Collaborative Research at NSF

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Why collaborate?

• Accomplish more, faster
• Leverage skills, resources
• Learn new approaches
• Increase your audience, client base
Find Funding ...

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

1. Select “Funding” tab
1. Choose: “Search Funding Opportunities” from drop down menu
Some Funding Opportunities …

– **CIF21**: Cyberinfrastructure Framework for the 21st Century

– **GOALI**: Grant Opportunities for Academic Liaison with Industry

– **I-Corps**: Innovation Corps Program

– **IGERT**: Integrative Graduate Education & Research Traineeship Program

– **MRI**: Major Research Instrumentation

– **REU**: Research Experiences for Undergraduates

– **RUI**: Research in Undergraduate Institutions

– **SEES**: Science, Engineering, and Education for Sustainability
Cyberinfrastructure Framework for the 21st Century (CIF21)

http://nsf.gov/cif21

- FY 2012 budget: $78 million
- FY 2013 request: $106 million
OCI web-page:

Advanced Computing Infrastructure – Strategic Plan:

CIF-21 task force reports:

IGERT CIF-21 track:

NSF/NIH BigData solicitation (NSF 12-499):
http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504767

Data-Intensive Data-Related Research:

EarthCube:
http://www.nsf.gov/geo/earthcube
Grant Opportunities for Academic Liaison with Industry (GOALI)

• Promote university-industry partnerships:
  • projects, fellowships/traineeships
  • Direct transfer of knowledge (commercialization)

• Target high-risk/high-gain research (beyond what industry funds)

• Focus on:
  • fundamental research
  • new approaches to solving generic problems
  • Innovative, collaborative educational programs

• Anticipated funding: 60-80 awards, $5M
  – NSF funds go to academic institution
  – Industry partner facilitates commercialization

• Submission to disciplinary program (not GOALI)
NSF Innovation Corps (I-Corps)

- Establish public-private partnerships

- Anticipated Program Outcomes
  - Functioning network of Mentors/Advisors
  - Scientist and Engineers trained as Entrepreneurs
  - Increased impact of NSF-funded basic research

- Projects are Team-based
  - Entrepreneurial Lead: Post-doc or Student
  - I-Corps Mentor: Domain-relevant volunteer guide
  - PI: Researcher with current or previous award

- Requires prior written authorization to submit a proposal
I-Corps

• Contacts:
  – Errol Arkilic: (703) 292-8095
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  – Rathindra DasGupta: (703) 292-8353
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  – Anita La Salle: (703) 292-5006
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• Submission Windows:
  Apr 1, 2013 – June 17, 2013

• Current solicitation: NSF 12-602
• Anticipated Funding in FY 2013: $18M

• Information webinars held on first Tuesday of each month
Program Goals:

• Prepare graduate students for interdisciplinary research and education careers as leaders and agents for change

• innovative models for graduate education and training

• collaborative research that transcends traditional disciplinary boundaries

• No active solicitation
  check web site for 2013
  igert@nsf.gov
Major Research Instrumentation (MRI)

Shared use of major, modern, state-of-the-art instrumentation

Track 1: ACQUIRE

Integrate research with education

Track 2: DEVELOP

- Colleges, universities, institutions of higher education
- Independent research museums and science centers
- Independent nonprofit research organizations
- Consortia of eligible organizations
- Small businesses (partner with submitting organizations)
MRI

• Limit: 3 submissions per organization

• Identify NSF division(s) to review proposal

• Cost Sharing:
  • Ph.D. granting and non-degree granting institutions: 30%
  • Non-Ph.D. granting higher education institutions: 0%

• Info: Randy Phelps: mri@nsf.gov  NSF 13-517

• Deadlines:
  February 21, 2013
  January 23, 2014

• Anticipated funding: $90M
Research Experiences for Undergraduates (REU)

REU Sites
- Engage group of undergraduates in research
- Students who might not otherwise have opportunity
- Students from outside host institution
- Cohort experience; coherent intellectual theme
- Single discipline or interdisciplinary

REU Supplement
- 1-2 undergraduates participate in new or ongoing NSF project
- Number of students commensurate to size and nature of project
- Faculty/researcher mentors
- Access to facilities and professional development opportunities
Partnership opportunities:

- Dept. of Defense, Dept. of Energy
- Cyberinfrastructure
- International Projects
- Research experiences for Teachers

Deadlines (12-569):

- Sites: August 28, 2013
- Antarctic Sites: May 24, 2013
- Supplements: contact discipline Program Officer

Anticipated Funding: 1,750-1,800 awards (180 sites) for $68M
Research in Undergraduate Institutions (RUI)

Support: faculty at primarily undergraduate institutions (PUIs):

1) individual and collaborative research projects
2) purchase of shared-use research instrumentation
3) Research Opportunity Awards (ROA) for work with NSF-supported investigators at other institutions

- Support undergraduate involvement in high quality research
- Strengthen research environment at PUls
- Promote integration of research and education at PUls

Contact NSF program officers in discipline! NSF 00-144

PUIs: Institutions that award 10 or fewer Ph.D. or D.Sc. per year
Science, Engineering, and Education for Sustainability (SEES)

Mission: *advance science, engineering, & education to inform the societal actions needed for environmental & economic sustainability & sustainable human well-being*

- Interdisciplinary research and education
- Systems thinking
- Partnerships and networks
- New participants
- Workforce and education

... All towards global sustainability

**nsf-sees-info@nsf.gov**  **http://www.nsf.gov/sees/**
SEES – New Opportunities

Small Business Technology Transfer Program Phase I (STTR) (NSF 13-501)
LOI: January 8, 2013 (required); Full Proposals: February 6, 2013

Cyber-Enabled Sustainability Science and Engineering (Cyber-SEES) (NSF 13-500)
LOI: 12/4/2012 (required); Full Proposals: February 5, 2013

Interdisciplinary Research in Hazards and Disasters (Hazards SEES) (NSF 12-610)
Full Proposals: February 4, 2013

Science, Engineering and Education for Sustainability Fellows (SEES Fellows) (NSF 12-601)
Deadline: November 21, 2013; Annually thereafter

Coastal SEES (NSF 12-594)
Full Proposals: January 17, 2013

RCN – SEES track (NSF 11-531)
CNH – SEES track (NSF 10-612)
Climate-related (CRI) competitions continue

Check the SEES site often for updates and new deadlines
Thank You