Panelists

Sankar Basu
Program Director, Directorate for Computer & Information Sciences & Engineering; Division of Computing and Communication Foundations

Sonia Esperança
Program Director, Directorate for Geosciences; Division of Earth Sciences

Jean Feldman
Head, Policy Office, Office of Budget, Finance & Award Management; Division of Institution & Award Support

Randy Phelps
Staff Associate, Office of the Director; Office of Integrative Activities
Topics Covered

• Find Funding Opportunities
• Proposal & Award Policies and Procedures Guide
• Types of Proposal Submissions
• Sections of an NSF Proposal
• Postdoctoral Mentoring Plans
• Data Management Plans

“Ask Early, Ask Often!”
Find Funding Opportunities
NSF Funding & Research Community

SPECIAL NOTICES

NSF and Congress: Latest Actions
NSF releases DRAFT Proposal & Award Policies & Procedures Guide (PAPPG) in the Federal Register for public comment
Science Policy
Dear Colleague Letter: NSF INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science)
New Steps to Enhance Transparency and Accountability at the National Science Foundation, Important Notice No. 137, January 13, 2015
NSF Strategic Plan for FY 2014-2018

EVENT CALENDAR

AUGUST 22, 2016 - AUGUST 22, 2016
National Science Foundation at the American Chemical Society Meeting, August 22-24, 2016
OUTREACH

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OUTREACH
Other Ways to Find Funding

Use Grant.gov’s Search Feature
The Proposal & Award Policies & 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.

Part I is NSF’s proposal preparation and submission guidelines

Part II is NSF’s award and administration guidelines
What is the Proposal & Award Policies & Procedures 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 not be accepted or returned without review
- Describes process for withdrawals, returns, and declinations
- Includes policies to guide, manage, and monitor the award and administration of grants and cooperative agreements
<table>
<thead>
<tr>
<th>Funding Opportunities</th>
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<tr>
<td><strong>Program Descriptions</strong></td>
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<td>Proposals for a Program Description must follow the instructions in the GPG.</td>
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<tr>
<td><strong>Program Announcements</strong></td>
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<td>Proposals for a Program Announcement must follow the instructions in the GPG.</td>
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<tr>
<td><strong>Program Solicitations</strong></td>
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<tr>
<td>Proposals must follow the instructions in the Program Solicitation; the instructions in the GPG apply unless otherwise stated in the solicitation.</td>
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<tr>
<td><strong>Dear Colleague Letters</strong></td>
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<tr>
<td>Dear Colleague Letters are notifications of opportunities or special competitions for supplements to existing NSF awards.</td>
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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
Discovery Research PreK-12 (DRK-12)

PROGRAM SOLICITATION
NSF 15-592

REPLACES DOCUMENT(S):
NSF 13-601

National Science Foundation

Directorate for Education & Human Resources
Research on Learning in Formal and Informal Settings

Full Proposal Deadline(s) (due by 5 p.m. proposer's local time):
December 07, 2015
December 05, 2016
First Monday in December, Annually Thereafter

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

Number of awards funded by the program per year

Funds available to the program per year

Award Information

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

**Estimated Number of Awards:** 35 to 45

Per year. It is anticipated that about 10-15 Level I awards, 15-20 Level II awards 5-10 Level III awards, and 5 Conference/Synthesis awards will be made in FY 2016, pending availability of funds.

**Anticipated Funding Amount:** $50,000,000

Pending availability of funds, NSF anticipates having approximately $100,000,000 available over the two fiscal year period FY2016-2017 for support of the DRK-12 portfolio. Approximately $50,000,000 will be available for the FY2016 competition and approximately $50,000,000 will be available for the FY2017 competition.

Normal limits for funding requests of DRK-12 proposals are as follows: (1) Level I projects up to $450,000 with duration up to three years; (2) Level II projects up to $3,000,000 with duration up to four years; and (3) Level III projects up to $5,000,000 with duration up to five years. The three levels of funding should align with the maturity of the proposed work, the size and scope of the empirical effort, as well as the capacity of the interdisciplinary team to conduct the proposed research.
Eligibility information for institutions/PIs submitting proposals
Types of Proposal Submissions

NO DEADLINES

Proposals may be submitted at any time

F. When to Submit Proposals

Proposers should allow adequate time for NSF review and processing of proposals (see GPG Chapter 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 be returned without 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

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Types of Proposal Submissions

DEADLINE DATES

Proposals will not be accepted after this date and time (5 p.m. submitter’s local time)

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Types of Proposal Submissions

SUBMISSION WINDOWS

Proposals will not be accepted after this date and time (5 p.m. submitter’s local time)

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

1. Letters of Intent

Some NSF program solicitations require or request submission of a letter of intent (LOI) in advance of submission of a full proposal. An LOI is not a binding document. 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 an LOI is used to help avoid potential conflicts of interest in the review process.

An LOI normally contains the Principal Investigator’s (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. An LOI is not externally evaluated or used to decide on funding. The requirement to submit an LOI will be identified in the program solicitation, and such letters are submitted electronically to NSF. Failure to submit a required LOI identified in a program solicitation will result in a full proposal not being accepted or returned without review.
Types of Proposal Submissions

PRELIMINARY PROPOSALS

Sometimes required, sometimes optional

Some NSF program solicitations require or request submission of a preliminary proposal in advance of submission of a full proposal. The three 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 when the community senses that a major new direction is being identified, or competitions that will result in a small number of awards;
- increase the overall quality of the full submission; and
- assist NSF program staff in managing the review process and in the selection of reviewers.
Proposals that do not contain the following required sections may not be accepted by FastLane:

- Project Summary
- Project Description
- References Cited
- Biographical Sketch(es)
- Budget
- Budget Justification
- Current and Pending Support
- Facilities, Equipment and Other Resources
- Data Management Plan
- Postdoctoral Mentoring Plan (if applicable)
• Some proposal documents are for “NSF Use Only” and are not provided to reviewers
  ▪ Authorization to deviate from proposal preparation requirements
  ▪ List of suggested reviewers to include or not to include
  ▪ Proprietary or privileged information
  ▪ Proposal certifications
  ▪ Information about collaborators and other affiliations
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
Project Summary (Required)

Text boxes must contain an Overview and Statements on Intellectual Merit and Broader Impacts.

Proposals that do not separately address the Overview and both Merit Review criteria in text boxes will not be accepted by FastLane.

Project summaries with special characters must be uploaded as a PDF document.
Project Description (Required)
Proposers should address what they want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful.

A separate section within the narrative must include a discussion of the broader impacts of the proposed activities.
References Cited (Required)
Reference information is required, and proposers must follow accepted scholarly practices in providing citations for source materials.

(v) Group Proposals
NSF encourages submission of proposals by groups of investigators; often these are submitted to carry out interdisciplinary projects. Unless stipulated in a specific program solicitation, however, such proposals will be subject to the 15-page Project Description limitation established in Section (ii) above. PIs who wish to exceed the established page limitations for the Project Description must request and receive a deviation in advance of proposal submission. (GPG Chapter II.A contains information on deviations.)

(vi) Proposals for Renewed Support
See GPG Chapter V for guidance on preparation of renewal proposals.

e. References Cited
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. (See also GPG Chapter I.C.2.d.(iii)(d)) If the proposer has a website address readily available, that information should be included in the citation. It is not NSF’s intent, however, to place an undue burden on proposers to search for the URL of every referenced publication. Therefore, inclusion of a website address is optional. Any proposal that includes reference citation(s) that do not specify a URL is not considered to be in violation of NSF proposal preparation guidelines and the proposal will still be reviewed.

Proposers must be especially careful to follow accepted scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 15-page Project Description.

f. Biographical Sketch(es)
(i) Senior Personnel
A biographical sketch (limited to two pages) is required for each individual identified as senior personnel. (See GPG Exhibit II-6 for the definitions of Senior Personnel.) Proposers may elect to use third-party solutions, such as NIH’s SciEntry, to develop and maintain their biographical sketch. However, proposers are advised that they are still responsible for ensuring that biographical sketches created using third-party solutions are compliant with NSF proposal preparation requirements.

Do not submit any personal information in the biographical sketch. This includes items such as: home address; home telephone, fax, or cell phone numbers; home e-mail address; drivers’ license numbers; marital status; personal hobbies; and the like. Such personal information is not appropriate for the biographical sketch and is not relevant to the merits of the proposal. NSF is not responsible or in any way liable for the release of such material. (See also GPG Chapter III.H.)
f. Biographical Sketch(es)

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A biographical sketch (limited to two pages) is required for each individual identified as senior personnel. (See GPG Exhibit II-6 for the definitions of Senior Personnel.) Proposers may elect to use third-party solutions, such as NIH’s SciErie to develop and maintain their biographical sketch. However, proposers are advised that they are still responsible for ensuring that biographical sketches created using third-party solutions are compliant with NSF proposal preparation requirements.

Do not submit any personal information in the biographical sketch. This includes items such as: home address; home telephone, fax, or cell phone numbers; home e-mail address; drivers’ license numbers; marital status; personal hobbies; and the like. Such personal information is not appropriate for the biographical sketch and is not relevant to the merits of the proposal. NSF is not responsible or in any way liable for the release of such material. (See also GPG Chapter III.1).

(a) Professional Preparation

A list of the individual’s undergraduate and graduate education and postdoctoral training (including location) as indicated below:

<table>
<thead>
<tr>
<th>Undergraduate Institution(s)</th>
<th>Location</th>
<th>Major</th>
<th>Degree &amp; Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Institution(s)</td>
<td>Location</td>
<td>Major</td>
<td>Degree &amp; Year</td>
</tr>
<tr>
<td>Postdoctoral Institution(s)</td>
<td>Location</td>
<td>Area</td>
<td>Inclusive Dates (years)</td>
</tr>
</tbody>
</table>

(b) Appointments

A list, in reverse chronological order, of all the individual’s academic/professional appointments beginning with the current appointment.

(c) Products

A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of ten will be used in the review of the proposal.

Each product must include full citation information including (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website and URL or other Persistent Identifier.

If only publications are included, the heading “Publications” may be used for this section of the Biographical Sketch.

(d) Synergistic Activities

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**Biographical Sketches (Required)**

Biographical sketches are required for all senior project personnel and must not exceed two pages in length, per individual.
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. Proposals containing subawards must include a separate budget justification of no more than three pages for each subaward.
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)
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, 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.
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.

Facilities, Equipment, and Other Resources

Instructions: Upload an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded. Describe only those resources that are directly applicable. The description should be narrative in nature and must not include any quantifiable financial information. If there are no Facilities, Equipment, or Other Resources identified, a statement to that effect should be indicated in this section and uploaded into FastLane. See GPG II.C.2.i for more information.

Upload File
Current and Pending Support (Required)
This section of the proposal calls for information on all current and pending support for ongoing projects and proposals.
Sections of an NSF Proposal

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

Except as specified below, special information and supplementary documentation must be included as 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 following areas is not considered part of the 15-page Project Description limitation. This Special Information and Supplementary Documentation section also is not considered an appendix. Specific guidance on the need for additional documentation may be obtained from the organization’s sponsored projects office or in the references cited below.

- Postdoctoral Researcher Mentoring Plan. Each proposal that requests funding to support postdoctoral researchers must include, as a supplementary document, a description of the mentoring activities that will be provided for such individuals. In no more than one page, the mentoring plan must describe the mentoring that will be provided to all postdoctoral researchers supported by the project, regardless of whether they reside at the submitting organization, any subrecipient organization, or at any organization participating in a simultaneously submitted collaborative project. Proposers are advised that the mentoring plan must not be used to document the 15-page Project Description limitation. See GPG Chapter II.D.5 for additional information on collaborative proposals. Mentoring activities provided to postdoctoral researchers supported on the project will be evaluated under the Broader Impacts review criterion.

Examples of mentoring activities include, but are not limited to: 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.

- Plans for data management and sharing of the products of research. Proposals 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 policy on the dissemination and sharing of research results (see AAG Chapter VI.D.4), and may include:
  1. the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
  2. the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
  3. policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
  4. policies and provisions for re-use, re-distribution, and the production of derivatives; and
Special Information and Supplementary Documentation

- Data Management Plans
- Post doctoral Mentoring Plans
- Letters of Collaboration

Carnegie Mellon University
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.
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.
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
Data Management Plan Requirements

• All proposals are required to include, as a supplementary doc, a Data Management Plan of up to two 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 as a clear justification is provided.
• Plan will be reviewed as part of the Intellectual Merit and/or Broader Impacts of the proposal.
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. Grantees are expected to encourage and facilitate such sharing. See Award & Administration Guide (AAG) Chapter VI.D.4.

NSF DATA MANAGEMENT PLAN REQUIREMENT 9

Proposals submitted or due on or after January 16, 2011, must include a supplementary document of no more than two pages titled "Data Management Plan." This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results. See Grant Proposal Guide (GPG) Chapter II.C.2 for full policy implementation.

REQUIREMENTS BY DIRECTORATE, OFFICE, DIVISION, PROGRAM, OR OTHER NSF UNIT

Links to data management requirements and plans relevant to specific Directories, 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.C.1 apply.

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

- Biological Sciences Directorate (BIO)
  - Directorate-wide Guidance
- Computer & Information Sciences & Engineering (CISE)
  - Directorate-wide Guidance
- Education & Human Resources Directorate (EHR)
  - Directorate-wide Guidance
- Engineering directorates (CIV)
  - Directorate-wide Guidance
- Geosciences Directorate (GEO)
Ask Early, Ask Often!

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