

WISE (WOMEN IN SCIENCE AND ENGINEERING) AT CALTECH

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ABSTRACT

Women in Science and Engineering (WISE) is an organization for all students, postdocs, technical workers, and faculty at the California Institute of Technology. It is organized by graduate students and therefore primarily addresses the needs of graduate women. WISE reflects the desire of women to network within and outside the Institute community. WISE provides a variety of activities for mentoring, socializing, and for raising awareness about the problems associated with being a woman in science.

1. INTRODUCTION

The combination of the small number of women in science and their distribution across many research groups or laboratories within the university may result in little or no day-to-day contact between women scientists. Peer groups composed of scientists in the same research area may have only one woman, and therefore isolate women students or postdocs. The lack of role models at higher levels of academia enforces an even greater sense of isolation on the woman student. Four years ago, a group of graduate students sought to combat these problems by founding WISE. WISE at Caltech sponsors regular activities to bring women together and to expand their base of experiences with other women scientists. Caltech's Graduate Student Council funds the organization. Since women at other institutions experience many of these same difficulties, I hope that the activities described here will be of interest to women already involved in or starting similar organizations.

2. ACTIVITIES

2.1. The Undergraduate–Graduate Connection

The Undergraduate–Graduate Connection (UGGC) is a mentoring program which matches every freshman woman with a graduate woman mentor. All new undergraduate women are automatically assigned mentors on criteria such as academic and extracurricular interests. At the start of each academic year, letters are sent to every woman graduate student explaining the purpose of the program and asking for her participation.

WISE intends the exchange to provide the undergraduates with professional and scientific contact, evidence that women exist in the scientific and engineering community, social contact with graduate students, and, if needed, a support network. Graduate women can relate to what it is like to be a woman at Caltech, but generally have more experience in dealing with social and academic pressures.

WISE sponsors a brunch or picnic for all of the participants three times a year and encourages the graduates to take their undergraduates out to lunch once a term.

We have found that the success of the mentoring relationship rests on the diligence of the graduate woman in initiating contact, since often freshmen see no reason for the program. For this reason, it is also helpful to have large gatherings of the mentors and mentored which create a social and relaxed environment. By the time they are juniors and seniors, many of the undergraduates appreciate the advice they get. Standard topics of discussion range from how to deal with pressure for dates to applying to graduate schools. The program is greatly assisted by the Undergraduate Dean's Office which provides monetary support for the picnics and pays for the individual lunches. In addition, the Dean's Office copies and mails the UGGC information to the students.

2.2. Reading Group

The Women's Pot-Luck Dinner Reading Group meets every other month, rotating its location among participant's homes, and is devoted to discussion and dining. It serves WISE's primary function of bringing women into contact by providing discussion of literature relating to women's issues. In the 1991–92 academic year, we read and discussed Naomi Wolf's *The Beauty Myth*, Susan Faludi's *Backlash*, Catherine McKinnon's writings on feminist law theory, and Charlotte Perkins Gilman's novella *The Yellow Wallpaper*. Typically eight to ten people participate in each group. The readings are distributed through the Humanities Department office so that they are accessible to everyone.

2.3. Social Hour

Monthly social hours are a mainstay of WISE's activities. These informal meetings are held at the on-campus bar once a month. They, perhaps better than any of the other activities, provide an opportunity for women from different departments to meet and talk.

2.4. Discussion Group

Leigh Royden, a visiting professor from MIT in the 1991–92 academic year, started a new lunchtime discussion group called "Women and Science." The weekly meetings focused on a wide variety of topics, ranging from balancing family and career to surviving graduate school to dealing with sexual harassment. Her leadership created an environment in which both men and women participated and felt comfortable. The 20 to 30 people at each of the meetings included undergraduates, graduate students, postdocs, research scientists, and faculty.

This group became part of a higher-order mentoring chain, in which graduate students saw women who had successfully moved to the next stages of their scientific careers. WISE hopes to continue with similar meetings in the future, and intends to invite both Caltech faculty and visiting women to speak. By drawing on the experiences of these women, we hope to provide a broad range of role models who can enlarge our understanding of what it means to be a woman in science. The division of Geological and Planetary Sciences has provided administrative support for the mailings for these meetings and is willing to continue doing so.

3. OTHER ACTIVITIES

WISE's other activities include providing input on the newly established "Caltech Resource Center for Women/Center for Women in Science and Engineering." This women's center will enable us to reach more women and to expand our activities.

In this election year, we realized that part of enfranchising women means enabling them to have political power. In this context, we held a forum for a woman physicist who was running for state senate in Caltech's district.

4. CONCLUSION

As long as women remain significantly underrepresented at institutions of higher learning, it will be necessary for women at these institutions to meet, organize, and support each other. WISE at Caltech hopes to accomplish these goals through a mixture of socializing, consciousness raising, and mentoring. We are successful in that women participate in our activities and enjoy the rare occasions in which they can be the majority. Most importantly, we need to provide role models for women in every stage of their careers. Undergraduates need to see that there are successful graduate women in science; graduate women need to see postdocs and faculty. The Undergraduate-Graduate Connection and the social, reading, and discussion groups provide what is sometimes the only interaction among women scientists on campus.

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