Proposal Preparation & Merit Review
NSF-Day Workshop
November 8, 2012
NCURA 54th Annual Meeting
Washington, DC
Panelists

Dragana Brzakovic
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Jolene Jesse
Program Director, Directorate for Education & Human Resources (EHR), Division of Human Resource Development (HRD).

Jacqueline Meszaros
Science & Engineering Policy Analyst, National Science Board
Proposal Preparation

Topics Covered

- Find Funding Opportunities
- Proposal and Award Policies and Procedures Guide
- Sections of an NSF Proposal
- Proposal Development Strategies
- Budgetary Guidelines
- Support for Proposal Writing
- Grants for Rapid Response (RAPID) & EArly-Concept Grants for Exploratory Research (EAGER)
Find Funding Opportunities
Find Funding Opportunities

NSF Funding & Research Community

SPECIAL NOTICES

Nominations for the 2013 Alan T. Waterman Award Are Being Accepted Through October 31, 2012


EVENT CALENDAR

09 OCT Center for e-Design IAB Meeting

10 OCT Advisory Committee for Geosciences

FUNDING OPPORTUNITIES

Search Funding Opportunities

Enter search term

Search by Program Area

Select One

VIEW ALL FUNDING OPPORTUNITIES

Proposal and Award Policies and Procedures Guide

Prepare a Proposal

Upcoming Due Dates

Submit Proposal to FastLane
NSF News and Information
Other Ways to Find Funding

Use Grants.gov’s search feature
What is the Proposal & Award Policies & Procedures Guide?

The Proposal and Award Policies and Procedures Guide (PAPPG) contains documents relating to NSF's proposal and award process. It has been designed for use by both our customer community and NSF staff and consists of two parts:
What is the Proposal & Award Policies & Procedures Guide?

Part I is NSF’s proposal preparation and submission guidelines -- the NSF Grant Proposal Guide (GPG) and the NSF Grants.gov Application Guide.
What is the Proposal & Award Policies & Procedures Guide?

Part II is NSF’s award and administration guidelines -- the documents used to guide, manage, and monitor the award and administration of grants and cooperative agreements made by NSF.
Grant Proposal Guide

• 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
# Types of Funding Opportunities

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What to Look For in a Program Announcement or Solicitation

• Goal of Program

• Eligibility

• Special proposal preparation and/or award requirements
Sample Cover Page of a Solicitation

Louis Stokes Alliances for Minority Participation (LSAMP)

PROGRAM SOLICITATION
NSF 12-564

REPLACES DOCUMENT(S):
NSF 11-543

National Science Foundation

Directorate for Education & Human Resources
Division of Human Resource Development

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):

August 28, 2012
Bridge to the Doctorate

October 05, 2012
First Friday in October, Annually Thereafter
Bridge to the Doctorate

Program Solicitation Number

NSF Directorates and Offices providing funding for this opportunity
Sample Cover Page of a Solicitation

Award Information

**Anticipated Type of Award:** Standard Grant or Continuing Grant or Cooperative Agreement

**Estimated Number of Awards:** 60

Up to 60 awards will be made across fiscal 2012 and 2013.

In FY 2012, up to 20 Bridge to the Doctorate (BD) grants will be made.

In FY 2013, 20 Alliance grants (this includes 5 B2B), up to 15 Bridge to the Doctorate (BD) grants and up to 5 Broadening Participation Research (BPR) in STEM Education grants.

**Anticipated Funding Amount:** $20,000,000

$20,000,000 across fiscal years 2012 and 2013; Subject to the availability of funds.

**Number of awards funded by the program per year**

**Funds available to the program per year**
Eligibility information for institutions/PIs submitting proposals

Eligibility Information

Organization Limit:

Proposals may only be submitted by the following:

- Universities and Colleges - Universities and two- and four-year colleges (including community colleges) accredited in, and having a campus located in the US, acting on behalf of their faculty members. Such organizations also are referred to as academic institutions.

PI Limit:

- Alliance (including the B2B) and BD: To promote institutional commitments to increase the quality and quantity of under-represented minorities in STEM disciplines, the President or Provost of the lead institution should serve as the Principal Investigator. A full explanation should be provided for a PI designation in variance with this requirement. Co-principal investigators from partner institutions may be designated, as appropriate, for the project.

- Broadening Participation Research in STEM Education: Eligible PI/co-PI(s) for proposals applying for educational research or evaluation support should be the individual conducting or responsible for the research or evaluation project. Other potential co-Principal Investigators include collaborators on the research project. At least one of the PIs must have experience in educational research.

Limit on Number of Proposals per Organization:

- Alliances (Including B2B) and BD: 1

- Broadening Participation Research in STEM Education: No limit.

Limit on Number of Proposals per PI:

- Alliances (Including B2B): 1

- Bridge to the Doctorate: 1

- Broadening Participation Research in STEM Education: No limit.
Types of Proposal Submissions

No Deadlines – Proposals may be submitted at any time

Many NSF programs accept proposals at any time. Other programs, however, establish due dates for submission of proposals. The following types of due dates are utilized by NSF:

1. **Target dates**: dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.

2. **Deadline dates**: dates after which proposals will not be accepted for review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with [GPG Chapter II.A.](#)
Types of Proposal Submissions

Target Dates – Talk to the Program Office if you think you might miss the date

Proposers should allow adequate time for NSF review and processing of proposals (see GPG 1.1.1 for further information). Many NSF programs accept proposals at any time. Other programs, however, establish due dates for submission of proposals. The following types of due dates are utilized by NSF:

1. **Target dates**: dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.

2. **Deadline dates**: dates after which proposals will not be accepted for review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with GPG Chapter II.A.
Types of Proposal Submissions

Deadline Dates – Proposals will not be accepted after this date and time (5 pm submitter’s local time)

Proposers should allow adequate time for NSF review and processing of proposals (see GPG I.H for further information). Many NSF programs accept proposals at any time. Other programs, however, establish due dates for submission of proposals. The following types of due dates are utilized by NSF:

1. **Target dates:** dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.

2. **Deadline dates:** dates after which proposals will not be accepted for review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with GPG Chapter II.A.
Types of Proposal Submissions

Submission Windows – Closing date converts to a deadline date

3. Submission windows: designated periods of time during which proposals will be accepted for review by NSF. It is NSF’s policy that the end date of a submission window converts to, and is subject to, the same policies as a deadline date.
Types of Proposal Submissions

Letters of Intent – Enables better management of reviewers and panelists

Some NSF program solicitations require or request submission of a letter of intent (LOI) in advance of submission of a full proposal. A LOI is not binding. The predominant reason for its use is to help NSF program staff gauge the size and range of the competition, enabling earlier selection and better management of reviewers and panelists. In addition, the information contained in a LOI is used to help avoid potential conflicts of interest in the review process.

A LOI normally contains the PI’s and co-PI’s names, a proposed title, a list of possible participating organizations (if applicable), and a synopsis that describes the work in sufficient detail to permit an appropriate selection of reviewers. A LOI is not externally evaluated or used to decide on funding. The requirement to submit a LOI will be identified in the program solicitation, and such letters are submitted electronically via the NSF FastLane System.
Types of Proposal Submissions

Preliminary Proposals – Sometimes required, sometimes optional

2. Preliminary Proposal

Some NSF program solicitations require or request submission of a preliminary proposal in advance of submission of a full proposal. The two predominant reasons for requiring submission of a preliminary proposal are to:

- reduce the proposers’ unnecessary effort in proposal preparation when the chance of success is very small. This is particularly true of exploratory initiatives where the community senses that a major new direction is being identified, or competitions that will result in a small number of actual awards; and
- increase the overall quality of the full submission.
Sections of an NSF Proposal

Cover Sheet (Required)
Many of the boxes on the cover sheet are electronically prefilled as part of the FastLane login process.

Example from FastLane
Sections of an NSF Proposal

Project Summary
(Required)
The proposal must contain a summary of the proposed activity suitable for publication, not more than one page in length.

Proposals that do not separately address both merit review criteria will be returned without review.

Text from the GPG
Sections of an NSF Proposal

**Project Description (Required)**
The two merit review criteria should be addressed with the project description, which may not exceed 15 pages.

*Text from the GPG*
Sections of an NSF Proposal

References Cited (Required)
Reference information is required, and proposers must follow accepted scholarly practices in providing citations for source materials.

Text from the GPG

Reference Information is required. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the website address also should be included. If the document is available only in print, a copy of the publication should be included as part of the proposal.

If the proposal has a website address rather than a URL, then that information should be included in the citation, as stated above. If a URL is required, however, proposers should include the URL in the proposal as part of the proposal. Therefore, inclusion of a website address is optional. A proposal that includes reference citations that do not specify a URL address is not considered to be in violation of NSF proposal preparation guidelines and the proposal will still be reviewed.
Biographical Sketches
(Required)
Biographical sketches are required for all senior project personnel and must not exceed two pages in length, per individual.

Text from the GPG
Sections of an NSF Proposal

Budget (Required)
Each proposal must contain a budget for each year of support requested. The budget justification should be no more than three pages for all years of the project combined.

Example from FastLane
**Sections of an NSF Proposal**

**Current & Pending Support (Required)**
This section of the proposal calls for information on all current and pending support for ongoing projects and proposals.

*Example from FastLane*
Sections of an NSF Proposal

Facilities, Equipment, and Other Resources (Required)
This section of the proposal is used to assess the adequacy of the organizational resources available to perform the effort proposed.

*Example from FastLane*
Special Information and Supplementary Documentation

This segment should alert NSF officials to unusual circumstances that require special handling; more information can be found in the GPG Chapter II.C.2.j.

Text from the GPG

Costs of entertainment, amusement, diversion and social activities and any costs directly associated with such activities (such as tickets to shows or sporting events, meals, lodging rentals, transportation and parking) are unreasonable. Travel, meal and hotel expenses of grantee employees who are not on travel status are unreasonable. Costs of employees on travel status are limited to those allowed under the governing cost principles for travel expenses.

(b) Meals and Coffee Breaks

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any of its components, including, but not limited to, laboratories, departments and centers.

(c) Alcoholic Beverages

No NSF funds may be spent on alcoholic beverages.

Additional information on emerging certain types of costs generally associated with meetings and conferences to NSF officials is available in AAG Chapter 12.C.3.

I. Current and Pending Support

This section of the proposal calls for required information on all current and pending support for ongoing projects and proposals, including subsequent funding in the case of continuing grants. All current project support from whatever source (e.g., Federal, State, local or foreign government agencies, public or private foundations, industrial or commercial organizations) must be listed. The proposed project and all other projects or activities requiring a portion or all of the PI and other senior personnel must be included, even it may receive no support from the project. The total award amount for the entire award period (including indirect costs) must be shown as well as the number of person-months per year to be devoted to the project, regardless of source of support. Similar information must be provided for all proposals already submitted or submitted concurrently to other potential sponsors, including lists. Proposals submitted in a proposal to other organizations will not prejudice its review by NSF. Note that the Biological Sciences Divisions except this policy, however, detailed in GRC Chapter 1.2.

If the project now being submitted has been authorized by a source other than NSF, the information requested in the paragraph above must be furnished for the last period of funding.

j. Special Information and Supplementary Documentation

Except as specified below, special information and supplementary documentation must be included part of the Project Description (or part of the budget justification). If it is relevant to determining the quality of the proposed work, information submitted in the university affairs is not considered part of the proposed project budget allocation. This Special Information and Supplementary Documentation section also is not considered an appendix. Specific guidelines on the need for additional documentation may be obtained from the organization's sponsored proposal office or in the references cited below.
Proposal Development Strategies

Key Questions for Prospective Investigators

– 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 for Individual Investigators

• Determine your long-term research and education goals

• Develop your bright idea
  - Survey the literature
  - Contact other investigators currently working on the same subject
  - Prepare a brief concept paper
  - Discuss with your colleagues and mentors

• Read solicitation instructions carefully
Proposal Development Strategies for Individual Investigators

• Prepare to carry out your project
  - Determine available resources
  - Realistically assess your needs
  - Develop preliminary data
  - Present to your colleagues, mentors, and students

• Determine possible funding sources

• Understand the ground rules
Proposal Development Strategies: 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.

• Proposed mentoring activities will be evaluated as part of the merit review process, under NSF’s broader impacts merit review criterion.
Proposal Development Strategies: Mentoring for Postdoctoral Researchers

- Mentoring activities may include:
  - Providing career counseling, training in the preparation of grant proposals, or training in responsible professional practices
  - Developing publications and presentations
  - Offering guidance on techniques to improve teaching and mentoring skills
  - Providing counseling on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas
Proposal Development Strategies: Mentoring for Postdoctoral Researchers

• Proposals that identify a postdoc on the budget but do not include a maximum one-page mentoring plan as a supplementary document will be prevented from submission in FastLane.

• For collaborative proposals, the lead organization must submit a mentoring plan for all postdoctoral researchers supported under the entire collaborative project.
Data Management Plan Requirements

• All proposals are required to include, as a supplementary doc, a data management plan of up to 2 pages.
• Plan should describe how the proposal will conform to NSF policy on dissemination and sharing of research results.
• A valid Data Management Plan may include only the statement that no detailed plan is needed, as long a clear justification is provided.
• Plan will be reviewed as part of the intellectual merit and/or broader impacts of the proposal.
Data Management Plan Requirements

Dissemination and Sharing of Research Results

NSF Data Sharing Policy

Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Researchers are expected to encourage and facilitate such sharing. See Award & Administration Guide (A&AG) Chapter 11.4.9.8.4 for further information.

NSF Data Management Plan Requirements

Proposals submitted on or after January 15, 2011, must include a supplementary document of no more than two pages labeled “Data Management Plan.” This supplementary document should describe how the proposal will conform to NSF policies on the dissemination and sharing of research results. See Grant Proposal Guide (GPG) Annex I, Section I.B.1 for full policy implementation.

Requirements by Directorate, Office, Division, Program, or other NSF Unit

Links to data management requirements and plans relevant to specific Directorates, Offices, Divisions, Programs, or other NSF units, are provided below. If guidance specific to the program is not provided, then the requirements established in Grant Proposal Guide, Chapter II.4.C.1 apply.

Please note that if a specific program solicitation provides guidance on preparation of data management plans, such guidance must be followed.

- Engineering Directorate (ENG)
  - Directorate-wide Guidance

- Geosciences Directorate (GEO)
  - Division of Earth Sciences
  - Division of Ocean Sciences
  - Division of Polar Programs

- Mathematical and Physical Sciences Directorate (MPS)
  - Division of Astronomical Sciences
  - Division of Chemistry
  - Division of Materials Research
  - Division of Mathematical Sciences
  - Division of Physics

- Social, Behavioral and Economic Sciences Directorate (SBE)
  - Directorate-wide Guidance

Data Management & Sharing Frequently Asked Questions (FAQs) - updated November 30, 2010

Budgetary Guidelines

Information regarding budgetary guidelines can be found in both the GPG and in the Award & Administration Guide (AAG), as well as NSF program solicitations.

Amounts should be:
- Realistic and reasonable
- Well-justified and should establish need
- Consistent with program guidelines

Eligible costs consist of:
- Personnel
- Equipment
- Travel
- Participant support
- Other direct costs (e.g., subawards, consultant services, computer services, and publications costs)
NSF Cost Sharing Policy

• Inclusion of voluntary *committed* cost sharing is prohibited in solicited & unsolicited proposals.
  
  – To be considered voluntary committed cost sharing, the cost sharing must meet all of the standards of [2 CFR § 215.23](https://www.acf.hhs.gov/ofa/policy/2-cfr-215-23), to include identification of cost sharing on the NSF budget.
  
  – Line M will be “grayed out” in FastLane.

• Organizations may, at their own discretion, continue to contribute any amount of voluntary uncommitted cost sharing to NSF-sponsored projects.
Find Support for Proposal Writing

- NSF Publications
  - Program announcements and solicitations
  - Proposal & Award Policies & Procedures Guide
  - Program Web pages
  - Funded project abstracts
  - Reports and special publications

- Targeted workshops
- Program Officers
- Mentors on Campus
- Former panelists
- Sponsored Research Office
- Successful proposals

Finally, serving as a reviewer is helpful as well!
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 for one year of duration
- The project description is expected to be brief; no more than five pages
- Only internal merit review is required for RAPID proposals. Under rare circumstances, Program Officers may elect to obtain external reviews. If external merit review is to be used, then the PI will be informed
EArly-concept Grants for Exploratory Research (EAGER)

• The EAGER funding mechanism may be used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches.

• This work is considered especially "high risk-high payoff" because it involves radically different approaches, applies new expertise, or engages novel disciplinary or interdisciplinary perspectives.
EArly-concept Grants for Exploratory Research (EAGER)

- Requests may be for up to $300K and for two years of duration
- Only internal merit review is required. Under rare circumstances, Program Officers may elect to obtain external reviews. If external merit review is to be used, then the PI will be informed
- No-cost extensions, and requests for supplemental funding may be requested but are subject to full external merit review
Merit Review

Topics Covered

• Proposal and Award Timeline
• Proposal Preparation and Submission
  - Reminders When Preparing Proposals
• Proposal Review and Processing
  - Program Officer Review
  - Proposal Review Criteria
  - Types of Reviews
  - Becoming a Reviewer
  - Managing Conflicts of Interest
  - Funding Decisions
• Award Processing
  - Issuing the Award
NSF Proposal & Award Process Timeline

1. NSF Announces Opportunity
2. Research & Educational Communities
3. Submit
4. NSF Program Officer
5. Ad Hoc
6. Panel
7. Combination
8. Internal
9. Program Officer Analysis and Recommendations
10. DD Concur
11. Via DGA
12. Organization
13. Can be returned without review/withdrawn
14. Proposal Receipt at NSF: 90 Days
15. Proposal Receipt to DD Concurrence of PO Recommendation: 6 Months
16. DD Concur: 30 Days
17. Award
Reminders When Preparing Proposals

• Read the funding opportunity; ask a Program Officer for clarifications if needed
• Address all the proposal review criteria
• Understand the NSF merit review process
• Avoid omissions and mistakes
• Check your proposal to verify that it is complete!
Proposal Review and Processing

1. NSF Announces Opportunity
2. Research & Educational Communities
3. Submit
4. NSF Program Officer
   - Ad Hoc
   - Panel
   - Combination
   - Internal
5. Program Officer Analysis and Recommendations
6. DD Concur
7. Award Via DGA
8. Decline
9. Organization

Timeframe:
- Proposal Preparation: 90 Days
- Proposal Receipt to DD Concurrence of PO Recommendation: 6 Months
- DGA Review & Processing: 30 Days

Note: Proposals can be returned without review/withdrawn.
Program Officer Review

- Upon receipt at NSF, proposals are routed to the correct program office.
- NSF staff conducts a preliminary review to ensure they are:
  - Complete;
  - Timely; and
  - Conform to proposal preparation requirements.
- NSF may return a proposal without review if it does not meet the requirements above.
  - The return without review process will be discussed in greater detail later in the session.
Proposal Review Criteria

• Throughout the review process, proposals are evaluated against:
  – National Science Board approved merit review criteria:
    • What is the intellectual merit of the proposed activity?
    • What are the broader impacts of the proposed activity?
  – Program specific criteria (stated in the program solicitation).
Merit Review Criteria

The Grant Proposal Guide (GPG) contains a description of the Merit Review Criteria

A. Review Criteria

The National Science Foundation strives to conduct a fair, competitive, transparent merit-review process for the selection of projects. All NSF proposals are evaluated through use of two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities. For example, proposals for large facility projects also might be subject to special review criteria outlined in the program solicitation.
Intellectual Merit Considerations

• How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields?

• How well-qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.)

• To what extent does the proposed activity suggest and explore creative, original or potentially transformative concepts?

• How well-conceived and organized is the proposed activity?

• Is there sufficient access to resources?
Broader Impacts Considerations

• How well does the activity advance discovery and understanding while promoting teaching, training, and learning?

• How well does the activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic)?

• To what extent will the activity enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships?

• Will the results be disseminated broadly to enhance scientific and technological understanding?

• What may be the benefits of the proposed activity to society?
Examples of Broader Impacts

The GPG contains examples of Broader Impacts. For further information, visit:

Proposal Review and Processing

NSF Announces Opportunity

Research & Educational Communities

Submit

NSF Program Officer

NSF

Proposal Receipt at NSF

90 Days

Proposal Preparation

6 Months

Proposal Receipt to DD Concurrence of PO Recommendation

30 Days

DD Concur

Award

Via DGA

Organization

Can be returned without review/withdrawn

Program Officer Analysis and Recommendations

Ad Hoc

Panel

Combination

Internal

Decline

Award

DGA Review & Processing
Return of Proposals Without Review

• Per Important Notice 127, *Implementation of new Grant Proposal Guide Requirements related to the Broader Impacts Criterion:*
  – Proposals that do not separately address both criteria within the one-page Project Summary *will be* returned without review.

• Per the GPG postdoctoral researcher mentoring requirement:
  – Proposals that include postdoctoral researchers must include, as a supplementary document, a description of the mentoring activities that will be provided for such individuals.
  – The mentoring plan must not exceed one page per project.

• Per the GPG data management plan requirement:
  – Proposals must be included as a supplementary document.
Other Reasons for Return of Proposals Without Review

- It is inappropriate for funding by the National Science Foundation.
- It is submitted with insufficient lead time before the activity is scheduled to begin.
- It is a full proposal that was submitted by a proposer that has received a “not invited” response to the submission of a preliminary proposal.
- It is a duplicate of, or substantially similar to, a proposal already under consideration by NSF from the same submitter.
Other Reasons for Return of Proposals Without Review

• It does not meet NSF proposal preparation requirements, such as page limitations, formatting instructions, and electronic submission, as specified in the GPG or program solicitation.
• It is not responsive to the GPG or program announcement/solicitation.
• It does not meet an announced proposal deadline date (and time, where specified).
• It was previously reviewed and declined and has not been substantially revised.
• It duplicates another proposal that was already awarded.
Proposal Review and Processing

1. NSF Announces Opportunity
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   - Ad Hoc
   - Panel
   - Combination
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8. Organization
9. Decline

Timeline:
- Proposal Receipt at NSF: 90 Days
- Proposal Receipt to DD Concurrence of PO Recommendation: 6 Months
- DD Concur: 30 Days
- Award
Types of Reviews

• *Ad hoc*: proposals sent out for review —
  – *Ad hoc* reviewers usually have specific expertise in a field related to the proposal.
  – Some proposals may undergo *ad hoc* review only.

• *Panel*: Face-to-face sessions conducted by reviewers mainly at NSF but also in other settings
  – Panel reviewers usually have a broader scientific knowledge.
  – Some proposals may undergo only a panel review.
  – Some proposals may undergo reviews by multiple panels (especially for those proposals with cross-cutting themes).
Types of Reviews

• Combination: some proposals may undergo supplemental *ad hoc* reviews prior to or after a panel review.

• Internal: review by NSF Program Officers only—
  – Examples of internally reviewed proposals:
    • Proposals submitted to Rapid Response Research Grants (RAPID)
    • Proposals submitted to EArly-concept Grants for Exploratory Research (EAGER)
    • Proposals for conferences or workshops
How are Reviewers Selected?

• **Types of reviewers recruited:**
  – Reviewers with specific content expertise
  – Reviewers with general science or education expertise

• **Sources of Reviewers:**
  – Program Officer’s knowledge of the research area
  – References listed in proposal
  – Recent professional society programs
  – Computer searches of S&E journal articles related to the proposal
  – Former reviewers
  – Reviewer recommendations included in proposal or sent by email

• **Three or more external reviewers per award are selected.**
How Do I Become a Reviewer?

• Contact the NSF Program Officer(s) of the program(s) that fit your expertise:
  – Introduce yourself and your research experience.
  – Tell them you want to become a reviewer for their program.
  – Ask them when the next panel will be held.
  – Offer to send a 2-page CV with current contact information.
  – Stay in touch if you don’t hear back right away.
What is the Role of the Reviewer?

- Review all proposal material and consider:
  - The two NSF merit review criteria and any program specific criteria.
  - The adequacy of the proposed project plan including the budget, resources, and timeline.
  - The priorities of the scientific field and of the NSF program.
  - The potential risks and benefits of the project.

- Make independent written comments on the quality of the proposal content.
What is the Role of the Review Panel?

• Discuss the merits of the proposal with the other panelists

• Write a summary based on that discussion

• Provide some indication of the relative merits of different proposals considered
Why Serve on an NSF Panel?

• Gain first-hand knowledge of the merit review process
• Learn about common problems with proposals
• Discover proposal writing strategies
• Meet colleagues and NSF Program Officers managing the programs related to your research
Managing Conflicts of Interest in the Review Process

• The primary purpose is to remove or limit the influence of ties to an applicant institution or investigator that could affect reviewer advice.

• The secondary purpose is to preserve the trust of the scientific community, Congress, and the general public in the integrity, effectiveness, and evenhandedness of NSF’s merit review process.
Examples of Affiliations with Applicant Institutions

- Current employment at the institution
- Other association with the institution, such as being a consultant
- Being considered for employment or any formal or informal reemployment arrangement at the institution
- Any office, governing board membership, or relevant committee membership at the institution
Examples of Personal Relationships with Investigator or Project Director

- Known family or marriage relationship
- Business partner
- Past or present thesis advisor or thesis student
- Collaboration on a project or book, article, or paper within the last 48 months
- Co-edited a journal, compendium, or conference proceedings within the last 24 months
Proposal Review and Processing

- NSF Announces Opportunity
- Research & Educational Communities
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  - Panel
  - Combination
  - Internal
- Program Officer Analysis and Recommendations
- DD Concur
- Organization
- Award Via DGA
- Decline

Timeframes:
- Proposal Preparation: 90 Days
- Proposal Receipt to DD Concurrence of PO Recommendation: 6 Months
- DD Concurrence: 30 Days
- Award
Funding Decisions

• The merit review panel summary provides:
  – Review of the proposal and a recommendation on funding.
  – Feedback (strengths and weaknesses) to the proposers.

• NSF Program Officers make funding recommendations guided by program goals and portfolio considerations.

• NSF Division Directors either concur or reject the Program Officer’s funding recommendations.
Feedback from Merit Review

- Reviewer ratings (such as: E, VG, G, F, P)
- Analysis of how well proposal addresses both review criteria: Intellectual Merit and Broader Impacts
- Proposal strengths and weaknesses
- Reasons for a declination (if applicable)

If you have any questions, contact the cognizant Program Officer.
Documentation from Merit Review

- Verbatim copies of individual reviews, excluding reviewer identities
- Panel Summary or Summaries (if panel review was used)
- Context Statement (usually)
- PO to PI comments (formal or informal, written, email or verbal) as necessary to explain a decision
Examples of Reasons for Declines

• The proposal was not considered to be competitive based on the merit review criteria and the program office concurred.

• The proposal had flaws or issues identified by the program office.

• The program funds were not adequate to fund all competitive proposals.
Revisions and Resubmissions

• Points to consider:
  – Do the reviewers and the NSF Program Officer identify significant strengths in your proposal?
  – Can you address the weaknesses that reviewers and the Program Officer identified?
  – Are there other ways you or your colleagues think you can strengthen a resubmission?

As always, if you have questions, contact the cognizant Program Officer.
NSF Reconsideration Process

• Explanation from Program Officer and/or Division Director

• Written request for reconsideration to Assistant Director within 90 days of the decision

• Request from organization to Deputy Director of NSF
Possible Considerations for Funding a Competitive Proposal

- Addresses all review criteria
- Likely high impact
- Broadening participation
- Educational impact
- Impact on institution/state

- Special programmatic considerations (e.g. CAREER/RUI/EPSCoR)
- Other support for PI
- “Launching” versus “Maintaining”
- Portfolio balance
Award Processing

- NSF Announces Opportunity
- Research & Educational Communities
- Submit
- NSF Program Officer
- Proposal Receipt at NSF: 90 Days
- Proposal Preparation
- 6 Months: Proposal Receipt to DD Concurrency of PO Recommendation
- 30 Days: DGA Review & Processing

Flowchart:
- Ad Hoc
- Panel
- Combination
- Internal
- Program Officer Analysis and Recommendations
- Can be returned without review/withdrawn
- DD Concur
- Award
- Via DGA
- Decline
- Organization
Issuing the Award

- NSF’s Division of Grants and Agreements (DGA) reviews the recommendation from the program office for business, financial, and policy implications.

- NSF’s grants and agreements officers make the official award as long as:
  - The institution has an adequate grants management capacity.
  - The PI/Co-PIs do not have overdue annual or final reports.
  - There are no other outstanding issues with the institution or PI.
For More Information

Go to NSF’s Home Page (http://www.nsf.gov)

Merit Review

NOTICE: Effective January 14, 2013, the National Science Foundation will implement revised merit review criteria based on the National Science Board (NSB) report, National Science Foundation’s Merit Review Criteria: Review and Revisions. View the Merit Review Website that is effective for proposals submitted or due on or after January 14, 2013.

Through its merit review process, the National Science Foundation (NSF) ensures that proposals submitted are reviewed in a fair, competitive, transparent, and in-depth manner. The merit review process is described in detail in Part I of the NSF Proposal & Award Policies & Procedures Guide (PAPPG); the Grant Proposal Guide (GPG). The GPG provides guidance for the preparation and submission of proposals to NSF.

The goal of this Merit Review website is to help you better understand the NSF merit review process as well as identify resources for additional information (including applicable chapters in the GPG). Sections of this website include:

- Phase I: Proposal Preparation and Submission
- Phase II: Proposal Review and Processing
- Phase III: Award Processing
- Non-Award Decisions and Transactions
- Merit Review Facts
- Why You Should Volunteer to Serve as an NSF Reviewer
- Additional Resources
- Contact Us

Proposals and Awards
For More Information

Ask Early, Ask Often!

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