Proposal Preparation
Panelists

**Karen Cone**  
Program Director; Division of Molecular & Cellular Biosciences; Directorate for Biological Sciences

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

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Staff Associate; Office of Integrative Activities; Office of the Director
Topics Covered

• Find Funding Opportunities
• Proposal and 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
Find Funding Opportunities (cont)

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

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<th>AUGUST 22, 2016 - AUGUST 22, 2016</th>
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<td>National Science Foundation at the American Chemical Society Meeting, August 22-24, 2016</td>
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FUNDING OPPORTUNITIES

Search Funding Opportunities
Enter search term
GO

or Search by Program Area
Select One
GO

VIEW ALL FUNDING OPPORTUNITIES

Proposal and Award Policies and Procedures Guide
Prepare a Proposal
Upcoming Due Dates
Submit Proposal to FastLane
Other Ways to Find Funding

Use the Search Feature in Grants.gov
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
## Types of Funding Opportunities

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<th>Program Descriptions</th>
<th>Program Announcements</th>
<th>Program Solicitations</th>
<th>Dear Colleague Letters</th>
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<tr>
<td>Proposals for a <strong>Program Description</strong> must follow the instructions in the PAPPG.</td>
<td>Proposals for a <strong>Program Announcement</strong> must follow the instructions in the PAPPG.</td>
<td>Proposals must follow the instructions in the <strong>Program Solicitation</strong>; the instructions in the PAPPG apply unless otherwise stated in the solicitation.</td>
<td><strong>Dear Colleague Letters</strong> 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
**Sample Cover Page of a Solicitation**

**Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES)**

*NSF INCLUDES Alliances*

**PROGRAM SOLICITATION**

**NSF 18-529**

**National Science Foundation**

Department of Biological Sciences

Directorate for Computer & Information Science & Engineering

Directorate for Education & Human Resources

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical & Physical Sciences

Directorate for Social, Behavioral & Economic Sciences

Office of Integrative Activities

**Full Proposal Deadline(s) (due by 5 p.m. submitter’s local time):**

- April 04, 2018
- April 02, 2019

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**Program Solicitation Number**

**NSF Directorate(s) 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**

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**Award Information**

**Anticipated Type of Award:** Cooperative Agreement

**Estimated Number of Awards:** 1 to 3

In FY 2018, up to three (3) NSF INCLUDES Alliance awards will be made pending the availability of funds.

**Anticipated Funding Amount:** $8,500,000

In FY 2018, approximately $8.5 million is available to fund new NSF INCLUDES Alliance awards.
Eligibility Information

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Chapter I.E.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

An organization may serve as the lead institution on only one Alliance proposal. Organizations that serve as the lead institution on an Alliance proposal may still participate in other Alliance proposals as a collaborating institution. In the event that an organization exceeds the limit of one proposal as lead, proposals received within the limit will be accepted based on earliest date and time of proposal submission. **No exceptions will be made.**

Limit on Number of Proposals per PI or Co-PI:

An individual may serve as a PI or Co-PI on only two (2) NSF INCLUDES Alliance proposals. Proposals that exceed the PI or Co-PI limit will be returned without review. In the event that an individual exceeds this limit, proposals received within the limit will be accepted based on earliest date and time of proposal submission. **No exceptions will be made.**
Types of Proposal Submissions

NO DEADLINES
Proposals may be submitted at any time

F. When to Submit Proposals

Proposers should allow adequate time for processing of proposals (see Chapter 1.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 or will 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 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 processing of proposals (see 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:

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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)

Proposers should allow adequate time for processing of proposals (see Chapter 1.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:

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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

2. Preliminary Proposals
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.
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
Required Sections of a Research Proposal

- Cover Sheet
- 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)

Proposals that do not contain these required sections may not be accepted by FastLane or Research.gov
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.

The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity.

The overview includes a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed. The statement on intellectual merit should describe the potential of the proposed activity to advance knowledge. The statement on broader impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes.

The Project Summary should be written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal.

The Project Summary may ONLY be uploaded as a Supplementary Document if use of special characters is necessary. Such Project Summaries must be formatted with separate headings for Overview, Intellectual Merit and Broader Impacts. Failure to include these headings will result in the proposal being returned without review.

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Text from the PAPPG
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.

The Project Description must contain, as a separate section within the narrative, a section labeled "Broader Impacts". This section should provide a discussion of the broader impacts of the proposed activities. Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to the achievement of societal relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the US; and enhanced infrastructure for research and education.

Plans for data management and sharing of the products of research, including preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products should be described in the Special Information and Supplementary Documentation section of the proposal (see Chapter II.C.2) for additional instructions for preparation of this section.

Brevity will assist reviewers and Foundation staff in dealing effectively with proposals. Therefore, the Project Description (including Results from Prior NSF Support, which is limited to five pages) may not exceed 15 pages. Visual materials, including charts, graphs, maps, photographs and other pictorial presentations are included in the 15-page limitation. Please be cautioned that the Project Description must be self-contained and that URLs must not be used because: 1) the Information could circumvent page limitations; 2) the reviewers are under no obligation to view the sites; and 3) the sites could be altered or deleted between the time of submission and the time of review.

Conformance to the 15-page limit will be strictly enforced and may not be exceeded unless a deviation has been specifically authorized. (Chapter II.A contains information on deviations.)

The purpose of this section is to assist reviewers in assessing the quality of prior work conducted with current or prior NSF funding. If any PI or co-PI identified on the proposal has received NSF support with a start date in the past five years (including any current funding and no cost extensions), information on the award is required for each PI and co-PI, regardless of whether the support was directly related to the proposal or not. In cases where the PI or any co-PI has received more than one award (excluding amendments to existing awards), they need only report on the one award that is most closely related to the proposal. Support includes not just salary support, but any funding awarded by NSF. NSF awards such as standard or continuing grants, Graduate Research Fellowship, Major Research Instrumentation, conference, equipment, travel, and center awards, etc., are subject to this requirement.

The following information must be provided:

(a) the NSF Award number, amount and period of support;

(b) the title of the project;
References Cited (Required)

- Reference information is required, and proposers must follow accepted scholarly practices in providing citations for source materials.

Text from the PAPPG
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 PAPPG
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 five pages for all years of the project combined.

• Proposals containing subawards must include a separate budget justification of no more than five pages for each subaward.
Information regarding budgetary guidelines can be found in PAPPG 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.

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 PAPPG II.C.2.i for more information.
Sections of an NSF Proposal

Current and Pending Support (Required)

• This section of the proposal calls for information on all current and pending support for ongoing projects and proposals.
Special Information and Supplementary Documentation

This section is used for the required data management plan, postdoctoral mentoring plan and other pertinent supplementary information, such as letters of collaboration; more information can be found in the PAPPG, Chapter II.C.2.j.
Letter of Collaboration

Letter should consist of a single-sentence statement of collaboration:

• “If the proposal submitted by Dr. [name of the PI] entitled [proposal title] is selected for funding by the NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment and Other Resources section of the proposal."

• Must NOT recommend or endorse PI or project

All relevant collaborative activities should be described in the Project Description, or in the Facilities, Equipment and Other Resources pages, such as:

• Intellectual contributions to the project
• Permission to access a site, use instrumentation or facility
• Offer to furnish samples / materials for research
• Logistical support / evaluation services
• Mentoring of U.S. students at a foreign site, if applicable
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.
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 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, and with the scientific community at large, results of their work that demonstrate utility or potential utility for others. Such sharing may include, but is not limited to, the following:

1. Dissemination of research results through publications, presentations, and other means.
2. Sharing of data, tools, and software.
3. Collaboration with other researchers.

NFS DATA MANAGEMENT PLAN REQUIREMENTS

Proposals submitted or due on or after January 18, 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 Directorates, Offices, Divisions, Programs, or other NSF units are provided below. Guidance specific to the program is not provided, but the requirements established in Grant Proposal Guide, Chapter II.C.2., 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 Science & Engineering (CISE)
  - Directorate-wide Guidance
- Education & Human Resources Directorate (EHR)
  - Directorate-wide Guidance
- Engineering Directorate (ENG)
  - Directorate-wide Guidance
- Geosciences Directorate (GEO)
  - Directorate-wide Guidance
For More Information

“Ask Early, Ask Often!”

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