

This document does not replace the NSF guidelines –please read the guidelines found in the Proposal & Award Policies & Procedures Guide thoroughly before preparing your proposal. The full text of the PAPPG can be found at:

[https://www.nsf.gov/pubs/policydocs/pappg18\\_1/index.jsp](https://www.nsf.gov/pubs/policydocs/pappg18_1/index.jsp)

#### APPLICATION PROCESS

- Proposals to NSF are submitted electronically by ORSP via the NSF Fastlane System
- The PI must log on at <https://www.fastlane.nsf.gov/jsp/homepage/proposals.jsp> to start the application
- Please make sure your profile is up-to-date
- If you are new to Fastlane and need an account established, please contact ORSP to set one up
- Click on “Proposal Functions” and then click on “Proposal Preparation”
- Under “Create New Proposal,” click on “Create Blank Proposal”
- Go to the Cover Sheet and select the appropriate Program Announcement/Solicitation and also the appropriate NSF Unit (Directorate). Use the “Go Back” button at bottom of the page to navigate through the system and not the “Back” arrow in the top left corner.
- Your actions are automatically saved when you close out the application
- Once the application is started, the PI must then give ORSP access to the application. On Proposal Actions screen, highlight the appropriate application from the Temporary Proposals in Progress list and then click on “Allow SRO Access.” A Proposal Errors/Warning Screen will appear; click on “Proceed” and then select “Allow SRO to view, edit and submit proposal.” **This will allow ORSP to work on the application, but it will NOT be submitted until it is completed.**
- ORSP will complete the remainder of the cover page

#### 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 (i.e., each upload starts at page one). ORSP recommends using a descriptive footer centered on the bottom of the page
  - For Biographical Sketch attachments, use “Biographical Sketch – Name of individual – Page X of X”
  - For all other attachments, use “Section Title (i.e., Project Description) – Page X of X”

#### ATTACHMENTS/INFORMATION NEEDED FROM PI

- 1) Project Summary (1 page, 4,600 characters, 51 lines) written in 3<sup>rd</sup> person; understandable to scientifically literate lay reader including:
  - 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 NSF
- 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. Sections include
    - 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?
- **\*\*NEW- Intellectual Merit** (separate section with header)
- Broader Impacts (separate section with header)
- Results from prior NSF support (5 pages; included within 15 page Project Description).
  - 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.
- Responsible Conduct of Research (RCR) Statement – if undergraduate/graduate students/postdoctoral researchers involved with project (see <http://www.marquette.edu/orsp/ResponsibleConductofResearch.shtml> )
- Vertebrate animals section (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 (2 pages/person):
  - 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
  - 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 examples)
- 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 **(ORSP will draft with input from investigators)**
- 8) 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
- 9) Supplementary Documents:
  - Data Management Plan (2 pages):
    - 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?
  - Postdoctoral Mentoring Plan (1 page, if applicable)
  - Rationale for performance of all or part of the project off-campus (if applicable, no page limit)
  - 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."
  - REU Supplement (if applicable, 3 pages):
    - 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).
- 10) Single Copy Documents:
  - List of suggested reviewers/reviewers not to include (highly recommended)
  - Collaborators & Other Affiliations - The template found here - <https://www.nsf.gov/bfa/dias/policy/coa.jsp>, must be used for all key/senior personnel.
- 11) Cover Sheet (in addition to information indicated in Application Process Section above)
  - If Human Subjects involved:
    - Include affirmation that IRB has declared the research exempt and provide exemption number(s) **OR**
    - Provide IRB approval date **OR**
    - Indicate if approval is pending (pending means that you have submitted a request for approval or are planning to submit prior to grant award)
    - Include Marquette's Federal Wide Assurance (FWA) Number: FWA00005844
  - If Vertebrate Animals involved:
    - Include approval date from Institutional Animal Care and Use Committee **OR**
    - Indicate if approval is pending
    - Include Marquette's Animal Welfare Assurance Number: A3663-01

#### **INFORMATION NEEDED FROM SUBAWARDEES, CONSULTANTS AND/OR COLLABORATIVE PROPOSALS FROM MULTIPLE ORGANIZATIONS**

- Subawardees (Collaborators who need institution resources) must provide:
  - Biographical Sketch (for senior/key personnel) [in NSF format]
  - Current and pending support (for senior/key personnel)
  - Letter of Intent, signed by authorized organization representative [include scope of work]

- Letter of commitment from senior/key personnel (optional)
- Budget and Budget Justification (on NSF form)
- Consultants (Collaborators who do not need institution resources) must provide:
  - Personal Letter of Commitment
  - Budget Justification for services (include information on each individual's expertise, primary organizational affiliation, normal daily compensation rate, and number of days of expected service)
  - Biosketch (if deemed senior/key personnel) [in NSF format]
  - Current and pending support (if deemed senior/key personnel)
- Collaborative proposals submitted by multiple organizations
  - Each organization's project title must begin with "Collaborative Research"
  - Lead organization's submission must include all documentation outlined in the "Attachments/Information Needed from PI" section above
  - Non-lead organizations' submissions include all documentation for their respective organizations outlined above in the "Attachments/Information Needed" section **except** the Project Summary, Project Description, References Cited and usually Data Management Plan.
  - Non-lead organizations must assign each submission a proposal PIN and provide the PIN and temporary proposal ID generated by FastLane to the lead organization
  - Lead organization must enter each non-lead organization proposal PIN/temporary proposal ID into lead submission by using "Link Collaborative Proposals" option on the "Form Preparation" screen

**UNIVERSITY FORMS/SUPPLEMENTARY DOCUMENTATION NEEDED: Forms generated by ORSP when project title and budget are finalized and then routed to the faculty in order to obtain institutional review and approval (reviewed/signed by department chair and college dean and others making commitments, if any).**

1. Marquette University Proposal Registration Form
2. Disclosure of Financial Interests Form
3. ORSP Budget Form
4. List of all Project Sites
  - a. If collaborating with another site, a letter of intent, along with a scope of work and budget will need to be provided by the other institution.
5. List of all Key Personnel (those who contribute to the scientific development or execution of the project in a substantive, measurable way, whether or not salaries are requested)
  - a. Letters of support/verification of key personnel's commitment to the project should be given to ORSP
6. Letters of support/verification of commitment from any other Marquette resources needed