



Proposal Preparation

NSF Workshop for Sponsored Project Administrators
at Hispanic Serving Institutions

April 13, 2007 - Miami, FL

April 20, 2007 – Albuquerque, NM

NSF – HSI Workshop



Ask Early, Ask Often!!

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Outline

- Finding funding opportunities
 - Searching the NSF web site
 - “MyNSF” sign up for automatic email notifications
- Proposal Development Strategies
 - Institutional Projects
 - Individual Investigators
- Following NSF Guidelines
 - Grant Proposal Guide (GPG)
 - Program solicitations
 - Budget guidelines



Finding Funding

- Think through your project idea before searching for funding programs.
- A good proposal is a good idea, well expressed, with a clear indication of methods for pursuing the idea, evaluating the findings, making them known to all who need to know, and indicating the broader impacts of the activity.
- Search by key words or for the appropriate program office.



Funding



Funding

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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

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FUNDING SEARCH

Full Text:

NSF Organization:

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

Program Status:

- Active Funding Opportunities
- Currently Funded Programs
- Archived Programs



NSF Web Site

MyNSF



MyNSF

[About MyNSF](#)

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[RSS Frequently Asked Questions](#)

MyNSF

MyNSF, formerly the Custom News Service, allows you to receive notifications about new content posted on the NSF website. Notification can be received via email or RSS.

Current Subscribers:

If you are already subscribed, please enter your email address in the box below and select the MyNSF button. This will take you directly to your personal MyNSF Page. You may bookmark that web page.

Email address:

New Users:

To subscribe, type your email address in the text box below and select the Subscribe button.

Email address:

RSS Feeds

Click on the name of the RSS feed to which you want to subscribe and copy the URL from your browser. The open up your RSS reader and paste that URL into the appropriate place.

RSS feeds are available for the following content areas:



Types of Funding Opportunities

NSF provides the following types of funding opportunities

- Program Description
 - Published only on the NSF website.
 - Proposals must follow GPG instructions.
- Program Announcement
 - Published NSF document describing the program.
 - Proposals must follow GPG instructions.
- Program Solicitation
 - Published document with additional restrictions and/or requirements.
 - Proposals must follow both the solicitation and the GPG instructions
- Dear Colleague Letter
 - Notifications of opportunities or special competitions for supplements to existing NSF awards.



Proposal Development

Key Questions

1. What do you intend to do?
2. Why is the work important?
3. What has already been done?
4. How are you going to do the work?



Proposal Development Strategies

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



Proposal Development Strategies (cont'd)

- 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



Proposal Development Strategies (cont'd)

- Ascertain overall scope and mission
 - Read carefully solicitation instructions
 - Determine where your project fits
 - Ascertain evaluation procedures and criteria
 - Talk with NSF Program Officer:
 - Your proposed project
 - Specific program requirements/limitations
 - Current program patterns
 - Coordinate with your organization's sponsored projects office



Follow the NSF Guidelines

- Grant Proposal Guide (GPG)
- Program solicitation
- Budget guidelines



Grant Proposal Guide (GPG)

- Provides guidance for preparation and submission of proposals to NSF;
 - Process for deviations from the GPG
 - Process and criteria by which proposals will be reviewed
 - Reasons why a proposal may be returned without review
 - Reconsideration process
 - Process for withdrawals, returns & declinations
 - Award process and procedures for requesting continued support
 - Significant award and administration processes
 - Budget line item definitions
 - Process for submission of collaborative proposals (subawards and multiple proposals)



Program Solicitation Key Components

- **Goal of the program**
- **Deadline(s)**
 - No deadline
 - Deadline
 - Target date
 - Submission Window
- **Type of proposal submission**
 - Preliminary proposals
 - Invite/not invite
 - Encourage/not encourage
 - Letters of Intent
 - Required
 - Optional
 - Full proposals



Program Solicitations Key Components (cont'd)

- **Eligibility**
- **Special proposal preparation requirements**
 - For example:
 - Required components within the project description
 - Required Supplementary Documents
- **Special award requirements**
 - For example:
 - Additional reporting
 - Attendance at meetings
- **Additional Review Criteria** (depends on the program)



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)



Budgetary Guidelines (cont'd)

- Call your Program Officer!
- All funding sources noted in Current and Pending Support
- Sponsored Projects Offices are resources for proposers on NSF guidelines.



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



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



Selected NSF Programs of Interest

NSF – HSI Workshop



Advanced Technological Education (ATE)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5464&org=DUE&from=home

Promotes improvement in undergraduate technological education The program emphasis is on two-year colleges

- Project areas (\$25 to \$300 K per year for 3 years):
 - Program Improvement
 - Professional Development for Educators
 - Curriculum and Educational Materials Development
 - Teacher Preparation
 - Small Grants for Institutions new to ATE
- ATE Centers that provide models and leadership:
 - *National Centers of Excellence*: \$5 million over four years
 - *Regional Centers of Excellence*: \$3 million over four years
 - *Resource Centers*: \$1.5 million over four years
- Targeted research on technician Education (\$100 to \$300K per year up to 4 years)
- Preliminary proposals (optional) due April 26, 2007
- Full proposals due October 11, 2007



Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5257&org=DUE&from=home

- Institutional grant to support student scholarships for academically talented and financially needy students to complete an **associate**, baccalaureate, or graduate level degree in science and engineering disciplines.
 - Grantee institutions select scholarship recipients, report demographic information, and manage the S-STEM project.
- Letter of Intent – October 10, 2007
- Proposal due date – November 13, 2007



STEM Talent Expansion Program (STEP)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5488&org=DUE&from=home

Type 1 Projects - Full implementation projects to increase the number of students receiving AA or BA degrees

- Award size depends on total enrollment of all partner institutions: between \$500 K & \$2 M
 - Associate degree-granting institutions with a record of articulation to STEM baccalaureate programs need not necessarily grant associate degrees in STEM fields in order to be eligible.
 - Projects that improve the transition of students among the collaborating institutions, such as transfer between two- and four-year institutions are encouraged.
- Letter of Intent due date expected to be August 2007
 - Full Proposal deadline expected to be September 2007



Course, Curriculum & Laboratory Improvement (CCLI)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5741&org=DUE&from=home

Projects should address one or more of the following five components :

1. Conducting research on undergraduate STEM teaching and learning
2. Creating learning materials and teaching strategies
3. Developing faculty expertise
4. Implementing educational innovations
5. Assessing learning and evaluating innovations

Due May 8 or 9, 2007 (depending on state)

Phase 1, Exploratory Projects total up to \$150 K for 1 - 3 yrs (\$200 K for collaborations between 4-year institutions and 2-year institutions)

Due January 10, 2008

Phase 2, Expansion Projects total up to \$500 K for 2 - 4 yrs

Phase 3, Comprehensive Projects total up to \$2 M for 3 - 5 yrs



Minority Serving Community College (MSCC) Research Teams

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06008

New program that supports research teams from MSCCs to do research at small business sites across the country.

- MSCCs include non-profit Historically Black Colleges, Hispanic-Serving Colleges, and Tribal Colleges whose highest degree awarded is the associate degree.
- MSCC Research Teams must consist of at least one faculty member and one student. (Teams with additional students or faculty are encouraged)
- The NSF Small Business Innovation Research and Small Business Technology Transfer Phase II grantee must request the supplemental funding to support the research team.
- Faculty at MSCCs can search for small business sites to contact at <http://www.nsf.gov/awardsearch/>



Community College Institutes (CCI) - Department of Energy & NSF Joint Program

- Paid internships in Science and Engineering and Technology for students from community colleges.
 - 10 week summer research with DOE laboratory scientists.
 - Career planning activities and numerous training and informational sessions.
 - Students must apply to DOE lab and be accepted before seeking NSF supplement.
 - Additional information is available at <http://www.scied.science.doe.gov/scied/CCI/about.html>.
- Current grantees of some NSF/EHR programs may request supplemental funds – refer to the Dear Colleague Letter: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5632.



Minority Postdocs

- Increase the number of research scientists from underrepresented groups
- Awards for research and training
- Applicants choose sponsoring scientist and provide research/training plan
- 2-3 Year Awards
- \$50K/yr
- \$4K Travel Grant
- \$50K Starter Grant



Minority Postdoc Applications and Awards

FY	Applicants	New Fellowships	Travel grants	Actual Obligations
1990	33	8	2	\$0.95M
1991	48	10	6	\$1.10M
1992	21	10	1	\$1.10M
1993	34	11	3	\$1.10M
1994	37	13	3	\$0.91M
1995	39	10	2	\$0.93M
1996	45	14	1	\$1.41M
1997	31	9	2	\$0.97M
1998	39	11	2	\$1.20M
1999	23	13	2	\$1.66M
2000	26	9	1	\$1.25M
2001	30	11	1	\$1.73M
2002	26	12	0	\$1.62M
2003	21	14	1	\$1.65 M
2004	35	17	0	\$2.33 M
2005	35	18	0	\$2.4 M
2006	60 estimated	20 estimated		\$2.5 M estimated
Total	598	212	25	\$24.81 M



Quality Education for Minorities (QEM) Proposal Preparation Workshops

- Focused on Faculty from Underrepresented Groups and those at Minority Serving Institutions (MSIs)
- Three year award
- Two workshops per year
 - <http://qemnetwork.qem.org/>



Broadening Participation Two New Funding Opportunities

- Research Initiation Grants (RIG)
- Career Advancement Awards (CAA)



RIG/CAA

- Who can apply?
 - U.S. citizens with doctorate or equivalent experience in a field supported by NSF
 - Underrepresented minority researchers and researchers at Minority Serving Institutions are especially encouraged to apply



RIG/CAA Provide

Two year research awards for up to \$150,000 with additional \$25,000 for equipment

RIG:

- For PIs who have not had previous Federal Research Funding as PI or CoPI

CAA:

- For PIs who have received Federal Funding