



NSF Regional Grants Conference Introduction & NSF Overview

March 21-22, 2011

Hosted by: Vanderbilt University, Nashville, TN

Panelist

Martha Rubenstein

Director and Chief Financial Officer, Office of Budget, Finance & Award Management

Ask Early, Ask Often!

Topics Covered

- **Origins of NSF**
- **NSF Organization**
- **FY 2012 Budget Request**
- **Funding Trends**
- **American Recovery & Reinvestment Act**
- **Interdisciplinary Research**
- **Transparency & Accountability**
- **Key Documents**

Origins of NSF



- **The Government should accept new responsibilities for promoting the flow of scientific knowledge and the development of scientific talent in our youth.”**
 - **Science - The Endless Frontier, 1945**
- **1947: Congress Approves, Truman Vetoes**
- **1950: Compromise Bill Approved & Signed by Truman**

NSF Act of 1950

- **To promote the progress of science...”**
- **NSB (24) and 1 Director, appointed by the President**
- **Encourage & develop a national policy for the promotion of basic research and education in the math, physical, medical, biological, engineering and other sciences**
- **Initiate & support basic scientific research in the sciences**
- **Evaluate the science research programs undertaken by agencies of the Federal government**
- **Provide information for S&E policy formation**

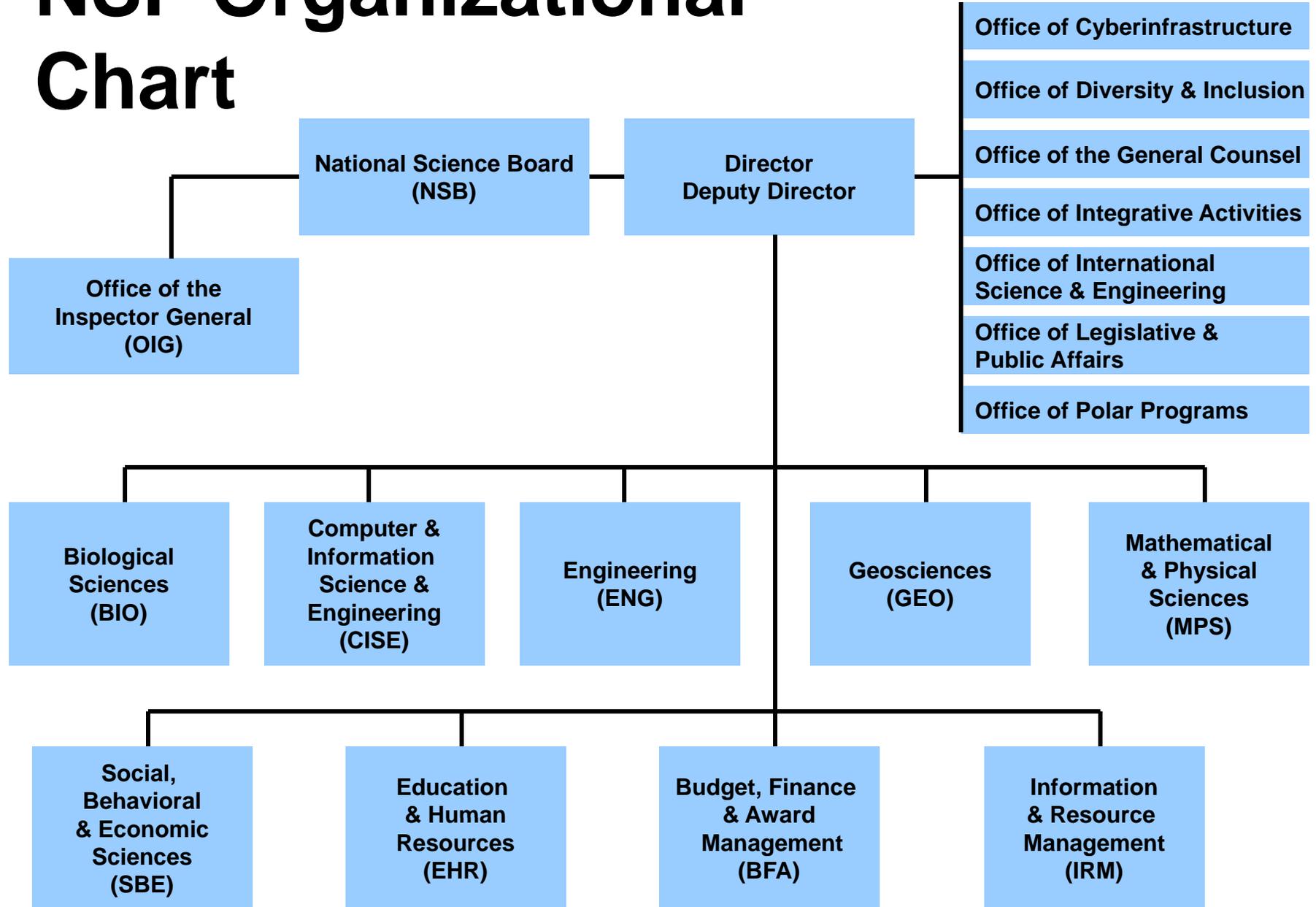
NSF Vision

**Advancing discovery, innovation,
and education beyond the
frontiers of current knowledge,
and empowering future
generations in science and
engineering.**

NSF in a Nutshell

- **Independent Agency**
- **Supports basic research & education**
- **Uses grant mechanism**
- **Low overhead; highly automated**
- **Discipline-based structure**
- **Cross-disciplinary mechanisms**
- **Use of Rotators/IPAs**
- **National Science Board**

NSF Organizational Chart



Personnel Changes

- Dr. Subra Suresh confirmed as NSF Director
- Dr. Cora Marrett nominated as NSF Deputy Director
- Joan Ferrini-Mundy appointed Assistant Director for Education & Human Resources
- Dr. Machi Dilworth appointed Head, Office of International Science & Engineering.
- Dr. Farnam Jahanian appointed Assistant Director for Computer & Information Science & Engineering
- Ms. Amy Northcutt appointed Acting Director of the Office of Information & Resource Management

FY 2012 Request vs. FY 2010 Enacted

(Dollars in Millions)

**Difference between
FY 2010 Enacted and
FY 2012 Request**

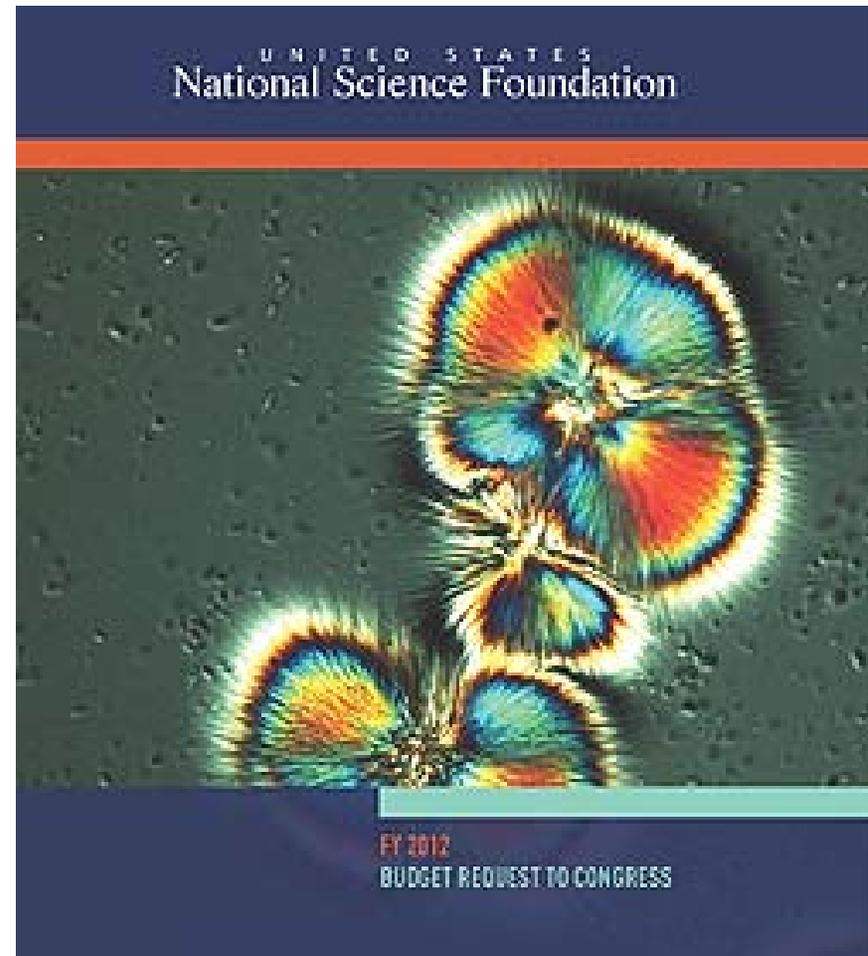
	FY 2010 Enacted	FY2012 Request	Amount	Percent
R&RA	\$ 5,564	\$ 6,254	\$ 690	12%
EHR	873	911	38	4%
MREFC	117	225	107	92%
AOAM	300	358	58	19%
NSB	5	5	0	7%
OIG	14	15	1	7%
Total, NSF	\$ 6,873	\$ 7,767	\$894	13%

Totals may not add due to rounding

FY 2012 Budget Request

The Three Pillars of Innovation

- Invest in the Building Blocks of American Innovation
- Promote Competitive Markets that Spur Productive Entrepreneurship
- Catalyze Breakthroughs for National Priorities



Invest in the Building Blocks of American Innovation

Request	FY 2012 Request
Fundamental Research	R&RA +12% / R&D +16%
Growth in research awards	+ 2,000
Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE)	\$12 M
Science and Engineering Beyond Moore's Law (SEBML)	\$97 M
Research at the Interface of the Biological, Mathematical, and Physical Sciences (BioMaPS)	\$76
Faculty Early Career Development Program (CAREER)	\$222 M
Graduate Research Fellowship Program (GRF)	\$198 M

Invest in the Building Blocks of American Innovation

Request	FY 2012 Request
STEM Education Programs	
Community Colleges	\$100 M
Teacher Learning for the Future (TLF)	\$20 M
Transforming Broadening Participation through STEM (TBPS)	\$20 M
Widening Implementation and Demonstration of Evidence-based Reforms (WIDER)	\$20

Promote Competitive Markets that Spur Productive Entrepreneurship

Request	FY 2012 Request
Advanced Manufacturing	\$190 M
Enhancing Access to the Radio Spectrum (EARS)	\$15 M
Engineering Research Centers (ERC) and Industry/University Cooperative Research Centers (I/UCRC)	\$96 M
Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR)	\$147 M
Wireless Innovation (WIN) Fund <ul style="list-style-type: none">• \$1 billion over five years (mandatory spending)• \$150 million in FY 2012	

Catalyze Breakthroughs for National Priorities

Request	FY 2012 Request
Cyberinfrastructure Framework for 21 st Century Science and Engineering (CIF21)	\$117 M
Science, Engineering, and Education for Sustainability (SEES)	\$998 M
Clean Energy	\$576 M
National Nanotechnology Signature Initiatives	\$117 M
National Robotics Initiative (NRI)	\$30 M

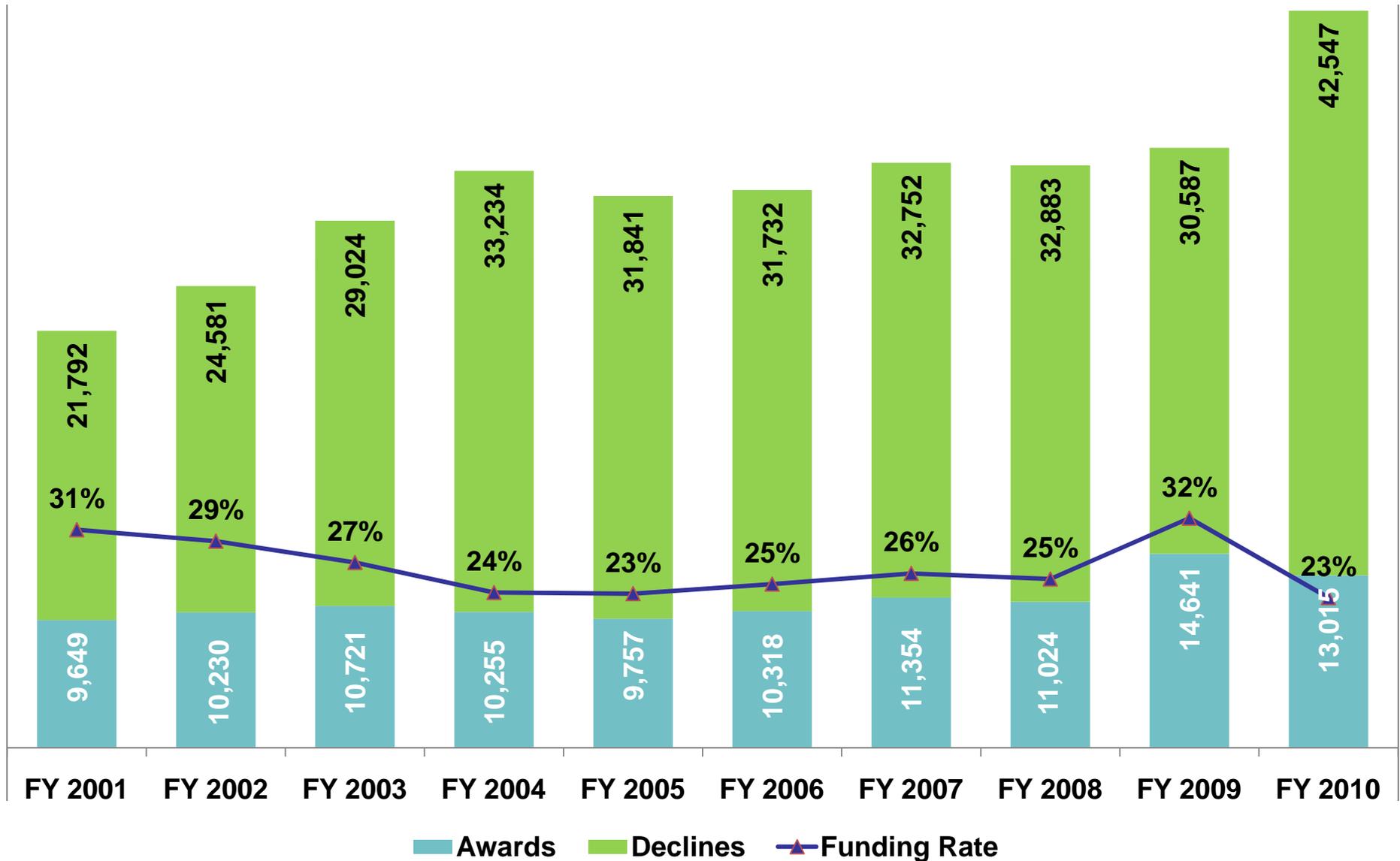
FY 2012 Budget Request: Major Research Equipment and Facilities Construction

- Advanced Laser Interferometer Gravitational-Wave Observatory (AdvLIGO)
- Advanced Technology Solar Telescope (ATST)
- Atacama Large Millimeter Array (ALMA)
- National Ecological Observatory Network (NEON)
- Ocean Observatories Initiative (OOI)

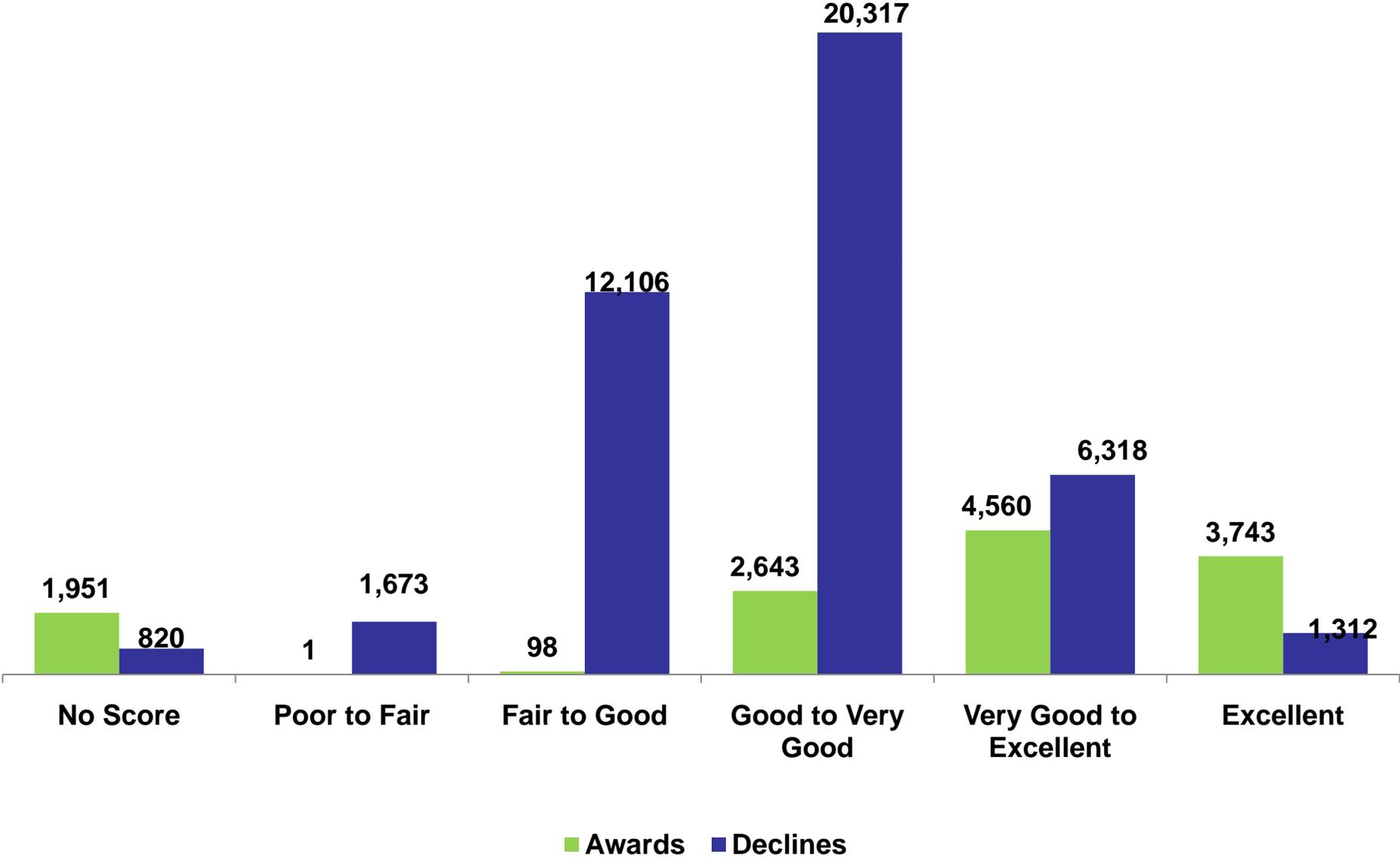
FY 2012 Budget Request: Terminations and Reductions

- Terminations:
 - Deep Underground Science and Engineering Laboratory
 - (DUSEL)
 - Graduate STEM Fellows in K-12 Education (GK-12)
 - National STEM Distributed Learning Program (NSDL)
 - Research Initiation Grants to Broaden Participation in Biology
 - (RIG-B)
 - Synchrotron Radiation Center (SRC)
- Reductions:
 - Science of Learning Centers (SLC)

NSF Competitive Awards, Declines, and Funding Rates



Distribution by Average Reviewer Ratings for Awards and Declines, FY 2010

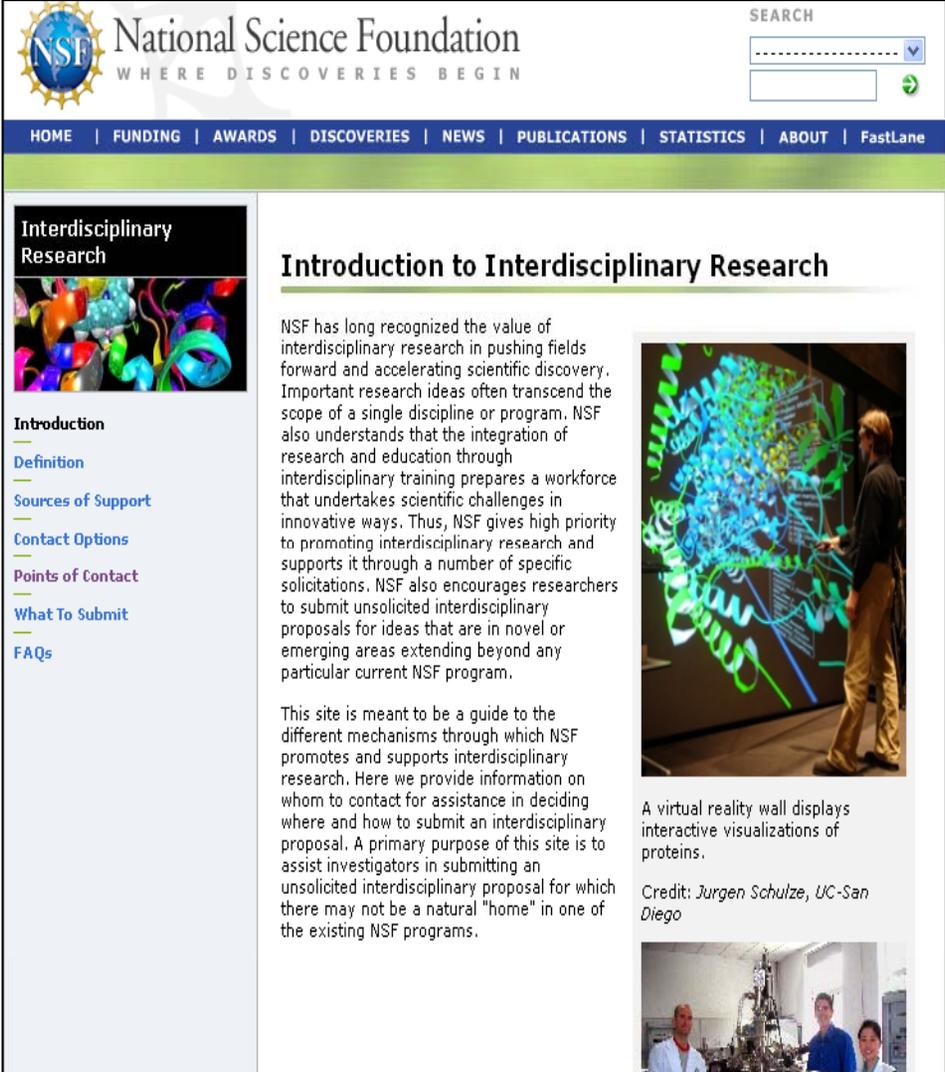


ARRA: Reporting & Accountability Requirements

- **The OMB expectation is for a high level of accountability and transparency from both agencies and recipients.**
 - **Higher scrutiny from:**
 - Administration
 - Congress
 - Public
 - Recovery Act Accountability & Transparency Board
 - NSF Office of the Inspector General (OIG)

Interdisciplinary Research (IDR)

- Important research ideas often transcend the scope of a single discipline or program.
- NSF gives high priority to promoting interdisciplinary research and supports it through a number of specific solicitations.
- NSF encourages submission of unsolicited interdisciplinary proposals for ideas that are in novel or emerging areas extending beyond any particular current NSF program.



The screenshot shows the NSF website's 'Interdisciplinary Research' page. At the top is the NSF logo with the tagline 'WHERE DISCOVERIES BEGIN' and a search bar. A navigation menu includes links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area is titled 'Introduction to Interdisciplinary Research' and contains a paragraph explaining NSF's support for IDR. To the right is a photo of a person interacting with a large, colorful protein structure visualization on a wall. Below the photo is a caption and credit. A sidebar on the left lists navigation links: Introduction, Definition, Sources of Support, Contact Options, Points of Contact, What To Submit, and FAQs. At the bottom right, there is a small photo of three people in a laboratory setting.

National Science Foundation
WHERE DISCOVERIES BEGIN

SEARCH

HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane

Interdisciplinary Research

Introduction to Interdisciplinary Research

NSF has long recognized the value of interdisciplinary research in pushing fields forward and accelerating scientific discovery. Important research ideas often transcend the scope of a single discipline or program. NSF also understands that the integration of research and education through interdisciplinary training prepares a workforce that undertakes scientific challenges in innovative ways. Thus, NSF gives high priority to promoting interdisciplinary research and supports it through a number of specific solicitations. NSF also encourages researchers to submit unsolicited interdisciplinary proposals for ideas that are in novel or emerging areas extending beyond any particular current NSF program.

This site is meant to be a guide to the different mechanisms through which NSF promotes and supports interdisciplinary research. Here we provide information on whom to contact for assistance in deciding where and how to submit an interdisciplinary proposal. A primary purpose of this site is to assist investigators in submitting an unsolicited interdisciplinary proposal for which there may not be a natural "home" in one of the existing NSF programs.

A virtual reality wall displays interactive visualizations of proteins.

Credit: Jurgen Schulze, UC-San Diego

Introduction
Definition
Sources of Support
Contact Options
Points of Contact
What To Submit
FAQs

Transparency & Accountability Administration Priorities

Focus on “Open Government”

Core Principles:

- Transparency
- Participation
- Collaboration

Open Government Policy:

- The President’s Memorandum on Transparency and Open Government (Jan 21, 2009)
- A Strategy for American Innovation: Driving Towards Sustainable Growth and Quality Jobs
- The Open Government Directive



“My Administration is committed to creating an unprecedented level of openness in Government. We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in Government.”

- President Barack Obama

Government-wide efforts: Transparency



- USA Spending.gov: Financial Transparency
- Recovery.gov: Tracking Economic Stimulus Spending
- Data.gov: One Stop Data Sharing Platform
- IT Dashboard: Visualizing Technology Spending

“Transparency promotes accountability by providing the public with information about what the Government is doing.”

OMB Memo on Open Government, Dec. 8, 2009

Transparency & Accountability Meeting Administration Priorities

NSF Efforts - Transparency

The image shows four overlapping screenshots of NSF-related websites:

- Grants.gov:** The top-most screenshot, showing the header with the logo and navigation links like Search, Contact Us, Site Map, and Help.
- National Science Foundation:** The second screenshot, featuring the NSF logo and the tagline "WHERE DISCOVERIES BEGIN". It includes a search bar and a navigation menu with links like HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane.
- Data.gov:** The third screenshot, displaying the "NSF Re DATA.GOV" header and a navigation menu with links like HOME, CATALOGS, STATE/LOCAL, FAQ, SUGGEST DATASETS, AGENCY PARTICIPATION, ABOUT, and BLOG.
- Research.gov:** The bottom-most and largest screenshot, showing a banner with a woman's face and the text "Why should I Use Research.gov? Get the answers >>". Below the banner is a "Services" section with icons and descriptions for various tools like "Research Spending and Results", "Policy Library", "Grants Application Status", "Institution and User Management", "Federal Financial Report", and "Recovery Act".

- Grants.gov
- NSF Recovery.gov
- Data.gov: NSF Datasets
- Research.gov

Transparency & Accountability

What It All Means For You

NSF Bringing it All Together

- Technology and Tools:
 - Research.gov: Partnerships and Services for the Research Community
- Standards and Policy:
 - Project Outcomes Report for the General Public (America COMPETES Act)
 - Federal Financial Report
 - Research Performance Progress Report

Research.gov

- Supports the needs of institutions and researchers
- Increases transparency of Federal research spending and outcomes (Research Spending & Results/Project Outcomes Report)
- Provides the public, scientific community, and Congress with easy access to information (SEE Innovation)
- Leverages government-wide standards (RPPR/FFR)

Current Research.gov Partners

Research.gov simplifies the research community's access to information and grant services for multiple federal agencies

- National Science Foundation (Lead Agency)
- National Aeronautics and Space Administration (Partner Agency)
- Department of Defense Research (Partner Agency)
- National Institute of Food and Agriculture (Partner Agency)

Formerly USDA's Cooperative State Research, Education, and Extension Service



Current Research.gov Services

- Public Facing Services:

- SEE Innovation (New!)
- Research Spending & Results
 - Find Recovery Act Awards
- Research Headlines & Events
- Policy Library (Government-wide)

- Research Community Services:

- Project Outcomes Report for the General Public (New!)
- Grants Application Status
- Federal Financial Reports
- Manage institution and user accounts
- Research Performance Progress Reports (planning stage)
- Application Submission Web Service (now in pilot)

Research.gov POWERING KNOWLEDGE AND INNOVATION

Home | Contact Us | Site Map | Help

Welcome Anonymous | January 22, 2010

Why should I Use Research.gov?
Get the answers >>

Services
Online tools to help you manage your grants
Welcome to Research.gov. Below is a list of services that we offer. Select a service from below to find out more.

- Research Spending and Results**
Now Available! Find Recovery Act Awards made by NSF. Here you can also find information about how NSF and NASA grant award dollars are being spent, what research is being performed, and how the outcomes of the research are benefiting society.
- Policy Library**
An electronic library that consolidates Federal and agency-specific policies, guidelines and procedures for use by Federal agencies and the awardee community. Agency-specific documents are included only for Research.gov partner agencies.
- Grants Application Status**
Principal Investigators and Sponsored Projects Office staff can check the status of grant applications, from submission to decision, submitted to NSF, USDA/CSREES, and DoD/ARO. Account Required.
- Institution and User Management**
Institution Administrators can manage profiles and permissions for their institutions and users. Account Required.
- Federal Financial Report**
Institutions can prepare and submit grant financial reports to NSF using the new government-wide standard form. Account Required.
- Recovery Act**
Learn More About the American Recovery and Reinvestment Act of 2009.

Events

- January 21 - 22, 2010
[Center for Research in Intelligent Storage \(CRIS\) IAB Meeting](#)
Partnership meeting
- January 25 - 26, 2010
[FDP Meeting](#)
Partnership meeting
- February 10 - 12, 2010
[NCURA Departmental Research Administration Workshop](#)
Workshop

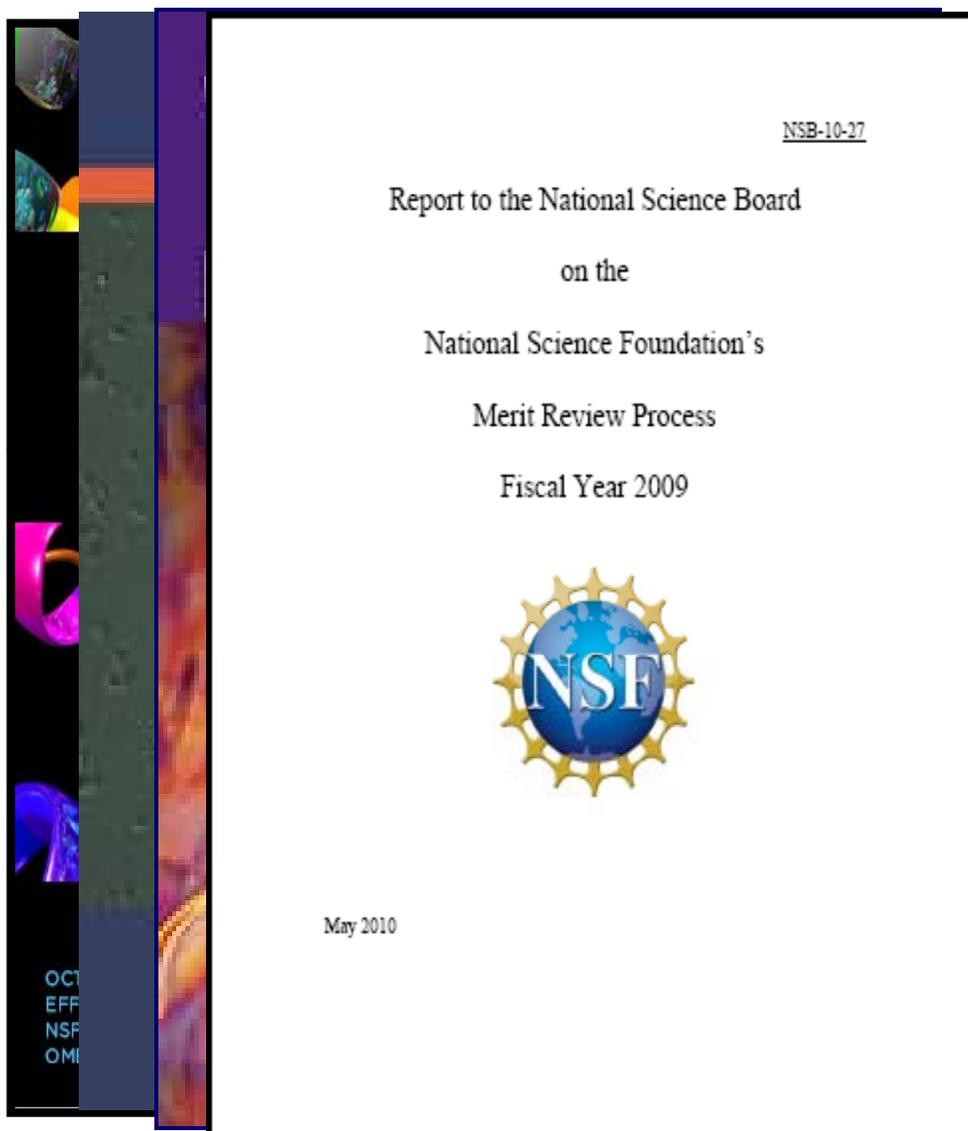
[View All Events](#)

My Weather

40°F
Cloudy

Arlington, VA
Fri, 22 Jan 2010 12:52 pm EST
Enter Your Zip:

Key Documents



- **Proposal & Award Policies & Procedures Guide (PAPPG)**
- **FY 2012 Budget Request to Congress**
- **Science & Engineering Indicators**
- **Report to the NSB on NSF Merit Review Process**

For More Information

Ask Early, Ask Often!

<http://www.nsf.gov/staff>

<http://www.nsf.gov/staff/orglist.jsp>