

THE FORMATION OF PENN STATE'S WOMEN IN THE SCIENCES AND ENGINEERING (WISE) INSTITUTE

Sharon Jadrmak Luck, Associate Director

Women In the Sciences and Engineering (WISE) Institute
The Pennsylvania State University
University Park, Pennsylvania

Introduction and History

On July 1, 1994, Penn State officially formed the Women In the Sciences and Engineering (WISE) Institute. The WISE Institute is a university-level effort to coordinate and enhance research about and intervention programs for women in the sciences and engineering, with a focus on recruitment, retention, and advancement. It also represents an innovative approach to cross-disciplinary interaction among engineers, humanists, scientists, and social scientists. The objectives of the WISE Institute are to:

- * create a community/network for women in the sciences and engineering at Penn State (focus on WISE issues);
- * examine issues about women in the sciences and engineering at Penn State, nationally, and internationally (research WISE issues);
- * raise awareness about the barriers for women in the sciences and engineering at Penn State (educate about WISE issues); and
- * identify ways to create a more supportive climate across Penn State for women in the sciences and engineering (integrate WISE issues).

The WISE Institute builds upon and expands the groundwork developed by the Women in Engineering Program at Penn State that was initiated by the College of Engineering in 1989. In October 1992, Penn State sent a team of twenty-eight people to the Committee on Institutional Cooperation's (CIC) WISE Conference at Indiana University in Bloomington, Indiana. The institutional action plan that was written as a follow-up to this conference by the Penn State team called for a "university-wide women in the sciences and engineering effort." This suggestion was refined into a proposal for the WISE Institute that was drafted and presented to the Provost and Deans during 1993 and 1994. In May 1994, the Provost and Deans approved the creation of the WISE Institute at Penn State.



OMEN IN ENGINEERING CONFERENCE: IS SYSTEMIC CHANGE HAPPENING?

1995 WEPAN National Conference

Structure

The WISE Institute is a collaborative effort between the Colleges of Agricultural Sciences, Earth and Mineral Sciences, Engineering, Health and Human Development, and Liberal Arts, and the Eberly College of Science. It's constituencies include women undergraduates, graduate students, faculty, technical staff, administrators, and alumni.

In its organizational structure, the WISE Institute includes several components and reports to a Steering Committee of Deans and the Vice-Provost for Educational Equity. In the university's organizational chart, the WISE Institute is located under the Vice-Provost for Educational Equity's jurisdiction. The WISE Institute staff consists of:

- * Director, Dr. Londa Schiebinger (also Professor of History and Women's Studies);
- * Associate Director, Sharon Jadnak Luck;
- * Staff Assistant, Wendy Baker; and
- * work-study or wage payroll Student Assistants.

The components of the WISE Institute are the WISE Network, WISE Network Executive Committee, and the WISE Institute Advisory Board. The WISE Network includes over 70 representatives from departments, campuses, and units across the university who meet once per semester. These representatives are "ambassadors" for WISE issues and activities, and the WISE Institute communicates with them regularly. The WISE Network Executive Committee is a group of faculty from the Network who meet with the Director and Associate Director monthly to advise, assist with operation, and help formulate plans. The WISE Institute Advisory Board is a group of external advisors who meet once or twice per year with the staff, Executive Committee, and Steering Committee.

Activities and Statistics

Many different WISE-oriented activities take place across Penn State each year, and some of them are quite new while others have been around for awhile. The WISE Institute staff conducts some of these activities; however, many different individuals and groups at Penn State are involved with a variety of WISE-oriented programs and projects. Some of these groups include student chapters of the Association for Women In Science (AWIS), Sigma Alpha professional sorority for women in agriculture, and the Society of Women Engineers (SWE). Local WISE-oriented organizations are also active on some of the commonwealth campus locations. In order to serve as an umbrella for these activities, the WISE Institute has made connections and created formal liaisons with many of these individuals and groups.

WISE-oriented activities fall into two general categories: research and intervention programs. Some of the research activities include gathering pertinent

statistics, investigating recruitment and retention issues, and educating the campus community about WISE issues. Intervention programs such as conferences, summer programs, special brochures or publications, and workshops are aimed at several constituents: pre-college students (and parents, teachers, and counselors), undergraduates, graduate students, faculty, and technical staff.

Since the WISE Institute is a university-level operation, we look at issues and activities that cut across colleges, campuses, and units. Penn State is a large, multi-campus, land-grant, research university with twenty-two campus locations and over one dozen academic colleges. The main campus, University Park, is located in the geographic center of the state of Pennsylvania. Student enrollment is around 60,000 across the whole university, with about 35,000 students at the University Park campus. For women in science and engineering, here are the latest statistics:

Females in the Sciences and Engineering - Fall 1994

<u>College</u>	<u>Undergraduates</u> <u>number -- %</u>	<u>Grad. Students</u> <u>number -- %</u>	<u>Faculty **</u> <u>number -- %</u>
Ag. Sci.	832 -- 38%	146 -- 44%	44 -- 14%
Earth & Min. Sci.	167 -- 21%	102 -- 22%	30 -- 12%
Eng.	903 -- 17%	169 -- 13%	33 -- 11%
Science	1190 -- 44%	210 -- 36%	53 -- 18%
TOTAL	3092 -- 28%	627 -- 24%	160 -- 14%

(** Faculty includes tenure, tenure-track, and fixed-term - full and part time.)

Benefits and Strengths

By creating the WISE Institute, Penn State has institutionalized its commitment to gender diversity in science and engineering at a high level within the university. All of the various WISE-oriented activities can now come together under one umbrella (the WISE Institute), and the individuals and groups who are working on these activities can network and support one another across the university. The potential now exists for more collaboration on activities among students, faculty, and technical staff across Penn State's campuses and colleges.

The WISE Institute also brings together the "two cultures" of science and the humanities. It has created cross-disciplinary interaction among students and colleagues in

many departments and colleges. A larger community of women in science and engineering is being created at Penn State, and many more faculty (female and male) than before are officially involved with WISE-oriented activities and issues via the WISE Institute. Through this larger "critical mass" of women, we can find strength in numbers by working together across disciplines and addressing similar issues that face women in the sciences and engineering.

