

THE NATIONAL SCIENCE FOUNDATION

Grants.gov Application Guide

*A Guide for Preparation & Submission of
NSF Applications via Grants.gov*

NSF 19-041

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February 25, 2019*





SUMMARY OF CHANGES AND CLARIFICATIONS

Effective for applications submitted, or due, on or after February 25, 2019

Overall Document, *The Grants.gov Application Guide* has been updated to align with changes to NSF's *Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 19-1).

Chapter VI, NSF-Specific Forms and Instructions, Section 1.4, NSF Cover Page – Enter Other Information (Field 4 on the Form), Institutions of Higher Education (IHEs), has been updated to specify that proposals that include funding to be provided to an international branch campus of a U.S. IHEs must include in the project description, a justification for why the project activities cannot be performed at the U.S. campus. The box for "Funding of an International Branch Campus of a U.S. IHEs, including through use of a subaward or consultant arrangement" must be checked on the NSF Cover Page.

Chapter VI, NSF-Specific Forms and Instructions, Section 1.4, NSF Cover Page – Enter Other Information (Field 4 on the Form), Foreign Organizations, has been updated to specify that in cases where the involvement of a foreign organization is considered to be essential by the proposer, in addition to providing justification in the project description, the box for "Funding of a Foreign Organization, including through use of a subaward or consultant arrangement" must be checked on the NSF Cover Page.

Chapter VI, NSF-Specific Forms and Instructions, Section 2.1 and 2.5, NSF R&R Senior/Key Person Profile (Expanded) – in Grants.gov, NSF has disabled the "Degree Type" and "Degree Year" fields on the NSF Senior/Key Person Profile (Expanded) form for Project Director/Principal Investigator (PD/PI) and for Senior/Key Person(s).

Editorial changes. Editorial changes have been made to either clarify or enhance the intended meaning of a sentence or section or ensure consistency with data contained in NSF systems or other NSF policy documents.



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I. INTRODUCTION

1. BACKGROUND

The National Science Foundation (NSF) funds research and education in science and engineering through grants and cooperative agreements. The Foundation accounts for approximately 20 percent of federal support to academic institutions for basic research. Grants.gov allows organizations to electronically find and apply for competitive grant opportunities from all Federal grant-making agencies, including NSF.

2. PURPOSE AND SCOPE

This document was developed to assist applicants in the preparation and submission of applications to NSF. It is intended as the primary document for use in preparation of applications via Grants.gov. Where appropriate, relevant sections of the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)* and Grants.gov Applicant User Guide have been incorporated by reference.

For the purpose of this document, the term “application” (used by Grants.gov) replaces the term “proposal” (used by NSF). However, the terms are synonymous.

3. INTENDED AUDIENCE

NSF welcomes applications on behalf of all qualified scientists, engineers, and educators. The Foundation strongly encourages women, minorities, and persons with disabilities to participate fully in its programs. In accordance with Federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination, under any program or activity receiving financial assistance from NSF, although some programs may have special requirements that limit eligibility.

Scientists, engineers, and educators usually initiate applications that are officially submitted by their employing organization. Before formal submission, the application may be discussed with appropriate NSF program staff. Graduate students are not encouraged to submit research applications but should arrange to serve as research assistants to faculty members. Some NSF divisions accept applications for Doctoral Dissertation Research Grants when submitted by a faculty member on behalf of the graduate student. A full listing of eligible applicants is contained in the *NSF Proposal & Award Policies & Procedures Guide* ([PAPPG Chapter I.E](#)).

4. SYMBOLS

The following symbols are used throughout this document to highlight information that is of particular interest or importance:



This symbol indicates NSF specific instructions.



This symbol represents a link to an important reference material.

*

This symbol represents a required field



5. REFERENCED DOCUMENTS

5.1 NSF Proposal & Award Policies & Procedures Guide (PAPPG)

The PAPPG provides guidance for the preparation of applications for submission to NSF via use of the FastLane system and Research.gov. The PAPPG includes detailed application preparation instructions and information about NSF's application processing and review process. It also includes information about withdrawals, returns, and declinations. Where appropriate, sections of the PAPPG have been incorporated by reference into this application guide.



NSF Proposal & Award Policies & Procedures Guide:

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg

5.2 Grants.gov Online User Guide

The Grants.gov Online User Guide is a comprehensive reference to information about Grants.gov.



Grants.gov Online User Guide:

https://www.grants.gov/help/html/help/GetStarted/Get_Started.htm



II. GENERAL INSTRUCTIONS FOR SUBMISSION VIA GRANTS.GOV

1. REGISTRATION PROCESS

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for most government grants on the Grants.gov website, including NSF grants.



Grants.gov Registration: <http://www.grants.gov/web/grants/applicants.html>

2. SOFTWARE REQUIREMENTS¹

2.1 Adobe Reader

In order to open, complete, and submit an application package, applicants must download and install the latest version of Adobe Reader from the Grants.gov website. NSF strongly recommends that applicants download Adobe Reader directly from the Grants.gov website to ensure the use of the latest compatible version of Adobe Reader.



For minimum system requirements, download instructions, and help tips for using Adobe, please see Grants.gov Download Software: <http://www.grants.gov/web/grants/applicants.html>

¹ If the applicant has problems setting up software on their machine, the applicant may not have security permissions to install new programs on their system. If that is the case, they should contact the organization's system administrator.



III. NSF-SPECIFIC INSTRUCTIONS FOR SUBMISSION VIA GRANTS.GOV

1. NSF'S IMPLEMENTATION OF GRANTS.GOV

Unless otherwise specified in an NSF solicitation, applications to NSF may be submitted via use of Grants.gov, the NSF FastLane system, or Research.gov. Please note that simultaneously submitted collaborative applications must be submitted via FastLane, as Grants.gov and Research.gov do not currently support this functionality.

Upon posting to Grants.gov, the application package will contain the appropriate Research and Related forms, NSF specific forms, and the NSF Grants.gov Application Guide.

2. COMPONENTS OF AN NSF APPLICATION

The documents listed in Table 1 are components of an NSF application. The documents identified as required must be submitted to NSF as part of the application. Detailed instructions for submitting both required and optional documents can be found on the page indicated in the last column of the table.

Table 1: Components of an NSF Application

Document	Required	Optional	Instructions
SF 424 (R&R) Cover Sheet	✓		Page 18
Project/Performance Site Location(s)	✓		Page 25
R&R Other Project Information	✓		Page 26
R&R Senior/Key Person Profile (Expanded)	✓		Page 44
R&R Personal Data	✓		Page 31
R&R Funds Requested Budget	✓		Page 33
R&R Subaward Budget Attachment(s)	✓		Page 39
NSF Cover Page	✓		Page 41
NSF Deviation Authorization		✓	Page 47
NSF Suggested Reviewers		✓	Page 48

3. CONFORMANCE WITH APPLICATION PREPARATION REQUIREMENTS

It is imperative that all applications conform to these application preparation and submission instructions.



All attachments to an application also must comply with NSF font, spacing, and margin requirements specified in [PAPPG Chapter II.B.2](#). Conformance with all preparation and submission instructions is required and will be strictly enforced unless a deviation has been approved in advance of application submission. Please note that NSF solicitations may establish additional requirements. Applications that do not comply with this requirement will not be inserted into NSF's FastLane system and therefore cannot be reviewed. See [PAPPG Chapter II.A](#) for additional information.

3.1 Portable Document Format (PDF)

NSF requires that applicants submit all attachments to applications to Grants.gov in Portable Document Format (PDF). In order to save a document as a PDF, the applicant will need to use PDF generator software. Applications with attachments in non-PDF format will not be inserted into FastLane and will require resubmission via Grants.gov by the applicant.



3.2 Creating PDF Files

NSF has published the following webpage that provides guidance on creating PDF files acceptable for submission to FastLane. **This same guidance must be followed for all attachments submitted with the NSF application through Grants.gov.**



Creating PDF Files: https://www.fastlane.nsf.gov/documents/pdf_create/pdfcreate_05a.jsp

Adobe Reader cannot produce PDF files. The applicant must use the Adobe Distiller component of Adobe Acrobat.

NOTE: DO NOT USE PDF Writer! To avoid problems with converting documents to PDF, download the FastLane Job Options file as described below.

3.2.1 Instructions for Non-Adobe Acrobat Users

Users without Adobe Acrobat may use the PDF Conversion Utility found within FastLane to convert non-PDF documents to PDF format. The utility can be accessed by **registered** FastLane users through either the Proposal Preparation or the Research Administration modules.

To access the FastLane PDF Conversion Utility through Proposal Preparation, navigate to the NSF FastLane homepage: <https://www.fastlane.nsf.gov/fastlane.jsp> and select the “Proposals, Awards and Status” module. **To access the FastLane PDF Conversion Utility through Research Administration**, click on the link <https://www.fastlane.nsf.gov/researchadmin/>. Next:

1. Log in using your appropriate FastLane log-in information.
2. On the Quick Links menu at the left of the screen, select Convert Files to PDF.
3. Enter the document location in the space provided, or click the Browse button to select the document to be converted to PDF format.
4. Select the Convert to PDF button. The PDF conversion process may take a few minutes depending on your file size. Upon completion of PDF conversion, the screen will indicate that your file has been successfully converted.
5. Select View PDF. The converted document appears in PDF format in Adobe Reader within your web browser.
6. Select the diskette icon to name and save your new PDF file locally to your computer's hard drive.

3.2.2 Warnings and Rules

Failure to comply with the following warnings or to adhere to NSF rules for PDF files may result in your application not being inserted into NSF's FastLane system and the application missing the funding opportunity's deadline date.

Warnings

- DO NOT Use Adobe Acrobat PDFWriter
- DO NOT Use Blocked PDF Producers
- DO NOT Use Adobe Acrobat Encryption or Security Settings

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Rules

- Always Check Results
- Always Embed All Fonts
- Always Use Type 1 or True Type Fonts
- Note the Special Rules for TeX or LaTeX

DO NOT Use Adobe Acrobat PDFWriter

PDFWriter does not produce acceptable PDF files, except under very limited circumstances. This can lead to NSF Program Officers and reviewers seeing garbled and/or incomplete versions of a file. NSF recommends uploading one of the supported formats as identified in the Acceptable File Formats section on FastLane https://www.fastlane.nsf.gov/documents/pdf_create/pdfcreate_04.jsp?page=0 To create and upload a PDF file, use Adobe Distiller (in the same package as PDFWriter) or Ghostscript version 6.5 or higher.

4. SUBMISSION OF SAME APPLICATION TO MULTIPLE AGENCIES

With the exception of the Biological Sciences Directorate policy specified below, concurrent submission of an application to other organizations for simultaneous consideration will not prejudice its review.



NSF Biological Sciences Directorate Policy

Research applications to the Biological Sciences Directorate (not applications for conferences) cannot be duplicates of applications to any other Federal agency for simultaneous consideration. The only exceptions to this rule are: (1) when the Program Officers at the relevant Federal agencies have previously agreed to joint review and possible joint funding of the application; or (2) applications for Principal Investigators (PIs) who are beginning investigators (individuals who have not been a PI) or co-Principal Investigator (co-PI) on a Federally funded award with the exception of doctoral dissertation, postdoctoral fellowship, or research planning grants. For applicants who qualify under this latter exception, the box for "Beginning Investigator" must be checked on the NSF Grant Application Cover Page.

5. SUBMISSION FOR REVIEW BY MULTIPLE PROGRAMS WITHIN NSF



The same work/application cannot be funded twice. The submission of duplicate or substantially similar applications concurrently for review by more than one program without prior NSF approval may result in the return of the redundant applications. (See [PAPPG Chapter IV.B](#) for further information.)

6. NEXT STEPS – POST SUBMISSION TO GRANTS.GOV

Until an application has been received and validated by NSF, the Authorized Representative² (AR) may check the status of an application on Grants.gov. Grants.gov requires a user login and password.



Check Application Status: <http://www.grants.gov/web/grants/applicants/track-my-application.html>

² For purposes of this Guide, the term "Authorized Representative (AR)" is interchangeable with the term "Authorized Organizational Representative (AOR)."



6.1 Grants.gov Contact Center

If the AR has not received a confirmation message from Grants.gov within 48 hours of submission of the application, please contact:

Telephone: 1-800-518-4726

E-mail: support@grants.gov

6.2 NSF IT Help Central

If the AR³ has not received a confirmation message from NSF within 60 hours of submission of the application, please contact:

Telephone: 1-800-673-6188

E-mail: fastlane@nsf.gov

6.3 Research.gov and the NSF FastLane System

Research.gov (<http://www.research.gov/>) is NSF's modernization of FastLane.

FastLane is the NSF online website through which NSF interacts with researchers and potential researchers, reviewers, and research administrators and their organizations.



FastLane: <https://www.fastlane.nsf.gov>

For applications submitted through Grants.gov the applicant should use:

- Research.gov to register with NSF if you or your organization has not done previous business with NSF. To have a valid proposal submission, you must register your organization with NSF and all individuals who will be serving as administrators, AORs, PIs and co-PIs must register for a NSF account (i.e., NSF ID).
- Research.gov to check the status of an application after it has been received and validated by NSF. See Section 6.3.1, "Check the Status of an Application in Research.gov," below for more information;
- FastLane to add or correct information in the application after submission via Grants.gov and a notification is received from NSF that the application has been inserted into FastLane. See Section 6.3.2, "Proposal File Update – Post Submission," and Section 6.4, "Warning Messages," for details.

6.3.1 Proposal File Update – Post Submission

Applications submitted through Grants.gov are considered official submissions to the Federal government. The FastLane Proposal File Update Module³ allows the organization to request the replacement of files or revision of other Proposal Attributes, associated with a previously submitted proposal. (Note: The FastLane Proposal File Update module must not be used for submission of revised budgets. All budgetary revisions must be submitted through use of the FastLane Revised Proposal Budget Module. See Section 6.3.3, "Revisions to the Budget" below for further information.)

See [PAPPG Chapter III.C](#) for further information.

6.3.2 Revisions to the Budget

Negotiating budgets generally involves discussing a lower or higher amount of total support for the proposed project.

When such discussions result in a budget reduction of 10% or more from the amount originally proposed, a corresponding reduction should be made in the scope of the project. Applicants must use the FastLane Revised

³ The identified PI also will receive a confirmation message from NSF.

³The module in FastLane that is used to update files is the Proposal File Update module. The term proposal has the same meaning as application.

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Proposal Budget Module to submit this information. A revised proposal budget also must include a Budget Impact Statement that describes the impact of the budget reduction on the scope of the project.

Revised proposal budgets must be signed and submitted by the AR. See [PAPPG Chapter III.D](#) for further information.

6.4 Warning Messages

If an applicant receives a Warning Message email stating information needs to be added or corrected in the application, the applicant should carefully review each warning and make the necessary correction(s) as needed in the Proposal File Update module. See Section 6.3.1, “Proposal File Update – Post Submission,” and 6.3.2, “Revisions to the Budget,” above for more information about file updates.

NSF strongly recommends that the warnings be resolved as described in the warning message. NSF will return without review applications that do not meet NSF application preparation requirements.



IV. GRANT APPLICATION PACKAGE INSTRUCTIONS

1. GRANT APPLICATION PACKAGE

1.1 Verify Grant Information

Verify that the information shown corresponds to the grant for which the applicant wishes to apply. Grants.gov will auto-populate the following information:

- Opportunity Title
- Offering Agency
- Catalog of Federal Domestic Assistance (CFDA) Number
- CFDA Description
- Opportunity Number
- Competition ID
- Opportunity Open Date
- Opportunity Close Date
- Agency Contact

1.2 Enter a Name for the Application

Check the box indicating that the applicant will be submitting applications on his/her own behalf (if applicable). The check box will only be shown on funding opportunities that are open to individuals.

Enter a name for the application in the ***Application Filing Name** field (this is a required field). This name is for use solely by the applicant for you to track through the Grants.gov submission process. It is not used by the receiving agency.

<input type="checkbox"/> I will be submitting applications on my behalf, and not on behalf of a company, state, local or tribal government, academia, or other type of organization.
* Application Filing Name: <input type="text"/>

1.3 Open and Complete Mandatory Documents

Open and complete all of the documents listed in the “Mandatory Documents” section. Complete the SF 424 (R&R) first. Data entered on the SF 424 (R&R) is populated into other mandatory and optional forms where possible.

Mandatory Documents include:

- SF 424 (R&R)
- Project/Performance Site Location(s)
- R&R Other Project Information
- R&R Personal Data
- R&R Budget
- NSF Cover Page
- NSF R&R Senior/Key Person Profile (Expanded)

Copies of all forms are available for reference on the Grants.gov website:

<http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

1.4 Open and Complete Optional Documents

To open Optional documents click on the checkbox next to the optional form you wish to add. Once the checkbox is checked, click on the link for the form to fill it out.



Optional Documents include:

- R&R Subaward Budget Attachment(s) Form
- NSF Deviation Authorization
- NSF Suggested Reviewers or Reviewers Not to Include

Copies of all forms are available for reference on the Grants.gov website:
<http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

1.5 Navigating the Forms

The applicant must complete the mandatory fields on each page of the form/document. Mandatory fields in Adobe Reader are highlighted in yellow with a red border.

* Application Filing Name:

To navigate to the next page of a form/document, locate the right arrow in the Adobe toolbar at the top of Adobe Reader and click on the arrow.



Once the arrow has been clicked, the applicant will be taken to the next page of the form/document where he/she may complete the rest of the form. The applicant may use this arrow to be taken to each subsequent form in the application.

To go back to the previous page or previous form/document, simply click the left arrow on the Adobe toolbar.



Additionally, Adobe Reader allows scrolling from one form to the next by using the up and down arrows on the far right of Adobe Reader.

Once all the relevant fields have been completed, the applicant can return to the Grant Application Package screen and the list of Mandatory and Optional Documents by going to the first page in the application package or by clicking on the “Close Form” button when available. When a form/document is closed the completed data is captured in the application package but the form/document is not automatically saved. The application package must be saved from the Grant Application Package screen. More information on saving the application package is available in Section 1.8, “Saving the Application.”

1.6 Attachments

Many of the forms/documents in the application package require the applicant to attach files. As stated in Chapter III, Section 3.1 above, “Portable Document Format (PDF),” NSF requires that all attachments must be submitted in PDF format.

To attach a PDF file to the forms/documents in the application package, only use the attachment buttons found on the form. Do not use the Adobe attachment function through the Adobe menu or Adobe icon.



For more information on adding attachments to the application package using Adobe forms, please see the Grants.gov Online User Guide:

https://www.grants.gov/help/html/help/GetStarted/Get_Started.htm

The R&R Subaward Budget Attachment(s) Form allows the applicant to attach additional Adobe forms. Chapter V, Section 8 of this Guide provides detailed instructions for the navigation of this form.

1.7 Displaying Help Tips

To display a Help Tip in Adobe Reader, hover or place the cursor over the field in question. Fields that are pre-populated by Grants.gov are display-only fields and no Help Tip is available. Help Tips are not available for buttons that are grayed out.

1.8 Saving the Application

The “Save” button only appears on the Grant Application Package screen. It is recommended that after the applicant completes each form/document that he/she go to the first page of the application package, or click on the “Close Form” button when available, then save the application package by clicking on the “Save” button at the top of the Grant Application Package Screen. It is important to note that the application package will be saved to the last active directory on the applicant’s computer. Therefore, the applicant should save the application package to his/her hard drive where it can easily be located. The applicant may save the application package at any time and should save the application package with the same file name each time.

1.9 Check Package for Errors

To initiate the Grants.gov edit check process, simply click on the “Check Package for Errors” button on the first page of the application package.

Save

Save & Submit

Check Package for Errors

If all fields pass validation checks, a message box is shown saying “Validation Passed.” If the application fails a validation check, the applicant must fix the error(s) and check the package for errors again. All errors are displayed one at a time.



Applicants are advised that no checks against NSF-specific business rules will take place at this time.

1.10 Submitting the Application

The AR must open the application in Adobe Viewer then press the “Save & Submit” button. Applications can be completed in their entirety offline; however, to submit an application you must be connected to the internet. To submit the application:

1. Browse to the physical location where the application file is located on your hard disk.
2. Double-click the application.
3. The application will open in Adobe Reader. This may take a few moments. Please be patient.

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4. Once the application is completely open, if the “Save & Submit” button is not active then click the “**Save**” button. If the application has passed the “Check Package for Errors” validation check, the application will be saved and the “Save & Submit” button will become active.
5. Click “**Save & Submit.**” A window will display requiring the application to be saved one more time. Save the application.
6. A pop-up window is displayed with User Name and Password prompt.
7. Enter your AR User Name and Password.
8. Click **Login.**

A pop-up window is displayed that says “This document is trying to connect to the site. If you trust the site click ‘Allow’, otherwise click ‘Block’.”
9. Click on ‘Allow’ and select the checkbox next to ‘Remember my Action...’ This is a security warning from the Adobe Reader. **Please note the URL shown in the window may be slightly different than what is listed here.**
10. A pop-up window is displayed that asks “Do you wish to sign and submit this Application?”
11. Click the “Sign and Submit Application” button
12. A Security Warning pop-up window is displayed that says “This document has accessed more than one site and might be trying to share data among different locations. This could be a privacy concern. Are you sure you want to continue?” Check the “Don’t show this message again until this document is reopened” checkbox and click “Yes.”
13. Upon successful submission of the application, a Confirmation document is displayed with the Grants.gov Tracking Number displayed on the second page. It is recommended that this document be saved and printed for your records.

Only the AR has the authority and user rights to **Sign and Submit** an application to Grants.gov.

Additional submission FAQs may be found on the Grants.gov website.



Grants.gov submission FAQs: <http://www.grants.gov/web/grants/applicants/applicant-faqs.html>



V. RESEARCH AND RELATED (R&R) FORMS AND INSTRUCTIONS

1. OVERVIEW

This section contains both the SF 424 (R&R) instructions, as well as any applicable NSF-specific instructions. The NSF-specific instructions are identified by the NSF logo. It is important that all applications conform to these SF 424 (R&R) General Instructions, and where specified, with the NSF-specific instructions. Conformance is required and will be strictly enforced unless a deviation has been approved in advance of submission. Applicants are advised that NSF may return without review applications that are not consistent with these instructions.

The NSF applicant is required to complete and submit the following SF 424 (R&R) forms as part of the application package:

- SF 424 (R&R) (Cover Sheet);
- Project/Performance Site Location(s);
- Research & Related Other Project Information;
- Research & Related Personal Data;
- Research & Related Budget.

The following SF 424 (R&R) form is optional and only should be submitted when applicable:

- R&R Subaward Budget Attachment(s) Form

Detailed instructions for the completion of each of these forms are explained in the following sections.

2. SF 424 (R&R) (COVER SHEET)

A copy of the SF 424 (R&R) (Cover Sheet) is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

2.1 Enter a Type of Submission (Field 1 on the Form)

Check one of the Type of Submission boxes.



For purposes of NSF, the term preliminary proposal is synonymous with pre-application. Preliminary proposals, when required, must be submitted via use of the NSF FastLane System. In addition, the box for "changed/corrected application" should not be used.

Applicants that wish to change or correct a previously submitted application (that has already been accepted into FastLane) should use the Proposal File Update module available in NSF FastLane at <https://www.fastlane.nsf.gov/>. See Chapter III, Section 6.3.2, "Proposal File Update – Post Submission." Resubmissions, continuations, or revisions also should not be used in Field 8 on the form. See Section 2.8, "Select Type of Application (Field 8 on the Form)."

2.2 Enter Date Submitted (Field 2 on the Form)

Enter the date the application is submitted to the Federal agency.



For proposers impacted by a natural or anthropogenic disaster, please contact the cognizant NSF Program Officer in the Division/ Office to which the application will be submitted to request authorization to submit a proposal after the deadline date. Proposers should then follow the written or verbal guidance provided by the cognizant NSF Program Officer. A statement identifying the nature of the event that impacted the ability to submit the proposal on time should be uploaded under “Additional Single-Copy Documents,” Field 5 on the NSF Cover Page form. See also [PAPPG Chapter I.F](#) for additional information.

2.3 Enter Date Received by State (Field 3 on the Form)

Leave this blank.

2.4.a Federal Identifier (Field 4.a. on the Form)



If a new, full application is being submitted that is related to a previously submitted preliminary proposal, enter the NSF assigned preliminary proposal number in the Federal Identifier field. If this is a renewal application, requesting additional funding for a period subsequent to that provided by a current award, enter the assigned award number of the previously funded application in the Federal Identifier field. If this application is a resubmission of an application that has been previously submitted, but was not funded, and is being resubmitted for new consideration, leave blank. NSF treats these submissions as new applications.

2.4.b Agency Routing Number (Field 4.b. on the Form)



NSF does not use this field for routing. This field should be left blank.

2.4.c Previous Grants.gov Tracking ID (Field 4.c on the Form)



NSF does not use this field. This field should be left blank.

2.5 Enter Applicant Information (Field 5 on the Form)

Enter the DUNS number of the applicant organization. This field is required.



The legal name of the applicant "**organization**" should be entered under "Legal Name," unless the applicant is an individual.

In addition, applicants that are individuals cannot enter information into the Organizational DUNS field.

Field Name	Input
*Legal Name	Enter legal name of applicant, which will undertake the assistance activity, enter the complete address of the applicant (including county/parish and country), and name, telephone number, e-mail, and fax of the person to contact on matters related to this application. This field is required.
Department	Enter the name of primary organizational department, service, laboratory, or equivalent level within the organization which will undertake the assistance activity.

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Division	Enter the name of primary organizational division, office, or major subdivision which will undertake the assistance activity.
*Street 1	Enter first line of the street address for the applicant in "Street1" field. This field is required.
Street 2	Enter second line of the street address for the applicant in "Street2" field. This field is optional.
*City	Enter the city for address of applicant. This field is required.
County/Parish	Enter the county/parish for address of applicant.
*State	Enter the State where the applicant is located. This field is required if the applicant is located in the United States.
Province	Enter the Province.
*Zip Code	Enter the Postal Code (e.g., ZIP code) of applicant. This field is required if the applicant is located in the United States. This field is required if a State is selected; optional for Province.
*Country	Select the country for the applicant address. This field is required.

Person to be contacted on matters involving this application:

Field Name	Input
Prefix	Enter the prefix (e.g., Mr., Mrs., Rev.) for the person to contact on matters related to this application.
*First Name	Enter first (given) name of the person to contact on matters related to this application. This field is required.
Middle Name	Enter the middle name of the person to contact on matters related to this application.
*Last Name	Enter the last (family) name of the person to contact on matters related to this application. This field is required.
Suffix	Enter the suffix (e.g., Jr, Sr, PhD) for the name of the person to contact on matters related to this application.
Position/Title	Enter the title of the person to contact on matters related to this application.
*Street 1	Enter first line of the street address for the person to contact on matters related to this application in "Street1" field. This field is required.
Street 2	Enter second line of the street address for the person to contact on matters related to this application in "Street2" field. This field is optional.
*City	Enter the city for address of the person to contact on matters related to this application. This field is required.
County/Parish	Enter the county/parish for address of the person to contact on matters related to this application.
*State	Enter the State where the person to contact on matters of this application is located. This field is required if the applicant is located in the United States.
Province	Enter the Province.
*Country	Select the country for the person to contact on matters related to this application address. This field is required.
*ZIP / Postal Code	Enter the Postal Code (e.g., ZIP code) of the person to contact on matters related to this application. This field is required if the applicant is located in the United States. This field is required if a State is selected; optional for Province.
*Phone Number	Enter the daytime phone number for the person to contact on matters related to this application. This field is required.
Fax Number	Enter the fax number for the person to contact on matters related to this application.
*Email	Enter the e-mail address for the person to contact on matters related to this application.

2.6 Enter Employer Identification (EIN) or (TIN) (Field 6 on the Form)

Employer Identification (EIN) or (TIN) - Enter either TIN or EIN as assigned by the US Internal Revenue Service. If your organization is not in the US, type 44-4444444. This is required information.

2.7 Enter Type of Applicant (Field 7 on the Form)

Type of Applicant - Select the appropriate applicant type code. This field is required. If "Other" is selected, specify the Type of Applicant.



If Small Business is selected as Type of Applicant, then note if the organization is Women-owned and/or Socially and Economically Disadvantaged.

- **Women Owned** - Check if the applicant is a women-owned small business - a small business that is at least 51% owned by a woman or women, who also control and operate it.
- **Socially and Economically Disadvantaged** - Check if the applicant is a socially and economically disadvantaged small business, as determined by the US Small Business Administration pursuant to section 8(a) of the Small Business Act U.S.C. 637(a).

2.8 Select Type of Application (Field 8 on the Form)

Select the type from the following list. Check only one.

- **New** - An application that is being submitted to an agency for the first time.
- **Renewal** - An application requesting additional funding for a period subsequent to that provided by a current award. A renewal application competes with all other applications and must be developed as fully as though the applicant is applying for the first time.



For purposes of NSF, the boxes for "Resubmission," "Continuation," and "Revision" are not used and must not be checked. If a renewal application is being submitted, enter the assigned award number of the previously funded application in the Federal Identifier field (Field 4 on the Form.)



NSF will not be using the SF 424 (R&R) to: Increase Award, Decrease Award, Increase Duration or Decrease Duration, or perform other post award transactions, and therefore, the boxes related to types of revision should not be checked. Requests for supplemental funding should be submitted electronically via the Supplemental Funding Request module in the NSF FastLane system at <https://www.fastlane.nsf.gov>.

*** Is this application being submitted to other agencies?** – Enter yes or no. If yes, enter the name(s) of other Agencies. This is required information.

2.9 Enter Name of Federal Agency (Field 9 on the Form)

*** Name of Federal Agency** - This is the name of the Federal agency from which assistance is being requested with this application. This information is pre-populated by Grants.gov.

2.10 Enter Catalog of Federal Domestic Assistance Number (Field 10 on the Form)

This is the Catalog of Federal Domestic Assistance Number of the program under which assistance is being requested.

Number – Enter the number.

Title – Enter the title.

2.11 Enter Descriptive Title of Applicant's Project (Field 11 on the Form)

*** Descriptive Title of Applicant's Project** - Enter a brief descriptive title of the project. This is required information.



The title of the project must be brief, scientifically or technically valid, and suitable for in the public press. NSF may edit the title of a project prior to making an award.



2.12 Enter Proposed Project (Field 12 on the Form)

- * **Start Date** – Enter the proposed start date of the project. This field is required.
- * **Ending Date** – Enter the proposed end date of the project. This field is required.



The proposed duration for which support is requested must be consistent with the nature and complexity of the proposed activity. Grants are normally awarded for up to three years but may be awarded for periods of up to five years. The Foundation encourages organizations to request awards for durations of three to five years when such durations are necessary for completion of the proposed work and when such durations are technically and managerially advantageous. Specification of a desired starting date for the project is important and helpful to NSF staff; however, requests for specific effective dates may not be met. Except in special situations, requested effective dates must allow at least six months for NSF review, processing, and decision. Should unusual situations (e.g., a long lead time for procurement) create problems regarding the proposed effective date, the PI should consult his/her organization's sponsored projects office.

2.13 Enter Congressional District of Applicant (Field 13 on the Form)

* **Applicant Congressional District** - Enter the Congressional District in the format: 2 character State Abbreviation - 3 character District Number. Examples: CA-005 for California's 5th district, CA-012 for California's 12th district. If outside the US, enter 00-000. To locate your congressional district, visit the Grants.gov website. This field is required.

2.14 Enter Project Director/Principal Investigator Contact Information (Field 14 on the Form)

Field Name	Input
Prefix	Enter the prefix (e.g., Mr., Mrs., Rev.) for the name of the Project Director.
*First Name	Enter first name of the PD/PI. This field is required.
Middle Name	Enter the middle name of the Project Director.
*Last Name	Enter the last (family) name of the Project Director. This field is required.
Suffix	Enter the suffix (e.g., Jr, Sr, PhD) for the name of the PD/PI.
Position/Title	Enter the title of the Project Director.
*Organization Name	Enter the name of organization for the PD/PI. This field is required.
Department	Enter the name of primary organizational department, service, laboratory, or equivalent level within the organization of the PD/PI.
Division	Enter the name of primary organizational division, office, or major subdivision of the PD/PI.
*Street 1	Enter first line of the street address for the PD/PI in the "Street1" field. This field is required.
Street 2	Enter second line of the street address for the PD/PI in "Street2" field. This field is optional.
*City	Enter the City for address of the PD/PI. This field is required.
County/Parish	Enter the county/parish for address of the PD/PI.
*State	Enter the State where the PD/PI is located. This field is required if the PD/PI is located in the United States.
Province	Enter the Province for PD/PI.
*Country	Select the country for the PD/PI address. This field is required.
*ZIP / Postal Code	Enter the Postal Code (e.g., ZIP code) of the PD/PI. This field is required if the PD/PI is located in the United States.
*Phone Number	Enter the daytime phone number for the PD/PI. This field is required.
Fax Number	Enter the fax number for the PD/PI.
*E-mail	Enter the e-mail address for the PD/PI. This field is required.

2.15 Enter Estimated Project Funding (Field 15 on the Form)

Field Name	Input
* Total Federal Funds Requested	Enter total Federal funds requested for the entire project period. This is required information.
Total Non-Federal Funds	Enter total non-Federal funds requested for the entire project period, if applicable. This is required information.



*Total Federal & Non-Federal Funds	Enter total estimated funds for the entire project period, including both Federal and non-Federal funds. This is required information.
*Estimated Program Income	Identify any Program Income estimated for this project period, if applicable. This is required information.



Applicants are advised that funds entered in field 15.b. will be entered on Line M of the NSF budget when entered into the NSF FastLane system or Research.gov. Review the solicitation's guidance on cost sharing. See also [PAPPG Chapter II.C.2.g\(xii\)](#).

2.16 Is Application Subject to Review by State Executive Order 12372 Process? (Field 16 on the Form)

If yes, select "This pre-application/application was made available to the state executive order 12372 process for review on:" and enter the date. If the announcement indicates that the program is covered under Executive Order 12372, applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372.

If No, check appropriate box.



The Foundation's regulation on Intergovernmental Review of National Science Foundation Programs and Activities is published in 45 CFR Part 660.

2.17 Complete Certification (Field 17 on the Form)

Check "I agree" to provide the required certifications and assurances. This field is required.



Only a designated Authorized Organizational Representative (AOR) may submit the applicable certifications specified in [PAPPG Chapter II.C.1.d](#). As defined in the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG), Introduction, Section D, the AOR is the administrative official who on behalf of the applicant is empowered to make certifications and assurances and can commit the organization to the conduct of a project that NSF is being asked to support as well as adhere to various NSF policies and grant requirements.

2.18 SFLLL (Disclosure of Lobbying Activities) or Other Explanatory Documentation (Field 18 on the Form)

If applicable, attach the SFLLL or other explanatory documentation per agency instructions.

2.19 Enter Authorized Representative (Field 19 on the Form)

Field Name	Input
Prefix	Enter the prefix (e.g., Mr., Mrs., Rev.) for the name of the Authorized Representative.
*First Name	Enter the first (given) name of the Authorized Representative. This field is required.
Middle Name	Enter the middle name of the Authorized Representative.
*Last Name	Enter the last (family) name of the Authorized Representative. This field is required.
Suffix	Enter the suffix (e.g., Jr, Sr, PhD) for the name of the Authorized Representative.
*Position/Title	Enter the title of the Authorized Representative. This field is required.
*Organization Name	Enter the name of organization for the Authorized Representative. This field is required.
Department	Enter the name of primary organizational department, service, laboratory, or equivalent level within the organization of the Authorized Representative.
Division	Enter the name of primary organizational division, office, or major subdivision of the Authorized Representative.



*Street 1	Enter first line of the street address for the Authorized Representative in the "Street1" field. This field is required.
Street 2	Enter second line of the street address for the Authorized Representative in the "Street2" field. This field is optional.
*City	Enter the city for the address of the Authorized Representative. This field is required.
County/Parish	Enter the county/parish for the address of the Authorized Representative.
*State	Enter the State where the Authorized Representative is located. This field is required if the Authorized Representative is located in the United States.
Province	Enter the Province for the Authorized Representative.
*Country	Select the country for the Authorized Representative address.
*ZIP / Postal Code	Enter the Postal Code (e.g., ZIP code) of the Authorized Representative. This field is required if the Authorized Representative is located in the United States.
*Country	Select the country for the Authorized Representative address.
*Phone Number	Enter the daytime phone number for the Authorized Representative. This field is required.
Fax Number	Enter the fax number of the Authorized Representative.
*E-mail	Enter the e-mail of the Authorized Representative. This is required information.
Signature of Authorized Representative	It is the organization's responsibility to assure that only properly authorized individuals sign in this capacity and/or submit the application to Grants.gov. If this application is submitted through Grants.gov, leave blank. If a hard copy is submitted, the AR must sign this block.
Date Signed	If this application is submitted through Grants.gov, the system will generate this date. If submitting a hard copy, enter the date the AR signed the application.

2.20 Enter Pre-Application (Field 20 on the Form)



NSF does not use this field. Preliminary proposals, when required, must be submitted via use of the NSF FastLane System.

2.21 Cover Letter Attachment (Field 21 on the Form)



NSF does not use this field as it does not permit Cover Letters to be submitted with the application.

3. PROJECT/PERFORMANCE SITE LOCATIONS

A copy of the Project/Performance Site Locations form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortBy=1>.

3.1 Enter Project/Performance Site Primary Location

Project/Performance Site Primary Location:

Field Name	Input
Organization Name	Indicate the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the block(s) provided.
DUNS Number	Enter the DUNS number associated with the organization where the project will be performed.
*Street 1	Enter first line of the street address in "Street 1" field of the primary performance site location. This field is required.
Street 2	Enter second line of the street address in "Street 2" field for the primary performance site location. This field is optional.
*City	Enter the City for address of the primary performance site location. This field is required.
County/Parish	Select the county/parish for the performance site location.
*State	Enter the State where the primary performance site location is located. This field is required if the Project Performance Site is located in the United States.

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Province	Enter the Province where the primary performance site location is located.
Country	Select the name of the country for the primary project performance site.
*ZIP / Postal Code	Enter the Postal Code (e.g., ZIP code) of the primary performance site location. This field is required if the Project Performance Site is located in the United States.
*Project/Performance Site Congressional District	Enter the Congressional District in the format: 2 character State Abbreviation – 3 character District Number. Examples: CA-005 for California’s 5 th district, CA-0012 for California’s 12 th district. If all districts in a state are affected, enter “all” for the district number. Example: MD-all for all congressional districts in Maryland. If nationwide (all districts in all states), enter US-all. If the program/project is outside the US, enter 00-000. To locate your congressional district, visit the Grants.gov web site. Note it is likely that this field will be identical to the “Congressional Districts of Applicant” field provided elsewhere in this application.

Project/Performance Site Location 1 (Optional):

Field Name	Input
Organization Name	Indicate the site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the block(s) provided.
DUNS Number	Enter the DUNS number associated with the organization where the project will be performed.
*Street 1	Enter first line of the street address in "Street 1" field of the primary performance site location. This field is required.
Street 2	Enter second line of the street address in "Street 2" field for the primary performance site location. This field is optional.
*City	Enter the City for address of the primary performance site location. This field is required.
County/Parish	Select the county/parish for the performance site location.
*State	Enter the State or province where the primary performance site location is located. This field is required if the Project Performance Site is located in the United States.
Province	Enter the Province for the primary performance site location.
Country	Select the name of the country for the project performance site.
*Zip / Postal Code	Enter the Postal Code (e.g., ZIP code) of the primary performance site location. This field is required if the Project Performance Site is located in the United States.
*Project/Performance Site Congressional District	Enter the Congressional District in the format: 2 character State Abbreviation – 3 character District Number. Examples: CA-005 for California’s 5 th district, CA-0012 for California’s 12 th district. If all districts in a state are affected, enter “all” for the district number. Example: MD-all for all congressional districts in Maryland. If nationwide (all districts in all states), enter US-all. If the program/project is outside the US, enter 00-000. To locate your congressional district, visit the Grants.gov web site. Note it is likely that this field will be identical to the “Congressional Districts of Applicant” field provided elsewhere in this application.

Add additional sites as necessary using the “Next Site” button.



For research performed at remote sites, “NA” should be typed in the following mandatory fields if they do not apply to the location: **Street 1, City, State, and Zip Code**. For projects that support research infrastructure and tools, such as vessels, facilities, and telescopes, the project/performance site should correspond to the physical location of the research asset. For research assets or projects that are geographically distributed, the proposer should report information for the primary site, as defined by the proposer. For example, proposals for the operations and maintenance of research vessels may list the project/performance site as the vessel’s home port.



If the Organization Name field is left blank for the Performing Organization, then the Awardee Organization is also considered as the Performing Organization.



submission of the determination notice is available on the [NSF website](#).

IRB Approval Date – Enter the latest Institutional Review Board (IRB) approval date (if available). Leave blank if Pending.

Human Subject Assurance Number – Enter the approved Federal Wide Assurance (FWA), Multiple Project Assurance (MPA), Single Project Assurance (SPA) Number or Cooperative Project Assurance Number that the applicant has on file with the Office for Human Research Protections, if available. If the applicant has an FWA number, enter the 8-digit number. Do not enter FWA before the number.

4.2 Are Vertebrate Animals Used? (Field 2 on the Form)

This is required information. Check yes or no.

- Yes
 No



Any project proposing the use of vertebrate animals for research or education shall comply with the Animal Welfare Act [7 USC 2131, *et seq.*] and the regulations promulgated thereunder by the Secretary of Agriculture [9 CFR, 1.1-4.11] pertaining to the humane care, handling, and treatment of vertebrate animals held or used for research, teaching, or other activities supported by Federal awards. See also [PAPPG Chapter II.D.4](#).

If activities involving vertebrate animals are planned at any time during the proposed project at any performance site, check yes. If no, skip the remaining questions about Vertebrate Subjects.

If YES to Vertebrate Animals:

Is the IACUC review Pending? Check yes or no.

- Yes
 No

IACUC Approval Date – Enter the latest Institutional Animal Care and Use Committee (IACUC) approval date (if available). Leave blank if Pending.

Animal Welfare Assurance Number – Enter the Federally approved assurance number, if available.

4.3 Is Proprietary/Privileged Information Included in the Application? (Field 3 on the Form)

This is required information. Check yes or no.

- Yes
 No

Patentable ideas, trade secrets, privileged or confidential commercial or financial information, disclosure of which may harm the applicant, should be included in applications only when such information is necessary to convey an understanding of the proposed project. If the application includes such information, check yes and clearly mark each line or paragraph on the pages containing the proprietary/privileged information with a legend similar to - "The following contains proprietary/privileged information that (name of applicant) requests not be released to persons outside the Government, except for purposes of review and evaluation."



Such information also may be included as a separate statement. If this method is used, the statement must be submitted electronically as a single-copy document and attached in Block 5 of the NSF Cover Page. While NSF will make every effort to prevent unauthorized access to such material, the Foundation is not responsible or in any



way liable for the release of such material. See also [PAPPG Chapter III.H](#).

4.4 Does this Project Have an Actual or Potential Impact – Positive or Negative – on the Environment? (Field 4.a on the Form)

This is required information. Check yes or no.

- Yes**
- No**



NSF does not use this text box (Field 4.b on the Form). This field should be left blank.

If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed? - Check yes or no.

- Yes** - Indicate whether an exemption has been authorized or an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) has been performed.
- No** - Indicate whether an exemption has been authorized or an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) has been performed. Click here for no. You must answer question 4a before this one.



NSF does not use this text box (Field 4.d on the Form). This field should be left blank.

4.5 Is the Research Performance Site Designated, or Eligible to be Designated, as a Historic Place? (Field 5 on the Form)

This is required information. Check yes or no.

- Yes**
- No**



NSF does not use this text box (Field 5.a. on the Form). This field should be left blank.



If “yes” was selected for fields 4.a., 4.c., or 5.a, the proposer may be requested to submit supplemental post-proposal submission information to NSF in order that a reasonable and accurate assessment of environmental impacts by NSF may be made. The types of information that may be requested is shown in the [Organization Environmental Impacts Checklist](#).



4.6 Does this Project Involve Activities Outside the US or Partnership with International Collaborators? (Field 6 on the Form)

This is required information. Check yes or no.

- Yes
 No

If yes, identify countries – Enter the countries with which international cooperative activities are involved.

6. Does this project involve activities outside of the United States or partnerships with international collaborators? Yes No

6.a. If yes, identify countries:

6.b. Optional Explanation:

International Activities Country Name(s) -- For each proposal that describes an international activity, proposers should list the primary countries involved. A maximum of five countries may be listed. An international activity is defined as research, training, and/or education carried out in cooperation with international counterparts either overseas or in the U.S. using virtual technologies. Proposers also should enter the country/countries with which project participants will engage and/or travel to attend international conferences. If the specific location of the international conference is not known at the time of the proposal submission, proposers should enter "Worldwide". (See [PAPPG Chapter II.C.2.i](#)).



NSF does not use the text box for **Optional Explanation** (Field 6.b on the Form). This field should be left blank. Information on international involvement must be fully described in the budget justification or project description sections of the proposal.

4.7 Attach Project Summary/Abstract (Field 7 on the Form)

The Project Summary must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained description of the project and should contain a statement of objectives and methods to be employed. It should be informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. This Summary must not include any proprietary/confidential information. To attach a Project Summary/Abstract, click "Add Attachment."



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 broad audience within the scientific domain. It should not be an abstract of the proposal. (See [PAPPG Chapter III.A](#) for further descriptive information on the NSF merit review criteria.)

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. See also [PAPPG Chapter II.C.2.b](#).

4.8 Attach Project Narrative (Field 8 on the Form)

Provide Project Narrative in accordance with the announcement and/or agency-specific instructions. To attach a Project Narrative, click "Add Attachment."



The Project Narrative (referred to as the Project Description in the PAPPG) including the Results from Prior NSF Support must not exceed 15 pages, and must be prepared in accordance with the guidelines specified in [PAPPG Chapter II.C.2.d](#), unless a deviation is authorized by an NSF program solicitation.

4.9 Attach Bibliography & References Cited (Field 9 on the Form)

Provide a bibliography of any references cited in the Project Narrative. 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. Include only bibliographic citations. Applicants should be especially careful to follow scholarly practices in providing citations for source materials relied upon when preparing any section of the application. Please click the add attachment button to the right of this field to complete this entry.



While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 15-page Project Description. See also [PAPPG Chapter II.C.2.e](#).

4.10 Attach Documentation for Facilities & Other Resources (Field 10 on the Form)

This information is used to assess the capability of the organizational resources available to perform the effort proposed. Identify the facilities to be used (Laboratory, Animal, Computer, Office, Clinical, and Other). If appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Describe only those resources that are directly applicable to the proposed work. Provide any information describing the Other Resources available to the project (e.g., machine shop, electronic shop) and the extent to which they would be available to the project. To attach a document for Facilities and Other Resources, click “Add Attachment.”



This information is used to assess the adequacy of the resources available to perform the effort proposed to satisfy both the Intellectual Merit and Broader Impacts review criteria. Applicants should include 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. Such information must be provided in this section, in lieu of other parts of the application (e.g., budget justification, project narrative). The description should be narrative in nature and must not include any quantifiable financial information. Reviewers will evaluate the information during the merit review process and the cognizant NSF Program Officer will review it for programmatic and technical sufficiency.

Although these resources are not considered cost sharing as defined in 2 CFR § 200.306, the Foundation does expect that the resources identified in the Facilities and Other Resources section will be provided, or made available, should the proposal be funded. [PAPPG Chapter VII.B.1](#), specifies procedures for use by the awardee when there are postaward changes to objectives, scope, or methods/procedures. See also [PAPPG Chapter II.C.2.i](#).

4.11 Attach Equipment Documentation (Field 11 on the Form)

List major items of equipment already available for this project and, if appropriate, identify location and pertinent capabilities. To attach a document for Equipment, click “Add Attachment.”



Applicants should include an aggregated description of the equipment that the organization and its collaborators will provide to the project, should it be funded.



The Project Narrative (referred to as the Project Description in the PAPPG) including the Results from Prior NSF Support must not exceed 15 pages, and must be prepared in accordance with the guidelines specified in [PAPPG Chapter II.C.2.d](#), unless a deviation is authorized by an NSF program solicitation.

4.9 Attach Bibliography & References Cited (Field 9 on the Form)

Provide a bibliography of any references cited in the Project Narrative. 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. Include only bibliographic citations. Applicants should be especially careful to follow scholarly practices in providing citations for source materials relied upon when preparing any section of the application. Please click the add attachment button to the right of this field to complete this entry.



While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 15-page Project Description. See also [PAPPG Chapter II.C.2.e](#).

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This information is used to assess the adequacy of the resources available to perform the effort proposed to satisfy both the Intellectual Merit and Broader Impacts review criteria. Applicants should include 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. Such information must be provided in this section, in lieu of other parts of the application (e.g., budget justification, project narrative). The description should be narrative in nature and must not include any quantifiable financial information. Reviewers will evaluate the information during the merit review process and the cognizant NSF Program Officer will review it for programmatic and technical sufficiency.

Although these resources are not considered cost sharing as defined in 2 CFR § 200.306, the Foundation does expect that the resources identified in the Facilities and Other Resources section will be provided, or made available, should the proposal be funded. [PAPPG Chapter VII.B.1](#), specifies procedures for use by the awardee when there are postaward changes to objectives, scope, or methods/procedures. See also [PAPPG Chapter II.C.2.i](#).

4.11 Attach Equipment Documentation (Field 11 on the Form)

List major items of equipment already available for this project and, if appropriate, identify location and pertinent capabilities. To attach a document for Equipment, click “Add Attachment.”



Applicants should include an aggregated description of the equipment that the organization and its collaborators will provide to the project, should it be funded.



Although these resources are not considered cost sharing as defined in 2 CFR § 200.306, the Foundation does expect that the equipment identified in the Equipment section will be provided, or made available, should the proposal be funded. [PAPPG Chapter VII.B.1.](#) specifies procedures for use by the awardee when there are postaward changes to objectives, scope, or methods/procedures. See also [PAPPG Chapter II.C.2.i.](#)

4.12 Add Other Attachments (Field 12 on the Form)

Attach file(s) using the appropriate buttons.



Except as specified in [PAPPG Chapter II.C.2.j](#), 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. The categories of information identified in [PAPPG Chapter II.C.2.j](#), are not considered part of the 15-page project description limitation. This Special Information and Supplementary Documentation section also is not considered an appendix. See also additional documentation required by [PAPPG Chapter II.E.](#)

5. R&R Personal Data

A copy of the R&R Personal Data form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

The Federal Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PD/PI with each application. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. Data will be confidential.



Collection of this information is authorized by and will be used in accordance with the NSF Act of 1950, as amended, 42 U.S.C. 1861, et seq. Demographic data allows NSF to gauge whether our programs and other opportunities in science and technology are fairly reaching and benefiting everyone regardless of demographic category; to ensure that those in under-represented groups have the same knowledge of, and access to, programs, meetings, vacancies, and other research and educational opportunities as everyone else. The information will be held closely. It may be disclosed to government contractors, experts, volunteers, and researchers to complete assigned work; and to other government agencies in order to coordinate and assess programs. The information may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004), and NSF-51, "Reviewer/Proposal File and Associated Records," 69 Federal Register 26410 (May 12, 2004). Submission of information is voluntary.



If any of the individuals listed in the application are registered in NSF's FastLane system or Research.gov, the demographic information in the application will not overwrite the demographic information in FastLane or Research.gov.



5.1 Enter Project Director/Principal Investigator

Field Name	Input
Prefix	Enter the prefix (e.g., Mr., Mrs., Rev.) for the name of the PD/PI. Pre-populated from SF 424 R&R.
*First Name	Enter the first (given) name of the PD/PI. This field is required. Pre-populated from SF 424 R&R.
Middle Name	Enter the middle name of the PD/PI. Pre-populated from SF 424 R&R.
*Last Name	Enter the last (family) name of the PD/PI. This field is required. Pre-populated from SF 424 R&R.
Suffix	Enter the suffix (e.g., Jr, Sr, PhD) for the name of the PD/PI. Pre-populated from SF 424 R&R.
Gender	Select the gender of the Project Director/Principal Investigator.
Race (check all that apply)	Choose one or more: <i>American Indian or Alaska Native</i> : A person having origins in any of the original peoples of North, Central, or South America, and who maintains tribal affiliation or community attachment. <i>Asian</i> : A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (Note, individuals from the Philippine Islands have been recorded as Pacific Islanders in previous data collection strategies.) <i>Black or African American</i> : A person having origins in any of the black racial groups of Africa. <i>Native Hawaiian or Other Pacific Islander</i> : A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. <i>White</i> : A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. <i>Do Not Wish to Provide</i>
Ethnicity	Choose one: <i>Hispanic or Latino</i> - A person of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race <i>Non-Hispanic or Latino</i> <i>Do Not Wish to Provide</i>
Disability Status (check all that apply)	Check one or more: <i>Hearing</i> <i>Visual</i> <i>Mobility/Orthopedic Impairment</i> <i>Other</i> <i>None</i> <i>Do Not Wish to Provide</i>
Citizenship	Choose one: <i>US Citizen</i> <i>Permanent Resident</i> <i>Other non-US Citizen</i> <i>Do Not Wish to Provide</i>

5.2 Enter co-Project Director/co-Principal Investigator Information

To enter co-Project Director/co-Principal Investigator information click on the “Next Person” button.

6. R&R FUNDS REQUESTED BUDGET

A copy of the R&R Funds Requested Budget form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.



6.1 Enter Budget Information



Applicants will be using the SF 424 R&R "Funds Requested" budget type to prepare their application for submission to NSF.

Field Name	Input
*Budget Type	Project, Subaward/Consortium: Check the appropriate block. Project: The budget requested for the primary applicant organization. Subaward/Consortium: The budget requested for subawardee/consortium organization(s). Note, separate budgets are required only for subawardee/consortium organizations that perform a substantive portion of the project. If creating a Subaward Budget, use the R&R Subaward Budget Attachment and attach as a separate file on the R&R Budget Attachment(s) form.
*Start Date	Pre-populated from the SF 424 (R&R). Enter the requested/proposed start date of each budget period. This field is required.
*End Date	Enter the requested/proposed end date of each budget period. This field is required.
Budget Period	Identifies the specific budget period; e.g., 1, 2, 3, 4, 5. If submitting through Grants.gov, the system will automatically generate a cumulative budget for the total project period. This field is required.

6.2 Enter Senior/Key Person (Field A on the Form)

This section identifies names of senior/key personnel. Each person identified in the senior/key person profile that is an employee of the applying organization must be listed in this section if funds are requested.



Enter the name (first name, middle initial, last name) for each senior/key personnel **exactly** as entered on other forms/documents in the application package. Do not enter a duplicate name for any senior/key personnel identified. If a duplicate name is entered in this section for any of the senior/key personnel, then the application will not be inserted into FastLane and therefore will not be reviewed. This section should also include such roles as co-PD/PI, Postdoctoral Associates, and Other Professionals.



As a general policy, NSF recognizes that salaries of faculty members and other personnel associated directly with the project constitute appropriate direct costs and may be requested in proportion to the effort devoted to the project. NSF regards research as one of the normal functions of faculty members at institutions of higher education. Compensation for time normally spent on research within the term of appointment is deemed to be included within the faculty member's regular organizational salary.



As a general policy, NSF limits the salary compensation requested in the proposal budget for senior personnel to no more than two months of their regular salary in any one year. (See [Exhibit II-7](#) for the definitions of Senior Personnel.) It is the organization's responsibility to define and consistently apply the term "year", and to specify this definition in the budget justification. This limit includes salary compensation received **from all NSF-funded grants**. This effort must be documented in accordance with 2 CFR § 200, Subpart E, including 2 CFR § 200.430(i). If anticipated, any compensation for such personnel in excess of two months must be disclosed in the proposal



budget, justified in the budget justification, and must be specifically approved by NSF in the award notice budget.⁴

Under normal rebudgeting authority, as described in Chapters VII and X, a grantee can internally approve an increase or decrease in person months devoted to the project after an award is made, even if doing so results in salary support for senior personnel exceeding the two-month salary policy. No prior approval from NSF is necessary unless the rebudgeting would cause the objectives or scope of the project to change. NSF prior approval is necessary if the objectives or scope of the project change.

These same general principles apply to other types of non-academic organizations.

The names of the PI(s), faculty, and other senior personnel and the estimated number of full-time-equivalent person-months for which NSF funding is requested, and the total amount of salaries requested per year, must be listed. For consistency with the NSF cost sharing policy, if person months will be requested for senior personnel, a corresponding salary amount must be entered on the budget. **If no person months and no salary are being requested for senior personnel, the proposal will need to be submitted via FastLane as Grants.gov does not currently have a mechanism to remove PIs from the budget form.**

These same general principles apply to other types of non-academic organizations. See also [PAPPG Chapter II.C.2.g.i.\(a\)](#).

Field Name	Input
Prefix	Select the prefix of the senior/key person.
*First Name	Enter the first name of the senior/key person. This is required information.
Middle Name	Enter the middle name of the senior/key person.
*Last Name	Enter the last name of the senior/key person. This is required information.
Suffix	Select the suffix of the senior/key person.
*Project Role	Enter the project role of the senior/key person. This is required information.
Base Salary (\$)	Enter the annual compensation paid by the employer for each senior/key personnel. This includes all activities such as research, teaching, patient care, or other. The applicant may choose to leave this column blank.
Cal. Months	Identify the number of calendar months devoted to the project.
Acad. Months	Identify the number of academic months devoted to the project.
Sum. Months	Identify the number of summer months devoted to the project.
*Requested Salary (\$)	Regardless of the number of months being devoted to the project, indicate only the amount of salary being requested for this budget period for each senior/key person. This is required information.
*Fringe Benefits (\$)	Enter the applicable fringe benefits, if any, for each senior/key person. This is required information.



If the grantee's usual accounting practices provide that its contributions to employee benefits (leave, employee insurance, social security, retirement, other payroll-related taxes, etc.) be treated as direct costs, NSF funds may be requested to fund fringe benefits as a direct cost.

Field Name	Input
*Funds Requested (\$)	Enter requested salary and fringe benefit for each senior/key person. This is required information.
Total Funds requested for all Senior Key Persons in the Attached File	Total Funds requested for all Senior Key Persons in the attached file.
Total Senior/Key Person	This total will auto-calculate.

⁴ NSF grantees remain subject to the provisions of OMB M-01-06, "Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission Costs" regarding requirements for committing and tracking "some level" of faculty (or senior researcher) effort as part of the organized research base.



Additional Senior Key Persons - If funds are requested for more than 8 Senior/Key Persons, include all pertinent budget information and attach as a file here. Enter the total funds requested for all additional senior/key persons in line 9 of Section A.



NSF policy permits an applicant organization to request that salary data on senior personnel not be released to persons outside the Government during the review process. If this option is exercised, such applications must be submitted via the NSF FastLane system in accordance with the instructions identified in PAPPG [Chapter II.C.2.g.\(i\)\(d\)](#) and [Chapter II.D.1](#).

6.3 Enter Other Personnel (Field B on the Form)

Field Name	Input
*Number of Personnel	For each project role category, identify the number of personnel proposed. This is required information.
*Project Role	For each project role category identify the number of personnel proposed.
Cal. Months	Identify the number of calendar months devoted to the project.
Acad. Months	Identify the number of academic months devoted to the project.
Sum. Months	Identify the number of summer months devoted to the project
*Requested Salary (\$)	Regardless of the number of months being devoted to the project, indicate only the amount of salary/wages being requested for each project role. This is required information.
*Fringe Benefits (\$)	Enter applicable fringe benefits, if any, for this project role category. This is required information.
*Funds Requested (\$)	Enter requested salary/wages and fringe benefits for each project role. This is required information.
Total Number of Other Personnel	Enter Total Number of Other Personnel.



The salaries of administrative and clerical staff should normally be treated as indirect (F&A) costs. Inclusion of such costs on a proposal budget may be appropriate in accordance with the instructions identified in [PAPPG Chapter II.C.2.g.\(i\)\(b\)](#).

6.4 Enter Equipment Description (Field C on the Form)

Equipment is defined as an item of property that has an acquisition cost of \$5,000 or more (unless the organization has established lower levels) and an expected service life of more than one year.

Equipment item - Up to ten items of equipment may be separately listed in this section of the budget. If more than ten separate items of equipment are requested, the total dollar amount for the additional items should be added to the "Total funds requested for all equipment listed in the attached file." Each item of equipment should be separately listed and justified in the budget justification section of the proposal.

***Funds Requested (\$)** - List the estimated cost of each item of equipment including shipping and any maintenance costs and agreements. Equipment is defined as tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the proposer for financial statement purposes, or \$5,000.

Total funds requested for all equipment listed in the attached file – If more than ten separate items of equipment are requested, the total dollar amount for the additional items should be added to this field.



NSF does not use the "Additional Equipment" attachment option in Field C of the R&R Funds Requested Budget form. Additional equipment should be described in the budget justification section of the proposal. Any file



uploaded in this section will be added to the budget justification and may cause this section of the proposal to exceed the maximum allowable page limitation. NSF will return without review proposals that are not consistent with the proposal preparation instructions, including page limitations, contained in [PAPPG Chapter II](#) or the relevant program solicitation.

Total Equipment – Total Funds requested for all equipment.

6.5 Enter Travel (Field D on the Form)

1. **Domestic Travel Costs (Incl. US Territories and Possessions) Funds Requested (\$)** – Identify the total funds requested for domestic travel. Domestic travel includes travel within and between the US, its territories, and possessions. In the budget justification section, include purpose, destination, dates of travel (if known), and number of individuals for each trip. If the dates of travel are not known, specify estimated length of trip (e.g., 3 days).



According to the IRS, US territories and possessions are as follows: Puerto Rico, US Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, Midway Island, Wake Island, Palmyra Island, Howland Island, Johnston Island, Baker Island, Kingman Reef, Jarvis Island, and other US islands, cays, and reefs that are not part of any of the fifty states. See also: <http://www.irs.gov/Individuals/International-Taxpayers/Persons-Employed-In-U.S.-Possessions>.

2. **Foreign Travel Costs Funds Requested (\$)** - Identify the total funds requested for foreign travel. Travel outside the areas specified above is considered foreign travel. In the budget justification section, include purpose, destination, dates of travel (if known), and number of individuals for each trip. If the dates of travel are not known, specify estimated length of trip (e.g., 3 days).



Allowance for air travel normally will not exceed the cost of round-trip, economy airfares. Persons traveling under NSF grants must travel by US Flag Air carriers, if available. See also [PAPPG Chapter II.C.2.g.\(iv\)\(a\)](#).

Total Travel Costs – Total Funds requested for all travel.

6.6 Enter Participant/Trainee Support Costs (Field E on the Form)

Participant costs are the costs associated with conference, workshop, or symposium attendees that are not employees of the applicant or a subawardee. Trainee costs are the costs associated with educational projects that support trainees (pre-college, college, graduate, and post graduate). List total costs for each budget item and the number of participants/trainees. In the budget justification, identify the purpose of the conference/training, dates, and places and justify costs.

1. **Tuition/Fees/Health Insurance** - List total funds requested for Participant/Trainee Tuition/Fees/Health Insurance.
2. **Stipends** - List total funds requested for Participant/Trainee Stipends.
3. **Travel** - List total funds requested for Participant/Trainee Travel.
4. **Subsistence** - List total funds requested for Participant/Trainee Subsistence.
5. **Other** - Describe any other participant trainee funds requested.

Number of Participants/Trainees – List the total number of participants/trainees.

- 6.7 **Total Participant/Trainee Support Costs** – Total Funds requested for all trainee costs.



See [PAPPG Chapter II.C.2.g.\(v\)](#) and [PAPPG Chapter II.E.7](#).

Generally, indirect costs (F&A) are not allowed on participant support costs. See [PAPPG Chapter II.C.2.g.\(viii\)](#) for additional information.

6.8 Enter Other Direct Costs (Field F on the Form)

1. **Materials and Supplies** - List total funds requested for materials and supplies. In the budget justification, indicate general categories such as glassware, chemicals, animal costs, including an amount for each category. Categories less than \$1,000 do not require itemization.
2. **Publication Costs** - List the total publication funds requested. The application budget may request funds for the costs of documenting, preparing, publishing, or otherwise making available to others the findings and products of the work conducted under the award. In the budget justification include supporting information.
3. **Consultant Services** - List the total costs for all consultant services. In the budget justification, identify each consultant, the services he/she will perform, total number of days, travel costs, and total estimated costs.



Consultant Services are also referred to as Professional Service Costs. Anticipated services must be justified and information furnished on each individual's expertise, primary organizational affiliation, normal daily compensation rate, and number of days of expected service. Consultants' travel costs, including subsistence, also may be included. If requested, the proposer must be able to justify that the proposed rate of pay is reasonable. See also [PAPPG Chapter II.C.2.g.\(vi\)\(c\)](#).

4. **ADP/Computer Services** - List total funds requested for ADP/Computer Services. The cost of computer services, including computer-based retrieval of scientific, technical, and education information may be requested. In the budget justification, include the established computer service rates at the proposing organization if applicable.
5. **Subawards/Consortium/Contractual Costs** - List total funds requested for 1) all subaward/consortium organization(s) proposed for the project and 2) any other contractual costs proposed for the project.



Except for the purchase of materials and supplies, equipment, or general support services allowable under the grant, no portion of the proposed activity may be subawarded, transferred, or contracted out to another organization without written prior NSF authorization. Such authorization must be provided either through inclusion of the subaward(s) on an NSF award budget or by receiving written prior approval from the cognizant NSF Grants and Agreements Officer. See also [PAPPG Chapter II.C.2.g.\(vi\)\(e\)](#).

6. **Equipment or Facility Rental/User Fees** - List total funds requested for Equipment or Facility Rental/Use Fees. In the budget justification, identify each rental user fee and justify.
7. **Alterations and Renovations** - List total funds requested for Alterations and Renovations. In the budget justification, itemize, by category, and justify the costs of alterations and renovations including repairs, painting, removal or installation of partitions, shielding, or air conditioning. Where applicable, provide the square footage and costs.



Total Other Direct Costs – This total will auto-calculate.

6.9 Verify Total Direct Costs (Field G on the Form)

Total Direct Costs (A-F) – Total Funds requested for all direct costs.

6.10 Enter Indirect Costs (Field H on the Form)

Indirect Cost Type - Indicate the type of base; e.g., Salary and Wages, Modified Total Direct Costs, Other (explain). Also indicate if Off-site. If more than one rate/base is involved, use separate lines for each. If the applicant does not have a current indirect rate(s) approved by a Federal agency, indicate, "None--will negotiate" and include information for a proposed rate. Use the budget justification if additional space is needed.

Indirect Cost Rate (%) - Indicate the most recent Indirect Cost rate(s) (also known as Facilities and Administrative Costs [F&A]) established with the cognizant Federal office, or in the case of for-profit organizations, the rate(s) established with the appropriate agency. If the applicant has a cognizant/oversight agency and is selected for an award, the applicant must submit the indirect rate proposal to that office for approval. If the applicant does not have a cognizant/oversight agency, contact the awarding agency.

Indirect Cost Base (\$) - Enter the amount of the base for each indirect cost type.

* **Funds Requested (\$)** - Enter funds requested for each indirect cost type.



Except where specifically identified in an NSF program solicitation, the applicable US federally negotiated indirect cost rate(s) must be used in computing indirect costs (F&A) for the application. Additional information on the charging of indirect costs to an NSF award is available in [PAPPG Chapter II.C.2.g.\(viii\)](#) and [PAPPG Chapter X.D.](#)

6.11 Verify Total Indirect Costs

Cognizant Federal Agency - Enter the name of the cognizant Federal Agency, name and phone number of the individual responsible for negotiating your rate. If no cognizant agency is known, enter "None."



Except as noted in an NSF program solicitation, the applicable indirect cost rate(s) negotiated by the organization with the cognizant negotiating agency must be used in computing indirect costs (F&A) for a proposal according to 2 CFR 200.414. The amount for indirect costs should be calculated by applying the current negotiated indirect cost rate(s) to the approved base(s). Indirect cost recovery for colleges, universities, and other organizations of higher education are additionally restricted by 2 CFR 200 Appendix III, paragraph C.7, which stipulates that Federal agencies are required to use the negotiated F&A rate that is in effect at the time of the initial award throughout the life of the sponsored agreement. Additional information on the charging of indirect costs to an NSF award is available in [PAPPG Chapter II.C.2.g.\(viii\)](#) and [PAPPG Chapter X.D.](#)

6.12 Verify Total Direct and Indirect Costs (Field I on the Form)

Total Direct and Indirect Institutional Cost (G + H) – Total Funds requested for direct and indirect costs.

6.13 Enter Fee (Field J on the Form)

Generally, a fee is not allowed on a grant or cooperative agreement. Do not include a fee in the budget, unless the program solicitation specifically allows the inclusion of a "fee" (e.g., Major Facilities programs and SBIR/STTR). If a fee is allowable, enter the requested fee.



Payment of fees (profit) is allowable only if expressly authorized by the terms and conditions of the NSF award. However, NSF does not support inclusion of fees through Grants.gov submitted applications. To include fees in the budget, the applicant must either: (1) submit the application through Grants.gov then prepare a revised budget through the NSF FastLane system or Research.gov, or (2) submit the application directly through FastLane or Research.gov.

6.14 Enter Budget Justification (Field K on the Form)



Use the budget justification to provide the additional information requested in each budget category identified above and any other information the applicant wishes to submit to support the budget request. The budget justification must be no more than five pages per proposal budget. Only one file may be attached to the R&R Funds Requested Budget form. See also [PAPPG Chapter II.C.2.g](#).

7. R&R SUBAWARD BUDGET ATTACHMENT(S) FORM

A copy of the R&R Subaward Budget Attachment(s) Form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

On this form/document, you may attach up to 10 R&R Subaward Budget files for your grant application. Complete the subawardee budget(s) in accordance with the R&R budget instructions. Please remember that any file(s) you attach must be a PDF document.

To extract or download, fill and attach each additional R&R Subaward Budget Attachment form/document, simply follow these steps:

1. On the R&R Subaward Budget Attachment form/document, press the “Click here to extract the R&R Budget Attachment” button to download the form.

Click here to extract the R&R Subaward Budget Attachment

2. Save the subawardee budget file(s) with the name of the subawardee organization. Each file name attached to the R&R Subaward Budget Attachment Form must be unique. When assigning a name to the file, please remember to give it the extension “.pdf” (for example, “My_Senior_Key1.pdf”). If you do not name your file with the “.pdf” extension you will be unable to open it later using your Adobe Reader software.
3. Open the new form that you have just saved in Adobe Reader.
4. Enter your Subawardee organization information in this supplemental form. Complete the subawardee budget(s) in accordance with the R&R budget instructions. A subaward budget justification of no more than five pages must be attached in Field K of the R&R Subaward Budget Attachment.
5. When you have completed entering information in the supplemental form, save it and close it.
6. Return to the “R&R Subaward Budget Attachment(s)” Form.
7. Attach the saved supplemental form, which you just filled in, to one of the blocks provided on this “attachments” form.

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8. Extract and attach additional R&R Budget Forms for the Subaward organizations as necessary using the process outlined above. Please remember that the files you attach must be previously extracted R&R Budget forms. Attaching any other type of file may result in the inability to submit your application to Grants.gov.



Each Subaward Organization included on the R&R Subaward Budget Attachment(s) Form must currently be registered in NSF's Research.gov System. If the Subaward Organization is not registered in Research.gov, then the application will not be inserted into FastLane and therefore will not be reviewed. See also [PAPPG Chapter II.C.2.g.\(vi\)\(e\)](#).



Each Subaward Organization included on the R&R Subaward Budget Attachment(s) Form may only be associated with 15 budget periods. If the Subaward Organization is associated with 15 or more budget periods, then the application will not be inserted into FastLane and a confirmation email will not be sent.



VI. NSF-SPECIFIC FORMS AND INSTRUCTIONS

Before submitting a proposal to Grants.gov, the NSF applicant is required to ensure that his or her organization is registered with NSF as well as ensure the Authorized Organizational Representative (AOR) and all Principal Investigators and Co-Principal Investigators (PIs and co-PIS) have established NSF accounts (NSF IDs and passwords). The NSF Applicant will be required to provide the NSF IDs of the cognizant AOR and all PIs/co-PIS listed on the proposal as part of their submission as described in the instructions below. An Individual applicant is required to have NSF account (NSF IDs and passwords) as an unaffiliated user.

The NSF applicant is also required to complete and submit the following form in conjunction with the SF 424 (R&R) forms included in this application package:

- NSF Cover Page.
- NSF R&R Senior Key Person Profile (Expanded)

The following NSF-specific forms are optional and only should be submitted when applicable:

- NSF Deviation Authorization;
- NSF Suggested Reviewers or Reviewers Not to Include; and

Instructions for completing each of these forms follow.

1. NSF COVER PAGE

A copy of the NSF Cover Page form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortBy=1>.

1.1 Verify Funding Opportunity Number (Field 1 on the Form)

* **Funding Opportunity Number** – This information is pre-populated by Grants.gov.

Opportunity Closing Date – This information is pre-populated by Grants.gov.

1.2 Enter NSF Unit Consideration (Field 2 on the Form)

Indicate which NSF Unit should consider the application. To do that click on the URL in Block 2 and a browser window will open showing an NSF web page, <https://www.fastlane.nsf.gov/pgmannounce.jsp>. Follow the instructions on this web page to search by Funding Opportunity to identify the appropriate Division and Program for the programs accepting applications through Grants.gov. Copy the Division code and Program code into the form.

* **Division Code** – Enter the NSF division code for this funding opportunity. This is required information.

* **Program Code** – Enter the NSF program code for this funding opportunity. This is required information.

Division Name – Enter the NSF division name for this funding opportunity.

Program Name – Enter the NSF program name for this funding opportunity.

1.3 Enter Principal Investigator (PI) Information (Field 3 on the Form)

Check the box if currently serving (or have previously served) as PI, co-PI, or Program Director (PD) on any federally funded project.

1.4 Enter Other Information (Field 4 on the Form)

Check the appropriate box(es) if this application includes any of the items listed below:

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Beginning Investigator (PAPPG Chapter II.D.2.) – Check box if Beginning Investigator. **Note that this box applies only to PIs or co-PIs who are submitting applications to the Directorate for Biological Sciences.** See Chapter III, Section 4.1 of this Guide for further information.

Accomplishment-Based Renewal (PAPPG Chapter V.B.) – Check box if this is an Accomplishment-Based Renewal. If an accomplishment-based renewal is being submitted, applicants are reminded to enter the assigned award number of the previously funded application in the Federal field (Field 4 on the SF 424 (R&R) Cover Sheet).

Disclosure of Lobbying Activities (PAPPG Chapter II.C.1.d) – Check box for Disclosure of Lobbying Activities. This certification is required for an award of a Federal contract, grant, or cooperative agreement exceeding \$100,000 and for an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.

Funding of an International Branch Campus of a U.S. Institutions of Higher Education (IHEs), including through use of a subaward or consultant arrangement (see PAPPG Chapter I.E.1) – Check box for Funding of an International Branch Campus of U.S. IHEs. If the proposal includes funding to be provided to an international branch campus of a U.S. IHEs (including through use of subawards and consultant arrangements), the proposer must explain the benefit(s) to the project of performance at the international branch campus, and justify why the project activities cannot be performed at the U.S. campus.

4. Other Information

Check Appropriate Box (es) if this proposal includes any of the items listed below.

- | | |
|---|---|
| <input type="checkbox"/> Beginning Investigator (Proposal & Award Policies & Procedures Guide (PAPPG) Chapter II.D.2) | <input type="checkbox"/> Disclosure of Lobbying Activities (PAPPG Chapter II.C.1.d and Exhibit II-5) |
| <input type="checkbox"/> Accomplishment-Based Renewal (PAPPG Chapter V.B) | <input type="checkbox"/> Funding of an International Branch Campus of a U.S. IHE, including through use of a subaward or consultant arrangement (PAPPG Chapter I.E.1) |
| | <input type="checkbox"/> Funding of a Foreign Organization including through use of a subaward or consultant arrangement (PAPPG Chapter I.E.6) |

Funding of a Foreign Organization, including through use of a subaward or consultant arrangement (See PAPPG Chapter I.E.6) – Check box for Funding of Foreign Organization. NSF rarely provides direct funding support to foreign organizations. NSF will consider proposals for cooperative projects involving US and foreign organizations, provided support is requested only for the U.S. portion of the collaborative effort. In cases however, where the proposer considers the foreign organization's involvement to be essential to the project (e.g., through subawards or consultant arrangements), the proposer must explain why local support is not feasible and why the foreign organization can carry out the activity more effectively. In addition, the proposed activity must demonstrate how one or more of the following conditions have been met:

The foreign organization contributes a unique organization, facilities, geographic location and/or access to unique data resources not generally available to U.S. investigators (or which would require significant effort or time to duplicate) or other resources that are essential to the success of the proposed project; and/or

The foreign organization to be supported offers significant science and engineering education, training or research opportunities to the U.S.

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4. Other Information

Check Appropriate Box (es) if this proposal includes any of the items listed below.

- | | |
|---|---|
| <input type="checkbox"/> Beginning Investigator (Proposal & Award Policies & Procedures Guide (PAPPG) Chapter II.D.2) | <input type="checkbox"/> Disclosure of Lobbying Activities (PAPPG Chapter II.C.1.d and Exhibit II-5) |
| <input type="checkbox"/> Accomplishment-Based Renewal (PAPPG Chapter V.B) | <input type="checkbox"/> Funding of an International Branch Campus of a U.S. IHE, including through use of a subaward or consultant arrangement (PAPPG Chapter I.E.1) |
| | <input type="checkbox"/> Funding of a Foreign Organization including through use of a subaward or consultant arrangement (PAPPG Chapter I.E.6) |

1.5 Attach Additional Single-Copy Documents (Field 5 on the Form)

Attach PDF files for Additional Single-Copy Documents

1.6 Data Management Plan (Field 6 on the Form)

Each application must include a supplementary document of no more than two pages. This supplementary document should describe how the proposal will conform to NSF's policy on the dissemination and sharing of research results (see [PAPPG 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 existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
3. policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
4. policies and provisions for re-use, re-distribution, and the production of derivatives; and
5. plans for archiving data, samples, and other research products, and for preservation of access to them.

Data management requirements and plans specific to the Directorate, Office, Division, Program, or other NSF unit, relevant to a proposal are available at: <http://www.nsf.gov/bfa/dias/policy/dmp.jsp>. If guidance specific to the program is not available, then the requirements established in this section apply.

Applications that include subawards are a single unified project and should include only one supplemental combined Data Management Plan, regardless of the number subawards included. A valid Data Management Plan may include only the statement that no detailed plan is needed, as long as the statement is accompanied by a clear justification. Applicants who feel that the plan cannot fit within the limit of two pages may use part of the 15-page Project Description for additional data management information. Applicants are advised that the Data Management Plan must not be used to circumvent the 15-page Project Description limitation. The Data Management Plan will be reviewed as an integral part of the proposal, considered under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance.

Applications that do not contain the requisite data management plan will be rejected. See also [PAPPG Chapter IV.B.](#)

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1.7 Mentoring Plan (Field 7 on the Form)

Each application that requests funding to support postdoctoral researchers must include, as a supplementary document, 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, irrespective of whether they reside at the submitting organization, or any subrecipient organization(s). For purposes of meeting the mentoring requirement, collaborative applications that include subawards constitute a single unified project. Therefore, only one mentoring plan may be submitted for the entire project. The attachment must contain the words "Mentoring Plan" in the file name. Applicants are advised that the mentoring plan must not be used to circumvent the 15-page Project Description limitation. See [PAPPG Chapter II.D.3.](#) for additional information on collaborative applications.

Examples of mentoring activities include, but are not limited to: career counseling; training in preparation of grant applications, 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. The proposed mentoring activities will be evaluated as part of the merit review process under the Foundation's Broader Impacts merit review criterion.

In situations where a postdoctoral researcher is listed in Section A of the R&R Budget, and is functioning in a Senior Personnel capacity (i.e., responsible for the scientific or technical direction of the project), a mentoring plan is not required.

Applications that do not contain the requisite postdoctoral mentoring plan (where applicable) will be rejected. See [PAPPG Chapter IV.B.](#)

1.8 GOALI - Industrial PI Confirmation Letter (Field 8 on the Form)

Grant Opportunities for Academic Liaison with Industry (GOALI) applications must include, as a supplementary document, a GOALI-Industrial PI Confirmation Letter from the industrial partner that confirms the participation of a co-PI from industry. See [PAPPG Chapter II.E.4.](#)

1.9 RAISE - Program Officer Concurrence E-mails (Field 9 on the Form)

Research Advanced by Interdisciplinary Science and Engineering (RAISE) applications must include, as supplementary documentation, e-mails from at least two NSF Program Officers confirming approval to submit an application. See [PAPPG Chapter II.E.3.](#)

1.10 Type of Proposal (select one) (Field 10 on the Form)

Choose one of the following as the type of proposal

Research (see [PAPPG Chapter II](#))

Rapid Response Research (RAPID) (see [PAPPG Chapter II.E.1.](#))

EArly-concept Grants for Exploratory Research (EAGER) (see [PAPPG Chapter II.E.2.](#))

Research Advanced by Interdisciplinary Science and Engineering (RAISE) (see [PAPPG Chapter II.E.3.](#))

Grant Opportunities for Academic Liaison with Industry (GOALI) (see [PAPPG Chapter II.E.4.](#))

Ideas Lab (see [PAPPG Chapter II.E.5.](#))

Facilitation Awards for Scientists and Engineers with Disabilities (FASSED) (see [PAPPG Chapter II.E.6.](#))

Conference (see [PAPPG Chapter II.E.7.](#))

Equipment (see [PAPPG Chapter II.E.8.](#))

Travel (see [PAPPG Chapter II.E.9.](#))

Center (see [PAPPG Chapter II.E.10](#))

Research Infrastructure (see [Chapter II.E.11](#))

Fellowship (see *relevant funding opportunity*)

1.11 Authorized Representative (AOR) (Field 11 on the Form)

Provide the NSF ID associated with the AOR for this application. If the AOR is not registered, he or she must go to Research.gov and select the Register option to establish a NSF account. This field is required and the application cannot be successfully submitted to NSF without it.

If you are an Individual applicant then please enter the NSF ID for the registered unaffiliated user.

2. NSF R&R SENIOR/KEY PERSON PROFILE (EXPANDED)

A copy of the NSF R&R Senior/Key Person Profile (Expanded) form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortBy=1>.

Beginning with the PD/PI, provide a profile for each senior/key person proposed. Unless otherwise specified in an agency announcement, Senior/Key Personnel are defined as all individuals who contribute in a substantive, measurable way to the scientific development or execution of the project, whether or not salaries are requested. Consultants should be included if they meet this definition.



Definitions of categories of personnel are contained in [PAPPG Chapter II, Exhibit II-7](#).

2.1 Enter Profile – Project Director/Principal Investigator (PD/PI)

Field Name	Input
Prefix	Pre-populated from the SF 424 (R&R). The prefix (e.g., Mr., Mrs., Rev.) for the name of the Project Director.
*First Name	Pre-populated from the SF 424 (R&R). The first (given) name of the Project Director. This field is required.
Middle Name	Pre-populated from the SF 424 (R&R). The middle name of the Project Director.
*Last Name	Pre-populated from the SF 424 (R&R). The last (family) name of the Project Director. This field is required.
Suffix	Pre-populated from the SF 424 (R&R). The suffix (e.g., Jr, Sr, PhD) for the name of the Project Director.
Position/Title	Enter the position/title of the PD/PI. Pre-populated from the SF 424(R&R).
Department	Pre-populated from the SF 424 (R&R). The title of the Department.
Organization Name	Pre-populated from the SF 424 (R&R). The name of organization of the PD/PI.
Division	Pre-populated from the SF 424 (R&R). The name of primary organizational division, office, or major subdivision of the PD/PI.
*Street 1	Pre-populated from the SF 424 (R&R). The first line of the street address for the Project Director in the "Street 1" field. This field is required.
Street 2	Pre-populated from the SF 424 (R&R). The second line of the street address for the Project Director in the "Street 2" field. This field is optional.
*City	Pre-populated from the SF 424 (R&R). The city for address of Project Director. This field is required.
County/Parish	Pre-populated from the SF 424 (R&R). The county/parish for address of Project Director.
*State	Pre-populated from the SF 424 (R&R). The state where the Project Director is located. This field is required if the Project Director is located in the United States.

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Province	Pre-populated from the SF 424 (R&R). The Province where the Project Director is located.
*Country	Pre-populated from the SF 424 (R&R). The country for the Project Director address. This field is required.
*ZIP / Postal Code	Pre-populated from the SF 424 (R&R). The postal Code (e.g., ZIP code) of Project Director. This field is required if the Project Director is located in the United States.
*Phone Number	Pre-populated from the SF 424 (R&R). The daytime phone number for the Project Director. This field is required.
Fax Number	Pre-populated from the SF 424 (R&R). The fax number for the Project Director.
E-mail	Pre-populated from the SF 424 (R&R). The e-mail address for the Project Director. This field is required for Project Director.
Credential, e.g., agency login	Leave this field blank.
*Project Role	Use "Other" if a category is not listed in the pick list. This field is required.
Other Project Role Category	Complete if "Other Professional" or "Other" has been selected as a project role; e.g., Engineer, Chemist.
NSF ID	Enter the NSF ID associated with the PI/Co-PI



Please note that a valid NSF ID is required on this form for the Project Director/Principal Investigator. If you do not have an account (NSF ID and password), you must go to Research.gov and select the Register option to establish an account. If you are an Individual applicant then please enter the NSF ID for the registered unaffiliated user.

2.2 Attach Biographical Sketch –PD/PI

Provide a biographical sketch for the PD/PI. Save the information in a single file and attach here. This field is required.



A biographical sketch (limited to two pages) is required for the individual identified as the PD/PI. The information must be provided **in the order and format** established in [PAPPG Chapter II.C.2.f](#).

2.3 Attach Current and Pending Support – PD/PI

Provide a list of all current and pending support for the PD/PI (even if they receive no salary support from the project(s)) for ongoing projects and pending applications. Show the total award amount for the entire award period (including indirect costs) as well as the number of person-months per year to be devoted to the project by the senior/key person, regardless of source of support. Concurrent submission of an application to other organizations will not prejudice its review.



. See [PAPPG Chapter II.C.2.h](#) for further information.

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2.4 Attach Collaborators & Other Affiliations – PD/PI



Provide a list of Collaborators & Other Affiliations (COA) for the PD/PI. See also [PAPPG Chapter II.C.1.e](#) and [PAPPG Exhibit II-2](#). The COA information must be provided through use of the [COA template](#) and uploaded as a PDF attachment.

2.5 Enter Profile – Senior/Key Person(s)

Beginning with Senior/Key Person 1, provide a profile for each senior/key person proposed.

Field Name	Input
Prefix	Enter the prefix (e.g., Mr., Mrs., Rev.) for the name of the Senior/Key Person.
*First Name	Enter first (given) name of the Senior/Key Person. This field is required.
Middle Name	Enter the middle name of the senior/key person.
*Last Name	Enter the last (family) name of the Senior/Key Person. This field is required.
Suffix	Enter the suffix (e.g., Jr, Sr, PhD) for the name of the Senior/Key Person.
Position/Title	Enter the title of the Senior/Key Person.
Department	Enter the name of the primary organizational department, service, laboratory, or equivalent level within the organization of the Senior/Key Person.
Organization Name	Enter the name of the organization of the Senior/Key Person.
Division	Enter the name of primary organizational division, office, or major subdivision of the Senior/Key Person.
*Street 1	Enter first line of the street address for the Senior/Key Person in the "Street 1" field. This field is required.
Street 2	Enter second line of the street address for the Senior/Key Person in the "Street 2" field. This field is optional.
*City	Enter the city for address of Senior/Key Person. This field is required.
County/Parish	Enter the county/parish for address of Senior/Key Person.
*State	Enter the State where the Senior/Key Person is located. This field is required if the Senior/Key Person is located in the United States.
Province	Enter the Province where Senior/Key Person is located.
*Country	Select the country for the Senior/Key Person address.
*ZIP / Postal Code	Enter the Postal Code (e.g., ZIP code) of Senior/Key Person. This field is required if the Senior/Key Person is located in the United States.
*Phone Number	Enter the daytime phone number for the Senior/Key Person. This field is required.
Fax Number	Enter the fax number of the senior/key person.
*E-mail	Enter the e-mail address for the Senior/Key Person. This field is required for the Senior/Key Person.
Credential, e.g., agency login	Leave this field blank.
*Project Role	Select one. Use "Other" if a category is not listed in the pick list. This field is required.
Other Project Role Category	Complete if "Other Professional" or "Other" has been selected as a project role; e.g., Engineer, Chemist.
NSF ID	Enter the NSF ID associated each of the Senior/Key Person(s) being listed on this form.



Please note that a valid NSF ID is required on this form for each individual being entered as a Senior/Key person on this form. If an individual does not have an account (NSF ID and password), he or she must go to Research.gov and select the Register option to establish an account and then provide you with that NSF ID to enter on this form.

2.6 Attach Biographical Sketch – Senior/Key Person(s)

Provide a biographical sketch for each senior/key person. Save the information in a single file and attach. This is

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required information.



A biographical sketch (limited to two pages) is required for each individual identified as senior project personnel. The information must be provided **in the order and format** established in [PAPPG Chapter II.C.2.f](#).

2.7 Attach Current and Pending Support – Senior/Key Person(s)

Provide a list of all current and pending support for each senior/key person (even if they receive no salary support from the project(s)) for ongoing projects and pending applications. Show the total award amount for the entire award period (including indirect costs) as well as the number of person-months per year to be devoted to the project by the senior/key person, regardless of source of support. Concurrent submission of an application to other organizations for simultaneous consideration will not prejudice its review.



All current and pending project support (**including this project**) from whatever source (e.g., Federal, state, local or foreign government agencies, public or private foundations, industrial or other commercial organizations, or internal funds allocated toward specific projects) must be listed. With regard to the statement above that "Concurrent submission of an application to other organizations for simultaneous consideration will not prejudice its review," please note the Biological Sciences Directorate Policy specified Chapter III, Section 4.1 of this Guide. See also [PAPPG Chapter II.C.2.h](#).

2.8 Attach Collaborators & Other Affiliations – Senior/Key Person(s)



Provide a list of Collaborators & Other Affiliations (COA) for each senior/key person. See also [PAPPG Chapter II.C.1.e](#) and [PAPPG Exhibit II-2](#). The COA information must be provided through use of the [COA template](#) and uploaded as a PDF attachment.

2.9 Enter Additional Senior/Key Person Profile(s)

Once a profile is entered for senior/key person 1, the applicant may enter up to ninety-nine additional senior/key person profiles on the R&R Senior/Key Person Profile (Expanded) form/document.

To enter additional senior/key person profiles, select the "Next Person" button on the R&R Senior/Key Person (Expanded) form/document.

This will display "Profile - Senior/Key Person 2." Follow the instructions above to enter additional profiles (up to 99 people maximum).



Applications submitted to NSF may identify a **maximum of four co-Principal Investigators**. In cases where applications are submitted that include more than four co-PIs, NSF **will only use the first four co-PIs entered** on this form. Any person identified as a co-PI after the first four co-PIs listed will have their role changed to "Senior Key Person" in NSF's FastLane system.

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3. NSF DEVIATION AUTHORIZATION

A copy of the NSF Deviation Authorization form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

3.1 Enter Deviation Authorization (If Applicable)

It is important that all applications conform to the instructions provided in this Guide, and where applicable, the PAPPG. Conformance is required and will be strictly enforced unless a deviation has been approved. NSF will not accept or will return without review applications that are not consistent with these instructions. See [PAPPG Chapter IV.B](#) for additional information. NSF authorization to deviate from these instructions must be received prior to proposal submission. Deviations may be authorized in one of two ways:

1. Through specification of different requirements in an NSF solicitation; or
2. By the written approval of the cognizant NSF Assistant Director/Office Head or designee. These deviations may be in the form of a “blanket deviation” for a particular program or programs or, in rare instances, an “individual” deviation for a particular application.

Applicants may deviate from these instructions only to the extent authorized. Applications must identify the deviation in one of the following ways as appropriate: (a) by identifying the solicitation number that authorized the deviation in the appropriate block on the application Cover Sheet; or (b) for individual deviations, by identifying the name, date, and title of the NSF official authorizing the deviation. Further instructions are available on the FastLane Website (<https://www.fastlane.nsf.gov/fastlane.jsp>). See also [PAPPG Chapter II.A](#).

Requests for approval of a deviation from NSF's electronic submission requirement must be forwarded to the cognizant NSF program for review and approval prior to submission of the paper application.

4. NSF SUGGESTED REVIEWERS OR REVIEWERS NOT TO INCLUDE

Applicants may include a list of suggested reviewers who they believe are especially qualified to review the application. Applicants also may designate persons they would prefer not review the application, indicating why. These suggestions are optional. [PAPPG Chapter II, Exhibit II-2, Potentially Disqualifying Conflicts of Interest](#), contains information on conflicts of interest that may be useful in preparation of this list.

A copy of the NSF Suggested Reviewers or Reviewers Not to Include form is available for reference on the Grants.gov website: <http://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1>.

4.1 Enter Suggested Reviewers

Suggested Reviewers - Provide the First, Middle, and Last Name of suggested reviewers that the applicant believes are especially well qualified to review this application.

4.2 Enter Reviewers Not to Include

Designate persons the applicant would prefer not review this application and indicate why.

The cognizant NSF Program Officer handling the application considers the suggestions and may contact the Applicant for further information. The decision, however, whether or not to use the suggestions remains with the Program Officer.

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5. DIRECTORATE SPECIFIC FORMS

5.1 Biological Sciences (BIO) Classification Form

For applications submitted to the Directorate for Biological Sciences, a Biological Sciences Classification form is required to be submitted. **The applicant should use the Proposal File Update module in FastLane to enter this information. The applicant will not be able to check the status of an application until this information is provided.**

5.2 Division of Undergraduate Education (DUE) Project Data Form

For applications submitted to the Division of Undergraduate Education (DUE) a Project Data form is required to be submitted. **The applicant should use the Proposal File Update module in FastLane to enter this information. The applicant will not be able to check the status of an application until this information is provided.**



VII. NSF APPLICATION CHECKLIST

It is imperative that all applications conform to the application preparation and submission instructions identified in the SF 424 (R&R), the NSF *Grants.gov Application Guide*, and where specified, the NSF *Proposal & Award Policies & Procedures Guide (PAPPG)* http://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

Applications also must comply with NSF font, spacing, and margin requirements. The guidelines established in the [PAPPG Chapter II.B](#) establish minimum requirements, however, readability is of utmost importance and should take precedence in selection of an appropriate font. Conformance with all preparation and submission instructions is required and will be strictly enforced unless a deviation has been approved in advance of application submission. NSF may return without review applications that are not consistent with these instructions. See [PAPPG Chapter IV.B](#) for additional information.

Prior to electronic submission via Grants.gov, it is **strongly recommended** that an administrative review be conducted to ensure that an application complies with all application preparation instructions, in the format specified. This checklist is not intended to be an all-inclusive repetition of the required application contents and associated application preparation guidelines. It is, however, meant to highlight certain critical items so they will not be overlooked when the application is prepared.

[] General:

- [] Application is responsive to and compliant with the provisions in the program description, announcement, or solicitation.
- [] All required preparation and submission instructions specified in the PAPPG have been followed.
- [] System for Award Management (SAM) registration is current. Note that this registration must be maintained with current information at all times during which the organization has an active award or an application under consideration by NSF.
- [] If the application has been previously declined and is being resubmitted, the application has been revised to take into account the major comments from the prior NSF review.
- [] The proposed work is appropriate for funding by NSF, and is not a duplicate of or substantially similar to, a proposal already under consideration by NSF from the same submitter.
- [] The application contains all required sections for the type of proposal being submitted.
- [] The application must be submitted by 5 p.m. submitter's local time on the established deadline date.

[] SF 424 (R&R) Cover Sheet

- [] Renewal Applications: For renewal applications, the previous award number is entered in the Federal Identifier field. (Block 4)
- [] Full Application Related to Submission of a Preliminary Application. If a new full application is being submitted that is related to a previously submitted preliminary application, the assigned preliminary application number is entered in the Federal Identifier field. (Block 4a.)
- [] Type of Application. For purposes of NSF, the box for "Continuation" will not be used and should not be checked. (Block 8)
- [] Application Certifications: The requisite application certifications are submitted by the Authorized Representative upon checking the "I agree" box (Block 17) and submitting the application. See [PAPPG Chapter II.C.1.d](#) for a complete listing of the requisite certifications.



- [] SF LLL or other Explanatory Documentation. A scanned copy of the SF LLL (if applicable) is attached in Block 18. See [PAPPG Chapter II.C.1.d](#) and [PAPPG Exhibit II-5](#).

[] Project/Performance Site Location(s)

- [] The primary site where the work will be performed is indicated. If a portion of the project will be performed at any other site(s), the site location(s) is identified.

[] R&R Other Project Information

- [] Complete Questions 1 through 6.
- [] Project Summary/Abstract. Note limitation of one page. Project Summary is formatted with separate headings for Overview, Intellectual Merit, and Broader Impacts and the sections are separately addressed within the body of the Project Summary. Attach in Block 7 of the R&R Other Project Information Form. See [PAPPG Chapter II.C.2.b](#) and [PAPPG Chapter IV.B](#).
- [] Project Narrative (referred to in the PAPPG as Project Description). Attach in Block 8 of the R&R Other Project Information Form.
 - [] Project Narrative does not exceed the page limitations specified in the PAPPG or solicitation. See [PAPPG Chapter II.C.2.d](#).
 - [] Merit Review Criteria: Both merit review criteria have been addressed. See [PAPPG Chapter II.C.2.d\(i\)](#).
 - [] Project Narrative contains, as a separate section within the narrative, sections labeled “Intellectual Merit” and “Broader Impacts”. See [PAPPG Chapter II.C.2.d\(i\)](#).
 - [] Project Narrative is self-contained and Universal Resource Locators (URLs) have not been included. See [PAPPG Chapter II.C.2.d\(ii\)](#).
 - [] Results from Prior NSF Support have been provided for PIs and co-PIs who have received NSF support with an end date in the past five years. Results related to Intellectual Merit and Broader Impacts are described under two separate, distinct headings. See [PAPPG Chapter II.C.2.d\(iii\)](#).
- [] Bibliography and References Cited. This section includes bibliographic citations only and does not provide parenthetical information outside of the 15-page Project Narrative. Each reference is in the specified format. Attach in Block 9 of the R&R Other Project Information Form. See [PAPPG Chapter II.C.2.e](#).
- [] Facilities and Other Resources. 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 has been included. No quantifiable financial information has been included. If there are no facilities or other resources identified, a statement to that effect has been included. Attach in Block 10 of the R&R Other Project Information Form. See [PAPPG Chapter II.C.2.i](#).
- [] Equipment. An aggregated description of the equipment that the organization and its collaborators will provide to the project, should it be funded has been included. No quantifiable financial information has been included. If there is no equipment identified, a statement to that effect has been included. Attach in Block 11 of the R&R Other Project Information Form. See [PAPPG Chapter II.C.2.i](#).



- [] Other Attachments. A description of the types of information appropriate for inclusion in this section is defined in [PAPPG Chapter II.C.2.j](#), Special Information and Supplementary Documentation. Attach in Block 12 of the R&R Other Project Information Form.
- [] Any additional items specified in a relevant NSF Program Solicitation, as appropriate. Attach in Block 12 of the R&R Other Project Information Form.

[] **R&R Funds Requested Budget**

- [] Note in particular, the instructions regarding budget preparation as outlined in [PAPPG Chapter II.C.2.g](#), as well as those provided in the Grants.gov Application Guide.
- [] Budget Justification: Each budget line item is documented and justified in the budget justification. Attach on Line K of the Research & Related Budget Form.
- [] Subaward Budget Justification: If the application includes subawards, each subaward must include a budget justification of no more than five pages. This is in addition to the five pages allowed for the application budget justification. Attach on the Research & Related Subaward Budget Attachment Form.

NSF-Specific Forms

[] **National Science Foundation Grant Application Cover Sheet**

- [] Funding Opportunity Number: Pre-populated by Grants.gov. Verify the information is correct.
- [] NSF Unit of Consideration: See <https://www.fastlane.nsf.gov/pgmannounce.jsp> and follow the instructions for finding the Division and Program Information for the funding opportunity shown in Block 2.
- [] Other Information: If the application includes any of the items listed, check the relevant box(es) in Block 4.
- [] Additional Single-Copy Documents. A description of the categories of information appropriate for inclusion in this section is defined in [PAPPG Chapter II.C.1](#).
- [] Data Management Plan. The proposal includes a supplementary document of no more than two pages labeled "Data Management Plan." This supplementary document describes how the proposal will conform to NSF policy on the dissemination and sharing of research results. See [PAPPG Chapter II.C.2.j](#) and [PAPPG Chapter IV.B](#).
- [] Mentoring Plan. For proposals that request funding to support **postdoctoral researchers**, a supplementary document, not to exceed one page, that describes the mentoring activities that will be provided for such individuals, has been included. See [PAPPG Chapter II.C.2.j](#) and [PAPPG Chapter IV.B](#).
- [] **GOALI - Industrial PI Confirmation Letter (if applicable)**
- [] **RAISE - Program Officer Concurrence Emails (if applicable)**
- [] Type of Proposal. Type of application being developed has been selected.
- [] Authorized Representative. Provide the NSF ID associated with the AOR for this application. If the AOR is not registered, he or she must go to Research.gov and select the Register option to establish



a NSF account. This field is required and the application cannot be successfully submitted to NSF without it.

[] NSF R&R Senior/Key Person Profile (EXPANDED)

- [] A profile is required for each senior/key person proposed. See [PAPPG Chapter II, Exhibit II-7](#), for the categories of personnel considered senior project personnel by NSF.
- [] Enter a valid NSF ID for each individual being entered as a Senior/Key person. If an individual does not have an account (NSF ID and password), he or she must go to Research.gov and select the Register option to establish an account and then provide you with that NSF ID to enter on this form.
- [] Biographical Sketch(es): The content described is in accordance with the instructions and does not contain additional information beyond that specified. See [PAPPG Chapter II.C.2.f](#).
- [] Current and Pending Support: All current and pending support from whatever source (e.g., Federal, state, local or foreign government agencies, public or private foundations, industrial or other commercial organizations, or internal institutional resources) must be listed. The proposed project and all other projects or activities requiring a portion of time of the PI and other senior personnel must be included, even if they receive no salary support from the project(s). See [PAPPG Chapter II.C.2.h](#).
- [] Collaborators and Other Affiliation information has been provided for each individual identified as senior/key project personnel. See [PAPPG Chapter II.C.1.e](#).

[] Additional Single-Copy Documents/Optional Forms

- [] Proprietary or Privileged Information Statement (if applicable). See [PAPPG Chapter II.D.1](#).
- [] Authorization to Deviate from NSF Proposal Preparation Requirements (if applicable). See [PAPPG Chapter II.C.1.a](#).
- [] List of Suggested Reviewers, or Reviewers Not to Include (optional). See [PAPPG Chapter II.C.1.b](#) and [PAPPG Exhibit II-2](#).



VIII. ADMINISTRATION OF AWARDS



Guidance regarding the administration of NSF awards is contained in the Part II of the PAPPG and the relevant award conditions: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg