National Science Foundation
Office of Integrative Activities

"Catalyzing Excellence in Research and Education"





Office of Integrative Activities



- •OIA is an office within the Office of the NSF Director.
- •OIA coordinates with other NSF Offices and Directorates in development and management of cross-cutting programs and activities.
- •OIA supports the NSF Director's Office through policy analysis and special projects to address Foundation priorities.

FY 1980

Arkansas Maine Montana

South Carolina

West Virginia

FY 2000

Alaska

Hawaii

FY 2001

NSF EPSCoR Cohorts



FY 1985

Alabama Kentucky Nevada **North Dakota** Oklahoma **Puerto Rico** Vermont **Wyoming**

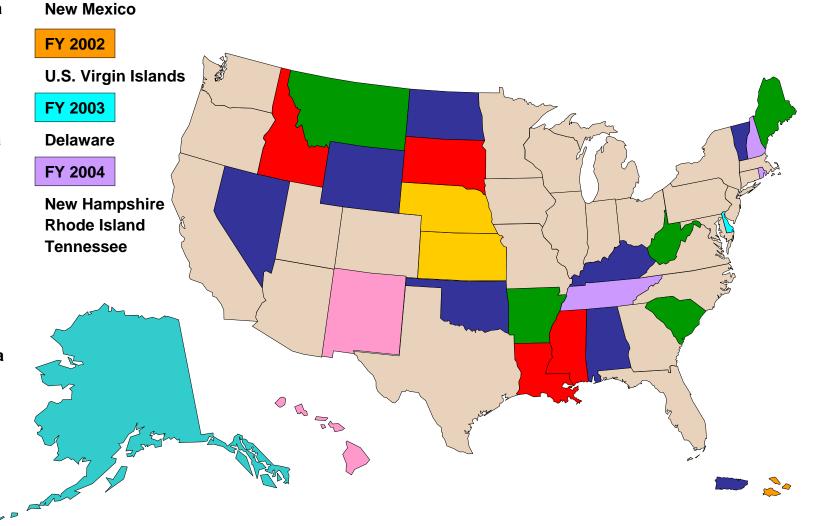
FY 1987

Idaho Louisiana Mississippi **South Dakota**

FY 1992

Kansas Nebraska





EPSCoR







- •The Experimental Program to Stimulate Competitive Research (EPSCoR) is a program designed to fulfill the National Science Foundation's (NSF) mandate to promote scientific progress nationwide. 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 currently participate.
- •Goal #1: Provide strategic programs and opportunities for EPSCoR jurisdictions that stimulate sustainable improvements in their R&D capacity and competitiveness.
- •Goal #2: Advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation, and overall knowledge-based prosperity.

EPSCoR INVESTMENT STRATEGY







- •RII Track 1 Grants: Provide up to \$4M per year for up to 5 years to support infrastructure improvements in science and technology in EPSCoR jurisdictions.
- •RII Track 2 Grants: Provide up to \$2M per year for up to 3 years as collaborative awards to consortia of EPSCoR jurisdictions to support innovation enabling cyberinfrastructure.
- •Co-funding: Provides partial support for those proposals from EPSCoR jurisdictions that merit review places at or near the cutoff for funding by the reviewing program. This mechanism operates internally within NSF and does not require any action on the part of the proposer.
- Outreach: Provides support for outreach visits by NSF staff to acquaint researchers in the EPSCoR jurisdictions with NSF priorities, programs, and policies.



Science & Technology Centers

STC Overview



- The Science and Technology Centers: Integrative Partnerships program enables innovative research and education projects of national importance that require a Center mode of support to achieve the research, education, and knowledge-transfer goals shared by the partners. STCs conduct world-class research in partnerships among academic institutions, national laboratories, industrial organizations, and/or other public/private entities to create new and meaningful knowledge of significant benefit to society.
- Up to \$5M per year, for up to 5 years.

STC Expectations





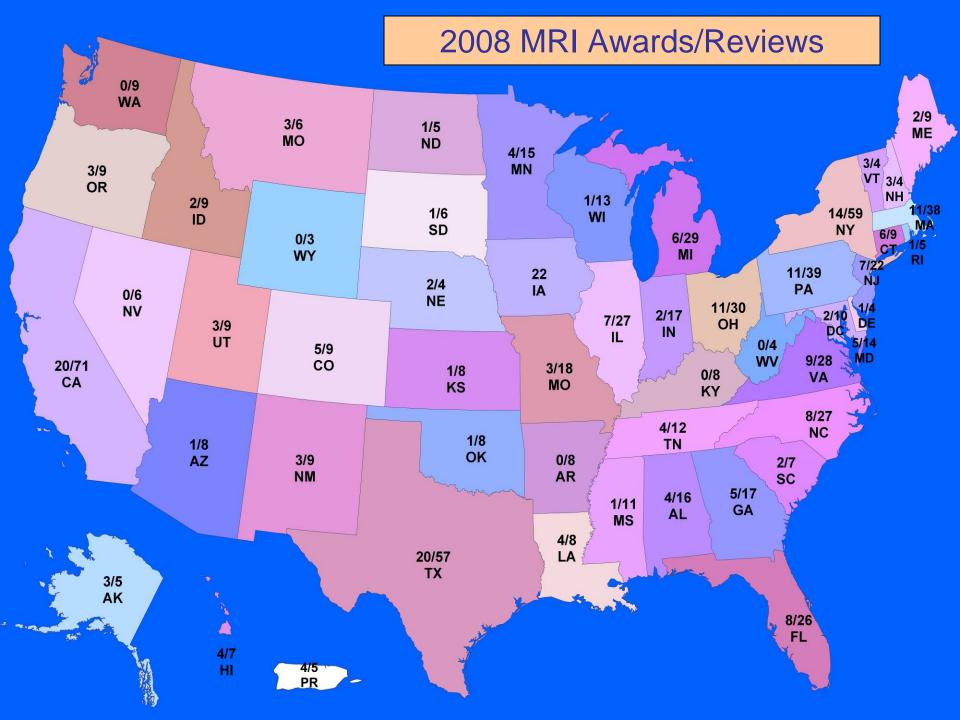


- •Provide a rich environment for encouraging future scientists, engineers, and educators to take risks in pursuing discoveries and new knowledge.
- •Provide means to undertake important investigations at interfaces of disciplines and/or new approaches within a discipline.
- •Demonstrate leadership in the involvement of groups traditionally underrepresented in science and engineering.
- •Undertake activities that facilitate knowledge transfer.

STC HISTORY



- Established in 1987.
- Objective: mount an innovative, interdisciplinary attack in important areas of basic research.
- The first STCs were established in 1989.
- The first two competitions led to the establishment of 25 STCs (no longer funded).
- Currently funded STCs include five centers for the class of 2000.
- Six centers for the class of 2002.
- Six centers for the class of 2005-2006.
- A sixth competition is currently under way, with the expectation of funding new centers in June of 2010.





- •The Major Research Instrumentation Program catalyzes new knowledge and discoveries by empowering the Nation's scientists and engineers by providing state-of-the-art research instrumentation. Thus enabling research-intensive learning environments that help develop not only a diverse workforce and next generation instrumentation, but facilitating academic/private sector partnerships.
- •Supports Instrument Acquisition or Instrument Development.
- •Award size:
 - * \$100K to \$2M for instrument development
 - * \$100K to \$4M for instrument acquisition
- •Note: no minimum award size for non-PhD granting institutions and for proposals in mathematical, social, behavioral, or economic sciences.

MRI GOALS



- •Support acquisition that improves access to and increased use of state-of-art modern instrumentation by researchers and students.
- •Foster development of next generation instrumentation that results in new instruments that are more widely used, or opens up new areas of research and research training.
- •Enable institutions to create well-equipped research environments that integrate research and education.
- Support instrumentation acquisition and development that takes advantages of new opportunities enabled by investments in cyberinfrastructure.
- Promote partnerships for instrumentation development between academic and private sectors.

MRI SUBMISSIONS



- Proposal Deadlines: Fourth Thursday in January.
- •Submission Limit: organization may submit or be included as a funded subawardee/subcontractor in no more that three MRI proposals. No more than two proposals submissions may be for instrumentation acquisition.
- •Cost sharing is 30% of the total project cost for PHD-granting institutions and non-degree granting institutions. Cost-sharing is not required for non-PhD granting institutions.

2008 MRI STATISTICS







- •Number Reviewed: 810
- •Dollars Requested: \$515.8 million
- •Number of Awards: 224 (39 DEV, 185 ACQ)
- •MRI Amount Awarded: \$93.2 million
- NSF Amount Awarded: \$101.0 million
- •Overall Success Rate: 27.7%
- •Mean Award: \$451,000
- •Median Award: \$330,000
- Number of Institutions that Participated: 449
- Number of Institutions Awarded: 184

2008 AWARD SNAPSHOT BY INSTITUTION TYPE

# reviewed	<u>Ph.D.</u> 472	<u>non-Ph.D.</u> 304	Non-degree 34	<u>MSI</u> 74
Mean request	\$765 K	\$430 K	\$704 K	\$555 K
# awards	129	84	11	24
Success rate	27.3%	27.6%	32.4%	32.0%
Mean award	\$571 K	\$267 K	\$440 K	\$407 K

MRI RECOVERY ACT



- •\$300M in American Recovery and Reinvestment Act.
- •Special solicitation to be released soon.
 - •Anticipated differences from current MRI solicitation.
 - One-time only.
 - ARRA Reporting.
 - Stay tuned.

ARI RECOVERY ACT



- •\$200M in American Research and Reinvestment Act.
- •Revision of 1996 Academic Research Infrastructure Program: Facilities Modernization Solicitation.
- Stay tuned.





The Cyber-Enabled Discovery and Innovation program seeks ambitious, transformative, multidisciplinary research proposals within or across three thematic areas:

- •From Data to Knowledge: enhancing human cognition and generating new knowledge from a wealth of heterogeneous digital data;
- •Understanding Complexity in Natural, Built, and Social Systems: deriving fundamental insights on systems comprising multiple interacting elements; and
- •Building Virtual Organizations: enhancing discovery and innovation by bringing people and resources together across institutional, geographical and cultural boundaries.

DEVELOPING STEM TALENT







- •The mission of NSF's Summer Scholars Internship Program (SSIP) is to develop undergraduate and graduate student potential through exposure to relevant science and engineering policy, research and education issues and programs; and to encourage students to earn graduate degrees and pursue careers in science, technology, engineering, and mathematics (STEM) fields.
- •AAAS Fellows spend one year at the National Science Foundation learning how NSF funds science, while providing scientific, engineering, and educational input on issues relating to NSF's mission to support fundamental science and engineering research and education. AAAS/NSF Science and Engineering Fellows will be placed at offices throughout the Foundation working with staff involved in the planning, development and oversight of agency programs.

CEOSE



The Committee on Equal Opportunities in Science and Engineering program is a Congressional mandated advisory committee, consists of 15 members who are appointed by the NSF Director. Members are representative of the science and engineering research and education communities (including federal agencies, private sectors firms, and scientific and engineering organizations). Members meet three times a year to provide advice to NSF concerning the implementation of the Science and Engineering Equal Opportunities Act and other policies and activities of NSF to encourage full participation of women, underrepresented minorities, and persons with disabilities in scientific, engineering, and professional fields.

MEDALS AND AWARDS



- •The National Medal of Science is a Presidential Award given to individuals for their exceptional contributions to knowledge in the physical, biological, mathematical, engineering sciences, or social and behavioral sciences. Since it's establishment in 1959, the National Medal of Science has been awarded to 441 distinguished scientists and engineers.
- •The Alan T. Waterman Award recognizes an outstanding young researcher in any field of science or engineering supported by the National Science Foundation.
- The Presidential Early Career Award for Scientists and Engineers (PECASE) recognizes outstanding scientists and engineers who, early in their careers, show exceptional potential for leadership at the frontiers of knowledge.



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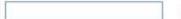
Programs and Activities

Office of Experimental Program to Stimulate Competitive Research (EPSCoR)

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Proposal and Award Policies and Procedures Guide

Introduction

Proposal Preparation and Submission

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Grants.gov Application Guide

Award and Administration

Special Announcements

- New 2009 Alan T. Waterman Award Winner
- Based upon the results of recently completed preliminary proposal competition Cyber-Enabled Discovery and Innovation (CDI), full proposals are by invitation only and due April 20 -May 20 2009
- Based upon the results of recently completed preliminary proposal competition Science and Technology Center: Integrative Partnership, full proposals are by invitation only and due on April 30, 2009
- CEOSE Meeting scheduled for June 29 30 2009
- PECASE Winners Recognized
- · Profiles in Team Science

OIA Highlights

Featured reports/updates on OIA-supported programs and activities... (More)

OIA Interactive Comidor

- <u>UVRadiation and Greenhouse Gases</u>
 Video
- Land Development and Water Quality (Video)
- (More)

Get OIA Updates by Email

Featured Programs

EPSCoR Research Infrastructure Improvement Program: Track-2

Major Research Instrumentation Program

Science and Technology Centers: Integrative Partnerships

EPSCoR Research Infrastructure Improvement Program: Track-1

Additional OIA Resources

OIA Organization Chart

Cyber-Enabled Discovery and Innovation

Neuroscience

Looking for STCs?

www.nsf.gov/od/oia