Rutgers University Office for the Promotion of Women in Science, Mathematics and Engineering (WiSEM) has been awarded a five year Institutional Transformation grant for $3.67 million dollars from the ADVANCE program of the National Science Foundation. The grant will run from September 1, 2008 – August 31, 2013. The awarded funds will support five interrelated initiatives to increase the participation and advancement of faculty women in science, engineering, and mathematics (SEM) on all three Rutgers campuses.

The Recruitment and Retention Initiative seeks to increase the number of women, particularly minority women, on the Rutgers SEM faculty. Strategies will include skills training for search committees, leadership training for established faculty and a coordinated mentorship program.

The Communication Initiative will focus on communications across campuses and departments. For example, we will enhance our web presence by building on existing initiatives such as the Rutgers SciWomen website (sciencewomen.rutgers.edu). Our RU FAIR professors will sponsor events at different schools and campuses thereby giving SEM faculty more opportunities to interact with one another as well as to share their ideas and to communicate their needs.

The Networking and Liaisons Initiative will build collaborations between Rutgers SEM faculty and the Rutgers Institute for Women’s Leadership (IWL) through such mechanisms as interdisciplinary mini-grants.

The Visibility Initiative will promote Rutgers women SEM faculty through expanded faculty profiles and mini autobiographies on the WiSEM web site, sponsorship of a lecture series of prominent women faculty, targeted nominations of distinguished faculty members and outstanding postdoctoral associates for awards, and solicitation of press coverage for Rutgers research.

Our Family Initiative will bolster the resources available for dual career families and for families with children. Collaborations will be built with existing Rutgers initiatives such as the ad hoc Committee for Work and Family and the Office of Institutional Diversity and Equity. Possible changes in current campus structure, tenure regulations and other policies that might better accommodate the needs of families will be discussed with appropriate Rutgers administrators, faculty, and staff. Life-cycle grants, designed to help faculty who have had health or other personal setbacks, are also proposed.

The RU-FAIR ADVANCE program at Rutgers will incorporate several strategies developed by similar programs at other universities such as ADVANCE professorships, mini-grants and life-cycle grants. Specific mechanisms include:
A) RU-InSTRIDE (Institutionally Novel Strategies and Tactics for Recruitment to Improve Diversity and Excellence) Committees. We model our program on the successful University of Michigan STRIDE program, adjusting it to Rutgers’ needs. The STRIDE model will be used to form committees of distinguished women and men professors from across Rutgers’ schools and campuses to study the relevant research literature and propose techniques for enhancing the recruitment of women and minorities. Background and implementation materials developed at other institutions will be distributed. Working with the President’s Council on Institutional Diversity and Equity, we will develop standardized “best practices” guidelines for faculty hiring and retention across all three campuses. The RU-In STRIDE committees will be structured so as to recognize the differences in disciplinary, school, and campus cultures. The central administration has promised to hold deans and their respective units accountable to ensure that searches follow the recommendations developed by InSTRIDE committees.

B) RU-FAIR professorships will be modeled on the ADVANCE professorships at Georgia Institute of Technology and will be selected based on competitive application, including nomination by deans. The RU-FAIR professorships are intended for senior SEM women faculty who will organize and implement, with the help of RU-FAIR staff, their proposed program of activities. Each professor is expected to serve as a university leader who fosters mentoring, promotes diversity, facilitates communication among our geographically dispersed faculty, and mediates between faculty and administration. There will be 3-4 termed professorships of 4.5 years. Each professorship will be accompanied by an annual budget of up to $50,000/year. The successful application will detail mechanisms for improving conditions for the retention of women and minorities in specific units. Units may be a college or campus, or may be structured along lines of scientific inquiry, such as computer or biological sciences. The selection committee will include the PI, CoPIs, and an Internal Advisory Board. The application will include a narrative from each candidate RU-FAIR professor outlining proposed activities that strengthen existing women’s networks and fortify their ties to other relevant campus networks.

C) RU-FAIR mini-grants. These grants are designed to stimulate interdisciplinary research, leadership initiatives and course development, or to increase retention through strengthened networks and informal mentorship. Proposals that foster collaborations between men and women on the Rutgers SEM faculty and Rutgers women’s programs and will be given priority. Mini-grants will range in size from $500 to $15,000, with 5-10 grants awarded each year.

D) RU-FAIR life cycle grants: Family emergencies can disrupt research projects and cause professional derailment at crucial junctures in faculty careers. We will offer “life cycle” grants for faculty applicants who need help to support their research in times of crisis. ADVANCE-funded research at the Women in Science and Engineering Institute at the University of Wisconsin-Madison
has shown that women and minorities take disproportionate advantage of these funds.

E) **Visibility and Dissemination: Lecture series.** We will establish a lecture series to showcase prominent women in SEM disciplines, working closely with individual Rutgers departments. Each semester, at least one outstanding woman will be brought to Rutgers to lecture in her field of expertise. **Awards, honors and press coverage.** Outside verification of excellence is an important yardstick that complements publication and grant support in measuring scientific success. Almost all professional societies offer prizes to reward distinction and discovery. We propose to nominate deserving Rutgers University faculty, postdoctoral fellows, students, and alumnae for appropriate awards. In addition, we will use the Rutgers Sciwomen website to showcase the women science faculty at Rutgers and to disseminate the findings and best practices developed by RU-FAIR initiatives.

F) **Benchmarking, Evaluation and Research.** To evaluate the success of our program, we will conduct a vigorous program of benchmarking and evaluation to track the status of women and minorities on the SEM faculty at Rutgers University. In addition RU-FAIR staff will participate in a broader research agenda on issues of gender equity including the stimulation and development of new research projects that study gender in the context of SEM professions.