

National Science Foundation



W H E R E D I S C O V E R I E S B E G I N

NSF FUNDAMENTALS WORKSHOP

Thomas Jefferson University
December 2017

SPEAKERS

- **Jean Feldman**
Head, Policy Office
Division of Institution and Award Support
Office of Budget, Finance and Award Management
703.292.8243; jfeldman@nsf.gov
- **Jamie French**
Division Director
Division Grants and Agreements
Office of Budget, Finance and Award Management
703.292.8644; [jhFrench@nsf.gov](mailto:jhfrench@nsf.gov)



TOPICS COVERED

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





ABOUT NSF



NSF MISSION

“To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense...”

NATIONAL SCIENCE FOUNDATION

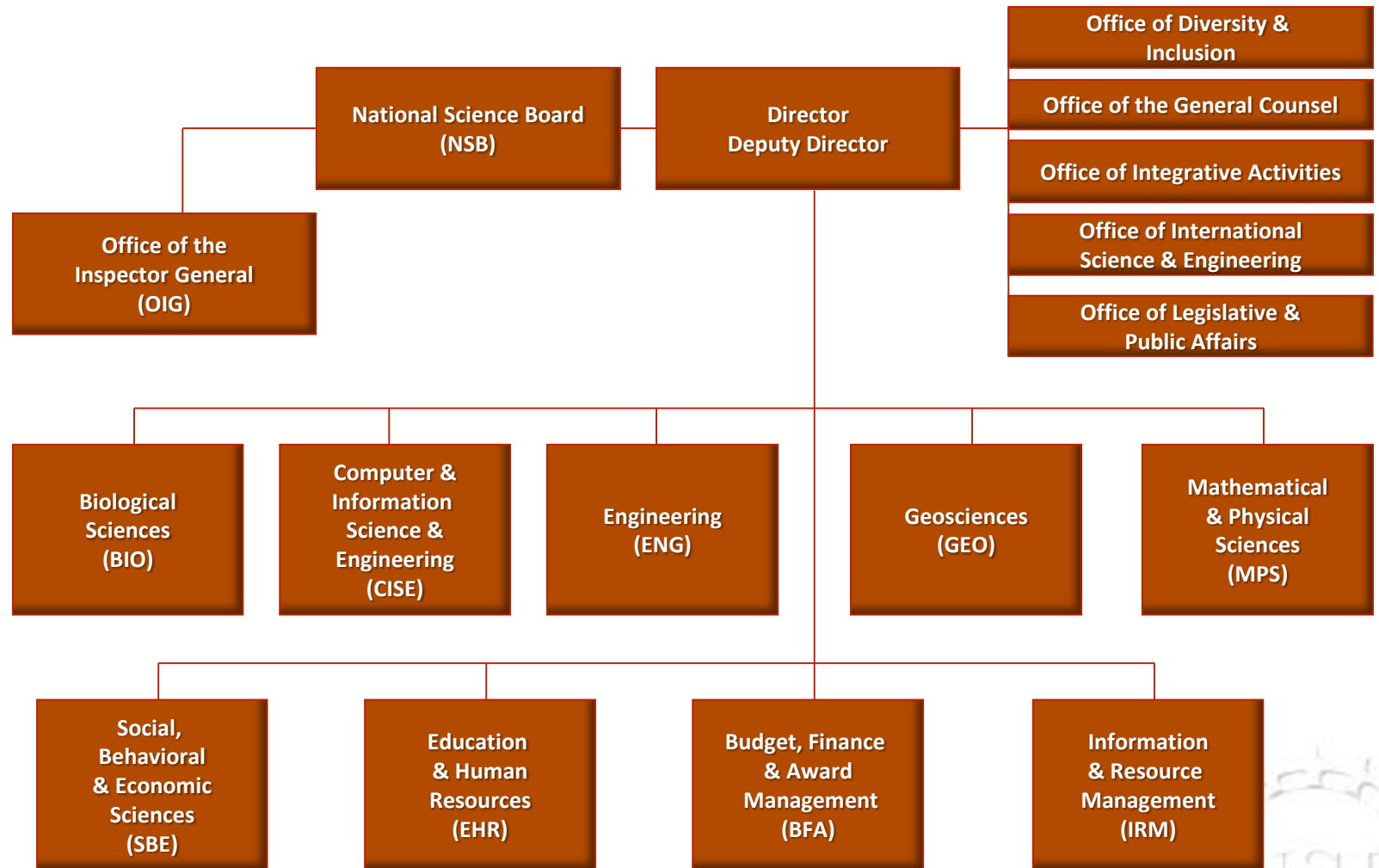


NSF IN A NUTSHELL

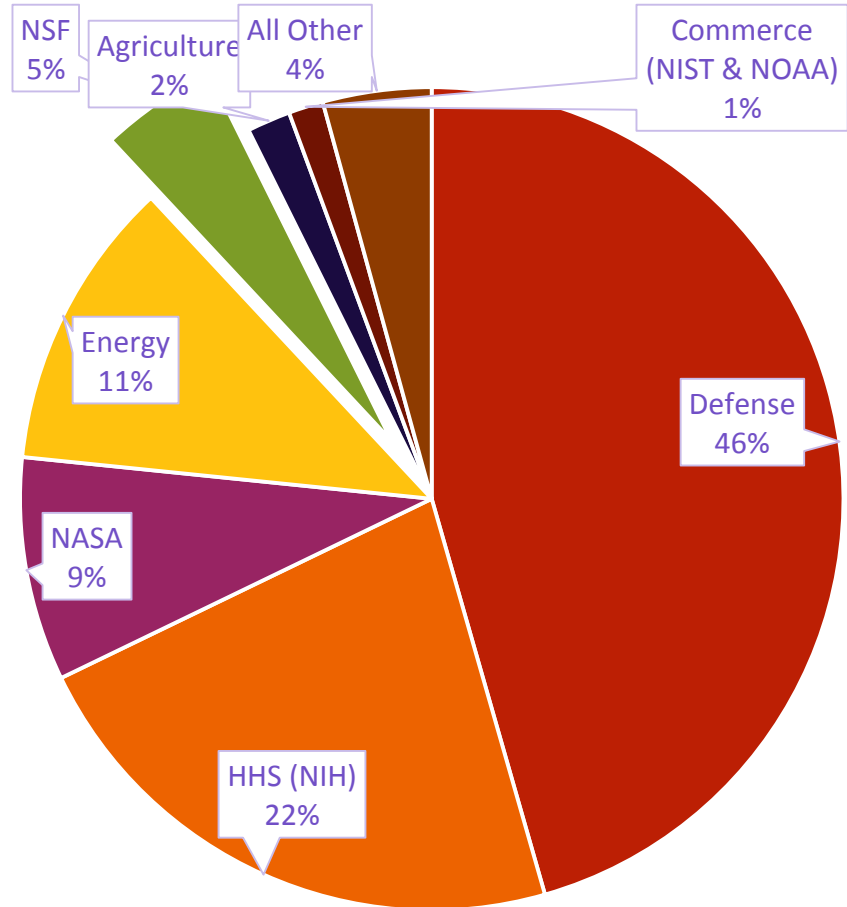
- Independent Agency
- Supports basic research and education
- Uses grant mechanism
- Low overhead; highly automated
- Discipline-based structure
- Cross-disciplinary mechanisms
- Use of Rotators/IPAs
- National Science Board



HOW NSF IS ORGANIZED



FY 2018 REQUEST: TOTAL R&D BY AGENCY



Total R&D = \$118 billion
Budget Authority in Billions of Dollars



FIND FUNDING OPPORTUNITIES

The screenshot shows the NSF website's navigation and content. At the top, a dark blue navigation bar contains the following links: HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. A search bar is located in the top right corner. The 'FUNDING' menu is open, displaying a list of options: Search Funding Opportunities, Browse Opportunities A-Z, Recent Opportunities, Due Dates, Preparing Proposals, Policies & Procedures, Merit Review, Interdisciplinary Research, Transformative Research, and About Funding. The main content area features a large image of a textured surface with a dark overlay containing the text 'Understanding Bacterial Crowdsourcing' and a 'FULL STORY' button. Below this, a dark blue bar contains the categories 'Advancing the Sciences', 'Funding & Supporting', and 'Inspiring & Educating', with a 'HIDE' button on the right. The lower section displays a grid of six article thumbnails with their respective titles and dates: 'VIMS Researchers Unravel Life Cycle of Blue-crab Parasite' (October 4, 2012), 'A Mammal Lung, In 3-D' (October 2, 2012), 'Home-based Assessment Tool for Dementia Screening' (October 2, 2012), 'URI Scientists: Marine Plants Can Flee to Avoid Predators' (October 1, 2012), 'White Shark Diets Vary With Age and', and 'Disappearing Act'.

FIND FUNDING OPPORTUNITIES

Are squiggly lines the future of password security?
June 2, 2014

New Understanding the Brain Website features funding opportunities, research areas
April 2, 2014

NSF Funding & Research Community

SPECIAL NOTICES

NSF Strategic Plan for FY 2014-2018

New NSF Proposal & Award Policies and Procedures Guide Issued, Effective for Proposals Submitted or Due On or After February 24, 2014

NSF Information Related to the American Recovery and Reinvestment Act of 2009

EVENT CALENDAR

- 17 JUN** NSF ADVANCE Program New Solicitation Webinars
WEBCAST
- 19 JUN** CDL - The Future of Computing - Mediated Research and Innovation
WEBCAST
- 19 JUN** The Future of Computing - Mediated Research and Innovation

FUNDING OPPORTUNITIES

Search Funding Opportunities

Enter search term

Search 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 WEBSITE ORGANIZATION

The screenshot shows the NSF website homepage with a blue header containing the NSF logo and the text "National Science Foundation". A "QUICK LINKS" button is in the top right. The main content area is divided into five sections:

- Research Areas** (green gear icon):
 - Biological Sciences
 - Computer & Information Science & Engineering
 - Cyberinfrastructure
 - Education and Human Resources
 - Engineering
 - Environmental Research & Education
 - Geosciences
 - Integrative Activities
 - International Science & Engineering
 - Mathematical & Physical Sciences
 - Polar Programs
 - Social, Behavioral & Economic Sciences
- Funding & Awards** (blue star icon):
 - FUNDING INFO**
 - Search Funding Opportunities
 - Browse Funding Opportunities A-Z
 - Recent Funding Opportunities
 - How to Prepare a Funding Proposal
 - Grant Proposal Guide
 - Submit a Proposal to FastLane
 - AWARD INFO**
 - Managing Awards
 - Award & Administration Guide
 - Search Awards
 - Award Statistics (Budget Internet Info System)
- Contact Us** (green speech bubble icon):
 - Staff Directory
 - Organization List
 - Visit NSF
 - Work at NSF
 - Do Business with NSF
 - Press
 - Inspector General Hotline
 - How Do I ...?
 - The National Science Foundation**
4201 Wilson Boulevard, Arlington,
Virginia 22230, USA
 - Tel: (703) 292-5111
 - FIRS: (800) 677-8339
 - TDD: (800) 281-8749
- Learning Resources** (red computer monitor icon):
 - Film, TV, Exhibits & More!
 - Slideshows & Photo Galleries
 - Classroom Resources
 - Funding for Research on Learning in Formal & Informal Settings
- News & Discoveries** (orange envelope icon):
 - Recent News
 - Recent Discoveries
 - Multimedia Gallery
 - Special Reports

The bottom right of the page features a photograph of a modern, multi-story glass building and a large, faint NSF logo watermark.

NSF AWARD SEARCH

The screenshot shows the NSF Award Search homepage. At the top left is the NSF logo with the text "National Science Foundation WHERE DISCOVERIES BEGIN". To the right is a "QUICK LINKS" dropdown menu and a search bar. Below this is a dark navigation bar with links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT NSF, and FASTLANE. Underneath is a secondary menu with "Simple Search", "Advanced Search", "Popular Searches", "Download Awards", "Send Comments", and "Award Search Help". The main content area is titled "Awards Simple Search" and features a "NEW" badge next to a link "See What's New in the New Award Search". 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'." and there are checkboxes for "Active Awards" (checked) and "Expired Awards". At the bottom, there is another navigation bar with the same links as above, followed by a footer with various links like "Research.gov", "USA.gov", "National Science Board", "Recovery Act", "Budget and Performance", "Web Policies and Important Links", "Privacy", "FOIA", "NO FEAR Act", "Inspector General", and "Webmas". The NSF logo is also present in the footer.

OTHER WAYS TO FIND FUNDING

Use Grants.gov's search feature

The screenshot shows the Grants.gov homepage. At the top, there are navigation links for CONTACT US, MANAGE SUBSCRIPTIONS, REGISTER, and LOGIN. A search bar is present with a dropdown menu set to 'Grant Opportunities' and a 'GO' button. Below the search bar is a main 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 background image of the Washington Monument. It includes a search box and a 'Search Grant Opportunities' button. Below this is a section titled 'Find Open Grant Opportunities' with four tabs: NEWEST OPPORTUNITIES, BROWSE CATEGORIES, BROWSE AGENCIES, and BROWSE ELIGIBILITIES. A table of grant opportunities is displayed below the 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

On the right side of the page, there are two informational boxes. The first is titled 'Grants.gov Updates:' and contains a yellow warning box about a scheduled maintenance outage on June 21-23, 2014. Below this is a link to the Grants.gov Calendar and Blog. The second box is titled 'Did You Know?' and contains two lightbulb icons with text about new features and SAM verification requirements.

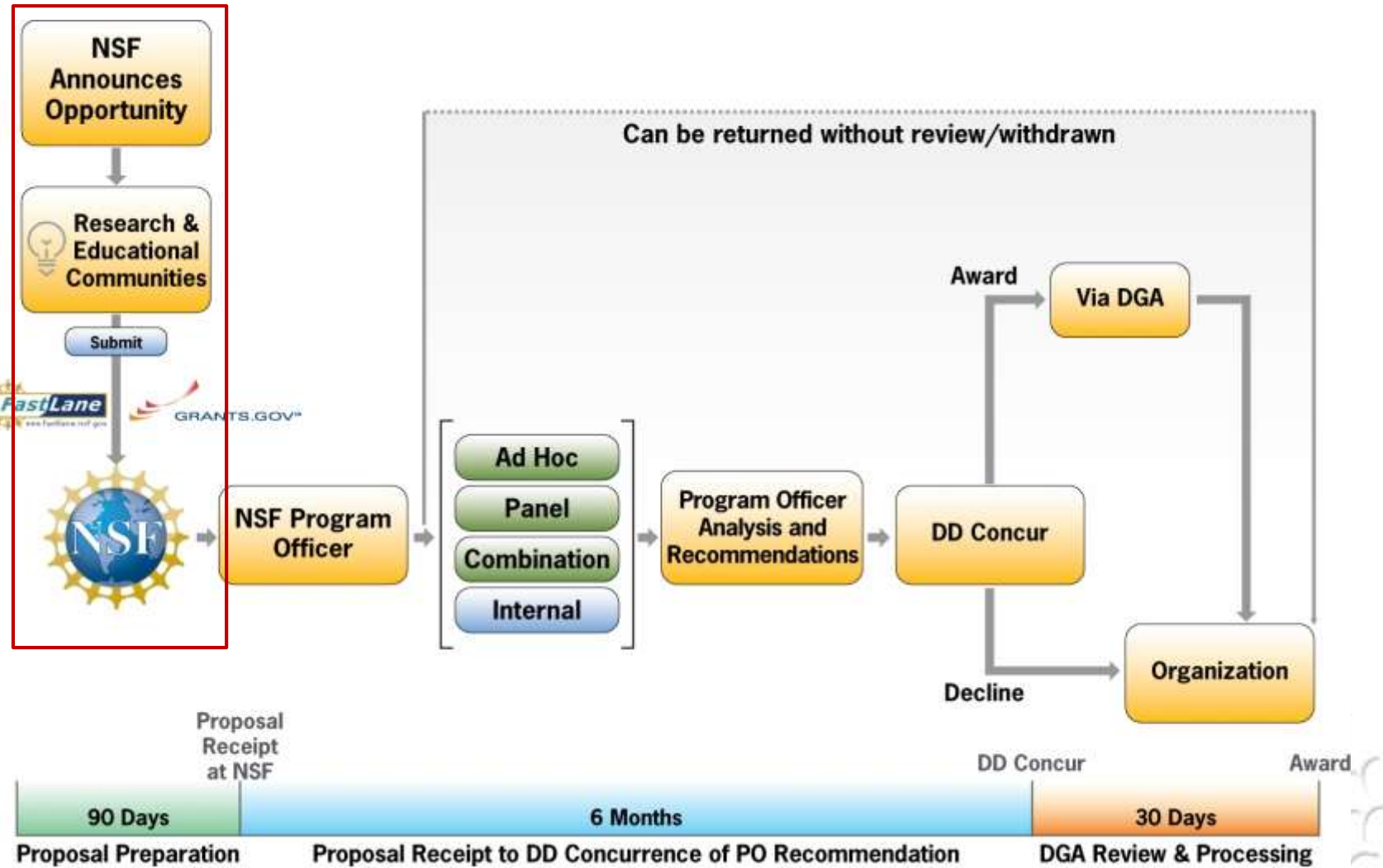




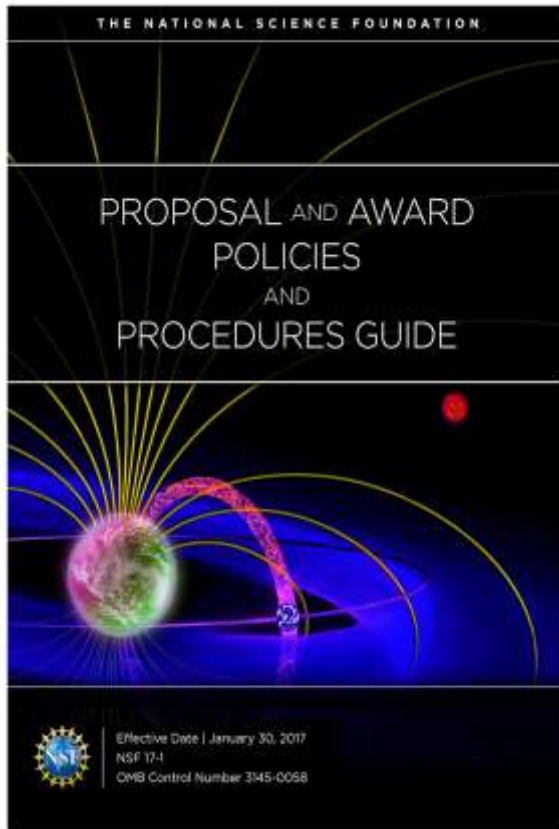
PROPOSAL PREPARATION



NSF PROPOSAL & AWARD PROCESS TIMELINE



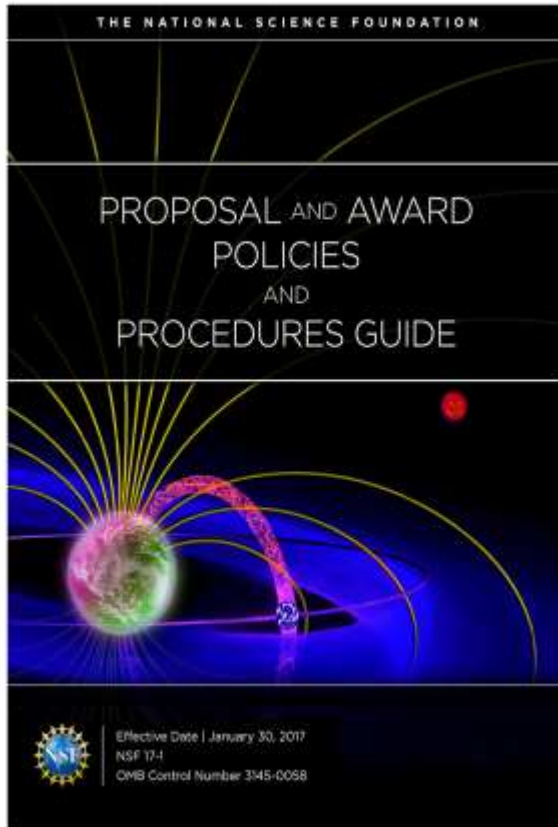
WHAT IS THE PROPOSAL & AWARD POLICIES & PROCEDURES GUIDE?



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



WHAT IS THE PROPOSAL & AWARD POLICIES & PROCEDURES GUIDE?



- Provides guidance for preparation and submission of proposals to NSF
- Describes process – and criteria – by which proposals will be reviewed
- Outlines reasons why a proposal may not be accepted or returned without review
- Describes process for withdrawals, returns, and declinations
- Includes policies to guide, manage, and monitor the award and administration of grants and cooperative agreements

TYPES OF FUNDING OPPORTUNITIES

Funding Opportunities

Program Descriptions

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

Program Announcements

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

Program Solicitations

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

Dear Colleague Letters

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



TYPES OF NSF PROPOSALS

- Research
- RAPID & EAGER
- RAISE
- GOALI
- Ideas Lab
- FASED
- Conferences
- Equipment
- Travel
- Facility/Center
- Fellowships



WHAT TO LOOK FOR IN A PROGRAM ANNOUNCEMENT



SAMPLE COVER PAGE OF A SOLICITATION

Antarctic Research

PROGRAM SOLICITATION

NSF 17-543

REPLACES DOCUMENT(S):

NSF 16-541



National Science Foundation

Directorate for Geosciences
Division of Polar Programs

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

May 23, 2017



SAMPLE COVER PAGE OF A SOLICITATION

Number of awards funded by the program per year

Funds available to the program per year

Award Information

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 50

Anticipated Funding Amount: \$55,000,000

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



SAMPLE COVER PAGE OF A SOLICITATION

Eligibility information for Organizations/PIs

Eligibility Information

Who May Submit Proposals:

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

Who May Serve as PI:

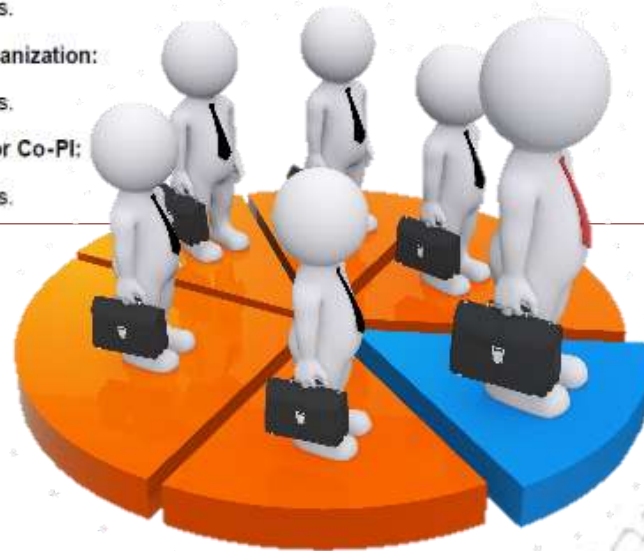
There are no restrictions or limits.

Limit on Number of Proposals per Organization:

There are no restrictions or limits.

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

There are no restrictions or limits.



TYPES OF DUE DATES



NO DEADLINES

Proposals may be submitted at any time

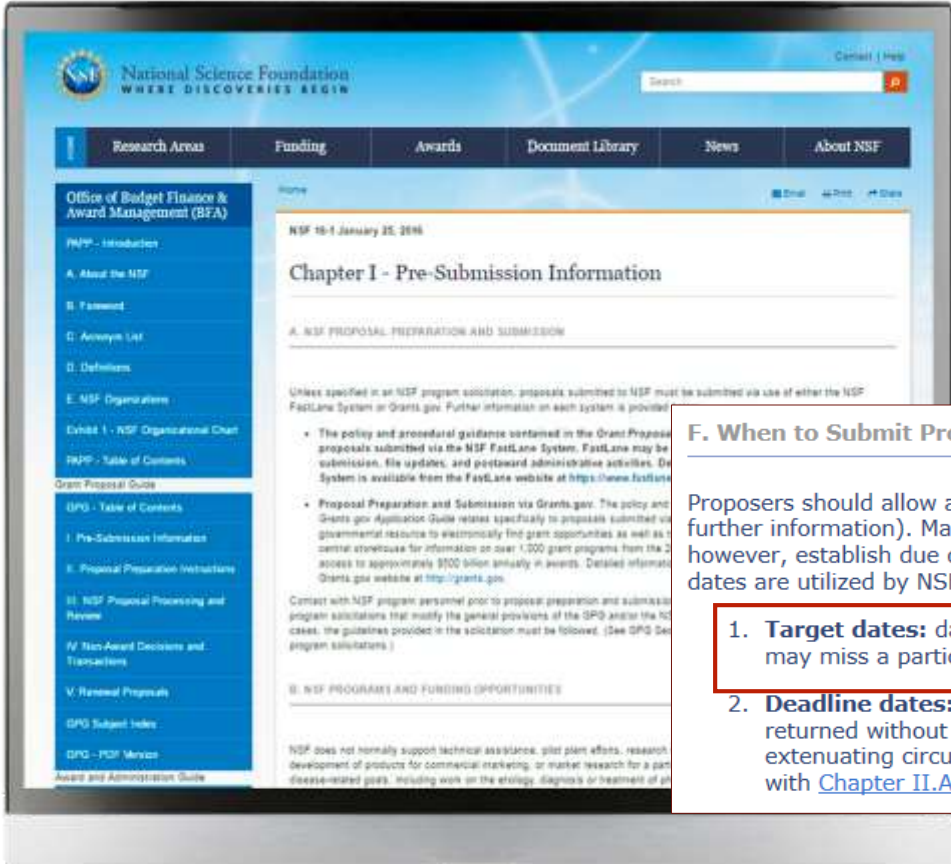
F. When to Submit Proposals

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 DUE DATES (CONT'D) PROPOSAL SUBMISSIONS



TARGET DATES

Talk to the program office if you think you might miss the date

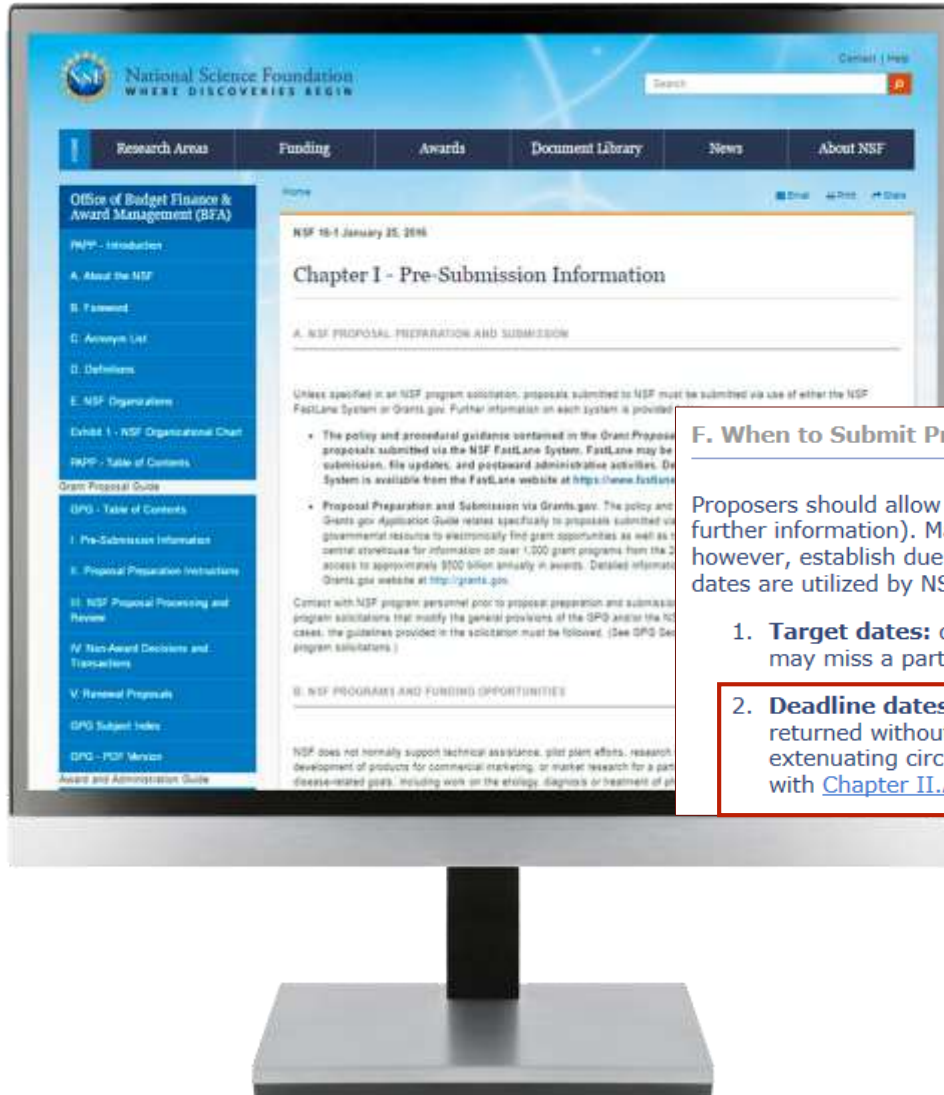
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TYPES OF DUE DATES (CONT'D)



DEADLINE DATES

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

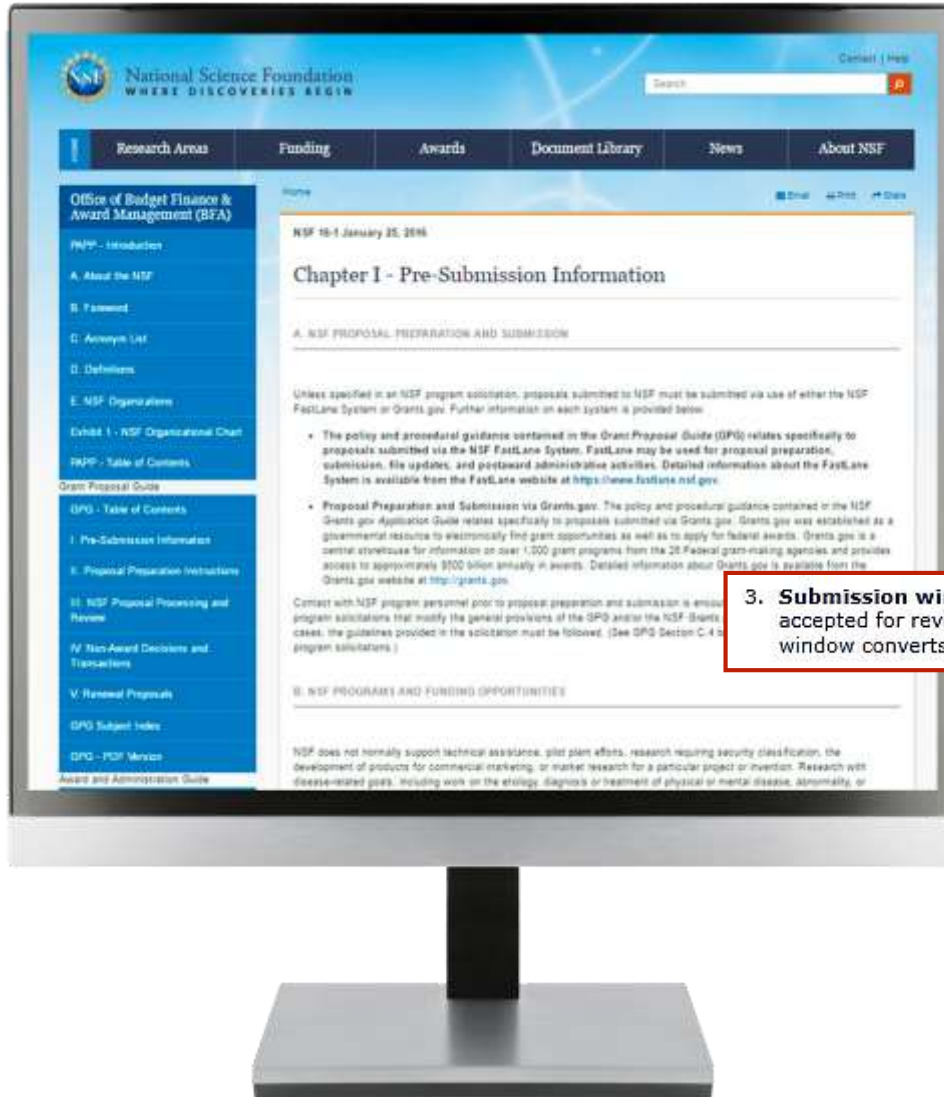
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TYPES OF DUE DATES (CONT'D)



SUBMISSION WINDOWS

Proposals will not be accepted after this date and time (5pm 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

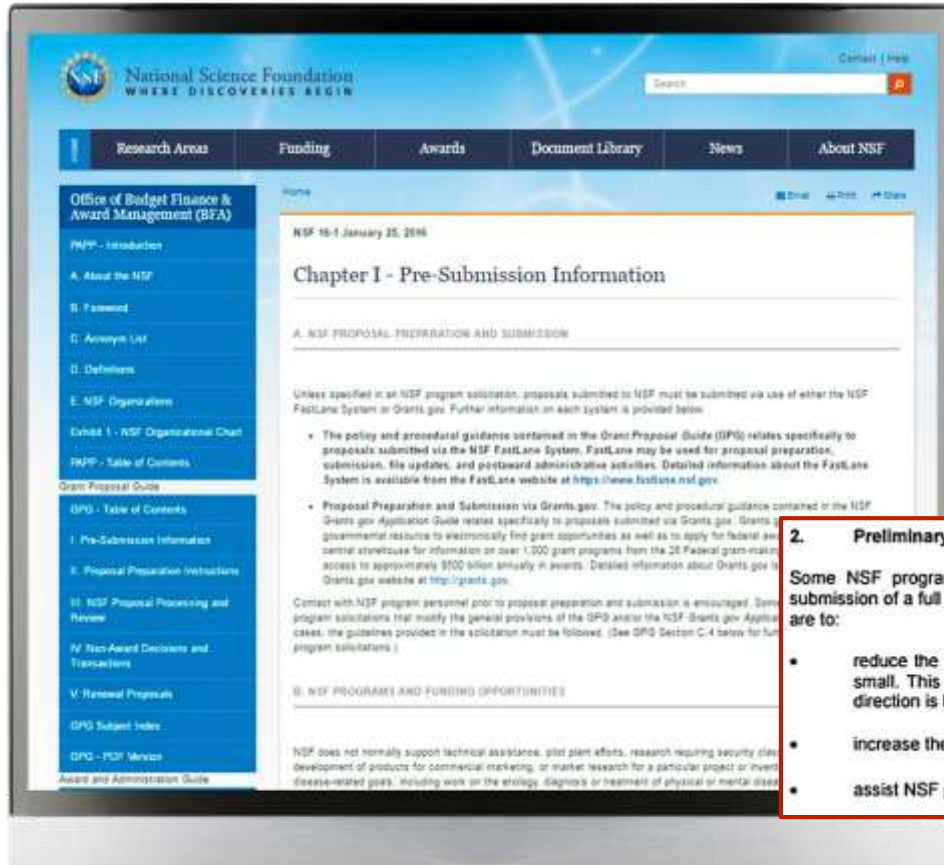
1. Letters of Intent

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.



PROPOSALS NOT ACCEPTED - RESEARCH



- Proposals that do not contain the following required sections may not be accepted by FastLane:
 - 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)



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
 - Collaborators and Other Affiliations Information



SECTIONS OF AN NSF RESEARCH PROPOSAL

Cover Sheet (Required)
 Many of the boxes on the cover sheet are electronically pre-filled as part of the Fastlane login process.

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION					
PROGRAM ANNOUNCEMENT/SOLICITATION NO./DUE DATE NSF 16-509			<input checked="" 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.) DEB - Long-Term Ecological Research					
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	DUNS# (Data Universal Numbering System) 0748118034567	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 National Science Foundation 4201 Wilson Boulevard Arlington, VA. 222301000		
AWARDEE ORGANIZATION CODE (IF KNOWN) 4102852000					
NAME OF PRIMARY PLACE OF PERF ProdValid			ADDRESS OF PRIMARY PLACE OF PERF, INCLUDING 9 DIGIT ZIP CODE ProdValid AA.		
IS AWARDEE ORGANIZATION (Check All That Apply) (See GPG II.C For Definitions)					
<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"/> THEN CHECK HERE		<input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL	
TITLE OF PROPOSED PROJECT SE ProdValid Jenkins Test					
REQUESTED AMOUNT \$ 4,444	PROPOSED DURATION (1-60 MONTHS) 24 months	REQUESTED STARTING DATE 12/12/16	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE		
THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.G.2)			<input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.7) Human Subjects Assurance Number _____		
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C.1.e)			Exemption Subsection _____, or IRB App. Date _____		
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG I.D., II.C.1.d)			<input type="checkbox"/> INTERNATIONAL ACTIVITIES: COUNTRY/COUNTRIES INVOLVED (GPG II.C.2.j)		
<input type="checkbox"/> HISTORIC PLACES (GPG II.C.2.j)					
<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date _____			<input checked="" type="checkbox"/> COLLABORATIVE STATUS		
PHS Animal Welfare Assurance Number _____			Not a collaborative proposal		
<input checked="" type="checkbox"/> FUNDING MECHANISM Research - other than RAPID or EAGER					

Example from FastLane



SECTIONS OF AN NSF RESEARCH PROPOSAL

Project Summary *(Required)*

Text boxes must contain an Overview and Statements on Intellectual Merit and Broader Impacts.

Proposals that do not separately address the Overview and both Merit Review criteria in text boxes will not be accepted by FastLane.

Project summaries with special characters must be uploaded as a PDF document.

b. Project Summary

Each proposal must contain a summary of the proposed project not more than one page in length. The Project Summary consists of an overview, a statement on the intellectual merit of the proposed activity, and a statement on the broader impacts of the proposed activity.

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

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

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

c. Table of Contents

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

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.

Text from the PAPPG

SECTIONS OF AN NSF RESEARCH 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 RESEARCH 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 RESEARCH PROPOSAL

Biographical Sketches *(Required)*

Biographical sketches are required for all senior project personnel and must not exceed two pages in length, per individual.

f. Biographical Sketch(es)

(i) Senior Personnel

A biographical sketch (limited to two pages) is required for each individual identified as senior personnel. (See Exhibit II-7 for the definitions of Senior Personnel.) Proposers may elect to use third-party solutions, such as NIH's SciENCv to develop and maintain their biographical sketch. However, proposers are advised that they are still responsible for ensuring that biographical sketches created using third-party solutions are compliant with NSF proposal preparation requirements.

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

Do not submit any personal information in the biographical sketch. This includes items such as: home address; home telephone, fax, or cell phone numbers; home e-mail address; driver's license number; marital status; personal hobbies; and the like. Such personal information is not appropriate for the biographical sketch and is not relevant to the merits of the proposal. NSF is not responsible or in any way liable for the release of such material. (See also Chapter III.H.)

(a) Professional Preparation

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

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

(b) Appointments

A list, in reverse chronological order, of all the individual's academic/professional appointments beginning with the current appointment.

(c) Products

A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of ten will be used in the review of the proposal.

Each product must include full citation information including (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website and URL, or other Persistent Identifier.

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

(d) Synergistic Activities

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

Text from the PAPPG

SECTIONS OF AN NSF RESEARCH PROPOSAL

Budget (Required)

Each proposal must contain a budget for each year of support requested. The budget justification should be no more than three pages for all years of the project combined.

Proposals containing subaward(s) must include a separate budget justification of no more than three pages for each subaward.

SUMMARY PROPOSAL BUDGET		YEAR 1		FOR NSF USE ONLY	
ORGANIZATION		PROPOSAL NO.	ESTIMATION (years)		
NSF			Proposed	Continued	
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR		AWARDED:			
Terry Deane					
A. STAFF PERSONNEL, POST-DOCS, Faculty, and Other Senior Associates (Do not include salaries, A.T. (leave number in column))		EST. SALARY	EST. BENEFITS	EST. TOTAL	EST. TOTAL
1. Terry Deane - base		0.00	0.00	0.00	480,000.00
2.					
3.					
4.					
5.					
B. 1. <input type="checkbox"/> OTHERS LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE		0.00	0.00	0.00	0.00
2. <input type="checkbox"/> TOTAL SENIOR PERSONNEL (A + B)		0.00	0.00	0.00	480,000.00
C. OTHER PERSONNEL (DO NOT INCLUDE SALARIES)					
1. <input type="checkbox"/> POST-DOCTORAL SCHOLARS		0.00	0.00	0.00	0.00
2. <input type="checkbox"/> OTHER PROFESSIONALS (TECHNICAL PROGRAMMER, ETC.)		0.00	0.00	0.00	0.00
3. <input type="checkbox"/> GRADUATE STUDENTS					0.00
4. <input type="checkbox"/> UNDERGRADUATE STUDENTS					0.00
5. <input type="checkbox"/> DIRECT TARIFFS - GENERAL OF CHARGED (FREIGHT)					0.00
6. <input type="checkbox"/> OTHER					0.00
TOTAL SALARIES AND WAGES (A + B)					480,000.00
D. FRINGE BENEFITS (IF CHARGED) AS DIRECT COSTS					0.00
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + D)					480,000.00
E. EQUIPMENT & IT FEE AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$1,000					
TOTAL EQUIPMENT					0.00
F. TRAVEL 1. DOMESTIC (INCL. CHANGE, MEALS AND U.S. POSSESSIONS)					0.00
2. FOREIGN					0.00
G. PARTICIPANT SUPPORT COSTS					
1. TRAVEL	\$				0.00
2. TRAVEL	\$				0.00
3. SUBSISTENCE	\$				0.00
4. OTHER	\$				0.00
TOTAL NUMBER OF PARTICIPANTS 1. \$1					0.00
TOTAL PARTICIPANT COSTS					0.00
H. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES	\$				0.00
2. PUBLICATION COSTS (EXCLUDING CONSULTATION)	\$				0.00
3. CONSULTANT SERVICES	\$				0.00
4. COMPUTER SERVICES	\$				0.00
5. SUBAWARD	\$				0.00
6. OTHER	\$				0.00
TOTAL OTHER DIRECT COSTS					0.00
I. TOTAL DIRECT COSTS (B THROUGH H)					480,000.00
J. INDIRECT COSTS (FUND POLICY RATE AND BASE)					
(Rate: Base:)					
TOTAL INDIRECT COSTS (JAY)					0.00
K. TOTAL DIRECT AND INDIRECT COSTS (I + J)					480,000.00
L. RESIDUAL FUNDS					0.00
M. AMOUNT OF THIS REQUEST (L OR (K) MAJOR)					480,000.00
N. COST SHARING (PREPROPOSED LEVEL) \$					
O. AGREED LEVEL \$ (EFFORTS) \$					
PI/PS NAME		FOR NSF USE ONLY			
Terry Deane		INDIRECT COST RATE VERIFICATION			
UNIV. PI/PS NAME		Date (Month)		Date of Rate Change	
Terry Deane					

1. ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Text from FastLane

BUDGETARY GUIDELINES

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

Amounts should be:

- Realistic and reasonable
- Well-justified and should establish need
- Consistent with program guidelines

Eligible costs consist of:

- Personnel
- Equipment
- Travel
- Participant support
- Other direct costs (e.g., sub-awards, consultant services, computer services, and publications costs)



NSF COST SHARING POLICY



- Inclusion of voluntary committed cost sharing is prohibited in solicited & unsolicited proposals.
 - To be considered voluntary committed cost sharing, the cost sharing must meet all of the standards of 2 CFR § 215.23, to include identification of cost sharing on the NSF budget.
 - Line M will be “grayed out” in FastLane.
- Organizations may, at their own discretion, continue to contribute any amount of voluntary uncommitted cost sharing to NSF-sponsored projects.



SECTIONS OF AN NSF RESEARCH 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

Instructions: Upload an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded. Describe only those resources that are directly applicable. The description should be narrative in nature and must not include any quantifiable financial information. If there are no Facilities, Equipment, or Other Resources identified, a statement to that effect should be indicated in this section and uploaded into FastLane. See PAPPG II.C.2.i for more information.

Upload File



SECTIONS OF AN NSF RESEARCH 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.

Current and Pending Support (See PAPPG Section II.C.2.h for guidance on information to include on this form.)			
<small>The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.</small>			
Investigator:	Other agencies (including NSF) to which this proposal has been/will be submitted:		
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	Project/Proposal Title:		
Source of Support:	Total Award Amount: \$	Total Award Period Covered:	
Location of Project:	Person-Months Per Year Committed to the Project.	Cal:	Acad: Sumr:
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	Project/Proposal Title:		
Source of Support:	Total Award Amount: \$	Total Award Period Covered:	
Location of Project:	Person-Months Per Year Committed to the Project.	Cal:	Acad: Sumr:
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	Project/Proposal Title:		
Source of Support:	Total Award Amount: \$	Total Award Period Covered:	
Location of Project:	Person-Months Per Year Committed to the Project.	Cal:	Acad: Sumr:
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	Project/Proposal Title:		
Source of Support:	Total Award Amount: \$	Total Award Period Covered:	
Location of Project:	Person-Months Per Year Committed to the Project.	Cal:	Acad: Sumr:
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	Project/Proposal Title:		
Source of Support:	Total Award Amount: \$	Total Award Period Covered:	
Location of Project:	Person-Months Per Year Committed to the Project.	Cal:	Acad: Sumr:
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	Project/Proposal Title:		
Source of Support:	Total Award Amount: \$	Total Award Period Covered:	
Location of Project:	Person-Months Per Year Committed to the Project.	Cal:	Acad: Sumr:

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Page G-0 USE ADDITIONAL SHEETS AS NECESSARY

Example from FastLane

SECTIONS OF AN NSF RESEARCH PROPOSAL

Special Information and Supplementary Documentation

This segment should alert NSF officials to unusual circumstances that require special handling; more information can be found in the PAPPG, Chapter II.C.2.j.

j. Special Information and Supplementary Documentation

Except as specified below, special information and supplementary documentation must be included as part of the Project Description (or part of the budget justification), if it is relevant to determining the quality of the proposed work. Information submitted in the following areas is not considered part of the 15-page Project Description limitation. This Special Information and Supplementary Documentation section also is not considered an appendix. Specific guidance on the need for additional documentation may be obtained from the organization's SPO or in the references cited below.

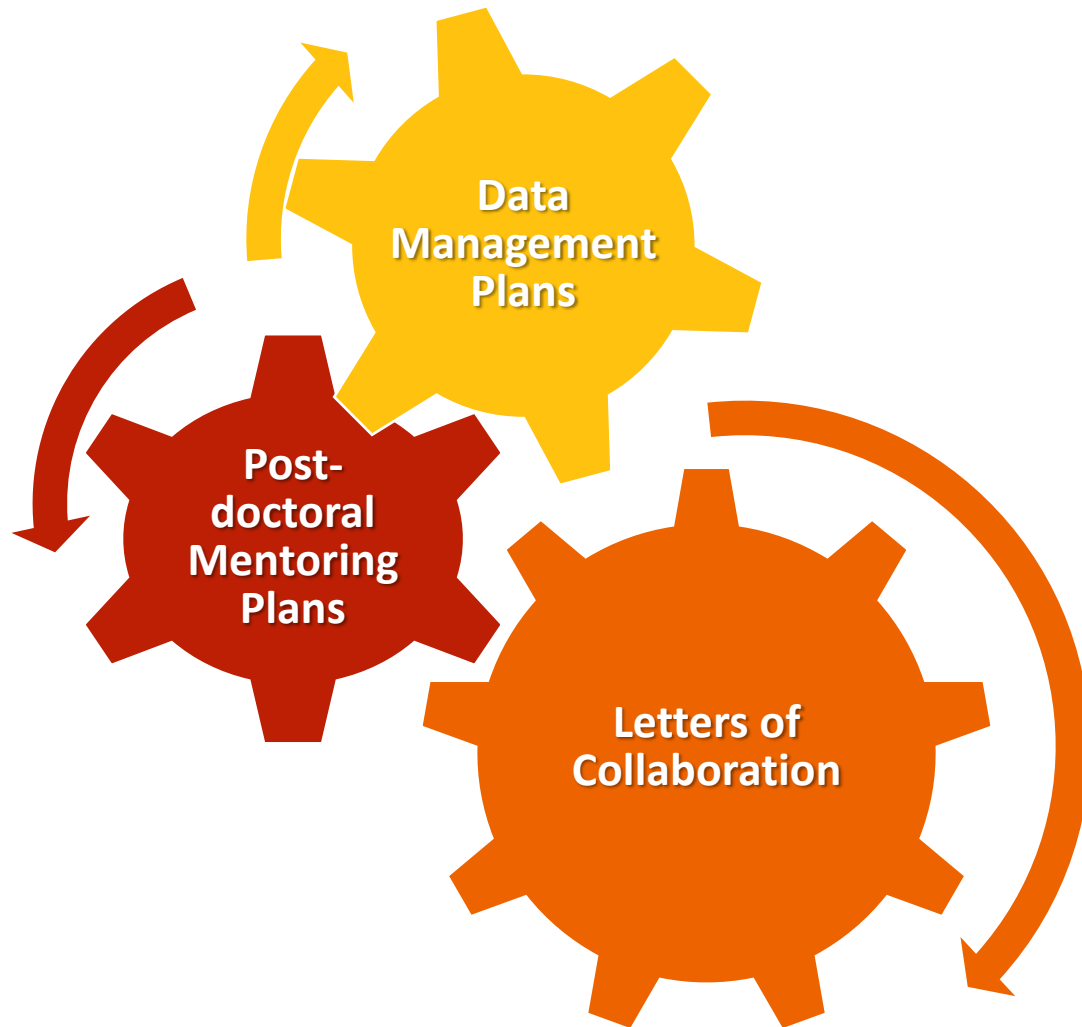
- Postdoctoral Researcher Mentoring Plan. Each proposal²⁶ that requests funding to support **postdoctoral researchers**²⁷ must upload under "Mentoring Plan" in the supplementary documentation section of FastLane, a description of the mentoring activities that will be provided for such individuals. In no more than one page, the mentoring plan must describe the mentoring that will be provided to all postdoctoral researchers supported by the project, regardless of whether they reside at the submitting organization, any subrecipient organization, or at any organization participating in a simultaneously submitted collaborative proposal. Proposers are advised that the mentoring plan must not be used to circumvent the 15-page Project Description limitation. See [Chapter II.D.5](#) for additional information on collaborative proposals. Mentoring activities provided to postdoctoral researchers supported on the project will be evaluated under the Broader Impacts review criterion.

Examples of mentoring activities include, but are not limited to: career counseling; training in preparation of grant proposals, publications and presentations; guidance on ways to improve teaching and mentoring skills; guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas; and training in responsible professional practices.

- Plans for data management and sharing of the products of research. Proposals must include a document of no more than two pages uploaded under "Data Management Plan" in the supplementary documentation section of FastLane. This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results (see [Chapter XI.D.4](#)), and may include:
 1. the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
 2. the standards to be used for data and metadata format and content (where

Text from the PAPPG

SPECIAL INFORMATION AND SUPPLEMENTARY DOCUMENTATION



MENTORING FOR POSTDOCTORAL RESEARCHERS

- Proposals that include funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals.
- Proposed mentoring activities will be evaluated as part of the merit review process, under NSF's Broader Impacts merit review criterion.



MENTORING FOR POSTDOCTORAL RESEARCHERS

- Proposals that identify a postdoc on the budget but do not include a maximum one-page mentoring plan as a supplementary document will be prevented from submission in FastLane.
- For collaborative proposals, the lead organization must submit a mentoring plan for all postdoctoral researchers supported under the entire collaborative project.



MENTORING FOR POSTDOCTORAL RESEARCHERS

- Mentoring activities may include:
 - Providing career counseling, training in the preparation of grant proposals, or training in responsible professional practices
 - Developing publications and presentations
 - Offering guidance on techniques to improve teaching and mentoring skills
 - Providing counseling on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas



DATA MANAGEMENT PLAN REQUIREMENTS

- All proposals are required to include, as a supplementary doc, a Data Management Plan of up to two pages.
- Plan should describe how the proposal will conform to NSF policy on dissemination and sharing of research results.
- A valid Data Management Plan may include only the statement that no detailed plan is needed, as long as a clear justification is provided.
- Plan will be reviewed as part of the Intellectual Merit and/or Broader Impacts of the proposal.



DATA MANAGEMENT PLAN REQUIREMENTS

The screenshot shows the NSF website's navigation menu with options like 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.C.2.) for full policy implementation.
- REQUIREMENTS BY DIRECTORATE, OFFICE, DIVISION, PROGRAM, OR OTHER NSF UNIT**

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

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

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

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

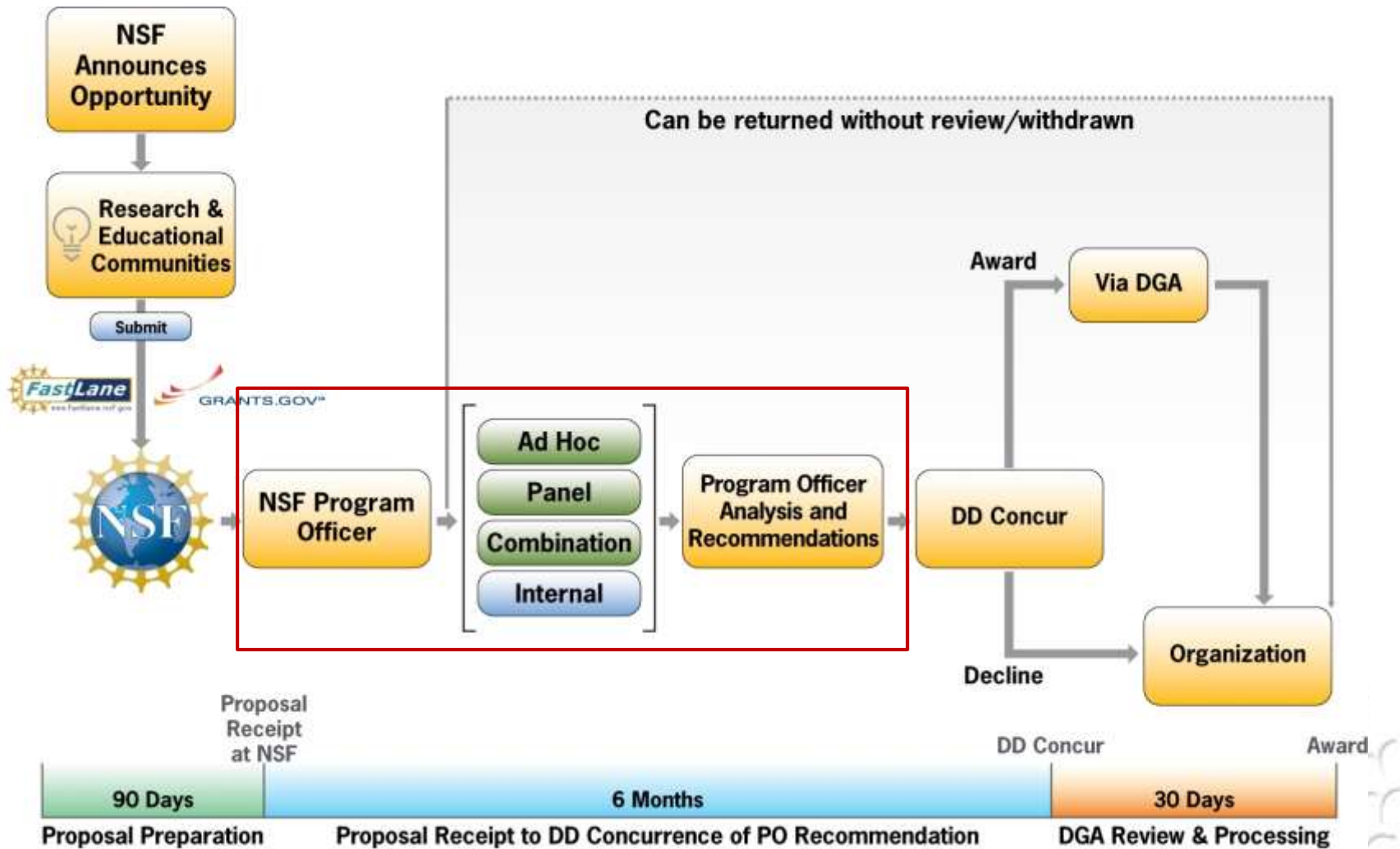




MERIT REVIEW



PROPOSAL REVIEW AND PROCESSING

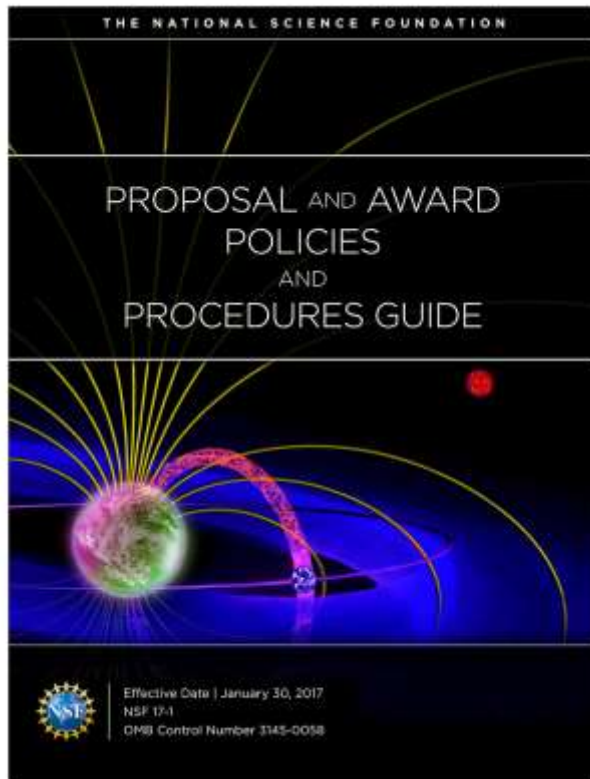


PROGRAM OFFICER REVIEW

- Upon receipt at NSF, proposals are routed to the PI-designated program office.
- NSF staff conducts a preliminary review to ensure they are:
 - Complete;
 - Timely; and
 - Conform to 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 his/her best to transfer it to the most appropriate program for evaluation.



PROPOSAL & AWARD POLICIES & PROCEDURES GUIDE (PAPPG)



- The PAPPG contains detailed guidelines on proposal preparation and a description of the Merit Review Criteria:

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.



PROPOSALS NOT ACCEPTED OR RETURNED WITHOUT REVIEW

If it does not contain all of the required sections, as described in **PAPPG Chapter II.C.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 of the Proposed Work.”
 - Must include results from prior NSF support with start date in the past 5 years.
- Per the PAPPG Data Management Plan Requirement:
 - Must be included as a supplementary document.
- Postdoctoral Researcher Mentoring Requirement (if applicable):
 - Proposals that include postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals.



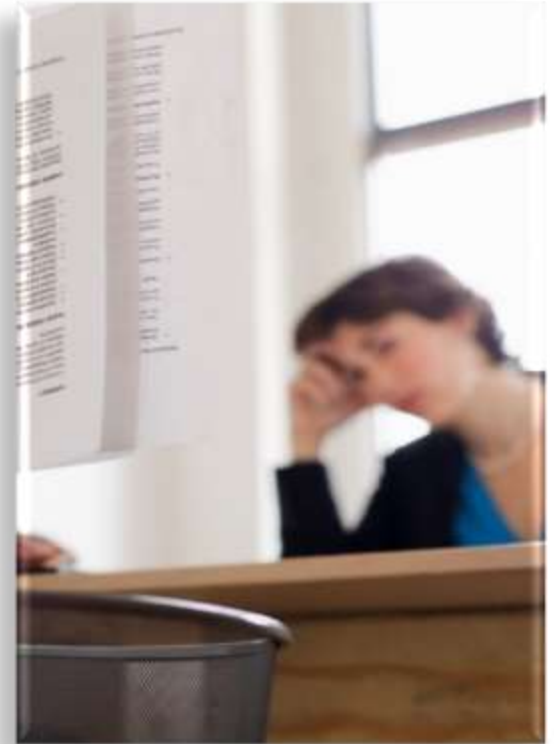
OTHER REASONS FOR RETURN OF PROPOSALS WITHOUT REVIEW

- It is inappropriate for funding by the National Science Foundation.
- 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.



OTHER REASONS FOR RETURN OF PROPOSALS 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 PAPPG or program announcement/solicitation.
- It does not meet an announced proposal deadline date (and time, where specified).
- It was previously reviewed and declined and has not been substantially revised.
- It duplicates another proposal that was already awarded.



REVIEW FORMAT IN FASTLANE

Reviewers provide feedback to NSF based on the Review Criteria and the Review Elements

Review Criteria and Elements are available as reviewers provide feedback

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

1. What is the potential for the proposed activity to
a. advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
b. benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. 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?
4. How well qualified is the individual, team, or institution to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

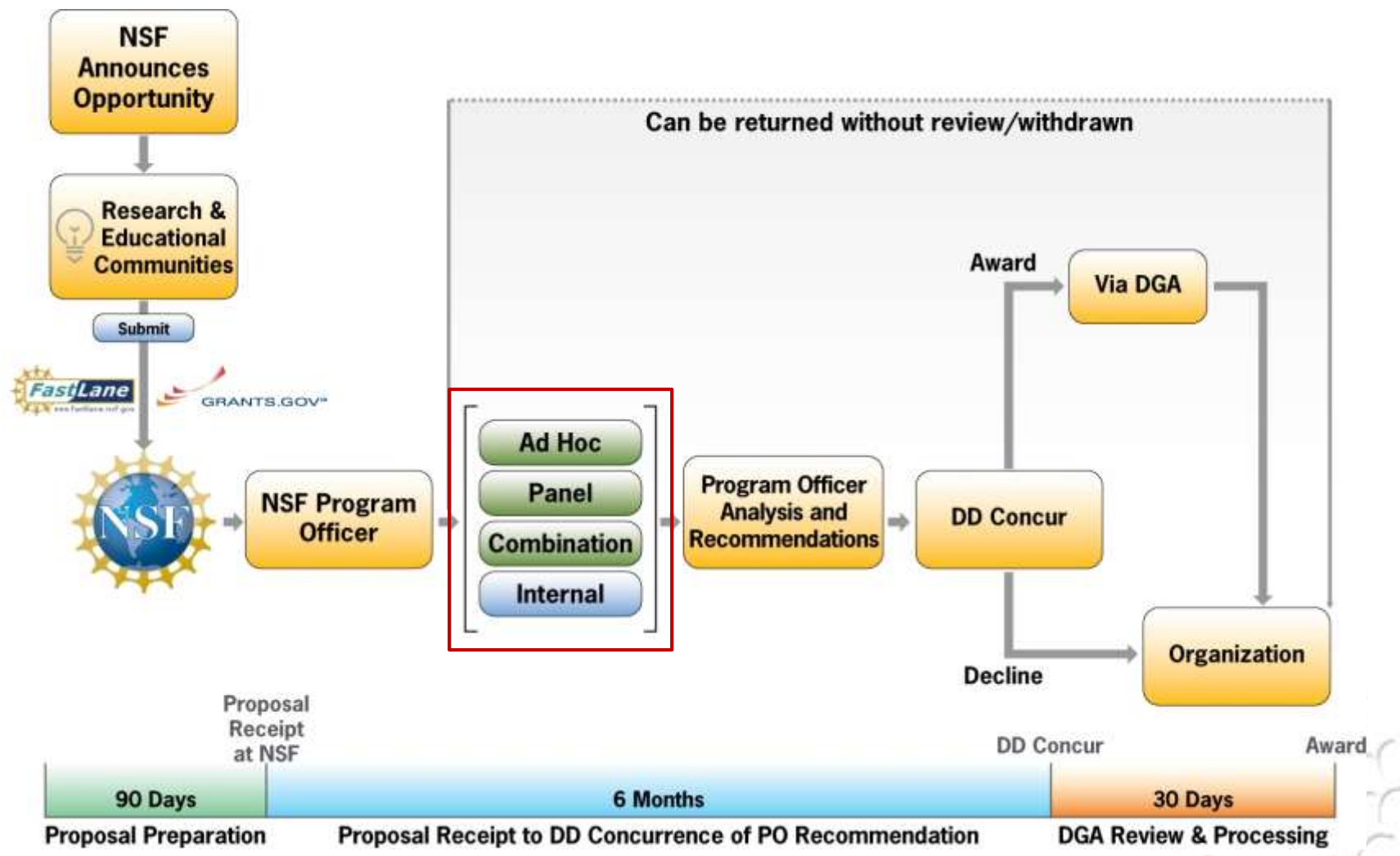
In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to intellectual merit.

In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to broader impacts.

Please evaluate the strengths and weaknesses of the proposal with respect to any additional solicitation-specific review criteria, if applicable.

This are the strengths and weaknesses of the proposal with respect to

PROPOSAL REVIEW AND PROCESSING



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: Face-to-face sessions conducted by reviewers mainly at NSF but also in 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



- Combination: Some proposals may undergo supplemental ad hoc reviews before or after a panel review.
- Internal: Review by NSF Program Officers only
 - Examples of internally reviewed 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)
 - Proposals for conferences under \$50,000



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
- A proposal must have at least three reviews or reviewers



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.



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.



WHAT IS THE ROLE OF THE REVIEW PANEL?



- Discuss the merits of the proposal with the other panelists
- Write a summary based on that discussion
- Provide some indication of the relative merits of different proposals considered



WHY SERVE ON AN NSF PANEL?

- 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



MANAGING CONFLICTS OF INTEREST IN THE REVIEW PROCESS

- The primary purpose is to remove or limit the influence of ties to an applicant organization or investigator that could affect reviewer advice.
- The secondary purpose is to preserve the trust of the scientific community, Congress, and the general public in the integrity, effectiveness, and evenhandedness of NSF's merit review process.



AFFILIATIONS WITH PROPOSER 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

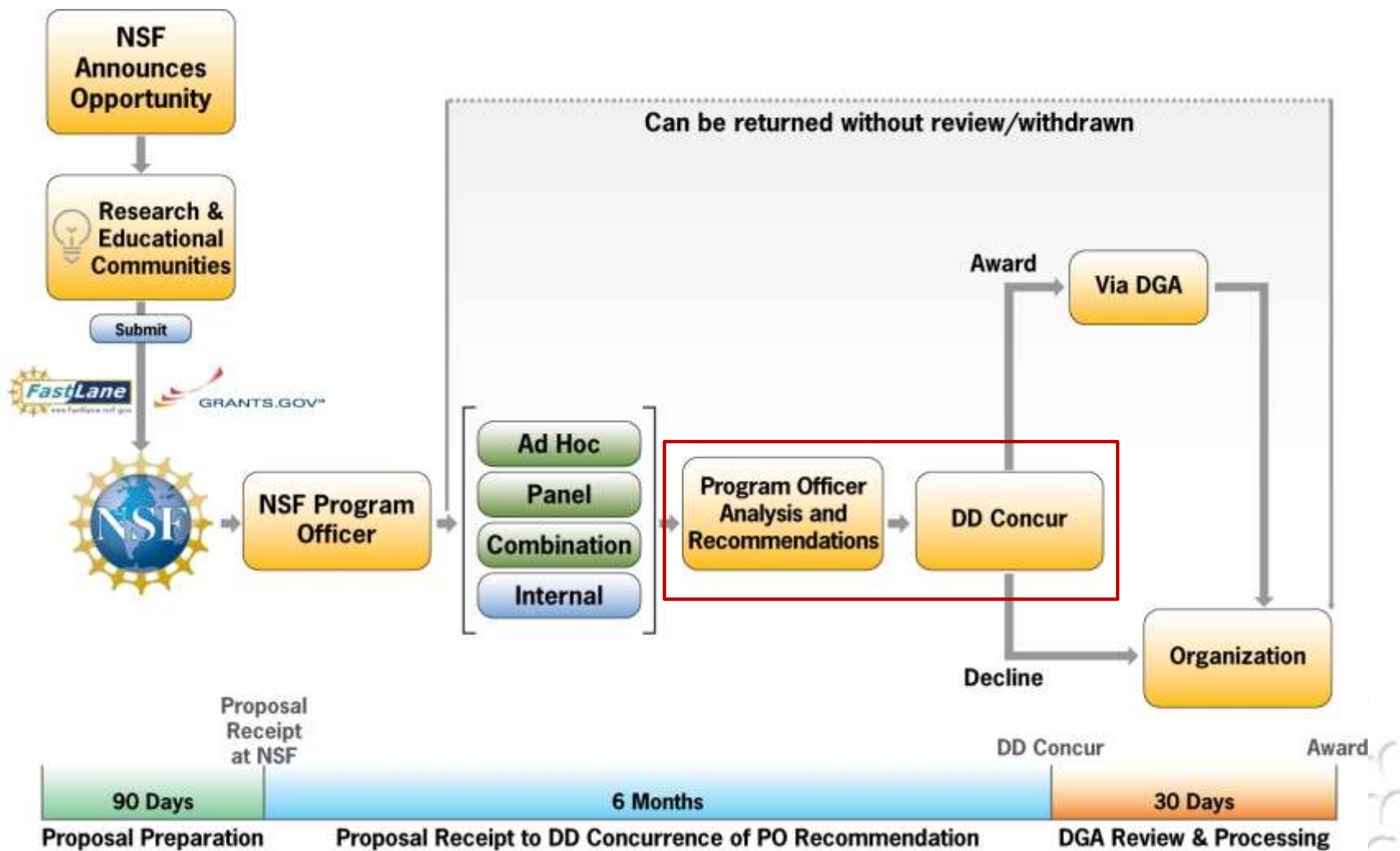


PERSONAL RELATIONSHIPS WITH INVESTIGATOR OR PROJECT DIRECTOR

- 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



PROPOSAL REVIEW AND PROCESSING



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**



DOCUMENTATION FROM MERIT REVIEW

- Verbatim copies of individual reviews, excluding reviewer identities
- Panel Summary or Summaries (if panel review was used)
- Context Statement (usually)
- PO to PI comments (formal or informal, written, email or verbal) as necessary to explain a decision



EXAMPLES OF REASONS FOR DECLINE

- 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 review process and the program officer concurred.
- 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?

Again, if you have questions, contact the cognizant Program Officer.



NSF RECONSIDERATION PROCESS

Explanation from
Program Officer
and/or Division
Director

Written request for
reconsideration to
Assistant Director
within 90 days of
the decision

Request from
organization to
Deputy Director
of NSF

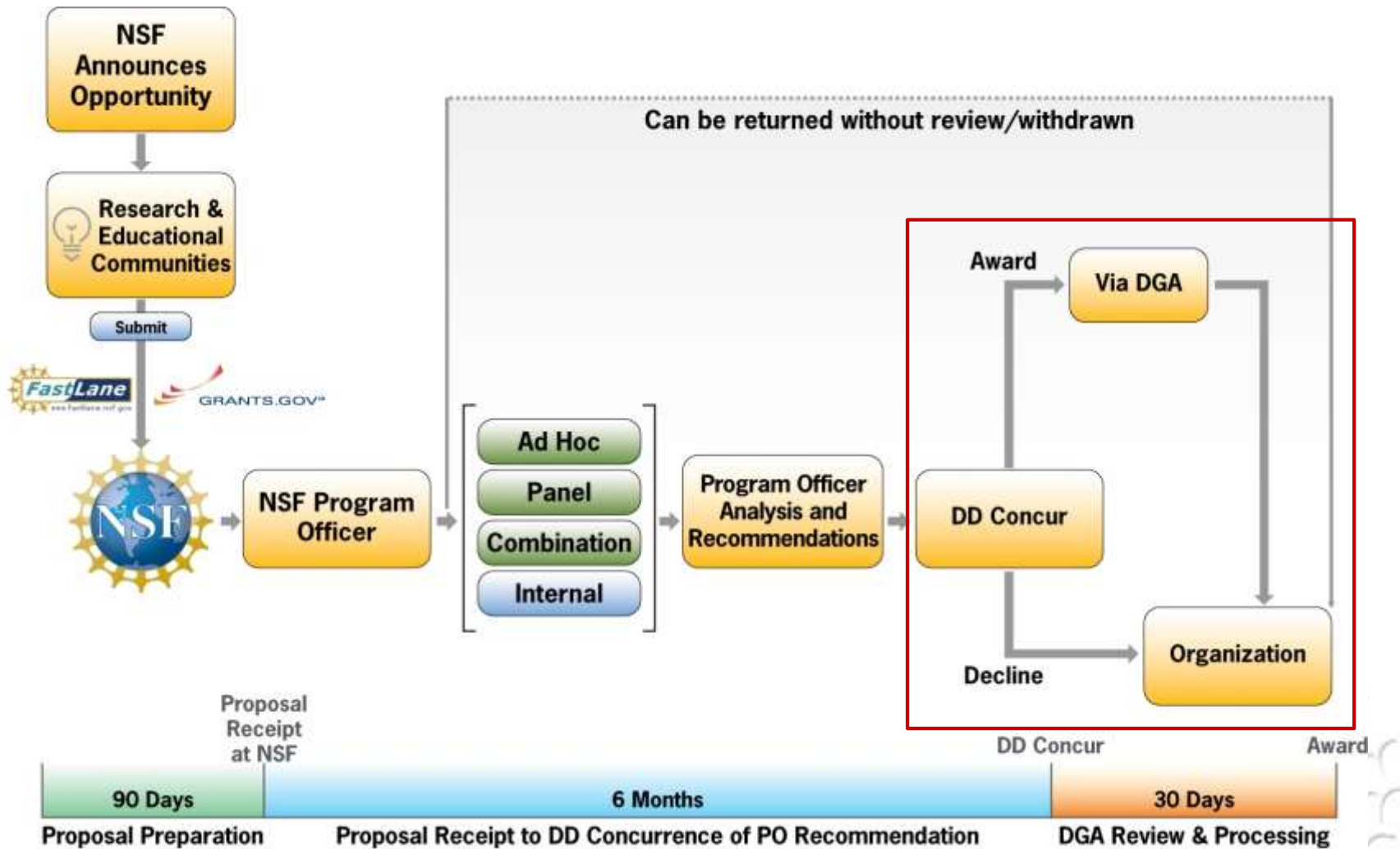


POSSIBLE CONSIDERATIONS FOR FUNDING A COMPETITIVE PROPOSAL

- 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



PROPOSAL REVIEW AND PROCESSING



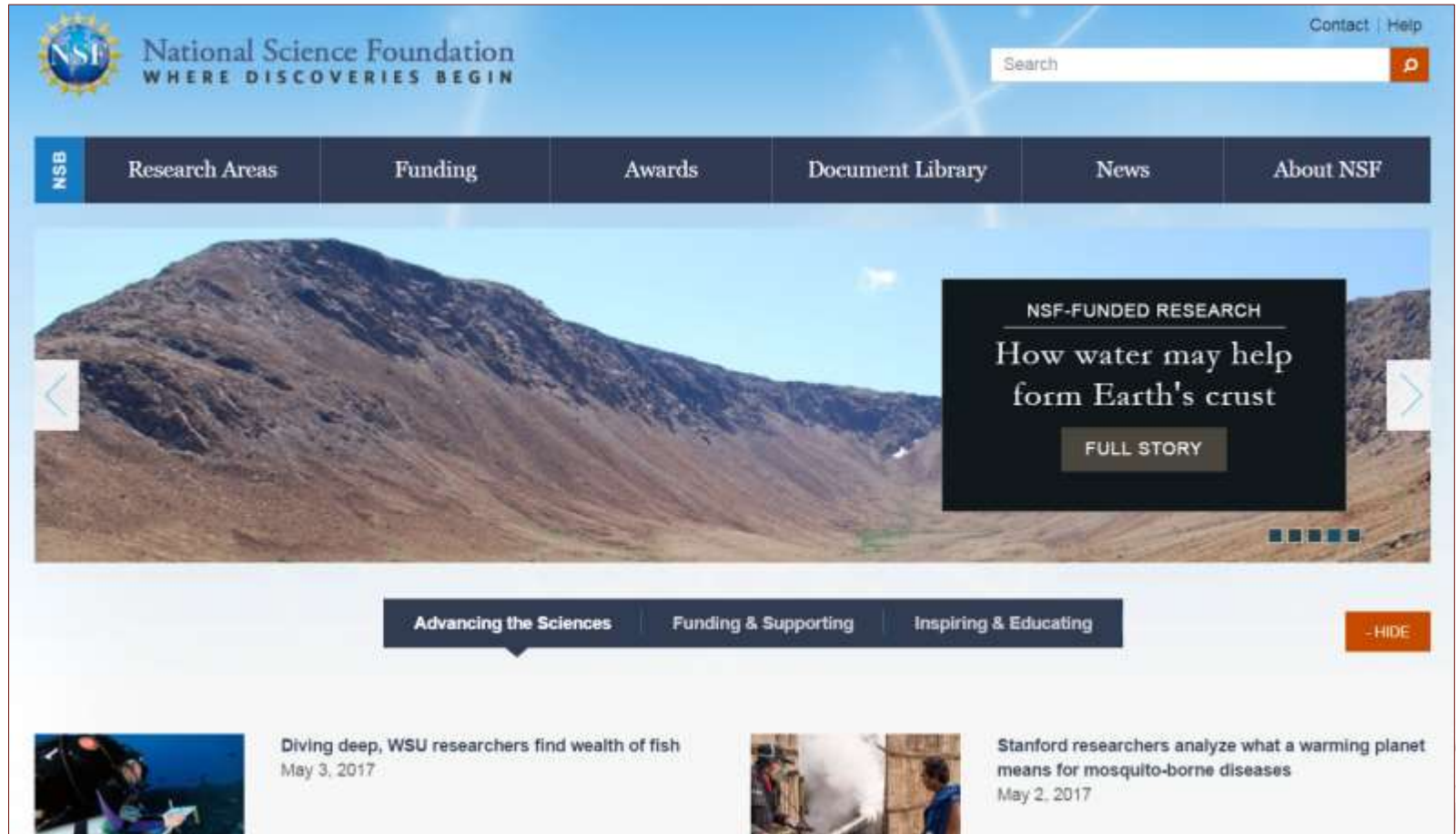
ISSUANCE OF THE AWARD

- 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 organizations 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 organization or the PI.



FOR MORE INFORMATION

Go to NSF's Home Page (www.nsf.gov)

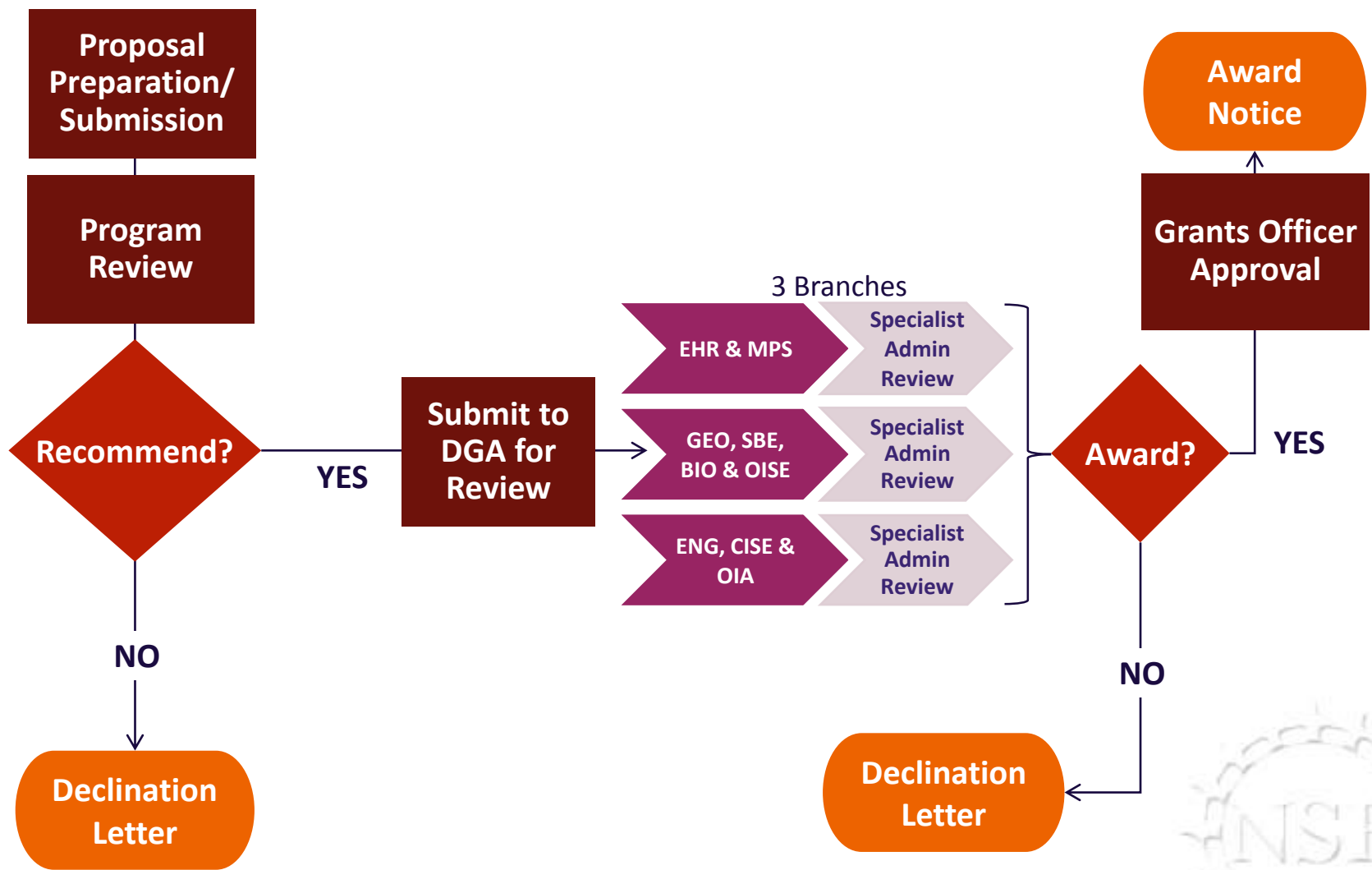




AWARD MANAGEMENT



NSF AWARD PROCESS - OVERVIEW



From the Program Office

From DGA



HOW MANY AWARD ACTIONS DOES DGA PROCESS EACH YEAR?

DGA Typically Approves:

- ~12,000 New Awards
- ~5,000 Supplements/Continuing Grant Increments
- ~5,000 Non-funded actions



SOLICITATION REQUIREMENTS

DGA reviews the proposal to ensure budgetary and administrative conditions are in accordance with the solicitation.

Human Subjects and Vertebrate Animals

- All NSF projects involving human subjects must conform with the Common Rule (45 CFR 690).
- Before an award can be made, all projects involving human subjects must either have an IRB approval or exemption.
- All NSF projects involving vertebrate animals must comply with the Animal Welfare Act and related regulations.
- Before an award can be made, all projects involving vertebrate animals must have an IACUC approval.
- What about awards lacking definite plans for use of human subjects?



PROPOSAL BUDGETS

Budget Line F, Participant Support Costs

- Know the definition of participant support. Be aware of NSF's policy with respect to participant support and watch out for unallowable entertainment and indirect costs.

Budget Line G, Other Direct Costs

- Subawards (G.5) Be sure that sub-recipient budgets and budget justifications are included as part of the proposal budget.
- Other (G.6) Itemize other direct costs clearly in the budget justification and beware of unallowable costs.



PROPOSAL BUDGETS (CONT'D)

Budget Line I, Indirect Costs

- Charge in accordance with your most recent federally negotiated rate agreement.
- In most cases, a supplement should use the rate used for the original award.

Budget Justification

- The amounts for each budget line item requested must be documented and justified.
- Amounts budgeted must be consistent with the proposing organization's policies and procedures and cost accounting practices used in accumulating and reporting costs.



TYPICAL AREAS OF QUESTIONS FOR DGA

Conference Proposals and Participant Support Costs

- Definitions of budget line items
- Allowable costs

Addition of Sub-Awards and Sub-Recipient Monitoring

- Submit request through FastLane; must have DUNS number and be registered in FastLane
- Monitoring requirements outlined in 2 CFR 200

Award Close-Out and Mandatory Cost-Share Requirements

- Most awards automatically closed
- If special terms & conditions in award, need requirements fulfilled, reports submitted, manual close-out



POST AWARD NOTIFICATIONS AND REQUESTS

Consolidated List of Notifications and Requests (not all-inclusive)

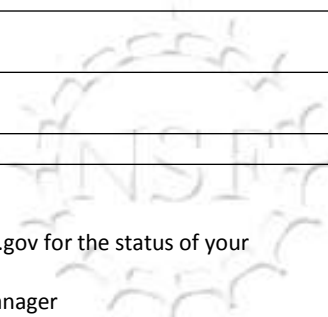
Type of Grantee Notification = Awardee Authority	Submitted By	Who Reviews		
Grantee-Approved No-Cost Extension	AOR	Program Officer		
Significant Changes in Methods or Procedures	PI	Program Officer		
Significant Changes, Delays or Events of Unusual Interest	PI	Program Officer		
Annual and Final Cost Share Notification by Recipient	AOR	Program Officer		
Conflicts of Interest that cannot be satisfactorily managed, imposition of conditions or restrictions when a conflict of interest exists	AOR	OGC		
Type of Grantee Request = NSF Approval Required	Submitted By	Who Reviews and Recommends?	Who Approves?	Amendment or Notice?*
Subawarding, Transferring or Contracting Out Part of an NSF Award	AOR	Program Officer	DGA	Amendment
First NSF-Approved No-Cost Extension	AOR	Program Officer	Program Officer	Notice
Second NSF-Approved No-Cost Extension	AOR	Program Officer	DGA	Amendment
Change in Objectives or Scope	AOR	Program Officer	DGA	Amendment
Long-Term Disengagement of the PI/PD or co-PI/co-PD	AOR	Program Officer	Program Officer	Notice
Change in Person-Months Devoted to the Project	AOR	Program Officer	Program Officer	Notice
Addition of co-PI/co-PD	AOR	Program Officer	DGA	Amendment
Withdrawal of PI/PD or co-PI/co-PD	AOR	Program Officer	DGA	Amendment
Substitute (Change) PI/PD or co-PI/co-PD	AOR	Program Officer	DGA	Amendment
PI/PD or co-PI/co-PD Transfer from One Organization to Another	AOR	Program Officer	DGA	-Old Organization, no notice, check research.gov -New Organization, amendment
Pre-award Costs in Excess of 90 Days	AOR	Program Officer	DGA	Amendment
Salaries of Administrative or Clerical Staff	AOR	Program Officer	DGA	Amendment
Travel Costs for Dependents	AOR	Program Officer	DGA	Amendment
Rearrangements/Alterations (Construction)	AOR	Program Officer	DGA	Amendment
Reallocation of Funds for Participant Support Costs	AOR	Program Officer	Program Officer	Notice
Additional categories of participant support costs other than those described in 2 CFR § 200.75	AOR	Program Officer	DGA	Amendment
Change to cost sharing commitments reflected on Line M of the NSF award budget	**AOR, via email	Program Officer/DGA	DGA	Amendment
Request for Supplemental Support	AOR	Program Officer	DGA	Amendment

Notes:

See Exhibit VII-I of the PAPPG for more details: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf17001&org=NSF

*You will always be notified when the award is amendment. Program Officer's have the option to send or not send approval notices. Check research.gov for the status of your request.

**Requests to change cost share commitments must be emailed. Best practice is to email both the NSF Program Officer and the DGA Portfolio Manager



NO COST EXTENSIONS

- Awards with \$0 balances cannot be extended.
- Awards cannot be extended just to use up 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 NCE's may be submitted "late," but you will need to explain why.



AWARD TRANSFERS

- Grants are awarded to the Organization, not the PI
- If the PI is moving to a new Organization, the transferring organization typically has the options below:
 1. Nominate new PI: The request will be reviewed by the NSF Program Officer, and sent to DGA for final review/approval.
 2. Request to sub-award
 3. Agree to transfer
 4. 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 DGA Grants Officer.





PROJECT REPORTS

Project Outcomes Report (POR) for the General Public

- Due 120 days after the end date.
- Not approved by the NSF Program Officer.

General Information about Project Reports

- The 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 SRO also can run a report to show reports for their awards that are due and overdue.
- The PI and all Co-PIs may submit the reports.
- The SRO does not have access to submit the reports.
- When in doubt, contact your Program Officer, or the Research.gov Help Desk.



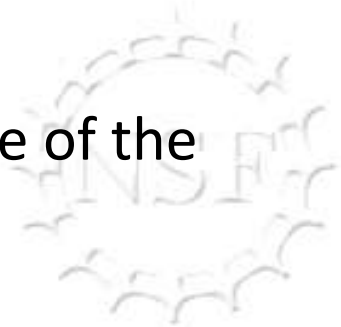
OVERDUE PROJECT REPORTS

Consequences

- No future funding
- No administrative actions
- Can impact other PI's awards

Annual and Final 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 reports are due 120 days after the end date of the award



NSF MONITORING ACTIVITIES

- Programmatic Site Visits
- Division of Institution & Award Support (DIAS) contracted desk reviews
- DIAS Advanced Monitoring Site Visit Program in conjunction with the Division of Grants & Agreements (DGA)
- Division of Financial Management (DFM) baseline monitoring including active payment monitoring and post award financial activity reviews
- Office of Inspector General (OIG) audits



AWARDEE RESPONSIBILITIES – KEYS TO SUCCESS

- Comply with all relevant federal regulations and national policy requirements.
- Adhere to the terms and conditions of an NSF award.
- Read your award notice carefully! It may include project or award-specific requirements, such as:
 - Funding restrictions
 - Special reporting requirements
 - Special terms and conditions or other instructions
- Manage funds prudently:
 - Allowable
 - Allocable
 - Reasonable
 - Necessary



AWARDEE RESPONSIBILITIES – KEYS TO SUCCESS (CONT'D)

- Establishing appropriate policies and procedures (written), oversight, and internal controls.
- Train staff so they understand their roles and responsibilities.
- Be consistent!
- Maintain timely and effective lines of communication. Know who to contact for relevant information. In general...

PI: *Your NSF Program Officer for technical/scientific questions
*Your Sponsored Research Office (SRO) for administrative questions

SRO: *DGA Portfolio Manager for award specific questions. Always include the award number in any email or communications to assist us with responding to your inquiry.

*NSF Policy Office with general grant policy questions and proposal solicitation issues





FOR MORE INFORMATION
ASK EARLY, ASK OFTEN!

policy@nsf.gov

