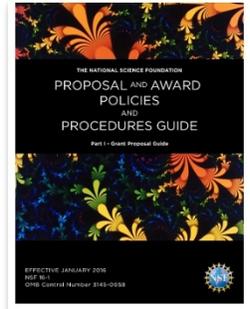


# 2016 Significant Changes

## NATIONAL SCIENCE FOUNDATION

- **When to Submit Proposals:** Proposals must be received by 5 p.m. submitter's local time on the deadline date, or the proposal will not be accepted.
- **Collaborators & Other Affiliations Information:** Previously part of the biosketch, this is a new single-copy document that requires each senior project personnel to provide information regarding collaborators and other affiliations. The new format no longer requires proposers to identify the total number of collaborators and other affiliations when providing this information.
- **Biographical Sketch(es):** Proposers may use third-party solutions (e.g., ScienCV—instructions can be found [here](#)) to develop their biographical sketch. However, the information they submit must be compliant with NSF proposal preparation requirements. In addition, biographical sketches of all senior personnel can no longer be grouped together in a single PDF file—they must now be uploaded separately for each individual identified on the proposal as senior personnel. However, Biographical sketches for Other Personnel and for Equipment proposals should be uploaded as a single PDF file in the Other Supplementary Documents section of the proposal.
- **Format of the Proposal:** Solicitations will no longer specify different type size, margin, or spacing requirements. All NSF funding opportunities will follow the GPG formatting instructions:
  - 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. (A font size of less than 10 points may be used for mathematical formulas or equations, figures, table or diagram captions and when using a Symbol font to insert Greek letters or special characters. However, the text must still be readable.)
  - No more than six lines of text within a vertical space of one inch.
  - Margins, in all directions, must be at least an inch.
- **Project Summary:** *Only* Project Summaries that use special characters may be uploaded in the Supplementary Documents section. They *must* contain separate headings for Overview, Intellectual Merit and Broader Impacts or the proposal will be returned without review.
- **Project Description:** URLs must *not* be used in the Project Description.
- **Results from Prior NSF Support:** Information must be provided for any PI or co-PI that has received NSF funding with a start date in the past five years (including any current funding and no-cost extensions). NSF awards such as standard or continuing grants, Graduate Research Fellowship, Major Research Instrumentation, travel, conference, and center awards, etc., are subject to this requirement.
- **Special Information and Supplementary Documentation:** Format that must be used for letters of collaboration:

*“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.”*



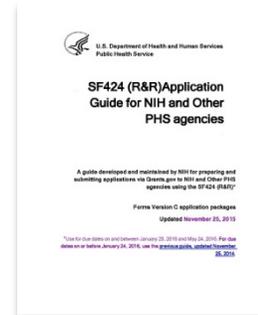
Click for Revised NSF Guidelines

- **Proposal Preparation Checklist:** Reflects the changes made to the GPG and NSF’s electronic systems and streamlined to emphasize the most relevant items. (See Attachment.)

## NATIONAL INSTITUTES OF HEALTH

### Phase I – Effective January 25, 2016

- **Rigor and Transparency:** NIH is changing application requirements and review language to enhance reproducibility of research findings through increased scientific rigor and transparency. Frequently asked questions can be found [here](#). Changes include:
  - Updates to application guide instructions for preparing your research strategy attachment
  - Use of a new "Authentication of Key Biological and/or Chemical Resources" attachment (when applicable) (uploaded in Other Attachments section of R&R Other Project Information form)
  - Additional rigor and transparency questions reviewers will be asked to consider when reviewing applications



Click for Revised NIH Guidelines

*Implementation for Grant Applications:* The following changes have been made, in addition to the existing instructions:

- **Significance:** Describe the scientific premise for the proposed project, including consideration of the strengths and weaknesses of published research or preliminary data crucial to the support of your application.
- **Approach:**
  - Describe the experimental design and methods proposed and how they will achieve robust and unbiased results.
  - Explain how relevant biological variables, such as sex, are factored into research designs and analyses for studies in vertebrate animals and humans. For example, strong justification from the scientific literature, preliminary data, or other relevant considerations, must be provided for applications proposing to study only one sex.
  - If your study(s) involves human subjects, you are expected to explain how relevant biological variables are important to the proposed experimental design and analyses. The sections on the Inclusion of Women and Minorities and Inclusion of Children can be used to expand your discussion on inclusion and justify the proposed proportions of individuals (such as males and females) in the sample.
  - Please refer to [NOT-OD-15-102](#) for further consideration of NIH expectations about sex as a biological variable.

For more background on rigor and transparency, see <http://grants.nih.gov/reproducibility/index.htm>

If live vertebrate animals are to be used, federal policy requires applicants to address the following criteria:

- **Description of Procedures.** Provide a concise description of the proposed procedures to be used that involve vertebrate animals in the work outlined in the application or proposal. Identify the species, strains, ages, sex and total number of animals by species to be used in the proposed work. If dogs or cats are proposed, provide the source of the animals.

- Justifications. Provide justification that the species are appropriate for the proposed research. Explain why the research goals cannot be accomplished using an alternative model (e.g., computational, human, invertebrate, in vitro).
- Minimization of Pain and Distress. Describe the interventions including analgesia, anesthesia, sedation, palliative care and humane endpoints to minimize discomfort, distress, pain and injury.
- Euthanasia. State whether the method of euthanasia is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals. If not, describe the method and provide a scientific justification.

The criteria are simplified by the following changes:

- A description of veterinary care is no longer required.
- Justification for the number of animals has been eliminated.
- A description of the method of euthanasia is required only if the method is not consistent with AVMA guidelines.

These requirements, as applicable, will take effect for all grant applications except Fellowship (F series) and Training (T series) grants for due dates on or after January 25, 2016, and will take effect for all applications for due dates on or after May 25, 2016. For contracts, see individual Requests for Proposals (RFPs) for detail.

- **Definition of Child:** Redefined the age of a child for the purposes of NIH's inclusion policy to individuals under 18 years old instead of under 21 years old.

## **Phase 2 – Effective May 25, 2016**

- **Inclusion Forms:** Addition of an optional PHS Inclusion Enrollment Report form to FORMS-D application packages. The new form, with additional study descriptors, will replace the optional Planned Enrollment Report and Cumulative Inclusion Enrollment Report forms found in FORMS-C application packages. NIH will provide more details about these changes prior to release of the updated forms.
- **Data Safety Monitoring Plans:** Addition of a new “Data Safety Monitoring Plan” to the following forms in FORMS-D application packages:
  - PHS 398 Research Plan
  - PHS 398 Career Development Supplemental Form
  - PHS Fellowship Supplemental Form
  - PHS 398 Research Training Program Plan

This new attachment must be included with all applications involving clinical trials.

Although the requirement of a data and safety monitoring plan for clinical trials is not new, the use of a separate attachment to collect this information will emphasize its importance and facilitate systematic enforcement of its presence.

- **New PHS Assignment Request Form:** Addition of an optional PHS Assignment Request Form to FORMS-D application packages to provide a consistent way to collect application referral information, including:
  - Awarding component (NIH institute) assignment preference
  - Study Section preference
  - List of potential reviewers in conflict, and why
  - List of scientific expertise needed to review the application

- **New Font Guidelines:** Text in PDF attachments must follow these minimum requirements:
  - Font size: must be 11 points or larger (smaller text in figures, graphs, diagrams and charts is acceptable as long as it is legible when the page is viewed at 100%)
  - Type density: must be no more than 15 characters per linear inch (including characters and spaces)
  - Line spacing: must be no more than six lines per vertical inch
  - Text Color: must be black (color text in figures, graphs, diagrams, charts, tables, footnotes and headings is acceptable as long as it is legible)

Since some PDF converters may reduce font size, it is important to confirm that the final PDF document complies with the font requirements.

The following fonts are recommended, although other fonts (both serif and non-serif) are acceptable if they meet the above requirements: Arial, Garamond, Georgia, Helvetica, Palatino, Linotype, Times New Roman, Verdana.

Legibility is of paramount importance. Applications that include PDF attachments that do not conform to the minimum requirements listed above may be withdrawn from consideration.

- **Biosketch Clarifications:** Clarifications include:
  - Indicating that a URL for a publication list is optional and, if provided, must be to a government website (.gov) like My Bibliography
  - Allowing publications (peer-reviewed and non-peer-reviewed) and research products to be cited in both the personal statement and the contributions to science sections
  - Explicitly stating that graphics, figures and tables are not allowed

## Exhibit II-1: Proposal Preparation Checklist

It is imperative that all proposals conform to the proposal preparation and submission instructions specified in the *Grant Proposal Guide*. Conformance with all preparation and submission instructions is required and will be strictly enforced unless a deviation has been approved in advance of proposal submission. Note that some NSF program solicitations modify the general provisions of the GPG, and in such cases, the guidelines provided in the solicitation must be followed. FastLane uses the rules specified for each type of proposal, (e.g., RAPID, EAGER, Ideas Lab, Equipment, Conference, and International Travel) to check for compliance prior to submission to NSF. Proposers are strongly advised to review the applicable sections of the GPG pertinent to the type of proposal being developed PRIOR to submission. NSF will not accept<sup>34</sup> or will return without review proposals that are not consistent with these instructions. See GPG Chapter IV.B for additional information.

Prior to submission, it is strongly recommended that an administrative review be conducted to ensure that proposals comply with the instructions, in the format specified. This checklist is not intended to be an all-inclusive repetition of the required proposal contents and associated proposal preparation guidelines. It is, however, meant to highlight certain critical items so they will not be overlooked when the proposal is prepared.

### **General:**

- The proposal is responsive to and compliant with the provisions in the program description, announcement, or solicitation.
- If the proposal has been previously declined and is being resubmitted, the proposal has been revised to take into account the major comments from the prior NSF review.
- The proposed work is appropriate for funding by NSF, and is not a duplicate of, or substantially similar to, a proposal already under consideration by NSF from the same submitter.
- The proposal must be submitted by 5 p.m. submitter's local time on the established deadline date.

### **Single Copy Documents:**

- Authorization to Deviate from NSF Proposal Preparation Requirements is included (if applicable).
- List of Suggested Reviewers, or Reviewers Not To Include has been provided (if applicable).
- SF LLL, *Disclosure of Lobbying Activities* has been provided (if applicable).
- Collaborators and other Affiliation information has been provided for each individual identified as senior project personnel.

### **Cover Sheet:**

- For interdisciplinary proposals, ensure all relevant programs are identified.
- For renewal proposals, previous award numbers have been entered.
- Related preliminary proposal number has been entered (if applicable).
- Appropriate box(es) have been checked, and requisite information has been provided.

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<sup>34</sup> Proposal Not Accepted is defined as FastLane will not permit submission of the proposal.

**[ ] Project Summary:**

- [ ] The Project Summary may ONLY be uploaded as a Supplementary Document if use of special characters is necessary. Such Project Summaries must be formatted with separate headings for Overview, Intellectual Merit and Broader Impacts.

**[ ] Project Description:**

- [ ] Project Description does not exceed the page limitations specified in the GPG or solicitation.
- [ ] Project Description contains, as a separate section within the narrative, a section labeled "Broader Impacts".
- [ ] Project Description is self-contained, and Uniform Resource Locators (URLs) have not been included.
- [ ] Results from Prior NSF Support have been provided for PIs and co-PIs who have received NSF support within the last five years. Results related to Intellectual Merit and Broader Impacts are described under two separate, distinct headings.

**[ ] References Cited:**

- [ ] This section includes bibliographic citations only and does not provide parenthetical information outside of the 15-page Project Description.
- [ ] Each reference is in the specified format.

**[ ] Biographical Sketch(es):**

- [ ] The content described is in accordance with the instructions, and does not contain additional information beyond that specified.

**[ ] Proposal Budget:**

- [ ] Each budget line item is documented and justified in the budget justification.

**[ ] Cost Sharing:**

- [ ] Unless required by an NSF program solicitation, voluntary committed cost sharing has not been included. Note that voluntary committed cost sharing is prohibited and Line M on the proposal budget will not be available for use by the proposer. While not required by NSF, proposing organizations may, at their own discretion, continue to contribute voluntary uncommitted cost sharing to NSF-sponsored projects. These resources are not auditable by NSF and should not be included in the proposal budget or budget justification.

**[ ] Current and Pending Support:**

- [ ] All current and pending 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).

**[ ] Facilities, Equipment and Other Resources:**

- [ ] 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, has been included.

No quantifiable financial information has been provided.

If there are no facilities, equipment or other resources identified, a statement to that effect has been included in this section of the proposal and uploaded into FastLane.

**Special Information and Supplementary Documentation:**

The types of information identified in GPG Chapter II.C.2.j have been included, as appropriate.

Any additional items specified in a relevant program solicitation have been included.