SELECTED CROSSCUTTING PROGRAMS

NSF crosscutting programs include interdisciplinary programs and programs that are supported by multiple directorates. Examples of major crosscutting activities include the following:

- **ADVANCE:** A budget of $19.53 million for ADVANCE in FY 2008, a decrease of $190,000 from the FY 2007 Request, will fund transformative efforts to address the systemic barriers to women's full participation in academic science and engineering (S&E). Included in the portfolio will be evaluation and assessment efforts to capture the impact of prior ADVANCE awards and to build upon effective practices, as well as new awards for Institutional Transformation. In order to include a variety of institutional types, new catalytic awards (IT-Start) will be made to support basic data collection and analysis functions necessary to understand the status of women faculty in academic S&E at institutions seeking transformation. This category of award is intended to broaden the spectrum of institutions participating in ADVANCE activities, including primarily undergraduate institutions, teaching intensive colleges, community colleges, minority-serving institutions (e.g. tribal colleges, Historically Black Colleges and Universities, Hispanic Serving Institutions) and women's colleges.

- **Faculty Early Career Development (CAREER):** The FY 2008 Request provides $156.52 million for CAREER, an increase of $7.06 million over the FY 2007 Request of $149.46 million. This will result in approximately 14 more CAREER awards than in FY 2007. CAREER awards support exceptionally promising college and university junior faculty who are committed to the integration of research and education and who are most likely to become the academic leaders of the 21st century.

- **Graduate Fellowships and Traineeships:** The FY 2008 Request provides $228.82 million, an increase of $8.93 million over the FY 2007 Request, for NSF's three flagship graduate fellowship and traineeship programs. This funding will enable NSF to support an estimated 5,375 graduate students.
    - $105.56 million for the Graduate Research Fellowship (GRF) program, an increase of $8.93 million above the FY 2007 Request, will support graduate students in all STEM fields. Funding will support an estimated 2,950 fellows.
    - $67.40 million for the Integrative Graduate Education and Research Traineeship (IGERT) program, equal to the FY 2007 Request, will support comprehensive Ph.D. programs that are innovative models for interdisciplinary education and research and that prepare students for academic and non-academic careers. Funding will support an estimated 1,510 IGERT trainees.
    - $55.86 million for the Graduate Teaching Fellowships in K-12 Education (GK-12) program, equal to the FY 2007 Request, will strengthen partnerships between higher education institutions and local school districts by providing universities the opportunity to become engaged with a program that features outreach to K-12 schools in a manner that benefits both their teachers and students. Funding will support an estimated 915 graduate fellows.

- **Research Experiences for Undergraduates (REU):** The FY 2008 Request for NSF's REU program totals $56.94 million, an increase of $20,000 above the FY 2007 Request of $56.92 million. The REU program supports active research participation by undergraduate students in any area of research funded by the NSF. REU sites involve students in research who might not otherwise have the opportunity, particularly those from institutions where research programs are limited. A significant fraction of the student participants come from outside the host institutions. Some REU grants have been extended to the freshman and sophomore levels to enhance retention and graduation rates.

- **Research Experiences for Teachers: (RET):** The FY 2008 Request for NSF's RET program totals $9.64 million, an increase of $1.13 million above the FY 2007 Request of $8.51 million. Funding will provide pre-service and in-service K-12 teachers with discovery-based learning experiences.