

Crosscutting Programs

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NATIONAL SCIENCE FOUNDATION

Ask Early, Ask Often!

Sankar Basu

Program Director, Directorate for Computer & Information Science & Engineering, Division of Computing & Communication Foundations

Linnea Fletcher

Program Director, Directorate for Education & Human Resources, Division of Undergraduate Education

James Lightbourne

Senior Advisor for the Integration of Research & Education, Office of the Director, Office of Integrative Activities

Judith Verbeke

Division Director (Acting), Directorate for Biological Sciences, Division of Integrative Organismal Biology



Funding



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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 Announcements & 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 
ACCELERATING DISCOVERY IN SCIENCE AND ENGINEERING THROUGH PETASCALE SIMULATIONS AND ANALYSIS (PetaApps) 	08-592	
Active Nanostructures and Nanosystems (ANN) 	06-595	
ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers 	09-504	Letter of Intent: August 4, 2009 Full Proposal: November 12, 2009
Advanced Learning Technologies (ALT) 	06-535	
Collaboration in Mathematical Geosciences (CMG) 	09-520	Full Proposal: March 10, 2009

Programs for Specific Groups/Purposes

- ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers
- Cyber-Enabled Discovery & Innovation (CDI)
- Grant Opportunities for Academic Liaison with Industry (GOALI)
- Integrative Graduate Education & Research Traineeship Program (IGERT)
- Major Research Instrumentation (MRI)
- NSF Graduate Teaching Fellows in K-12 Education (GK-12)
- Research Experiences for Undergraduates (REU)
- Research in Undergraduate Institutions (RUI)



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

- Program Solicitation: NSF 09-504
- Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5383&org=NSF&sel_org=X CUT&from=fund
- Deadlines
 - Letter of Intent (Required) – August 4, 2009
 - Institutional Transformation (IT)
 - Institutional Transformation Catalyst (IT-Catalyst)
 - Full Proposal – November 12, 2009
 - Institutional Transformation (IT)
 - Institutional Transformation Catalyst (IT-Catalyst)
- Contact Information:
 - Jessie DeAro (EHR): (703) 292-5350; jdearo@nsf.gov
 - Kelly Mack (EHR): (703) 292-8575; kmack@nsf.gov



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, thereby contributing to the development of a more diverse science and engineering workforce. Creative and innovative proposals to realize this goal are sought from men and women.



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

- Institutional Transformation (IT) Projects
 - institution-wide activities to systemically transform institutional practices, in order to create positive, sustainable, and permanent change in academic climate in an effort to recruit, retain and promote women in STEM academics.
- IT-Catalyst Projects
 - support the necessary data collection and institutional assessment at institutions of higher education to begin institutional transformation and culture change activities.
- Partnerships for Adaptation, Implementation, and Diffusion (PAID) Projects
 - adapt, implement and/or disseminate exemplary programs, policies, and practices to new institutions or new settings.



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

➤ Award Information

- Total awards estimated to be up to 38
- Anticipated Funding Amount: \$16 million over FY 2009 and FY 2010.



Cyber-Enabled Discovery & Innovation (CDI)

- Program Solicitation: [NSF-08-604](#)
- Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503163&from=fund
- Deadlines
 - Preliminary Proposal (Required):
 - Type I: November 8, 2008 – December 8, 2008
 - Type II: November 9, 2008 – December 9, 2008
 - Full Proposal (By Invitation Only):
 - Type I & II: April 20, 2009 – May 20, 2009
- Contact Information:
 - Mary Lou Maher
 - Eduardo Misawa
 - Thomas Russell

(703) 292-8080
cdi@nsf.gov



Cyber-Enabled Discovery & Innovation (CDI)

- New 5-year program, started FY07
- Cross-NSF – all Directorates participating
- Science/Engineering becomes increasingly computational, CDI supports multi-disciplinary research seeking significant advancement of more than one field of science or engineering.
- Enabled by advances in computational thinking, referring to computational concepts, methods, models, algorithms, tools, as applied to all fields of Science/Engineering (including computational research in Computer Science itself).
- Collectively, CDI research outcomes are expected to produce paradigm shifts in our understanding of a wide range of science and engineering phenomena and socio-technical innovations that create new wealth and enhance the national quality of life.



Long-term Funding for Cyber-enabled Discovery & Innovation

FY 2008 (Passed)	FY 2009 (in President's budget request)	FY 2010	FY2011 1	FY 2012
\$47.9M	\$100M	\$150M	\$200M	\$250M



Cyber-Enabled Discovery & Innovation (CDI)

- Program Goals: CDI seeks ambitious, transformative, multidisciplinary research proposals within or across the following 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.



Cyber-Enabled Discovery & Innovation (CDI)

- Two types of CDI awards will be supported as a result of the first (FY 2008) CDI competition
 - **Type I Awards:** Summer support for two investigators with complementary expertise; two graduate students; and their collective research needs (e.g. materials, supplies, travel) for three years.
 - **Type II Awards:** Summer support for three investigators with complementary expertise; three graduate students; one or two senior personnel (including post-doctoral researchers and staff); and their collective research needs (e.g. materials, supplies, travel) for four years.
- Subsequent years:
 - **Type III Awards:** will require the engagement of larger (than Type II) multidisciplinary teams, roughly comparable to multiple senior investigators with complementary expertise, multiple graduate students, several senior personnel, and their collective research needs (e.g. materials, supplies, travel) for up to five years.



Cyber-Enabled Discovery & Innovation (CDI)

- Eligibility: Proposals may only be submitted by:
 - Universities and colleges: U.S. universities and two- and four-year colleges (including community colleges)
 - Non-profit, non-academic organizations: Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities, subject to Grant Proposal Guide (GPG) guidelines
 - An individual may participate as Principal Investigator, co-Principal Investigator or Senior Personnel in at most two letters of intent, preliminary proposals, and full proposals in each annual competition.



Grant Opportunities for Academic Liaison with Industry (GOALI)

- Program Solicitation: NSF-09-516
- Program Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13706&from=fund
- Contact disciplines for deadlines & contact information



Grant Opportunities for Academic Liaison with Industry (GOALI)

➤ Program Goals:

- synergize university-industry partnerships by making project funds or fellowships/traineeships available to support an eclectic mix of industry-university linkages.
- This 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. .
- Seeks to fund research that lies beyond that which industry would normally fund by themselves.



Grant Opportunities for Academic Liaison with Industry (GOALI)

➤ Eligibility Information:

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



Grant Opportunities for Academic Liaison with Industry (GOALI)

➤ Award Information:

- Total awards estimated to be 60 to 80
- Anticipated Funding Amount: \$10 million total expected from all participating directorates.



Integrative Graduate Education and Research Traineeship (IGERT)

- Program Solicitation: NSF 09-519
- Program Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12759
- Deadlines:
 - Preliminary Proposal (Required): March 13, 2009
 - Full Proposal (By Invitation Only): September 14, 2009
- Coordinating Committee members are listed at:
<http://www.nsf.gov/crssprgm/igert/cc.jsp>



Integrative Graduate Education and Research Traineeship (IGERT)

➤ Program Goals:

- Meet the challenges of educating U.S. Ph.D. scientists and engineers who will pursue careers in research and education with the interdisciplinary backgrounds, deep knowledge in chosen disciplines, and technical, professional, and personal skills to become, in their own careers, leaders and creative agents for change.
- 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.
- Contribute to a world-class, broadly inclusive, and globally engaged science and engineering workforce.



Integrative Graduate Education and Research Traineeship (IGERT)

Eligibility Information:

- The PI must be on the faculty of the submitting institution
- There is a limit of four preliminary proposals that may be submitted by an institution either as a single institution or as a lead institution in a multi-institution preliminary proposal.
- Any given individual may participate as PI or co-PI in only one proposal submission.



Integrative Graduate Education and Research Traineeship (IGERT)

➤ Award Information:

- Estimated Number of Awards: Twenty Traineeship awards and one Resource Center award.
- Anticipated Funding Amount: \$12,600,000
 - New projects, the first year award will be up to \$400,000 and in amounts up to \$600,000 for each of the next four years.
 - Renewals will be made in amounts up to \$600,000 per year for five years.
 - NSF anticipates making one award for a Resource Center. This will be funded for up to 5 years at a maximum total of \$3M and an annual average of ~\$600,000



Major Research Instrumentation (MRI)

- Program Solicitation: NSF 09-502
- Program Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5260&org=NSF&sel_org=XCUT&from=fund
- Changes for FY 2009:
 - Letters of Intent will no longer be required for > \$2 million proposals
 - The America COMPETES Act of 2007 directed NSF to require cost-sharing in the MRI Program. This requirement remains in effect. The MRI program require 30% cost-sharing on all proposals from PhD granting and non-degree granting institutions. Non-PhD granting institutions are not required to provide cost-sharing. Language on cost-sharing has been clarified.
 - Clarification on submission eligible organizations has been provided.
 - Clarification on acceptable format and supplemental documentation has been provided.
- Deadline: Fourth Thursday in January



Major Research Instrumentation (MRI)

➤ Program Goals:

- Increase access to scientific and engineering equipment for research and research training in our Nation's institutions of higher education, research museums and non-profit research organizations.
- Improve the quality and expand the scope of research and research training in science and engineering, and to foster the integration of research and education by providing instrumentation for research-intensive learning environments.



Major Research Instrumentation (MRI)

Eligibility Information:

- Proposals may be submitted by the following:
 - US colleges, universities and institutions of higher education located in the US, its territories and possessions.
 - US independent research museums and science centers located in the US, its territories and possessions.
 - US independent nonprofit research organizations located in the US, its territories and possessions.
 - Consortia of eligible organizations.
 - US small businesses located in the US, its territories and possessions are eligible for instrument development support as private sector partners with submitting organizations; they may not submit proposals as a lead organization.



Major Research Instrumentation (MRI)

- Both of the following conditions must be met or proposal(s) will be returned without review:
 - An organization may submit or be included as a subawardee /subcontractor in no more than three proposals.
 - If an organization submits or is included as a partner or subawardee in three proposals, at least one of the three proposals must be for instrument development.



Major Research Instrumentation (MRI)

➤ Award Information:

- Estimated Number of Awards: 235, including up to eight “mid-scale” (\$2-4 million) awards
- Anticipated Funding Amount: \$115 million

➤ Contact Information:

- Phone: (703) 292-8040
- E-mail: mri@nsf.gov



NSF Graduate Teaching Fellows in K-12 Education (GK-12)

- Program Solicitation: NSF 08-556 (New Program Solicitation under development)
- Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5472&from=fund
- Deadlines:
 - Letter of Intent: May 16, 2008
 - Full Proposal: July 3, 2008
- Contact Information:
 - Sonia Ortega (EHR): – Mimi McClure (EHR)
 - Phone: (703) 292-5198 – Phone: (703) 292-5197
 - E-mail: sortega@nsf.gov – E-mail: mmcclure@nsf.gov



NSF Graduate Teaching Fellows in K-12 Education (GK-12)

➤ Program Goals:

- Provides funding to graduate students in NSF-supported science, technology, engineering, and mathematics (STEM) disciplines to acquire additional skills that will broadly prepare them for professional and scientific careers in the 21st century.
- Expected outcomes include improved communication, teaching and team building skills for the fellows; professional development opportunities for K-12 teachers; enriched learning for K-12 students; and strengthened partnerships between institutions of higher education and local school districts.



NSF Graduate Teaching Fellows in K-12 Education (GK-12)

Eligibility Information

- Only academic institutions in the United States and its territories that grant masters or doctoral degrees in STEM disciplines supported by the National Science Foundation (NSF) may submit proposals.
- The PI must be a faculty member at the lead institution in a STEM discipline.
- One proposal per institution, either New or Continuing for any one competition.



NSF Graduate Teaching Fellows in K-12 Education (GK-12)

➤ Award Information:

- Estimated Number of Awards: 21 including New and Continuing projects.
- Anticipated Funding Amount: \$12.6 million approximately in FY 2009.



Research Experiences for Undergraduates (REU)

- Program Solicitation: NSF 07-569 (FY 2009 solicitation under development)
- Program Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund
- Deadlines:
 - REU Sites: Anticipated Summer 2009
 - REU Sites (Antarctic Program): June 6, 2009
 - REU Supplements: Contact Discipline
- Contact Information:
http://www.nsf.gov/crssprgm/reu/reu_contacts.jsp



Research Experiences for Undergraduates (REU)

REU Sites

➤ Program Goals:

- Initiate and conduct projects that engage a number of undergraduate students in research.
- 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

- Provides 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 or Engineering
- Research Experiences for Teachers
- REU Supplements for Evaluative Research Experiences



Research Experiences for Undergraduates (REU)

➤ Award Information:

- REU activity may be funded as a standard or continuing grant (for REU Sites), as a supplement to an existing award, or as a component of a new or renewal grant or cooperative agreement.
- Estimated Number of Awards: 1700 to 1800 - This estimate includes approximately 150 new Site awards and 1,600 new Supplement awards.
- Anticipated Funding Amount: \$57,000,000 in FY2008 - This estimate includes both Sites and Supplements.



Research in Undergraduate Institutions (RUI)

- Program Solicitation: [NSF 00-144](#)
- Program Website:
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5518&from=fund
- Contact discipline for deadlines and contact information



Research in Undergraduate Institutions (RUI)

➤ Program Goals:

- Support high quality research with active involvement of undergraduates.
- Strengthen the research environment in undergraduate institutions.
- 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



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