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PREFACE

The NSF Faculty Submissions Tool-kit is for faculty and research associates who wish to submit a proposal to the National Science Foundation (NSF). This tool-kit is not intended to replace NSF’s Grants Proposal Guide or the Proposal and Award Policies and Procedures Guide. The purpose of this document is to provide a quick summary of NSF’s proposal requirements, NSF templates, and how OSU meets NSF’s requirements.

This tool-kit was prepared with guidance from Oregon State University (OSU) policies and procedures as well as guidance from the following:


  *NSF Proposal and Award Policies and Procedures Guide, 16-1, January 2016 edition, full version:

Included throughout the tool-kit are additional links to the websites from which we pulled information. If you use this tool-kit and notice that a link is broken, please contact coe.preawards@oregonstate.edu so we can correct the error and provide you with the correct information.
LIFE-CYCLE OF SUBMITTING GRANTS
The life-cycle of submitting a grant in the College of Engineering through the Research and Economic Development (RED) office.

1. Identify Grant Opportunity
2. Contact COE RED Proposal Support Team
3. Proposal Support Team and PIs Work with OSRAA to Obtain Approval
4. Grant Submitted to Sponsor

- The Office of Sponsored Research and Award Administration (OSRAA) publicizes opportunities on their website. Dr. Tumer is available to discuss opportunities with an appointment.
- After OSRAA approval, and depending on sponsor guidelines, OSRAA may submit the final proposal on behalf of the Lead PI, or the Lead PI may submit to the funding agency directly.
- Please be available to answer questions and make proposal changes requested by OSRAA collaboratively with the Proposal Support team.
- Please notify the Proposal Support team by submitting a Request for Service. Please see the Grant Submission Timeline for further details.

Proposal Support Team Contact Information:
Phone: 541-737-6518
Email: COE.preawards@oregonstate.edu
Website: red.engr.oregonstate.edu/
GRANT SUBMISSION PROCEDURE

Proposal Support Coordinator Role

- Serves as a single-point of contact to faculty and staff, OSRAA, collaborators, subcontractors, Business and Engineering Business Center (BEBC), and grant accountants
- Prepares budgets and budget justifications in alignment with NSF’s requirements and OSU policies
- Initiates and support entries in Cayuse
- Supports entry of budget and uploads budget justification in FastLane
- Supports completion of supplemental forms as outlined in guidelines
- Track and review proposal requirements prior to submission

Procedure

Full proposals shall be routed through Cayuse and approved by all affiliated organizational units; reviewed, approved, and submitted by OSRAA’s Institutional Authorizing Official. In order to maximize chances of funding, the following deadlines apply to most proposal submissions:

1. Initial notification

   - Proposal Support team requests notification as soon as you know you will be applying for a particular opportunity, but not less than 9 days prior to the submission deadline. This notice will allow the team to provide the best possible support. The earlier you start the process, the better for all!
   - If you are unable to give sufficient advance notice of a grant proposal, we will work with you to obtain limited review from OSRAA. During high-volume periods, we can only facilitate your submission to the extent time allows. We are not permitted, due to time constraints, to support any same-day submissions to NSF.

2. Draft proposal

   - OSRAA requests a copy of a strong draft proposal no later than 5 days prior to the deadline to ensure that all requirements are met.

3. Cayuse routing

   - Proposal Support coordinator and PI work together to finalize the budget and budget justification at 5 days prior to the deadline. The budget, budget justification, and a strong draft of the proposal must be uploaded in Cayuse for routing. OSRAA requires, at minimum, 3 full days to review the proposal.

4. Final proposal

   - OSRAA requires a final copy/version of the proposal to be uploaded in FastLane no later than the date of submission to allow for a full review and quality check.

Please see the following timeline outlining detailed stages of proposal preparation and submission.
GRANT SUBMISSION PROCESS

Feel free to notify us as soon as you know you will be applying for a particular opportunity. The following is a step-by-step timeline you should initiate at a minimum one month preceding the proposal due date. The boxes in “white” are tasks that have a flexible timeline, while items in “orange” have a firm timeline. **The earlier you start the process, the better for all!**

<table>
<thead>
<tr>
<th>30-9 days before deadline</th>
<th>24-9 days before deadline</th>
<th>9-4 days before deadline</th>
<th>5 days before deadline</th>
<th>3-0 days before deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI brainstorms; completes Proposal Support <a href="#">Request for Services</a>; reviews RFP to verify eligibility</td>
<td>PI writes draft proposal; Proposal Support coordinator and PI develop initial budget and budget justification; Pre-Award initiates Cayuse record</td>
<td>PI and Proposal Support coordinator finalize budget; budget justification; sponsor budget forms</td>
<td>PI uploads final/draft proposal; completes required questions in Cayuse; initiates Cayuse routing process</td>
<td>OSRAA performs final review and with explicit approval from PI submits proposal to sponsor</td>
</tr>
</tbody>
</table>

**SOLICITATION REVIEW**

**DRAFT PROPOSAL PREPARATION**

**FINAL PROPOSAL PREPARATION**

**OSRAA REVIEW**

**SUBMIT TO SPONSOR**

**PROPOSAL DEADLINE!**

Late Submissions (8-0 Business Days): If you are unable to give sufficient advance notice of a grant proposal, we will work with you to obtain limited review from OSRAA. During high-volume periods, we can only facilitate your submission to the extent time allows. *We are not permitted, due to time constraints, to support any same-day submissions.*
COLLEGE OF ENGINEERING REQUEST FOR SERVICES FORM
The Request for Services form allows a Proposal Support coordinator to initiate a Cayuse record and draft a budget. This form makes the initiation process efficient for both the PIs and the Proposal Support team. The Request for Services form contains elements that are required to initiate a Cayuse record, so it is important to populate the form with as much information as possible.
NOTE: Full proposals are due to the Proposal Support team no later than 9 business days before the sponsor deadline. PI and/or Co-PIs must be available for proposal revisions during this period.

To request proposal support, click the link below:

http://red.engr.oregonstate.edu/pre-award-services
OSU’s CONFLICT OF INTEREST POLICY
Conflict of Interest (COI) training and disclosure is required for “covered individuals” on grants. You will be required to complete the COI training and submit a COI disclosure form.

OSU promotes and encourages new and varied collaborations with entities outside of the University. As a result of such external relationships, conflicts of interest may occur when an individual is in a position to make a decision in the conduct of his or her research, teaching or outreach activities that may result in personal or family gain, financial or otherwise. Adherence to the highest levels of professional integrity by faculty, staff, students and associated personnel in all their actions is required to avoid or minimize conflicts of interest.

The COI policy sets forth the obligations of OSU and its employees, students and associated personnel with respect to conflicts of interest that involve University research. For further details about the COI policy please visit the Office of Research Integrity – Conflict of Interest website.

NOTE: If you are submitting an application to any Public Health Services (PHS) sponsor you must take the training and file a COI disclosure form BEFORE AN APPLICATION WILL BE SUBMITTED.

Conflict of Interest Training

Who must complete the training?
Any individual who completes an annual COI declaration must complete training. Those required to complete an annual form are:

- Professorial Faculty
- Research Associates
- Post-Doctoral Scholars and Fellows
- Any individual listed by name on a sponsored project
- Any other individual who is requested to complete a form by a unit head, dean or the COI Officer

How often must training be taken?
Investigators proposing for, or receiving funding from, a Public Health Service (PHS) agency (see PHS agencies) must complete training every four years, when OSU revises its COI policy, when investigators are new to OSU, and when investigators are found to be non-compliant with OSU policy or COI management. All other individuals complete the training once, unless otherwise requested by the COI Officer.

How is training completed?
OSU facilitates the completion of COI training through the CITI (pronounced “city”) training module. CITI is also used by the IRB and IACUC for their respective training requirements. Instructions for new users and returning users are found here. Once the CITI training is completed, a notice of completion will be sent automatically to the OSU COI office.
OSU COI Contact Information
Please direct questions regarding COI or CITI training requirements to the COI office by either email COI@oregonstate.edu or phone (541-737-4692).

NATIONAL SCIENCE FOUNDATION – FASTLANE SYSTEM REGISTRATION
The NSF FastLane system uses internet technology to facilitate the way NSF does business with the research, education, and related communities. The NSF FastLane system is available for proposal preparation, submission, and status review as well as post-award administrative activities.

Unless otherwise specified in the solicitation, Sponsored Programs requires proposal to be submitted electronically through the NSF FastLane system. Collaborative proposals are submitted as separate submissions from multiple organizations and linked by the lead organization in the NSF FastLane system.

To request registration with the NSF FastLane system, please visit OSRAA’s website. Once your registration has been completed, you will receive a notification email from OSRAA containing important account and reference information. You may want to save this message for future reference.

NOTE: If you are currently registered in FastLane with another organization, please fill out the registration form. OSRAA will locate your registration and update your information.

Required Information for FastLane Registration
All these items are required for new users:

- First Name
- Middle Initial
- Last Name
- OSU Department (home organization unit with which you are affiliated. This may be a department, research institute, outreach center, or like organization unit).
- High Degree Attained (degree type with particular area of specialty i.e., PhD in Sociology).
- Year Degree Conferred
- OSU ID
- OSU Email Address
- OSU Phone

NOTE: Your FastLane account will be setup with a NSF ID. That number will be reflected in the confirmation letter you will receive electronically for NSF FastLane. Please use that number when signing in to FastLane.

If you have questions with this form, please contact proposals@oregonstate.edu or call OSRAA at 541-737-4933.
INTRODUCTION TO PROPOSAL PREPARATION INSTRUCTION
The remainder of this document contains excerpts from the *NSF Grant Proposal Guide 16-1*. The Grant Proposal Guide is Part 1 of the full *NSF Proposal Preparation and Award Policies and Procedures Guide 16-1*. For more detailed information about the topics and proposal sections discussed in this document, please read the appropriate section in the links above. Many of the following sections also include a referenced page number to the GPG for your convenience.
# NATIONAL SCIENCE FOUNDATION PROPOSAL REQUIREMENTS

## General Formatting Instructions

The proposal must be easily readable and must conform to these requirements. Individual program solicitations may require deviations from any of the formatting requirements mentioned below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Type</td>
<td>When completing the Cover Sheet in FastLane, the proposer must indicate the type of proposal being developed.</td>
</tr>
<tr>
<td>Page Size</td>
<td>8.5” x 11”</td>
</tr>
<tr>
<td>Page Numbers</td>
<td>Each section of the proposal should have page numbers. Each section should be numbered individually.</td>
</tr>
</tbody>
</table>
| Fonts                        | • Arial, Courier New, or Palatino Linotype at a font size of 10 points or larger;  
                                | • Times New Roman at a font size of 11 points or larger; or  
                                | • Computer Modern family of fonts at a font size of 11 points or larger.  
                                | • Macintosh users also may use Helvetica and Palatino typefaces               |
| Other Formatting Requirements| • No more than six lines of text per vertical inch  
                                | • Margins, in all directions at least one inch  
                                | • One column per page  
                                | • Line Spacing: Single- or double-spaced at discretion of the proposer, established page limits must be followed. |
| FastLane Compliance Check    | FastLane will run a compliance check on all proposals prior to submission. If any sections of a proposal are missing the proposal will not be accepted.  
                                | The compliance check will verify inclusion of these documents:  
                                | • Cover Sheet  
                                | • References Cited  
                                | • Budget  
                                | • Budget Justification  
                                | • Facilities, Equipment, and Other Resources  
                                | • Project Summary  
                                | • Project Description  
                                | • Biographical Sketch  
                                | • Collaborators and Other Affiliations  
                                | • Current and Pending Support  
                                | • Data Management Plan  
                                | • Post-Doctoral Researcher Mentoring Plan, as applicable  
                                | Submission instructions for conference proposals, international travel grant proposals, or program solicitations may deviate from the GPG instructions. If the submission instructions do not require a section to be provided, insert text or upload a document in that section of the proposal that states, "Not Applicable.”  
                                | • Exceptions: collaborative proposals, letters of intent, and pre-applications. Check with your program web site or program officer if you have questions. |

Cover Sheet
There are four major components of the Cover Sheet. A number of the boxes contained on the Cover Sheet are electronically pre-filled as part of the FastLane login process. The information requested on the Cover Sheet is as follows:

1. Awardee & Project/Performance Site Primary Location
2. Program Description/Announcement/Solicitation Number
3. NSF Unit of Consideration
4. Remainder of Cover Sheet
   a) Title of Proposed Project
   b) Budget and Duration Information
   c) PI/Co-PI Information
   d) Previous NSF Award
   e) Other Federal Agencies
   f) Awardee Organization Information
   g) Project/Performance Site Primary Location
   h) Other Information

For more detailed instructions, please see pages 19-21 of the Grant Proposal Guide.

Project Summary
Page Limit: 1 page, 4,600 characters including spaces and headings. The proposer may determine how many characters to use in each FastLane text box, but the sum of characters across the three text boxes must not exceed 4,600.

NOTE: Due to the way FastLane counts characters and spaces, we recommend you limit your Project Summary to 4,500 characters, including spaces and headings.

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

The overview includes a description of the activity that would result if the proposal were funded and a statement of objectives and methods to be employed. The statement on intellectual merit should describe the potential of the proposed activity to advance knowledge. The statement on broader impacts should describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes. Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to the project.

The Project Summary should be written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal.
NOTE: Proposals that do not contain the Project Summary, including an overview and separate statements on intellectual merit and broader impacts will not be accepted by FastLane or will be returned without review.

If the Project Summary contains special characters it should be uploaded as a Supplementary Document.

NOTE: Only project summaries that use special characters may be uploaded in the Supplementary Documents section. Summaries that do not use special characters MUST be entered in the Project Summary section.

Project Summaries submitted as a PDF must be formatted with separate headings for the overview, statement on the intellectual merit of the proposed activity, and statement on the broader impacts of the proposed activity. Failure to include these headings may result in the proposal being returned without review.


Project Description (including Results from Prior NSF Support)
Page Limit: 15 pages

Content
The Project Description should provide a clear statement of the work to be undertaken and must include: objectives for the period of the proposed work and expected significance; relation to longer-term goals of the PI's project; and relation to the present state of knowledge in the field, to work in progress by the PI under other support and to work in progress elsewhere.

The Project Description should outline the general plan of work, including the broad design of activities to be undertaken, and, where appropriate, provide a clear description of experimental methods and procedures. Proposers should address what they want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. The project activities may be based on previously established and/or innovative methods and approaches, but in either case must be well justified. These issues apply to both the technical aspects of the proposal and the way in which the project may make broader contributions.

The Project Description must contain, as a separate section within the narrative, a section labeled “Broader Impacts of the Proposed Work”. This section should provide a discussion of the broader impacts of the proposed activities.

Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to the project. NSF values the advancement of scientific knowledge and activities that contribute to the achievement of societally relevant outcomes. Such outcomes include, but are not limited to:
Full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the United States; and enhanced infrastructure for research and education.

Plans for data management and sharing of the products of research, including preservation, documentation, and sharing of data, samples, physical collections, curriculum materials and other related research and education products should be described in the Special Information and Supplementary Documentation section of the proposal (see GPG Chapter II.C.2.j. for additional instructions for preparation of this section).

**Page Limitations & Inclusion of Uniform Resource Locators (URLs) within the Project Description**

Brevity will assist reviewers and Foundation staff in dealing effectively with proposals. Therefore, the Project Description (including Results from Prior NSF Support, which is limited to five pages) may not exceed 15 pages. Visual materials, including charts, graphs, maps, photographs and other pictorial presentations are included in the 15-page limitation. PIs are cautioned that the Project Description must be self-contained and that URLs that provide information related to the proposal must not be used because: 1) the information could circumvent page limitations, 2) the reviewers are under no obligation to view the sites, and 3) the sites could be altered or deleted between the time of submission and the time of review.

**NOTE: URLS must not be used in the project description. See page 22 of the GPG 16-1 for further details.**

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

**Results from Prior NSF Support**

If any PI or co-PI identified on the project has received NSF funding (including any current funding) with a start date in the past five years, information on the award(s) for each PI and Co-PI is required, irrespective of whether the support was directly related to the proposal or not. In cases where the PI or co-PI has received more than one award (excluding amendments), they need only report on the one award most closely related to the proposal. Funding includes not just salary support, but any funding awarded by NSF such as standard or continuing grants, Graduate Research Fellowship, Major Research Instrumentation, travel, conference, and center awards, etc., are subject to this requirement. The following information must be provided:

a) the NSF award number, amount and period of support;

b) the title of the project;
c) a summary of the results of the completed work, including accomplishments, supported by the award. The results must be separately described under two distinct headings, Intellectual Merit and Broader Impacts;

d) a listing of the publications resulting from the NSF award (a complete bibliographic citation for each publication must be provided either in this section or in the References Cited section of the proposal); if none, state “No publications were produced under this award.”

e) evidence of research products and their availability, including, but not limited to: data, publications, samples, physical collections, software, and models, as described in any Data Management Plan; and

f) if the proposal is for renewed support, a description of the relation of the completed work to the proposed work.

Reviewers will be asked to comment on the quality of the prior work described in this section of the proposal. Please note that the proposal may contain up to five pages to describe the results. Results may be summarized in fewer than five pages, which would give the balance of the 15 pages for the Project Description.

Unfunded Collaborations (Letters of Collaboration)
Any substantial collaboration with individuals not included in the budget should be described in the Facilities, Equipment and Other Resources section of the proposal (see GPG Chapter II.C.2.i) and documented in a letter of collaboration from each collaborator. Such letters must be provided (follow the format instructions specified in GPG II.C.2) and upload in the supplementary documentation section. Letters of collaboration should use the following format: “If the proposal submitted by Dr. [insert the full name of the Principal Investigator] entitled [insert the proposal title] is selected for funding by NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment or Other Resources section of the proposal.” A template for this can be found on the RED Proposal Support website.

**NOTE:** Letters of support should not be submitted as they are not standard components of an NSF proposal; however, please check the solicitation to see if letters of support are required.

Group Proposals
NSF encourages submission of proposals by groups of investigators; often these are submitted to carry out interdisciplinary projects. Unless stipulated in a specific program solicitation, however, such proposals will be subject to the 15-page Project Description limitation established in Section (ii) above. PIs who wish to exceed the established page limitations for the Project Description must request and receive a deviation in advance of proposal submission.

Proposals for Renewed Support
A proposal for renewed support may be either a “traditional” proposal in which the proposed work is documented and described as fully as though the proposer were applying for the first time; or, an “Accomplishment-Based Renewal” (ABR) proposal, in which the Project Description is replaced by copies of no more than six reprints of publications resulting from the research supported by NSF during the
preceding three to five year period, plus a brief summary of plans for the proposed support period. For more detailed instructions, please see Page 70 of the Grant Proposal Guide.

References Cited
Page Limit: None

Reference information is required. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the website address also should be identified. Proposers must be especially careful to follow accepted scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the 15-page Project Description.

Biographical Sketch
Page Limit: 2 pages

Senior Personnel
A biographical sketch (limited to two pages) is required for each individual identified as senior personnel. (See GPG Exhibit II -7 for the definitions of Senior Personnel.) The following information must be provided in the order and format specified below. Inclusion of additional information beyond that specified below may result in the proposal being returned without review.

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

In FastLane, if biographical sketches for all senior personnel are uploaded in a single PDF file associated with the PI, insert text or upload a document that states, “Not Applicable” for any co-PI or Senior Person.

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

<table>
<thead>
<tr>
<th>Undergraduate Institution(s) name, city, state</th>
<th>Major</th>
<th>Degree &amp; Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Institution(s) name, city, state</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postdoctoral Institution(s) name, city, state</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major</th>
<th>Degree &amp; Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>Inclusive Dates (years)</td>
</tr>
</tbody>
</table>
**Appointments**

Appointments should be a list, in reverse chronological order, of all the individual’s academic/professional appointments beginning with the current appointment.

**Products**

A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of 10 will be used in the review of the proposal.

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

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

**Synergistic Activities**

Synergistic activities should be a list of up to five examples that demonstrate the broader impact of the individual’s professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples could include, among others: innovations in teaching and training (e.g., development of curricular materials and pedagogical methods); contributions to the science of learning; development and/or refinement of research tools; computation methodologies, and algorithms for problem-solving; development of databases to support research and education; broadening the participation of groups underrepresented in science, mathematics, engineering and technology; and service to the scientific and engineering community outside of the individual’s immediate organization.

**Biographical Sketch Template**

The biographical sketch template can be found on the Proposal Support website.

**Reference:** NSF Grant Proposal Guide, 16-1 January 2016 pages 23-24

**Collaborators and Other Affiliations**

Page limit: None

This section is new as of January 2016. Instead of including collaborators and other affiliations in the biographical sketch, NSF now asks for this information as a separate document to be uploaded in the “Single Copy Document” section of Fastlane. The guidelines are as follows:

“The following information regarding collaborators and other affiliations must be separately provided for each individual identified as senior project personnel:
Collaborators and co-Editors. A list of all persons in alphabetical order (including their current organizational affiliations) who are currently, or who have been collaborators or co-authors with the individual on a project, book, article, report, abstract or paper during the 48 months preceding the submission of the proposal. Also include those individuals who are currently or have been co-editors of a journal, compendium, or conference proceedings during the 24 months preceding the submission of the proposal. If there are no collaborators or co-editors to report, this should be so indicated.

Graduate Advisors and Postdoctoral Sponsors. A list of the names of the individual’s own graduate advisor(s) and principal postdoctoral sponsor(s), and their current organizational affiliations, if known.

Thesis Advisor and Postgraduate-Scholar Sponsor. A list of all persons (including their organizational affiliations, if known), with whom the individual has had an association as thesis advisor. In addition, a list of all persons with whom the individual has had an association within the last five years as a postgraduate-scholar sponsor.

The information is used to help identify potential conflicts or bias in the selection of reviewers. See GPG Exhibit II-2 for additional information on potential reviewer conflicts.

Current and Pending Support
Page Limit: None

This section of the proposal calls for required information on all current and pending support for ongoing projects and proposals, including this project, and any subsequent funding in the case of continuing grants. All current project support from whatever source (e.g., Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organizations, or internal funds allocated toward specific projects) must be listed. The proposed project and all other projects or activities requiring a portion of time of the PI and other senior personnel must be included, even if they receive no salary support from the project(s). The total award amount for the entire award period covered (including indirect costs) must be shown as well as the number of person-months per year to be devoted to the project, regardless of source of support. Similar information must be provided for all proposals already submitted or submitted concurrently to other possible sponsors, including NSF. Concurrent submission of a proposal to other organizations will not prejudice its review by NSF. The Biological Sciences Directorate exception to this policy is delineated in GPG Chapter I.G.2.

If the project now being submitted has been funded previously by a source other than NSF, the information requested in the paragraph above must be furnished for the last period of funding.

Definitions

- Investigator Name – Full name (First M. Last) of the investigator for which this form was prepared, not the project principal investigator name.
- Source of support – Name of funding source (i.e., National Institutes of Health, National Science Foundation, US Department of Agriculture).
- Total award period covered: MM/DD/YYYY – MM/DD/YYYY
- Location of project – Institution where project will take place. If this is a collaborative project, you can list all (University of La Verne / Citrus College).
- Person-months per year committed to the project – This is generally listed as Calendar months OR a combination of Academic year and Summer months. “Cal” is not meant to be a sum of
ABOUT THESE TEMPLATES:
There is no required form for this section, and you have the option of typing the information directly into the Fastlane page. However, if you choose to enter the information directly into Fastlane, all formatting will be stripped (plan text only), and though you can save the resulting information as a pdf file, it is not editable and, therefore, cannot be changed to use with future proposals. The template provided is a way to organize the information into a form that can be saved and edited for later use.

“Acad” and “Sumr”. If the effort committed varies from year to year, we can edit the table to enable the listing of each year’s commitment (i.e., Y1 = 1.2 mos; Y2 = 2.4 mos; Y3 = 2 mos).

Current and Pending Support Format
List any pending or current support or your plans to submit this current proposal to another agency in the future according to the following instructions:

- Group all current support and all pending support in separate sections. Under pending support include “(this proposal),” after the title, for the proposal being submitted with this application.
- Pending Support – List all awards you have applied for that have pending status at the time of the current application. Provide all the requested information for each award.
- Current Support – List all active awards. Provide all the requested information for each award.
- List most recent item first in chronological order.
- Do not list awards that have closed or those that have been rejected.

Current and Pending Template
Below see two examples of NSF current and pending templates. The current and pending templates can be found on the Proposal Support website. Senior personnel has three options to complete the current and pending requirements:

- Input in FastLane directly
- NSF-1239 Current and Pending Form
- Microsoft Word Current and Pending Form
Facilities, Equipment, and Other Resources

Page Limit: None

This section of the proposal is used to assess the adequacy of the resources available to perform the effort proposed to satisfy both Intellectual Merit and Broader Impacts review criteria. Proposers should describe only those resources that are directly applicable. Proposers should include an aggregated description of the internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded. Such information must be provided in this section, in lieu of other parts of the proposal (e.g., budget justification, project description).

The description should be narrative in nature and must not include any quantifiable financial information. Reviewers will evaluate the information during the merit review process and the cognizant NSF Program Officer will review it for programmatic and technical sufficiency. Although these resources are not considered cost sharing as defined in 2 CFR § 200.306, the Foundation does expect that the resources identified in the Facilities, Equipment, and Other Resources section will be provided, or made available, should the proposal be funded.

If there are no Facilities, Equipment and Other Resources to describe, insert text or upload a document in this section of the proposal that states, "Not Applicable."

Facilities, Equipment, and Other Resources Template

Below see the example of the NSF facilities, equipment and other resources template. The facilities, equipment and other resources template can be found on the Proposal Support website.
Each proposal that requests funding to support postdoctoral researchers must include, as a supplementary document, a description of the mentoring activities that will be provided for such individuals. If a Postdoctoral Researcher Mentoring Plan is required, Fast Lane will not permit submission of a proposal if the Plan is missing. In no more than one page, the mentoring plan must describe the mentoring that will be provided to all postdoctoral researchers supported by the project, irrespective of whether they reside at the submitting organization, any sub awardee organization, or at any organization participating in a simultaneously submitted collaborative project. Proposers are advised that the mentoring plan may not be used to circumvent the 15-page project description limitation. See GPG Chapter II.D.5 for additional information on collaborative proposals. Mentoring activities provided to postdoctoral researchers supported on the project will be evaluated under the Broader Impacts review criterion.

For purposes of meeting the mentoring requirement, simultaneously submitted collaborative proposals, and, collaborative proposals that include sub awards, constitute a single unified project. Therefore, only one mentoring plan may be submitted for the entire project. In situations where a postdoctoral researcher is listed in Section A of the NSF Budget, and is functioning in a Senior Project personnel
capacity (i.e., responsible for the scientific or technical direction of the project), a mentoring plan is not required. Consult GPG Chapter II.C.2.j, page 32 for further information.

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

**Postdoctoral Researcher Mentoring Plan Template**

Below see the example of the NSF postdoctoral research mentoring plan template. The postdoctoral research mentoring plan template can be found on the Proposal Support website. The highlighted portions of the template, below, require modification for tense and content.
Data Management Plan
Page Limit: 2 pages

General Information – The NSF has required a 2-page data management plan (DMP) with all proposals since January 18, 2011. Always check with your specific Directorates, Offices, Divisions, Programs, other NSF units, and program solicitation or specific DMP guidelines. If guidance specific to the program is not provided, then the requirements established in Grant Proposal Guide, Chapter II.C.2.j page 33 apply.

The general sections of a DMP, as outlined by the NSF, are:

1. Types of data produced
2. Data and metadata standards
3. Policies for access and sharing
4. Policies for re-use, redistribution
5. Plans for archiving & preservation

The Engineering Directorate has slightly different sections:

1. Roles and responsibilities
2. Expected data
3. Period of data retention
4. Data formats and metadata
5. Data dissemination and policies for public access, sharing and publication delays
6. Data storage and preservation of access

Resources at OSU – Two data management specialists within the Libraries’ Research Data Services unit (http://guides.library.oregonstate.edu/research-data-services) are available to assist you with the development and review of your DMP. As a first-step, we strongly encourage you to utilize the DMPTool (https://dmptool.org/) as a resource in creating your plan. The DMPTool provides detailed guidance, links to general and institutional resources, and walks a researcher through the process of generating a comprehensive plan tailored to specific DMP requirements. As institutional members of the DMPTool, we provide OSU-specific links and information within the tool.
Figure 1. Select ‘Oregon State University’ when you log in.

The tool will guide you through directorate-specific plan requirements for each section of the DMP, and provide links for further resources.

Figure 2. Select the appropriate directorate from the list of NSF templates. If none apply, select the ‘Generic’ template
When you are finished with your plan, you can have it reviewed by OSU’s Data Management Specialists by clicking the ‘Submit for Review’ button. They will review the plan and provide feedback as quickly as possible (generally 24-48 hours). Alternatively, you may email the plan as an attachment to ResearchDataServices@oregonstate.edu.
You may also add co-owners to your plan, which grants access to your collaborators and allows them to review and contribute to the DMP.

**Data Storage** – Local storage for working/in-process data is available. The COE Computing Support is your first stop for questions regarding data storage. [http://engineering.oregonstate.edu/computing/](http://engineering.oregonstate.edu/computing/) If the default storage limit isn’t large enough for your needs, COE IT will work with you to determine your best options (this is where having a DMP can be helpful!). Alternatively, there are centralized cyberinfrastructure resources available through OSU Information Services [http://is.oregonstate.edu/client-services/cn/cn-policies/contracts-pricing](http://is.oregonstate.edu/client-services/cn/cn-policies/contracts-pricing). Be sure to contact IS directly, as the prices for storage quoted in the web site are often out of date.

**Data Sharing** – The NSF requires you to share your data within 3 years after the end of the project, or immediately following a publication; whichever comes first. Providing data upon request does not satisfy the NSF’s data sharing policy. Data must be made publicly accessible to the greatest extent possible. The method and platform for sharing your data will largely depend on the size and format of your dataset, and it’s audience. Some journals also require open access to the data that underlies your paper. The ideal place to share your data is via a subject-based data repository, where it will be in context with similar data and be discoverable by your primary audience. The Registry of Research Data Repositories ([http://www.re3data.org](http://www.re3data.org)) is a good place to search for a repository within your field. If a
subject repository does not exist in your field, a general data repository is another good option, and there are many to choose from.

OSU’s institutional repository, ScholarsArchive@OSU (SA@OSU) is also available for the preservation and sharing of datasets (including software code). SA@OSU is a free service for all faculty, staff and graduate students at OSU, and provides a means to permanently archive and share your research results. It is a local platform for research discoverability and access, and is supported by expert, in-person curation for all of your needs. The SA@OSU repository provides mirroring, redundancy, media migration, access control, and other security-based services that ensure the data are appropriately archived for as long as the data owner specifies. All datasets are assigned a unique identifier (a DOI), and the repository is indexed by DataCite and the Data Citation Index. See http://bit.ly/OSUDatasets to review datasets that are currently in the repository. See http://bit.ly/datarepository for more information about using SA@OSU for archiving and sharing your datasets, or contact Research Data Services with questions.

BUDGET AND BUDGET JUSTIFICATION PREPARATION GUIDANCE
The Proposal Support team primarily supports faculty to develop their budget and budget justification. We have established templates for both documents that incorporate NSF’s GPG requirements. This toolkit will separately address the budget and budget justification preparation below.

Budget Preparation
Each proposal must contain a budget for each year of support requested. The Proposal Support budget template follows the NSF FastLane budget format. The following sections will address each section of the budget.

Salaries and Wages (Lines A and B on the Proposal Budget)

Senior Personnel Salaries and Wages (Line A)
Reference: Page 25 of GPG 16-1

NSF regards research as one of the normal functions of faculty members at institutions of higher education. Compensation for time normally spent on research within the term of appointment is deemed to be included within the faculty member’s regular organizational salary.

As a general policy, NSF limits the salary compensation requested in the proposal budget for senior personnel to no more than two months of their regular salary in any one year. This limit includes salary compensation received from all NSF-funded grants. This effort must be documented in accordance with 2 CFR § 200, Subpart E. If anticipated, any compensation for such personnel in excess of two months must be disclosed in the proposal budget, justified in the budget justification, and must be specifically approved by NSF in the award notice budget.

The names of the PI(s), faculty, and other senior personnel and the estimated number of full-time-equivalent person-months for which NSF funding is requested, and the total amount of salaries
requested per year, must be listed. For consistency with the NSF cost sharing policy, if person months will be requested for senior personnel, a corresponding salary amount must be entered on the budget. If no person months and no salary are being requested for senior personnel, they should be removed from Section A of the budget. Their name(s) will remain on the Cover Sheet and the individual(s) role on the project should be described in the Facilities, Equipment and Other Resources section of the proposal.

**NOTE:** These same requirements apply to other types of non-academic organizations seeking NSF funding (i.e. subcontractors, industry partners, or collaborators).

**Other Personnel (Line B)**
Reference: Page 26 of GPG 16-1

This section is for project staff including postdoctoral researchers, undergraduate and graduate students, and other professionals.

Administrative and clerical salaries and wages should normally be treated as indirect (F&A) costs. Inclusion of such costs on a proposal budget may be appropriate only if all of the following conditions are met:

1) Administrative or clerical services are integral to a project or activity;
2) Individuals involved can be specifically identified with the project or activity;
3) Such costs are explicitly included in the approved budget or have the prior written approval of the cognizant NSF Grants Officer; and
4) The costs are not also recovered as indirect costs.

For postdoctoral associates and other professionals, the total number of persons for each position must be listed, with the number of full-time-equivalent person-months and total amount of salaries requested per year. For graduate and undergraduate students, secretarial, clerical, technical, etc., whose time will be charged directly to the project, only the total number of persons and total amount of salaries requested per year in each category is required. Salaries requested must be consistent with the organization’s regular practices. The budget justification should detail the rates of pay by individual for senior personnel, postdoctoral associates, and other professionals.

The budget may request funds for support of graduate or undergraduate research assistants to help carry out the proposed research. Compensation classified as salary payments must be requested in the salaries and wages category.

**Fringe Benefits (Line C on the Proposal Budget)**
Reference: Page 26 of GPG 16-1

OSU’s accounting practices require that its contributions to employee benefits (leave, employee insurance, social security, retirement, other payroll-related taxes, etc.) be treated as direct costs, NSF grant funds may be requested to fund fringe benefits as a direct cost. These are typically determined by application of a calculated fringe benefit rate for a particular class of employee (full time or part-time) applied to the salaries and wages requested. The Proposal Support team utilizes the COE Business &
Engineering Business Center fringe/OPE rate table when developing budgets. See Proposal Support website for fringe/OPE rate table.

**Equipment (Line D on the Proposal Budget)**  
Reference: Page 27 of GPG 16-1

NSF defines equipment as tangible asset (including information technology systems when necessary to accomplish the project objectives and not otherwise reasonably available) having a useful life of more than one year and a per-unit acquisition cost which equals, or exceeds, $5,000. The acquisition cost of equipment includes modifications, attachments, and accessories necessary to make the asset usable for the purpose for which it was purchased. Equipment assets must be adequately justified, listed individually by description and estimated cost, and in some cases, quotes are required. Allowable items ordinarily will be limited to research equipment and apparatus not already available for the conduct of the work.

**Travel (Line E on the Proposal Budget)**  
Reference: Page 27 of GPG 15-1

**NSF Travel Requirements**
Travel and its relation to the proposed activities must be specified, itemized and justified by destination and cost. Funds may be requested for field work, attendance at meetings and conferences, and other travel associated with the proposed work, including subsistence. In order to qualify for support, however, attendance at meetings or conferences must be necessary to accomplish proposal objectives, or disseminate its results.

Allowance for air travel normally will not exceed the cost of round-trip, economy airfares.

Domestic travel includes travel within and between the U.S., its territories and possessions. Foreign travel is defined as outside the U.S., its territories and possessions. The proposal must include relevant information, including countries to be visited (also enter names of countries on the proposal budget), dates of visit, if known.

*NOTE: If the specific location of the international conference is not known at the time of the proposal submission, proposers should enter “Worldwide” on the Cover Sheet.*

**OSU Travel Policies**
The Oregon State University (OSU) Travel Policy and allowable reimbursements are derived from the Oregon University System (OUS) Policy, which states that the universities are to follow applicable state statutes, regulations and administrative rules. All travelers (including students, official volunteers, and guests) on official university business must comply with OSU travel policies and procedures.

Specific contracts or other awards may have different requirements for the submission of receipts relating to domestic or foreign travel. The Office of Post Award Administration (OSRAA) assists units in identifying the contract or award by noting the requirement on the original Award Information Sheet. Units will be held responsible for receipts that are not submitted with reimbursements or for
reimbursements that are done using incorrect methods. A cost overrun to the unit will be prepared for any travel that is billed to the contractor and subsequently disallowed due to lack of receipts/documentation for the reimbursement.

NOTE: Pre-approval from OSRAA is required when employee international travel expenses will be charged to a grant index.

**Participant Support (Line 4 on the Proposal Budget)**
Reference: Page 27-28 of GPG 16-1

**NSF Participant Support Requirement**
This budget category refers to costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with NSF sponsored conferences or training projects. Any additional categories of participant support costs other than those described in 2 CFR § 200.75 (such as incentives, gifts, souvenirs, t-shirts and memorabilia), must be justified in the budget justification, and such costs will be closely scrutinized by NSF.

The number of participants to be supported must be entered in the parentheses on the proposal budget. These costs also must be justified in the budget justification section of the proposal. Indirect costs (F&A) are not allowed on participant support costs. Participant support costs must be accounted for separately should an award be made.

NOTE: Funds provided for participant support may not be used for other categories of expense without specific prior NSF written approval. Such requests must be submitted electronically via use of NSF’s electronic systems.

**OSU Participant Support Cost Policy**
Participant support costs refer to costs paid to or on behalf of participants, trainees/Fellows attending conferences, meetings, symposia, training activities and workshops. A participant must be an individual who is attending in the context of a "student."

- Participant support costs may include transportation, per diem, stipends, supplies, conference fees, and other related costs (registration fees, books, instructional materials) for participants only. **Honoraria and travel for speakers and receptions are not considered participant support costs.**
- Employees of OSU, including Graduate Research Assistants (who are considered employees), may be considered a participant under the definition above, but should not be included under participant support cost in a proposal budget because they are an OSU employee. Their costs should be incorporated into other budget categories (i.e. travel).
- Participant support costs (non-employee participants) are exempt from indirect costs
Other Direct Costs (Lines G1 through G6 on the Proposal Budget)
Reference: Page 28-29 of GPG 16-1

NSF Other Direct Costs Requirements
Any costs proposed to an NSF grant must be allowable, reasonable and directly allocable to the supported activity. The budget must identify and itemize other anticipated direct costs not included under the headings above, including materials and supplies, publication costs, computer services and consultant services.

Materials and Supplies (G1 on the Proposal Budget)
The proposal budget justification should indicate the general types of expendable project-related materials and supplies required. Supplies are defined as all tangible assets other than those described in the Equipment section above. A computing device is considered a supply if the acquisition cost is less than $5,000, regardless of the length of its useful life. In the specific case of computing devices, charging as a direct cost is allowable for devices that are essential and allocable, but not solely dedicated, to the performance of the NSF award.

NOTE: Cost estimates must be included for items that represent a substantial amount of the proposed line item cost.

Publication/Documentation/Dissemination (Line G2 on the Proposal Budget)
The proposal 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 grant. This generally includes the following types of activities: reports, reprints, page charges or other journal costs (except costs for prior or early publication); necessary illustrations; cleanup, documentation, storage and indexing of data and databases; development, documentation and debugging of software; and storage, preservation, documentation, indexing, etc., of physical specimens, collections or fabricated items.

Consultant Services /Professional Services Costs (Line G3 on the Proposal Budget)
The proposal budget may request costs for professional and consultant services. Professional and consultant services are services rendered by persons who are members of a particular profession or possess a special skill, and who are not officers or employees of the proposing organization. Consultants’ travel costs, including subsistence, may be included. Additional information on the allowability of consultant or professional service costs is available in 2 CFR § 200.459.

Computer Services (Line G4 on the Proposal Budget)
The cost of computer services, including computer-based retrieval of scientific, technical and educational information, may be requested only where it is institutional policy to charge such costs as
direct charges. A Grant Proposal Guide II-17 NSF 15-1 justification based on the established computer service rates at the proposing organization must be included. The proposal budget also may request costs for leasing of computer equipment. As noted in GPG Chapter II.C.2.g(iii), general purpose (such as word processing, spreadsheets, communication) computer equipment should not be requested.

**NOTE: See materials and supplies, above, for guidance on acquisition of computing devices.**

**Subawards (Line G5 on the Proposal Budget)**

**NSF Requirements:**

Except for the purchase of materials and supplies, equipment or general support services allowable under the grant, no portion of the proposed activity may be subawarded, transferred, or contracted out to another organization without written prior NSF authorization. Such authorization must be provided either through inclusion of the subaward(s) on an NSF award budget or by receiving written prior approval from the cognizant NSF Grants Officer.

If known at the time of proposal submission, the intent to enter into such arrangements must be disclosed in the proposal. A separate budget and a budget justification of no more than three pages, must be provided for each subrecipient, and if already identified, along with a description of the work to be performed.

**OSU Requirements:**

The subaward process is used when OSU passes through a portion of the sponsored award to another entity for the purpose of programmatic effort on the project or when OSU receives a portion of a sponsored award from another organization. All the terms and conditions that are part of the primary award must be included in the subaward document. Signature of acceptance of these terms by the receiving entity is required.

Further guidance information is available for determining whether an activity is a subaward or procurement.

The following are *not* considered subawards.

- **Personal Services Contract:** A Personal Services Contract (PSC) is with an individual and that individual is usually considered a consultant. They are paid a specific rate to deliver and we own what they deliver.

- **Employee:** With an employee we direct and control the work whereas on a subcontract or Personal Services Contract, the entity (subaward) or person (PSC) is in the business of doing what we are hiring them to do and we do not control or direct what they do.

- **Fixed Fee:** A Fixed Fee is established when there is a pre-determined rate that has been approved by the organization and that rate is applied to a standard process or procedure (such as testing).
• For further details on determining whether a subcontract should be used or determining if the item should be procured, visit OSRAA’s website.

A budget that includes a subaward to another organization must include the following:

• a separate detailed budget signed by the sub-award’s authorized official
• a statement of work
• a copy of the sub-award’s negotiated indirect cost rate agreement included in the proposal (if subcontract budget is over $25,000 and if subaward has an F & A rate agreement)

When OSU is the organization receiving the subaward, we process:

• a separate detailed budget
• a statement of work
• a completed Cayuse form.

All commercial subawards must provide a justification for a sole-source selection. This is retained with the university proposal file for audit purposes. University subawards do not require this.

Other (Line G6 on the Proposal Budget)

Any other direct costs not specified in Lines G1 through G5 must be identified on Line G6. Such costs must be itemized and detailed in the budget justification.

Tuition on fellowships (non-GRA/GTA appointments)

Tuition on GRAs must be at a rate appropriate for the person applying (i.e. resident, non-resident, international). Full tuition remission must be charged unless the following exceptions apply:

• When the sponsor does not allow tuition as a direct charge it must be shown as a cost share.
• When the GRA FTE is split between two budget indexes, tuition should be split proportionately.
• Graduate students can be paid hourly as a student worker, but will not be appointed as GRA, will not have tuition paid and will not receive Recruitment and Retention Differential.
• Graduate students can be both hourly and on GRA/GTA appointments as long as:
  o it is specified in the budget
  o the student does not go above .49 FTE

Budget Template

The budget template plan template can be found on the Proposal Support website. The highlighted portions of the template, below, require modification for tense and content.
**BUDGET JUSTIFICATION**

A budget justification page follows the budget to explain any item in the budget that may be questioned by the reviewer or any sponsor representative. It is often helpful to indicate how cost estimates were derived for each of the direct cost items unless already obvious. The justification page should be organized in the same order as the budget itself, although not every item in the budget may require justification.

**The budget justification must be no more than three pages per proposal.** The amounts for each budget line item requested must be documented and justified in the budget justification as specified below. For proposals that contain a subaward(s), each subaward must include a separate budget justification of no more than three pages.

As a general policy, NSF limits the salary compensation requested in the proposal budget for senior personnel to no more than two months of their regular salary in any one year. This limit includes salary compensation received from all NSF-funded grants. This effort must be documented in accordance with...
2 CFR § 200, Subpart E. If anticipated, any compensation for such personnel in excess of two months must be disclosed in the proposal budget, justified in the budget justification, and must be specifically approved by NSF in the award notice budget. Under normal rebudgeting authority, as described in AAG Chapters II and V, an awardee can internally approve an increase or decrease in person months devoted to the project after an award is made, even if doing so results in salary support for senior personnel exceeding the two month salary policy. No prior approval from NSF is necessary as long as that change would not cause the objective or scope of the project to change. NSF prior approval is necessary if the objective or scope of the project changes. The budget justification template can be found on the Proposal Support website. The highlighted portions of the template, below, require modification for tense and content.

Budget Justification Template
ADDITIONAL TYPES OF NSF GRANT SUBMISSIONS FOR FACULTY

NSF offers additional types of funding opportunities in addition to the regular faculty grants. A few of these are described below. Full instructions for submitting these and other less common types of grants are described in the GPG 16-1.

NSF Collaborative Grants

A collaborative proposal is one in which investigators from two or more organizations wish to collaborate on a unified research project. Collaborative proposals may be submitted to NSF in one of two methods: as a single proposal, in which a single award is being requested (with subawards administered by the lead organization); or by simultaneous submission of proposals from different organizations, with each organization requesting a separate award. In either case, the lead organization’s proposal must contain all of the requisite sections as a single package to be provided to reviewers (that will happen automatically when procedures below are followed). All collaborative proposals must clearly describe the roles to be played by the other organizations, specify the managerial arrangements, and explain the advantages of the multi-organizational effort within the Project Description. PIs are strongly encouraged to contact the cognizant NSF Program Officer prior to submission of a collaborative proposal.

Submission of a Collaborative Proposal from One Organization

The single proposal method allows investigators from two or more organizations who have developed an integrated research project to submit a single, focused proposal. A single investigator bears primary responsibility for the administration of the grant and discussions with NSF and, at the discretion of the organizations involved, investigators from any of the participating organizations may be designated as co-PIs. Please note, however, that if awarded, a single award would be made to the submitting organization, with any collaborators listed as subawards.

If a proposed subaward includes funding to support postdoctoral researchers, the mentoring activities to be provided for such individuals must be incorporated in the supplemental mentoring plan.

By submission of the proposal, the organization has determined that the proposed activity is administratively manageable. NSF may request a revised proposal, however, if it considers that the project is so complex that it will be too difficult to review or administer as presented.

Submission of a Collaborative Proposal from Multiple Organizations

Simultaneous submission of proposals allows multiple organizations to submit a unified set of certain proposal sections, as well as information unique to each organization. The lead organization is required to submit a Project Summary, Project Description, References Cited, Data Management Plan, and Postdoctoral Mentoring Plan (if applicable) for all organizations in the collaborative. Other sections must be submitted by each organization in the collaborative. All collaborative proposals arranged as separate submissions from multiple organizations must be submitted via FastLane. For these proposals, the
project title must begin with the words "Collaborative Research:" If funded, each investigator bears responsibility for a separate award.

Required sections of the proposal differ based on the organization’s role. The following sections are required for a collaborative proposal submitted by:

<table>
<thead>
<tr>
<th>Lead Organization</th>
<th>Non-Lead Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Sheet</td>
<td>Cover Sheet</td>
</tr>
<tr>
<td>Project Summary</td>
<td>Table of Contents (automatically generated)</td>
</tr>
<tr>
<td>Table of Contents (automatically generated)</td>
<td>Biographical Sketch(es)</td>
</tr>
<tr>
<td>Project Description</td>
<td>Budget</td>
</tr>
<tr>
<td>References Cited</td>
<td>Budget Justification</td>
</tr>
<tr>
<td>Biographical Sketch(es)</td>
<td>Current and Pending Support</td>
</tr>
<tr>
<td>Budget</td>
<td>Facilities, Equipment, and Other Resources</td>
</tr>
<tr>
<td>Budget Justification</td>
<td>Collaborators &amp; Other Affiliations</td>
</tr>
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<td>Current and Pending Support</td>
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<td>Facilities, Equipment, and Other Resources</td>
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<td>Data Management Plan</td>
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<td>Collaborators &amp; Other Affiliations</td>
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<tr>
<td>Letters of Collaboration (if applicable)</td>
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<td>Postdoctoral Mentoring Plan (if applicable)</td>
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**NOTE: FastLane will combine the proposal submissions for printing or electronic viewing.**

To submit the collaborative proposal, the following process must be completed:

1. Each non-lead organization must assign their proposal a proposal PIN. This proposal PIN and the temporary proposal ID generated by FastLane when the non-lead proposal is created must be provided to the lead organization before the lead organization submits its proposal to NSF.
2. The lead organization must then enter each non-lead organization(s) proposal PIN and temporary proposal ID into the FastLane lead proposal by using the "Link Collaborative Proposals" option found on the FastLane "Form Preparation" screen. Given that such separately submitted proposals constitute a “single” proposal submission to NSF, it is imperative that the proposals be submitted within a reasonable timeframe to one another.
3. All components of the collaborative proposal must meet any established deadline, and, failure to do so may result in the entire collaborative proposal being returned without review.

**NSF CAREER Proposals**

**Page Limit: 15**

**General Information**: See the CAREER Funding Page for more details. Please read the Solicitation NSF 15-555 for details about preparing a CAREER proposal.

The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation’s most prestigious awards in support of junior faculty who exemplify the
role of teacher-scholars through outstanding research, excellent education and the integration of education and research within the context of the mission of their organizations.

Such activities should build a firm foundation for a lifetime of leadership in integrating education and research. NSF encourages submission of CAREER proposals from junior faculty members at all CAREER-eligible organizations and especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply.

**PECASE**: Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious recent CAREER awardees. Selection for this award is based on two important criteria:

1. innovative research at the frontiers of science and technology that is relevant to the mission of the sponsoring organization or agency, and
2. community service demonstrated through scientific leadership, education or community outreach.

These awards foster innovative developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of the participating agencies, enhance connections between fundamental research and national goals, and highlight the importance of science and technology for the Nation’s future. Individuals cannot apply for PECASE. These awards are initiated by the participating federal agencies. At NSF, up to twenty nominees for this award are selected each year from among the PECASE-eligible CAREER awardees who are most likely to become the leaders of academic research and education in the twenty-first century. The White House Office of Science and Technology Policy make the final selection and announcement of the awardees.

**Grants for Rapid Response Research (RAPID)**
The RAPID funding mechanism is used for proposals having a severe urgency with regard to availability of, or access to data, facilities or specialized equipment, including quick-response research on natural or anthropogenic disasters and similar unanticipated events. PI(s) must contact the NSF program officer(s) whose expertise is most germane to the proposal topic before submitting a RAPID proposal. This will facilitate determining whether the proposed work is appropriate for RAPID funding.

- The Project Description is expected to be brief (two to five pages) and include clear statements as to why the proposed research is of an urgent nature and why a RAPID award would be the most appropriate mechanism for supporting the proposed work.

**NOTE: this proposal preparation instruction deviates from the standard proposal preparation instructions contained in this Guide; RAPID proposals must otherwise be compliant with the GPG.**

- The "RAPID" proposal type must be selected in the proposal preparation module in FastLane.
- Only internal merit review is required for RAPID proposals. Under rare circumstances, program officers may elect to obtain external reviews to inform their decision. If external review is to be obtained, then the PI will be so informed in the interest of maintaining the transparency of the
review and recommendation process. The two standard NSB approved merit review criteria will apply.

- Requests may be for up to $200K and of one year duration. The award size, however, will be consistent with the project scope and of a size comparable to grants in similar areas.
- No-cost extensions, and requests for supplemental funding, will be processed in accordance with standard NSF policies and procedures.
- Renewed funding of RAPID awards may be requested only through submission of a proposal that will be subject to full external merit review. Such proposals would be designated as “RAPID renewals.”

EArly-concept Grants for Exploratory Research (EAGER)
The EAGER funding mechanism may be used to support exploratory work in its early stages on untested, but potentially transformative, research ideas or approaches. This work may be considered especially "high risk-high payoff" in the sense that it, for example, involves radically different approaches, applies new expertise, or engages novel disciplinary or interdisciplinary perspectives. These exploratory proposals may also be submitted directly to an NSF program, but the EAGER mechanism should not be used for projects that are appropriate for submission as “regular” (i.e., non-EAGER) NSF proposals. PI(s) must contact the NSF program officer(s) whose expertise is most germane to the proposal topic prior to submission of an EAGER proposal. This will aid in determining the appropriateness of the work for consideration under the EAGER mechanism; this suitability must be assessed early in the process.

- The Project Description is expected to be brief (five to eight pages) and include clear statements as to why this project is appropriate for EAGER funding, including why it does not “fit” into existing programs and why it is a “good fit” for EAGER.

NOTE: this proposal preparation instruction deviates from the standard proposal preparation instructions contained in this Guide; EAGER proposals must otherwise be compliant with the GPG.

- The "EAGER" proposal type must be selected in the proposal preparation module in FastLane.
- Only internal merit review is required for EAGER proposals. Under rare circumstances, program officers may elect to obtain external reviews to inform their decision. If external review is to be obtained, then the PI will be so informed in the interest of maintaining the transparency of the review and recommendation process. The two standard NSB approved merit review criteria will apply.
- Requests may be for up to $300K and up to two years in duration. The award size, however, will be consistent with the project scope and of a size comparable to grants in similar areas.
- No-cost extensions, and requests for supplemental funding, will be processed in accordance with standard NSF policies and procedures.
- Renewed funding of EAGER awards may be requested only through submission of a proposal that will be subject to full external merit review. Such proposals would be designated as “EAGER renewals.”
### IMPORTANT NSF RESOURCES

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<thead>
<tr>
<th>Resource</th>
<th>Link</th>
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<tr>
<td>NSF FastLane Help System</td>
<td><a href="https://www.fastlane.nsf.gov/NSFHelp/flashhelp/fastlane/FastLane_Help/fastlane_help.htm#welcome_to_the_fastlane_help_system.htm">https://www.fastlane.nsf.gov/NSFHelp/flashhelp/fastlane/FastLane_Help/fastlane_help.htm#welcome_to_the_fastlane_help_system.htm</a></td>
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Office of Sponsored Research and Award Administration website