	14	5	13	16	11	7	17	144	1.2%	97	1.3%

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Sociology

Table 11. PhDs in Sociology

US cit & perm res	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
male	246	234	178	209	193	160	135	152	170	175	186	182	188	188	182	182	184	205	182	185	3696	44.7%	1844	41.1%
female	204	208	214	196	153	191	191	177	195	203	209	238	247	236	273	260	295	309	287	290	4576	55.3%	2644	58.9%
White	391	382	332	338	295	289	257	258	285	306	316	332	328	328	346	345	346	382	349	348	6553	81.0%	3420	78.1%
male	213	192	147	174	160	126	104	117	130	134	152	138	132	140	138	135	130	143	128	144	2877	35.5%	1380	31.5%
female	178	190	185	164	135	163	153	141	155	172	164	194	196	188	208	210	216	239	221	204	3676	45.4%	2040	46.6%
Asians	10	11	8	11	19	14	13	15	19	24	21	38	50	44	29	23	30	32	30	30	471	5.8%	327	7.5%
male	3	8	5	6	13	6	8	6	9	13	7	19	22	17	12	10	6	16	12	10	208	2.6%	131	3.0%
female	7	3	3	5	6	8	5	9	10	11	14	19	28	27	17	13	24	16	18	20	263	3.2%	196	4.5%
Native Am.	0	1	1	4	2	2	1	1	2	6	0	4	1	7	4	3	4	6	2	7	58	0.72%	38	0.87%
male	0	1	0	4	0	2	0	0	2	3	0	0	1	5	1	0	1	3	1	0	24	0.3%	12	0.3%
female	0	0	1	0	2	0	1	1	0	3	0	4	0	2	3	0	3	1	7	34	0.4%	26	0.6%	
Black	26	28	26	26	12	22	28	23	27	26	29	26	29	25	42	40	45	57	44	46	627	7.75%	383	8.75%
male	15	16	13	13	8	14	13	12	8	14	11	15	13	13	18	21	18	26	18	19	298	3.7%	172	3.9%
female	11	12	13	13	4	8	15	11	19	12	18	11	16	12	24	19	27	31	26	27	329	4.1%	211	4.8%
Hispanic	11	17	18	14	10	17	23	27	23	13	21	12	16	13	19	15	26	26	38	25	384	4.74%	211	4.82%
male	8	15	9	5	6	8	10	13	14	8	12	5	10	7	10	7	8	15	19	8	197	2.4%	101	2.3%
female	3	2	9	9	4	9	13	14	9	5	7	6	6	9	8	18	11	19	17	187	2.3%	110	2.5%	

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Psychology

Table 12. PhDs in Psychology

US cit/perm res	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%		
male	1605	1466	1425	1362	1277	1217	1174	1220	1128	1206	1223	1169	1127	1048	1022	1063	1064	1054	982	914	23746	39.2%	10666	33.9%		
female	1503	1520	1439	1470	1529	1512	1563	1772	1890	1780	1938	1967	2057	2185	2107	2211	2229	2177	2050	1876	36775	60.8%	20797	66.1%		
White	2785	2683	2590	2547	2516	2445	2452	2648	2652	2635	2803	2729	2722	2744	2523	2645	2702	2605	2453	2226	52105	87.6%	26152	84.8%		
male	1456	1318	1302	1234	1170	1094	1065	1075	991	1078	1094	1028	980	909	833	882	913	881	825	746	20874	35.1%	9091	29.5%		
female	1329	1365	1288	1313	1346	1351	1387	1573	1661	1557	1709	1701	1742	1835	1690	1763	1789	1724	1628	1480	31231	52.5%	17061	55.3%		
Asians	44	43	44	41	47	55	53	59	73	108	121	121	126	113	132	146	122	128	1682	2.8%	1190	3.9%				
male	23	21	23	18	16	20	28	22	15	20	22	32	43	31	29	34	47	29	43	547	0.9%	341	1.1%			
female	21	22	21	23	31	27	31	44	39	51	76	78	90	95	84	98	99	93	85	1135	1.9%	849	2.8%			
Native Am.	9	6	10	9	16	7	11	19	13	15	15	12	14	17	18	31	35	22	17	15	311	0.5%	196	0.6%		
male	7	5	5	4	4	3	3	6	5	6	6	5	6	8	6	13	12	3	5	7	119	0.2%	71	0.2%		
female	2	1	5	5	12	4	8	13	8	9	7	8	9	12	18	23	19	12	8	192	0.3%	125	0.4%			
Black	112	121	105	109	93	103	97	115	130	106	118	124	149	152	158	172	189	174	172	2651	4.5%	1560	5.1%			
male	37	45	42	42	34	46	36	43	44	28	44	46	39	38	41	43	37	45	50	43	823	1.4%	426	1.4%		
female	75	76	63	67	59	57	61	72	86	78	74	78	110	114	115	135	144	124	129	1828	3.1%	1134	3.7%			
Hispanic	94	84	69	90	95	93	109	122	133	131	133	146	173	171	208	215	211	175	184	2729	4.6%	1747	5.7%			
male	43	42	28	47	32	38	30	52	55	45	43	49	53	64	56	57	60	46	56	948	1.6%	529	1.7%			
female	51	42	41	43	63	55	63	57	70	78	86	90	97	120	107	152	158	151	129	128	1781	3.0%	1218	3.9%		

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NEH/USDA/NASA).

# Biology

Table 13. PhDs in Biological Sciences		83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	83-02	%	93-02	%
<b>US cit &amp; perm res</b>		3324	3399	3256	3241	3141	3323	3299	3380	3525	3568	3752	4088	4329	4364	4256	4308	4124	4268	4241	4102	71186	100%	41832	100%
male		2202	2308	2178	2125	1997	2071	2023	2068	2135	2130	2168	2345	2470	2423	2336	2387	2260	2281	2272	2187	42179	59.3%	23129	55.3%
female		1122	1091	1078	1116	1144	1252	1276	1312	1390	1438	1584	1743	1859	1941	1920	1921	1864	1987	1969	1915	29007	40.7%	18703	44.7%
<b>White</b>		2995	3044	2913	2888	2759	2966	2904	2975	3041	3068	3144	3105	3115	3170	3158	3246	3128	3308	3253	3114	58180	83.3%	31741	77.4%
male		2007	2085	1962	1911	1764	1852	1784	1821	1871	1847	1833	1758	1770	1771	1760	1810	1726	1798	1768	1723	34898	50.0%	17717	43.2%
female		988	959	951	977	995	1114	1120	1154	1170	1221	1311	1347	1345	1399	1398	1436	1402	1510	1485	1391	23282	33.3%	14024	34.2%
<b>Asians</b>		164	158	151	168	170	171	201	200	261	268	366	719	920	885	721	657	608	539	558	580	7885	11.3%	6553	16.0%
male		88	89	94	101	93	98	112	113	132	136	195	451	511	482	373	366	332	276	287	279	4329	6.2%	3552	8.7%
female		76	69	57	67	77	73	89	87	129	132	171	268	409	403	348	291	276	263	271	301	3556	5.1%	3001	7.3%
<b>Native Am.</b>		4	10	13	17	11	6	7	4	10	13	7	16	15	20	7	12	20	17	15	12	224	0.3%	141	0.3%
male		3	7	4	11	7	4	4	3	6	8	5	11	10	11	4	6	10	10	8	6	132	0.2%	81	0.2%
female		1	3	9	6	4	2	3	1	4	5	2	5	5	9	3	6	10	7	7	6	92	0.1%	60	0.1%
<b>Black</b>		46	50	53	48	60	48	56	51	64	62	75	78	107	98	112	111	116	118	139	122	1492	2.1%	1076	2.6%
male		24	24	32	26	35	25	32	29	32	38	43	33	64	58	52	41	50	44	55	55	737	1.1%	495	1.2%
female		22	26	21	22	25	23	24	22	32	32	45	43	40	60	70	66	74	84	67	755	1.1%	581	1.4%	
<b>Hispanic</b>		43	44	59	66	62	76	71	89	95	102	114	131	127	131	146	168	175	173	165	178	2037	2.9%	1508	3.7%
male		22	29	36	39	38	49	50	56	56	59	57	69	80	65	83	89	99	82	88	65	1146	1.6%	777	1.9%
female		21	15	23	27	24	27	21	33	39	43	57	62	47	66	63	79	76	91	77	113	891	1.3%	731	1.8%

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NIEH/USDA/NASA).

# Astronomy

Table 14. PhDs in Astronomy		85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	85-02	%	93-02	%
<b>US cit &amp; perm res</b>		84	91	73	104	82	96	86	106	111	112	141	149	158	147	117	139	123	109	2028	100%	1306	100%
male		75	84	64	90	69	78	79	91	88	91	116	114	132	120	91	104	94	87	1667	82.2%	1037	79.4%
female		9	7	9	14	13	18	7	15	23	21	25	35	26	27	26	35	29	22	361	17.8%	269	20.6%
<b>White</b>		77	79	69	93	74	86	83	95	100	97	111	131	132	120	109	115	103	87	1761	90.1%	1105	88.0%
male		69	76	60	81	63	70	77	84	79	78	92	101	110	96	86	89	76	69	1456	74.5%	876	69.8%
female		8	3	9	12	11	16	6	11	21	19	19	30	22	24	23	26	27	18	305	15.6%	229	18.2%
<b>Asians</b>		2	6	1	5	2	5	0	4	3	10	22	12	8	13	3	13	6	13	128	6.5%	103	8.2%
male		2	4	1	4	0	3	0	2	1	9	18	8	7	10	3	9	6	12	99	5.1%	83	6.6%
female		0	2	0	1	2	0	2	2	1	4	4	1	3	0	4	0	1	29	1.5%	20	1.6%	
<b>Native Am.</b>		0	0	0	2	0	0	0	1	0	0	1	1	1	1	0	0	1	1	8	0.4%	6	0.5%
male		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	0.3%	4	0.3%
female		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0.1%	2	0.2%
<b>Black</b>		0	0	2	0	0	1	0	1	2	0	1	0	2	1	2	1	1	1	15	0.8%	11	0.9%
male		0	0	2	0	0	0	1	0	0	2	0	1	0	1	0	0	1	0	9	0.5%	6	0.5%
female		0	0	0	0	0	0	0	1	0	0	0	1	0	2	1	0	1	0	6	0.3%	5	0.4%
<b>Hispanic</b>		0	2	0	2	2	2	1	4	2	2	4	2	3	2	1	3	7	4	43	2.2%	30	2.4%
male		0	1	0	2	2	1	3	2	2	2	1	2	1	2	6	3	34	1.7%	23	1.8%		
female		0	1	0	0	0	0	1	0	0	2	1	1	0	1	1	1	1	1	9	0.5%	7	0.6%

Data source: Survey of Earned Doctorates (NSF/NIH/USED/NIEH/USDA/NASA).