NSF Grants Conference
Crosscutting Programs

March 11-12, 2013
Hosted by Howard University, Arlington, Virginia
Panelists

Susannah Gal
Program Director, Directorate Biological Sciences, Division of Molecular and Cellular Biosciences

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

Tracy Kimbrel
Deputy Division Director, Directorate for Computer & Information Sciences & Engineering, Division of Computing & Communication Foundations

Randy Phelps
Staff Associate, Office of the Director, Office of International & Integrative Activities

Donald Senich
Senior Advisor, Directorate for Engineering, Division of Industrial Innovation & Partnerships
Topics Covered

• ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers
• Ethics Education in Science and Engineering (EESE)
• Graduate Research Fellowship Program (GRFP)
• Grant Opportunities for Academic Liaison with Industry (GOALI)
• Innovation Corps Sites Program (I-Corps Sites)
• Innovation Corps Team Program (I-Corps Teams)
• Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE)
• Integrative Graduate Education & Research Traineeship (IGERT)
• Major Research Instrumentation (MRI)
• Research Experiences for Undergraduates (REU)
• Research in Undergraduate Institutions (RUI)
• Research Coordination Networks (RCN)
Find Funding for Crosscutting Programs

Go to http://www.nsf.gov/funding/pgm_list.jsp?type=xcut
ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

• Contact:
  Beth Mitchneck: (703) 292-5178; bmitchne@nsf.gov
  Jody Chase: (703) 292-5173; lchase@nsf.gov
  Cynthia Douglas: (703) 292-5175; cdouglas@nsf.gov

• Deadlines:
  Letter of Intent: October 4, 2013
  Full proposal: November 12, 2013

• Current solicitation number: 12-584
ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

• Program Goal:
  – To develop systemic approaches to increase the representation and advancement of women in academic STEM careers.
  – To contribute to and inform the general knowledge base on gender equity in the academic STEM disciplines.

• 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.

• ADVANCE does not support activities to increase or retain the number of women entering into or persisting in STEM doctoral degree programs.
ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers

Estimated Number of Awards: 22

Anticipated Funding Amount: $9.9 million
Ethics Education in Science & Engineering (EESE)

- Contact disciplines for deadlines and contact information.
- Deadline: March 1, 2013
- Current solicitation number: 11-514
Ethics Education in Science & Engineering (EESE)

• **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)

Estimated Number of Awards: 6 to 10

Anticipated Funding Amount: $3 million
Graduate Research Fellowship Program (GRFP)

- **Contact:**
  Gisele Muller-Parker, Doris Carver, Pushpalatha Murthy
  (703) 292-8694
  grfp@nsf.gov

- **Deadline:**
  November 13-19, 2012
  See solicitation for discipline-specific due dates

- **Current solicitation number:**
  12-599
Graduate Research Fellowship Program (GRFP)

• Program Goals:
  – Select, recognize, and financially support individuals early in their careers with the demonstrated potential to be high achieving scientists and engineers.
  – Broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans.
Graduate Research Fellowship Program (GRFP)

• **Funding:**
  - Each Fellowship consists of three years of support usable over a five-year period.
  - For each year of support, NSF provides a stipend of $30,000 to the Fellow and a cost-of-education allowance of $12,000 to the degree-granting institution.
Graduate Research Fellowship Program (GRFP)

PROGRAM SOLICITATION
NSF 12-599

REPLACES DOCUMENT(S):
NSF 11-582

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 Integrative Activities
  Office of Experimental Program to Stimulate Competitive Research
Office of International Science and Engineering
Office of Polar Programs

Application Deadline(s) (submitted by 8 p.m. Eastern Standard Time):

November 13, 2012
  Engineering; Computer and Information Sciences and Engineering; Materials Research

November 14, 2012

Estimated Number of Awards: 2,000
Anticipated Funding Amount: $243 million
Grant Opportunities for Academic Liaison with Industry (GOALI)

- Contact disciplines for deadlines and contact information.

- Current solicitation number: 12-513
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)

- **Eligibility Information:**
  - For fellowships/traineeships, only U.S. citizens, nationals, or permanent residents are eligible to apply for support under this program.
  - NSF funds cannot go to an industry partner; they can only be used by the academic institution. The industry partner is expected to participate in the research effort to facilitate in the commercialization of the research.
Grant Opportunities for Academic Liaison with Industry (GOALI)

Estimated Number of Awards: 60 to 80

Anticipated Funding Amount: $5 million
Innovation Corps Sites Program (I-Corps Sites)

- I-Corp Sites contact information is available at: www.nsf.gov/funding/pgm_summ.jsp?pims_id=504802&org=NSF&sel_org=XCUT&from=fund

- Deadline: July 01, 2013

- Current solicitation number: 12-604
Innovation Corps Sites Program (I-Corps Sites)

• **Program Goal:**
  - To spur translation of research, to encourage collaboration between academia and industry, and to train students to understand innovation and entrepreneurship. NSF funding through I-Corps Sites enables academic institutions to support teams whose projects are likely candidates for commercialization.

• **Purpose of Program:**
  - To nurture and support multiple, local teams that are transitioning their ideas, devices, processes or other intellectual activities into the marketplace. While different institutions may choose different mechanisms for achieving the goals of an I-Corps Site, certain characteristics of a Site must be consistent - the make-up of the teams the Site supports, the origin and nature of the projects, and the kind of support that is provided to the teams by the site.
**Innovation Corps Sites Program (I-Corps Sites)**

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**Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):**
- January 07, 2013
- July 01, 2013
- First Monday in July, Annually Thereafter

**SUMMARY OF PROGRAM REQUIREMENTS**

**General Information**

Program Title:
- Innovation Corps Sites Program (I-Corps Sites)

- Estimated number of awards: 15 awards annually, pending availability of funds
- Anticipated funding amount: 1.5 million
Innovation Corps Teams Program (I-Corps Teams)

- I-Corp Teams contact information is available at: [www.nsf.gov/funding/pgm_summ.jsp?pims_id=504672&org=NSF&sel_org=XCUT&from=fund](www.nsf.gov/funding/pgm_summ.jsp?pims_id=504672&org=NSF&sel_org=XCUT&from=fund)

- Submission Windows:
  - January 1, 2013 - March 15, 2013
  - April 1, 2013 - June 17, 2013
  - July 1, 2013 - September 16, 2013

- Current solicitation number: 12-602
Innovation Corps Teams Program (I-Corps Teams)

• **Program Goals:**
  - To spur translation of fundamental research to the market place, to encourage collaboration between academia and industry, and to train NSF-funded faculty, students and other researchers to understand innovation and entrepreneurship.

• **Program Purpose:**
  - To identify NSF-funded researchers who will receive additional support - in the form of mentoring and funding - to accelerate the translation of knowledge derived from fundamental research into emerging products and services that can attract subsequent third-party funding.
Innovation Corps Teams Program (I-Corps Teams)

- I-Corps projects outcomes:
  - Clear go/no go decision regarding viability of products and services
  - Should the decision be to move the effort forward, a transition plan to do so
  - Technology demonstration for potential partners

- A webinar will be held on the first Tuesday of every month to answer questions about this program.

www.nsf.gov/news/special_reports/i-corps/program.jsp
Innovation Corps Teams Program (I-Corps Teams)

**PROGRAM SOLICITATION**
NSF 12-602

REPLACES DOCUMENT(S):
NSF 11-560

**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 Cyberinfrastructure

**Submission Window Date(s) (due by 5 p.m. proposer’s local time):**

October 01, 2012 - December 17, 2012

**Estimated number of awards:** 250

**Anticipated funding amount:** 12.5 million
Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE)

- INSPIRE Teams contact information is available at: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504852&org=NSF&sel_org=XCUT&from=fund

- Submission Windows:
  Letter of Intent Windows:
The Track 2 deadline has passed
December 10, 2012 - March 29, 2013 (Track 1)

Full Proposal Deadline Dates:
May 13, 2013 (Track 2)
May 29, 2013 (Track 1)
May 29, 2013 (Director’s)

- Current solicitation number: 13-518
Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE)

**Program Goals:**

- Create new interdisciplinary opportunities that are not perceived to exist presently.
- Attract unusually creative high-risk / high-reward interdisciplinary proposals.
- Provide sufficient funding to pursue the novel idea beyond the exploratory stage.
- Recognize and encourage innovative interdisciplinary research by unusually creative individual investigators, especially at early-to mid-career stages.
Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE)

Estimated number of awards: 45 to 60

Anticipated funding amount: $63 million
Integrative Graduate Education and Research Traineeship (IGERT)

- Coordinating Committee members are listed at: [http://www.nsf.gov/crssprgm/igert/cc.jsp](http://www.nsf.gov/crssprgm/igert/cc.jsp)
- Deadlines:
  - Letter of Intent: May 1, 2012
  - Full proposal: July 2, 2012
- Current solicitation number: 11-533
- New solicitation being developed
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)

- **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.
Integrative Graduate Education and Research Traineeship (IGERT)

Estimated Number of Awards: 18

Anticipated Funding Amount: $13.5 million
Major Research Instrumentation (MRI)

- Contact Information: (703) 292-8040 mri@nsf.gov
- Deadline: January 23, 2014
- Current solicitation number: 13-517
Major Research Instrumentation (MRI)

- Program Goals:
  - Support acquisition of major state-of-the-art instrumentation
  - Foster development of the next generation of major instrumentation
  - Integrate research with education
  - Use, advance, and/or expand the Nation's cyber-infrastructure and/or high performance computing capability through instrumentation acquisition or development
  - Promote academic and private sector instrument development partnerships
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:
- “US”-based Organizations:
  - Colleges, universities, and institutions of higher education
  - Independent research museums and science centers
  - Independent nonprofit research organizations
- Consortia of eligible organizations
- Small businesses
  - Private sector partners with submitting organizations
  - May not submit as lead

The Basics – Cost Sharing:
- 2007 America COMPETES Act – Cost sharing required
- Ph.D.-granting and non-degree granting institutions: 30% cost-sharing required on all proposals
- Non-Ph.D.-granting institutions: no cost-sharing required
Major Research Instrumentation (MRI)

Estimated Number of Awards: 175
Anticipated Funding Amount: $90 million

Major Research Instrumentation Program (MRI):
Instrument Acquisition or Development

PROGRAM SOLICITATION
NSF 13-517

REPLACES DOCUMENT(S):
NSF 11-503

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):
   February 21, 2013
   January 23, 2014
   Fourth Thursday in January, Annually Thereafter
Research Experiences for Undergraduates (REU)

- Contact Information: http://www.nsf.gov/crssprgm/reu/reu_contacts.jsp

- Deadlines:
  - Full Proposal for REU Sites (Antarctica): May 24, 2013
  - Full Proposal for REU Sites (non-Antarctica): August 28, 2013

- Current solicitation number: 12-569
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 Experience for Undergraduates (REU)

**Estimated Number of Awards:**
1,750 to 1,800 (estimate includes approximately 180 new site awards and 1,600 new supplement awards)

**Anticipated Funding Amount:**
$68.4 million in FY 2013 (estimate includes both sites and supplements)

**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
Research in Undergraduate Institutions (RUI)

- Contact discipline for deadlines and contact information
- Current solicitation number: 00-144
- New solicitation being developed
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.
Research in Undergraduate Institutions (RUI)

Estimated Number of Awards: Varies across disciplinary research programs

Anticipated Funding Amount: Varies across disciplinary research programs
For More Information

Ask Early, Ask Often!

nsf.gov/staff
nsf.gov/staff/orglist.jsp
nsf.gov/about/career_opps/rotators/index.jsp