**Standard NSF Proposal Outline**

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| Note: This outline addresses key development components of a standard NSF application; however, it does not address all elements required to complete the application or budget. Complete instructions are available in the solicitation and the [NSF Proposal and Award Policies and Procedures Guide](https://www.nsf.gov/pubs/policydocs/pappg19_1/index.jsp).Notes added specifically for NSF Program are *italicized.* |

1. **Project Summary (limited to 1 page and 51 lines)**

The Project Summary should be written in the third person, informative to other persons working in the same or related fields, and, insofar as possible, understandable to a scientifically or technically literate lay reader. It should not be an abstract of the proposal. The summary must include three separate sections, each of which is input into a text box in FastLane:

* **Overview:**Describe the activity that would result if the proposal were funded and state the objectives and methods to be employed.
* **Intellectual Merit:** Describe the potential of the proposed activity to advance knowledge within its own field or across different fields, including the qualifications of the team to conduct the project and the extent to which the proposed activities suggest and explore creative, original, or potentially transformative concepts.
* **Broader Impacts:** Describe the potential of the proposed activity to benefit society and contribute to the achievement of specific, desired societal outcomes. *Projected number of new teachers compared to current number produced.*
1. **Project Description (limited to 15 pages)**

The Project Descriptionshould provide a clear statement of the work to be undertaken. URLs must not be used. Should this project involve collaboration with other institutions/organizations, describe the roles to be played by the other entities, specify the managerial arrangements, and explain the advantages of the multi-organizational effort. (Note: With the exception of the “Results from Prior NSF Support” subsection, page limitations for each subsection in the Project Description are suggestions only; proposals that use the maximum number of pages in each subsection will not be in compliance with the overall 15-page limitation.)

**Overview, Goal, and Objectives (suggested length: 1 to 1.5 pages)**

* Succinctly state (2-3 paragraphs) the problem or opportunity your proposal will address. Briefly address how your proposed research will help synthesize, build, and/or expand research foundations in the areas identified as priorities in the solicitation.
* Clearly elucidate the long-term goal of your research, the overall goal of the proposed project, and the specific objectives of the work proposed.

**Background and Significance (suggested length: 3.5 to 5 pages)**

* Briefly sketch the background leading to the application, critically evaluate existing knowledge, and identify the gaps that the project is intended to fill. Discuss how this project will generate foundational research that will advance the field in general or address significant challenges. Also describe the contributions the project will make to synthesizing, expanding, or building the base of knowledge and evidence needed in the field, and to the development of theory and methodology.
* Summarize any prior work relevant to the proposed project as well as relevant work in progress by the PI under other support.

**Research Plan (suggested length: 7 to 9 pages)**

* Describe the work necessary to meet the objectives set forth in the first section.
* Include clear statements of the research activities to be undertaken, including experimental methods and procedures.
* Include any plans for collaboration among researchers in related disciplines.
* Include evaluation criteria, as well as a timeline for the completion of project activities and key milestones.

**Broader Impacts (suggested length: ½ to 1 page)**

* The Project Description must contain, as a separate section within the narrative, a section labeled “Broader Impacts”.
* Discuss the broader impacts of the proposed activities, which may be accomplished through the research itself, activities directly related to the research, or activities supported by, but complementary to, the project.

**Intellectual Merit (suggested length: ½ page)**

* The intellectual merit of a project encompasses its potential to advance knowledge within its own field or across different fields.
* Discuss the qualifications of the team to conduct the project.
* Explain the extent to which the proposed activities suggest and explore creative, original, or potentially transformative concepts.
* Provide an overview of the resources available to carry out the proposed activities (these will be further detailed in the Facilities, Equipment, and Other Resources document).

**Results from Prior NSF Support (if applicable; limited to 5 pages)**

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

* + The NSF award number, amount, and period of support;
	+ The title of the project;
	+ A summary of the results of the completed work, including accomplishments, described in two separate sections related to the Intellectual Merit and Broader Impact activities supported by the award;
	+ 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.”;
	+ 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
	+ If the proposal is for renewed support, a description of the relation of the completed work to the proposed work.

If the project was recently awarded and therefore no new results exist, describe the major goals and broader impacts of the project.

1. **References Cited (no page limit)**

This section should contain a list of bibliographic citations relevant to the proposal. While there is no page limit, please note that this section must contain bibliographic citations only and cannot include any parenthetical information. Note that:

* Every 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.
* The website address should be identified if the document is available electronically.
* Proposers must conform to accepted scholarly practices in citing source materials relied upon in the proposal.
1. **Biographical Sketches (limited to 2 pages each)**

The Office of Grants and Sponsored Programs can provide a template for biographical sketches and, if desired, assist with collecting and editing them.

1. **Budget and Budget Justification (budget justification limited to 3 pages)**
2. **Current and Pending Support (no page limit)**

The Office of Grants and Sponsored Programs can provide a template for the Current and Pending Support document and, if desired, assist with collecting necessary information and ensuring consistent formatting.

1. **Facilities, Equipment, and Other Resources (no page limit)**

Provide a narrative description of the resources available to perform the effort proposed to satisfy both the Intellectual Merit and Broader Impacts review.

* Describe internal and external resources (both physical and personnel) that the organization and its collaborators will provide to the project, should it be funded.
* Describe any substantial collaboration with individuals not included in the budget; each collaboration should then be documented in a letter of collaboration (see Documentation of Collaborative Arrangementsbelow).
* Only directly applicable resources should be described.
* **Do not include** any quantifiable financial information.
1. **Special Information and Supplementary Documentation**

**Data Management Plan (limited to 2 pages)**

The Data Management Plan should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results and may include:

* The types of data, samples, physical collections, software, curriculum materials, and other materials to be produced during the project.
* The data and metadata format and content standards. If no standards or inadequate standards exist, this should be stated along with any proposed solutions or remedies.
* Policies for access and sharing, including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements.
* Policies and provisions for re-use, re-distribution, and the production of derivatives.
* Plans to archive and preserve access to data, samples, and other research products.

Data management requirements and plans specific to the Directorate, Office, Division, Program, or other NSF unit, relevant to a proposal are available at: <http://www.nsf.gov/bfa/dias/policy/dmp.jsp>.

If guidance specific to the program is not available, then the requirements listed above apply.

A valid Data Management Plan may include only the statement that no detailed plan is needed, as long as the statement is accompanied by a clear justification. Proposers who feel that the plan cannot fit within the limit of two pages may use part of the 15-page *Project Description* for additional data management information. Proposers are advised that the *Data Management Plan* must not be used to circumvent the 15-page Project Description limitation.

**Postdoctoral Researcher Mentoring Plan (if applicable; limited to 1 page)**

Each proposal that requests funding to support postdoctoral researchers must provide a description of the mentoring activities that will be provided for such individuals.

* The mentoring plan must describe the mentoring that will be provided to all postdoctoral researchers supported by the project, regardless of whether they reside at the submitting organization, any subrecipient organization, or at any organization participating in a simultaneously submitted collaborative proposal. The mentoring plan must not be used to circumvent the 15-page Project Description limitation.
* 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.

**Documentation of Collaborative Arrangements**

* Letters of collaboration should be limited to stating the intent to collaborate and should not contain endorsements or evaluation of the proposed project. The recommended format for letters of collaboration is as follows:

“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 and Other Resources section of the proposal.”

* While letters of collaboration are permitted, unless required by a specific program solicitation, letters of support should not be submitted as they are not a standard component of an NSF proposal. A letter of support is typically from a key stakeholder such as an organization, collaborator, or Congressional Representative and is used to convey a sense of enthusiasm for the project and/or to highlight the qualifications of the PI or co-PI. A letter of support submitted in response to a program solicitation requirement must be unique to the specific proposal submitted and cannot be altered without the author’s explicit prior approval.

**Evaluation Plan**

**Other Documents (if applicable)**

Refer to the full solicitation for information on other required documents.

1. **Single-Copy Documents**

**Collaborators & Other Affiliations Information (no page limit)**

NSF requires applicants to submit information on Collaborators & Other Affiliations. The spreadsheet template for this attachment is found [here](https://www.nsf.gov/bfa/dias/policy/coa.jsp). The template is also available from OGSP.

*A Project Data Form must be submitted as part of all proposals. The information on this form is used to direct proposals to appropriate reviewers and to determine the characteristics of projects supported by the NSF Division of Undergraduate Education (DUE). In FastLane, this form will appear in the list of forms for a proposal only after (1) selecting the "Noyce" program solicitation number on the Cover Sheet and (2) saving the Cover Sheet. Grants.gov users should*

**Simplified NSF Proposal Outline**

**[numbered headings are a separate document(s)]**

1. **Project Summary (limited to 1 page and 51 lines)**
* **Overview:**
* **Intellectual Merit:**
* **Broader Impacts:**
1. **Project Description (limited to 15 pages)**

**Overview, Goal, and Objectives (suggested length: 1 to 1.5 pages)**

**Background and Significance (suggested length: 3.5 to 5 pages)**

**Work Plan (suggested length: 7 to 9 pages)**

**Broader Impacts (suggested length: ½ to 1 page)**

**Intellectual Merit (suggested length: ½ page)**

**Results from Prior NSF Support (if applicable; limited to 5 pages)**

1. **References Cited (no page limit)**
2. **Biographical Sketches (limited to 2 pages each)**

1. **Budget and Budget Justification (budget justification limited to 3 pages)**
2. **Current and Pending Support (no page limit)**

1. **Facilities, Equipment, and Other Resources (no page limit)**

1. **Special Information and Supplementary Documentation**

**Data Management Plan (limited to 2 pages)**

**Documentation of Collaborative Arrangements**

**Evaluation Plan**

1. **Single-Copy Documents**

**Collaborators & Other Affiliations Information (no page limit)**

**Project Data Form**