

Panelists

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Topics Covered

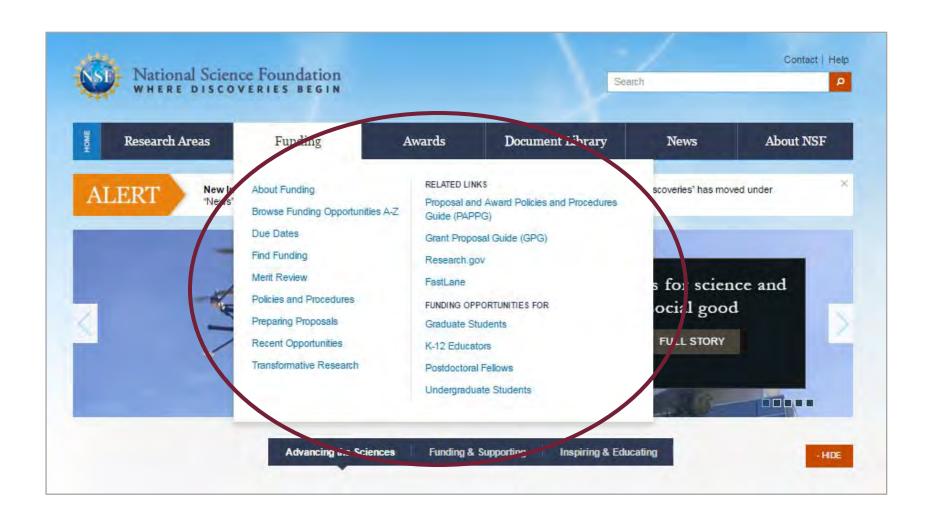
- Find Funding Opportunities
- Proposal and Award Policies and Procedures Guide
- Types of Proposal Submissions
- Sections of an NSF Proposal
- Postdoctoral Mentoring Plans
- Data Management Plans



"Ask Early, Ask Often!"

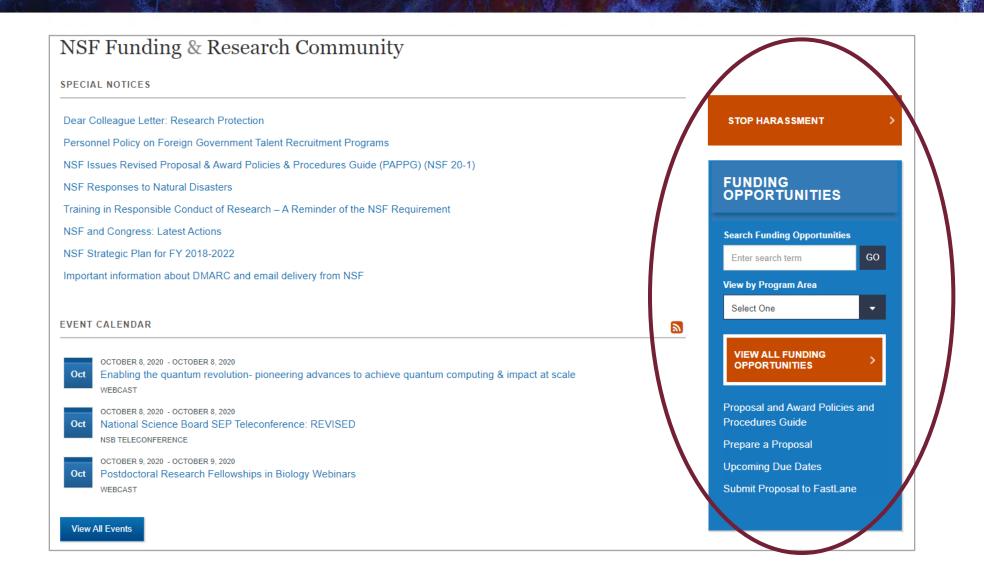


Find Funding Opportunities





Find Funding Opportunities





NSF Award Search





Other Ways to Find Funding

Use the Search Feature in Grants.gov

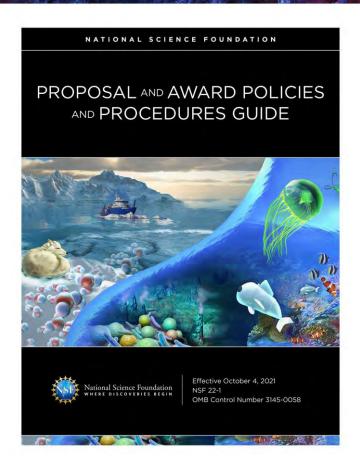




What is the Proposal & Award Policies & Procedures Guide?

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? (cont'd)

- 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.

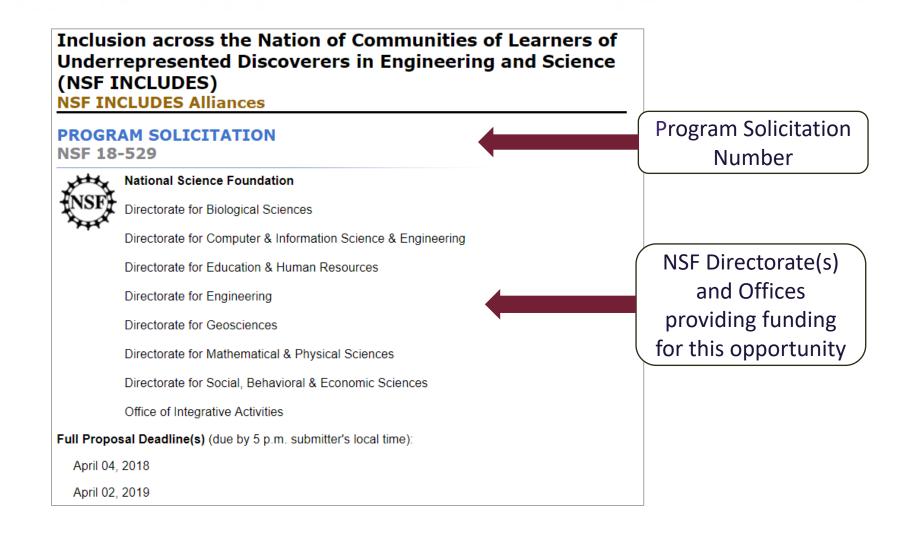


What to Look for in a Program Announcement or Solicitation





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: 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.



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.

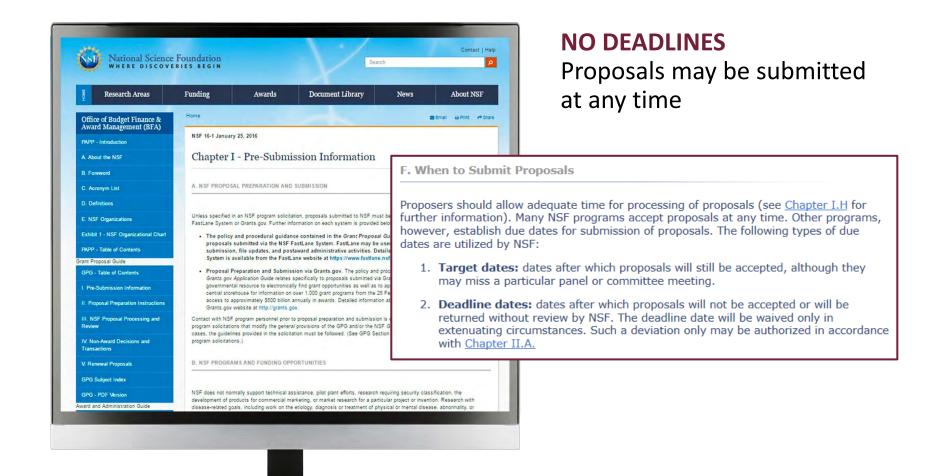
Limit on Number of Proposals per Organization:

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 selead, proposals received within the limit will be accepted based on earliest date and time of proposal submission. **No exceptions will be made.**

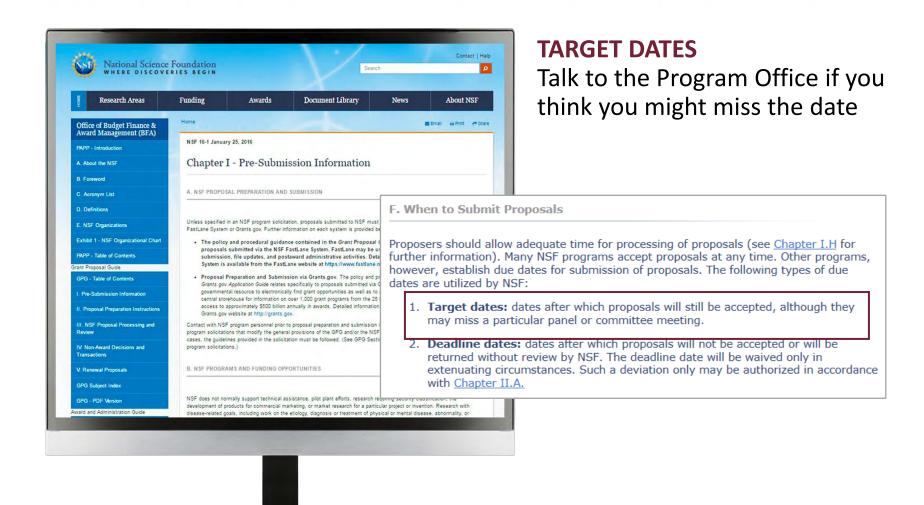
Limit on Number of Proposals per PI or Co-PI:

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.**

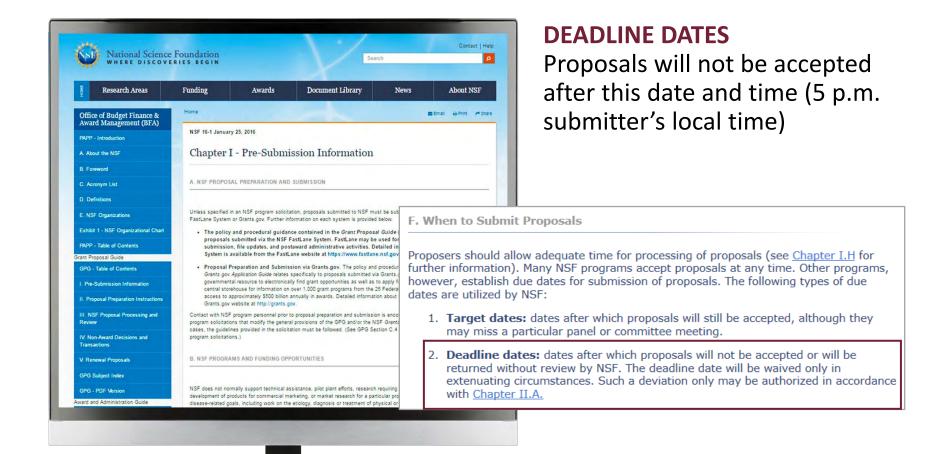




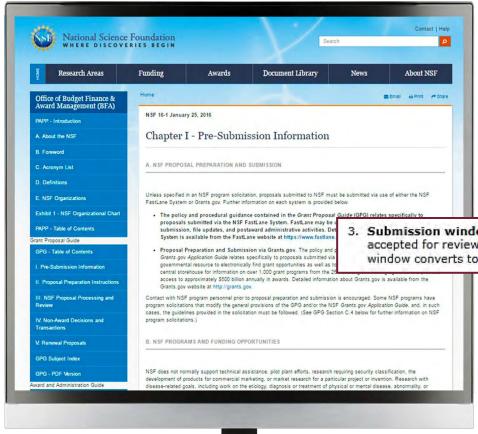










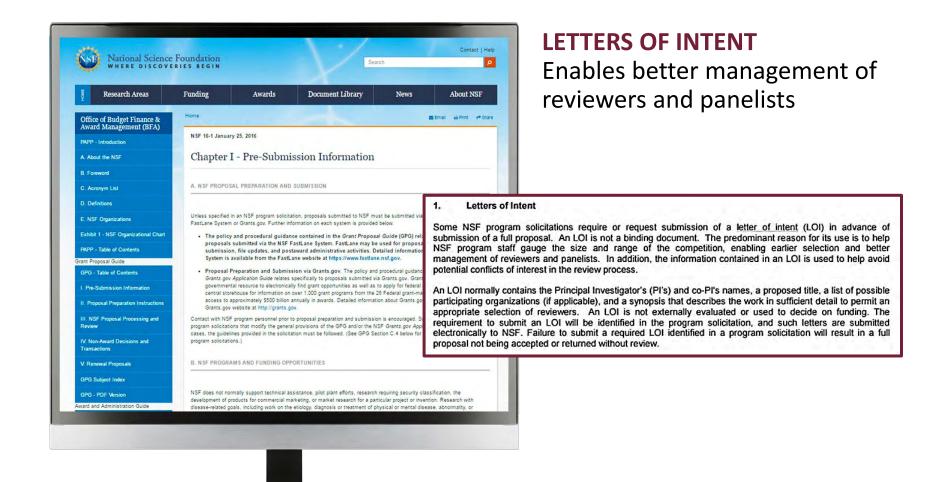


SUBMISSION WINDOWS

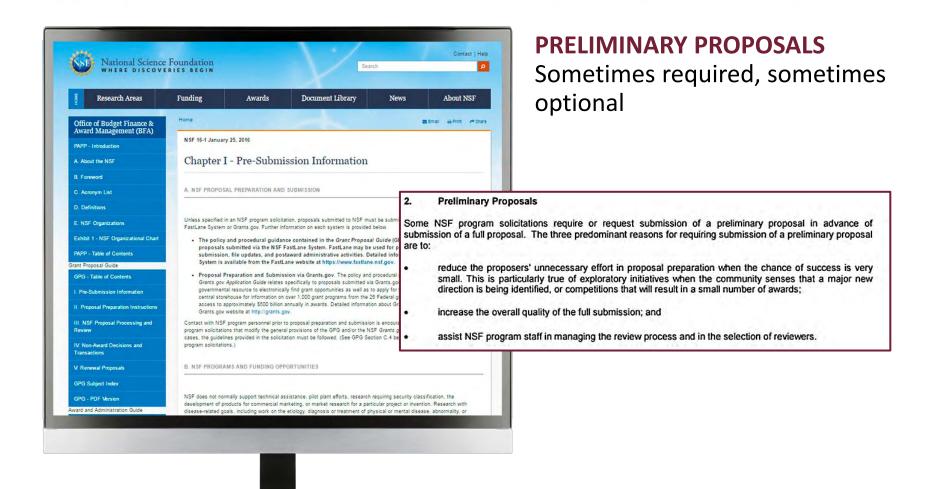
Proposals will not be accepted after this date and time (5 p.m. submitter's local time)

 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.











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 or Research.gov



Cover Sheet (Required)

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

	COVER SHE	ET FC	R PROF	POSAL	то	THE NATIO	NAL SCIEN	ICE FOUND	ATION		
PROGRAM ANNOUNCEMENT/SOLICITATION NO./DUE DATE				☐ Special	Special Exception to Deadline Date Policy			F	FOR NSF USE ONLY		
NSF 18-561 10/01/18							NSF F	NSF PROPOSAL NUMBER			
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most spi						ecific unit known, i.e. program, division, etc.)					
CHE - Chem St	ruct,Dynmcs&M	fechans	ms B								
DATE RECEIVED	RECEIVED NUMBER OF COPIES		DIVISION ASSIGN		NED FUND CODE		DUNS# (Data Universal Numbering Syst		FILE LOCATION		
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DEMO AWARDEE ORGANIZATION CODE (IF KNOWN)											
	ATION CODE (IF KNOW)	N)									
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TBD					DEMO						
IS AWARDEE ORGANIZATION (Check All That Apply) SMALL BUSIN					ESS MINORITY BUSINESS IF THIS IS A PRELIMINARY PROPOSAL DRGANIZATION WOMAN-OWNED BUSINESS THEN CHECK HERE						
TITLE OF PROPOSED I	PROJECT Molecul	ar Info	rmation a	nd							
REQUESTED AMOUNT				(1-60 MONTH	1 1			SHOW RELATED	HOW RELATED PRELIMINARY PROPOSAL NO.		
\$	\$ 36 months THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW				04/01/19			" AFFLICABLE			
THIS PROPOSAL INCLI BEGINNING INVEST		EMS LISTE	ED BELOW			☐ HUMAN SUBJEC	CTS	Human Subjects Assu	rance Number		
☐ DISCLOSURE OF LOBBYING ACTIVITIES					Exemption Subsection or IRB App.			•			
☐ PROPRIETARY & PRIVILEGED INFORMATION					☐ INTERNATIONAL ACTIVITIES: COUNTRY/COUNTRIES INVOLVED						
☐ HISTORIC PLACES											
☐ VERTEBRATE ANIMALS IACUC App. Date PHS Animal Welfare Assurance Number						☐ COLLABORATIVE STATUS					
▼ TYPE OF PROPOSAL Research						Not a collaborative proposal					
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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 or Research.gov.
- 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.

Table of Contents

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

- d. 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.) for additional instructions for preparation of this section).

 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:

- 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.

- 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; and
- 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 three pages in length, per individual.
- The Biographical Sketch is used to assess how well qualified the individual, team, or organization is to conduct the proposed activities.

Biographical Sketch(es)

Note: The requirement to use an NSF-approved format for preparation of the biographical sketch will go into effect for new proposals submitted or due on or after October 5, 2020. In the interim, proposers must continue to prepare this document in accordance with the guidance specified in the PAPPG (NSF 20-1). NSF, however, encourages the community to use the NSF-approved formats and provide valuable feedback as we enhance them for the October implementation.

i) Senior Personnel

A separate biographical sketch (limited to two pages) must be provided through use of an NSF-approved format, for each individual designated as senior personnel. (See Exhibit II-3 for the definitions of Senior Personnel.)

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)

Graduate Institution(s)

Location

Major

Degree & Year

Degree & Year

Degree & Year

Postdoctoral Institution(s)

Location

Area

Inclusive Dates (Years)

(b) Appointments

A list, in reverse chronological order by start date of all the individual's academic, professional, or institutional appointments, beginning with the current appointment. Appointments include any titled academic, professional, or institutional position whether or not remuneration is received, and whether full-time, part-time, or voluntary (including adjunct, visiting, or honorary).

(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

A list of up to five distinct examples that demonstrates the broader impact of the individual's professional and scholarly activities that focus on the integration and transfer of knowledge as well as its creation. Synergistic activities should be specific and must not include multiple examples to further describe the

 An NSF-approved format must be used for all senior project personnel.



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.





Budgetary Guidelines

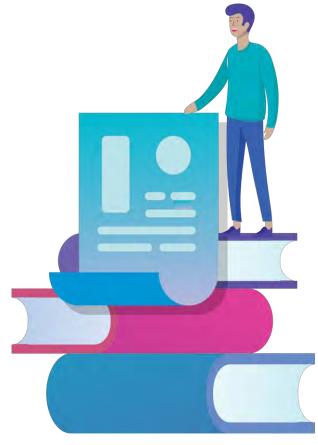
Information regarding budgetary guidelines can be found in PAPPG as well as NSF program solicitations.

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.
- NSF uses the information to assess the capacity of the individual to carry out the research as proposed as well as to help assess any potential overlap/duplication.
- Current and Pending Support must be provided through use of an NSF-approved format.

h. Current and Pending Support³²

- (i) This section of the proposal is used to assess the capacity of the individual to carry out the research as proposed, as well as to help assess any potential overlap/duplication with the project being proposed.
- (ii) Current and pending support information must be separately provided through use of an NSF-approved format³³, for each individual designated as senior personnel on the proposal. Current and pending support includes all resources made available to an individual in support of and/or related to all of his/her research efforts, regardless of whether or not they have monetary value, except as noted in paragraph (v) below. Current and pending support also includes in-kind contributions (such as



³² A table entitled, NSF Pre-award and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending Support, has been developed to assist users in completion of these sections of the proposal.

³³ A set of Frequently Asked Questions regarding the NSF-approved formats has been developed to assist users in completion of this section of the proposal.

Pre-award and Post-award Disclosures

NSF Pre-award and Post-award Disclosures^{1/2/3} Relating to the Biographical Sketch and Current and Pending Support September 1, 2021

Table Key

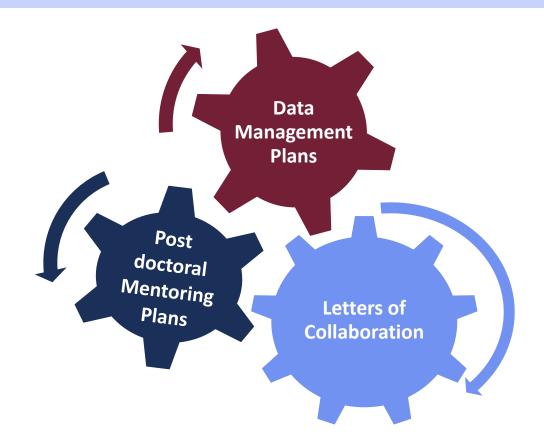
- = for new support only
- = If undisclosed at the time of proposal submission

Type of Activity	Biographical Sketch	Current & Pending Support	Facilities, Equipment & Other Resources	Project Reports	Post-Award Information Term & Condition	Disclosure Not Required
Undergraduate, graduate, and postdoctoral training, including location, major/area and degree and year	~					
Academic, professional ⁴ or institutional appointments, whether or not remuneration is received, and, whether full-time, part-time, or voluntary	~					
All projects (including this project) currently under consideration from whatever source, and all ongoing projects, irrespective of whether support is provided through the proposing organization, another organization or directly to the individual		~		/ *	~•	
In-kind contributions that support the research activity for use on the project/proposal being proposed			~			



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 for Postdoctoral Researchers (cont'd)

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

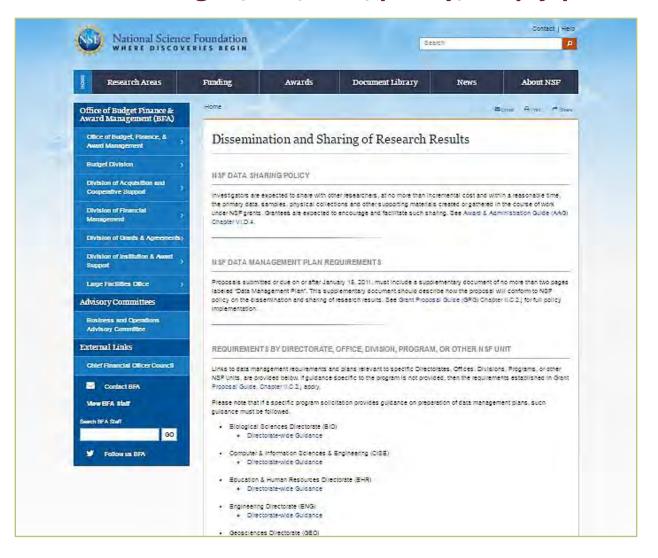


- All proposals are required to include, as a supplementary doc, a Data Management Plan of up to two pages.
- Plan should describe how the proposal will conform to NSF policy on dissemination and sharing of research results.
- A valid Data Management Plan may include only the statement that no detailed 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





For More Information

"Ask Early, Ask Often!"

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



