

Proposal Preparation

NSF Regional Grants Conference
Hosted by
Arizona State University

March 30-31, 2009



Ask Early, Ask Often!

Sankar Basu

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

Linea Fletcher

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

Ajit Subramaniam

Associate Program Director, Directorate for Geosciences, Division of Ocean Sciences

Judith Verbeke

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



Coverage

- Finding Funding
- Proposal & Award Policies & Procedures Guide
 - Grant Proposal Guide (GPG)
- Sections of an NSF Proposal
- Proposal Development Strategies
- Budgetary Guidelines
- Support for Proposal Writing
- Grants for Rapid Response Research (RAPID) & EARly-concept Grants for Exploratory Research (EAGER)





New Method Promises More Data Storage →

FEATURES 1 2 3 4 ||

Funding Opportunities

→ Find Funding Opportunities

→ Upcoming Due Dates

→ How to Prepare Your Proposal

→ Funding Trends

Program Areas

Select One

Quick Links

Select One

Search Funding Opportunities

About NSF

General Information About NSF

Merit Review

View Staff Directory

Search Staff Directory

Career Opportunities

Contracting Opportunities

Visit NSF

NSF Organizations

Special Notices

[NSF Hispanic Serving Institution Listening Session](#)

[National Science Board STEM Education Recommendations for the Obama Administration](#)

New [Proposal and Award Policies and Procedures Guide](#) Available, Effective April 6, 2009.

Latest News

[See All](#)



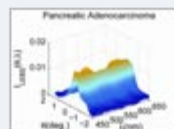
[Statement by Arden L. Bement, Jr., Director, National Science Foundation, on the American Recovery & Reinvestment Act of 2009](#)

Released February 24, 2009
Press Statement



[Marine Scientists to Investigate Role of Equatorial Pacific Ocean in Global Climate System](#)

Released February 23, 2009
Press Release



[Determining Risk for Pancreatic Cancer](#)

Released February 23, 2009
Press Release

Now Showing: Film, TV, Museums and More

[See All](#)

Get NSF Updates by Email

Site Features

→ NSF at a Glance

News

For the News Media

Special Reports

Discoveries from NSF Research

Research Overviews

Speeches & Lectures

Multimedia Gallery

NSF & Congress

Classroom Resources

NSF-Wide Investments

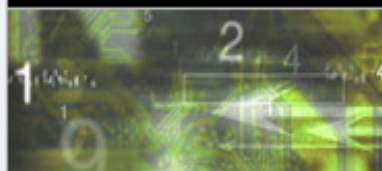
Science and Engineering Statistics

Search NSF Awards

Podcasts and RSS Feeds



Funding



Funding

[About Funding](#)

[A-Z Index of Funding Opportunities](#)

[Advanced Funding Search](#)

[Guide to Programs/Browse Funding Opportunities](#)

[Recent Funding Opportunities](#)

[Upcoming Due Dates](#)

Proposals and Awards

[Proposal and Award Policies and Procedures Guide](#)

Introduction

Proposal Preparation and Submission

• [Grant Proposal Guide](#)

• [Grants.gov Application Guide](#)

Award Administration

Find Funding

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants and cooperative agreements for research and education in the sciences, mathematics, and engineering. [MORE](#)

A-Z INDEX OF FUNDING OPPORTUNITIES

[A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G-H](#) | [I](#) | [J-M](#) | [N](#) | [O-P](#) | [Q-R](#) | [S](#) | [T-Z](#)

FUNDING SEARCH

Full Text:

NSF Organization:

Any

- BIO/DBI: Biological Infrastructure
- BIO/DEB: Environmental Biology
- BIO/EF: Emerging Frontiers

Program Status:

- Active Funding Opportunities
- Currently Funded Programs
- Archived Programs

Search

Reset

Grant Proposal Guide (GPG)

- Provides guidance for preparation and submission of proposals to NSF
- Describes process – and criteria – by which proposals will be reviewed
- Outlines reasons why a proposal may be returned without review
- Describes process for withdrawals, returns & declinations



For the Research & Education Community

Top Activities

- [Find Funding](#)
- [Go to FastLane](#)
- [Go to Calendar](#)

About NSF

[General Information About NSF](#)

[View Staff Directory](#)

Search Staff Directory

 [➔](#)

[Career Opportunities](#)

[Visit NSF](#)

NSF Organizations [▼](#) [➔](#)

Specialized Information for

Select One [▼](#) [➔](#)

Proposals and Awards

[Proposal and Award Policies and Procedures Guide](#)

[Introduction](#)

[Proposal Preparation and Submission](#)

[Grant Proposal Guide](#)

[Grants.gov Application Guide](#)

[Award Administration](#)

[Award Administration Guide](#)

[Award Conditions](#)

[Other Types of Proposals](#)

Special Notice

[Public Affairs Support for PIs via PIOs](#)

Special Notice

[Call for Nominations for the Presidential Awards for Excellence in Science, Mathematics and Engineering Mentoring](#)

Recently Announced Funding Opportunities

[See All](#)

[Faculty Early Career Development \(CAREER\) Program](#)
(NSF 08-557) Posted April 7, 2008

[NSF GRADUATE TEACHING FELLOWS IN K-12 EDUCATION](#)
(NSF 08-556) Posted April 4, 2008

[Ice Coring and Drilling Services for the Office of Polar Programs](#)
(NSF 08-555) Posted April 4, 2008

[National Science, Technology, Engineering, and Mathematics Education Digital Library](#)
(NSF 08-554) Posted March 28, 2008

[Science, Technology, and Society](#)
(NSF 08-553) Posted March 28, 2008

Upcoming Due Dates

[See All](#)

[Supplemental Opportunity for SBIR/STTR Memberships in I/UCRCs](#)
(PD 07-1591) Supplement: April 15, 2008

[Centers for Chemical Innovation Phase I](#)
(NSF 08-536) Preliminary Proposal: April 17, 2008

[Research in Disabilities Education](#)
(NSF 08-527) Full Proposal: April 21, 2008

[Management and Operation of the Virtual Astronomical Observatory](#)
(NSF 08-537) Full Proposal: April 22, 2008

[Get NSF Updates by Email](#)

Program Areas

[Crosscutting and NSF-wide](#)

[Biological Sciences](#)

[Computer & Information Science & Engineering](#)

[Cyberinfrastructure](#)

[Education and Human Resources](#)

[Engineering](#)

[Environmental Research & Education](#)

[Geosciences](#)

[International Science & Engineering](#)

[Mathematical & Physical Sciences](#)

[Polar Programs](#)

[Social, Behavioral & Economic Sciences](#)

Other Site Features

[Special Reports](#)

[Research Overviews](#)

[Multimedia Gallery](#)

[Classroom Resources](#)

[NSF-Wide Investments](#)

Types of Funding Opportunities

NSF uses the following types of funding opportunities

- Program Description
 - Follows GPG instructions
- Program Announcement
 - Follows GPG instructions
- Program Solicitation
 - Deviates/supplements GPG instructions
- Dear Colleague Letter
 - Not used to generate new proposals, however, can be used to generate funding requests to supplement an existing award



What to Look for in a Program Announcement/Solicitation

- Goal of program
- Eligibility
- Special proposal preparation and/or award requirements



Types of Proposal Submission

- No deadlines
- Deadlines
- Target dates
- Submission Windows
- Preliminary proposals
- Letters of Intent



Sections of an NSF Proposal

- Cover Sheet
- Project Summary
- Table of Contents
- Project Description
- References Cited
- Biographical Sketch(es)
- Budget
- Current & Pending Support
- Facilities, Equipment & Other Resources
- Special Information & Supplementary Documentation



Proposal Development

➤ Key Questions for Prospective Investigator

- What do you intend to do?
- Why is the work important?
- What has already been done?
- How are you going to do the work?



Proposal Development Strategies: Individual Investigator

- Determine your long-term research/education goals or plan
- Develop your bright idea
 - Survey the literature
 - Contact Investigators currently working on the topic
 - Prepare a brief concept paper
 - Discuss with colleagues/mentors
- Read solicitation instructions carefully



Proposal Development Strategies Individual Investigator

- Prepare to do the project
 - Determine available resources
 - Realistically assess needs
 - Develop preliminary data
 - Present to colleagues/mentors/students
- Determine possible funding sources
- Understand the ground rules



Mentoring for Postdoctoral Researchers

- Proposals that include funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals.
- Mentoring activities may include:
 - Career counseling;
 - Training in preparation of grant proposals;
 - Publications and presentations;
 - Guidance on ways to improve teaching and mentoring skills;
 - Guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas; and
 - Training in responsible professional practices.



Mentoring for Postdoctoral Researchers

- Proposed mentoring activities will be evaluated as part of the merit review process under the Foundation's broader impacts merit review criterion.
- Beginning April 6, 2009, proposals that do not include a supplementary document on mentoring activities will be returned without review.
- Proposals submitted prior to April 6, 2009, must include a description of the mentoring activities as a separate section within the 15-page project description.



Budgetary Guidelines

➤ Amounts

- Reasonable for work – Realistic
- Well Justified – Need established
- In-line with program guidelines

➤ Eligible costs

- Personnel
- Equipment
- Travel
- Participant Support
- Other Direct Costs (including subawards, consultant services, computer services, publication costs)



Getting Support in Proposal Writing

➤ NSF Publications

- Program Announcements/Solicitations
- Grant Proposal Guide
- Web Pages
- Funded Project Abstracts
- Reports, Special Publications

➤ Targeted Workshops

➤ Program Officers

- Incumbent
- Former “Rotators”

➤ Mentors on Campus

➤ Previous Panelists

➤ Serve As Reviewer

➤ Sponsored Research Office

➤ Successful Proposals



EArlly-concept Grants for Exploratory Research (EAGER)

- Exploratory work on ***potentially transformative*** untested/ novel research ideas or approaches ***in their early stages***.
- “High risk-high payoff” projects that:
 - Involve radically different approaches;
 - Apply new expertise; or
 - Engage novel disciplinary or interdisciplinary perspectives.



EARLY-concept Grants for Exploratory Research (EAGER)

- Requests may be for up to \$300K and up to two years duration, but award size should be consistent with:
 - project scope; and
 - grants of a comparable size in similar areas
- Review process, no cost extensions, supplements, and follow-on proposals similar to RAPID



Grants for Rapid Response Research (RAPID)

The RAPID funding mechanism is for projects having a:

“severe urgency with regard to availability of, or access to data, facilities or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events”



Grants for Rapid Response Research (RAPID)

- Requests may be for up to \$200K and of one year duration **but** award size should be consistent with:
 - project scope; and
 - grants of a comparable size in similar areas.
- Project description is brief (two to five pages).
- Only internal review required (external review in rare cases, permissible with notification to PI).
- No cost extensions and supplements will use existing NSF policies.
- Follow-on full proposals – “RAPID renewals” – externally reviewed.



Ask Early, Ask Often



www.nsf.gov

