

thorough reviews that individual centers undergo periodically, the NSF Programs that support these centers also undergo periodic evaluation.

National Science Foundation (NSF) Programs List

Science & Technology Centers: (<http://www.nsf.gov/od/oia/programs/stc/start.htm>) These university-based centers have research, education, and knowledge- and technology-transfer activities with diverse partners in the public and private sectors. There have been three competitions open to all fields of science supported by the NSF. Awards made through the first two competitions will soon expire. Five new STCs were established in 1999 and have the potential to continue for 10 years. The Program was established in 1987; during Fiscal Year 1999 \$51 million was invested in 23 centers. Centers that were created through the first competition in 1989 have expired. Awards made through the second competition in 1991 will soon expire.

Engineering Research Centers and Groups: (<http://www.eng.nsf.gov/eec/erc.htm>) The Engineering Research Centers (ERCs) are cross-disciplinary university-based centers focused on long-term research and education in next-generation engineered systems, in partnership with industry and other practitioners. They focus on a wide range of technologies in bioengineering, earthquake engineering, electronics, information technology, and manufacturing and processing. Since the first ERCs were established in 1985, the program has undergone a number of independent evaluations that have demonstrated their impact in terms of knowledge creation, technology advancement, and the enhanced capabilities and career success of their graduates. Engineering Research Groups (ERGs) are small cross-disciplinary teams of faculty, supported to pursue high-risk, nascent technologies that might be the foundation for future ERC awards. ERGs develop dialogues with industry, and they seek to insert their research findings into the curriculum. In Fiscal Year 2000, \$62 million was invested in 23 ERCs, including two new ones, and 16 ERGs. The ERC awards were leveraged by \$177 M from industry, universities, states, and other agencies.

Industry/University Cooperative Research Centers

(http://www.eng.nsf.gov/eec/i_ucrc.htm): Industry/University Cooperative Research Centers (I/UCRC) stimulate industry/university interaction in industrially relevant research. NSF provides seed funding, while the majority of the funding comes from the industrial partners. The goal is to speed technology transfer, and to develop graduates who are familiar with industrial practices. The Program was established in 1973; during Fiscal Year 2000 \$5.2 million was invested in 50 centers, which stimulated partnerships with 700 firms, leveraging NSF's support with approximately \$95 M in cash and in-kind support.

State/Industry/University Cooperative Research Centers

(http://www.eng.nsf.gov/eec/siurc_intro.htm): These university-based centers are based on the I/UCRC model for industrially relevant research, with an added special focus on building partnerships with States to focus on local economic development.