

National Science Foundation Office of Integrative Activities 4201 Wilson Boulevard, Room 1270 Arlington, Virginia 22230



ABOUT NSF

The National Science Foundation (NSF) is an independent federal agency created by Congress in 1950 "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations, and other research organizations throughout the United States. The Foundation accounts for about one-fourth of federal support to academic institutions for basic research.

CONTACT INFORMATION

Office of Integrative Activities (OIA)

Phone: (703) 292–8040 Fax: (703) 292–9040 www.nsf.gov/od/oia/

Experimental Program to Stimulate Competitive Research (EPSCoR)

Phone: (703) 292–8683 Fax: (703) 292–9047 www.nsf.gov/od/oia/programs/epscor/



NSF 09-66

Office of Integrative Activities

Catalyzing Excellence in Research and Education



OIA OVERVIEW

The Office of Integrative Activities (OIA) catalyzes excellence in research and education across the National Science Foundation. It funds emerging, cross-disciplinary research programs, education activities, and initiatives that enhance scientific discovery, invest in research infrastructure, and strengthen the nation's technically trained workforce. For example, OIA manages the Experimental Program to Stimulate Competitive Research, the Major Research Instrumentation program, the Cyber-Enabled Discovery and Innovation program, and agency-wide Science and Technology Center activities. Additionally, OIA administers prestigious honorary award programs—such as the National Medal of Science and the Alan T. Waterman award—and professional internships for aspiring scientists and engineers. OIA provides policy support for the National Science Foundation Director and Deputy Director and plays a leadership role—working in partnership with NSF directorates and offices—to promote agency-wide policy, support for new strategic directions, and programmatic and operational unity and alignment.

NATIONAL SCIENCE FOUNDATION

Where Discoveries Begin

DISCOVERY LEARNING

Medals and Awards



OlA administers the National Medal of Science and the Alan T. Waterman Award on behalf of the Office of the National Science Foundation (NSF) Director. The National Medal of Science is a Presidential award bestowed on individuals for their exceptional contributions to knowledge in science or engineering. Since its establishment in 1959, the National Medal

of Science has been awarded to distinguished scientists and engineers whose careers span decades of research and development. The Alan T. Waterman Award is the NSF's annual award to honor an outstanding young U.S. researcher in the forefront of science or engineering. In addition to a medal and recognition, the recipient receives an award of \$500,000 over a three-year period to pursue research or advanced study in any field of science or engineering.

Experimental Program to Stimulate Competitive Research (EPSCoR)



EPSCoR's mission is to assist the Foundation in its statutory function to strengthen research throughout the United States and to avoid undue geographic concentration of such efforts. The EPSCoR program is directed at those jurisdictions that have historically received lesser amounts of NSF research and development (R&D)

funding. Twenty-five states, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands were eligible to participate in 2009. Through this program, NSF establishes partnerships with government, higher education and industry that build a state's or region's research capacity and, hence, its national R&D competitiveness.

Major Research Instrumentation (MRI)



The MRI program catalyzes new knowledge and discoveries by empowering the nation's scientists, engineers and students through investments in state of-the-art research instrumentation at U.S. colleges and universities, museums and science centers, and not-for-profit organizations. The MRI program builds institutional capacity to

educate and train a diverse workforce in environments that integrate research and education. The MRI program also promotes the development of the next generation of research instrumentation, often through academic-private sector partnerships. OIA manages the MRI program in collaboration with NSF directorates and offices.

Science and Technology Centers (STC)



STCs advance discovery and innovation in science and engineering through the integration of cutting-edge research, excellence in education, targeted knowledge transfer, and the development of a diverse workforce. Partnering with academic institutions, national laboratories, and industrial organizations, STCs support

potentially transformative, complex research and education projects that require large-scale, long-term awards. OIA coordinates with program directors throughout NSF to manage the competition and post-award monitoring.

Cyber-Enabled Discovery & Innovation (CDI)



CDI is NSF's bold, five-year initiative to create revolutionary science and engineering research outcomes made possible through innovation and advances in computational thinking. When applied in challenging science and engineering research and education contexts, the use of models, algorithms and tools for

computational thinking promise a profound impact on the nation's ability to generate new knowledge. Collectively, CDI research outcomes are expected to produce paradigm shifts in understanding of a wide range of science and engineering phenomena and socio-technical innovations that will create new wealth and enhance the national quality of life. OIA co-chairs with NSF directorates the agency-wide CDI initiative.

Committee on Equal Opportunities in Science and Engineering (CEOSE)



CEOSE, a Congressionally mandated body, advises NSF on policies, programs and activities that encourage full participation in scientific and engineering fields by women, underrepresented minorities, and persons with disabilities. CEOSE members are drawn from institutions in academia, industry and government and

are appointed by the NSF Director. OIA coordinates requirements and logistics in support of CEOSE meetings, which are typically held three times a year.

OFFICE OF INTEGRATIVE ACTIVITIES Catalyzing Excellence in Research and Education

INFRASTRUCTURE STEWARDSHIP

Developing STEM Talent



On behalf of NSF, OIA administers two professional development programs for aspiring, early career and established scientists and engineers: the NSF Summer Scholars Internship (SSIP) and the NSF-American Association for the Advancement of Science (AAAS) Science and Technology Fellowship programs. Program participants

are exposed to science and engineering policy and research and education issues by engaging directly in the planning, development and/or oversight of the agency's activities. In addition, SSIP interns are encouraged to earn graduate degrees and pursue careers in science, technology, engineering and mathematics.

Academic Research Infrastructure (ARI)



The ARI program enhances the nation's science and engineering enterprise by updating U.S. academic research facilities and research training infrastructure. ARI provides U.S. scientists and engineers access to facilities needed to conduct transformative research and to meet the science and engineering challenges of the

21st century. These next-generation research facilities, which will include cyber-enabled research environments that integrate research and education, will also support the development and training of educators and students. OIA leads and oversees NSF-wide coordination of the ARI program.