

# **FALL 2022 NSF VIRTUAL GRANTS CONFERENCE**

Proposal Preparation





## Panelists

### **Jean Feldman**

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

### **Randy Phelps**

Staff Associate, Office of Integrative Activities; Office of the Director

### **Jennifer Wade**

Program Director, Division of Earth Sciences, Directorate for Geosciences



# 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

A screenshot of the National Science Foundation (NSF) website. The top navigation bar includes 'HOME', 'Research Areas', 'Funding', 'Awards', 'Document Library', 'News', and 'About NSF'. The 'Funding' menu is open, displaying a list of links: 'About Funding', 'Browse Funding Opportunities A-Z', 'Due Dates', 'Find Funding', 'Merit Review', 'Policies and Procedures', 'Preparing Proposals', 'Recent Opportunities', and 'Transformative Research'. A 'RELATED LINKS' section is also visible, containing links to 'Proposal and Award Policies and Procedures Guide (PAPPG)', 'Grant Proposal Guide (GPG)', 'Research.gov', 'FastLane', 'FUNDING OPPORTUNITIES FOR Graduate Students', 'K-12 Educators', 'Postdoctoral Fellows', and 'Undergraduate Students'. The page also features a search bar, a notification banner, and a footer with the text 'Advancing the Sciences | Funding &amp; Supporting | Inspiring &amp; Educating'.



# Find Funding Opportunities

## NSF Funding & Research Community

### SPECIAL NOTICES

- [Dear Colleague Letter: Research Protection](#)
- [Personnel Policy on Foreign Government Talent Recruitment Programs](#)
- [NSF Issues Revised Proposal & Award Policies & Procedures Guide \(PAPPG\) \(NSF 20-1\)](#)
- [NSF Responses to Natural Disasters](#)
- [Training in Responsible Conduct of Research – A Reminder of the NSF Requirement](#)
- [NSF and Congress: Latest Actions](#)
- [NSF Strategic Plan for FY 2018-2022](#)
- [Important information about DMARC and email delivery from NSF](#)

### EVENT CALENDAR

- Oct** OCTOBER 8, 2020 - OCTOBER 8, 2020  
[Enabling the quantum revolution- pioneering advances to achieve quantum computing & impact at scale](#)  
WEBCAST
- Oct** OCTOBER 8, 2020 - OCTOBER 8, 2020  
[National Science Board SEP Teleconference: REVISED](#)  
NSB TELECONFERENCE
- Oct** OCTOBER 9, 2020 - OCTOBER 9, 2020  
[Postdoctoral Research Fellowships in Biology Webinars](#)  
WEBCAST

[View All Events](#)

[STOP HARASSMENT](#)

### FUNDING OPPORTUNITIES

#### Search Funding Opportunities

Enter search term

GO

#### View by Program Area

Select One

[VIEW ALL FUNDING OPPORTUNITIES](#)

[Proposal and Award Policies and Procedures Guide](#)

[Prepare a Proposal](#)

[Upcoming Due Dates](#)

[Submit Proposal to FastLane](#)



# NSF Award Search

The screenshot shows the NSF Award Search website. At the top left is the NSF logo with the tagline "National Science Foundation WHERE DISCOVERIES BEGIN". To the right is a "QUICK LINKS" dropdown menu and a search box. Below this is a navigation bar with links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. A secondary navigation bar contains links for Simple Search, Advanced Search, Popular Searches, Download Awards, Send Comments, and Award Search Help. The main content area is titled "Awards Simple Search" and includes a link for "Overview of Award Search Features". Below this is a search form with the label "Search award for:" and a "Search" button. A note below the form says "Use double quotes for exact search. For example 'water vapor'." There are two checkboxes: "Active Awards" (checked) and "Expired Awards" (unchecked). At the bottom left is a "Feedback" button, and at the bottom right are social media icons for Facebook, Twitter, LinkedIn, and YouTube. A footer contains various links such as Research.gov, USA.gov, BusinessUSA, Recovery Act, Budget and Performance, Annual Financial Report, Web Policies and Important Links, Privacy, FOIA, Plain Language, NO FEAR Act, Inspector General, Webmaster Contact, and Site Map. The NSF logo is centered at the very bottom.



# Other Ways to Find Funding

## Use the Search Feature in Grants.gov

The screenshot shows the Grants.gov homepage. At the top, there is a search bar with a dropdown menu set to "Grant Opportunities" and a "GO" button. Below the search bar is a navigation menu with links for HOME, ABOUT, SEARCH GRANTS, APPLICANTS, GRANTORS, SYSTEM-TO-SYSTEM, FORMS, OUTREACH, and SUPPORT. The main content area features a "Find Grants" section with a video player showing the Washington Monument. To the right, there are "Grants.gov Updates" and "Did You Know?" sections. Below the video, there is a "Find Open Grant Opportunities" section with tabs for "NEWEST OPPORTUNITIES", "BROWSE CATEGORIES", "BROWSE AGENCIES", and "BROWSE ELIGIBILITIES". A table of grant opportunities is displayed below these tabs.

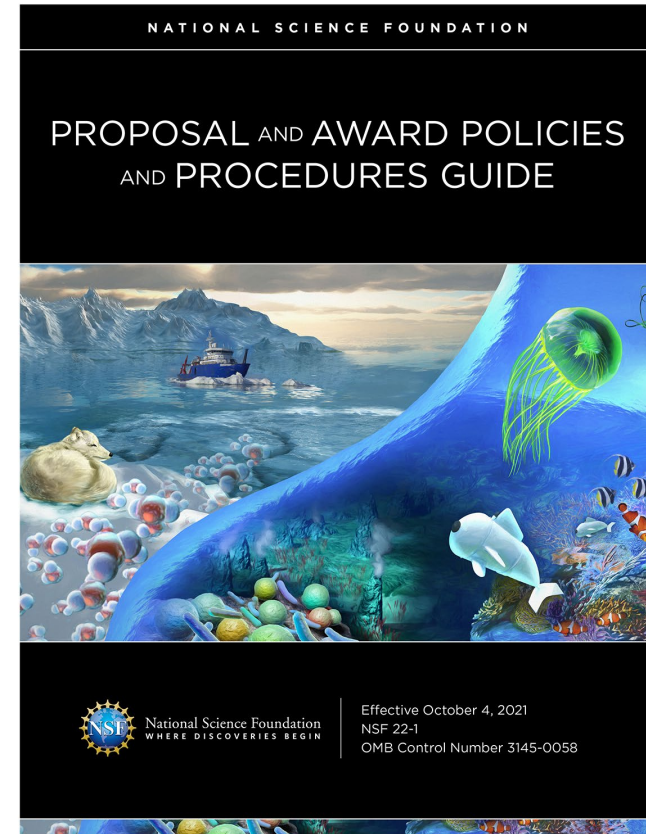
Funding Opportunity Number	Opportunity Title	Agency
RFA-263-14-000001	Local Scholarship Program	Egypt USAID-Cairo
NNH14ZDA001N-RST	ROSES 2014: Remote Sensing Theory for Earth Science	NASA Headquarters
CDC-RFA-DP14-1419PPHF14	PPHF 2014: Racial and Ethnic Approaches to Community Health (REACH) - financed in part by Prevention and Public Health Funding	Chronic Disease Prevention and Health Promotion
HHS-2014-ACL-CDAP-SO-0089	State Health Insurance Assistance Program Performance Improvement and Innovation Grant	Administration for Community Living
DARPA-BAA-14-46	DSO Office-Wide	DARPA - Defense Sciences



# 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



## Program Descriptions

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

## Program Announcements

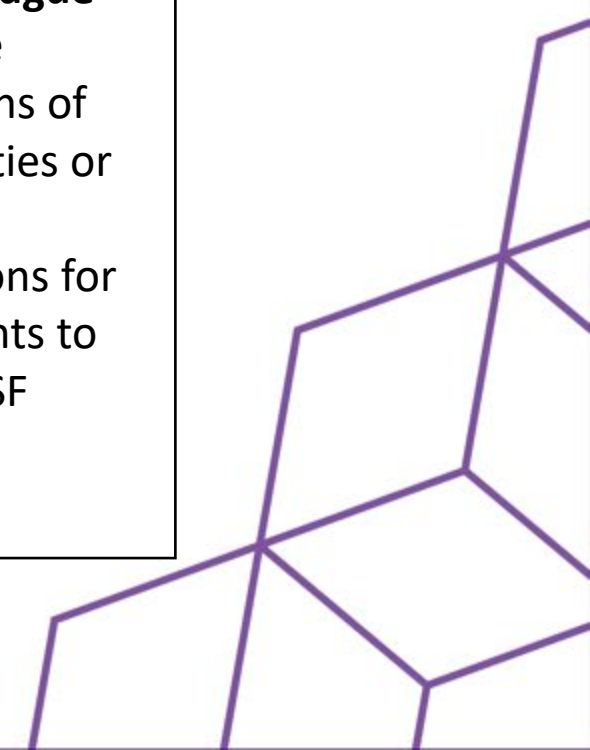
Proposals for a **Program Announcement** must follow the instructions in the PAPPG.

## 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

## 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  
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:

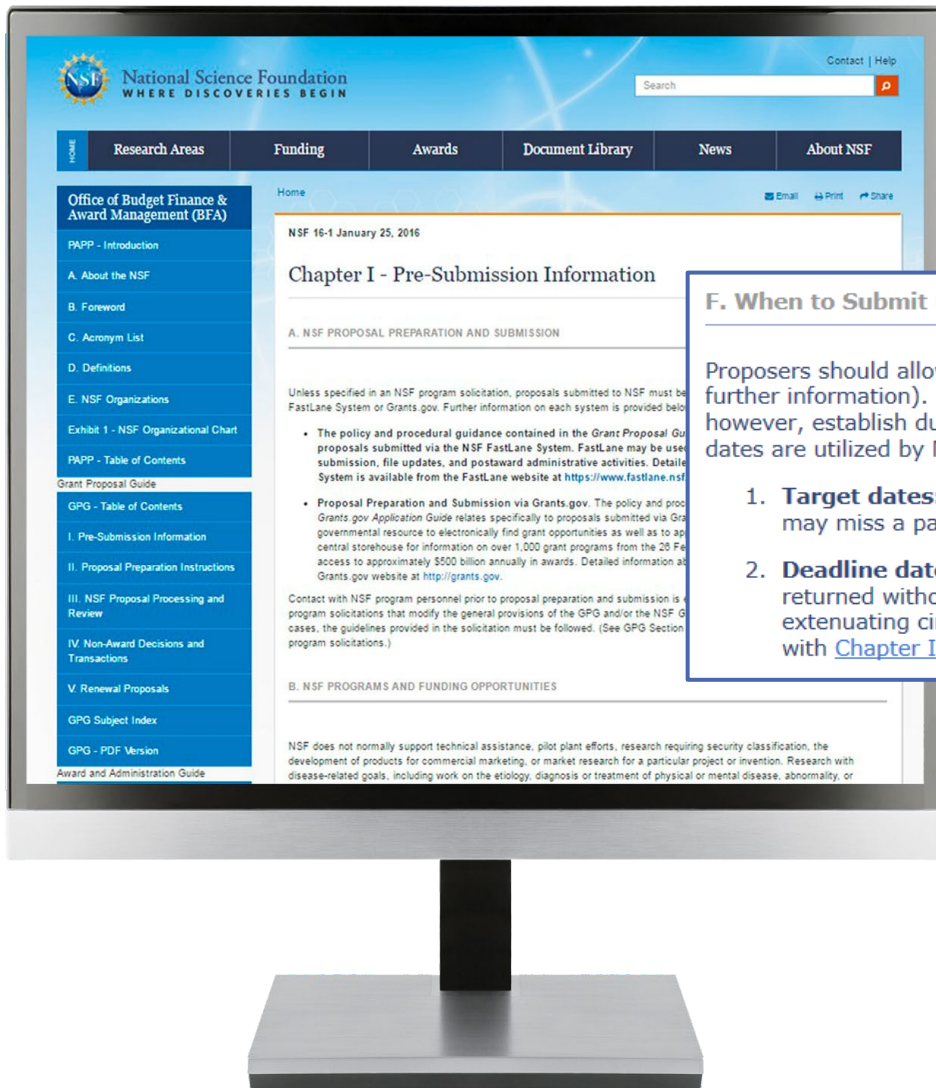
An organization may serve as the lead institution on only one Alliance proposal. Organizations that serve as the lead institution on an Alliance proposal may still participate in other Alliance proposals as a collaborating institution. In the event that an organization exceeds the limit of one proposal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

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

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



# Types of Proposal Submissions



## NO DEADLINES

Proposals may be submitted at any time

### F. When to Submit Proposals

Proposers should allow adequate time for processing of proposals (see [Chapter 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](#).



# Types of Proposal Submissions



## 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:

1. **Target dates:** dates after which proposals will still be accepted, although they may miss a particular panel or committee meeting.
2. **Deadline dates:** dates after which proposals will not be accepted or will be returned without review by NSF. The deadline date will be waived only in extenuating circumstances. Such a deviation only may be authorized in accordance with [Chapter II.A](#).





# Types of Proposal Submissions



## DEADLINE DATES

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



# Types of Proposal Submissions



## SUBMISSION WINDOWS

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

**3. Submission windows:** designated periods of time during which proposals will be accepted for review by NSF. It is NSF's policy that the end date of a submission window converts to, and is subject to, the same policies as a deadline date.



# Types of Proposal Submissions

## LETTERS OF INTENT

Enables better management of reviewers and panelists



### 1. Letters of Intent

Some NSF program solicitations require or request submission of a letter of intent (LOI) in advance of submission of a full proposal. An LOI is not a binding document. The predominant reason for its use is to help NSF program staff gauge the size and range of the competition, enabling earlier selection and better management of reviewers and panelists. In addition, the information contained in an LOI is used to help avoid potential conflicts of interest in the review process.

An LOI normally contains the Principal Investigator's (PI's) and co-PI's names, a proposed title, a list of possible participating organizations (if applicable), and a synopsis that describes the work in sufficient detail to permit an appropriate selection of reviewers. An LOI is not externally evaluated or used to decide on funding. The requirement to submit an LOI will be identified in the program solicitation, and such letters are submitted electronically to NSF. Failure to submit a required LOI identified in a program solicitation will result in a full proposal not being accepted or returned without review.



# Types of Proposal Submissions

## PRELIMINARY PROPOSALS

Sometimes required, sometimes optional



### 2. Preliminary Proposals

Some NSF program solicitations require or request submission of a preliminary proposal in advance of submission of a full proposal. The three predominant reasons for requiring submission of a preliminary proposal are to:

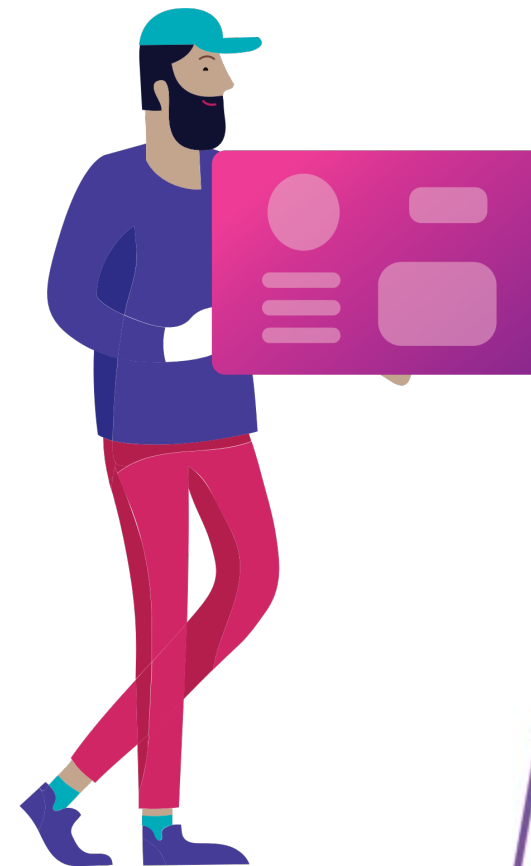
- reduce the proposers' unnecessary effort in proposal preparation when the chance of success is very small. This is particularly true of exploratory initiatives when the community senses that a major new direction is being identified, or competitions that will result in a small number of awards;
- increase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



# 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**





# 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 <b>NSF 22-1</b>			<input type="checkbox"/> Special Exception to Deadline Date Policy		FOR NSF USE ONLY <b>NSF PROPOSAL NUMBER</b>
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.) <b>CHE - Software Institutes</b>					
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	UEI (Unique Entity Identifier)	FILE LOCATION
	<b>1</b>	<b>03090000 CHE</b>	<b>8004</b>	<b>GGF7K5B4JSL5</b>	
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN) <b>530206152</b>		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 <b>NATIONAL SCIENCE FOUNDATION</b>			ADDRESS OF AWARDEE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE <b>2415 EISENHOWER AVE ALEXANDRIA, VA 22314-4684 US</b>		
AWARDEE ORGANIZATION CODE (IF KNOWN) <b>4102852000</b>			ADDRESS OF PRIMARY PLACE OF PERF, INCLUDING 9 DIGIT ZIP CODE <b>2415 Eisenhower Avenue Alexandria, VA 22314-4684 US</b>		
NAME OF PRIMARY PLACE OF PERF <b>National Science Foundation</b>					
IS AWARDEE ORGANIZATION (Check All That Apply) <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> MINORITY BUSINESS <input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE					
<input type="checkbox"/> FOR-PROFIT ORGANIZATION <input type="checkbox"/> WOMAN-OWNED BUSINESS					
TITLE OF PROPOSED PROJECT <b>Test Research</b>					SHOW LETTER OF INTENT ID IF APPLICABLE
REQUESTED AMOUNT \$ <b>0</b>	PROPOSED DURATION (1-60 MONTHS) <b>36</b> months	REQUESTED STARTING DATE <b>09/01/2022</b>	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE		
THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input type="checkbox"/> BEGINNING INVESTIGATOR		<input type="checkbox"/> HUMAN SUBJECTS Human Subjects Assurance Number _____ Exemption Subsection _____ or IRB App. Date _____			
<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"/> VERTEBRATE ANIMALS IACUC App. Date _____ PHS Animal Welfare Assurance Number _____		<input checked="" type="checkbox"/> COLLABORATIVE STATUS <b>A collaborative proposal from one organization (PAPPG I.L.D.3.a)</b>			
<input checked="" type="checkbox"/> TYPE OF PROPOSAL <b>Research</b>					
PI/PD DEPARTMENT			PI/PD POSTAL ADDRESS		



# 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 in text boxes 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

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

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





# 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. Pls are cautioned that the Project Description must be self-contained and that URLs must not be used because: 1) the information could circumvent page limitations; 2) the reviewers are under no obligation to view the sites; and 3) the sites could be altered or deleted between the time of submission and the time of review.

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

### (iii) Results from Prior NSF Support

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

The following information must be provided:

- (a) the NSF award number, amount and period of support;
- (b) the title of the project;

*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

## 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.

### f. 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)	Location	Major	Degree & Year
Graduate Institution(s)	Location	Major	Degree & Year
Postdoctoral Institution(s)	Location	Area	Inclusive Dates (Years)

#### (b) Appointments

A list, in reverse chronological order 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 activity. Examples may include, among others: innovations in teaching and training; contributions to the

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

*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				FOR NSF USE ONLY		
National Science Foundation				PROPOSAL NO.	DURATION (months)	
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR				AWARD NO.	Proposed	Granted
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)					0	
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/PI/D NAME				FOR NSF USE ONLY		
ORG. REP. NAME*				INDIRECT COST RATE VERIFICATION		
				Date Checked	Date Of Rate Sheet	Initials - ORG

\*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 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

[Browse for file to upload](#)

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



# Sections of an NSF Proposal

## Current and Pending Support (Required)

- This section of the proposal calls for information on all current and pending support for ongoing projects and proposals.
- 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 Support<sup>32</sup>**

(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 format<sup>33</sup>, 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

---

<sup>32</sup> 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.

<sup>33</sup> 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<sup>1/2/3</sup> Relating to the Biographical Sketch and Current and Pending Support April 20, 2022

### 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 <sup>4</sup> 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 <i>directly</i> to the individual		✓		✓*	✓◆	
In-kind contributions that support the research activity for use on the project/proposal being proposed			✓			

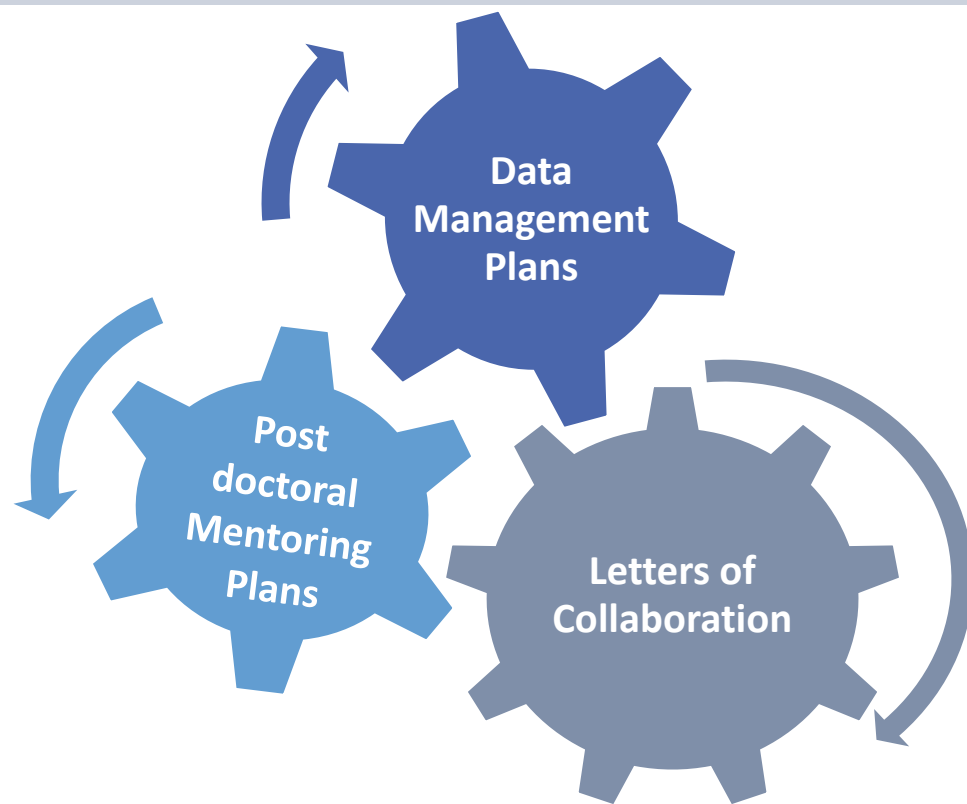




# Sections of an NSF Proposal

## 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.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.
- 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](http://www.nsf.gov/bfa/dias/policy/dmp.jsp)

The screenshot shows the NSF website page for Data Management Plan Requirements. The page features a blue header with the NSF logo and the tagline "WHERE DISCOVERIES BEGIN". A search bar is located in the top right corner. Below the header is a navigation menu with links for HOME, Research Areas, Funding, Awards, Document Library, News, and About NSF. The main content area is titled "Dissemination and Sharing of Research Results" and contains the following sections:

- NSF DATA SHARING POLICY**

Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Grantees are expected to encourage and facilitate such sharing. See Award & Administration Guide (AAG) Chapter V.I.D.4.
- NSF DATA MANAGEMENT PLAN REQUIREMENTS**

Proposals submitted or due on or after January 18, 2011, must include a supplementary document of no more than two pages labeled "Data Management Plan". This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results. See Grant Proposal Guide (GPG) Chapter II.O.2 for full policy implementation.
- REQUIREMENTS BY DIRECTORATE, OFFICE, DIVISION, PROGRAM, OR OTHER NSF UNIT**

Links to data management requirements and plans relevant to specific Directorates, Offices, Divisions, Programs, or other NSF units, are provided below if guidance specific to the program is not provided, then the requirements established in Grant Proposal Guide, Chapter II.O.2, apply.

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

  - Biological Sciences Directorate (BIO)
    - Directorate-wide Guidance
  - Computer & Information Sciences & Engineering (CISE)
    - Directorate-wide Guidance
  - Education & Human Resources Directorate (EHR)
    - Directorate-wide Guidance
  - Engineering Directorate (ENG)
    - Directorate-wide Guidance
  - Geosciences Directorate (GEO)

The left sidebar contains a navigation menu for the Office of Budget Finance & Award Management (BFA), including links to various divisions, advisory committees, and external links. It also includes a "Contact BFA" section with a search bar for BFA staff and a "Follow us BFA" link.



# For More Information

## “Ask Early, Ask Often!”

- [nsf.gov/staff](https://www.nsf.gov/staff)
- [nsf.gov/staff/orglist.jsp](https://www.nsf.gov/staff/orglist.jsp)
- [nsf.gov/about/career\\_opps/rotators/index.jsp](https://www.nsf.gov/about/career_opps/rotators/index.jsp)

