Fall 2017 Grants Conference

PROPOSAL PREPARATION



NOVEMBER 13 - 14, 2017, PHOENIX, AZ / NATIONAL SCIENCE FOUNDATION

Panelists

Karen Cone

Program Director, Directorate for Biological Sciences; Division of Molecular and Cellular Biosciences

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

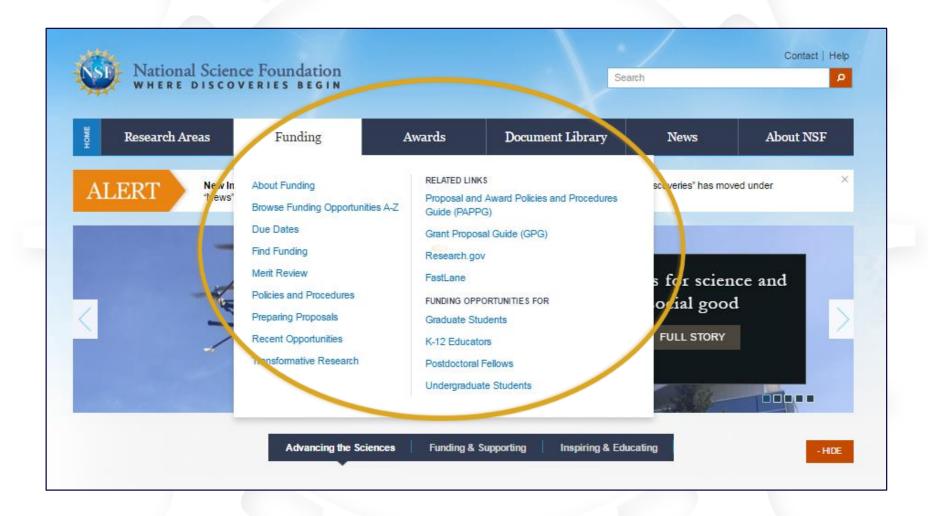
Topics Covered

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

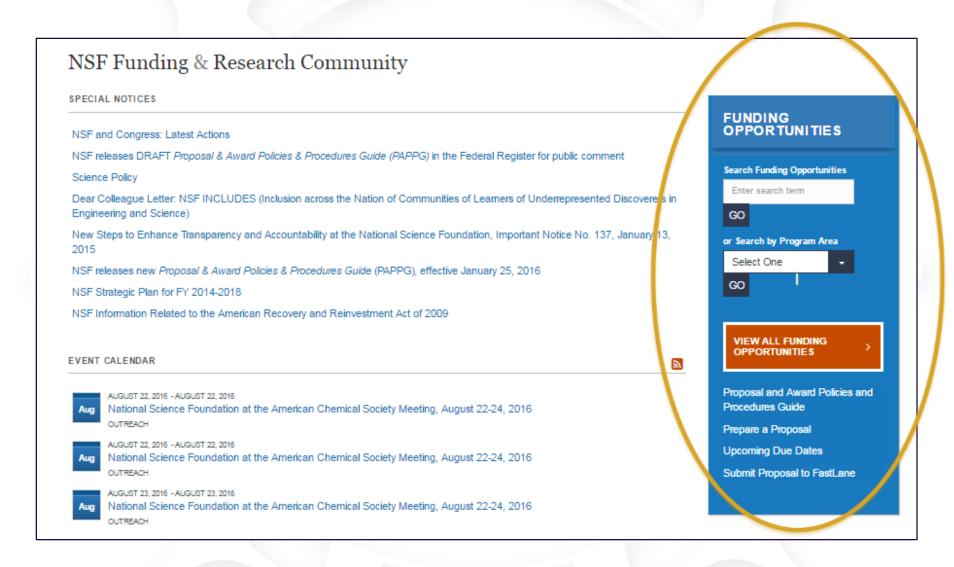


"Ask Early, Ask Often!"

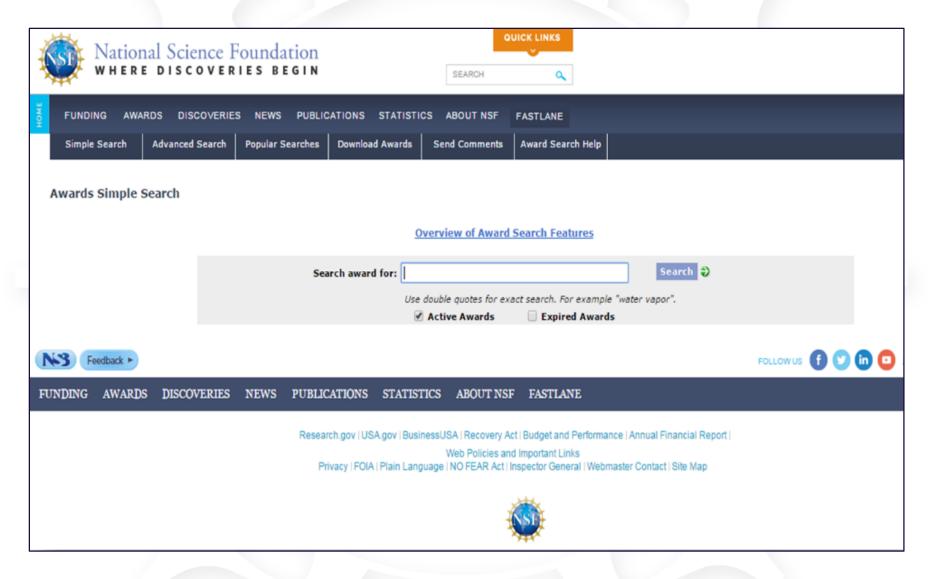
Find Funding Opportunities



Find Funding Opportunities

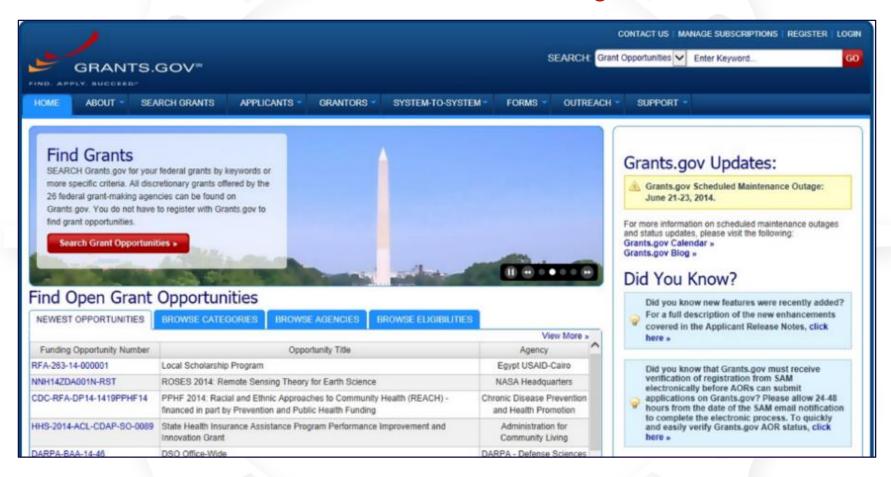


NSF Award Search



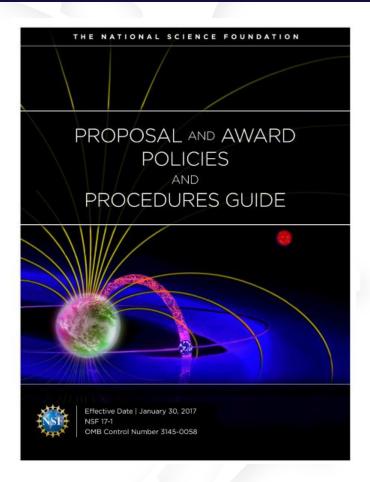
Other Ways to Find Funding

Use the Search Feature in Grants.gov



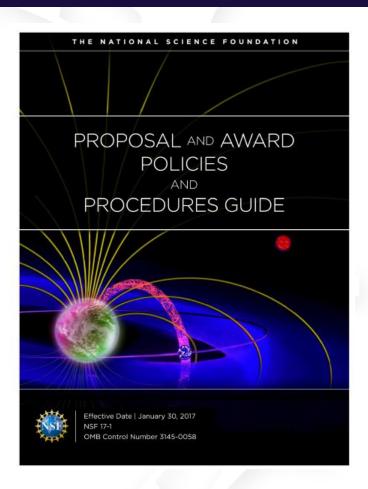
What is the Proposal & Award Policies & Procedures Guide?

- 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

Funding Opportunities

Program Descriptions

Proposals for a
Program
Description must
follow the
instructions in
the PAPPG.

Program Announcements

Proposals for a **Program Announcement**must follow the instructions in the PAPPG.

Program Solicitations

Proposals must follow the instructions in the **Program**Solicitation; the instructions in the PAPPG apply unless otherwise stated in the solicitation.

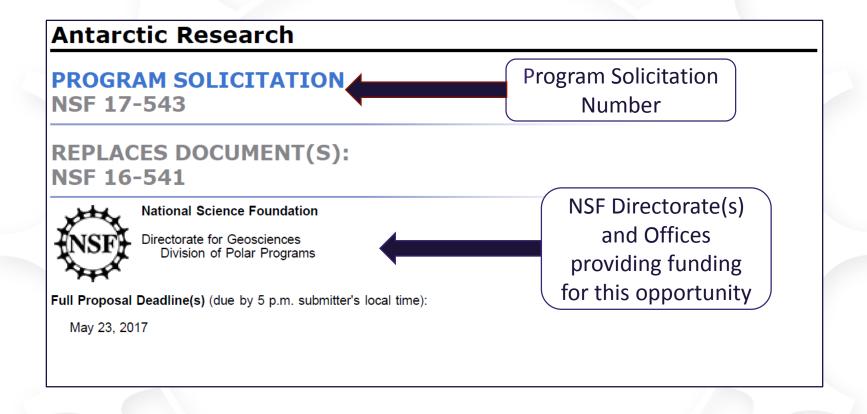
Dear Colleague Letters

Dear Colleague Letters are notifications of opportunities or special competitions for supplements to existing NSF awards.

What to Look for in a Program Announcement or Solicitation



Sample Cover Page of a Solicitation



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: 50

Anticipated Funding Amount: \$55,000,000

The Antarctic Sciences Section anticipates committing approximately \$55M as either standard or continuing awards made in response to this solicitation contingent on the availability of funds.

Sample Cover Page of a Solicitation

Eligibility information for institutions/PIs submitting proposals

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.

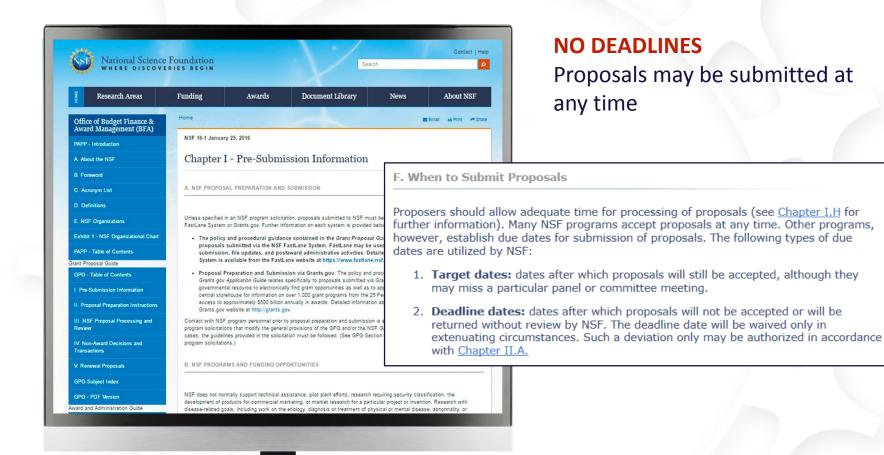
Limit on Number of Proposals per Organization:

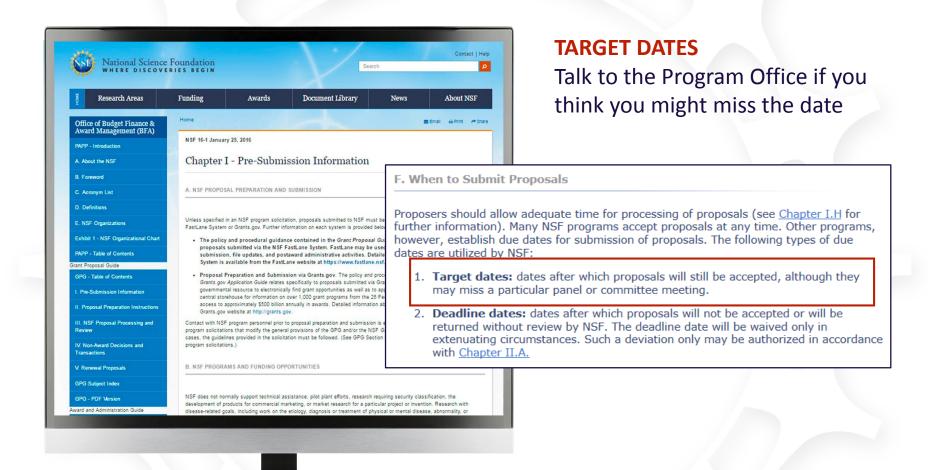
There are no restrictions or limits.

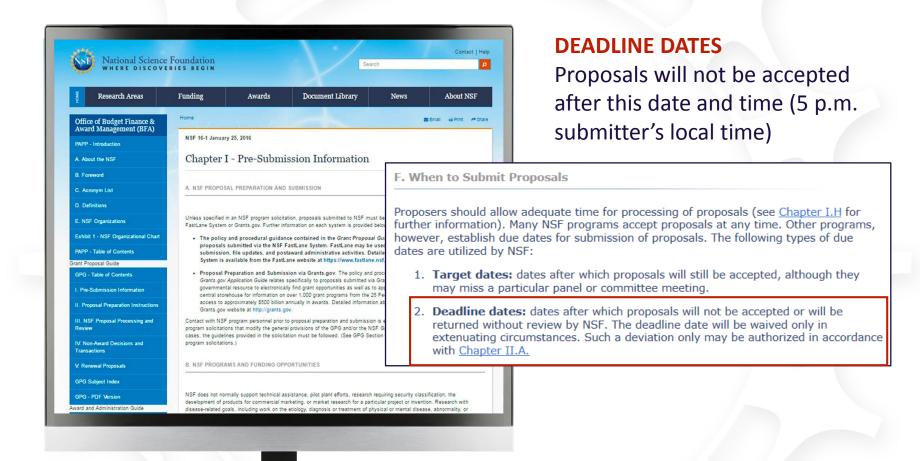
Limit on Number of Proposals per PI or Co-PI:

There are no restrictions or limits.







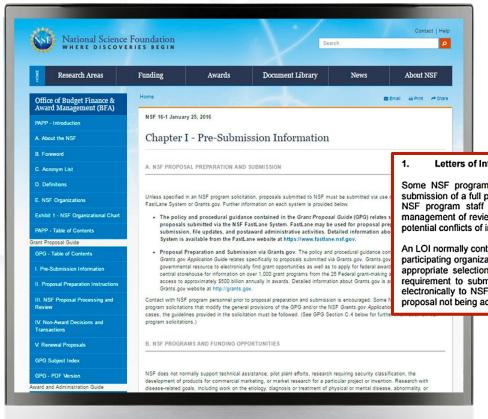




SUBMISSION WINDOWS

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

 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.



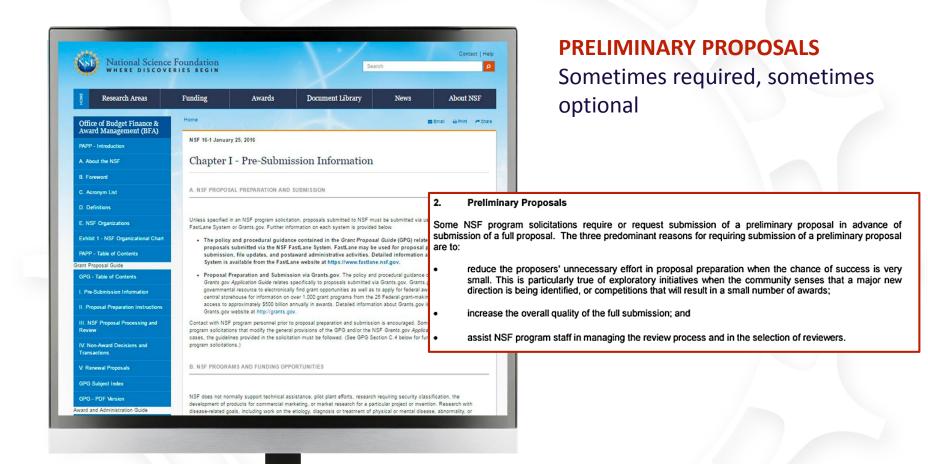
LETTERS OF INTENT

Enables better management of reviewers and panelists

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.



Single Copy Documents

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



Cover Sheet (Required)

 Many of the boxes on the cover sheet are electronically prefilled as part of the FastLane login process.

PROGRAM ANNOUNCEMENT/SOLICITATION NO/DUE DATE			Special Exception to Deadline Date Policy			FO	FOR NSF USE ONLY	
NSF 16-509			Section 2015 Common Section 194 Acceptance A			NSF PR	NSF PROPOSAL NUMBER	
	BY NSF ORGANIZATION UNIT		ast specific unit kno	in, i.e. program, dvision, e	E)			
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□ VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date PHS Animal Welfare Assurance Number September Funding Mechanism Research - other than RAPID or EAGER				OCCULABORATIVE STATUS Not a collaborative proposal				

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.

b. Project Summary

Each proposal must contain a summary of the proposed project not more than one page in length. 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

c. Table of Contents

A Table of Contents is automatically generated for the proposal. The proposer cannot edit this form.

- Project Description (including Results from Prior NSF Support)
- (i) Content

The Project Description should provide a clear statement of the work to be undertaken and must include the objectives for the period of the proposed work and expected significance; the relationship of this work to the present state of knowledge in the field, as well as to work in progress by the PI under other support.

The Project Description should outline the general plan of work, including the broad design of activities to be undertaken, and, where appropriate, provide a clear description of experimental methods and procedures. 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. The project activities may be based on previously established and/or innovative methods and approaches, but

Text from the PAPPG

¹⁵If the proposal includes use of vertebrate animals, supplemental information is required. See Chapter II.D.4 for additional information

¹⁶ If the proposal includes use of human subjects, supplemental information is required. See Chapter II.D.5 for additional information.

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 societally 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.j for additional instructions for preparation of this section).

(ii) Page Limitations and Inclusion of Uniform Resource Locators (URLs) within the Project Description

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. Pls are 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.)

(iii) Results from Prior NSF Support

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.

- (e) evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management Plan;
- (f) if the proposal is for renewed support, a description of the relation of the completed work to the proposed work.

If the project was recently awarded and therefore no new results exist, describe the major goals and broader impacts of the project. Note that the proposal may contain up to five pages to describe the results. Results may be summarized in fewer than five pages, which would give the balance of the 15 pages for the Project Description.

(iv) Unfunded Collaborations

Any substantial collaboration with individuals not included in the budget should be described in the Facilities, Equipment and Other Resources section of the proposal (see Chapter II.C.2.i) and documented in a letter of collaboration from each collaborator. Such letters should be provided in the supplementary documentation section of the FastLane Proposal Preparation Module and follow the format instructions specified in Chapter II.C.2.j. Collaborative activities that are identified in the budget should follow the instructions in Chapter II.D.3.

(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. Pls who wish to exceed the established page limitations for the Project Description must request and receive a deviation in advance of proposal submission. (Chapter II.A contains information on deviations.)

(vi) Proposals for Renewed Support

See 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 Chapter II.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. A 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

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.

f. Biographical Sketch(es)

(i) Senior Personnel

A biographical sketch (limited to two pages) is required for each individual identified as senior personnel. (See Exhibit II-7 for the definitions of Senior Personnel.) Proposers may elect to use third-party solutions, such as NIH's SciENcv 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.

The following information must be provided in the order and format specified below. Inclusion of additional information beyond that specified below may result in the proposal being returned without review.

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; driver's license number; 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 Chapter III.H).

(a) Professional Preparation

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

Undergraduate Institution(s)	Location	Major	Degree & Year
Graduate Institution(s)	Location	Major	Degree & Year
Postdoctoral Institution(s)	Location	Area	Inclusive Dates (Years)

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.

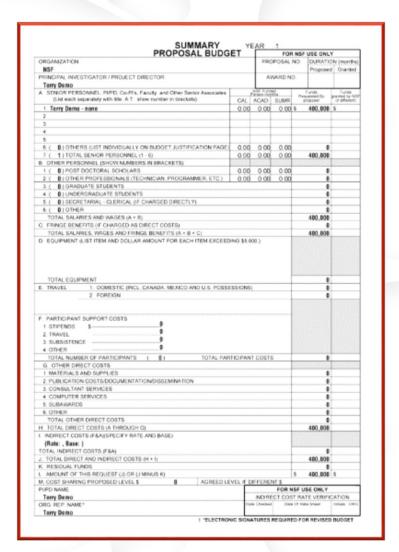
If only publications are included, the heading "Publications" may be used for this section of the Biographical

(d) Synergistic Activities

A list of up to five examples that demonstrate the broader impact of the individual's professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation.

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.



Text from the FastLane

Budgetary Guidelines

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)

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, 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 PAPPG 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.

	ent and Pending Support						
(See PAPPG Section II.C.2. The following information should be provided for each investig	h for guidance on information to include stor and other senior personnel. Failure to provide this informatio	on this form.) n may delay consideration of this proposal.					
	Other agencies (including NSF) to which this proposal						
Investigator:							
Support:	☐ Submission Planned in Near Future	□*Transfer of Support					
Source of Support: Total Award Amount: \$ Location of Project: Person-Months Per Year Committed	Total Award Period Covered: to the Project. Cal: Acad:	Sumr:					
Support: Current Pending Project/Proposal Title:	☐ Submission Planned in Near Future	□ *Transfer of Support					
Source of Support: Total Award Amount: \$ Location of Project:	Total Award Period Covered:						
Person-Months Per Year Committed	to the Project. Cal: Acad:	Sumr:					
Support: □ Current □ Pending Project/Proposal Title:	☐ Submission Planned in Near Future	□ *Transfer of Support					
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Support: Current Pending Project/Proposal Title:	Submission Planned in Near Future	□ *Transfer of Support					
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Person-Months Per Year Committed	to the Project. Cal: Acad:	Sumr:					
Support:	☐ Submission Planned in Near Future	□ *Transfer of Support					
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project:							
Person-Months Per Year Committed	to the Project. Cal: Acad:	Summ:					
*If this project has previously been funded by anoth	er agency, please list and furnish information for imme Page G-0 USE ADDITION	diately preceding funding period. ONAL SHEETS AS NECESSARY					

Text from the FastLane

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.



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.



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 <u>entire</u> 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



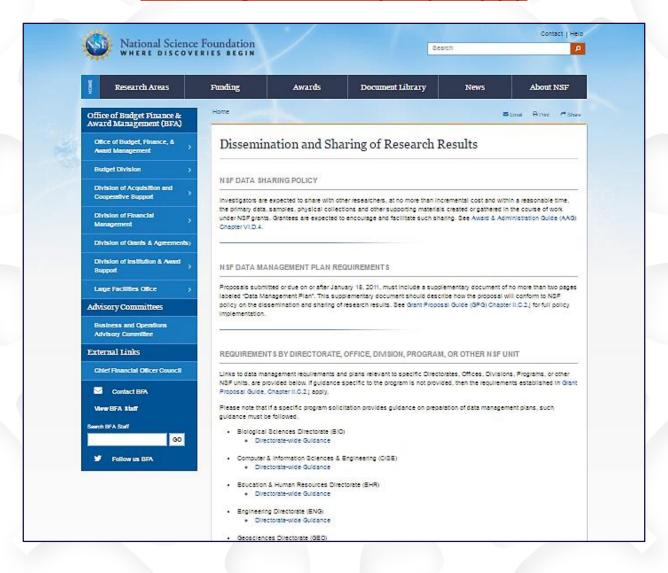
Data Management Plan Requirements

- 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.



Data Management Plan Requirements

www. nsf.gov/bfa/dias/policy/dmp.jsp



Letters of Collaboration

- Collaborative arrangements of significance should be documented through letters of collaboration.
- Include in the Supplementary Documents section of the proposal.
- Do not include letters of support.
- Recommended format for letters of collaboration is in the PAPPG, Chapter II.C.2.j.

For More Information

Ask Early, Ask Often!



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