

This document supplements NSF guidance. Please be sure to read the NSF Proposal and Award Policies Guide (PAPPG) and specific program solicitation thoroughly before beginning to prepare your proposal. **Instructions provided in the program solicitation supersede those found in the PAPPG.** The full text of the PAPPG can be found at: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg. Pre-proposal contact with an appropriate program officer is highly recommended for all NSF applications, and is required for some.

APPLICATION PROCESS

- Proposals to NSF are submitted electronically by ORSP via the NSF Fastlane or Research.gov systems.
- The PI must start the application.
- Please make sure your profile is up-to-date.
- If you are new to Research.gov and need an account established, please begin the registration process at <https://www.research.gov/accountmgmt/#/registration>. You must request to be affiliated with Marquette University.
- The PI must give ORSP access to the application. After starting the proposal, you will need to click on “Share Proposal with SPO/AOR” on the left side of the page. Then click on “change proposal access,” followed by “Edit access and Allow proposal submission.” **This will allow ORSP to work on the application, but it will NOT be submitted until it is completed.**

FORMAT SPECIFICATIONS FOR ATTACHMENTS

- Font = Arial, Courier New, or Palatino Linotype (10 pt or larger), Times New Roman or Computer Modern family of fonts (11 pt or larger). ORSP strongly recommends using 11 pt or larger for all fonts.
- 1” margins all around
- All sections of the application require a PDF attachment. If the attachment is not applicable to your proposal, then a PDF must be uploaded stating that.
- Single spacing with no more than 6 lines of text within a vertical space of 1 inch
- Each section uploaded as a file must be individually paginated.
- No proposer-supplied information may appear in the margins.

ATTACHMENTS/APPLICATION COMPONENTS

- 1) **Project Summary (1 page)**, to include:
 - Overview – describe activity if project funded and state objectives and methods to be used
 - Statement of project’s intellectual merit – describe potential of proposed activity to advance knowledge
 - Statement of project’s broader impacts – describe potential of proposed activity to benefit society and contribute to achievement of specific, desired societal outcomes
- 2) Table of Contents: automatically generated by FASTLANE
- 3) **Project Description (15 pages; do not include URLs)**: Ensure merit review criteria (intellectual merit and broader impacts) are well described and integrated throughout Project Description
 - Objectives and expected significance
 - General plan of work undertaken/Methodology
 - Relation to longer term goals of project
 - Relation to present state of knowledge in field, to work in progress by PI and to work in progress elsewhere
 - What benefits could result if project is successful?
 - **Broader Impacts (separate section with header)** – a second section with the header “intellectual merit” is recommended by ORSP, but no longer required by NSF.
 - Results from prior NSF support (**5 page limit; included within 15 pages**). If any PI or co-PI identified on the proposal has received NSF funding with an end 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 co-PI has

received more than one award (excluding amendments to existing awards), they need only report on the one award most closely related to the proposal.

- 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.
- Vertebrate animals section - Sufficient information must be provided within the 15-page Project Description to enable reviewers to evaluate the:
 - rationale for involving animals;
 - choice of species and number of animals to be used;
 - description of the proposed use of the animals;
 - exposure of animals to discomfort, pain, or injury; and
 - description of any euthanasia methods to be used.
- If human subjects involved, NSF does not prescribe information to be included, but ORSP recommends describing the number and demographics of people involved and research safeguards
- 4) References Cited (no page limit): Include names of all authors (**no et al**), title, volume and page numbers (if applicable) and year of publication. Include website address if available electronically.
 - If no references are cited, a statement to that effect must be included
- 5) Biographical Sketches for all senior project personnel (**3 pages per individual**) (Must use biosketch developed in sciENCv or the NSF provided fillable biosketch form – see [NSF BIOSKETCH](#) website for additional information.)
 - Professional Preparation: Undergrad and graduate education, postdoctoral training. The location of the individual's undergraduate, graduate and postdoctoral institution(s) must be provided.
 - Academic/professional appointments in reverse chronological order
 - Appointments should include any titled academic, professional, or institutional position, whether or not remuneration is received.
 - Products (Up to 5 products most closely related to proposed project and another 5 of most significant products. Products may include publications, data sets, software, patents and copyrights)
 - Synergistic Activities (up to 5 distinct activities)
 - Synergistic activities should be specific and must not include multiple examples to further describe the activity.
- 6) Budget (Including Justification)
 - Budget Forms (**Completed by ORSP**)
 - Budget justification (5 pages; ORSP will create shell and route to PI for completion)
- 7) Current and pending support for ongoing projects (including this proposal) requiring time from PI and senior personnel: include total award amount and number of person months devoted to project (Create in SciENCv or use fillable NSF form. See [NSF Current and Pending](#) website for additional information. ORSP can help with this information for MU investigators.
- 8) Collaborators & Other Affiliations Information - The template found here - <https://www.nsf.gov/bfa/dias/policy/coa.jsp>, must be used for all key/senior personnel.
- 9) Facilities, Equipment and Other Resources:

- Include narrative aggregated description of internal and external resources (physical and personnel) directly applicable to project (do not include any quantifiable financial information)
- If there are no Facilities, Equipment, etc. to describe, a statement to that effect must be included
- Responsible Conduct of Research (RCR) Statement – if undergraduate/graduate students/postdoctoral researchers involved with project. ORSP recommends the following:
 - “In accordance with the America COMPETES Act, Marquette University has a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project. The plan is available for review upon request.”

10) **Data Management Plan (2 pages maximum)**

(<http://www.marquette.edu/orsp/NSFDataManagementPlanGuidance.shtml>)

- Check the guidelines for the directorate you are applying to for additional instructions
- Data to be produced?
- Standards to be used for data/metadata format and content?
- Policies for access and sharing? For re-use, re-distribution and production of derivatives?
- Plans for archiving and for preservation of access?

11) **Postdoctoral Mentoring Plan** (if funding requested to support postdoctoral researchers) (1 page)

(http://www.marquette.edu/orsp/documents/Sample_Postdoc_Mentoring_Plan.pdf)

12) **Letters of Collaboration** – (if applicable). 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."

13) **REU Supplement (3 pages maximum)** (if applicable)

- If including undergraduate student training as part of the project, you should discuss (1) the nature of each prospective student's involvement in the research project; (2) the experience of the PI (or other prospective research mentors) in involving undergraduates in research, including any previous REU Supplement support and the outcomes from that support; (3) the nature of the mentoring that the student(s) will receive; and (4) the process and criteria for selecting the student(s).

14) List of suggested reviewers/reviewers not to include (optional, but highly recommended)

UNIVERSITY ROUTING VIA KUALI: PIs must create application in Kuali and complete the following information:

1. Basic opportunity information (Title, project dates, sponsor, deadline)
2. Key Personnel- add yourself as PI and any Marquette collaborators. Contact ORSP if you have non-Marquette collaborators that need to be added.
3. Certification- after adding yourself as PI, click on your name and then proposal person certification, answer the questions. Any CoPIs named will also need to answer the certification questions.
4. Credit Split Distribution – assign credit split allocation and recognition for all PIs and CoIs/CoPIs.
5. Questionnaire- answer all questions.
6. COI (top of page toolbar)- update annual disclosure.
7. Please refer to the step by step instruction guide on the [ORSP Kuali Website](#) or contact ORSP with questions about setting up your application.