

## NSF Grant Checklist

### First:

Contact with NSF program personnel prior to proposal preparation and submission is encouraged. Some NSF programs have program solicitations that modify the general provisions of the GPG and/or the Grants.gov Application Guide, and in such cases, the guidelines provided in the solicitation must be followed.

You can send the program personnel an abstract for the proposal (if you have one) or a recent publication. This will give them a better idea of your research interests. If they have enough time, the program personnel may even look at a draft of the research plan.

### Next:

Contact the Grants and Contracts Manager (GCM), Mollie Lyon ([mollie.lyon@dmu.edu](mailto:mollie.lyon@dmu.edu)) to schedule a meeting to discuss your proposal.

At this meeting we will briefly discuss the scope and purpose, the budget, the key personnel, and specific dates regarding the proposal.

Please email your Program Announcement or Request for Application announcement to GCM before the meeting.

Please be aware the PI is responsible for identifying all covered individuals and insuring that all covered individuals have completed the Conflict of Interest Training/Financial Information Disclosure process before an award can be processed and an account set up. Please consult the Office of Research for information and instructions.

Des Moines University uses a program called Cayuse to submit all NSF proposals to Grants.gov. The proposal must be submitted in its entirety through Cayuse to the Grants Office **7 days prior to the submission deadlines.**

### The following will give you a better idea of what to expect when preparing the proposal:

#### —Proposal Title

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

#### —Project Dates

Except in special situations, requested effective dates must allow at least six months for NSF review, processing and decision.

The proposed duration for which support is requested must be consistent with the nature and complexity of the proposed activity. Grants are normally awarded for up to three years but may be awarded for periods of up to five years. The Foundation encourages PIs to request awards for durations of three to five years when such durations are necessary for completion of the proposed work and are technically and managerially advantageous. Specification of a desired starting date for the project is important and helpful for NSF staff; however, requests for specific effective dates may not be met.

#### —Formatting Specifications

The proposal must be clear, readily legible, and conform to the following requirements:

- Font** - Use one of the following typefaces identified below:
  - 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
  - Computer Modern family of fonts at a font size of 11 points or larger
  - A font size of less than 10 points may be used for mathematical formulas or equations, figure, table or diagram captions and when using a Symbol font to insert Greek letters or special characters. PIs are cautioned, however, that the text must still be readable
- Page Margins and Spacing**
  - No more than 6 lines of text within a vertical space of 1 inch
  - Margins, in all directions, must be at least an inch
  - These requirements apply to all uploaded sections of a proposal, including supplementary documentation.
  - Individual program solicitations may require different type size, margin or line spacing requirements.
- Formatting the Proposal**
  - Proposers are strongly encouraged to use only a standard single-column format for the text. Avoid using a two-column format since it can cause difficulties when reviewing the document electronically. The guidelines specified above establish the **minimum** type size requirements; however, PIs are advised that readability is of paramount importance and should take precedence in selection of an appropriate font for use in the proposal. **Small type size makes it difficult for reviewers to read the proposal; consequently, the use of small type not in compliance with the above guidelines may be grounds for NSF to return the proposal without review.** Adherence to type size and line spacing requirements is also necessary to ensure that no proposer will have an unfair advantage, by using smaller type or line spacing to provide more text in the proposal.

The Office of Research recommends using Arial 11 on all documents. We have found that this font type and size gives the writer the most efficient use of space.

#### —Budget

All NSF budgets are detailed (non-modular) budgets.

As a general policy, NSF limits salary compensation for senior project 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**.

#### Some Questions to think about in regard to your

##### **budget: Personnel**

- Do you plan on hiring a Research Technician or Post-Doctoral Researcher?
- Do you plan on hiring any Graduate Research Assistants?

##### **Supplies and Equipment**

- Will you need any specialized equipment, software or data sets?

##### **If you are doing Primary Data Collection:**

- If you are collecting primary data, how do you propose to collect the information?
- What do you have in mind for participant incentives?
- Do you have a timeline for the data collection?

##### **Travel**

- Will you be traveling anywhere to meet with collaborators?
- Do you plan on attending any professional conferences?

##### **Consultants**

- Will you be working with consultants?
- What is the daily rate of pay and the amount of time they will be contributing?

—**Helpful information we need to know to help finalize the proposal:**

Who is working on the project?

Please let us know any Co-Principal Investigators/Senior Personnel. All Co-Investigators/Senior Personnel will require a biographical sketch for the proposal. Senior personnel are those who will be responsible for the scientific or technical direction of the proposed project.

Will the proposal have any subcontracts?

For all subcontracts to be complete and approved by Grant Office they must include:

- A letter of institutional commitment from an authorized representative (NOT the PI of the subcontract)
- Budget
- Budget justification
- Statement of Work
- Resources Page
- Copy of F&A agreement

Please provide us with the name of the Principal Investigator of the subcontract as well as an administrative contact at the subcontracting institution.

—**Determining if subcontract vs. consultant**

**Consultants**

Consultants are experts outside the University hired to perform a service on the project for a short period of time. A consulting agreement is generally to an individual who is not using any institutional or organizational facilities and is acting as a direct agent. He/she usually bills by the hour, by invoice, and is paid directly. The consultant may also come to the main performance site (DMU) to carry out a certain piece of the project.

**Subgrant/Subcontract/Subaward**

Subcontracted work is generally conducted at another institution or company, and usually has a budget for salary/fringes, supplies, etc. The sponsor requirements/terms and conditions have to be passed down to the subcontract via written agreements. Compliance also has to be monitored. For each subgrant/subcontract included in a proposal, a scope of work to be performed and a separate budget provided by the organization receiving the subaward is to be provided to the Grants Office before the proposal is institutionally approved and forwarded to the sponsor. Submitting a proposal without a firm commitment from the subcontractor places the University at risk because if the proposal is awarded, the subcontracting organization may be unable to perform the work at the proposed price. It is best to obtain a firm quote/budget plus a statement of the work to be performed from the subrecipient before the proposal is submitted. Also, any terms or conditions from the sponsor flow down to the subcontract.

**If this will be an NSF Collaborative Proposal, we will need the proposal number and PIN to connect the proposals in Fastlane.**

—**You will need to include the following to complete your grant proposal:**

▪ **Project Summary**

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.

The project summary should be written in 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.

Combined, these three sections must be limited to no more than 4,600 characters and spaces.

- **Project Description**

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 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

**The Project Description is limited to 15 pages.**

More information on the Project Description can be found here, p. II-9  
<http://www.nsf.gov/pubs/policydocs/pappguide/nsf14001/gpgprint.pdf>

- **References Cited**

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.

\*If the proposer has a website address readily available, that information should be included in the citation, as stated above. It is not NSF's intent, however, to place an undue burden on proposers to search for the URL of every referenced publication. Therefore, inclusion of a website address is optional. A proposal that includes reference citation(s) that do not specify a URL address is not considered to be in violation of NSF proposal preparation guidelines and the proposal will still be reviewed.

- **Budget Justification**

Budget justifications should be no more than three pages.

- **Biographical Sketches**

All NSF biosketches are limited to two pages. See an example of an NSF biosketch [here](#).

- **Facilities, Equipment and Other Resources**

This document is used to highlight both the University and also the PI and laboratory. The Office of Research has a sample document on file. Please request it if you would like to use this and make changes specified to your research and lab.

- **Current and Pending Support**

This is required for all senior project personnel.

- **Appendices (not allowed)**

All information necessary for the review of a proposal must be contained in Sections A through I of the proposal. **Appendices may not be included unless a deviation has been authorized.**

- **Special Information and Supplementary Documentation**

- Postdoctoral Researcher Mentoring Plan (if applicable)**

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, 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 subawardee 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.

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**

Proposals must include a supplementary document of no more than two pages labeled "Data Management Plan". This supplement 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. Proposals for supplementary support to an existing award are not required to include 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 supplement 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 may 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, coming under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance.

Specific guidance by Directorate, Office, Division, Program, or Other NSF Unit can be founds here: <http://www.nsf.gov/bfa/dias/policy/dmp.jsp>

**—Documentation of collaborative arrangements of significance to the proposal through letters of commitment.**

While such letters of commitment are allowable, 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. Letters of support are typically from a key stakeholder such as an organization, collaborator or Congressional Representative, and are used to convey a sense of enthusiasm for the project and/or to highlight the qualifications of the PI or co-PI. Letters 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. NSF may return without review proposals that are not consistent with these instructions.

—Please see the following link for more information on this section, p. II-21  
<http://www.nsf.gov/pubs/policydocs/pappguide/nsf14001/gpgprint.pdf>

▪ **List of Suggested Reviewers or Reviewers Not to Include**

Proposers may include a list of suggested reviewers who they believe are especially well qualified to review the proposal. Proposers also may designate persons they would prefer not review the proposal, indicating why. These suggestions are optional. The cognizant program officer handling the proposal considers the suggestions and may contact the proposer for further information. However, the decision whether or not to use the suggestions remains with the Program Officer.

The final project summary, budget, budget justification, and subcontract paperwork (if applicable) must be

submitted to the Grants Office **7 days prior to the submission deadlines.**

Des Moines University uses a program called Cayuse to submit all NSF proposals to Grants.gov. We encourage all Principal Investigators to complete all portions of the grant proposal on time (for the 7 day prior Grants Office deadline) to ensure that their proposal is successfully routed to NSF by the 5pm deadline. Complete proposals, submitted prior to deadline days, are more likely to be transmitted to NSF on time.

Please email ([mollie.lyon@dmu.edu](mailto:mollie.lyon@dmu.edu)) or call (x1657) with any questions. The Office of Research looks forward to working with you!

**The complete NSF guide for preparing grant proposals can be found here:**  
<http://www.nsf.gov/pubs/policydocs/pappguide/nsf14001/gpgprint.pdf>

**Complete Cayuse instructions for electronic submissions can be found here:**  
<https://pulse.dmu.edu/academics/research/Pages/Grants.aspx>