

Cover Sheet: Produced by fastlane, type in information there.

# Your Title Here

**Overview:** 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 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.

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

Additional instructions for preparation of the Project Summary are available in FastLane.

**Intellectual Merit:** The statement on intellectual merit should describe the potential of the proposed activity to advance knowledge.

**Broader Impacts:** 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.

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# **Your Title Here**

## **1 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.

In order to have something in the bibliography, cite this (Rees & Ostriker, 1977).

## **2 Time Line and Management Plan**

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).

## **3 Broader Impacts of the Proposed Work**

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.

## 4 Results from Previous NSF Support

If any PI or co-PI identified on the project has received NSF funding (including any current funding) in the past five years, information on the award(s) 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. 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.

## References cited

Rees, MJ; Ostriker, JP. “Cooling, dynamics and fragmentation of massive gas clouds - Clues to the masses and radii of galaxies and clusters,” *MNRAS*, v. 179, 1977, p. 541–559.  
<http://adsabs.harvard.edu/abs/1977MNRAS.179..541R>

BIOGRAPHICAL SKETCHES – provided separately

# BUDGET JUSTIFICATION

Each proposal must contain a budget for each year of support requested. 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.

The proposal may request funds under any of the categories listed so long as the item and amount are considered necessary, reasonable, allocable, and allowable under 2 CFR §200, Subpart E, NSF policy, and/or the program solicitation. For-profit entities are subject to the cost principles contained in the Federal Acquisition Regulation, Part 31. Amounts and expenses budgeted also must be consistent with the proposing organization's policies and procedures and cost accounting practices used in accumulating and reporting costs.

## A. Senior personnel

A1. salary support for the PI

A2. salary support for other senior personnel

## B. Other personnel

B1. postdocs

B2. other professionals

B3. graduate students

B4. undergraduate students

## C. Fringe Benefits

Fringe benefits are calculated at a rate X% for faculty, Y% for postdocs, and Z% for grad students.

## D. Equipment

Equipment is defined as tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the proposer for financial statement



purposes, or \$5,000. It is important to note that the acquisition cost of equipment includes modifications, attachments, and accessories necessary to make the property usable for the purpose for which it was purchased. Items of needed equipment must be adequately justified, listed individually by description and estimated cost.

Allowable items ordinarily will be limited to research equipment and apparatus not already available for the conduct of the work. General purpose equipment such as office equipment and furnishings, and information technology equipment and systems are typically not eligible for direct cost support. Special purpose or scientific use computers or associated hardware and software, however, may be requested as items of equipment when necessary to accomplish the project objectives and not otherwise reasonably available. Any request to support such items must be clearly disclosed in the proposal budget, justified in the budget justification, and be included in the NSF award budget.

## **E. Travel**

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. Travel support for dependents of key project personnel may be requested only when the travel is for a duration of six months or more either by inclusion in the approved budget or with the prior written approval of the cognizant NSF Grants Officer. Temporary dependent care costs above and beyond regular dependent care that directly result from travel to conferences are allowable costs provided that the conditions established in 2 CFR §200.474 are met.

Allowance for air travel normally will not exceed the cost of round-trip, economy airfares. Persons traveling under NSF grants must travel by US-Flag Air carriers, if available.

## **G. Other Direct Costs**

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. Examples include aircraft rental, space rental at research establishments away from the grantee organization, minor building alterations, payments to human subjects, and service charges. Reference books and periodicals may be charged to the grant only if they are specifically allocable to the project being supported by NSF.

## **I. Indirect Costs**

University Overhead

## Current support

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Agency:	NSF
Amount requested:	\$X
Period:	MM/YYYY-MM/YYYY
Project Title:	Project Title
Effort Committed:	X months/year

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## Pending support

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Agency:	NSF
Amount requested:	\$X
Period:	MM/YYYY-MM/YYYY
Project Title:	Project Title
Effort Committed:	X months/year

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Agency:	USGS
Amount requested:	\$X
Period:	MM/YYYY-MM/YYYY
Project Title:	Project Title
Effort Committed:	X months/year

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# FACILITIES, EQUIPMENT, AND OTHER RESOURCES

This section of the proposal is used to assess the adequacy of the resources available to perform the effort proposed to satisfy both the Intellectual Merit and Broader Impacts review criteria. 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. AAG Chapter II.B.1 specifies procedures for use by the awardee when there are postaward changes to objective, scope or methodology.

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

## Postdoctoral Mentoring Plan

Postdoctoral Researcher Mentoring Plan. Each proposal<sup>29</sup> that requests funding to support postdoctoral researchers<sup>30</sup> 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, FastLane 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 subrecipient organization, or at any organization participating in a simultaneously submitted collaborative project. Proposers are advised that the mentoring plan must 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.

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.

## Data Management Plan

Plans for data management and sharing of the products of research. Proposals must include a supplementary document of no more than two pages labeled "Data Management Plan". This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results (see AAG Chapter VI.D.4), and may include:

1. the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;

2. the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
3. policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
4. policies and provisions for re-use, re-distribution, and the production of derivatives; and
5. plans for archiving data, samples, and other research products, and for preservation of access to them.

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

Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined Data Management Plan, regardless of the number of non-lead collaborative proposals or subawards included. FastLane will not permit submission of a proposal that is missing a Data Management Plan.

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. The Data Management Plan will be reviewed as an integral part of the proposal, considered under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance.