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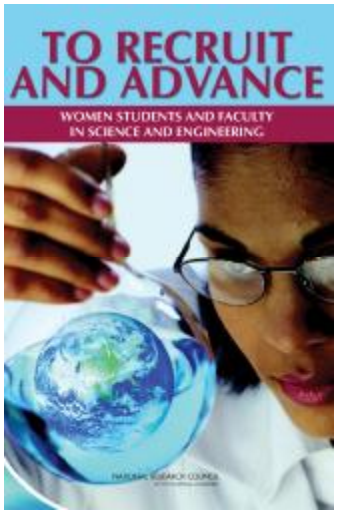
REPORT IN BRIEF



TO RECRUIT AND ADVANCE: WOMEN STUDENTS AND FACULTY IN U.S. SCIENCE AND ENGINEERING (2006)

Although women have made great strides in becoming full members of the science and engineering (S&E) enterprise, they are still underrepresented among graduate students and postdoctorates and among faculty in science and engineering programs. The Committee on Women in Science and Engineering (CWSE) of the National Academies created the Committee on the Guide to Recruiting and Advancing Women Scientists and Engineers in Academia to produce a guide that would help those who have a stake in seeing more women in science and engineering accomplish that goal. Specifically, the committee was asked to prepare a guide that will identify and discuss best practices in recruitment, retention, and promotion for women scientists and engineers in academia.

The committee sought to identify the strategies that some higher education institutions have employed to achieve gender inclusiveness in academic S&E and to use these four case studies as a way to gain a more detailed picture of women's participation in science and engineering (with a particular focus on research universities) with specific approaches that had worked at the visited institutions and could be adapted to others. The committee is able to present a variety of strategies that students, faculty, and administrators at higher education institutions, and outside interests, such as the professional societies, could use to better recruit, retain, and advance women in academic S&E.

One of the findings that resonated throughout the site visits and through the literature review is that women face multiple challenges—challenges that may lead to their attrition at key junctures in higher education. Some of the reasons for this attrition have to do with women's ambitions and career preferences; others stem from the demographic characteristics of female S&E students and faculty. Still others result from not enough being done by peers, departments, and institutions to create a climate that is as comfortable for women as it is for men. Fortunately, one of the main findings of the committee's study is that many policies are available to universities for facilitating the recruitment and retention of female students, faculty, and administrators. Some policies are better implemented by the top leadership—presidents, provosts, and deans—while others can be put in place by department chairs or individual faculty. Other findings and recommendations from the committee include *policies to advance female faculty and policies to advance women into administrative positions.*

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By most accounts, female faculty appear to advance along the academic career pathway more slowly than males. Most studies suggest that women are less likely to receive tenure or a promotion and tend to spend more time in lower ranks. Partly as a result, female faculty are less satisfied and more likely than their male counterparts to change jobs or move out of academia.

The underlying causes behind these outcomes include working conditions that have more negative effects on women than men and evaluations that appear, unintentionally or otherwise, to undervalue women's efforts and accomplishments compared with male faculty.

Admittedly, it is easier to change institutional policies and practices than it is to change the direction of decision making. However, many steps can be taken to ensure that working conditions affect the different kinds of faculty similarly. Indeed, additional oversight may guarantee that tenure and promotion committees treat all faculty fairly. Ultimately, however, each person participating in these processes must commit himself or herself to administering equitable treatment.

COMMITTEE ON THE GUIDE TO RECRUITING AND ADVANCING WOMEN SCIENTISTS AND ENGINEERS IN ACADEMIA

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Copies of *To Recruit and Advance: Women Students and Faculty in U.S. Science and Engineering* are available from the National Academies Press, (800) 624-6242 or (202) 334-3313 (in the Washington area); www.nap.edu. For more information on the project, contact staff at (202) 334-3317 or visit the PGA website at www.nationalacademies.org/pga.