

**WOMEN IN THE SCIENCES AND ENGINEERING:  
PROGRESS WITH CONTINUED CHALLENGES**

For almost forty years, Penn State has been concerned with issues facing women in science and engineering fields. In 1980, several important issues affecting the success of women at Penn State were clearly identified: the lack of women in leadership positions, low representation of women on the faculty, a chilly climate for women students, and the lack of role models for women students (*Status of Women Report*, 2001). Several University initiatives were developed in part to respond to these and other issues. These include the founding of the Commission for Women in 1981, recognizing the Women in the Sciences and Engineering (WISE) Institute in 1994, and establishing the Women in Engineering Program (WEP) in 1989.

How far have we come in more than four decades of recognizing that challenges exist for women in the sciences and engineering fields? We know from the data presented in this status report that we have increasing numbers of female faculty throughout colleges and campuses. However, these data are not all broken down into science and engineering fields. It is also difficult to answer the question posed above because data on the progress of women

at Penn State are not located in one convenient place. We know that recent national reports published in the *Harvard Business Review* (2008), by the National Science Foundation (2007), and elsewhere show the persistence of chilly climates for women in science and engineering fields as well as in other disciplines. The Commission for Women recognizes that more can be done to support women at Penn State.

During the next year, the Commission for Women Web site will include data summaries of various populations of women at Penn State. The Web site will provide organized links to other data available at Penn State as well, such as exit interviews, faculty salary reports, and the like. The CFW would like to identify gaps in the data that allow us to describe the full experience for women at Penn State, regardless of discipline. We would also like to receive feedback from the Penn State community on this status report and hear about the experiences of women and advocates for women at Penn State.



**CFW MISSION**

The Commission for Women (CFW) serves as an advisory group to the President of the University on the status of women at Penn State, advocates for women's concerns, and recommends solutions.

Since 1981, the commission has identified areas of concern for the women employees and students of Penn State. It is a forum for exchanging ideas that can translate into improved policies and practices to support women at Penn State.

**MEMBERSHIP**

The members of the commission are volunteers from across Penn State. CFW membership represents every employment category within the University (faculty, exempt and nonexempt staff, technical service, and administrative), as well as graduate and undergraduate students. Commission members are appointed by the President of the University. Additionally, individuals from the Penn State community can get involved in the commission's activities as affiliates.

For more information, please visit the Commission for Women's Web site: [www.equity.psu.edu/cfw](http://www.equity.psu.edu/cfw)

**The work of the commission is done through the committees listed below:**

**EXECUTIVE**

Composed of the commission's committee/program chairs and special liaisons, it oversees activities and decisions of the commission in accordance with its bylaws and exercises budgetary responsibility while serving as an advisory council to elected commission officers. The Executive Committee also administers the annual Rosemary Schraer Mentoring and Achieving Women awards programs and manages annual membership/election activities.

**ASSESSMENT**

Gathers, reviews, and interprets gender-equity data to assist in identifying issues that impact women at Penn State. The committee also compiles periodic reports on the status of women at the University and provides consultation to committees seeking data relevant to their studies.

**CAMPUS LIAISON PROGRAM**

Involves and collaborates with contacts at Penn State campuses to share best practices, strengthen intercampus communication about women's issues, and reinforce the commission's goals.

**ISSUES**

Ad hoc issues committees study and suggest commission responses to key topics that affect the working/learning environments for women at Penn State. The committees consult with the Assessment Committee on available/accessible data and study historical trends, best practices, other institutional models, expert opinions, and experiences of University employees and students.

**MARKETING**

Promotes the purpose, vision, and accomplishments of the commission, increases awareness of the commission within the Penn State community, and publicizes its special programs and events.

**MENTORING PROGRAM**

Annually matches faculty and staff protégés with mentors within the University community. The committee assists mentor/protégé pairs to develop goals, provides guidance throughout the year, and organizes monthly activities on professional and personal development.



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**This publication is available in alternative media on request.**

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**REPORT ON THE  
STATUS OF WOMEN  
AT PENN STATE**



Photograph: Greg Grieco

**2007–2008**

A Report Prepared by  
The Commission for Women  
Office of the Vice Provost for Educational Equity

PENNS STATE  
**COMMISSION for WOMEN**  
[www.equity.psu.edu/cfw](http://www.equity.psu.edu/cfw)



DEBORAH OAKES

**FROM THE 2007–08 CHAIR OF THE  
COMMISSION FOR WOMEN**

I am pleased to introduce the *2007–2008 Report on the Status of Women at Penn State*, prepared by the University's Commission for Women (CFW) with support from the Office of the Vice Provost for Educational Equity. This document presents a snapshot of key gender equity indicators. The demographic and salary information presented herein represents the first publication of what the commission intends as an annual tracking effort. Over time, trends in the data will measure the University's progress in achieving its goal of gender equity and, equally important, serve to identify areas where additional efforts are warranted.

Penn State benefits from ensuring gender equality. Attracting and retaining the widest talent pool is vital in a competitive higher education environment. Fostering a supportive, safe, and affirming campus climate facilitates full participation of women in every aspect of the University. Equity in policy and in practice enriches and strengthens the entire Penn State community.

Improving women's status requires proactive institutional efforts. The goal of this year's report is to publicize baseline data on women faculty, students, and staff relative to their male counterparts. These data will provide a foundation so that, in partnership with other Penn State offices and organizations, and using comparable data from peer institutions, the commission is able to make appropriate recommendations for change. The status report will also be a resource for others in the University seeking comparative gender-based data. Along with updates to be published in the coming years, we hope these data will serve to invigorate discussion, research, and action at all Penn State campuses toward advancing gender equity.

This publication is an outgrowth of the commission's long-standing efforts to improve conditions for women at Penn State. The Commission for Women was established by President John Oswald in 1981 to serve as an advisory group to the President of the University on the status of women at Penn State, to serve as an advocate for women's concerns, and to recommend solutions. In the years since its inception, CFW has assessed women's status and suggested initiatives to improve women's numerical representation, the campus climate, and salary parity. Much progress has been made, yet there are challenges that remain.

The data for this report were gathered from various sources including Penn State's Data Warehouse, the University Budget Office, and the Office of Human Resources. Due to space limitations, not all the information gathered is presented in print. Additional and more detailed information on women's status is available electronically at the Commission for Women Web site: [www.equity.psu.edu/cfw](http://www.equity.psu.edu/cfw)

I present this report on women's status at Penn State with optimism, and I look forward to your feedback.

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## PROFILE OF WOMEN AT PENN STATE FALL 1997 AND FALL 2007

	1997		2007	
<b>Administrators</b>				
Board of Trustees	6/42	(14%)	11/51	(22%)
President	0/1	(0%)	0/1	(0%)
Provost	0/1	(0%)	0/1	(0%)
Vice Presidents/Senior Vice Presidents	1/8	(13%)	2/11	(18%)
Vice Provosts	0/6	(0%)	0/3	(0%)
Other Senior Leadership (e.g., Associate Vice, Presidents, Associate Vice Provosts, etc.)	3/26	(12%)	8/31	(26%)
Deans	5/11	(45%)	4/14	(29%)
Associate Deans	8/33	(24%)	11/44	(25%)
Assistant Deans	1/3	(33%)	7/12	(58%)
Campus Chancellors	4/17	(24%)	9/20	(45%)
Department Heads/School Directors	11/96	(11%)	22/112	(20%)
Other Administrators	23/81	(28%)	24/72	(33%)
<b>Faculty and Staff</b>				
Evan Pugh Professors	0/22	(0%)	3/25	(12%)
Distinguished Professors	5/48	(10%)	20/103	(19%)
Full Professors	95/864	(11%)	213/1,158	(18%)
Associate Professors	198/854	(23%)	365/1,124	(32%)
Assistant Professors	319/919	(35%)	450/1,112	(40%)
Instructors	251/487	(52%)	311/568	(55%)
Other (lecturers, research faculty, and library faculty)	294/864	(34%)	556/1,373	(40%)
Total Full-time Employees*(excluding Faculty)	5,237/10,901	(48%)	6,342/11,472	(55%)

<b>Students**</b>				
Undergraduate	29,162/62,998	(46%)	30,817/67,950	(45%)
Graduate and Professional	4,945/10,429	(47%)	5,290/10,968	(48%)

\* Excludes Pennsylvania College of Technology \*\* Excludes Pennsylvania College of Technology and World Campus

This table presents the major categories representing full-time administrators, faculty, staff, and students at the Penn State campuses, compared across 1997 and 2007. For each category and each year, the actual number of females compared to the total number of individuals in that category (males and females) is given. For ease of comparison from year to year, the percentage of females to the total number of individuals is also listed.

“Other Administrators” includes executive and academic administrators who do not fit into any of the other detailed categories. “Total Full-time Employees” includes all employees who are not faculty.

In comparing these two years, the representation of females across the University has generally increased. However, there are clearly areas that would benefit from greater representation of women, such as vice provost positions, department heads, and senior faculty positions.

For a more historical view of these data, including the years between 1997 and 2007, please visit the Commission for Women’s Web site ([www.equity.psu.edu/cfw](http://www.equity.psu.edu/cfw)).

## RACE AND ETHNICITY PROFILE OF WOMEN FACULTY AT PENN STATE

The following graphs provide some detail regarding race and ethnicity data for faculty across all Penn State campuses (Pennsylvania College of Technology is not included). The comparisons are made across two years (1997 and 2007), two position categories (on the Tenure Path/Track and Tenured), and the two genders. The racial and ethnic categories reflect current and past available data, and further distinctions within the categories are not accessible at this time.

Across the racial and ethnic groups, there are some similarities in the data patterns. For example, for both male and female tenured faculty, numbers generally increased from 1997 to 2007. This is also generally true in the tenure-path position category. Probably the most interesting comparison concerns tenure-path faculty in 1997 and whether numbers in the tenured position category in 2007 are higher. For female faculty, with the exception of American Indian female faculty, there is an increase from tenure-path to tenured positions, 1997 to 2007 (the first and last green bars). This is, without exception, true for male faculty.

For a historical view of these data, including the years between 1997 and 2007, please visit the Commission for Women’s Web site ([www.equity.psu.edu/cfw](http://www.equity.psu.edu/cfw)).

## PROFILE OF WOMEN FACULTY AT PENN STATE FALL 1997 AND FALL 2007

	1997		2007	
<b>University Park</b>				
Full Professors	67/707	(9%)	137/793	(17%)
Associate Professors	123/525	(23%)	188/548	(34%)
Assistant Professors	182/465	(39%)	212/454	(47%)
Instructors	112/219	(51%)	126/226	(56%)
Other	205/691	(30%)	381/1,028	(37%)
<b>Total</b>	<b>689/2,607</b>	<b>(26%)</b>	<b>1,044/3,049</b>	<b>(34%)</b>
<b>Non-University Park Campuses</b>				
Full Professors	14/91	(15%)	27/134	(20%)
Associate Professors	65/291	(22%)	132/383	(34%)
Assistant Professors	115/391	(29%)	148/370	(40%)
Instructors	128/247	(52%)	163/300	(54%)
Other	76/141	(54%)	138/286	(48%)
<b>Total</b>	<b>398/1,161</b>	<b>(34%)</b>	<b>608/1,473</b>	<b>(41%)</b>
<b>College of Medicine</b>				
Full Professors	14/66	(21%)	39/197	(20%)
Associate Professors	10/38	(26%)	44/191	(23%)
Assistant Professors	22/63	(35%)	84/279	(30%)
Instructors	11/21	(52%)	19/39	(49%)
Other	13/32	(41%)	29/48	(60%)
<b>Total</b>	<b>70/220</b>	<b>(32%)</b>	<b>215/754</b>	<b>(29%)</b>

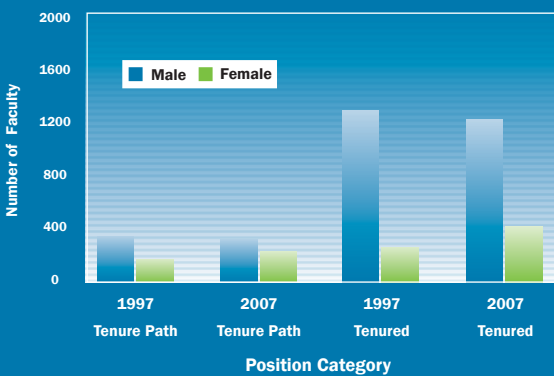
<b>The Dickinson School of Law*</b>				
Full Professors	na	na	10/34	(29%)
Associate Professors	na	na	1/2	(50%)
Assistant Professors	na	na	6/9	(67%)
Instructors	na	na	3/3	(100%)
Other	na	na	8/11	(73%)
<b>Total</b>	<b>na</b>	<b>na</b>	<b>28/59</b>	<b>(47%)</b>

\* These counts reflect Carlisle and University Park

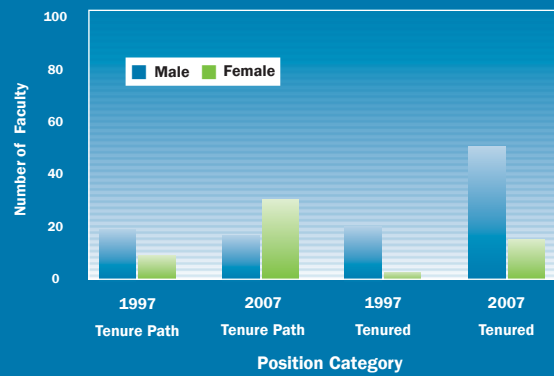
For each faculty category and each year, the number of females compared to the total number of individuals (males and females) is given. The percentage of females to the total number of individuals is also listed. From 1997 to 2007, the number of women faculty has increased at every rank and every location within the Penn State system. For most of the locations, the percentage of women represented at each rank has also increased. The College of Medicine is the notable exception.

For a historical view of these data, including the years between 1997 and 2007, please visit the Commission for Women’s Web site ([www.equity.psu.edu/cfw](http://www.equity.psu.edu/cfw)).

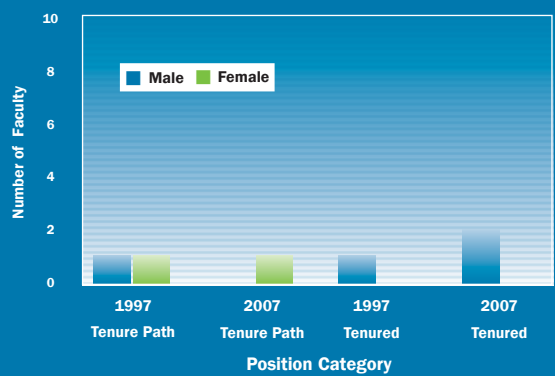
### White Faculty



### African American Faculty



### American Indian Faculty



## GENDER AND ETHNICITY DISTRIBUTION OF STAFF POSITIONS AND AVERAGE SALARY FOR EACH GROUP

	Female Students	Female Faculty	Female Students per Female Role Model	Male Students per Male Role Model
<b>University Total</b>	46%	36%	19.1	12.4
<b>University Park</b>				
Agricultural Sciences	47%	23%	12.9	4.3
Arts and Architecture	57%	44%	13.4	7.9
Smeal College of Business	34%	26%	60.8	39.9
Communications	62%	37%	77.0	27.2
Earth and Mineral Sciences	28%	23%	6.8	5.2
Education	73%	50%	22.6	8.7
Engineering	16%	15%	20.5	19.5
Health and Human Development	67%	60%	18.4	13.4
Information Sciences and Technology	14%	30%	12.2	32.5
Liberal Arts	51%	47%	11.3	9.4
Eberly College of Science	46%	28%	14.8	6.8
<b>Non-University Park Campuses</b>				
Great Valley	47%	41%	26.4	20.8
The Dickinson School of Law*	44%	45%	31.2	30.8
College of Medicine	44%	47%	10.7	12.1
College of Medicine	50%	29%	1.9	0.7

\* These counts reflect Carlisle and University Park

These data from 2007 compare the percentage of students — undergraduates and graduate students enrolled in each college or campus — to the percentage of faculty at Penn State. The columns on the left compare these percentages for female students and female faculty. In the lighter columns on the right, values were converted to ratios to display the ratio of female students to available female faculty role models within the colleges, as well as the same ratio for male students and male faculty role models. With the exception of the Dickinson School of Law and the College of Information Sciences and Technology, the percentage of female students exceeds that of female role models in every discipline.

	Administrative and Management Staff		Other Professional Staff		Secretarial / Clerical		Service / Maintenance		Skilled Crafts		Technical / Paraprofessional		
	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	
<b>Group Total</b>	\$82,893	775	\$53,287	4,783	\$33,006	2,169	\$32,147	1,870	\$46,548	698	\$36,223	915	
All Racial/Ethnic Groups	Female	\$78,298	335	\$47,708	2,545	\$33,089	2,069	\$30,048	761	\$43,871	13	\$32,618	553
	Male	\$86,391	440	\$59,631	2,238	\$31,285	100	\$33,586	1,109	\$46,599	685	\$41,730	362
Asian	Female	\$78,910	6	\$45,602	42	\$30,759	13	ND	5	–	–	\$31,933	37
	Male	ND	3	\$53,531	40	ND	1	ND	2	ND	2	\$29,214	6
African American	Female	\$76,389	17	\$46,315	69	\$31,706	39	\$30,180	26	–	–	\$25,323	25
	Male	\$72,799	14	\$51,288	86	ND	3	\$32,224	49	\$48,405	7	ND	3
Hispanic	Female	\$67,183	7	\$42,825	28	\$34,888	7	\$29,511	14	–	–	\$27,820	10
	Male	ND	4	\$49,091	27	ND	2	\$31,620	19	ND	2	ND	3
American Indian	Female	–	–	ND	3	\$31,312	6	ND	1	–	–	–	–
	Male	–	–	ND	3	ND	1	ND	5	ND	2	–	–
Undeclared	Female	–	–	ND	4	ND	2	–	–	–	–	ND	1
	Male	–	–	ND	1	ND	1	–	–	–	–	–	–
White	Female	\$78,648	305	\$47,852	2,399	\$33,137	2,002	\$30,051	715	\$43,871	13	\$33,163	480
	Male	\$86,593	419	\$60,251	2,081	\$31,554	92	\$33,683	1,034	\$46,568	672	\$41,961	350

Salary equity is a complex issue that affects all employees across the Penn State system. This table compares a number of staff and service employee categories, detailing the number of employees and average salaries within each category. Gender, race, and ethnicity complete this comprehensive view. The position categories are based on Equal Employment Opportunity codes established by the federal government for personnel reporting. Additional information regarding Penn State staff positions as they are represented by these categories can be found on the CFW Web site. For cases in which five or fewer individuals are employed, salary averages are not disclosed here (ND) to protect privacy. However, the number of individuals in that category is given. If no one is employed within a position category, this is represented with a "–".

As a comparison across all racial and ethnic groups, the following values represent women’s salaries as a percentage of men’s salaries.

- Administrative and Management Staff = 91%
- Other Professional Staff = 80%
- Secretarial/Clerical = 106%
- Service/Maintenance = 89%
- Skilled Crafts = 94%
- Technical/Paraprofessional = 78%