



NSF Primer Workshop

NCURA FRA / PRA Meeting

March 20, 2024

Speakers

- **Jean Feldman, Head, Policy Office**
Division of Institution and Award Support
Office of Budget, Finance and Award Management
- **Jamie French, Division Director**
Division of Grants and Agreements
Office of Budget, Finance and Award Management

policy@nsf.gov



Topics Covered

- About NSF
- Proposal Preparation
- Merit Review
- Award Administration



NSF by the Numbers



\$9.9B

FY 2023 Total Enacted

93%

Funds research,
education and
related activities



11K
Awards



1.9K
Institutions



353K
People

"Data represents FY 2023 Actuals unless otherwise indicated"





FY 2025 BUDGET REQUEST TO CONGRESS



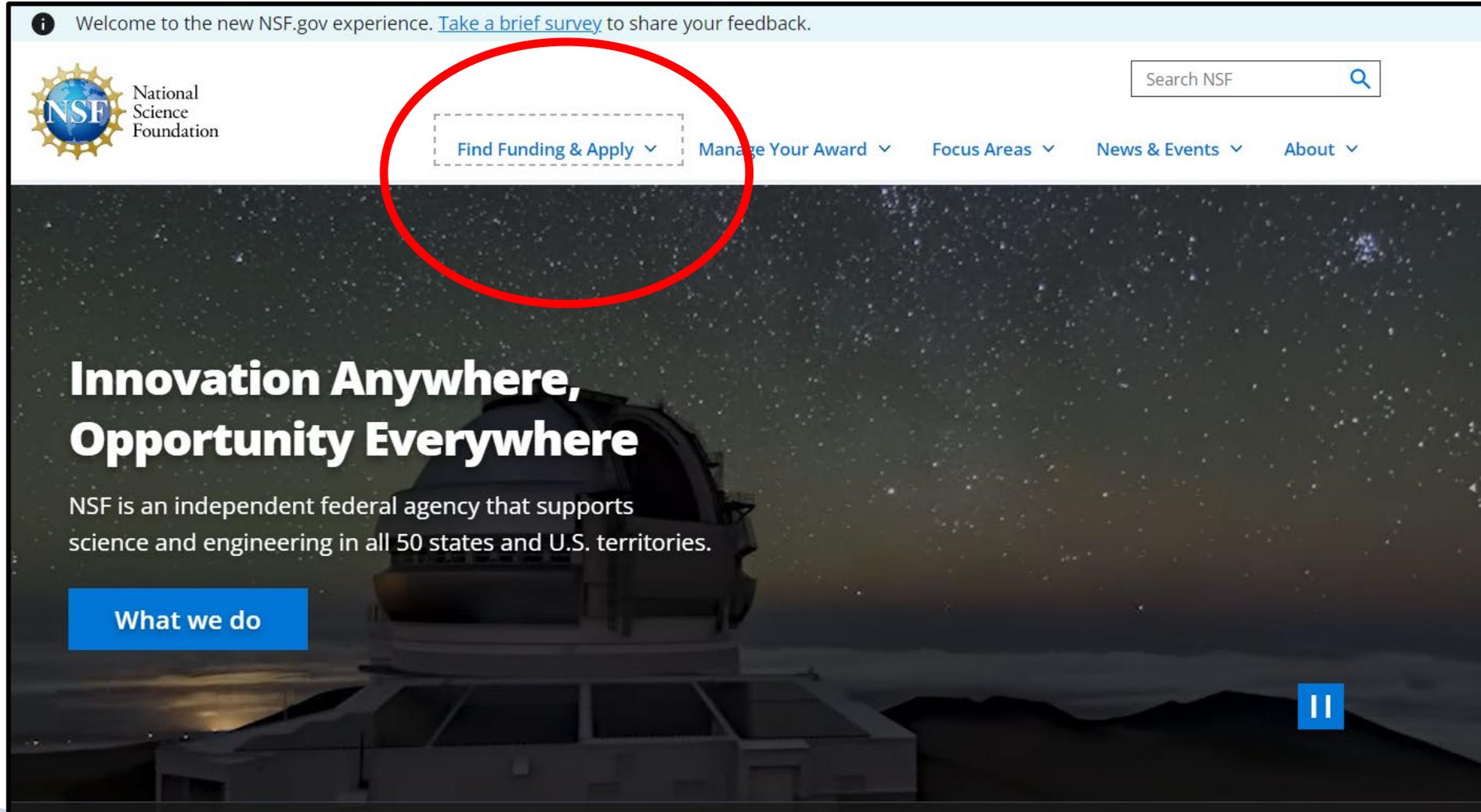
U.S. National Science Foundation

\$10,183 Billion – a 3% increase over the FY
2023 Total

<https://new.nsf.gov/about/budget/fy2025>



Find Funding Opportunities



Welcome to the new NSF.gov experience. [Take a brief survey](#) to share your feedback.

 National Science Foundation

Search NSF

Find Funding & Apply ▾ Manage Your Award ▾ Focus Areas ▾ News & Events ▾ About ▾

Innovation Anywhere, Opportunity Everywhere

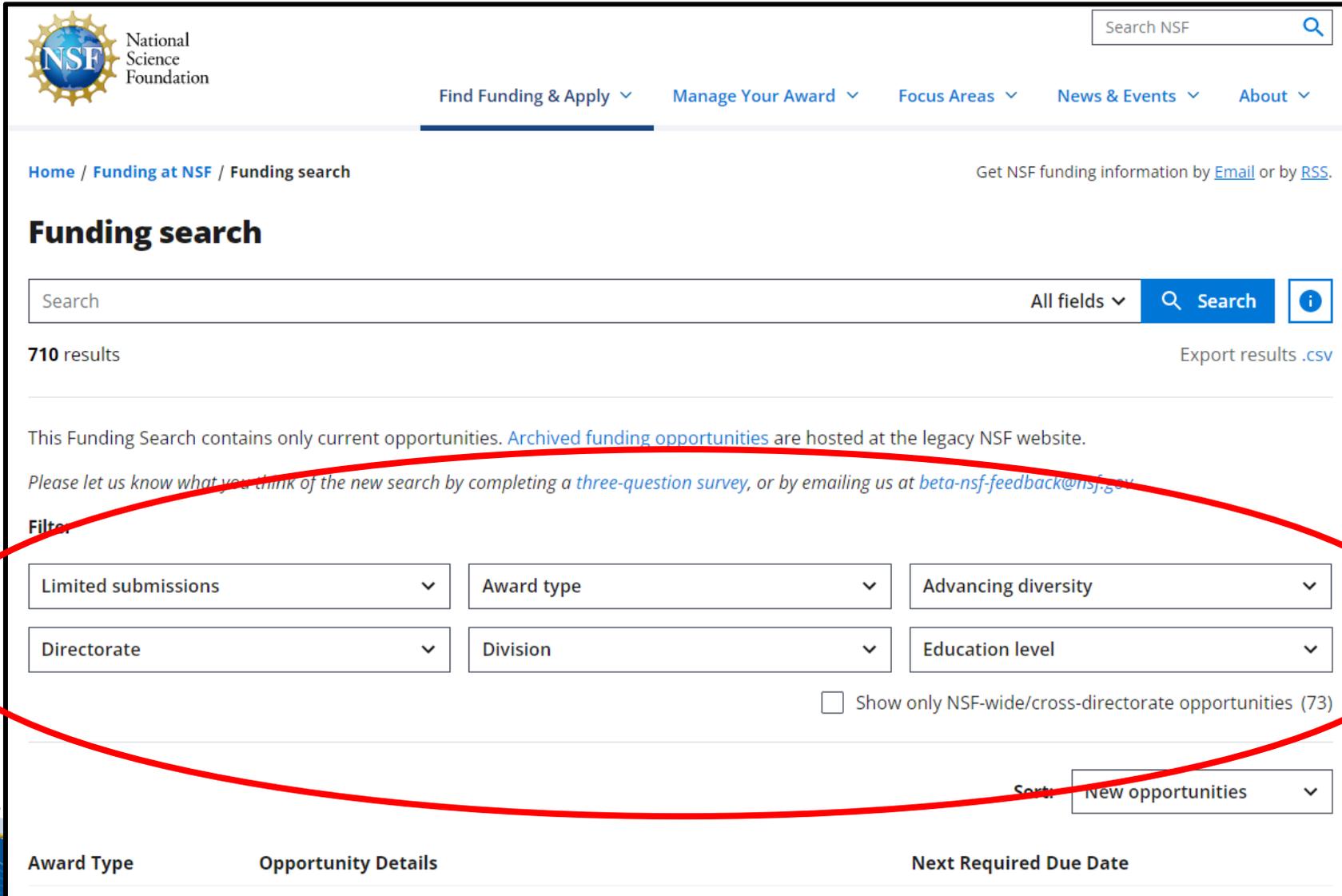
NSF is an independent federal agency that supports science and engineering in all 50 states and U.S. territories.

[What we do](#)

||



Find Funding Opportunities



The screenshot shows the NSF Funding Search interface. At the top left is the NSF logo and the text "National Science Foundation". To the right is a search bar labeled "Search NSF". Below the logo is a navigation menu with items: "Find Funding & Apply", "Manage Your Award", "Focus Areas", "News & Events", and "About". The breadcrumb trail reads "Home / Funding at NSF / Funding search". On the right, there is a link to "Get NSF funding information by Email or by RSS". The main heading is "Funding search". Below it is a search input field with the placeholder "Search", a dropdown menu for "All fields", a "Search" button, and an information icon. The results count is "710 results" and there is a link to "Export results .csv". A note states: "This Funding Search contains only current opportunities. Archived funding opportunities are hosted at the legacy NSF website." Below this is a survey link: "Please let us know what you think of the new search by completing a three-question survey, or by emailing us at beta-nsf-feedback@nsf.gov". The "Filter" section is circled in red and contains six dropdown menus: "Limited submissions", "Award type", "Advancing diversity", "Directorate", "Division", and "Education level". Below the filters is a checkbox labeled "Show only NSF-wide/cross-directorate opportunities (73)". At the bottom right, there is a "Sort" dropdown menu set to "New opportunities". The bottom of the page shows the start of a table with columns: "Award Type", "Opportunity Details", and "Next Required Due Date".



NSF Award Search

 Welcome to the new NSF.gov experience. [Take a brief survey](#) to share your feedback.

 National Science Foundation

Search NSF 

[Find Funding & Apply](#)  [Manage Your Award](#)  [Focus Areas](#)  [News & Events](#)  [About](#) 

[Simple Search](#) | [Advanced Search](#) | [Popular Searches](#) | [Download Awards](#) | [Send Comments](#) | [Award Search Help](#)

Awards Simple Search

[Overview of Award Search Features](#)

Search award for: [Search](#) 

Use double quotes for exact search. For example "water vapor".

Active Awards Expired Awards



Another Way to Find Funding – Grants.gov

The screenshot shows the Grants.gov search results page. The top navigation bar includes 'HOME', 'LEARN GRANTS', 'SEARCH GRANTS', 'APPLICANTS', 'GRANTORS', 'SYSTEM-TO-SYSTEM', 'FORMS', 'CONNECT', and 'SUPPORT'. The search bar at the top right contains 'Grant Opportunities' and 'Enter Keyword...' with a 'GO' button. The main content area is titled 'SEARCH GRANTS' and displays search criteria and a list of results.

SEARCH GRANTS

BASIC SEARCH CRITERIA:

Keyword(s):

Opportunity Number:

CFDA:

SEARCH

OPPORTUNITY STATUS:

Forecasted (0)

Posted (262)

Closed (229)

Archived (610)

FUNDING INSTRUMENT TYPE:

All Funding Instruments

Grant (262)

ELIGIBILITY:

All Eligibilities

Others (see text field entitled 'Additional Information on Eligibility' for clarification) (138)

Unrestricted (i.e., open to any type of entity above), subject to any clarification in text field entitled 'Additional Information on Eligibility' (124)

AGENCY: [X] All National Science Foundation

SEARCH TIPS | EXPORT DETAILED DATA | **Save Search**

SORT BY: **Update Sort**

DATE RANGE: **Update Date Range**

1 - 25 OF 262 MATCHING RESULTS: [Previous](#) **1** [2](#) [3](#) [4](#) [5](#) [6](#) ... [11](#) [Next](#)

Opportunity Number	Opportunity Title	Agency	Opportunity Status	Posted Date ↓	Close Date
23-581	Cultural Anthropology Program Senior Research Awards	NSF	Posted	04/22/2023	08/15/2023
23-580	Infrastructure Capacity for Biological Research	NSF	Posted	04/21/2023	
23-578	Infrastructure Innovation for Biological Research	NSF	Posted	04/21/2023	
23-577	Faculty Development in geoSpace Science	NSF	Posted	04/14/2023	09/18/2023
PD-23-1407	Combustion and Fire Systems	NSF	Posted	04/14/2023	
23-576	Computer and Information Science and Engineering (CISE) Research Initiation Initiative	NSF	Posted	04/07/2023	09/20/2023
23-575	Centers for Chemical Innovation	NSF	Posted	04/06/2023	10/18/2023
PD-23-1179	Nanoscale Interactions	NSF	Posted	04/05/2023	
PD-23-1406	Thermal Transport Processes	NSF	Posted	04/05/2023	
PD-23-1415	Particulate and Multiphase Processes	NSF	Posted	04/05/2023	
PD-23-1417	Interfacial Engineering	NSF	Posted	04/05/2023	
PD-23-7643	Environmental Sustainability	NSF	Posted	04/05/2023	
PD-23-7236	Biophotonics	NSF	Posted	04/05/2023	
23-574	CyberCorps(R) Scholarship for Service	NSF	Posted	04/05/2023	07/17/2023
PD-23-7644	Electrochemical Systems	NSF	Posted	04/05/2023	
23-573	Archaeometry	NSF	Posted	04/05/2023	12/01/2023



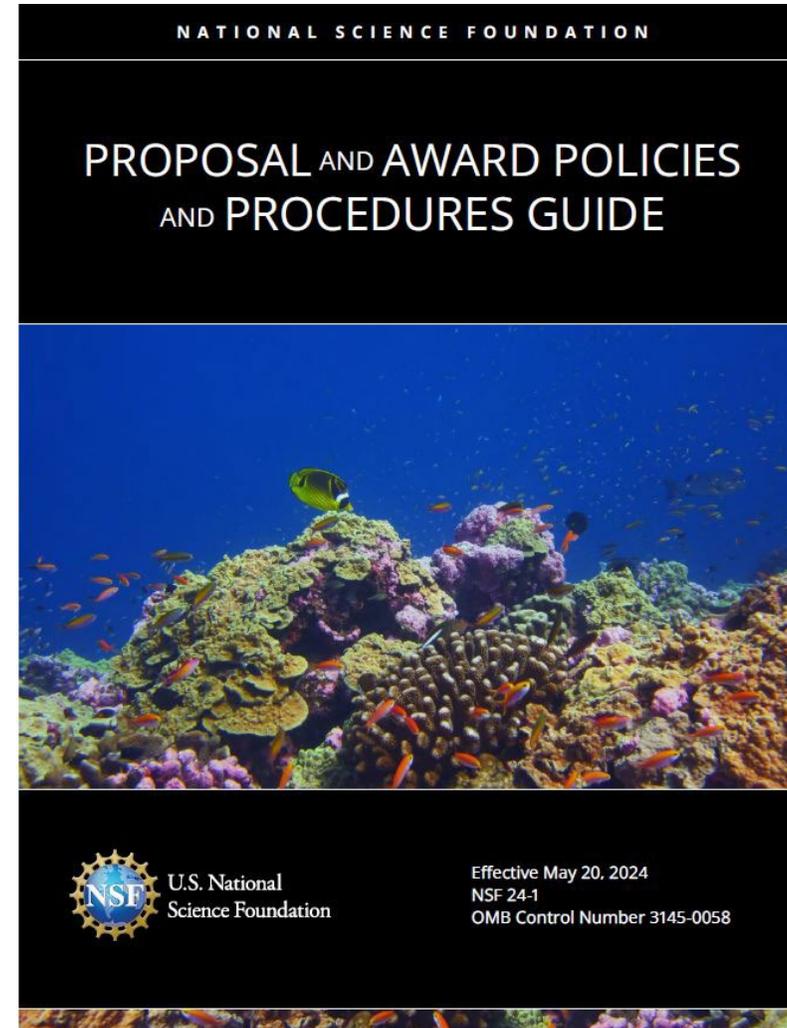
Proposal Preparation



The Proposal & Award Policies & Procedures Guide

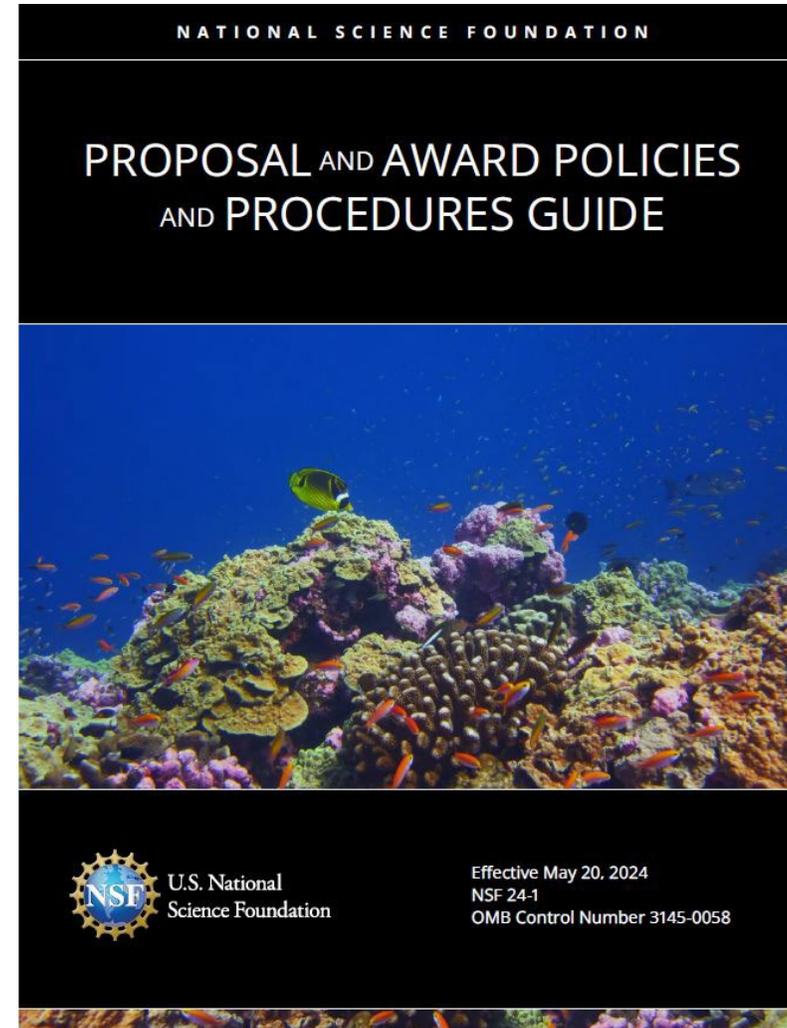
The Proposal & Award Policies & Procedures Guide (PAPPG) contains documents relating to NSF's proposal and award process. It has been designed for use by both our customer community and NSF staff and consists of two parts.

- Part I is NSF's proposal preparation and submission guidelines
- Part II is NSF's award and administration guidelines

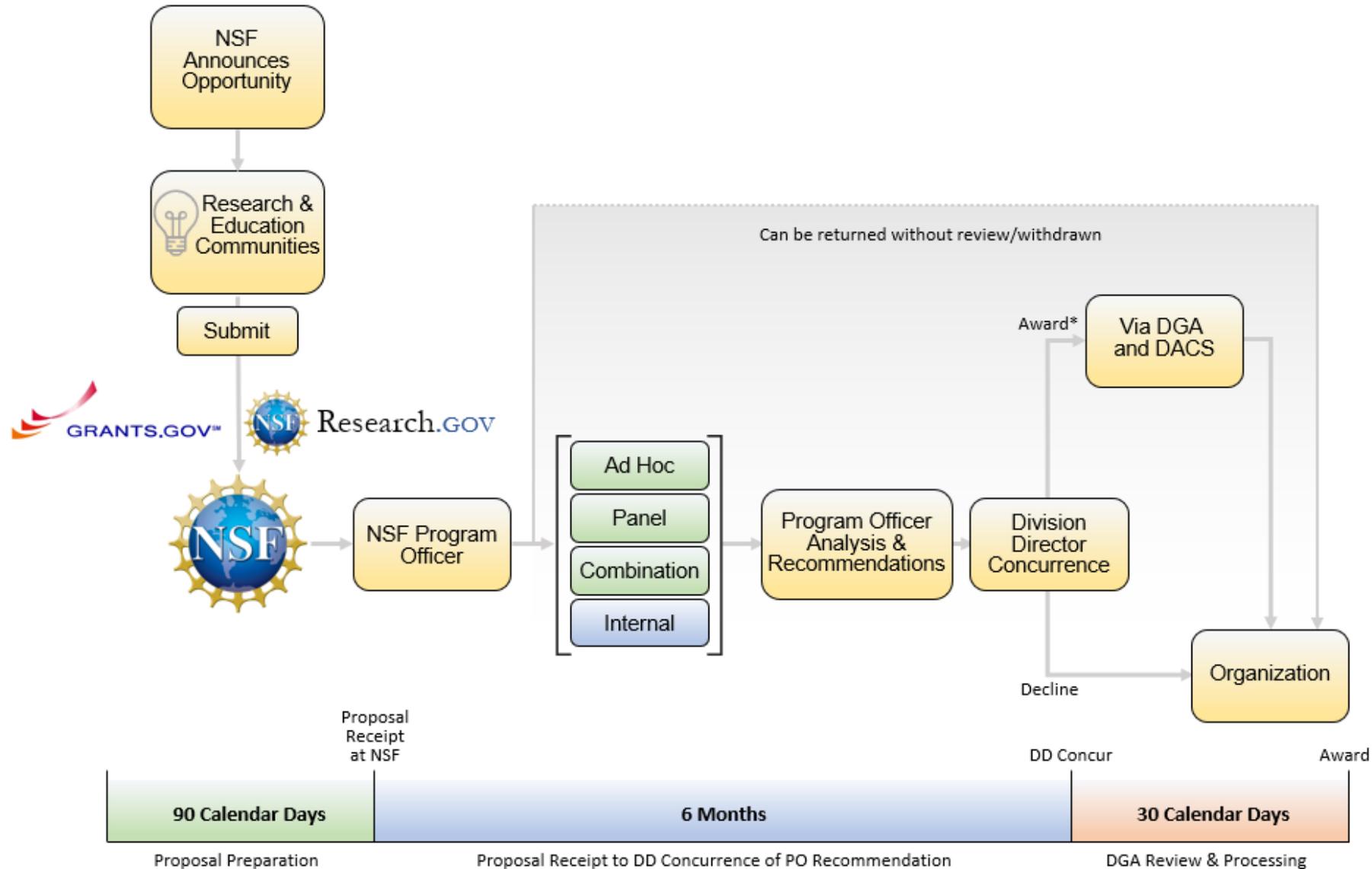


The Proposal & Award Policies & Procedures Guide

- 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



NSF Proposal & Award Process Timeline



Categories 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 provide general information, clarify or amend an existing policy, or inform about opportunities, or special competitions for supplements to existing awards. They may also announce interest for Planning, RAPID, EAGER, and RAISE proposals



What to Look for in a Funding Opportunity



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

Directorate for 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

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



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
organizations/PI
s 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:

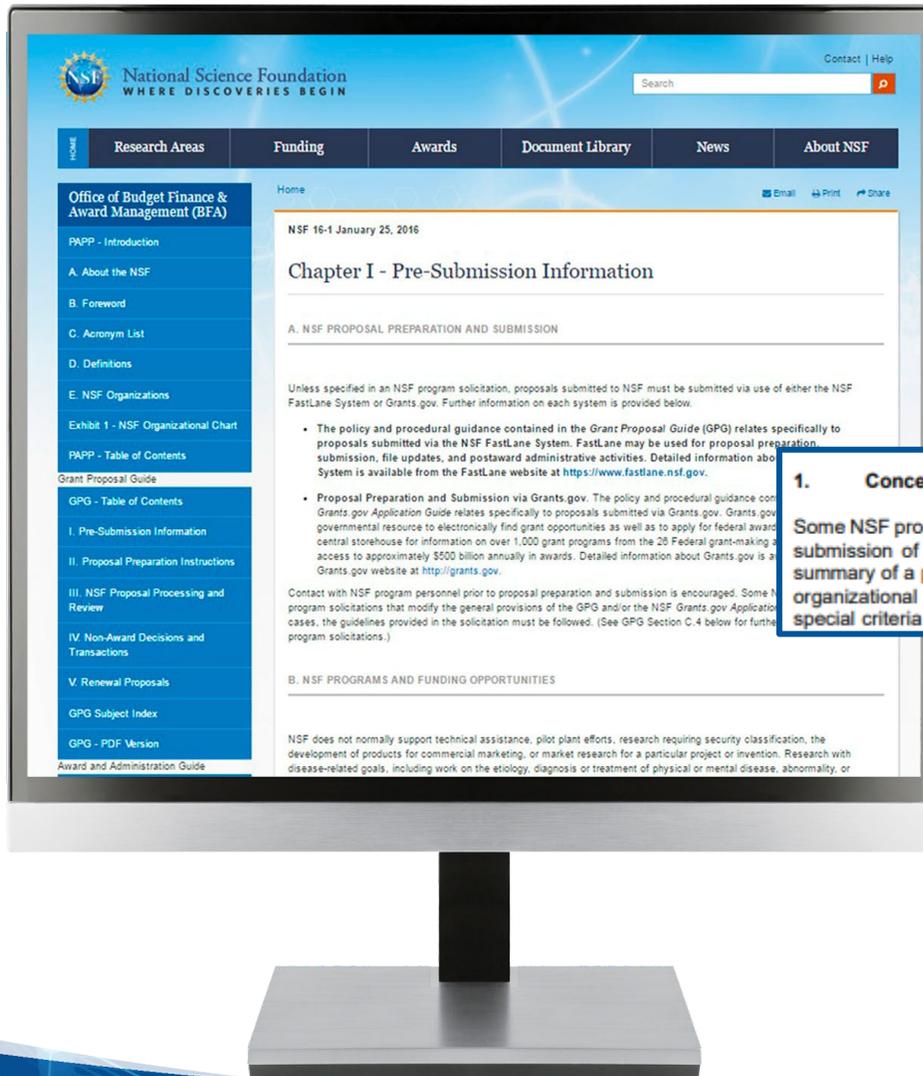
An organization may serve as the lead institution on only one Alliance proposal. Organizations that serve as the lead institution on an Alliance proposal may still participate in other Alliance proposals as a collaborating institution. In the event that an organization exceeds the limit of one proposal 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 Submissions



CONCEPT OUTLINES

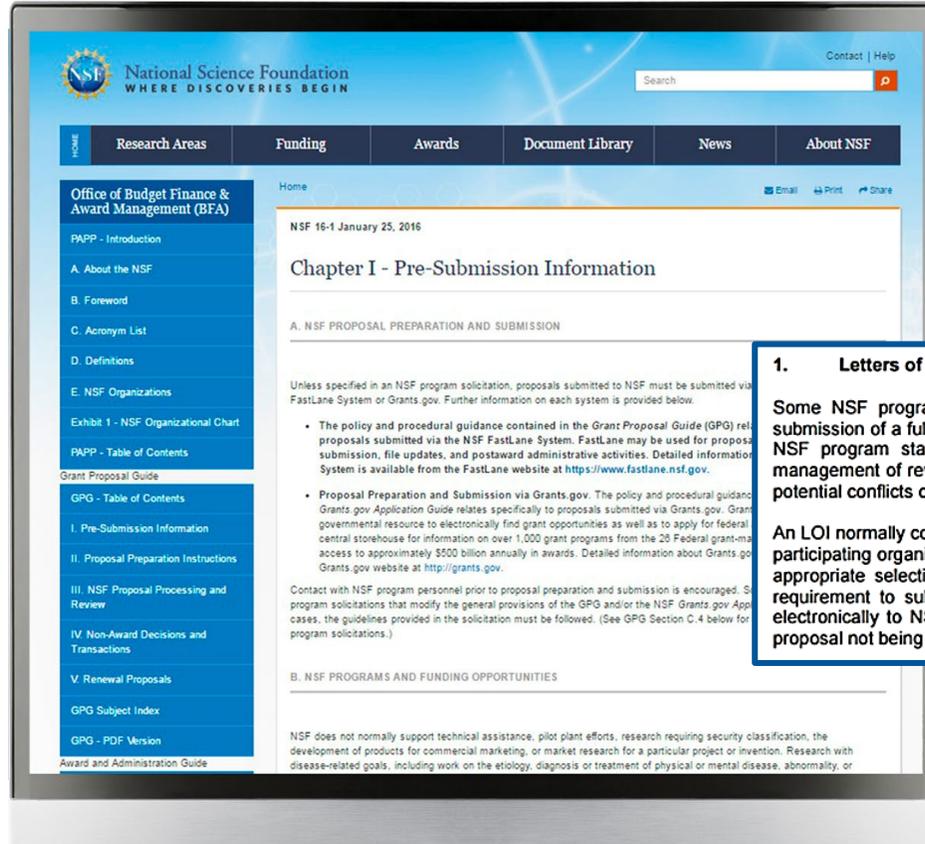
Required for some categories of funding opportunities

1. Concept Outlines

Some NSF proposal types (see Chapter II.E for additional information) or funding opportunities may require submission of a concept outline prior to submission of a full proposal. A concept outline is a concise summary of a project idea that contains information about the prospective PI(s), potentially germane NSF organizational unit(s), project title, keywords, and brief narrative descriptions of the idea and fit to any special criteria required for the proposal type or funding opportunity. The primary purposes of requiring a



Types of 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.

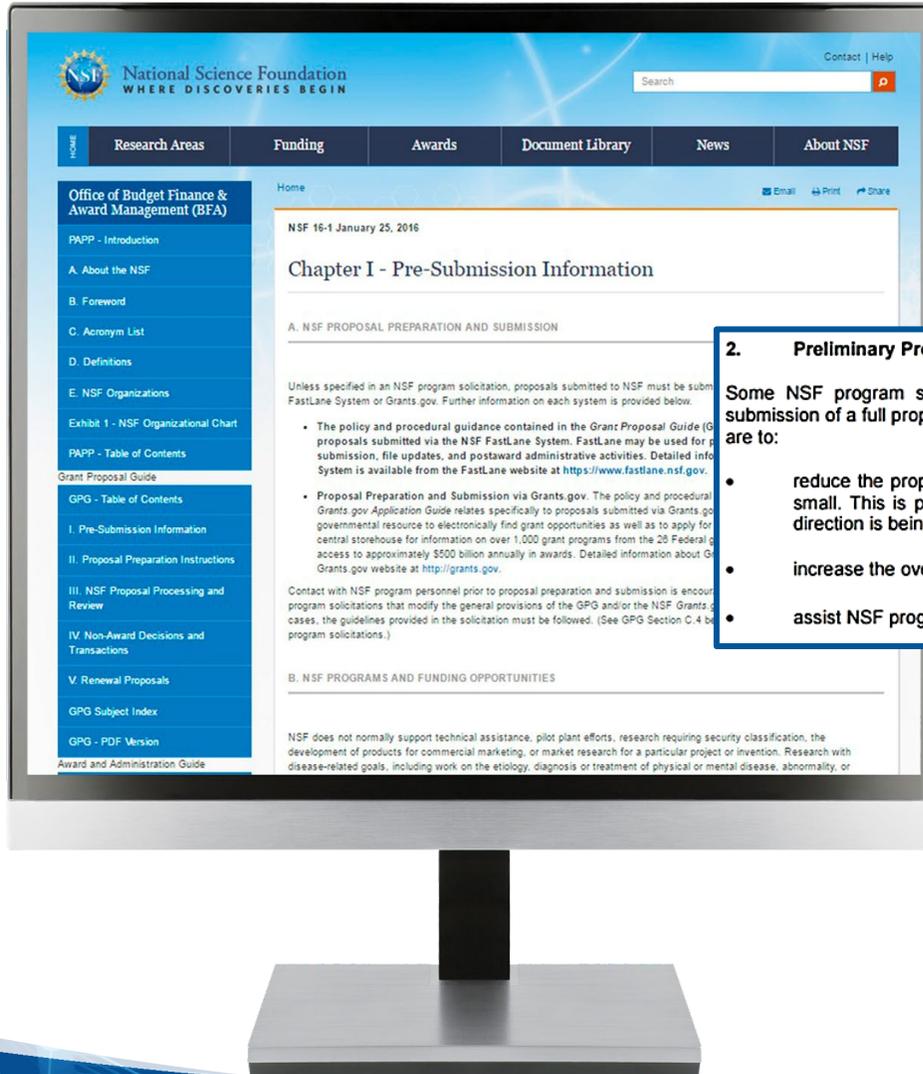
An LOI normally contains the Principal Investigator's (PI's) and co-PI's names, a proposed title, a list of possible participating organizations (if applicable), and a synopsis that describes the work in sufficient detail to permit an appropriate selection of reviewers. An LOI is not externally evaluated 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 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:

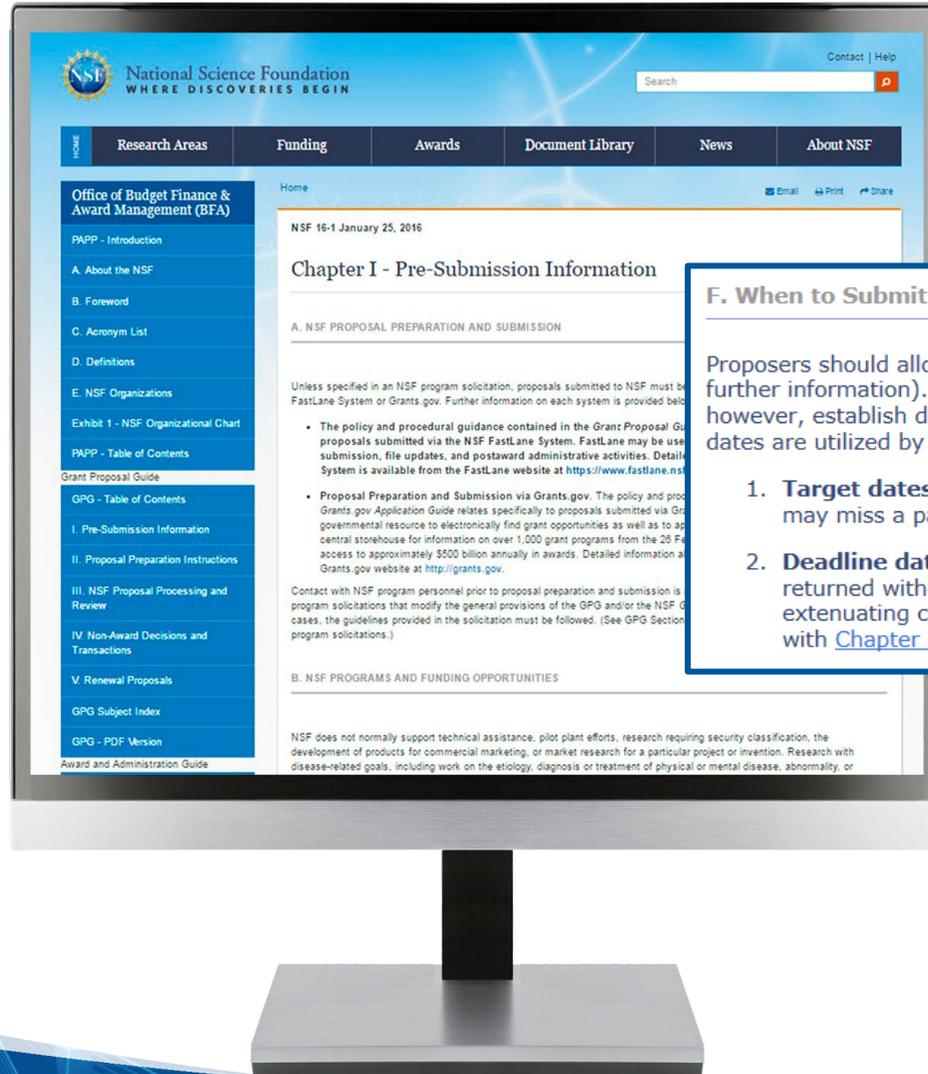
- reduce the proposers' unnecessary effort in proposal preparation when the chance of success is very small. This is particularly true of exploratory initiatives when the community senses that a major new direction is being identified, or competitions that will result in a small number of awards;
- increase the overall quality of the full submission; and
- assist NSF program staff in managing the review process and in the selection of reviewers.



When to Submit Proposals

NO DEADLINES

Proposals may be submitted at any time



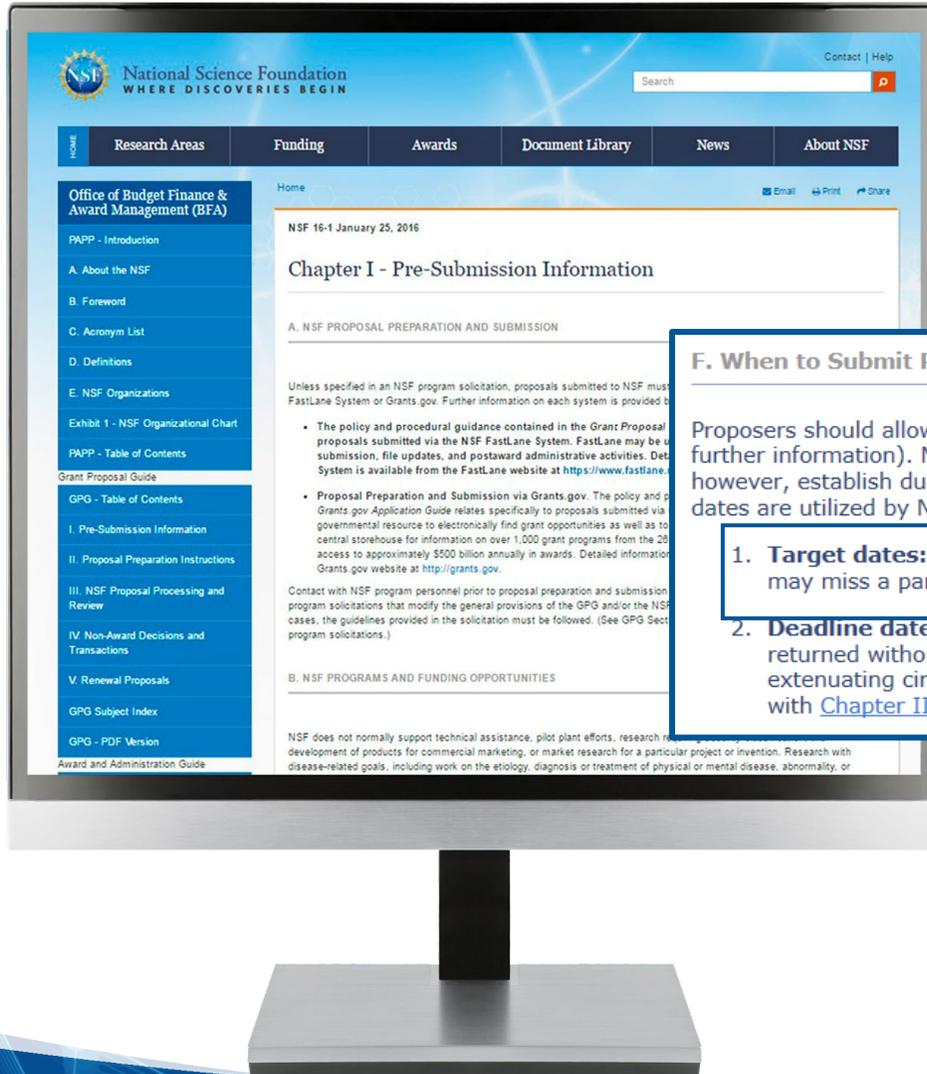
F. When to Submit Proposals

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

1. **Target dates:** dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.
2. **Deadline dates:** dates after which proposals will not be accepted 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](#).



When to Submit Proposals



TARGET DATES

Talk to the Program Office if you think you might miss the date

F. When to Submit Proposals

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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When to Submit Proposals



DEADLINE DATES

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

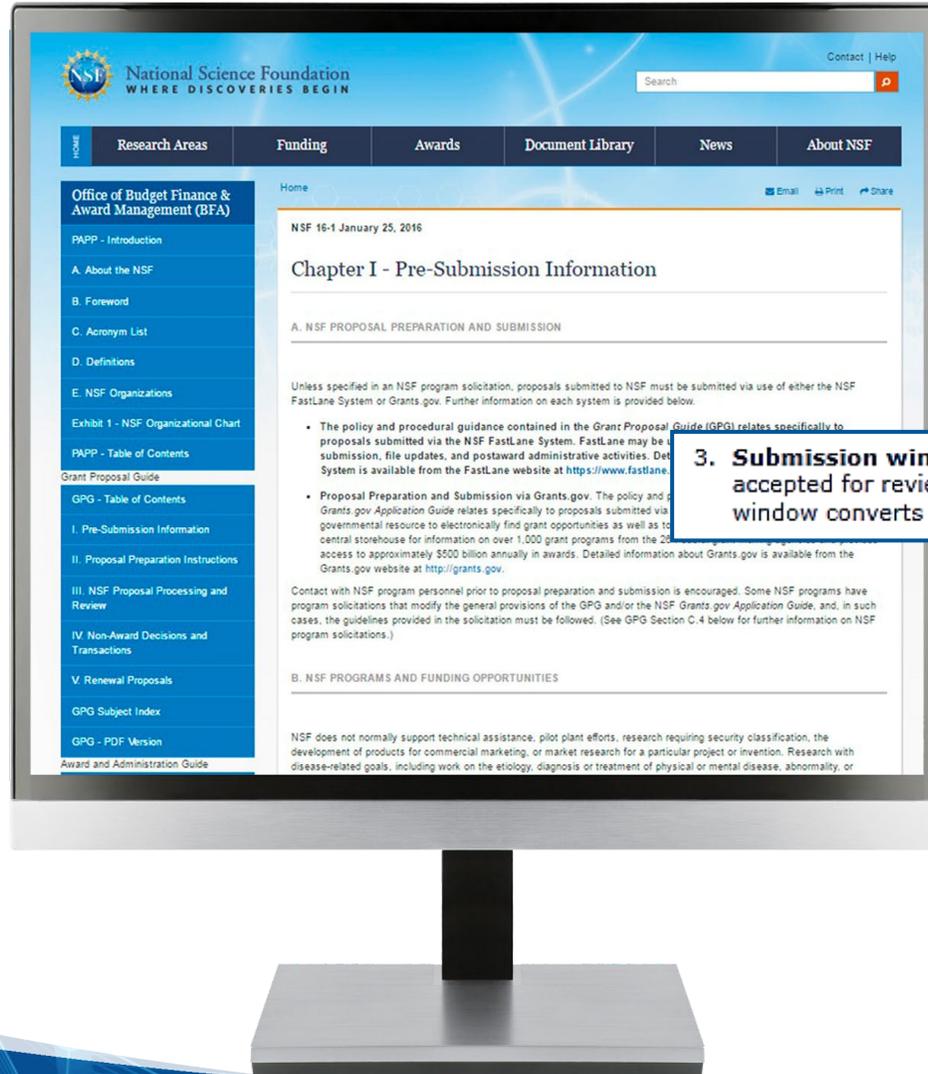
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When to Submit Proposals



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.



Other Types of Proposals

- Planning
- Rapid Response Research (RAPID)
- EARly Concept Grants for Exploratory Research (EAGER)
- Research Advanced by Interdisciplinary Science and Engineering (RAISE)
- Grant Opportunities for Academic Liaison with Industry (GOALI)
- Conference
- Equipment
- Travel
- Center
- Research Infrastructure
- Career Life Balance (CLB) Supplemental Funding Requests
- Research Opportunity Supplemental Funding Requests for Predominantly Undergraduate Institutions (ROA-PUI)

See PAPPG Chapter II.F.



Research Proposal Contents



Single Copy Documents

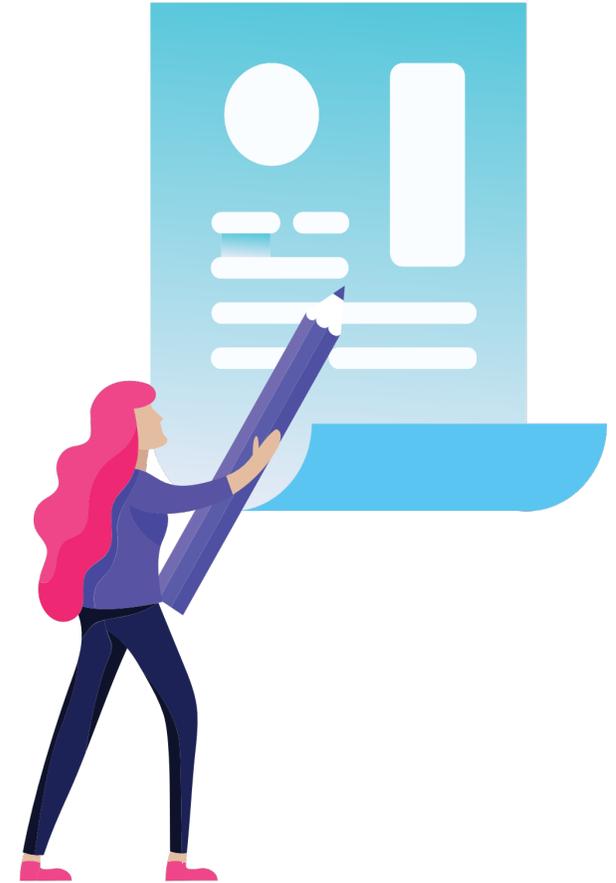
Some proposal documents are for “NSF Use Only” and are not provided to reviewers

- Authorization to deviate from proposal preparation requirements
- List of suggested reviewers to include or not to include
- Proprietary or privileged information
- Proposal certifications provided by the organization
- Proposal certifications provided by senior personnel



Required Sections of a Research Proposal

- Cover Sheet
- Project Summary
- Project Description
- References Cited
- Budget
- Budget Justification
- Facilities, Equipment and Other Resources
- Senior Personnel Documents
 - Biographical Sketch(es)
 - Current and Pending (Other) Support
 - Synergistic Activities (beginning with NSF 24-1)
 - Collaborators and Other Affiliations Information (Single Copy Document)
- Data Management and Sharing Plan
- Mentoring Plan (if applicable)
- Plan for Safe and Inclusive Working Environment (if applicable; not submitted with proposal unless specified in a solicitation)



Proposals that do not contain these required sections may not be accepted



Proposals Not Accepted or Returned Without Review

If it does not contain all of the required sections, as described in PAPPG Chapter II.D.2.

- Per the PAPPG Project Summary Requirement:
 - Must include an Overview and separate statements on Intellectual Merit and Broader Impacts.
- Per the PAPPG Project Description Requirement:
 - Must contain, as a separate section within the narrative, a section labeled “Broader Impacts.”
 - Must include results from prior NSF support with an end date in the past five years.
- Per the PAPPG Data Management and Sharing Plan Requirement:
 - Must be included as a supplementary document.
- Mentoring Requirement (if applicable):
 - Proposals that include funding for graduate students or postdoctoral scholars must include a description of the mentoring activities that will be provided for such individuals.



Proposals Not Accepted or Returned Without Review



- It is inappropriate for funding by the National Science Foundation.
- Has the potential to negatively impact research security due to credible information of a national security concern.
- It is submitted with insufficient lead time before the activity is scheduled to begin.
- It is a full proposal that was submitted by a proposer that has received a “not invited” response to the submission of a preliminary proposal.
- It is a duplicate of, or substantially similar to, a proposal already under consideration by NSF from the same submitter.



Proposals Not Accepted or Returned Without Review

- It does not meet NSF proposal preparation requirements, such as page limitations, formatting instructions, and electronic submission, as specified in the PAPPG or program solicitation.
- It is not responsive to the NSF funding opportunity.
- It does not meet an announced proposal deadline date.
- It was previously reviewed and declined and has not been substantially revised.
- It duplicates another proposal that was already awarded
- It does not contain each of the required sections of the proposal



Sections of an NSF Proposal

Cover Sheet (Required)

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

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./ DUE DATE NSF 23-1		<input type="checkbox"/> Special Exception to Deadline Date Policy		FOR NSF USE ONLY	
				NSF PROPOSAL NUMBER	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (indicate the most specific unit known, i.e. program, division, etc.) DBI - Innovation: Research Methods					
DATE RECEIVED	NUMBER OF COPIES 1	DIVISION ASSIGNED 0808000 DBI	FUND CODE 166Y	UEI (Unique Entity Identifier) GGF7K5B4JSL5	FILE LOCATION
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN) 530206152		SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S)	
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE NATIONAL SCIENCE FOUNDATION			ADDRESS OF AWARDEE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE 2415 EISENHOWER AVE ALEXANDRIA, VA 22314-4684 US		
AWARDEE ORGANIZATION CODE (IF KNOWN)					
NAME OF PRIMARY PLACE OF PERF National Science Foundation			ADDRESS OF PRIMARY PLACE OF PERF, INCLUDING 9 DIGIT ZIP CODE 2415 EISENHOWER AVE ALEXANDRIA, VA 22314-4684 US		
IS AWARDEE ORGANIZATION (Check All That Apply)		<input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> FOR-PROFIT ORGANIZATION		<input type="checkbox"/> MINORITY BUSINESS <input type="checkbox"/> WOMAN-OWNED BUSINESS	
					<input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE
TITLE OF PROPOSED PROJECT 23-1					SHOW LETTER OF INTENT ID IF APPLICABLE
REQUESTED AMOUNT \$ 0	PROPOSED DURATION (1-60 MONTHS) 0 months	REQUESTED STARTING DATE		SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE	
THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input checked="" type="checkbox"/> TYPE OF PROPOSAL Research		<input type="checkbox"/> HUMAN SUBJECTS Exemption Subsection _____ or IRB App. Date _____		Human Subjects Assurance Number _____	
<input checked="" type="checkbox"/> COLLABORATIVE STATUS Non-Collaborative		<input type="checkbox"/> FUNDING OF INT'L BRANCH CAMPUS OF U.S. IHE		<input type="checkbox"/> FUNDING OF FOREIGN ORGANIZATION OR FOREIGN INDIVIDUAL	
<input type="checkbox"/> BEGINNING INVESTIGATOR		<input type="checkbox"/> INTERNATIONAL ACTIVITIES: COUNTRY/COUNTRIES INVOLVED _____			
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES		<input type="checkbox"/> POTENTIAL LIFE SCIENCES DUAL USE RESEARCH OF CONCERN			
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION		<input type="checkbox"/> OFF-CAMPUS OR OFF-SITE RESEARCH			
<input type="checkbox"/> HISTORIC PLACES					
<input type="checkbox"/> LIVE VERTEBRATE ANIMALS IACUC App. Date _____ PHS Animal Welfare Assurance Number _____					
PI/PD DEPARTMENT		PI/PD POSTAL ADDRESS 2415 Eisenhower Avenue			
PI/PD FAX NUMBER		Alexandria, VA 22314 US			
NAMES (TYPED)	High Degree	Yr of Degree	Telephone Number	EmailAddress	
PI/PD NAME Jeremy Leffler	BA	1992	703-292-8075	jleffler@nsf.gov	
CO-PI/PD					
CO-PI/PD					
CO-PI/PD					



Sections of an NSF Proposal

Cover Sheet Checkboxes

- Beginning Investigator (BIO Directorate Only)
- Disclosure of Lobbying Activities
- Proprietary or Privileged Information
- Special Exceptions to the Deadline Date Policy
- Historic Place
- Live Vertebrate Animals
- Human Subjects
- Funding of an International Branch Campus of a US IHE
- Funding of a Foreign Organization or Foreign Individual
- International Activities
- Potential Life Sciences Dual Use Research of Concern
- Off-Campus or Off-Site Research
- Potential Impacts on Tribal Nations

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION					
PROGRAM ANNOUNCEMENT/SOLICITATION NO./DUE DATE NSF 23-1				<input type="checkbox"/> Special Exception to Deadline Date Policy	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.) DBI - Innovation: Research Methods				FOR NSF USE ONLY NSF PROPOSAL NUMBER	
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	UEI (Unique Entity Identifier)	FILE LOCATION
	1	08080000 DBI	166Y	GGF7K5B4JSL5	
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN) 530206152	SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S)		
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE NATIONAL SCIENCE FOUNDATION			ADDRESS OF AWARD-EE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE 2415 EISENHOWER AVE ALEXANDRIA, VA 22314-4684 US		
AWARDEE ORGANIZATION CODE (IF KNOWN)					
NAME OF PRIMARY PLACE OF PERF National Science Foundation			ADDRESS OF PRIMARY PLACE OF PERF, INCLUDING 9 DIGIT ZIP CODE 2415 EISENHOWER AVE ALEXANDRIA, VA 22314-4684 US		
IS AWARDEE ORGANIZATION (Check All That Apply) <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> FOR-PROFIT ORGANIZATION			<input type="checkbox"/> MINORITY BUSINESS <input type="checkbox"/> WOMAN-OWNED BUSINESS		<input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE
TITLE OF PROPOSED PROJECT 23-1					SHOW LETTER OF INTENT ID IF APPLICABLE
REQUESTED AMOUNT \$ 0	PROPOSED DURATION (1-60 MONTHS) 0 months	REQUESTED STARTING DATE	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE		
THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input checked="" type="checkbox"/> TYPE OF PROPOSAL: Research			Human Subjects Assurance Number _____		
<input checked="" type="checkbox"/> COLLABORATIVE STATUS: Non-Collaborative			or IRB App. Date _____		
<input type="checkbox"/> BEGINNING INVESTIGATOR			<input type="checkbox"/> HUMAN SUBJECTS		
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES			<input type="checkbox"/> FUNDING OF INT'L BRANCH CAMPUS OF U.S. IHE		
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION			<input type="checkbox"/> FUNDING OF FOREIGN ORGANIZATION OR FOREIGN INDIVIDUAL		
<input type="checkbox"/> HISTORIC PLACES			<input type="checkbox"/> INTERNATIONAL ACTIVITIES: COUNTRY/COUNTRIES INVOLVED _____		
<input type="checkbox"/> LIVE VERTEBRATE ANIMALS IACUC App. Date _____			<input type="checkbox"/> POTENTIAL LIFE SCIENCES DUAL USE RESEARCH OF CONCERN		
PHS Animal Welfare Assurance Number _____			<input type="checkbox"/> OFF-CAMPUS OR OFF-SITE RESEARCH		
PIPD DEPARTMENT		PIPD POSTAL ADDRESS 2415 Eisenhower Avenue			
PIPD FAX NUMBER		Alexandria, VA 22314 US			
NAMES (TYPED)	High Degree	Yr of Degree	Telephone Number	EmailAddress	
PIPD NAME Jeremy Leffler	BA	1992	703-292-8075	jleffler@nsf.gov	
CO-PIPD					
CO-PIPD					
CO-PIPD					

Sections of an NSF Proposal

Project Summary (Required)

- 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 will not be accepted.

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.

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

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

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



Merit Review Criteria

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to *advance knowledge*; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to *benefit society* and contribute to the achievement of specific, desired societal outcomes.



Sections of an NSF Proposal

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. PIs 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;

Text from the PAPPG



Sections of an NSF Proposal

References Cited (Required)

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

(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; and

(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. PIs 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



Sections of an NSF Proposal

Budget & Budget Justification (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.

SUMMARY PROPOSAL BUDGET				YEAR 1		
ORGANIZATION National Science Foundation				FOR NSF USE ONLY		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR				PROPOSAL NO.	DURATION (months)	
				Proposed	Granted	
				AWARD NO.		
A. SENIOR PERSONNEL: P/PI/D, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)	NSF Funded Person-months			Funds Requested By proposer	Funds granted by NSF (if different)	
	CAL	ACAD	SUMR			
1.						
2.						
3.						
4.						
5.						
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.0				0	
7. () TOTAL SENIOR PERSONNEL (1 - 6)	0.0				0	
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (1) POST DOCTORAL SCHOLARS	2.0				10,000	
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.0				0	
3. (0) GRADUATE STUDENTS					0	
4. (5) UNDERGRADUATE STUDENTS					10,000	
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0	
6. (0) OTHER					0	
TOTAL SALARIES AND WAGES (A + B)					20,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					20,000	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT					0	
E. TRAVEL						
1. DOMESTIC (INCL. U.S. POSSESSIONS)					0	
2. INTERNATIONAL					0	
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$	5,000					
2. TRAVEL	3,000					
3. SUBSISTENCE	1,000					
4. OTHER	500					
TOTAL NUMBER OF PARTICIPANTS (10)				TOTAL PARTICIPANT COSTS	9,500	
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES					1,500	
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					20,000	
3. CONSULTANT SERVICES					10,000	
4. COMPUTER SERVICES					60,000	
5. SUBAWARDS					0	
6. OTHER					0	
TOTAL OTHER DIRECT COSTS					91,500	
H. TOTAL DIRECT COSTS (A THROUGH G)					121,000	
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)						
TOTAL INDIRECT COSTS (F&A)					0	
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					121,000	
K. FEE					0	
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					121,000	
M. COST SHARING PROPOSED LEVEL \$ 0	AGREED LEVEL IF DIFFERENT \$					
PI/PD NAME				FOR NSF USE ONLY		
				INDIRECT COST RATE VERIFICATION		
ORG. REP. NAME*				Date Checked	Date Of Rate Sheet	Initials - CRG

*ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET



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)



Sections of an NSF Proposal

Facilities, Equipment, and Other Resources (Required)

This section of the proposal is used to assess the adequacy of the organizational resources available to perform the effort proposed.

Facilities, Equipment and Other Resources Give Feedback >

Content Instructions for Facilities, Equipment and Other Resources:

- The document must conform to solicitation-specific and PAPPG instructions
- Please refer to the [Format of the proposal \(PAPPG\)](#) for all margin, spacing, font type and size requirements
- This section should be narrative in nature and include internal and external resources (both physical and personnel)
- This section should include any senior personnel or postdoctoral researchers for whom no funds are being requested in the budget
- The section must not include any quantifiable financial information

File Instructions for Facilities, Equipment and Other Resources:

- Only one file can be uploaded
- Your file should **not** contain page numbers, as they will be added automatically by the system
- Accepted file types include: PDF
- Maximum file size permitted is 10 MB

[Facilities, Equipment and Other Resources \(PAPPG\)](#)

Browse for file to upload



Sections of an NSF Proposal – Biographical Sketch

- Required for each individual identified as a senior/key person.
- Used to assess how well qualified the individual, team, or organization is to conduct the proposed activities.
- Individuals are required to disclose contracts associated with participation in programs sponsored by foreign governments, instrumentalities, or entities, including foreign government-sponsored talent recruitment programs.
- Must certify that they are not a party to a Malign Foreign Talent Recruitment Program
Must be created in SciENCv.

BIOGRAPHICAL SKETCH COMMON FORM

November 1, 2023

This Biographical Sketch Common Form provides instructions for submission of a biographical sketch by each individual identified as a [senior/key person](#) on a Federally funded research project. The biographical sketch is used to assess how well qualified the individual, team, or organization is to conduct the proposed activities.

Consistent with NSPM-33, individuals are required to disclose contracts associated with participation in programs sponsored by foreign governments, instrumentalities, or entities, including [foreign government-sponsored talent recruitment programs](#). Further, if individuals receive direct or indirect support that is funded by a foreign government-sponsored talent recruitment program, even where the support is provided through an intermediary and does not require membership in the foreign government-sponsored talent recruitment program, that support must be disclosed. Individuals must also report other foreign government sponsored or affiliated activities. In accordance with 42 USC § 19232, individuals are prohibited from being a party in a [malign foreign talent recruitment program](#).

A table entitled, [NSPM-33 Implementation Guidance Pre- and Post-award Disclosures Relating to the Biographical Sketch and Current and Pending \(Other\) Support](#)¹ has been created to provide helpful reference information regarding pre-award and post-award disclosures. The table includes the types of activities to be reported, where such activities must be reported in the application, as well as when updates are required in the application and award lifecycle. A final column identifies activities that are not required to be reported.

Individuals are reminded **not to 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. The Federal research funding agency is not responsible or in any way liable for the release of such material.

The format of the Biographical Sketch Common Form is provided below. There is no page or character limit to this section of the application.

*** = required**

***Identifying Information**

***Name:** Enter the name of the senior/key person (Last Name, First Name, and Middle Name, including any applicable suffix).

Persistent Identifier (PID) of the Senior/Key Person: Enter the PID of the senior/key person. The PID is a unique, open digital identifier that distinguishes the individual from every other researcher with the same or a similar name.

***Position Title:** Enter the current position title of the senior/key person.



Sections of an NSF Proposal – Current and Pending (Other) Support

- Required for each individual identified as a senior/key person.
- Used to assess the capacity or any conflicts of commitment that may impact the ability of the individual to carry out the research effort as proposed.
- Information helps assess any potential scientific and budgetary overlap/duplication with the project being proposed.
- Must certify that they are not a party to a Malign Foreign Talent Recruitment Program
- Must be created in SciENCv.

CURRENT AND PENDING (OTHER) SUPPORT COMMON FORM November 1, 2023

The individual agrees to update this disclosure at the request of the Federal research funding agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award. (Refer to the Federal research funding agency's policy on updating award support).

Instructions for Submission of the Current and Pending (Other) Support Common Form

Current and pending (other) support information is used to assess the capacity or any [conflicts of commitment](#) that may impact the ability of the individual to carry out the research effort as proposed. The information also helps assess any potential scientific and budgetary overlap/duplication with the project being proposed.

This document provides instructions on submission of current and pending (other) support information for each individual identified as a [senior/key person](#) on a Federally funded research project.¹

A separate submission must be provided for each proposal and active project, as well as in-kind contributions using the instructions and format specified below. Note that there is no page limitation for this section of the application, though some fields have character limitations for consistency and equity.

Consulting activities must be disclosed under the proposals and active projects section of the form when any of the following scenarios apply:

- The consulting activity will require the senior/key person to perform research as part of the consulting activity;
- The consulting activity does not involve performing research, but is related to the senior/key person's research portfolio and may have the ability to impact funding, alter time or effort commitments, or otherwise impact scientific integrity; or
- The consulting entity has provided a contract that requires the senior/key person to conceal or withhold confidential financial or other ties between the senior/key person and the entity, irrespective of the duration of the engagement.

Consistent with NSPM-33, individuals are required to disclose contracts associated with participation in programs sponsored by foreign governments, instrumentalities, or entities, including [foreign government-sponsored talent recruitment programs](#). Further, if individuals receive direct or indirect support that is funded by a foreign government-sponsored talent recruitment program, even where the support is provided through an intermediary and does not require membership in the foreign government-sponsored talent recruitment program, that support must be disclosed. Individuals must also report other foreign government sponsored or affiliated activities. In accordance with 42 USC § 19232, individuals are prohibited from being a party in a [malign foreign talent recruitment program](#).

¹In accordance with the NSPM-33 Implementation Guidance, senior/key persons typically do not include graduate students.



Sections of an NSF Proposal – Synergistic Activities

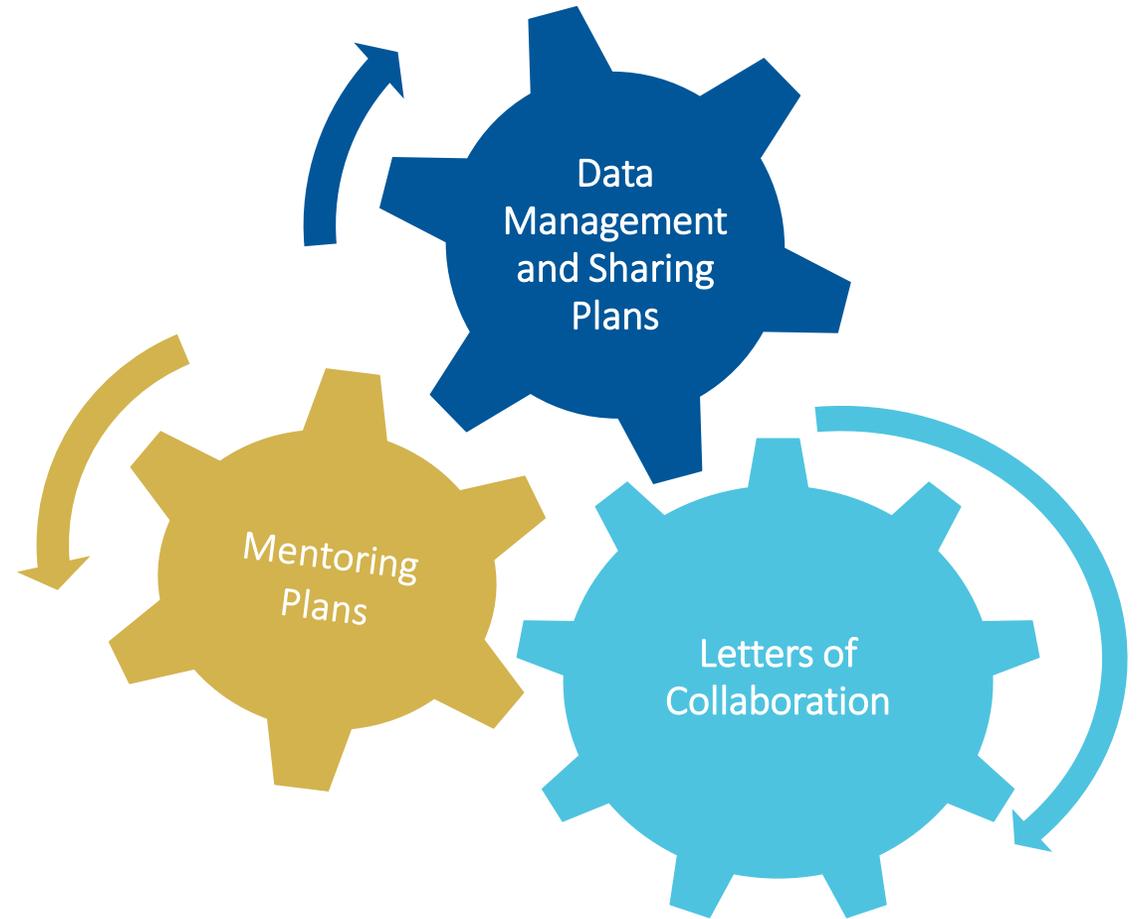
- Beginning with PAPPG (NSF 24-1) Synergistic Activities will no longer be an element of the biographical sketch
- Must be included as a separate upload for each senior/key person in Research.gov
- May be up to one page that includes a list of up to five distinct examples that demonstrate the broader impact of the individual's professional and scholarly activities that focus on the integration and transfer of knowledge as well as its creation.
- Multiple examples of a distinct activity are not permitted.



Sections of an NSF Proposal

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.D.2.i.



Letters of Collaboration

Letters should be limited to stating the intent to collaborate. While not required, the following format may be used:

- “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 Graduate Students or Postdoctoral Scholars

- Proposals that include funding to support graduate students or postdoctoral scholars 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 graduate students or postdoctoral scholars on the budget but do not include a maximum one-page mentoring plan as a supplementary document will be prevented from submission.
- For collaborative proposals, the lead organization must submit a mentoring plan for entire collaborative project.



Mentoring for Graduate Students or Postdoctoral Scholars

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 and Sharing Plan Requirements

- All proposals are required to include, as a supplementary doc, a Data Management and Sharing 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 and Sharing 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.



Safe and Inclusive Working Environments for Off-Campus or Off-Site Research

- For each proposal that proposes to conduct research off-campus or off-site, the AOR must complete a certification that the organization has a plan in place *for that proposal* regarding safe and inclusive working environments
- Off-campus or off-site research is defined as data/information/samples being collected off-campus or off-site, such as fieldwork and research activities on vessels and aircraft
- The plan itself is not submitted to NSF as part of the proposal

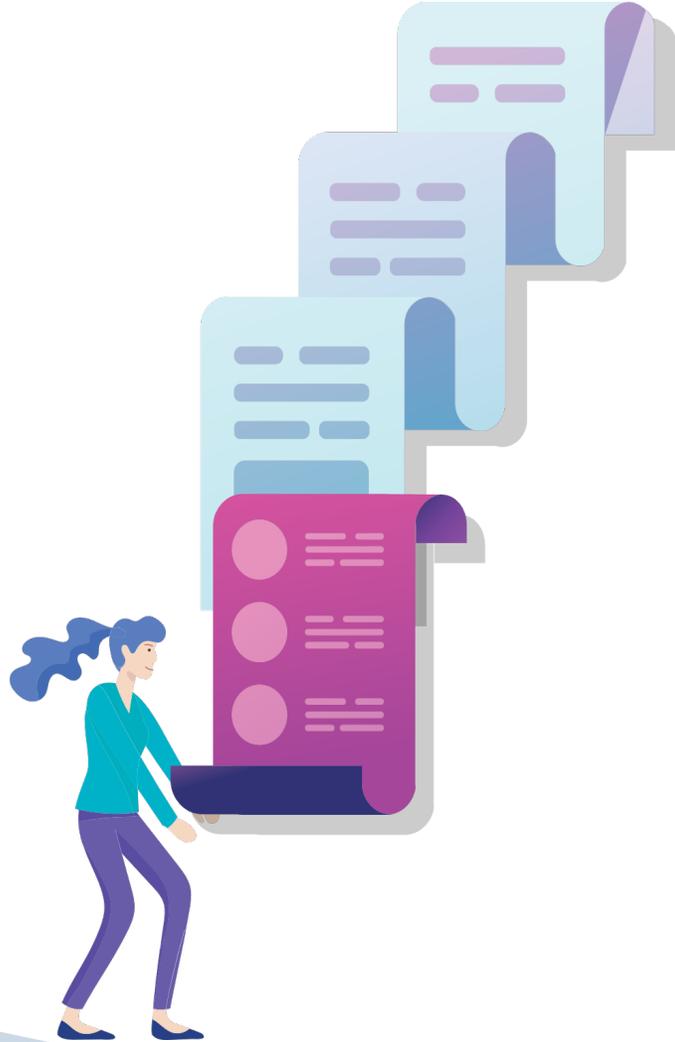


Seeking and Obtaining Tribal Nation Approval for Proposals that May Impact Tribal Resources or Interests

- Proposals that may impact the resources or interests of a federally recognized American Indian or Alaska Native Tribal Nation (Tribal Nation) will not be awarded by NSF without the prior written approval from the designated official(s) from the relevant tribe(s).
- For these purposes, references to “resources or interests of a Tribal Nation” are limited to resources and interests connected to Tribal Nation lands or those aspects of Tribal life that are within the domain of a Tribal Nation, (including, but not limited to, Tribal languages and subsistence rights on Tribal Nation lands) as opposed to individual Tribal Nation members.
- Proposal Preparation Instructions:
 - New checkbox on the Cover Sheet to indicate if there are “Potential Impacts on Tribal Nations”
 - Proposers seeking funding for such proposals must provide at least one of the following at time of proposal submission:
 - (i) A copy of the written request to the Tribal Nation for the activities that require review and approval;
 - (ii) Prior to award, a written confirmation from the Tribal Nation(s) that review and approval is not required; or
 - (iii) A document providing the requisite approval.



Reminders When Preparing Proposals



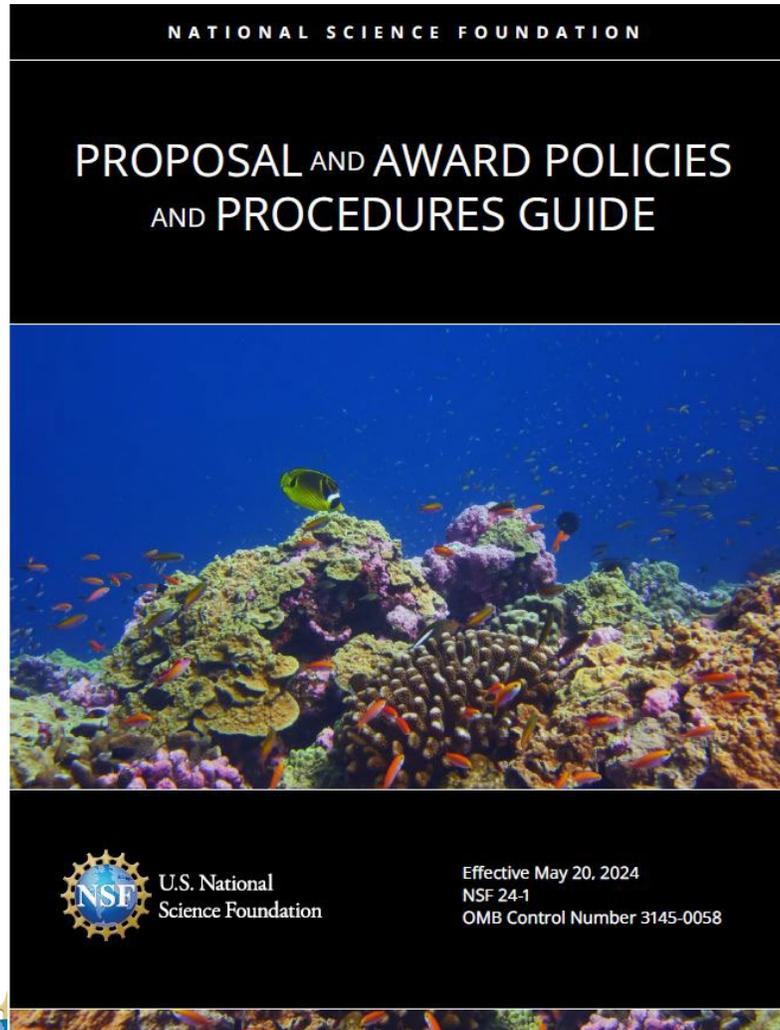
- Read the funding opportunity
 - Ask a Program Officer for clarifications if needed
- Address all the proposal review criteria
- Understand the NSF merit review process
- Avoid omissions and mistakes
- Check your proposal to verify that it is complete!



Merit Review Process



Proposal & Award Policies & Procedures Guide (PAPPG)



A. Merit Review Principles and Criteria

The National Science Foundation strives to invest in a robust and diverse portfolio of projects that creates new knowledge and enables breakthroughs in understanding across all areas of science and engineering research and education. To identify which projects to support, NSF relies on a merit review process that incorporates consideration of both the technical aspects of a proposed project and its potential to contribute more broadly to advancing NSF's mission "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes." NSF makes every effort to conduct a fair, competitive, transparent merit review process for the selection of projects.



Program Officer Review

- Upon receipt at NSF, proposals are routed to the PI-designated program office.
- NSF staff conduct a preliminary review to ensure proposals are:
 - Complete;
 - Timely; and
 - In compliance with proposal preparation requirements.
- NSF may not accept a proposal or may return it without review if it does not meet the requirements above.
- If the proposal is outside the scope of the program, the Program Officer usually tries to transfer it to the most appropriate program for evaluation.



Merit Review Criteria

When evaluating NSF proposals, reviewers should consider what the proposers 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 would accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers are asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to *advance knowledge*; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to *benefit society* and contribute to the achievement of specific, desired societal outcomes.



Five Review Elements

The following elements should be considered in the review for both criteria:

- What is the potential for the proposed activity to:
 - **advance knowledge** and understanding within its own field or across different fields (**Intellectual Merit**); and
 - **benefit society** or advance desired societal outcomes (**Broader Impacts**)?
- To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
- Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- How well qualified is the individual, team, or institution to conduct the proposed activities?
- Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?



Types of Reviews

***Ad hoc*: Proposals sent out for review**

- *Ad hoc* reviewers usually have specific expertise in a field related to the proposal.
- Some proposals may undergo *ad hoc* review only.

Panel: In-person or virtual conducted by reviewers at NSF and other settings

- Panel reviewers usually have a broader scientific knowledge.
- Some proposals may undergo only a panel review.
- Some proposals may undergo reviews by multiple panels (especially for those proposals with crosscutting themes).



Types of Reviews

Internal: Review by NSF Program Officers only

- Examples of internally reviewed proposals:
 - Planning proposals
 - Proposals submitted to Rapid Response Research Grants (RAPID)
 - Proposals submitted to Early-concept Grants for Exploratory Research (EAGER)
 - Proposals submitted to Research Advanced by Interdisciplinary Science and Engineering (RAISE)
 - Career-Life Balance (CLB) Supplemental Funding Requests
 - Proposals for conferences under \$50,000



What is the Role of the Reviewer?

Review all proposal material and consider

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

Make independent written comments on the quality of the proposal content.



How are Reviewers Selected?

Types of Reviewers Recruited

- Reviewers with specific content expertise
- Reviewers with general science or education expertise

Sources of Reviewers

- Program Officer's knowledge of the research area
- References listed in proposal
- Recent professional society programs
- Computer searches of S&E journal articles related to the proposal
- Former reviewers
- Reviewer recommendations included in proposal or sent by email



Personal Relationships with Principal Investigator

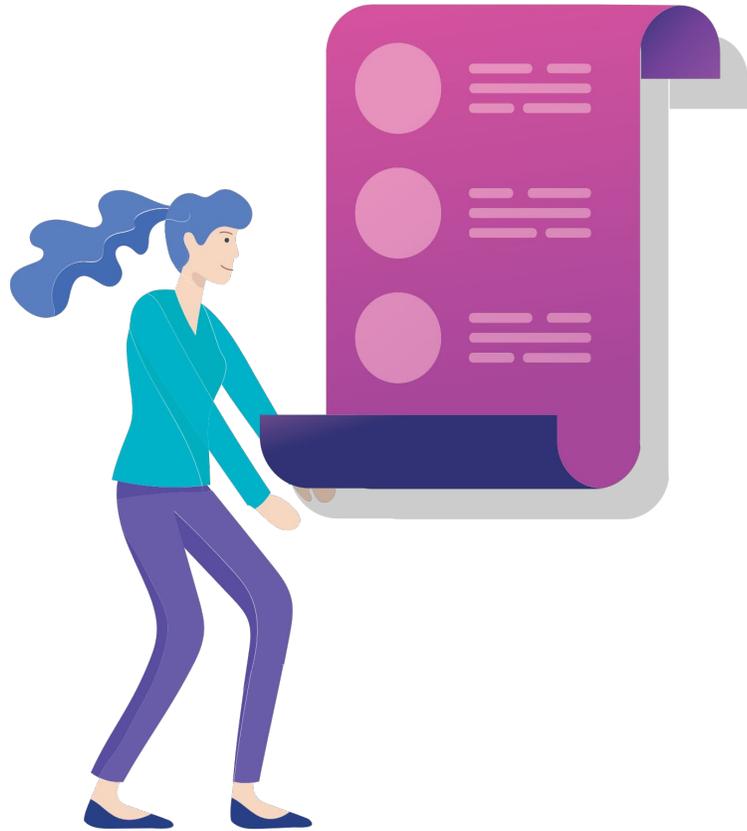
Examples

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



Affiliations with Proposing Organizations

Examples



- Current employment at the organization
- Other association with the organization, such as being a consultant
- Being considered for employment or any formal or informal reemployment arrangement at the organization
- Any office, governing board membership, or relevant committee membership at the organization



How Do I Become a Reviewer?

Contact the NSF Program Officer(s) of the program(s) that fit your expertise

- Introduce yourself and your research experience.
- Tell them you want to become a reviewer for their program.
- Ask them when the next panel will be held.
- Offer to send a 2-page CV with current contact information.
- Stay in touch if you don't hear back right away.



Why Serve on an NSF Panel?



- Serve the community by helping to inform and guide research investments.
- Gain first-hand knowledge of the merit review process
- Learn about common problems with proposals
- Discover proposal writing strategies
- Meet colleagues and NSF Program Officers managing the programs related to your research



Funding Decisions

- The merit review panel provides:
 - Review of the proposal and a recommendation on funding.
 - Feedback (strengths and weaknesses) to the proposers.
- NSF Program Officers make funding recommendations guided by program goals and portfolio considerations.
- NSF Division Directors either concur or reject the Program Officers' funding recommendations.



Feedback from Merit Review



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

If you have any questions, contact the cognizant Program Officer



Examples of Reasons for Declines



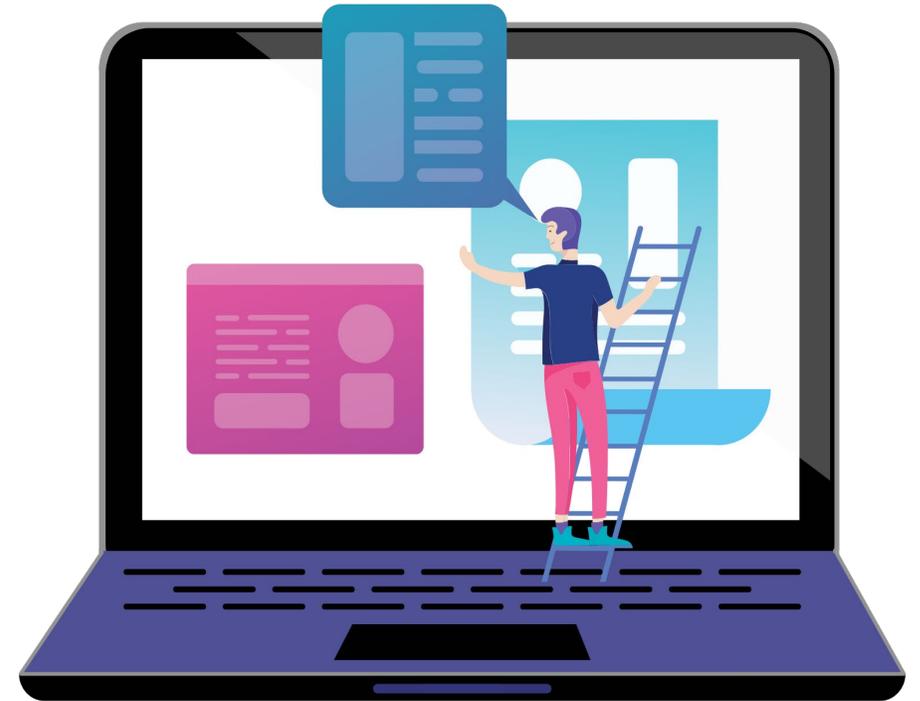
- The proposal was not considered to be competitive based on the merit review criteria and the program office concurred.
- The proposal had flaws or issues identified by the program officer.
- The program funds were not adequate to fund all competitive proposals.



Revisions and Resubmissions

Points to consider

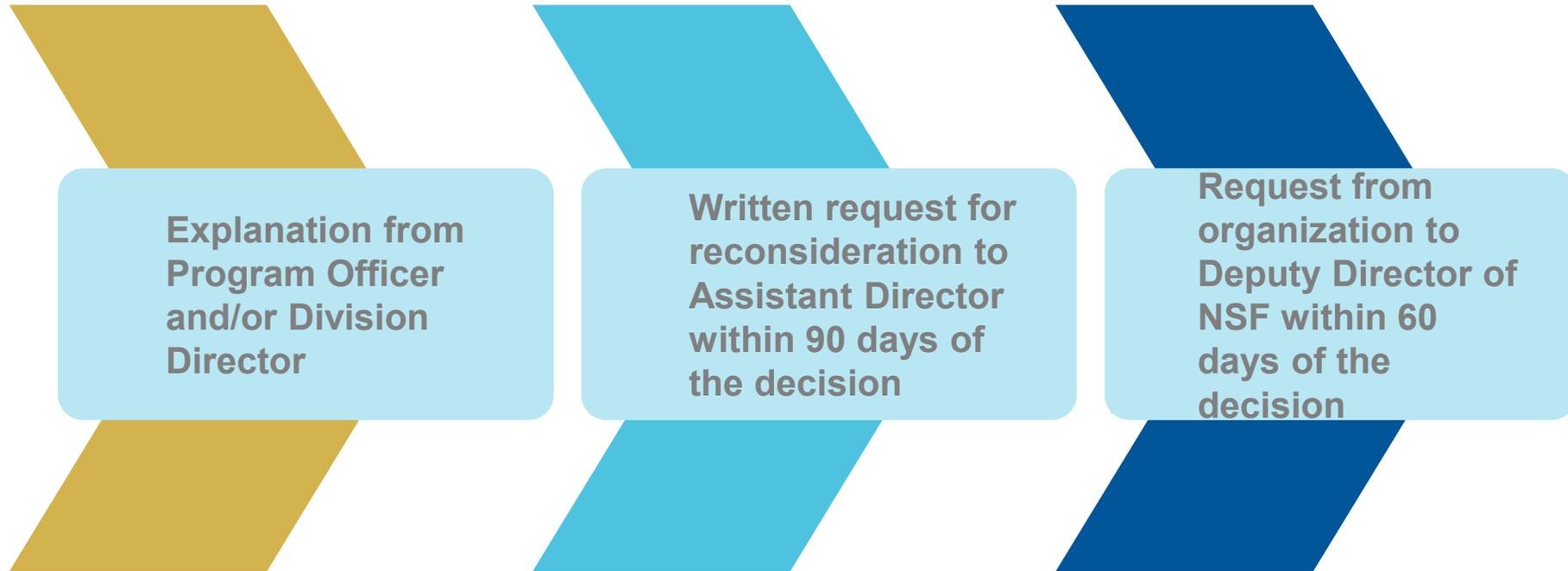
- Do the reviewers and the NSF Program Officer identify significant strengths in your proposal?
- Can you address the weaknesses that reviewers and the Program Officer identified?
- Are there other ways you or your colleagues think you can strengthen a resubmission?



If you have questions, contact the cognizant Program Officer.

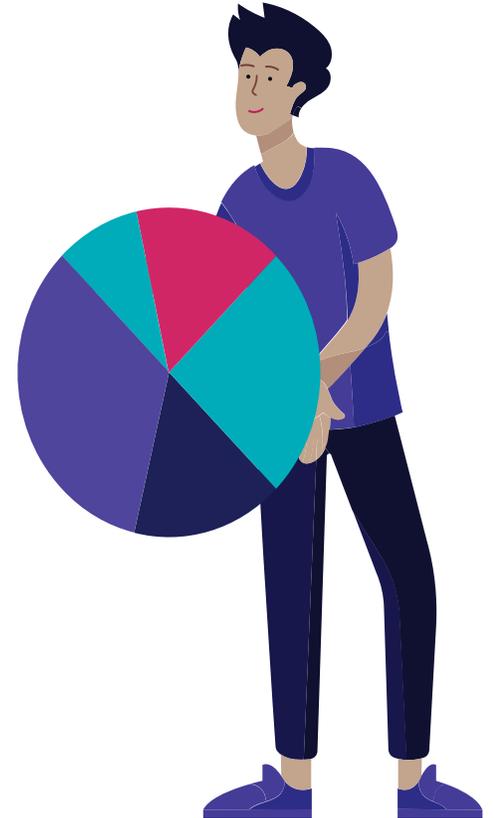


NSF Reconsideration Process



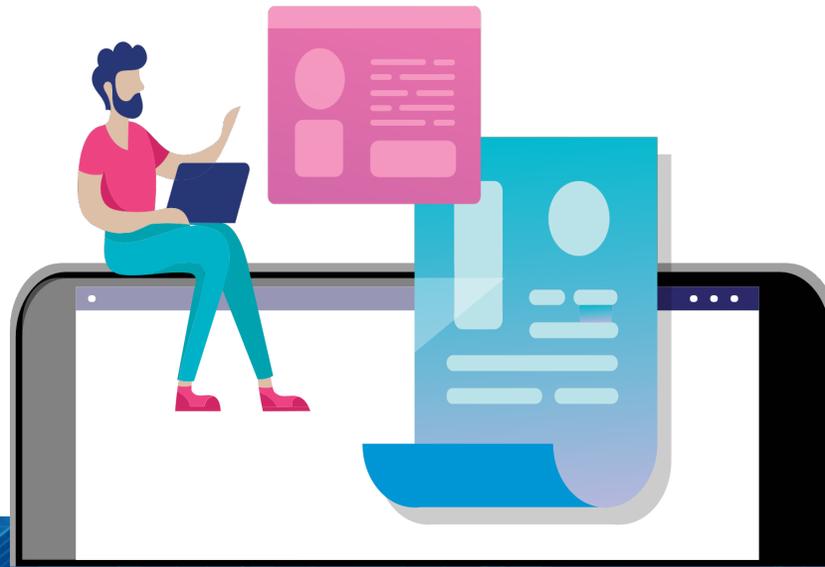
Possible Considerations for Funding a Competitive Proposal

- Addresses all review criteria
- Likely high impact
- Broadening participation
- Educational impact
- Impact on organization/state
- Special programmatic considerations (e.g. CAREER/RUI/EPSCoR)
- Other support for PI
- “Launching” versus “Maintaining”
- Portfolio balance



Issuance of the Award

- NSF's Division of Grants and Agreements (DGA) reviews the recommendation from the program office for business, financial, and policy implications.
- NSF's grants and agreements officers make the official award as long as:
 - The organization has an adequate grants management capacity.
 - The PI/co-PIs do not have overdue annual or final reports.
 - There are no other outstanding issues with the institution or PI.



Award Administration



NSF Award Process

What Kind of Awards are Issued?

- **Assistance Awards** - the principal purpose of which is to transfer anything of value from NSF to the grantee for them to carry out a public purpose; and not to acquire property or services for NSF's direct benefit or use.
 - **Grants** (*Standard and Continuing*)
 - **Cooperative Agreements**
 - **Fellowships**
- **Other Types of Awards**
 - **Acquisitions**
 - **Contracts**
 - **Other Arrangements**



Award Requirements

Award Terms and Conditions

- Terms and conditions are identified in the award notice
- For questions about an award reach out to the grants and agreements officer

Award terms and conditions

When you receive an award notice from NSF, it will specifically identify certain conditions that are applicable to, and become part of, your award.

Part II of NSF's **Proposal and Award Policies and Procedures Guide (PAPPG)** covers the NSF award process, from issuance and administration of an NSF award through closeout. When your award notice's conditions reference a particular section of the guide, that section becomes part of the award.

NSF's Conditions webpages provide the full text of the terms and conditions used to manage NSF grants and cooperative agreements. Topics covered on these pages include awardee responsibilities, federal requirements, pre-award costs, no-cost extensions, significant project changes, travel, allowable costs, project reports, final report requirements and more:

- **Grant General Conditions**
- **Research Terms and Conditions**
- **Cooperative Agreement Conditions**
- **Special Conditions** for NSF conference or group travel awards, awards made to international organizations, or awards involving international research.

Together, the **PAPPG** and **Grant General Conditions** detail NSF's administrative requirements, cost principles and audit requirements for its awards. If these two documents are silent on a specific area covered by **2 CFR § 200**, the requirements specified in 2 CFR § 200 must be followed.



Recipient Responsibilities

National Policy Requirements

Research Terms and Conditions

Appendix C

NATIONAL POLICY REQUIREMENTS MATRIX

This listing of statutory/regulatory/and executive requirements is provided for information purposes only, and may not reflect all requirements that are applicable to a specific award.

Statutory/Regulatory/and Executive Based Requirements		Used For:		Requirement(s) that should be noted by the recipient
National Policy Requirements Applicable to all research agencies:	Type of Award	Type of Recipient	Specific Situation	
a) Nondiscrimination				
By signing or accepting funds under the agreement, the recipient agrees that it will comply with applicable provisions of the following, national policies prohibiting discrimination:				
a. On the basis of race, color, or national origin, in Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, et seq.), as implemented by: NSF at 45 CFR Part 611 NASA at 14 CFR Part 1250 DOE at 10 CFR Part 1040 USDA at 7 CFR Part 15 DOC at 15 CFR Part 8 HHS at 45 CFR Part 80 & 81	Grants, cooperative agreements, and other financial assistance	All	All	The following regulations require the recipient to flow down requirements to subrecipients. NSF at 45 CFR Part 611 NASA at 14 CFR Part 1250 DOE at 10 CFR Part 1040 USDA at 7 CFR Part 15 DOC at 15 CFR Part 8 HHS at 45 CFR Part 80 & 81
b. On the basis of race, color, religion, sex, or national origin, in Executive Order 11246 [3 CFR, 1964-1965 Comp., p. 339], as implemented by Department of Labor regulations at 41 CFR Part 60.	Grants, cooperative agreements, and other prime awards defined at 40 CFR 60-1.3 as "Federally assisted construction contract."	All	Awards under which construction is to be done.	41 CFR 60-1.4(b) prescribes a clause that recipients must include in federally assisted, construction awards and subawards [60-1.4(d) allows incorporation by reference]. This requirement also is at: 32 CFR 33.36(l) (3) and at paragraphs 1. of Appendices A to 32 CFR Part 32 and 32 CFR Part 34.
c. On the basis of sex or blindness, in Title IX of the Education Amendments of 1972 (20 U.S.C. 1681, et seq.). NSF 45 CFR Part 618 DOE at 10 CFR Part 1040 DOC at 15 CFR Part 8a HHS at 45 CFR Part 86 NASA at 14 CFR Part 1253	Grants, cooperative agreements, and other financial assistance included at 20 U.S.C. 1682.	Educational institution [for sex discrimination, excepts all Institution controlled by religious organization, when inconsistent with the organization's religious tenets].	All educational program or activity receiving Federal financial assistance.	



Recipient Notifications to NSF

- Grantee-Approved No-Cost Extension
- Significant Changes in Methods or Procedures (Other than Changes in Objective or Scope)
- Significant Changes, Delays or Events of Unusual Interest (Other than Changes in Objective or Scope)
- Annual and Final Cost Share Notification



Recipient Notifications to NSF

- **Conflicts of Interest that can not be satisfactorily managed**, reduced or eliminated and research that proceeds without the imposition of conditions or restricts when a conflict of interest exists
- **Finding/Determination that a PI or co-PI has been found to have violated** awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault
- **Placement by the recipient of a PI or co-PI on administrative leave** or the imposition of any administrative action on the PI or any co-PI by the awardee relating to any finding/determination or an investigation of an alleged violation of awardee policies or codes of conduct, statutes, regulations, or executive orders relating to sexual harassment, other forms of harassment, or sexual assault.



Recipient Requests for NSF Prior Approval

- Changes in objectives, scope, or methods/procedures
- Changes in PI, co-PI or person-months devoted to the project
- Second no-cost extension
- Transfer of funds from participant support to other categories of expense
- Subawarding, or transferring part of an NSF award (subaward)
- Postaward additions of postdoctoral scholars

For the full list, see the
Research Terms and Conditions, Appendix A Prior Approval Matrix

<https://www.nsf.gov/awards/managing/rtc.jsp>



No Cost Extensions

- Awards with \$0 balances cannot be extended.
- Awards cannot be extended just to spend remaining funds.
- Submit Grantee-Approved NCEs at least 10 days prior to the award end date.
- Submit the NSF-Approved NCEs at least 45 days prior to the award end date.
- Research.gov will automatically determine what type of NCE is appropriate based upon eligibility.
- NSF-Approved NCEs may be submitted “late,” but you will need to explain why.
- Verify that the no cost extension changed the end date.



Technical Reporting Requirements

Annual and Final Annual Project Reports

- Must be approved by the NSF Program Officer
- Annual reports are due 90 days prior to the end of the current budget period
- Final annual reports are due no later than 120 days following the end date of the award

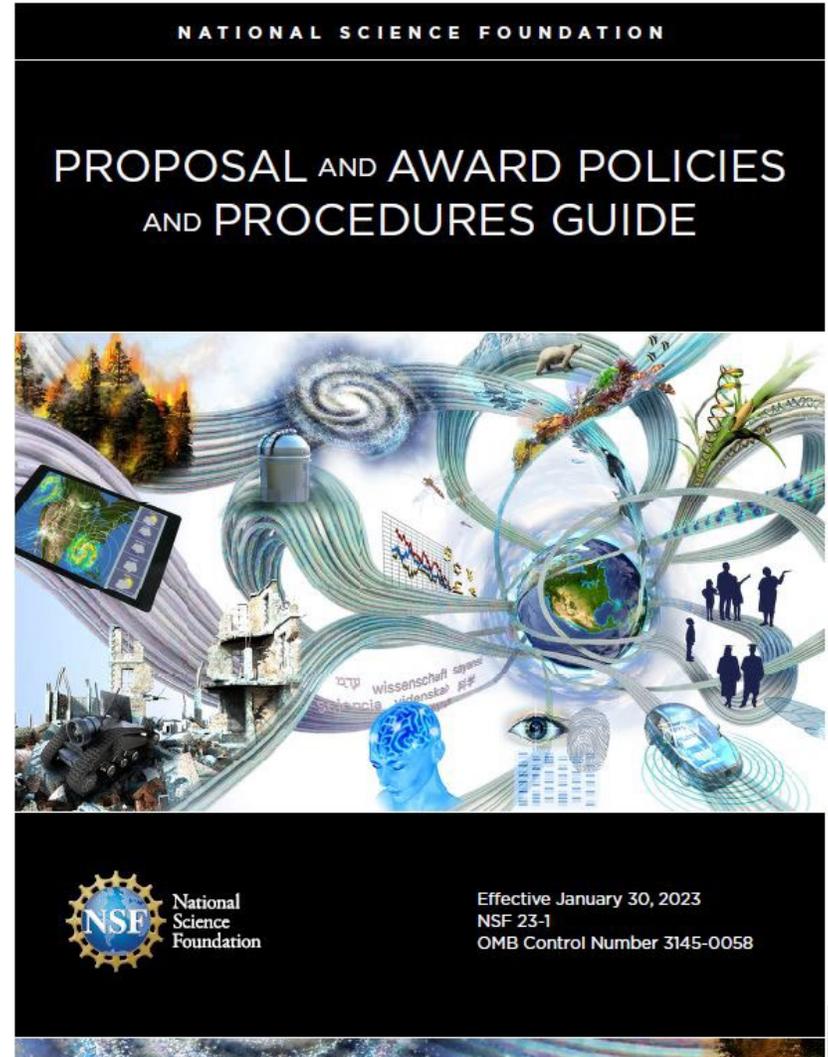
Project Outcomes Report (POR) for the General Public

- Not approved by the NSF Program Officer.
- Due no later than 120 days following the end date of the award



Technical Reporting Requirements

- By submitting the final project report, the PI is signifying that the scope of work for the project has been completed and that they do not anticipate that any further research activities (including a no-cost extension, supplemental funding, or transfer of the grant) need to be completed on the project.
- Submission of the final project report does not preclude the grantee from requesting any further payments for costs incurred during the period of performance.
- See PAPPG Chapter VII.D



Technical Reporting Requirements

General Information about Project Reports

- NSF sends “reminder” notices for all reports – when they are due and when they become overdue.
- The report requirements for an award are available to the PI and all co-PIs via Research.gov.
- The SPO can run a report to show reports that are due and overdue via Research.gov for all the organization’s awards.
- Any active personnel—the PI and all co-PIs – may submit the reports.
- The SPO does not have access to submit the reports.
- When in doubt, contact your Program Officer, or the Research.gov Help Desk.

Consequences for Overdue Project Reports

- No future funding – subject award or associated awards
- No administrative actions – subject award or associated awards
- Can impact other PIs’ awards
- Will be reported to FAPIIS (more on this later)



Reporting Requirements Pilot

NSF initiated a pilot in September 2023 intended to improve the timeliness of annual reports.

- Tested whether targeted communication and withholding future payments would improve the timeliness of annual project report submissions.
- Scope: awards from three Divisions with overdue annual project reports as of October 1, 2023, and awards that became overdue through February 1, 2024.
- Initial findings show over 95% of targeted awards submitted annual reports, which is significantly higher than nonparticipating Divisions.



Overdue Project Reports and FAPIIS



- The *Uniform Guidance* requires Federal awarding agencies to post overdue project reports at the time of award closeout to a **PUBLIC-FACING** repository of **POOR PERFORMERS** – the Responsibility/Qualification (R/Q formerly **FAPIIS**).
- No one wants to go into FAPIIS. **DON'T WAIT UNTIL IT'S TOO LATE.**
- Click [here](#) to learn more about the project reporting module on Research.gov and see the current status of your reports.



Award Transfers

Awards are made to the Organization, not the PI

If the PI is moving to a new Organization, the transferring organization typically has the options below:

- Nominate new PI: The request will be reviewed by the NSF Program Officer and sent to DGA for final review/approval.
- Request to sub-award
- Agree to transfer – New Award issued to New Awardee
- Terminate: Contact DGA and the NSF Program Officer immediately. There is no module for requesting termination of an award.

These and other possible alternatives should be discussed with the Grants and Agreements Officer in DGA.



Who to Contact on Your Campus and at NSF

- Your Organization's Sponsored Projects Office – questions on proposal preparation & submission; general policy questions; guidance in the PAPPG
- NSF Program Officer – programmatic questions; questions on guidance in a funding opportunity
- NSF Grants & Agreements Officer – questions related to an NSF award
- NSF Policy Office – general policy questions; questions on proposal preparation, and other guidance specified in the PAPPG



Ask Early, Ask Often

