



NSF Regional Grants Conference Crosscutting Programs

March 21-22, 2011

Hosted by: Vanderbilt University, Nashville, TN

Panelists

David Hanych

Program Director, Directorate for Education & Human Resources,
Division of Research on Learning in Formal & Informal Settings

John McGrath

Division Director, Directorate for Engineering, Division of Chemical,
Bioengineering, Environmental & Transport Systems

Jennifer Schopf

Program Director, Office of the Director, Office of the Experimental
Program to Stimulate Competitive Research

Topics Covered

- **Find Funding for Crosscutting Programs**
- **Programs for Specific Groups/Purpose**
 - ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers
 - Cyberinfrastructure Framework for the 21st century (CF21)
 - Ethics Education in Science and Engineering (EASE)
 - Integrative Graduate Education & Research Traineeship Program (IGERT)
 - Grant Opportunities for Academic Liaison with Industry (GOALI)
 - Major Research Instrumentation (MRI)
 - Science, Engineering and Education for Sustainability (SEES)
 - Research Coordination Networks (RCN)
 - Research Experiences for Undergraduates (REU)
 - Research in Undergraduate Institutions (RUI)
- **Conclusion**

Find Funding for Crosscutting Programs

Go to http://www.nsf.gov/funding/pgm_list.jsp?type=xcut



The screenshot shows the NSF website's funding page. At the top, the NSF logo and tagline "WHERE DISCOVERIES BEGIN" are visible. A search bar is located in the top right corner. Below the header is a navigation menu with links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area is titled "Crosscutting and NSF-wide Active Funding Opportunities". It includes a description of the site's purpose, a search filter for "Crosscutting and NSF-wide" and "Active" status, and a table of funding opportunities. The table has columns for Title, Program Guidelines, and Due Dates. The first entry is "Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R²)".

Funding

Crosscutting and NSF-wide Active Funding Opportunities

This site provides program information for activities sponsored by more than one NSF organization. In addition, all NSF organizations accept proposals that cut across organizational and programmatic boundaries. We suggest that those seeking support for interdisciplinary work not described here consult the NSF program site(s) closest to the science, engineering or education focus of the planned work and contact relevant program officers to discuss submission of a proposal.

Org: Status:

[Get Crosscutting Program Annncmts & Info Updates by Email](#) [RSS](#)

Sorted by Title. Click column headings to sort.

Key: Crosscutting | NSF-wide | Grants.gov submission required

Title	Program Guidelines	Due Dates
Academic Research Infrastructure Program: Recovery and Reinvestment (ARI-R²)	09-562	

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

The screenshot shows the NSF website interface. At the top left is the NSF logo with the text "National Science Foundation WHERE DISCOVERIES BEGIN". To the right is a search bar with "NSF Web Site" selected. Below the header is a navigation menu with links: HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area features a "Funding" sidebar on the left with links like "Find Funding", "A-Z Index of Funding Opportunities", "Recent Funding Opportunities", "Upcoming Due Dates", "Advanced Funding Search", "Interdisciplinary Research", "How to Prepare Your Proposal", and "About Funding". The main content area displays the title "ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE)" with a "NSF-wide" tag. Below the title is "ADVANCE Program Information" and a paragraph of text. A "CONTACTS" section contains a table with the following data:

Name	Email	Phone	Room
Kelly Mack	kmack@nsf.gov	(703) 292-8575	815
Amy Rogers	arogers@nsf.gov	(703) 292-5178	815
Patricia Simms	psimms@nsf.gov	(703)292-7869	815
J.T. Clark	jtclark@nsf.gov	(703) 292-8219	815

Below the table are sections for "PROGRAM GUIDELINES" (Solicitation [10-593](#)) and "DUE DATES" (Letter of Intent Deadline Date: October 3, 2011; Full Proposal Deadline Date: November 7, 2011).

- **Contact:**

- Kelly Mack: (703) 292-8575; kmack@nsf.gov
- Amy Rogers: (703) 292-5178; arogers@nsf.gov
- Patricia Simms: (703) 292-7869; psimms@nsf.gov
- J.T. Clark: (703) 292-8219; jtclark@nsf.gov

- **Deadlines:**

- For Letters of Intent: October 3, 2011 (IT & IT- Catalyst)
- For full proposal: November 7, 2011 (IT & IT- Catalyst)

- **Current solicitation number: 10-593**

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

- **Program Goal:**
 - To increase the representation and advancement of women in academic science and engineering careers.
 - Both men and women may submit proposals to this program.
- **Projects Supported in 2011-2012**
 - Institutional Transformation (IT) Projects systemically and permanently change institutional practices to promote women in STEM academics.
 - IT-Catalyst Projects support the evaluation of current institutional activities to identify areas for transformation and cultural change.
 - Partnerships for Adaptation, Implementation, and Diffusion (PAID) Projects adapt, implement, and/or distribute exemplary programs, policies, and practices to new institutions or settings.
- **Eligibility Information:** Proposers may submit only one Institutional Transformation proposal or one IT-Catalyst proposal. There is no limit to the number of PAID proposals that can be submitted.

ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

PROGRAM SOLICITATION
NSF 10-593

REPLACES DOCUMENT(S):
NSF 09-504



National Science Foundation

Directorate for Education & Human Resources
Division of Human Resource Development

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Estimated Number of Awards: 23

Anticipated Funding Amount: \$12.2 million

Cyberinfrastructure Framework for the 21st Century (CIF-21)

NSF 10-015
Dear Colleague Letter: Cyberinfrastructure Framework for 21st Century Science and Engineering (CF21)

Dear Colleague:

Today, every discipline of science and engineering is being revolutionized by the widespread use of comprehensive cyberinfrastructure (CI). Computing power, data volumes, and network capacities are all on exponential growth paths, collaborations are growing dramatically, and all forms of CI---and multiple communities spanning multiple agencies and international domains---often must be brought to bear to address a single complex grand challenge problem, such as climate change. All of these developments are part of a revolutionary new approach to scientific discovery in which advanced computational facilities (e.g., data systems, computing hardware, high speed networks) and instruments (e.g., telescopes, sensor networks, sequencers) are coupled to the development of quantifiable models, algorithms, software and other tools and services to provide unique insights into complex problems in science and engineering.

NSF has, for over two decades, been providing the scientific community with open access to high performance computing facilities and the associated user support so that those facilities could be used to enable state-of-the-art, often transformative, scientific investigations. The support began in the 1980's with the initial funding of the NSF supercomputer centers, followed by the Partnerships for Advanced Computational Infrastructure (PACI) program and finally the TeraGrid program. Along with these programs, there have been other important developments in cyberinfrastructure such as the Open Science Grid, the National Virtual Observatory, data activities, major collaborative projects such as Network for Earthquake Engineering Simulation (NEES), The National Ecological Observatory Network (NEON), Ocean Observatories Initiative (OOI), Large Hadron Collider (LHC) and many others too numerous to list here.

As a logical next step, it is imperative that NSF develop a strategic long term vision of what is being called a *Cyberinfrastructure Framework for 21st Century Science and Engineering (CF21)*. This vision will need to address concepts and capabilities such as,

1. High end computational, data, visualization and sensor-based systems and the associated user support needed for transformative science; HPC systems and services of all types and flavors, networking, interoperable data systems and mining, including a focus on sustainability and extensibility.
2. Activities that link cyberinfrastructure framework into campuses (including government and business) and programs that provide the widely dispersed, most broadly based activities and resources; grids, cloud computing, loosely coupled campus services, federated ID management and hybrid networks involving wireless and social networks.
3. Major national and international research facilities and collaborations including large-scale NSF collaborative facilities and projects, cyberinfrastructure developed across NSF and other government agencies, including international partners.
4. A comprehensive plan for education and outreach in computational science to support learning and workforce

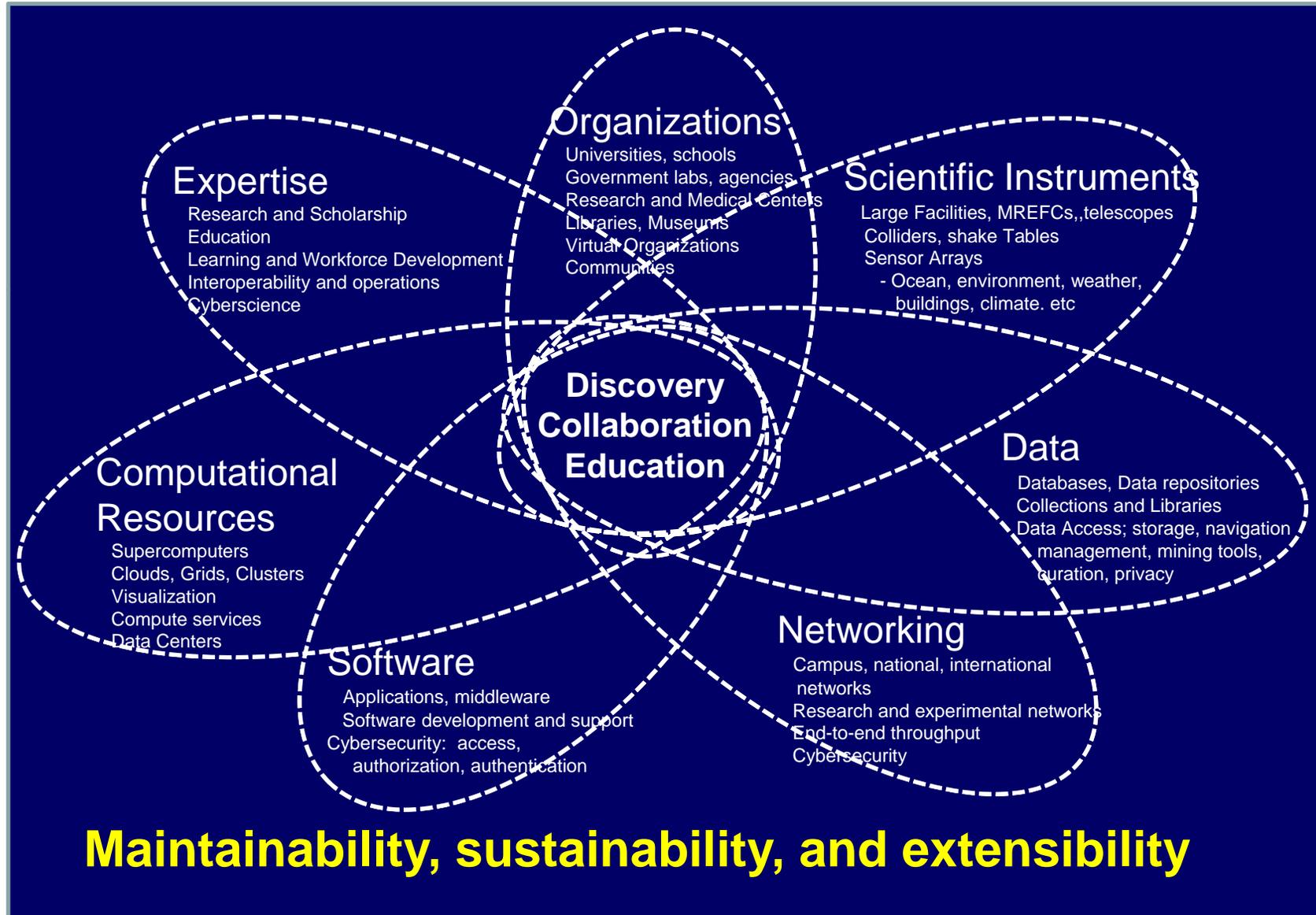
- **CIF-21 contact information is available at:**
<http://www.nsf.gov/pubs/2010/nsf10015/nsf10015.pdf>
- **Current Dear Colleague Letter: 10-015**

Cyberinfrastructure Framework for the 21st Century (CIF-21)

- **Program Goals:**

- **To enable virtual proximity – “ you are one with your resources”**
- **To continue to collapse the barrier of distance and remove geographic location as an issue**
- **ALL resources (including people) are virtually present, accessible and secure**
- **End-to-end integrated resources**
- **Science, discovery, innovation, education are the metrics**
- **An organizing fabric and foundation for science, engineering and education**

Cyberinfrastructure Framework for the 21st Century (CIF-21)



Cyberinfrastructure Framework for the 21st Century (CIF-21)

- **Strategic Plan:**
 - In process of developing detailed CIF21 Roadmap for FY12 and beyond
 - Will guide for CI investments across NSF
 - Lead by internal NSF working group
 - Multidirectorate “collective” programs designed to build critical infrastructure and capabilities
 - Outcomes and metrics being identified for each of 4 Thrust Areas
 - Computational Resources
 - Community Research Networks
 - Access and Connections to CI Resources
 - Data-enabled Science
 - Education: integral and embedded

Cyberinfrastructure Framework for the 21st Century (CIF-21)

- **CI as enabling infrastructure for S&E**
 - Sustainability and viability essential
 - NSF has a unique role in this strategy
- **New role for Data**
 - Data-enabled and data intensive science
 - Management of data - compute, storage, use, access, etc.
- **Multi-disciplinary approaches essential**
- **Education - embedded and integral**
 - Methodologies (compute and data intensive)
 - Culture/society (interdisciplinary approaches, collaborative)
- **More coordinated post-award management**
 - Ensure value across the entire research enterprise

Ethics Education in Science & Engineering (EERE)

The screenshot shows the NSF website for the EERE program. The header includes the NSF logo and the tagline 'WHERE DISCOVERIES BEGIN'. A search bar is located in the top right. The navigation menu includes links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area is titled 'Ethics Education in Science and Engineering (EERE)' and features a 'CONTACTS' section with a table of names and their respective divisions. Below the table are sections for 'PROGRAM GUIDELINES', 'Solicitation 11-514', 'DUE DATES', and 'SYNOPSIS'. The 'DUE DATES' section states the full proposal deadline date as March 14, 2011. The 'SYNOPSIS' section begins with the text: 'The Ethics Education in Science and Engineering (EERE) program funds research and educational projects that improve ethics education in all fields of science and'.

Funding

[Crosscutting](#)

Ethics Education in Science and Engineering (EERE)

CONTACTS

Name	Dir/Div	Name	Dir/Div
Kelly Joyce	SBE/SES	Myles Boylan	EHR/DUE
Tom Carruthers	MPS/PHY	Ephraim Glinert	CISE/IIS
Jill Karsten	GEO/OAD	Susan C. Kemnitzer	ENG/EEC
Carter Kimsey	BIO/DBI	Marshall M. Lih	ENG/CBET
Vanessa Richardson	OD/OISE	Carol F. Steel	EHR/DGE

PROGRAM GUIDELINES

Solicitation [11-514](#)

DUE DATES

Full Proposal Deadline Date: March 14, 2011

SYNOPSIS

The Ethics Education in Science and Engineering (EERE) program funds research and educational projects that improve ethics education in all fields of science and

- Contact disciplines for contact information.

- Deadlines:
March 1, 2012 &
March 1, 2013

- Current solicitation number: 11-514

Ethics Education in Science & Engineering (EERE)

- **Program Goal:**

- To fund research and educational projects that improve ethics education in all fields of science and engineering that NSF supports, with priority consideration given to interdisciplinary, inter-institutional, and international contexts.

- **Eligibility Information:**

- Only colleges and universities located and accredited in the U.S. or U.S.-based professional associations are eligible to apply to this program.
- NSF expects project teams to include persons with appropriate expertise.
- An eligible organization may submit only one proposal as the lead organization.

Ethics Education in Science & Engineering (EESE)

Ethics Education in Science and Engineering (EESE)

PROGRAM SOLICITATION
NSF 11-514

REPLACES DOCUMENT(S):
NSF 08-530

 **National Science Foundation**

- Directorate for Social, Behavioral & Economic Sciences
 - Division of Social and Economic Sciences
- Directorate for Biological Sciences
- Directorate for Computer & Information Science & Engineering
- Directorate for Education & Human Resources
- Directorate for Engineering
- Directorate for Geosciences
- Directorate for Mathematical & Physical Sciences
- Office of International Science and Engineering

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):
March 14, 2011

**Estimated Number
of Awards: 6 to 10**

**Anticipated
Funding Amount:
\$3 million**

Integrative Graduate Education and Research Traineeship (IGERT)

National Science Foundation
WHERE DISCOVERIES BEGIN

SEARCH
NSF Web Site

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

Funding

Find Funding
A-Z Index of Funding Opportunities
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Advanced Funding Search
Interdisciplinary Research
How to Prepare Your Proposal
About Funding

Proposals and Awards
Proposal and Award Policies and Procedures Guide
Introduction
Proposal Preparation and Submission
Grant Proposal Guide
Grants.gov Application Guide
Award and Administration
Award and Administration Guide
Award Conditions
Other Types of Proposals
Merit Review

NSF-wide

Integrative Graduate Education and Research Traineeship Program (IGERT)

Presentation on IGERT Proposal Preparation

Watch a streaming [video](#) presentation by IGERT program officers discussing the proposal preparation process.

CONTACTS

Name	Email	Phone	Room
Melur K. Ramasubramanian	igert@nsf.gov	(703) 292-8696	875
Carol F. Stoel	igert@nsf.gov	(703) 292-8696	875

IGERT Coordinating Committee members are listed on the IGERT web page, at <http://www.nsf.gov/crsspram/igert/cc.jsp>.

PROGRAM GUIDELINES

Solicitation [11-533](#)

Please be advised that the NSF Proposal & Award Policies & Procedures Guide (PAPPG) includes guidelines implementing the mentoring provisions of the America COMPETES Act (ACA) (Pub. L. No. 110-69, Aug. 9, 2007.) As specified in the ACA, each proposal that requests funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals. Proposals that do not comply with this requirement will be returned without review (see the PAPP Guide Part I: Grant Proposal Guide Chapter II for further information about the implementation of this requirement).

DUE DATES

Letter of Intent Deadline Date: May 2, 2011

- Coordinating Committee members are listed at: <http://www.nsf.gov/crsspram/igert/cc.jsp>
- Deadlines:
 - Letter of Intent: May 2, 2011
 - Full proposal: July 1, 2011
- Current solicitation number: 11-533

Integrative Graduate Education and Research Traineeship (IGERT)

- **Program Goals:**

- **To meet the challenges of educating U.S. Ph.D. scientists and engineers who will pursue careers in research and education with interdisciplinary backgrounds; deep knowledge in chosen disciplines; and the technical, professional, and personal skills.**
- **To catalyze a cultural change in graduate education for students, faculty, and institutions by establishing innovative models for graduate education and training in a fertile environment for collaborative research that transcends traditional disciplinary boundaries.**
- **To contribute to a world-class, broadly inclusive, and globally engaged science and engineering workforce.**

Integrative Graduate Education and Research Traineeship (IGERT)

Integrative Graduate Education and Research Traineeship Program (IGERT)

PROGRAM SOLICITATION
NSF 11-533

REPLACES DOCUMENT(S):
NSF 10-523



National Science Foundation

Directorate for Biological Sciences
Directorate for Computer & Information Science & Engineering
Office of Cyberinfrastructure
Directorate for Education & Human Resources
Directorate for Engineering
Directorate for Geosciences
Office of Integrative Activities
Office of International Science and Engineering
Directorate for Mathematical & Physical Sciences
Office of Polar Programs
Directorate for Social, Behavioral & Economic Sciences

Letter of Intent Due Date(s) (*required*) (due by 5 p.m. proposer's local time):

May 02, 2011

May 01, 2012

**Estimated Number
of Awards: 18**

**Anticipated
Funding Amount:
\$13.5 million**

Integrative Graduate Education and Research Traineeship (IGERT)

- **Eligibility Information:**
 - **Academic institutions in the U.S., its territories, or possessions that grant the Ph.D. degree in the sciences and engineering may submit proposals. The lead institution must grant the Ph.D. degree in at least one of the STEM fields supported by NSF and at least one Ph.D. granting unit should participate in the IGERT. Non-Ph.D. granting institutions, nonacademic, and international organizations may serve as collaborating organizations.**
 - **The PI must be on the faculty of the submitting institution.**
 - **There is a limit of one proposal that may be submitted by an institution either as a single institution or as a lead institution in a multi-institution proposal.**
 - **Any given individual may participate as PI or co-PI in only one proposal submission. A PI or co-PI on one proposal may serve as a faculty participant on other proposals.**

Grant Opportunities for Academic Liaison with Industry (GOALI)

NSF National Science Foundation
WHERE DISCOVERIES BEGIN

SEARCH: NSF Web Site

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

Funding

Find Funding
A-Z Index of Funding Opportunities
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Interdisciplinary Research
How to Prepare Your Proposal
About Funding

Proposals and Awards
Proposal and Award Policies and Procedures Guide
Introduction
Proposal Preparation and Submission
• Grant Proposal Guide
• Grants.gov Application Guide

NSF-wide
Grant Opportunities for Academic Liaison with Industry (GOALI)

CONTACTS

Name	Email	Phone	Room
Donald Senich	dsenich@nsf.gov	(703) 292-7082	550 S
William S. Bainbridge	wbainbri@nsf.gov	(703) 292-8930	
John Cherniavsky	jchernia@nsf.gov	(703) 292-5136	855S
Leonard E. Johnson	lejohnso@nsf.gov	(703) 292-8559	
Graham M. Harrison	gharriso@nsf.gov	(703) 292-7252	
Glenn H. Larsen	glarsen@nsf.gov	(703) 292-8050	
Jacqueline Meszaros	jmeszaro@nsf.gov	(703) 292-7261	980.12
Diane Jofuku Okamura	dokamuro@nsf.gov	(703) 292-4400	
Sonia Ortega	sortega@nsf.gov	(703) 292-8697	
Celeste Rohlfing	crohlfing@nsf.gov	(703) 292-4962	1005N

PROGRAM GUIDELINES
Solicitation [10-580](#)

- Contact disciplines for deadlines and contact information.
- Current solicitation number: 10-580

Grant Opportunities for Academic Liaison with Industry (GOALI)

- **Program Goals:**
 - **To promote university-industry partnerships by making project funds or fellowships/traineeships available to support an eclectic mix of industry-university linkages.**
 - **To fund research that lies beyond that which industry would normally fund by themselves.**
- **The solicitation targets high-risk/high-gain research with a focus on fundamental topics, new approaches to solving generic problems, development of innovative collaborative industry-university educational programs, and direct transfer of new knowledge between academe and industry.**

Grant Opportunities for Academic Liaison with Industry (GOALI)

Grant Opportunities for Academic Liaison with Industry (GOALI)

PROGRAM SOLICITATION

NSF 10-580

REPLACES DOCUMENT(S):

NSF 09-516



National Science Foundation

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Education & Human Resources

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Office of International Science and Engineering

Supplement Due Date(s):

Due Dates Vary by Program

Please discuss with the appropriate disciplinary program office prior to submitting a request for supplemental funding.

Estimated Number of Awards: 60 to 80

Anticipated Funding Amount: \$5 million from all participating directorates

Grant Opportunities for Academic Liaison with Industry (GOALI)

- **Eligibility Information:**

- **Proposals may only be submitted by U.S. institutions of higher education that confer degrees in research areas normally supported by NSF:**
 - **Proposals may only be submitted on behalf of faculty members with full-time appointments.**
 - **Federal laboratories and agencies, national labs, and non-profit organizations are encouraged to participate in three-way collaborations that also include the university and industry.**
 - **For fellowships/traineeships, only U.S. citizens, nationals, or permanent residents are eligible to apply for support under this program.**

Note: Only one proposal to NSF will be accepted per PI per fiscal year for GOALI consideration.

Major Research Instrumentation (MRI)

NSF National Science Foundation
WHERE DISCOVERIES BEGIN

SEARCH
NSF Web Site

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

Funding

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Award and Administration
• Award and Administration Guide

NSF-wide
Major Research Instrumentation Program: N

MRI ANNOUNCEMENTS

FREQUENTLY ASKED QUESTIONS POSTED
FAQs have been added for MRI Solicitation 11-503. To view the FAQs page click [here](#).

CONTACTS

Name	Email	Phone	Room
Dr. Craig C. Henderson	mri@nsf.gov	(703) 292-8040	
Dr. Randy L. Phelps	mri@nsf.gov	(703) 292-8040	

Additional contact information for NSF's Major Research Instrumentation Program is as follows:

Office of Integrative Activities
Major Research Instrumentation Program
National Science Foundation, Room 935
4201 Wilson Boulevard
Arlington, VA 22230
(703) 292-8040

E-Mail: mri@nsf.gov

Website: <http://www.nsf.gov/od/oia/programs/mri>

PROGRAM GUIDELINES
Solicitation [11-503](#)

- **Contact Information:**
 - (703) 292-8040
 - mri@nsf.gov
- **Deadline:**
January 27, 2011
- **Current solicitation number: 11-503**
- **Next Competition:**
January 2012
Deadline

Major Research Instrumentation (MRI)

- **Program Goals:**

- To support the ***acquisition*** of major state-of-the-art instrumentation, thereby improving access to, and increased use of, modern instrumentation shared by the Nation's scientists, engineers, and graduate and undergraduate students;

OR

- To foster the ***development*** of the next generation of major instrumentation, resulting in new instruments that are more widely used, and/or open up new areas of research and research training;

AND

- To enable academic departments, disciplinary and cross-disciplinary units, and multi-organization collaborations to create well-equipped research environments that ***integrate research with education.***

Major Research Instrumentation (MRI)

Major Research Instrumentation Program:

Instrument Acquisition or Development

PROGRAM SOLICITATION

NSF 11-503

REPLACES DOCUMENT(S):

NSF 10-529



National Science Foundation

Office of Integrative Activities

Directorate for Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Education & Human Resources

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Office of Polar Programs

Office of Cyberinfrastructure

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

January 27, 2011

4th Thursday in January thereafter

**Number of Proposals
Received for FY 2011: 876**

**Estimated Number of FY
2011 Awards: 175**

**Anticipated Funding
Amount: \$90 million**

Major Research Instrumentation (MRI)

- **The Basics:**

- **Submission limit** - Three (3) per organization: *If three proposals are submitted, at least one of the proposals must be for instrument development.*
- **Request size from NSF** - \$100,000-\$4 million from all eligible organizations; < \$100,000 exception for certain disciplines and from non-Ph.D.-granting institutions.
- **Merit Review** - At the time of submission, PI's are asked to identify an NSF division(s) to review proposal. NSF reserves the right to place proposals in the appropriate division(s) for review.

Major Research Instrumentation (MRI)

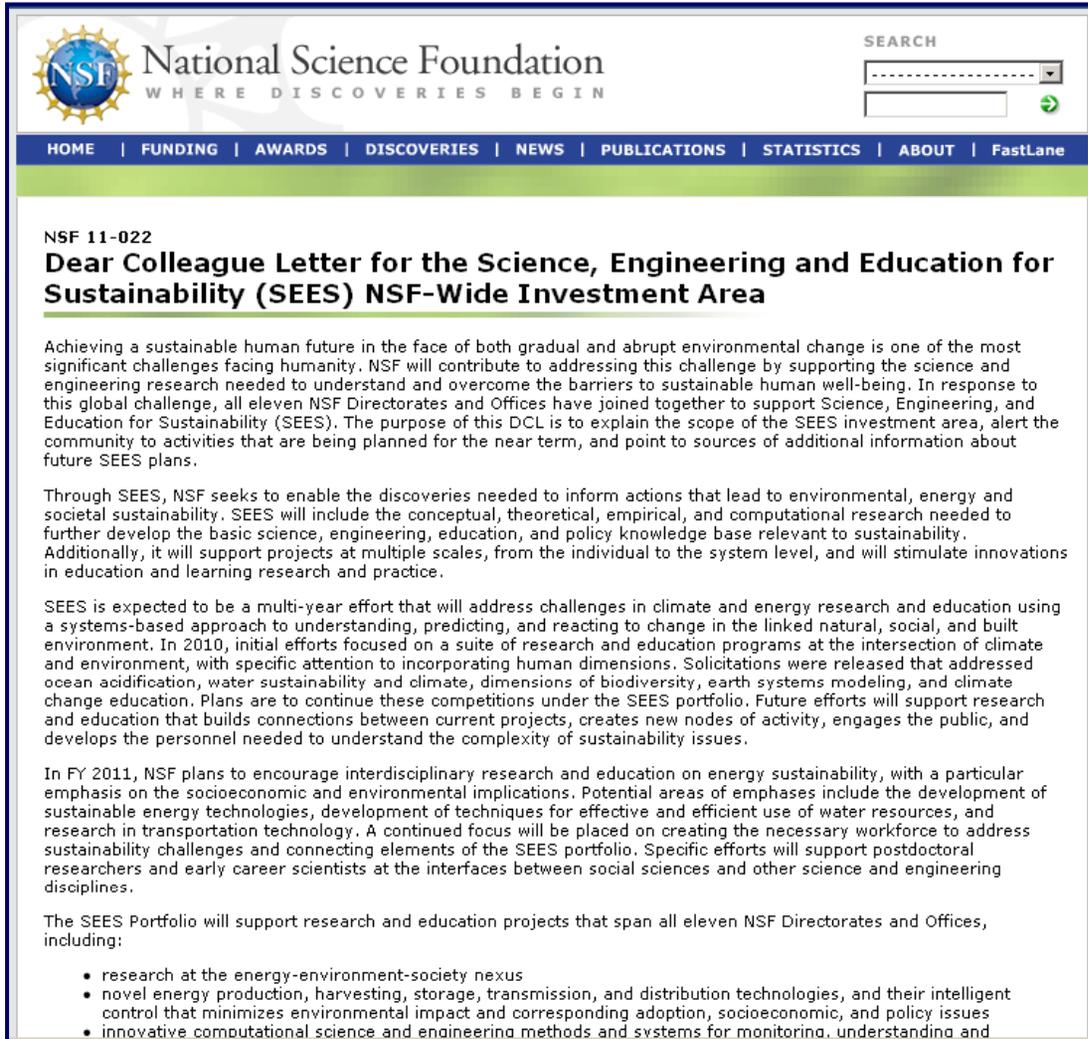
- **The Basics - Eligibility Information:**
 - **U.S. organizations may submit proposals provided that they are located in the U.S., its territories, and possessions. Specifically:**
 - **Colleges, universities, and institutions of higher education**
 - **Independent research museums and science centers**
 - **Independent nonprofit research organizations**
 - **Consortia of eligible organizations**
 - **Small businesses**
 - May act as private sector partners with submitting organizations
 - May not submit proposals as a lead organization

Major Research Instrumentation (MRI)

- **The Basics – Cost Sharing:**
 - **The America COMPETES Act of 2007 directed NSF to require cost-sharing in the MRI Program (this requirement remains in effect)**
 - **Ph.D. granting and non-degree granting institutions: 30% cost-sharing required on all proposals**
 - **Non-Ph.D. granting institutions: no cost-sharing required**

More detailed format and supplemental documentation requirements

Science, Engineering and Education for Sustainability (SEES)



The screenshot shows the NSF website header with the logo and tagline "National Science Foundation WHERE DISCOVERIES BEGIN". A search bar is visible in the top right. Below the header is a navigation menu with links: HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane. The main content area features the title "NSF 11-022 Dear Colleague Letter for the Science, Engineering and Education for Sustainability (SEES) NSF-Wide Investment Area". The text discusses the challenges of environmental change and the role of NSF in supporting research and education for sustainability. It mentions that SEES is a multi-year effort focusing on climate and energy research and education, with specific attention to incorporating human dimensions. The text also notes that in FY 2011, NSF plans to encourage interdisciplinary research and education on energy sustainability, with a particular emphasis on the socioeconomic and environmental implications. Finally, it states that the SEES Portfolio will support research and education projects that span all eleven NSF Directorates and Offices, including:

- research at the energy-environment-society nexus
- novel energy production, harvesting, storage, transmission, and distribution technologies, and their intelligent control that minimizes environmental impact and corresponding adoption, socioeconomic, and policy issues
- innovative computational science and engineering methods and systems for monitoring, understanding and

- SEES contact information is available at: http://www.nsf.gov/sbe/sees/sees_contacts.jsp
- Contact individual disciplines for deadlines.
- Current Dear Colleague Letter: 11-022

Science, Engineering and Education for Sustainability (SEES)

- **Program Goals:**

- **To enable the discoveries needed to inform actions that lead to environmental, energy, and societal sustainability.**
- **To address challenges in climate and energy research and education using a systems-based approach to understanding, predicting, and reacting to change in the linked natural, social, and built environment.**
- **To encourage interdisciplinary research and education on energy sustainability, with a particular emphasis on the socioeconomic and environmental implications.**

Science, Engineering and Education for Sustainability (SEES)

- **Researchers who are interested in SEES-related topics are encouraged to consider the following activities, as well as periodically check the SEES web page (<http://www.nsf.gov/sees>):**
 - **Dynamics of Coupled Natural and Human Systems (CNH) program (NSF 10-612)**
 - **The Catalyzing New International Collaborations program (NSF 11-508)**
 - **The Research Coordination Networks (RCN) program (NSF 11-531)**
 - **Researchers are encouraged to include support for postdoctoral researchers within new proposal submissions, especially those SEES-related projects providing opportunities to integrate the social and natural sciences**
 - **Interdisciplinary workshops are encouraged that would help inform the development of SEES activities over the coming years. Investigators should discuss their ideas with Program Officers in the most relevant NSF core program(s) to determine the saliency of their concepts with SEES goals**

Research Coordination Networks (RCN)

The screenshot shows the NSF website's page for Research Coordination Networks (RCN). The header includes the NSF logo and the tagline "WHERE DISCOVERIES BEGIN". A navigation bar contains links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. A search box is located in the top right. The main content area is titled "Research Coordination Networks (RCN)" and includes sections for CONTACTS, PROGRAM GUIDELINES, and DUE DATES. The CONTACTS section provides a link to "http://www.nsf.gov/bio/ef/rcn_sees_contacts_2011.htm". The PROGRAM GUIDELINES section lists solicitation "11-531". The DUE DATES section lists three deadlines: May 24, 2011 for the RCN SEES Track; June 15, 2011 for the RCN UBE and UBE Incubator Track; and February 3, 2012 for the RCN SEES Track. A SYNOPSIS section explains the goal of the RCN program to advance a field or create new directions in research or education.

- RCN contact information is available at:
http://www.nsf.gov/bio/ef/rcn_sees_contacts_2011.htm
- Deadlines:
 - For general (non-targeted) RCN:
Contact individual program for due dates
 - For targeted tracks:
 - RCN SEES:
May 24, 2011
 - RCN UBE and UBE Incubator:
June 15, 2011
- Current solicitation number: 11-531

Research Coordination Networks (RCN)

- **Program Goals:**

- **To advance a field or create new directions in research or education; innovative ideas for implementing novel networking strategies are especially encouraged.**
- **To communicate and coordinate groups of investigators in their research, training, and educational activities across disciplinary, organizational, geographic, and international boundaries.**

Research Coordination Networks (RCN)

- **Additional targeted tracks within the RCN programs are intended to foster linkages across selected directorates:**
 - **Science, Engineering, and Education for Sustainability (RCN-SEES):** Focuses on interdisciplinary topics that will advance sustainability science, engineering and education as an integrative approach to the challenges of adapting to environmental, social and cultural changes associated with growth and development of human populations, and attaining a sustainable energy future.
 - **Undergraduate Biology Education (RCN-UBE):** Focuses on any topic likely to lead to improved participation, learning, or assessment in undergraduate biology curricula.

Research Coordination Networks (RCN)

Research Coordination Networks (RCN)

PROGRAM SOLICITATION
NSF 11-531

REPLACES DOCUMENT(S):
NSF 10-566

 **National Science Foundation**

- Directorate for Biological Sciences
- Directorate for Computer & Information Science & Engineering
- Directorate for Education & Human Resources
- Directorate for Engineering
- Directorate for Geosciences
- Directorate for Mathematical & Physical Sciences
- Directorate for Social, Behavioral & Economic Sciences
- Office of Cyberinfrastructure
- Office of International Science and Engineering
- Office of Polar Programs

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

- May 24, 2011
 - RCN SEES Track
- June 15, 2011
 - RCN UBE and UBE Incubator Track
- February 03, 2012

**Estimated Number of
Awards: 15 to 25**

**Anticipated Funding
Amount:
\$7,500,000 to \$17,500,000
(pending availability of
funding)**

Research Coordination Networks (RCN)

- **Eligibility Information:**
 - **Proposals may only be submitted by the following:**
 - **Non-profit, non-academic organizations (e.g., independent museums, observatories, research labs, professional societies) in the U.S. associated with educational or research activities.**
 - **Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the U.S., acting on behalf of their faculty members.**

Research Experiences for Undergraduates (REU)

Funding

Find Funding

- A-Z Index of Funding Opportunities
- Recent Funding Opportunities
- Upcoming Due Dates
- Advanced Funding Search
- Interdisciplinary Research
- How to Prepare Your Proposal
- About Funding

Proposals and Awards

- Proposal and Award Policies and Procedures Guide
- Introduction
- Proposal Preparation and Submission
 - Grant Proposal Guide
 - Grants.gov Application Guide
- Award and Administration
 - Award and Administration Guide
- Award Conditions
- Other Types of Proposals
- Merit Review

NSF-wide

Research Experiences for Undergraduates (REU)

NOTE ON THE PROPOSAL DEADLINE FOR REU SITES

Two due dates are listed for REU Site proposals each year. The June deadline applies *only* to REU Site proposals that require access to Antarctica, which must be submitted to one of the Antarctic Sciences Division (ANT) research programs in the Office of Polar Programs (OPP). **The fall deadline (which is October 22 in 2009, and the fourth Wednesday in August in 2010 and beyond) applies to all other REU Site proposals.**

CONTACTS

NSF REU Site Contacts: http://www.nsf.gov/crssprgm/reu/reu_contacts.jsp

PROGRAM GUIDELINES

Solicitation [09-598](#)

DUE DATES

Full Proposal Deadline Date: June 3, 2011
Deadline for REU Site proposals requiring access to Antarctica. All other REU Site proposals must be submitted to the August REU deadline.
First Friday in June, Annually Thereafter

Full Proposal Deadline Date: August 24, 2011
Deadline for REU Site proposals except for those requiring access to Antarctica
Fourth Wednesday in August, Annually Thereafter

SYNOPSIS

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. This solicitation features two mechanisms for support of student research: (1) REU Sites are based on independent proposals to initiate and conduct projects that

- **Contact Information:**
http://www.nsf.gov/crssprgm/reu/reu_contacts.jsp
- **Deadlines:**
 - Full proposal for REU Sites (non-Antarctic):
August 24, 2011
 - Full proposal for REU Sites (Antarctic):
June 3, 2011
 - REU Supplements:
Contact individual discipline
- **Current solicitation number: 09-598**

Research Experiences for Undergraduates (REU)

- **REU Sites:**

- **Program Goals:**

- **To initiate and conduct projects that engage a number of undergraduate students in research.**
 - **To involve students in research who might not otherwise have the opportunity, particularly those from academic institutions where research programs are limited.**

- **Recruitment:**

- **Significant percentage of students from outside host institution**

Research Experiences for Undergraduates (REU)

- **REU Supplements:**
 - **Program Goal:**
 - To provide support for one or two undergraduate students to participate in research, as part of a new or ongoing NSF-funded research project.
- **REU Special Opportunities:**
 - **Partnership with the Department of Defense**
 - **Cyberinfrastructure**
 - **International Projects**
 - **Ethics in Science and Engineering**
 - **Research Experiments for Teachers**
 - **REU Supplements for Evaluative Research Experiences**

Research Experiences for Undergraduates (REU)

Research Experiences for Undergraduates (REU)
Sites and Supplements

PROGRAM SOLICITATION
NSF 09-598

REPLACES DOCUMENT(S):
NSF 07-569

 **National Science Foundation**
Directorate for Biological Sciences
Directorate for Computer & Information Science & Engineering
Directorate for Education & Human Resources
Directorate for Engineering
Directorate for Geosciences
Directorate for Mathematical & Physical Sciences
Directorate for Social, Behavioral & Economic Sciences
Office of Cyberinfrastructure
Office of International Science and Engineering
Office of Polar Programs

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):
Deadline for REU Site proposals except those requiring access to Antarctica:
October 22, 2009

- REU activity may be funded in several different ways:
 - A standard or continuing grant (for REU Sites)
 - A supplement to an existing award
 - A component of a new or renewal grant or cooperative agreement

- **Estimated Number of Awards: 1,800 to 1,850**
 - Estimate includes approximately 170 new site awards and 1,650 new supplement awards.
- **Anticipated Funding Amount: \$67.7 million in FY 2010**
 - Estimate includes both sites and supplements.

Research in Undergraduate Institutions (RUI)

The screenshot shows the NSF website with the following elements:

- Header:** National Science Foundation logo and tagline "WHERE DISCOVERIES BEGIN". A search bar with "NSF Web Site" selected.
- Navigation:** HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane
- Left Sidebar:** Funding section with links: Find Funding, A-Z Index of Funding Opportunities, Recent Funding Opportunities, Upcoming Due Dates, Advanced Funding Search, Interdisciplinary Research, How to Prepare Your Proposal, About Funding, Proposals and Awards, Proposal and Award Policies and Procedures Guide, Introduction, Proposal Preparation and Submission, Grant Proposal Guide, Grants.gov Application Guide, Award and Administration, Award and Administration.
- Main Content:** "Crosscutting/NSF-wide" link, "Research in Undergraduate Institutions (RUI)" title with icons, "CONTACTS" section with a table of names and divisions, "PROGRAM GUIDELINES" section with an announcement link "00-144", "DUE DATES" section with "Full Proposal Accepted Anytime", and a detailed paragraph about deadlines.

Name	Dir/Div	Name	Dir/Div
Robert (Scott) Fisher	MPS/AST	Henry N. Blount	OIA/EPSCoR
Harriet G. Taylor	CISE/CNS	Richard J. Fragaszy	ENG/EFRI
Jill L. Karsten	GEO/OAD	Michael Mishkind	BIO/IOS
Julie M. Palais	OD/OPP		

PROGRAM GUIDELINES
Announcement [00-144](#)

DUE DATES
Full Proposal Accepted Anytime

Many NSF programs have deadlines or target dates to allow time for consideration by review panels that meet periodically. Proposals must be submitted by the investigator's home institution in accordance with the target dates or deadlines, if any, of the NSF disciplinary program in the proposed research area. To confirm a date, refer to the program's page on the NSF Web site (<http://www.nsf.gov/>) or to the NSF E-Bulletin, at <http://www.nsf.gov/home/ebulletin/>. Inquiries about deadlines may be made also to the appropriate research program officer. Such inquiries are especially important for shared-use instrumentation proposals, which are sometimes funded cooperatively by two or more programs, depending upon the disciplinary mix of the users. Some programs require the submission of preliminary proposals prior to the submission of full proposals, with due dates posted on program Web sites and in the NSF E-Bulletin.

- Contact discipline for deadlines and contact information.
- Current solicitation number: 00-144

Research in Undergraduate Institutions (RUI)

- **Program Goals:**

- To support high quality research with active involvement of undergraduates.
- To strengthen the research environment in undergraduate institutions.
- To promote integration of research and education in undergraduate institutions.

- **Proposal Types:**

- Regular research
- Multi-user instrumentation
- Research opportunity awards

- **Eligibility Information:**

- Institutions that award an average of 10 or fewer Ph.D or D.Sc. Degrees per year in all NSF-supportable disciplines are eligible.

For More Information

ADVANCE - Program Page:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383

Recent, Active Awards:

<http://www.nsf.gov/awardsearch/progSearch.do?SearchType=progSearch&page=2&QueryText=&ProgOrganization=&ProgOfficer=&ProgEleCode=&BooleanElement=false&ProgRefCode=&BooleanRef=false&ProgProgram=A%2CADVANCE+-+FELLOWS%2CADVANCE+-+INSTITUTIONAL+TRANSF%2CADVANCE+-+INSTITUTIONAL+TRANSF%2CADVANCE+-+IT-START%2CADVANCE+-+LEADERSHIP%2CADVANCE-PAID&ProgFoaCode=&Restriction=2&Search=Search#results>

CIF-21 – Dear Colleague Letter:

<http://www.nsf.gov/pubs/2010/nsf10015/nsf10015.jsp?org=OCI>

EASE - Programs Page: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13338

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=13338&SearchType=progSearch&page=2&QueryText=&ProgOrganization=&ProgOfficer=&ProgEleCode=&BooleanElement=false&ProgRefCode=&BooleanRef=false&ProgProgram=ETHICS+EDU+FOR+SCI+%26+ENG+PROG&ProgFoaCode=&Restriction=2&Search=Search#results

For More Information

IGERT - Program Page: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12759

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=12759&SearchType=progSearch&page=2&QueryText=&ProgOrganization=&ProgOfficer=&ProgEleCode=1328,1335&BooleanElement=true&ProgRefCode=&BooleanRef=true&ProgProgram=&ProgFoaCode=&RestrictActive=on&Search=Search#results

GOALI - Program Page: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13706

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=13706&SearchType=progSearch&page=ProgEleCode=1504#results

MRI - Program Page: <http://www.nsf.gov/od/oia/programs/mri/>

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=5260&SearchType=progSearch&page=2&QueryText=&ProgOrganization=&ProgOfficer=&ProgEleCode=1189&BooleanElement=true&ProgRefCode=&BooleanRef=true&ProgProgram=&ProgFoaCode=&RestrictActive=on&Search=Search#results

SEES – Program Page: <http://www.nsf.gov/geo/sees/>

Dear Colleague Letter: <http://www.nsf.gov/pubs/2011/nsf11022/nsf11022.jsp?org=NSF>

For More Information

RCN - Program Page: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11691

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=11691&RestrictActive=on&d-30996-s=0&d-30996-xo=ascending&d-30996-xs=0&ProgFoaCode=&QueryText=&Search=Search&ProgEleCode=&d-30996-p=1&BooleanElement=true&ProgOfficer=&SearchType=progSearch&ProgOrganization=&BooleanRef=true&page=2&ProgRefCode=1664&ProgProgram=&d-30996-o=1#results

REU - Program Page: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=5517&SearchType=progSearch&page=2&QueryText=REU+Site&RestrictTitle=on&ProgOrganization=&ProgOfficer=&ProgEleCode=&BooleanElement=true&ProgRefCode=9250&BooleanRef=true&ProgProgram=&ProgFoaCode=&Restriction=2&Search=Search#results

RUI - Program Page: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5518

Recent, Active Awards:

http://www.nsf.gov/awardsearch/progSearch.do?WT.si_n=ClickedAbstractsRecentAwards&WT.si_x=1&WT.si_cs=1&WT.z_pims_id=5518&SearchType=progSearch&page=2&QueryText=&ProgOrganization=&ProgOfficer=&ProgEleCode=&BooleanElement=true&ProgRefCode=9229%2C9141&BooleanRef=true&RestrictActive=on&Search=Search#results

For More Information

Ask Early, Ask Often!

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

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