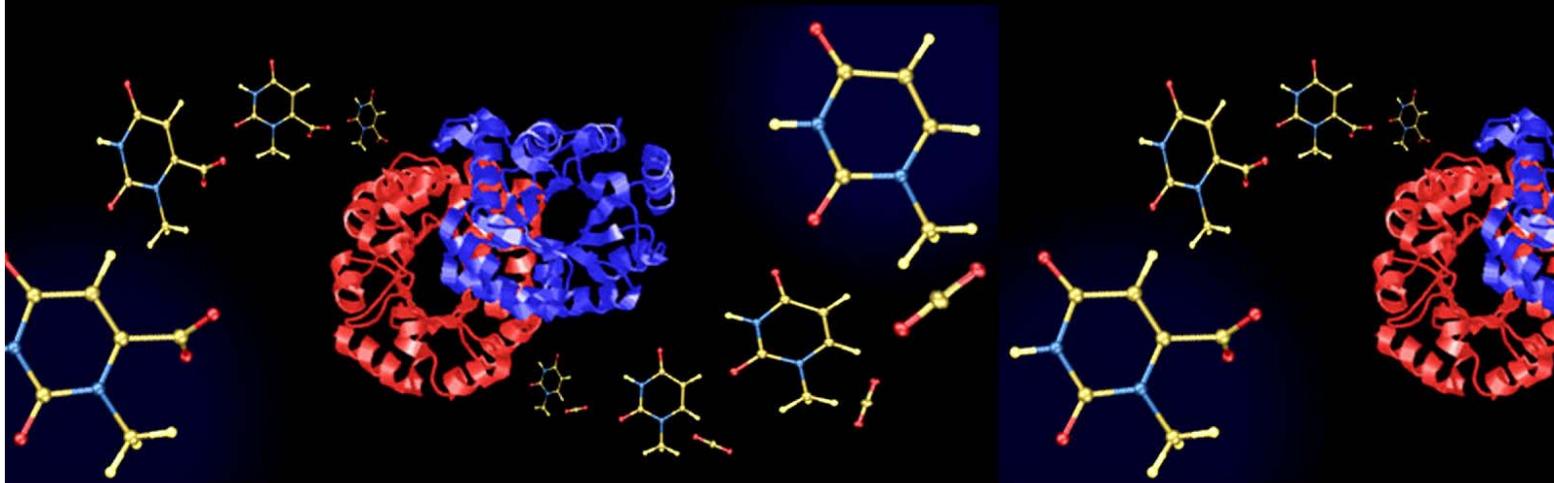


Grants.gov Application Guide



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



National Science Foundation

January 6, 2006

Image: An enzyme called orotidine 5'-monophosphate decarboxylase catalyzes a reaction to make uridine 5'-monophosphate, a component of DNA.
Credit: Dr. Dean J. Tantillo, Cornell University and Jeehiun Katherine Lee, Rutgers University





Summary of Significant Changes

SUMMARY OF SIGNIFICANT CHANGES

Chapter III – Section 1, NSF’s Implementation of Grants.gov

- This section has been updated to reflect NSF’s implementation plan for Fiscal Year 2006.

Chapter III – Section 6, Applications Eligible for Submission

- This section has been updated to reflect NSF’s implementation plan for Fiscal Year 2006.

Chapter III – Section 3.1, Portable Document Format (PDF)

- This section has been revised to delete the link to Grants.gov that lists tools and software that the applicant can use to create PDF files. Applicants without Adobe Acrobat should use the PDF Conversion Utility found within FastLane to convert non-PDF documents to PDF format. Instructions are given in Chapter III, Section 3.2.1, Instructions for Non-Adobe Acrobat Users.

Chapter III – Section 3.2.1.1, Instructions For Adobe Acrobat 6.0/7.0 Users

- This section has been deleted since NSF now accepts PDF files in Adobe Acrobat 6.0 or 7.0 formats. .

Chapter III – Section 3.2.1.2, Instructions for Non-Adobe Acrobat Users

- This section has been changed to Section 3.2.1.1 since the previous section with this number has been deleted.

Chapter IV – Section 1.2, Enter a Name for the Application

- This section has been clarified to inform the applicant that the Application Name is for the institution's use only, and is not used by the receiving agency.

Chapter V – Section 2.1, Enter a Type of Submission

- This section has been clarified to let the applicant know what information should be entered in the Federal Identifier field based on the type of submission selected.

Chapter V – Section 2.4, Federal Identifier

- This section has been clarified to let the applicant know what information should be entered in the Federal Identifier field based on the type of submission selected.

Chapter V – Section 4.1, Are Human Subjects Involved?

- The technical issue on the form regarding the exemption number has been corrected by Grants.gov and the section has been updated to reflect this change.



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Introduction

I. INTRODUCTION

1. BACKGROUND

The National Science Foundation (NSF) funds research and education in science and engineering through grants, contracts 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. Grants.gov encompasses over 900 grant programs offered by the 26 Federal grant-making agencies. It streamlines the process of awarding \$350+ billion annually to colleges, universities, K-12 school systems, businesses, informal science organizations, and other research organizations throughout the US. Grants.gov is one of 24 Federal cross-agency E-Government initiatives focused on improving access to government services via the Internet.

2. PURPOSE AND SCOPE

This instruction document was created to assist applicants in the preparation and submission of applications to the National Science Foundation. It is intended as the primary document for use in preparation of applications via Grants.gov. Where appropriate, relevant sections of the NSF Grant Proposal Guide (GPG) and Grants.gov User Guide have been incorporated by reference.

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

3. INTENDED AUDIENCE

NSF grants applicants include scientists, engineers and educators. 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. The Foundation also provides support specifically for women and minority scientists and engineers, scientists and engineers with disabilities, and faculty at predominantly undergraduate academic institutions. A full listing of eligible applicants is contained in the NSF Grant Proposal Guide.



NSF Grant Proposal Guide Chapter I.E. http://www.nsf.gov/pubs/gpg/nsf04_23/1.jsp#IE

4. DOCUMENT 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



Introduction

5. REFERENCED DOCUMENTS

5.1 NSF Grant Proposal Guide

The GPG provides guidance for the preparation of applications for submission to NSF. The GPG includes detailed application preparation instructions and information about NSF's application processing and review. It also includes information about withdrawals, returns and declinations, the award and continued support, and grant administration highlights. Where appropriate, sections of the GPG have been incorporated by reference into this application guide.



NSF Grant Proposal Guide: http://www.nsf.gov/pubs/gpg/nsf04_23/

5.2 Grants.gov User Guide

The Grants.gov User Guide is a comprehensive reference to information about Grants.gov. Applicants can download the User Guide as a Microsoft Word document or as a PDF document.



Grants.gov User Guide: <http://www.grants.gov/CustomerSupport#>



General Instructions for Submission via Grants.gov

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 any government grant on the Grants.gov website, including NSF grants.



Grants.gov Registration: <http://www.grants.gov/GetStarted>

2. SOFTWARE REQUIREMENTS¹

2.1 PureEdge

In order to access, complete and submit applications, applicants need to download and install the PureEdge Viewer. For minimum system requirements and download instructions, please see the Grants.gov User Guide.

2.2 Special Instructions for Macintosh Users

If the applicant does not have a Windows operating system, the applicant can still use PureEdge by using a Windows emulation program. PureEdge has created detailed instructions for Macintosh users:



http://www.grants.gov/GrantsGov_UST_Grantee!/SSL!/WebHelp/MacSupportforPureEdge.pdf

¹NOTE: 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.



NSF-Specific Instructions for Submission via Grants.gov

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

1. NSF'S IMPLEMENTATION OF GRANTS.GOV

In furtherance of the President's Management Agenda, in Fiscal Year 2006, NSF has identified specific programs that will either authorize, or require, use of Grants.gov to prepare and submit proposals to NSF. NSF will revise each of the funding opportunities identified on the list to incorporate Grants.gov submission requirements throughout the fiscal year. Once the funding opportunity has been revised and posted to Grants.gov FIND, the application package will become available in Grants.gov APPLY. The application package will contain the appropriate Pure Edge forms, NSF specific forms, and the NSF Grants.gov Application Guide. Applicants are advised that until the funding opportunity has been revised, the NSF FastLane system must be used to prepare and submit grant applications to NSF.



Complete Listing of NSF Programs that will either authorize, or require, use of Grants.gov to prepare and submit proposals to NSF in FY 2006: <http://www.nsf.gov/bfa/dias/policy/docs/grantsgovlisting06.pdf>

In addition, NSF does **not** accept applications through Grants.gov for the following types of transactions:

- Changed/Corrected Applications
- Revision
- Continuation

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
R&R SF424 Cover Sheet	✓		Page 18
R&R Performance Site Locations	✓		Page 25
R&R Other Project Information	✓		Page 26
R&R Key Person	✓		Page 30
R&R Personal Data	✓		Page 35
R&R Budget	✓		Page 36
NSF Grant Application Cover Page	✓		Page 43
NSF Application Checklist	✓		Page 45
NSF Deviation Authorization		✓	Page 48
NSF Suggested Reviewers		✓	Page 48
NSF FastLane System Registration		✓	Page 50

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. The guidelines established in the GPG Chapter II, Section B (http://www.nsf.gov/pubs/gpg/nsf04_23/2.jsp#IIB2) 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 had been approved in advance of application submission. Please note that NSF solicitations may establish additional requirements. NSF may return without review applications that are not



NSF-Specific Instructions for Submission via Grants.gov

consistent with these instructions. See GPG Chapter IV, Section B, (http://www.nsf.gov/pubs/gpg/nsf04_23/4.jsp#IVB) for additional information.

3.1 Portable Document Format (PDF)

NSF requires that applicants submit attachments to applications to Grants.gov in Portable Document Format (PDF). Using PDF format allows applicants to preserve the formatting of their documents. In order to save a document as a PDF, the applicant will need to use PDF generator software.

3.2.1 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 PDFWriter! To avoid problems with converting files to PDF, download the FastLane Job Options file as described below.

3.2.1.1 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.

Accessing the FastLane PDF Conversion Utility through Proposal Preparation

1. Navigate to the NSF FastLane homepage: <https://www.fastlane.nsf.gov/fastlane.jsp>
2. Select the Proposals, Awards and Status module.
3. Log in using your appropriate FastLane log-in information.
4. On the Quick Links menu at the left of the screen, select Convert Files to PDF.
5. Enter the location of the file in the space provided, or select the Browse button to select the file to be converted to PDF format.
6. Select the Convert to PDF button. The PDF conversion process may take a few minutes depending on your file. Upon completion of PDF conversion, the screen will indicate that your file has been successfully converted.
7. Select View PDF. The converted document appears in PDF format in Adobe Reader within your web browser.
8. Select the diskette icon to name and save your new PDF file locally to your hard drive.

Accessing the FastLane PDF Conversion Utility through Research Administration

1. Navigate to the NSF FastLane homepage: <https://www.fastlane.nsf.gov/fastlane.jsp>



NSF-Specific Instructions for Submission via Grants.gov

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

3.2.2 Warnings and Rules

Failure to heed the following warnings or adhere to NSF rules for PDF files may result in your application not being inserted into NSF's FastLane and the application missing the opportunity's deadline or target date!

Warnings

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

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. FastLane 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. .

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.

4.1 NSF Biological Sciences Directorate Policy

Research applications to the Biological Sciences Directorate, however, (not applications for conferences or workshops) cannot be duplicates of applications to any other Federal agency for simultaneous consideration. The only exceptions to this rule are – (1) when the applicants and program officers at 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.



NSF-Specific Instructions for Submission via Grants.gov

5. SUBMISSION FOR REVIEW BY MULTIPLE PROGRAMS WITHIN NSF

An application needs to be submitted only once to NSF, even if the applicant envisions review by multiple programs. 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 GPG Chapter IV, Section B (http://www.nsf.gov/pubs/gpg/nsf04_23/2.jsp#IIB2) for further information)

6. APPLICATIONS ELIGIBLE FOR SUBMISSION

In furtherance of the President's Management Agenda, in Fiscal Year 2006, NSF has identified specific programs that will either authorize, or require, use of Grants.gov to prepare and submit proposals to NSF. NSF will revise each of the funding opportunities identified on the list to incorporate Grants.gov submission requirements throughout the fiscal year. Once the funding opportunity has been revised and posted to Grants.gov FIND, the application package will become available in Grants.gov APPLY. The application package will contain the appropriate Pure Edge forms, NSF specific forms, and the NSF Grants.gov Application Guide. Applicants are advised that until the funding opportunity has been revised, the NSF FastLane system must be used to prepare and submit grant applications to NSF.



Complete Listing of NSF Programs that will either authorize, or require, use of Grants.gov to prepare and submit proposals to NSF in FY 2006: <http://www.nsf.gov/bfa/dias/policy/docs/grantsgovlisting06.pdf>

7. NEXT STEPS – POST SUBMISSION TO GRANTS.GOV

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



Check Application Status: <https://apply.grants.gov/ApplicantLoginGetID>

7.1 Grants.gov Contact Center

If the Authorized Representative (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

Email: support@grants.gov

7.2 NSF IT Help Central

If the Authorized Representative (AR)² has not received a confirmation message from NSF within 60 hours of submission of the application, please contact:

Telephone: 1-800-673-6188

Email: fastlane@nsf.gov

After applicants receive a receipt notification from NSF, FastLane should be used to check the status of an application.



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

7.3 Application File Update – Post Submission

Applications submitted through Grants.gov are considered official submissions to the Federal government.

Applicants that wish to change or correct a previously submitted application should use the Proposal File Update³ module available in the NSF FastLane System.

² Please note that the identified PI also will receive a confirmation message from NSF.

³ The module in FastLane that is used to update files is formally known as the Proposal File Update module; that terminology has been used here to avoid user confusion.

NATIONAL SCIENCE FOUNDATION

Grants.Gov Application Guide

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

January 6, 2006



NSF-Specific Instructions for Submission via Grants.gov

A request for a file update automatically will be accepted if submitted **prior to**:

- the deadline date specified in a program solicitation;
- initiation of external peer review in cases when a target date is utilized; and
- initiation of external peer review in the case of an unsolicited application.

A request for a file update **after** the timeframes specified above will require acceptance by the cognizant NSF Program Officer. Such requests may be submitted only to correct a technical problem with the application (i.e., formatting or print problems). Changes in the content of the application should not be requested **after** the timeframes specified above. When a request is accepted, the proposed files or revisions to application attributes will immediately replace the existing files and become part of the official application.

7.4 Warning Messages

If an applicant receives a Warning Message email stating information needs to be added or corrected in the application, the applicant will need to make the necessary correction(s) in the Proposal File Update module. See Application File Update – Post Submission above for more information about file updates.



Grant Application Package Instructions

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 their own behalf (if applicable). Enter a name for the application in the * **Application Filing Name** field. 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.

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:

1.3 Open and Complete Mandatory Documents

Open and complete all of the documents listed in the "Mandatory Documents" box. Complete the SF 424 (R&R) first. Data entered on the SF 424 (R&R) will populate other mandatory and optional forms where possible.

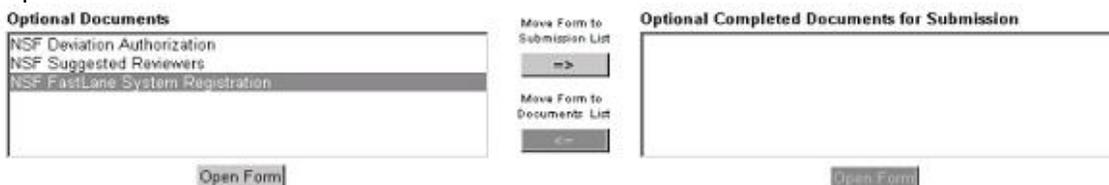


Grant Application Package Instructions

To open an item, simply click on it to select the item and then click on the “Open Form” button. When a form or document has been completed, click the form/document name to select it, and then click the => button. This will move the form/document to the “Completed Documents” box. To remove a form/document from the “Completed Documents” box, click the form/document name to select it, and then click the <= button. This will return the form/document to the “Mandatory Documents” or “Optional Documents” box.

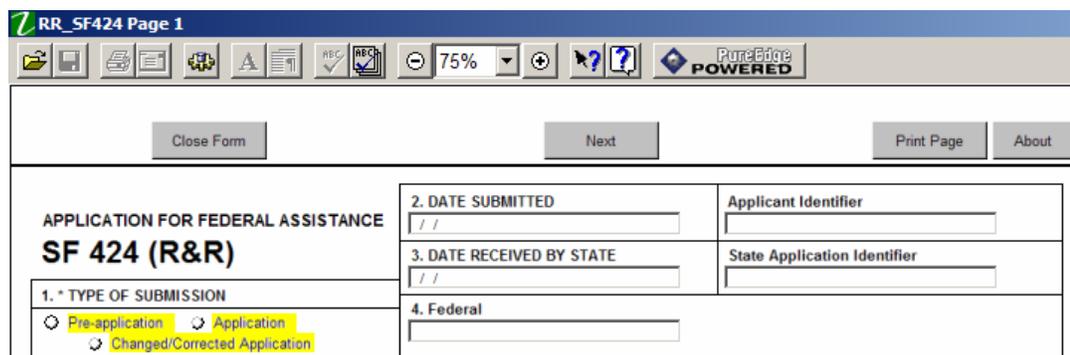
1.4 Open and Complete Optional Documents

These documents can be used to provide additional support for the application or may be required for specific types of funding opportunities. Reference the application package instructions for more information regarding “Optional Documents”.

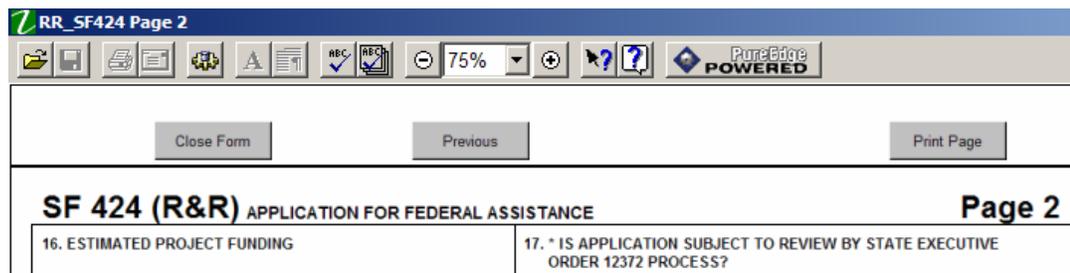


1.5 Navigating the Forms

The SF 424 (R&R) Cover Sheet, R&R Budget and NSF Application Checklist forms/documents are two or more pages in length. The applicant must complete the mandatory fields on each page of the form/document. To navigate to the next page of a form/document, locate the “Next” button at the top of the form and click on the button.



Once the “Next” button has been clicked, the applicant will be taken to the next page of the form/document where they may complete the rest of the form.



To go back to the first page of the form/document, simply click on the “Previous” button. Once all the relevant fields have been completed, the applicant may click on the “Close Form” button to return to the Grant Application Package screen and the list of Mandatory and Optional Documents. When a form/document is closed the completed data is captured in the application package but the form/document is not saved. The application package must be saved from the Grant Application Package screen. More information on saving the application package is available in section 1.7, Saving the Application.



Grant Application Package Instructions

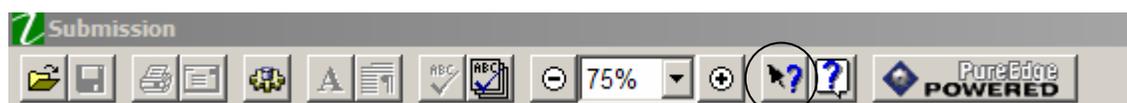
On the R&R Budget form/document, the applicant may enter up to 5 budget periods. To add a new budget period, the applicant must first complete Budget Period 1. The “Next Period” button on page 3 of the R&R Budget form/document will become active once Budget Period 1 is completed.

A screenshot of the "RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 1" form. At the top, there are buttons for "Close Form", "Previous", "Next", and "Print Page". Below these, the title "RESEARCH & RELATED BUDGET - SECTION F-K, BUDGET PERIOD 1" is displayed, with a "Next Period" button to its right. The form contains two input fields: "* ORGANIZATIONAL DUNS:" with the value "000000000000" and "* Budget Type:" with radio buttons for "Project" and "Subaward/Consortium".

Many of the forms/documents in the application package require the applicant to attach files. As stated in section 3.1, Portable Document Format (PDF), NSF requires that all attachments be submitted in PDF format. All attachments must also have a unique name to identify the attachment. Duplicate attachments will not be processed by NSF and will require resubmission of the application package through Grants.gov.

1.6 Accessing Help Tips

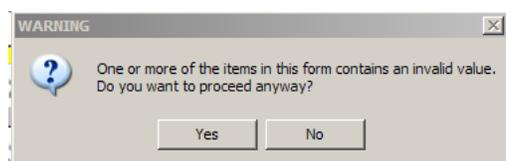
The applicant may access help tips while completing the application package by clicking on the help mode button located in the menu bar at the top of the screen. This button is shown below and is represented by an arrow and a question mark.



A question mark will appear next to the applicant's browser cursor once the help mode button has been clicked. The applicant may use their cursor to scroll over each field on the form/document to reveal help text for each field. Click on the help mode button again to return the cursor to normal.

1.7 Saving the Application

The application package can only be saved from the Grant Application Package screen. It is recommended that after the applicant completes each form/document that they click on the “Close Form” button to close the form and 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 their hard drive where it can easily be located. The applicant may save their application package at any time and should save the application package with the same file name each time. An error message will occur each time that the applicant saves the form before completing all of the mandatory fields on the mandatory forms or the optional forms moved to the Optional Completed Documents for Submission column on the application package.



The applicant may ignore this warning. This warning will not appear once all of the mandatory fields have been completed on all of the forms/documents in the application package.



Grant Application Package Instructions

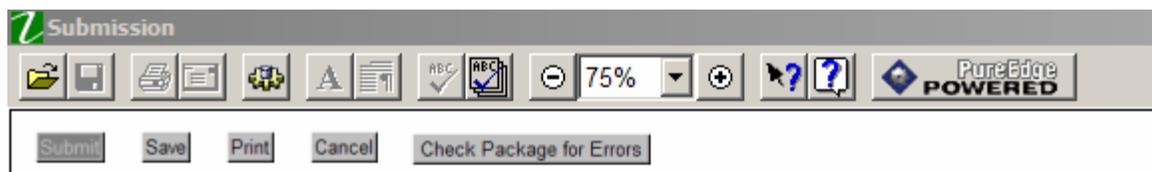
1.8 Check Package for Errors

To initiate the Grants.gov edit check process, simply click on the “Check Package for Errors” button at the top of the screen.

This process will identify all mandatory fields that have not been completed by the applicant. These errors will be displayed one at a time.



No NSF edit checks will take place at this time.



1.9 Submitting the Application

The AR must open the Internet Explorer browser, open the application and then press the Submit button. To submit the application:

1. Close all open browser(s) and running applications.
2. Open Internet Explorer.
3. From the tool bar, click **File > Open**. The **Open** window appears.
4. Click the **Browse** button located at the bottom of right of the window. A Browse menu opens. At the bottom of this screen there is a **Files of type:** drop-down menu.
5. Click the drop-down arrow and click **All Files**.
6. At the top of the screen there is a **Look in:** drop-down menu. Click the drop down arrow and browse to the physical location where the application file is located on your hard disk. Select the application.
7. Double-click the application or click **Open** and then click **OK**.
8. Internet Explorer will open the application. This may take a few moments. Please be patient.
9. Once the application is completely open, click the **Submit** button. (The Submit button will not become active until all mandatory documents have been properly completed and the application has been saved.).
10. Click **Sign and Submit**.
11. Next, enter your username and password.
12. Lastly, click **Login**.

Only the AR has the authority and user rights to **Sign and Submit** an application to Grants.gov. Additional submission tips may be found at the Grants.gov website.



Grants.gov Submission Tips: <http://www.grants.gov/assets/GrantsgovSubmitTips.pdf>



Research and Related (R&R) Forms and Instructions

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.

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

The screenshot shows the SF 424 (R&R) form interface. The form is titled "APPLICATION FOR FEDERAL ASSISTANCE SF 424 (R&R)". It contains various fields for submission type, applicant information, contact details, and project description. A blue arrow points to the "1. TYPE OF SUBMISSION" section, which includes options like "Pre-application", "Application", and "Changed/Corrected Application".

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

Check one of the Type of Submission boxes. If this submission is to change or correct a previously submitted "New" application, click the Changed/Corrected Application box and enter the Grants.gov tracking number in the Federal Identifier field. If this submission is to change or correct a "resubmission", "renewal", "continuation", or "revision" application, leave the Federal Identifier field as previously filled with the existing identifier (e.g. Award number). Do NOT insert the Grants.gov tracking number in these cases.



Unless specifically required by an NSF program solicitation, pre-applications are not required and should not be submitted to NSF. In addition, the box for "changed/corrected application" should not be used. Rather, applicants that wish to change or correct a previously submitted application should use the Proposal File Update module available in the NSF FastLane System at <https://www.fastlane.nsf.gov/>.



Research and Related (R&R) Forms and Instructions

2.2 Enter Date Submitted and Applicant Identifier (Field 2 on the Form)

Enter the date submitted to Federal agency (or State if applicable) in the **Date Submitted** field. Please use mm/dd/yyyy format (e.g. 08/13/2004). Enter the Applicant's control number (if applicable) in the **Applicant Identifier** field.

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

The **Date Received by State** field is for State use only (if applicable). Leave the **State Application Identifier** field blank.

2.4 Federal Identifier (Field 4 on the Form)

New project applications should leave this field blank, unless you are submitting a Changed/Corrected application. When submitting a changed/corrected "New" application, enter the Grants.gov tracking number. If this is a continuation, revision or renewal application, enter the assigned Federal Identifier number (for example, award number) even if submitting a changed/corrected application.



If a new, full application is being submitted that is related to a previously submitted preliminary application, enter the assigned preliminary application number in the Federal 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.

2.5 Enter Applicant Information (Field 5 on the Form)

Enter the DUNS or DUNS+4 number of the applicant organization in the * **Organizational DUNS** field. This is required information.



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 also cannot enter information into the Organizational DUNS field.

Field Name	Input
*Legal Name	Enter the applicant's legal name. This is required information
Department	Enter the applicant's department (optional)
Division	Enter the applicant's division (optional)
*Street 1	Enter the physical address of the applicant. Two lines are available for street address input. The second line is not required. This is required information
Street 2	Additional line for street address (optional)
*City	Enter the name of the city/place of the applicant. This is required information
County	Enter the name of the county of the applicant
*State	Select the name of the state of the applicant. This is required information
*Zip Code	Enter the five- or nine-digit postal code for the applicant. This is required information
*Country	Select the name of the country for the applicant. This is required information

Person to be contacted on matters involving this application:

Field Name	Input
Prefix	Select the prefix of the contact
*First Name	Enter the first name of the contact. This is required information
Middle Name	Enter the middle name of the contact
*Last Name	Enter the last name of the contact. This is required information
Suffix	Select the suffix of the contact
*Phone Number	Enter the phone number of the contact. This is required information
Fax Number	Enter the fax number of the contact
Email	Enter the email address of the contact



Research and Related (R&R) Forms and Instructions

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 U.S. Internal Revenue Service. If applicant's organization is not in the U.S., type 44-4444444.

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

Type of Applicant - Select from the menu or enter the appropriate letter in the space provided.

Complete only if "Other" is selected as the Type of Applicant.

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

- **Woman 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 U.S. 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.
- **Resubmission** - An application that has been previously submitted, but was not funded, and is being resubmitted for new consideration.
- **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.
- **Continuation** - A non-competing application for an additional funding/budget period within a previously approved project period.
- **Revision** - An application that proposes a change in - 1) the Federal Government's financial obligations or contingent liability from an existing obligation; or, 2) any other change in the terms and conditions of the existing award.



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

If Revision, mark the appropriate box(es)

- **Increase Award**
- **Decrease Award**
- **Increase Duration**
- **Decrease Duration**
- **Other (specify)**
If "Other" is selected, please specify in space provided.



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, these boxes 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** - Name the Federal agency from which assistance is being requested with this application. This information is pre-populated by Grants.gov.



Research and Related (R&R) Forms and Instructions

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

Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested. This information is pre-populated by Grants.gov.

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, intelligible to a scientifically or technically literate reader, and suitable for use in the public press. NSF may edit the title of a project prior to making an award.

2.12 List Areas Affected by Project (Field 12 on the Form)

* **Areas Affected by Project** - List only the largest political entities affected by the project (e.g., State, counties, cities). This is required information.

2.13 Enter Proposed Project (Field 13 on the Form)

* **Start Date** – Enter the proposed start date of the project. This is required information. Please use mm/dd/yyyy format (e.g. 08/13/2004).

* **Ending Date** – Enter the proposed ending date of the project. This is required information. Please use mm/dd/yyyy format (e.g. 08/13/2004).



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.

2.14 Enter Congressional Districts (Field 14 on the Form)

* **Applicant** - Enter the applicant's Congressional District. This is required information.

* **Project** – Enter the Congressional District of the primary site where the project will be performed. This is required information.



Research and Related (R&R) Forms and Instructions

2.15 Enter Project Director/Principal Investigator Contact Information (Field 15 on the Form)

Field Name	Input
Prefix	Enter the prefix of the individual responsible for the overall scientific and technical direction of the project.
*First Name	Enter the first name of the individual responsible for the overall scientific and technical direction of the project. This is required information
Middle Name	Enter the middle name of the individual responsible for the overall scientific and technical direction of the project.
*Last Name	Enter the last name of the individual responsible for the overall scientific and technical direction of the project. This is required information
Suffix	Enter the suffix of the individual responsible for the overall scientific and technical direction of the project.
Position/Title	Enter the position/title of the individual responsible for the overall scientific and technical direction of the project.
Organization Name	Enter the organization name of the individual responsible for the overall scientific and technical direction of the project
Department	Enter the department of the individual responsible for the overall scientific and technical direction of the project.
Division	Enter the division of the individual responsible for the overall scientific and technical direction of the project.
*Street 1	Enter the physical address of the applicant. Two lines are available for street address input. This is required information. The second line is not required.
Street 2	Additional line for street address (optional)
*City	Enter the name of the city/place of the applicant. This is required information.
County	Enter the name of the county of the applicant
*State	Select the name of the state of the applicant. This is required information.
*Zip Code	Enter the five- or nine-digit postal code for the applicant. This is required information.
*Country	Select the name of the country for the applicant. This is required information.
*Phone Number	Enter the phone number of the applicant. This is required information.
Fax Number	Enter the fax number of the applicant.
*Email	Enter the email of the applicant. This is required information.



Research and Related (R&R) Forms and Instructions

SF 424 (R&R) APPLICATION FOR FEDERAL ASSISTANCE

Page 2

16. ESTIMATED PROJECT FUNDING

a. * Total Estimated Project Funding

b. * Total Federal & Non-Federal Funds

c. * Estimated Program Income

17. * IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:
 DATE:

b. NO PROGRAM IS NOT COVERED BY E.O. 12372; OR
 PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

18. By signing this application, I certify (1) to the statements contained in the list of certifications* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001)

* I agree

* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

19. Authorized Representative

Prefix: * First Name: Middle Name: * Last Name: Suffix:

* Position/Title: * Organization:

Department: Division:

* Street1: Street2:

* City: County: * State: * ZIP Code:

* Country:

* Phone Number: Fax Number: * Email:

* Signature of Authorized Representative * Date Signed
 Completed on submission to Grants.gov Completed on submission to Grants.gov

20. Pre-application

2.16 Enter Estimated Project Funding (Field 16 on the Form)

Field Name	Input
* Total Estimated Project Funding	Enter total Federal funds requested for the entire project period. 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.

2.17 Is Application Subject to Review by State Executive Order 12372 Process? (Field 17 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.

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

If No, check appropriate box.

2.18 Complete Certification (Field 18 on the Form)

Check to provide the required certifications and assurances:

- I agree**

Only a designated Authorized Representative of the Organization may submit applicable certifications specified in Chapter II, Section C.1.e of the NSF Grant Proposal Guide. As defined in the NSF Grant Policy Manual, Chapter II, Section 210a, the Authorized Representative 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.



Research and Related (R&R) Forms and Instructions

2.19 Enter Authorized Representative (Field 19 on the Form)

Field Name	Input
Prefix	Enter the prefix of the authorized representative
*First Name	Enter the first name of the authorized representative. This is required information.
Middle Name	Enter the middle name of the authorized representative.
*Last Name	Enter the last name of the authorized representative. This is required information
Suffix	Enter the suffix of the authorized representative.
Position/Title	Enter the position/title of the authorized representative.
Organization Name	Enter the organization name of the authorized representative
Department	Enter the department of the authorized representative.
Division	Enter the division of the authorized representative.
*Street 1	Enter the physical address of the applicant. Two lines are available for street address input. This is required information. The second line is not required.
Street 2	Additional line for street address (optional)
*City	Enter the name of the city/place of the authorized representative. This is required information.
County	Enter the name of the county of the authorized representative.
*State	Select the name of the state of the authorized representative. This is required information.
*Zip Code	Enter the five- or nine-digit postal code for the authorized representative. This is required information.
*Country	Select the name of the country for the authorized representative. This is required information.
*Phone Number	Enter the phone number of the authorized representative. This is required information.
Fax Number	Enter the fax number of the authorized representative
*Email	Enter the email 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.
Pre-Application	Provide a summary description of the project in accordance with the announcement and/or agency-specific instructions and attach here.



With regard to block 20 on the SF424 (R&R) Cover Sheet, some NSF program solicitations require or encourage submission of a preliminary application in advance of submission of a full application. The two predominant reasons for requiring submission of a preliminary application are to:

- Reduce the applicant's unnecessary effort in application preparation when the chance of success is very small. This is particularly true of exploratory initiatives where the community senses that a major new direction is being identified, or competitions that will result in a small number of actual awards; and
- Increase the overall quality of the full submission.

The NSF program solicitation will specify the content and submission requirements in Section V.A of the solicitation when preliminary applications are to be utilized.



Research and Related (R&R) Forms and Instructions

3. R&R PERFORMANCE SITE LOCATIONS

3.1 Enter Project/Performance Site Primary Location

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. If more than 8 performance site locations are proposed, provide the requested information in a separate file and attach.

Project/Performance Site Primary Location:

Field Name	Input
Organization Name	Enter the name of the organization.
*Street 1	Enter the physical address of the primary project performance site. Two lines are available for street address input. This is required information. The second line is not required.
Street 2	Additional line for street address (optional)
*City	Enter the name of the city/place of the primary project performance site. This is required information.
County	Enter the name of the county of the primary project performance site
*State	Select the name of the state of the primary project performance site. This is required information.
*Zip Code	Enter the five- or nine-digit postal code for the primary project performance site. This is required information.
Country	Select the name of the country for the primary project performance site

Project/Performance Site Location 1 (Optional):

Field Name	Input
Organization Name	Enter the name of the organization
*Street 1	Enter the physical address of the project performance site. Two lines are available for street address input. This is required information. The second line is not required.
Street 2	Additional line for street address (optional)
*City	Enter the name of the city/place of the project performance site. This is required information.
County	Enter the name of the county of the project performance site
*State	Select the name of the state of the project performance site. This is required information. This is required information.
*Zip Code	Enter the five- or nine-digit postal code for the project performance site. This is required information.
Country	Select the name of the country for the project performance site



Research and Related (R&R) Forms and Instructions

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, Zip Code.**

4. R&R OTHER PROJECT INFORMATION

RESEARCH & RELATED Other Project Information

1. * Are Human Subjects Involved? Yes No

1.a. If YES to Human Subjects

Is the IRB review Pending? Yes No

IRB Approval Date:

Exemption Number: 1 2 3 4 5 6

Human Subject Assurance Number:

2. * Are Vertebrate Animals Used? Yes No

2.a. If YES to Vertebrate Animals

Is the IACUC review Pending? Yes No

IACUC Approval Date:

Animal Welfare Assurance Number

3. * Is proprietary/privileged information included in the application? Yes No

4.a. * Does this project have an actual or potential impact on the environment? Yes No

4.b. If yes, please explain:

4.c. 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? Yes No

4.d. If yes, please explain:

5.a. * Does this project involve activities outside the U.S. or partnership with international collaborators? Yes No

5.b. If yes, identify countries:

5.c. Optional Explanation:

6. * Project Summary/Abstract

7. * Project Narrative

8. Bibliography & References Cited

9. Facilities & Other Resources

10. Equipment

11. Other Attachments

4.1 Are Human Subjects Involved? (Field 1 on the Form)

This is required information. Check yes or no.

- Yes
- No



Projects involving research with human subjects must ensure that subjects are protected from research risks in conformance with the relevant federal policy known as the Common Rule (*Federal Policy for the Protection of Human Subjects, 45 CFR 690*). All projects involving human subjects must either (1) have approval from the organization's Institutional Review Board (IRB) before issuance of an NSF award or, (2) must affirm that the IRB or an appropriate knowledgeable authority previously designated by the organization (not the Principal Investigator) has declared the research exempt from IRB review in accordance with the applicable subsection, as established in section 101(b) of the Common Rule. The box for "Human Subjects" must be checked "yes" with the IRB approval date (if available) or exemption subsection from the Common Rule identified in the space provided. Check yes even if the proposed project is exempt from Regulations for the Protection of Human Subjects. If no, skip the remaining questions about Human Subjects.

If YES to Human Subjects:

Is the IRB review Pending?

- Yes



Research and Related (R&R) Forms and Instructions

- **No**

IRB Approval Date – Enter the latest Institutional Review Board (IRB) approval date (if available). Please use mm/dd/yyyy format (e.g. 08/13/2004). Leave blank if Pending.

NOTE: This is required information if the applicant selected NO to “Is the IRB review Pending?”

Exemption Number – If human subject activities are exempt from Federal regulations, provide the exemption numbers corresponding to one or more of the exemption categories. The six categories of research that qualify for exemption from coverage by the regulations are defined in the Common Rule for the Protection of Human Subjects. These regulations can be found at <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.htm>. Please check the exemption number:

- 1
- 2
- 3
- 4
- 5
- 6

Human Subject Assurance Number – Enter the approved Federal Wide Assurance (FWA), Multiple Project Assurance (MPA), Single Project Assurance (SPA) Number or Cooperative Project Assurance (CPA) Number that the applicant has on file with the Office for Human Research Protections, if available.



The Human Subject Assurance Number field on the R&R Other Project Information form/document has a maximum length of 10 characters. If the applicant has a FWA number, only 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**



For applications involving the use of vertebrate animals, sufficient information must be provided within the 15-page project description to enable reviewers to evaluate the choice of species, number of animals to be used, and any necessary exposure of animals to discomfort, pain, or injury. Consistent with the requirements of the Animal Welfare Act [7 U.S.C. 2131 et seq.] and the regulations promulgated by the Secretary of Agriculture [9 CFR, 1.1-4.11], NSF requires that proposed projects involving use of any vertebrate animal for research or education be approved by the submitting organization's Institutional Animal Care and Use Committee (IACUC) before an award can be made. For this approval to be accepted by NSF, the organization must have a current Institutional Animal Welfare Assurance established with the Public Health Service (PHS).

If the organization does not have such an Assurance in place, then approval of the project by the IACUC of an organization with a current PHS Assurance will be acceptable, if the IACUC agrees to provide the required oversight of facilities and activities during the award. Alternatively, the submitting organization may create its own IACUC by establishing a single-project Institutional Animal Welfare Assurance with NSF. In any case, IACUC approval must be received prior to an award. Questions regarding this requirement should be directed to the cognizant NSF Program Officer.

These same rules apply to awards to individuals (fellowships) for activities that involve use of vertebrate animals. The “Vertebrate Animals” box should be checked “yes”. Evidence of IACUC approval can be provided in a letter giving the date of IACUC approval with the appropriate organizational signature.

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 Subjects:

Is the IACUC review Pending? Check yes or no.

- **Yes**
- **No**



Research and Related (R&R) Forms and Instructions

IACUC Approval Date – Enter the Institutional Animal Care and Use Committee (IACUC) approval date (if available). Please use mm/dd/yyyy format (e.g. 08/13/2004). 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 6 of the National Science Foundation Grant Application 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 GPG Chapter VI, Section K.)

4.4 Does this Project Have an Actual or Potential Impact on the Environment? (Field 4 on the Form)

This is required information. Check yes or no.

- **Yes**
- **No**

If yes, please explain – Enter an explanation for the actual or potential impact on the environment.

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**
- **No**

If yes, please explain – Enter additional details about the EA or EIS.

4.5 Does this Project Involve Activities Outside the U.S. or Partnership with International Collaborators? (Field 5 on the Form)

This is required information. Check yes or no.

- **Yes**
- **No**

If yes:

Provide countries with which international cooperative activities are involved – Enter the names of countries.

Optional Explanation – Enter an explanation for involvement with outside entities (optional).

4.6 Attach Project Summary/Abstract (Field 6 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 must not be more than one page in length and must be suitable for publication. It must clearly address in separate statements (within the one-page summary): (1) the intellectual merit of the proposed activity; and (2) the broader impacts resulting from the proposed activity. (See Chapter III, Section A of the GPG for further descriptive information on the NSF merit review criteria.) It should be informative to other persons working in the same or related fields and, insofar as possible, understandable to a scientifically or



Research and Related (R&R) Forms and Instructions

technically literate lay reader. *Applications that do not separately address both merit review criteria within the one page Project Summary will be returned without review.*

4.7 Attach Project Narrative (Field 7 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 GPG) including the Results from Prior NSF Support must not exceed 15 pages, and must be prepared in accordance with the guidelines specified in GPG Chapter II, Section C.2.d.

4.8 Attach Bibliography & References Cited (Field 8 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. To attach a document for Bibliography and References Cited, click "Add Attachment".



If the applicant has a Website address readily available, that information also should be included in the citation. It is not NSF's intent, however, to place an undue burden on applicants to search for the URL of every referenced publication. Therefore, inclusion of a Website address is optional. An application that includes reference citation(s) that do not specify a URL address is not considered to be in violation of NSF application preparation guidelines and the application will still be reviewed.

4.9 Attach Documentation for Facilities & Other Resources (Field 9 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".

4.10 Attach Equipment Documentation (Field 10 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".

4.11 Add Other Attachments (Field 11 on the Form)

Attach a file to provide any other project information not provided above or in accordance with the announcement and/or agency-specific instruction.



Except as specified in GPG Chapter II, Section 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 GPG Chapter II, Section 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. Specific guidance on the need for additional documentation may be obtained from the organization's sponsored projects office or in the references cited in GPG Chapter II, Section C.2.j.



Research and Related (R&R) Forms and Instructions

5. R&R KEY PERSON



RESEARCH & RELATED Senior/Key Person Profile

PROFILE - Project Director/Principal Investigator

Prefix: * First Name: Middle Name: * Last Name: Suffix:

Position/Title: Department:

Organization Name: Division:

* Street1: Street2:

* City: County: * State: * Zip Code: * Country:

* Phone Number: Fax Number: * E-Mail:

Credential, e.g., agency login:

* Project Role: Other Project Role Category:

* Attach Biographical Sketch:

Attach Current & Pending Support:

PROFILE - Senior/Key Person 1

Prefix: * First Name: Middle Name: * Last Name: Suffix:

Position/Title: Department:

Organization Name: Division:

* Street1: Street2:

* City: County: * State: * Zip Code: * Country:

* Phone Number: Fax Number: * E-Mail:

Credential, e.g., agency login:

* Project Role: Other Project Role Category:

* Attach Biographical Sketch:

Attach Current & Pending Support:

ADDITIONAL SENIOR/KEY PERSON PROFILE(S)

Additional Biographical Sketch(es) (Senior/Key Person)

Additional Current and Pending Support(s)

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 GPG Appendix F.



Research and Related (R&R) Forms and Instructions

5.1 Enter Profile – Project Director/Principal Investigator

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
Position/Title	Enter the position/title of the senior/key person.
Organization Name	Enter the organization name of the senior/key person.
Department	Enter the department of the senior/key person.
Division	Enter the division of the senior/key person.
*Street 1	Enter the physical address of the senior/key person. Two lines are available for street address input. This is required information. The second line is not required.
Street 2	Additional line for street address (optional)
*City	Enter the name of the city/place of the senior/key person. This is required information
County	Select the name of the county for the senior/key person. This is required information.
*State	Select the name of the state of the senior/key person. This is required information.
*Zip Code	Enter the five- or nine-digit postal code for the senior/key person This is required information
*Country	Select the name of the country for the senior/key person This is required information
*Phone Number	Enter the phone number of the senior/key person This is required information
Fax Number	Enter the fax number of the senior/key person
Email	Enter the email of the senior/key person
Credential, e.g., agency login	If the application is being submitted to an agency (e.g. NIH) where the senior/key person has an established personal profile, enter the agency ID. If not, leave blank.
*Project Role	Use "Other" if a category is not listed in the pick list.
Other Project Role Category	Complete if "Other Professional" or "Other" has been selected as a project role; e.g., Engineer, Chemist

5.2 Attach Biographical Sketch

Provide a biographical sketch for the PD/PI. Recommended information includes - Education and Training, Research and Professional Experience, Collaborators and Affiliations (for conflicts of interest), Publications and Synergistic Activities. Save the information in a single file and attach.



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 GPG Chapter II, Section C.2.f.

5.3 Attach Current and Pending Support

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 for simultaneous consideration will not prejudice its review.



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.



Research and Related (R&R) Forms and Instructions

5.4 Enter Profile – Senior/Key Person 1

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
Position/Title	Enter the position/title of the senior/key person.
Organization Name	Enter the organization name of the senior/key person.
Department	Enter the department of the senior/key person.
Division	Enter the division of the senior/key person.
*Street 1	Enter the physical address of the senior/key person. Two lines are available for street address input. This is required information. The second line is not required.
Street 2	Additional line for address. (Optional)
*City	Enter the name of the city/place of the senior/key person. This is required information.
County	Enter the name of the county of the senior/key person.
*State	Select the name of the state of the senior/key person. This is required information.
*Zip Code	Enter the five- or nine-digit postal code for the senior/key person. This is required information.
*Country	Select the name of the country for the senior/key person. This is required information.
*Phone Number	Enter the phone number of the senior/key person. This is required information.
Fax Number	Enter the fax number of the senior/key person.
Email	Enter the email of the senior/key person.
Credential, e.g., agency login	If the application is being submitted to an agency (e.g. NIH) where the senior/key person has an established personal profile, enter the agency ID. If not, leave blank.
Project Role	Use "Other" if a category is not listed in the pick list.
Other Project Role Category	Complete if "Other Professional" or "Other" has been selected as a project role; e.g., Engineer, Chemist

5.5 Attach Biographical Sketch

Provide a biographical sketch for each senior/key person. Recommended information includes - Education and Training, Research and Professional Experience, Collaborators and Affiliations (for conflicts of interest), Publications and Synergistic Activities. Save the information in a single file and attach.



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 GPG Chapter II, Section C.2.f.

5.6 Attach Current and Pending Support

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.



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.

5.7 Attach Additional Senior/Key Person Profile(s)

If more than 8 senior/key person profiles are proposed, provide the information requested in a separate file and attach.



Research and Related (R&R) Forms and Instructions



No more than 4 co-PIs should be identified on an application to NSF.

5.8 Attach Additional Biographical Sketch(es) (Senior Key Person)

If more than 8 senior/key person biographical sketches profiles are proposed, provide the information requested in a separate file and attach.

5.9 Attach Additional Current and Pending Support(s)

If more than 8 current and pending supports are proposed, provide the information requested in a separate file and attach.

6. R&R PERSONAL DATA

RESEARCH & RELATED PERSONAL DATA
Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s)

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-PDs/PIs with each proposal. 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.

Project Director/Principal Investigator

Prefix: * First Name: Middle Name: * Last Name: Suffix:

Date of Birth: / / Social Security Number: - - Gender: ▾

Race (check all that apply): American Indian or Alaska Native Asian Black or African American Native Hawaiian or Other Pacific Islander White Do Not Wish to Provide

Ethnicity: ▾

Disability Status (check all that apply): Hearing Visual Mobility/Orthopedic Impairment Other None Do Not Wish to Provide

Citizenship: ▾

Reset Entries Next Person

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 and other research and educational opportunities; and to assess involvement of international investigators in work



Research and Related (R&R) Forms and Instructions

supported by NSF. The information 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 the Social Security Number is voluntary and will not affect the organization's eligibility for an award. However, it is an integral part of the NSF information system and assists in processing of the application.

6.1 Enter Project Director/Principal Investigator

Field Name	Input
Prefix	Select the prefix of the senior/key person (pre-populated from Senior/Key Person form).
*First Name	Enter the first name of the senior/key person (pre-populated from Senior/Key Person form). This is required information.
Middle Name	Enter the middle name of the senior/key person (pre-populated from Senior/Key Person form).
*Last Name	Enter the last name of the senior/key person (pre-populated from Senior/Key Person form). This is required information.
Suffix	Select the suffix of the senior/key person (pre-populated from Senior/Key Person form).
Date of Birth	Enter the date of birth of the Project Director/Principle Investigator.
Social Security Number	Enter the Social Security Number of the Project Director/Principal Investigator. The Social Security Number serves as a helpful identifier. However, submission of this data is voluntary. The applicant should leave blank if they do not wish to provide it.



Failure to submit the Social Security Number (SSN) will not affect the organization's eligibility for an award. However, the SSN is an integral part of the NSF information system and submission will assist in processing of the application.

Field Name	Input
Gender	Select the gender of the Project Director/Principal Investigator
Race (check all that apply)	Check 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	Chose 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
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	Chose one: <i>US Citizen</i> <i>Permanent Resident</i> <i>Other non-US Citizen</i> <i>Do Not Wish to Provide</i>



Research and Related (R&R) Forms and Instructions

6.2 Enter Co-Project Director/co-Principal Investigator Information

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

7. R&R BUDGET

7.1 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	Select one: <ul style="list-style-type: none"> Project - The budget requested for the primary applicant organization. This is required information. 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.

NSF is not accepting applications that require submission of subaward budgets through Grants.gov at this time.

Field Name	Input
*Start Date	Enter the requested/proposed start date of each budget period. Please use mm/dd/yyyy format (e.g. 08/13/2004). This is required information.
*End Date	Enter the requested/proposed end date of each budget period. Please use mm/dd/yyyy format (e.g. 08/13/2004). This is required information.
Budget Period	Identify the specific budget period; e.g.; 1,2,3,4,5. Grants.gov will automatically generate a cumulative budget for the total project period.



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7.2 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 a confirmation email will not be sent. This section should also include such roles as Co-PD/PI/PD, 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. Grant funds may not be used to augment the total salary or rate of salary of faculty members during the period covered by the term of faculty appointment or to reimburse faculty members for consulting or other time in addition to a regular full-time organizational salary covering the same general period of employment. Exceptions may be considered under certain NSF science and engineering education program solicitations for weekend and evening classes or for administrative work done as overload. (See [GPM Section 611](#))



Summer salary for faculty members on academic-year appointments is limited to no more than two-ninths of their regular academic-year salary. This limit includes summer salary received from all NSF-funded grants. These same principles apply to other types of non-academic organizations, such as research institutes. Since their employment periods are usually annual, salary must be shown under "calendar months." For such persons, "summer salary" is normally inappropriate under an NSF grant.

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 (social security, retirement, etc.) be treated as direct costs, NSF funds may be requested to fund fringe benefits as a direct cost.



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

Additional Senior Key Persons - If funds are requested for more than 12 Senior/Key Persons, include all pertinent budget information and attach as a file.



The applicant organization may request that salary data on senior personnel not be released to persons outside the Government during the review process. Such information 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 6 of the National Science Foundation Grant Application Cover Page. This statement must include all of the information requested on the budget for each person involved. NSF will not forward the detailed information to reviewers and will hold it privileged to the extent permitted by law. The information on senior personnel salaries will be used as the basis for determining the salary amounts shown in the application budget.

7.3 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	Use the blank(s) if an appropriate project role is not listed; e.g., Engineer, IT Professionals, etc. This is required information.
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.
*Funds Requested (\$)	Enter requested salary & fringe benefit for each senior/key person. This is required information.
Total Number of Other Personnel	This total will auto-calculate. Total Salary, Wages and Fringe Benefits (A+B) –This total will auto-calculate.



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C. Equipment Description
 List items and dollar amount for each item exceeding \$5,000

Equipment item	* Funds Requested (\$)
1. <input type="text"/>	<input type="text"/>
2. <input type="text"/>	<input type="text"/>
3. <input type="text"/>	<input type="text"/>
4. <input type="text"/>	<input type="text"/>
5. <input type="text"/>	<input type="text"/>
6. <input type="text"/>	<input type="text"/>
7. <input type="text"/>	<input type="text"/>
8. <input type="text"/>	<input type="text"/>
9. <input type="text"/>	<input type="text"/>
10. <input type="text"/>	<input type="text"/>
11. Total funds requested for all equipment listed in the attached file	<input type="text"/>
Total Equipment	

Additional Equipment:

D. Travel

	Funds Requested (\$)
1. Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions)	<input type="text"/>
2. Foreign Travel Costs	<input type="text"/>
Total Travel Cost	<input type="text"/>

E. Participant/Trainee Support Costs

	Funds Requested (\$)
1. Tuition/Fees/Health Insurance	<input type="text"/>
2. Stipends	<input type="text"/>
3. Travel	<input type="text"/>
4. Subsistence	<input type="text"/>
5. Other <input type="text"/>	<input type="text"/>
<input type="text"/> Number of Participants/Trainees	Total Participant/Trainee Support Costs <input type="text"/>

7.4 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 - List each item of equipment separately and justify each in the budget justification section. Allowable items ordinarily will be limited to research equipment and apparatus not already available for the conduct of the work. General-purpose equipment, such as a personal computer, is not eligible for support unless primarily or exclusively used in the actual conduct of scientific research.

*** Funds Requested (\$)** - List the estimated cost of each item of equipment including shipping and any maintenance costs and agreements. This is required information.

Total funds requested for all equipment listed in the attached file - If this section cannot accommodate all the equipment proposed, attach a file in the block provided. List each additional item and the funds requested on the file. List the total funds requested.

Total Equipment – This total will auto-calculate.

7.5 Enter Travel (Field D on the Form)

1. Domestic Travel Costs (Incl. Canada, Mexico, and U.S. Possessions) Funds Requested (\$) – Enter the total funds requested for domestic travel. Domestic travel includes Canada, Mexico and US 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).

2. Foreign Travel Costs Funds Requested (\$) - Enter the total funds requested for foreign travel. Foreign travel includes any travel outside of North America and/or U.S. 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).



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All foreign travel must be justified in the budget justification. Travel support for dependents of key project personnel may be requested only when all of the following conditions apply:

- The individual is a key person who is essential to the research on a full-time basis;
- The individual's residence away from home and in a foreign country is for a continuous period of six months or more and is essential to the effective performance of the project; and
- The dependent's travel allowance is consistent with the policies of the organization administering the grant.

Total Travel Costs – This total will auto-calculate.

7.6 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.



Generally, unless specified in a program solicitation, indirect costs (F&A) are not allowed on participant support 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 and list the total funds requested.
- Number of Participants/Trainees** – List the total number of participants/trainees.



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7.7 Total Participant/Trainee Support Costs – This total will auto-calculate.

F. Other Direct Costs		Funds Requested (\$)
1. Materials and Supplies		
2. Publication Costs		
3. Consultant Services		
4. ADP/Computer Services		
5. Subawards/Consortium/Contractual Costs		
6. Equipment or Facility Rental/User Fees		
7. Alterations and Renovations		
8. <input type="text"/>		
9. <input type="text"/>		
10. <input type="text"/>		
Total Other Direct Costs		

G. Direct Costs	Funds Requested (\$)
Total Direct Costs (A thru F)	0.00

H. Indirect Costs			
Indirect Cost Type	Indirect Cost Rate (%)	Indirect Cost Base (\$)	* Funds Requested (\$)
1. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4. <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total Indirect Costs			0.00

Cognizant Federal Agency	<input type="text"/>
<small>(Agency Name, POC Name, and POC Phone Number)</small>	

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

- 1. Materials and Supplies** - List total funds requested for materials & 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.

Anticipated consultant 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. Payment for a consultant's services, exclusive of expenses, may not exceed the consultant's normal rate or the daily maximum rate established annually by NSF, whichever is less. The current maximum consultant daily rate is available electronically on the NSF website at <http://www.nsf.gov/bfa/dias/policy/index.jsp>.

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.



Research and Related (R&R) Forms and Instructions



Except for the procurement of such items as commercially available supplies, materials, equipment or general support services allowable under the grant, no significant part of the research or substantive effort under an NSF grant may be contracted or otherwise transferred to another organization without prior NSF authorization. NSF is not accepting applications that require submission of subaward budgets through Grants.gov at this time.

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 & 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.

Add text to describe any "other" Direct Costs not requested above. Use the budget justification to further itemize and justify.

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

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

Total Direct Costs (A-F) – This total will auto-calculate.

7.10 Enter Indirect Costs (Field H on the Form)

Indirect Cost Type - Indicate the type of base; e.g., Salary & 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 & 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. This is required information.

7.11 Verify Total Indirect Costs

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



Unless otherwise indicated in a specific program solicitation, it is NSF policy that grantees are entitled to reimbursement from grant funds for indirect costs (F&A) allocable to the NSF share of allowable direct costs of a project, except grants:

- solely for the support of travel, equipment, construction of facilities, or doctoral dissertations;
- for participant support costs;
- to foreign grantees; and
- to individuals (i.e., Fellowship awards).



Research and Related (R&R) Forms and Instructions

I. Total Direct and Indirect Costs Funds Requested (\$)
Total Direct and Indirect Institutional Costs (G + H)

J. Fee Funds Requested (\$)

K. * Budget Justification
(Only attach one file.)

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

Total Direct and Indirect Institutional Cost (G-H) – This total will auto-calculate.

7.13 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 announcement specifically allows the inclusion of a "fee" (e.g., SBIR/STTR). If a fee is allowable, enter the requested fee.



Inclusion of fees (profit) in a budget is allowable only if specifically authorized by an NSF program solicitation.

7.14 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 following budget categories must be justified, where applicable: equipment, travel, participant/trainee support and other direct cost categories. Only one file may be attached.



NSF-Specific Forms and Instructions

VI. NSF SPECIFIC FORMS AND INSTRUCTIONS

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

- National Science Foundation Grant Application Cover Page; and
- NSF Application Checklist.

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

- NSF Deviation Authorization;
- NSF Suggested Reviewers; and
- NSF FastLane System Registration.

Instructions for completing each of these forms follow.

1. NSF GRANT APPLICATION COVER PAGE



**National Science Foundation
Grant Application Cover Page**

Please complete the following NSF forms in conjunction with the relevant Research and Related forms. If you are an organization or individual and you are not registered with NSF FastLane, please complete the Organization and Individual Registration Form in this package.

1. Funding Opportunity Number
 *Funding Opportunity Number: Opportunity closing date:

2. NSF Unit Consideration
 Go to <https://www.fastlane.nsf.gov/pgmannounce.jsp> and follow the instructions to find the Division and Program information for this funding opportunity.
 *Division Code: Division Name:
 *Program Code: Program Name:

3. Principal Investigator (PI) Information
 *Degree Type: *Degree Year:
 Check here if you are currently serving (or have previously served) as a PI, co-PI or Program Director (PD) on any Federally funded project.

4. Co-Principal Investigator (co-PI) Information
 NSF applications can identify a maximum of four co-Principal Investigators. Please enter below the co-PI information exactly as entered on the Research and Related Senior/Key Person form.

co-PI 1
 Prefix: *First Name: Middle Name: *Last Name: Suffix:
 *Degree Type: *Degree Year:

co-PI 2
 Prefix: *First Name: Middle Name: *Last Name: Suffix:
 *Degree Type: *Degree Year:

co-PI 3
 Prefix: *First Name: Middle Name: *Last Name: Suffix:
 *Degree Type: *Degree Year:

co-PI 4
 Prefix: *First Name: Middle Name: *Last Name: Suffix:
 *Degree Type: *Degree Year:

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

<input checked="" type="checkbox"/> Beginning Investigator (Grant Proposal Guide(GPG), Chapter I.A)	<input checked="" type="checkbox"/> Disclosure of Lobbying Activities (GPG, Chapter II.C.1.e)
<input checked="" type="checkbox"/> Small Grants for Exploratory Research (GPG, Chapter II.D.1)	<input checked="" type="checkbox"/> Historic Places (GPG, Chapter II.C.2.j)
<input checked="" type="checkbox"/> Accomplishment-Based Renewal (GPG, Chapter V.B.2)	<input checked="" type="checkbox"/> High Resolution Graphics/Other Graphics Where Exact Color Representation Is Required For Proper Interpretation (GPG, Chapter I.G.1)

6. Additional Single-Copy Documents Attach PDF Files



NSF-Specific Forms and Instructions

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

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

Opportunity Closing Date – This will be pre-populated by Grants.gov and is the closing date for this application.

1.2 Enter NSF Unit (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 a NSF web page with the programs accepting applications through Grants.gov. Select the appropriate Division and Program. Copy the Division code and Program code into the form. Go to <https://www.fastlane.nsf.gov/pgmannounce.jsp> and follow the instructions to find the Division and Program information for this funding opportunity.

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

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

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

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

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

* **Degree Type** – From the drop-down list, choose the name of the highest degree the PI has earned. This is required information.

* **Degree Year** – Enter the year in which this degree was earned. This is required information.

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 Co-Principal Investigator (Co-PI) Information (Field 4 on the form)

NSF applications can identify a maximum of four Co-Principal Investigators. The information below corresponds to the first four Co-PIs specified on the R&R “Senior/Key Person” Form. NSF will only use the first four Co-PIs entered on this form. Please enter the Co-PIs in the same order as on the R&R Senior/Key Personnel form. For Co-PI 1, Co-PI 2, Co-PI 3, and Co-PI 4 enter:

Field Name	Input
Prefix	Select the prefix of the Co-PI.
*First Name	Enter the first name of the Co-PI. This is required information.
Middle Name	Enter the middle name of the Co-PI.
*Last Name	Enter the last name of the Co-PI. This is required information.
Suffix	Select the suffix of the Co-PI.
*Degree Type	From the drop-down list, choose the name of the highest degree the Co-PI has earned. This is required information.
*Degree Year	Enter the year in which this degree was earned. This is required information.

1.5 Enter Other Information (Field 5 on the Form)

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

Beginning Investigator (GPG I.A) – Check box if Beginning Investigator. Note that this box applies only to PIs who are submitting applications to the Division of Biological Sciences. See Chapter III, Section 4.1 of this Guide for further information.

Small Grants for Exploratory Research (SGER)(GPG II.D.1) – Check box if this application includes a request for Small Grants for Exploratory Research. For more information on Small Grants for Exploratory Research, go to - http://www.nsf.gov/pubs/gpg/nsf04_23/2.jsp#IID1.

Accomplishment-Based Renewal (GPG V.B.2) – Check box if this is an Accomplishment-Based Renewal. For more information on Accomplishment-Based Renewals, go to - http://www.nsf.gov/pubs/gpg/nsf04_23/5.jsp - VB2
 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 (GPG II.C.1.e) – 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. For more information on Disclosure of Lobbying Activities, go to - http://www.nsf.gov/pubs/gpg/nsf04_23/2.jsp#IIC1e.



NSF-Specific Forms and Instructions

Historic Places (GPG II.C.2.j) – Check box if research occurs in a location designated, or eligible to be designated, a registered historic place. For more information on Historic Places, go to NSF's Grant Policy Manual (GPM) Section 840 - <http://www.nsf.gov/pubs/2002/nsf02151/gpm8.jsp#840>.

High Resolution Graphics/Other Graphics Where Exact Color Representation Is Required For Proper Interpretation (GPG I.G.1) – Detailed instructions for submission of applications that contain high-resolution graphics or other graphics where exact color representations are required for proper interpretation by the reviewer are available on the FastLane Website at <http://www.fastlane.nsf.gov/a1/newstan.htm#color>.

1.6 Attach Additional Single Copy Documents (Field 6 on the Form)

Attach PDF files for Additional Single-Copy Documents. For more information on Additional Single-Copy Documents, go to - http://www.nsf.gov/pubs/gpg/nsf04_23/2.jsp#IIC1.

2. NSF APPLICATION CHECKLIST

Prior to electronic submission via the Grants.gov portal, applicants must conduct an administrative review of the application by use of the NSF Application Checklist. NSF requires that this review be conducted in order to help ensure that an application complies with all application preparation instructions, in the format specified.



NSF-Specific Forms and Instructions

APPLICATION CHECKLIST
 National Science Foundation (NSF)

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 Manual, and where specified, the NSF Grant Proposal Guide (GPG) <http://www.nsf.gov/pubs/ods/getpub.cfm?gpg>. Applications also must comply with NSF font, spacing and margin requirements. The guidelines established in the GPG 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 GPG Chapter IV.B, Return Without Review http://www.nsf.gov/pubs/gpg/nsf04_234.htm#IVB, for additional information.

Prior to electronic submission via the Grants.gov portal, 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. Complete all of the below items in order to submit your application. Select the appropriate response for each item.

SF 424 R&R Forms

CHECK SECTION COMPLETED

SF 424 (R&R) Cover Sheet

Yes	No	NA	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Renewal Applications: For renewal applications, enter the previous award number in the Federal Identifier field. (Block 4)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Full Application Released to Submission of a Preliminary Application: If a new full application is being submitted that is related to a previously submitted preliminary application, enter the assigned preliminary application number in the Federal Identifier field. (Block 4)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Type of Application: For purposes of NSF, the box for "Continuation" will not be utilized and should not be checked. (Block 8)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Application Certifications: The requisite application certifications are submitted by the Authorized Organizational Representative upon checking the "I agree" box (Block 16) and submitting the application. See GPG Chapter II.C.1.a, Proposal Certifications for a complete listing of the requisite certifications.

Research & Related Project/Performance Site Location[s]: Indicate the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), so identify.

Research & Related Other Project Information: Complete questions 1 through 5 and attach files in Blocks 6 - 11 as specified.

Project Summary/Abstract: Note limitation of one page, and the requirement that both merit review criteria be separately addressed within the body of the Project Summary. Attach in Block 6 of the Research & Related Other Project Information Form. See GPG Chapter II.C.2.b, Project Summary, for more information.

Project Narrative: (referred to in the GPG as Project Description) Note limitation of 15-pages. Attach Project Narrative in Block 7 of the Research & Related Other Project Information Form. See GPG Chapter II.C.2.d, Project Description, for more information.

Yes	No	NA	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Merit Review Criteria: Ensure both merit review criteria are described as an integral part of the narrative. See GPG Chapter II.C.2.d (i).
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Inclusion of URLs (Universal Resource Locators) within the Project Narrative: PIs are advised that the Project Narrative must be self-contained and are cautioned that URLs (Internet addresses) that provide information necessary to the review of the application should not be used because reviewers are under no obligation to view such sites. See GPG Chapter II.C.2.d (i).
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Results from Prior NSF Support: Required only for PIs and co-PIs that have received NSF support within last 5 years. See GPG Chapter II.C.2.d(ii).
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Human-resource Information: Required information for renewal applications from academic institutions only. See GPG Chapter V.B.2.



NSF-Specific Forms and Instructions

- * **Bibliography and References Cited:** No page limitation, however, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 15-page Project Narrative. Each reference must be in the specified format. Attach in Block 8 of the Research & Related Other Project Information Form. See GPG Chapter II.C.2.e, References Cited, for more information.
- * **Facilities and Other Resources:** Attach in Block 9 to the Research & Related Other Project Information Form. See GPG Chapter II.C.2.i, Facilities, Equipment and Other Resources, for more information.
- * **Equipment:** Attach in Block 10 to the Research & Related Other Project Information Form. See GPG Chapter II.C.2.i, Facilities, Equipment and Other Resources, for more information.
- Yes No NA
 - * **Special Information and Supplementary Documentation:** A description of the types of information appropriate for inclusion in this section is defined in GPG Chapter II.C.2.j, Special Information and Supplementary Documentation. Attach in Block 11 of the Research & Related Other Project Information Form.
 - * **Any additional items specified in a relevant NSF Program Solicitation:** Attach in Block 11 of the Research & Related Other Project Information Form.
- * **Research & Related Senior/Key Person Profile:** A profile is required for all 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.
- Yes No
 - * **Biographical Sketch(es):** A biographical sketch is required for all senior project personnel and each biographical sketch should be prepared in accordance with the order and format specifications identified in GPG Chapter II.C.2.f, Biographical Sketch(es). Note limitation of 2-pages for each biographical sketch.
 - * **Current and Pending Support:** This section is required for all senior project personnel. See GPG Chapter II.C.2.h, Current and Pending Support, for more information.
- * **Research & Related Personal Data:** (Referred to in the GPG as Information About PI(s)/PD(s) and co-PI(s)/co-PD(s).) With the exception of the name(s) of the PD/PI and any co-PD/PIs, submission of the requested information is voluntary. See GPG Chapter II.C.1.a, Information about Principal Investigators/Project Directors and co-Principal Investigators/co-Project Directors, for more information.
- * **Research & Related Budget**
 - Yes No NA
 - * **Budget Justification:** Optional. Note 3-page limitation per application. Attach on Line K of the Research & Related Budget Form.
 - * **Cost Sharing:** See GPG Chapter II.C.2.g.(iii), Cost Sharing. For applications submitted in response to the GPG or an NSF program announcement, only the statutory cost sharing amount (1%) is required. In such cases, applicants should NOT identify cost sharing amounts in the Application Budget.

NSF-Specific Forms

CHECK SECTION COMPLETED

- * **National Science Foundation Grant Application Cover Sheet**
 - Yes No NA
 - * **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 1.
 - * **Other Information:** If the application includes any of the items listed, check the relevant box(es). (Block 5)
 - * **SF LLL - Disclosure of Lobbying Activities:** If applicable. Attach a scanned copy of the SF LLL in Block 6 of the NSF Grant Application Cover Sheet. See GPG Chapter II.C.1.a, Proposal Certifications.
- Yes No NA
 - * **Deviation Authorization:** If applicable. See GPG Chapter II.C.1.b, Deviation Authorization, for more information.
 - * **Organization and Individual Registration for NSF's FastLane system:** If applicable. To be completed only if the applicant organization is not currently registered in NSF's FastLane system. See <https://www.fastlane.nsf.gov/b6/B6Institutions.htm>. Individuals not employed by, or affiliated with, an organization must complete the information in Section 3.
 - * **List of Suggested Reviewers, or Reviewers Not to Include:** Optional. See GPG Chapter II.C.1.c, List of Suggested Reviewers or Reviewers Not to Include (optional). GPG Appendix B, Potentially Disqualifying Conflicts of Interest, contains information on conflicts of interest that may be useful in preparation of this list.

2.1 Complete NSF Application Checklist

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. Complete all the checklist items in order to submit the application. Select the appropriate response for each item. Submission of the checklist is required.



NSF-Specific Forms and Instructions

3. NSF DEVIATION AUTHORIZATION

Deviation Authorization (If Applicable)

Enter text for the Deviation Authorization information in the box below (if applicable):

A blue arrow originates from the left margin, points horizontally to the left side of the Deviation Authorization box, then turns vertically upwards and then horizontally to the right, pointing into the top-left corner of the box.

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 Grant Proposal Guide (GPG). Conformance is required and will be strictly enforced unless a deviation has been approved. NSF may return without review applications that are not consistent with these instructions. See Chapter IV, Section B of the GPG, for additional information. NSF must authorize any deviations from these instructions in advance. 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>).

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

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. Grant Proposal Guide Appendix B, *Potentially Disqualifying Conflicts of Interest*, contains information on conflicts of interest that may be useful in preparation of this list.



NSF-Specific Forms and Instructions

List of Suggested Reviewers or Reviewers Not to Include (optional)

Applicants may include a list of suggested reviewers who they believe are especially well qualified to review the proposal. Applicants also may designate persons they would prefer not review the proposal, indicating why. These suggestions are optional. Grant Proposal Guide Appendix B, Potentially Disqualifying Conflicts of Interest (<http://www.nsf.gov/pubs/2004/ns942/appb.htm>), contains information on conflicts of interest that may be useful in preparation of this list.

Suggested Reviewers: Provide the First, Middle, and Last Name of suggested reviewers that you believe are especially well qualified to review this proposal.
Enter text in the box below

Reviewers Not to Include: Designate persons you would prefer not review this proposal and indicate why.
Enter text in the box below

A blue line starts on the left side of the page, goes up, then right, then down, then right again, with arrows pointing to the two large text input boxes in the form.

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



NSF-Specific Forms and Instructions

5. NSF FASTLANE SYSTEM REGISTRATION

NSF Organization and Individual Registration For NSF's FastLane System

The following information should only be completed if your organization is not currently registered in NSF's FastLane System. To check if your organization is registered, please visit <https://www.fastlane.nsf.gov/n1/N1AdmInat.html>.

If you want to register and submit as an individual (Organization) please check the checkbox on the front of the Grant Application Package before the Application Filing Name and then complete section 3 of this form. The Grant Application Package is the page where all the mandatory and optional documents are listed.

1. Organization Information

*Organization Name: * Organization Short Name: * Organization Type:

*EIN/TIN: *DUNS Number:

*Street 1: Street 2:

*City: County: *State: *Zip Code: *Country:

*Telephone Number: Fax Number: *E-mail Address:

President's Name:

Prefix: First Name: Middle Name: Last Name: Suffix:

2. FastLane Contact

Prefix: *First Name: Middle Name: *Last Name: Suffix:

Social Security Number: (If you do not want to provide your real Social Security Number, leave this field empty and NSF's FastLane System will generate a PSEUDO-SSN for you.)

*Telephone Number: Fax Number: *E-mail Address:

3. Individual Information

Only complete this information if you are not employed by, or affiliated with, an organization. Do not use this section to register a new organization. To register as an organization, please uncheck the checkbox on the Grant Application Package that states you will be submitting applications on my own behalf, and not on behalf of a company, state, tribe, educational institution or other organization. The checkbox appears before the Application Filing Name. The Grant Application Package is the page where all the mandatory and optional documents are listed.

Prefix: *First Name: Middle Name: *Last Name: Suffix:

*Tax ID: Social Security Number: (If you do not want to provide your real Social Security Number, leave this field empty and NSF's FastLane System will generate a PSEUDO-SSN for you.)

*Street 1: Street 2:

*City: County: *State: *Zip Code: *Country:

*Telephone Number: Fax Number: *E-mail Address:

Department: *Degree Type: *Degree Year:

5.1 Enter Organization Information

The following information should only be completed if the applicant's organization is not currently registered in NSF's FastLane. To check if an organization is already registered, please visit www.fastlane.nsf.gov. If the applicant is not employed by, or affiliated with, an organization, please complete the Individual Information in section 3 of this form.



NSF-Specific Forms and Instructions

Field Name	Input
*Organization Name	Pre-populated from the R&R form. Enter the full name of the applicant's organization for NSF records (up to 64 characters, including spaces). This is required information.
*Organization Short Name	Enter the short name of the applicant's organization in 26 characters or less for identification purposes. If the applicant's full name can fit within 26 characters, use the same name here. The full name should not be truncated at 26 characters. The Short Name should be a unique identifier. This is required information.
Organization Type	Choose the applicant's type of organization from the drop-down list.
*EIN/TIN	Pre-populated from the R&R form. (9 digits, no hyphens). An EIN (Employer Identification Number) or TIN (Taxpayer Identification Number) is a nine-digit number that the IRS assigns in the following format: -00-0000000. The IRS uses this number to identify taxpayers that are required to file various tax returns. Employers, sole proprietors, universities, corporations, partnerships, nonprofit associations, trusts, and estates of decedents, government agencies, certain individuals, and other business entities use EIN/TIN. If the applicant's organization is not in the U.S., type 44-4444444. This is required information.
*DUNS Number	Pre-populated from the R&R form (9 digits, no hyphens). This is a unique 9-digit identifier provided by Dun & Bradstreet. It is an organizational identifier used by the federal government. If the organization does not have a DUNS number, it must contact Dun and Bradstreet at (800) 333-0505 to obtain one. A DUNS number will be provided to them immediately by telephone at no charge. This is required information.
*Street 1	Pre-populated from the R&R form. The physical address of the organization. The applicant may use up to two lines for the street address. The second line is not required. This is required information.
Street 2	Additional Line for Street Address (Optional)
*City	Pre-populated from the R&R form. The name of the city where the applicant's organization operates. This is required information.
County	Enter the name of the county of the applicant
*State	Pre-populated from the R&R form. The name of the State where the applicant's organization operates. This is required information.
*Zip Code	The five or nine digit postal code where the applicant's organization operates. This is required information.
*Country	Select the name of the country for the applicant. This is required information.
Telephone Number	Enter the telephone number of the applicant's organization for NSF to use to contact the applicant's business (enter area code and number, for U.S. phones, using only ten digits, no hyphens). The form cannot accommodate extensions, dashes or alphabetical characters in the phone number.
Fax Number	10 digits, no hyphens, no country code. Enter the fax number of the organization.
*Email Address	Enter the email address of the organization. This is required information.

5.2 Enter President's Name

Field Name	Input
Prefix	Select the prefix of the president.
First Name	Enter the first name of the president.
Middle Name	Enter the middle name of the president.
Last Name	Enter the last name of the president.
Suffix	Select the suffix of the president.



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5.3 Enter FastLane Contact

Field Name	Input
Prefix	Select the prefix of the FastLane Contact.
*First Name	Pre-populated from the R&R form. The first name of the FastLane Contact. This person will be the point of contact for FastLane in the applicant's organization and will be responsible for performing administrative management functions within FastLane (e.g., giving out passwords, submitting applications). This may be the same person as an Authorized Organizational Representative. Do not enter non-alphabetic characters (e.g., periods or hyphens) or spaces. This is required information.
Middle Name	Pre-populated from the R&R form. The middle name of the FastLane Contact.
*Last Name	Pre-populated from the R&R form. The last name of the FastLane Contact. This is required information.
Suffix	Select the suffix of the FastLane Contact.
Social Security Number	(9 digits, no hyphens) Enter the Social Security Number (SSN) for the FastLane Contact. (If the contact does not want to provide their actual Social Security Number, leave this field empty and NSF's FastLane System will generate a PSEUDO-SSN for the FastLane Contact).
*Telephone Number	Pre-populated from the R&R form. (10 digits, no hyphens, no country code) The FastLane Contact's phone number. This is required information.
Fax Number	Pre-populated from the R&R form. (10 digits, no hyphens, no country code) The FastLane Contact's fax number.
*Email Address	Pre-populated from the R&R form. The FastLane Contact's E-mail address. This is required information.

5.4 Enter Individual Information

Only complete this information if the applicant is not employed by, or affiliated with, an organization. Do not use this section to register a new organization.

Field Name	Input
Prefix	The prefix of the individual who will be the point of contact for FastLane and responsible for performing organizational management functions within FastLane.
*First Name	Enter the first name of the individual who will be the point of contact for FastLane and responsible for performing organizational management functions within FastLane. This may be the same person as an Authorized Organizational Representative. Do not enter non-alphabetic characters (e.g., periods or hyphens) or spaces. This is required information.
Middle Name	Enter the middle name of the individual.
*Last Name	Enter the last name of the individual. This is required information.
Suffix	Select the suffix of the individual.
*Tax ID	Enter the Tax ID Number. This is a nine-digit number that the IRS assigns. The IRS uses this number to identify taxpayers that are required to file various tax returns. This is required information.
Social Security Number	Enter the applicant's Social Security Number (9 digits, no hyphens). If the applicant does not wish to provide their actual Social Security Number, leave this field empty and NSF's FastLane System will generate a PSEUDO-SSN.
*Street 1	The physical address of the individual. The applicant may use up to two lines for the street address. This is required information. The second line is not required.
Street 2	Additional line for street address (optional)
*City	The name of the city for the individual. This is required information.
County	Enter the name of the county of the individual
*State	Pre-populated from the R&R form. The name of the State where the applicant's organization operates. This is required information.
*Zip Code	The five or nine digit postal code for the individual.
*Country	Select the name of the country for the individual. This is required information.
*Telephone Number	Enter the telephone number of the applicant's organization for NSF to use to contact the applicant's business (enter area code and number, for U.S. phones, using only ten digits, no hyphens). The form cannot accommodate extensions, dashes or alphabetical characters in the phone number. This is required information
Fax Number	10 digits, no hyphens, no country code). Enter the fax number of the individual.
*Email Address	Enter the email address of the individual. This is required information.
Department	Enter the individual's department



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*Degree Type	From the drop-down list, choose the name of the highest degree the individual has earned. This is required information.
*Degree Year	Enter the year in which this degree was earned. This is required information.

6. DIRECTORATE SPECIFIC FORMS

6.1 Biological Sciences (BIO) Classification Form

For applications submitted to the Directorate for Biological Sciences (BIO) a Bio Classification form is required to be submitted. The applicant should use Proposal Status 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.



NSF-Specific Forms and Instructions

VII. ADMINISTRATION OF AWARDS



Guidance regarding the administration of NSF awards is contained in the NSF Grant Policy Manual and the relevant award conditions. <http://www.nsf.gov/pubs/2002/nsf02151/>