

This document does not replace the NIH guidelines –please read the guidelines and solicitation thoroughly before preparing your proposal. The solicitation can be found here: <https://grants.nih.gov/grants/guide/pa-files/PA-25-134.html>. The NIH SF424 Application Guide can be found at <https://grants.nih.gov/grants/how-to-apply-application-guide/forms-i/general-forms-i.pdf> and more specifically for R grants: <https://grants.nih.gov/grants/how-to-apply-application-guide/forms-i/research-forms-i.pdf>. Not all NIH Institutes participate in the parent or other programs. Please make sure that the institute you are interested in is participating in the specific PA, PAR or RFA you are applying through. Pre-proposal contact with an appropriate program officer is highly recommended for all NIH applications and is required for some.

3 Main Objectives:

- Provide support for meritorious research at undergraduate-focused institutions or institutional components;
- Strengthen the research environment at these institutions/components; and
- Give undergraduate students an opportunity to gain significant biomedical research experience through active involvement in the research.

FORMAT SPECIFICATIONS FOR ATTACHMENTS

- PDF files only – file names are 50 characters or less and use only standard characters - A through Z, a through z, 0 through 9, underscore (_), hyphen (-), space (), and period (.). Do not use any other special characters (e.g., "&", "*", "%", "/", or "#") in the file name.
- Margins are ½" all around
- Font = black; Arial, Garamond, Georgia, Helvetica, Palatino Linotype, Times New Roman, or Verdana typeface are recommended; size 11 or larger; must be no more than 15 characters per linear inch (including characters and spaces)
- Do not include headers or footers
- Project Title – limited to 200 characters including spaces and punctuation; use only standard characters
- Use section headings

APPLICATION CONTENTS – Underlined information denotes a separate document that must be submitted as a PDF. Samples and templates are available on [ORSP's NIH website](#).

1. Project Summary/Abstract (**no more than 30 lines**): Provide a concise description of project objectives and methodologies suitable for dissemination to the public.
2. Project Narrative (**2-3 sentences**): Describe the relevance of this research to public health in lay terms.
3. Bibliography & References Cited (**no page limit**): Each reference must include the names of all authors, article and journal title, book title, vol#, pg.#, year of publication. When citing articles that fall under the Public Access Policy (peer-reviewed, accepted for publication since April 7, 2008, and are a result of NIH funding) and were authored or co-authored by the applicant, provide the NIH Manuscript Submission reference number (e.g., NIHMS97531) or the PubMed Central (PMC) reference number (e.g., PMCID234567) for each article. If the PMCID is not yet available because the Journal submits articles directly to PMC on behalf of their authors, indicate "PMC Journal – In Process."
4. Facilities and Other Resources (no page limit); instructions and samples can be found on the [ORSP NIH website](#). Provide a description of the facilities and resources of the institution available for the proposed research (e.g., equipment, supplies, laboratory space, research time, etc.). Describe only those resources that are directly applicable to the proposed work. If there are multiple sites, describe resources available at each site. Describe how the scientific environment will contribute to the probability of success of the project. Also include the following:
 - a. A profile of the students of the applicant institution and any information or estimate of the number who have obtained a baccalaureate degree and gone on to obtain an academic or professional doctoral degree in the health-related sciences during the last five years. **ORSP will provide this information.**
 - b. Description of the special characteristics of the school/college/institution that make it appropriate for an AREA grant with regard to: (1) providing support for meritorious research ; (2) strengthening the research environment; and (3) exposing undergraduate students to strong research environments.

- c. Description of the likely impact of an AREA grant on the PD(s)/PI(s), research environment of the institution, and the ability of undergraduate students to gain experience conducting biomedical research.
 - d. Description of the resources of the grantee institution available for the proposed research (e.g., equipment, supplies, laboratory space, etc.)
5. **Equipment** (no page limit): Provide list of major equipment items already available. If appropriate, identify their locations and pertinent capabilities. Sample is available on the [ORSP NIH website](#).
6. **Biosketches (5 page maximum/person)**: Required for senior/key personnel and Other Significant Contributors. We encourage using [SciENcv](#) to develop your biosketch and automatically format it. NIH will require the use of the SciENcv Common Form for Biosketch for applications on or after May 25, 2025.
 - a. Instructions and sample can be found at <https://grants.nih.gov/grants/forms/biosketch.htm>
 - b. Include Personal Statement; Positions, Scientific Appointments, and Honors; and Contributions to Science (You may provide a URL to a full list of your published work. This URL must be to a Federal Government website (a .gov suffix). NIH recommends using [My Bibliography](#).)
 - c. Include a summary of PI's previous and/or current experience in supervising students in research in the Personal Statement.
 - d. The PD(s)/PI(s) should indicate which peer-reviewed publications involved students under his or her supervision.
 - e. When citing articles that fall under the Public Access Policy (peer-reviewed, accepted for publication since April 7, 2008, and are a result of NIH funding) and were authored or co-authored by the applicant, provide the NIH Manuscript Submission reference number (e.g., NIHMS97531) or the PubMed Central (PMC) reference number (e.g., PMCID234567) for each article. If the PMCID is not yet available because the Journal submits articles directly to PMC on behalf of their authors, indicate "PMC Journal – In Process."
7. **Budget Forms and Justification [Note: ORSP liaison will create shell and route to faculty for editing.]**
 - a. Applicants may request up to \$375,000 in direct costs for the entire project period of up to 3 years.
8. **Cover Letter (as applicable, see below)**: This should be on university letterhead and should include only the following as applicable. Institute and study section information should no longer be included here.
 - a. Application title
 - b. Funding Opportunity title
 - c. As applicable: For late applications include specific information about the timing and nature of the cause of the delay; When submitting a Changed/Corrected Application after the due date, a cover letter is required explaining the reason for late submission of the Changed/Corrected Application; Explanation of any subaward budget components that are not active for all periods of the proposed grant; Statement that you have attached any required agency approval documentation for the type of application submitted; When intending to submit a video as part of the application, the cover letter must include information about the intent to submit it; if this is not done, a video will not be accepted; OR Include a statement in the cover letter if the proposed studies will generate large-scale human or non-human genomic data as detailed in the NIH Genomic Data Sharing Policy.
9. **Assignment Request Form**: this is a form page. [ORSP Project Planning and Development](#) will provide the most recent version of the document for you to complete.
10. **Introduction (1 page, IF resubmission or revision)**: Include an introduction section detailing the reviewer comments addressed in the application.
11. **Specific Aims (1 page)**: Concisely state goals and specific objectives of the proposed research and summarize expected outcomes, including the impact the results will exert on the research field.
12. **Research Strategy (12 pages): [Must be organized in the following order. Use section headings]** Describe how the proposed plan can achieve the specific aims using a research team composed primarily of undergraduate students. Describe how undergraduate students will be engaged in and supervised in conducting hands-on, rigorous research. Describe how undergraduate students will participate in research activities such as planning, execution, and/or analysis of the research. Formal training plans (e.g., non-research activities, didactic training, seminars) should not be provided, although a brief description of activities related to enhancing students' research capabilities and progress (e.g., the use of individual development plans, etc.) is permitted.
 - a. Significance

- b. Innovation
 - c. Approach
13. Data Management and Sharing Plan (2 pages)
- a. Applicants proposing to conduct research that will generate scientific data are subject to the [NIH Data Management and Sharing Policy](#) and must attach a DMS Plan.
 - b. A DMS Plan should reflect the proposed approach at the time the application is prepared. For some programs and data types, NIH and/or NIH Institutes, Centers, Offices, or programs have developed additional data sharing requirements.
 - c. You should address these [Elements of an NIH DMS Plan](#): data type; related tools, software and/or code; standards; data preservation, access and associated timelines; and access, distribution, or reuse considerations. A sample format is provided on the [Data Management and Sharing Plan Format Page](#). Additional resources and information about MU's recommended online program, DMPTool, is available on [Marquette's Data Management Planning webpage](#). Do not include hyperlinks in this attachment.
 - d. The [NIH Genomic Data Sharing Policy](#) expects applicants seeking funding for research that generates large-scale human or non-human genomic data to provide a plan for sharing of these data as part of their DMS Plan (a single plan addressing both).
14. Provost Letter – **ORSP will complete**; if it's an MPI proposal, each institution will need a provost letter
15. Vertebrate Animals - (if applicable, no page limit)
16. Select Agent Research - (if applicable, no page limit)
17. Multi PI Leadership Plan - (if applicable, no page limit)
18. Consortium/Contractual Agreements - (if there is/are subcontractor(s) – ORSP will prepare
19. Letter(s) of Support – collaborator and consultant letters (not a requirement, try to keep to one page each)
20. Resource Sharing Plans (if applicable)
- a. Sharing model organisms plan - only if the creation of a new animal model is proposed. Outline a plan to make research findings available to qualified individuals within the scientific community.
 - b. Research Tools - When resources have been developed with NIH funds, and the associated research findings published or provided to NIH, they are to be made readily available for research purposes to qualified individuals within the scientific community. For more information, see the Research Tools Policy on the [NIH Scientific Data Sharing Website](#).
21. Authentication of Key Resources Plan (if applicable, 1 page recommended):
- a. Briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposed studies.
22. Human Subjects and Clinical Trials Information - a Study Record will be uploaded for each proposed study involving human subjects – ask [ORSP Project Planning and Development](#) for the most recent version of the study record form. (Instructions for all attachments can be found on the [ORSP NIH website](#).)
- a. Study Title (must be unique for each study record)
 - b. Clinical Trial Questionnaire
 - c. Study Population Characteristics
 - i. Conditions or focus of study
 - ii. Study eligibility criteria
 - iii. Age limits (minimum and maximum)
 - iv. Inclusion of Individuals Across the LifeSpan (no page limit)
 - v. Inclusion of Women and Minorities (no page limit)
 - vi. Recruitment and Retention Plan (no page limit)
 - vii. Recruitment Status (select not yet recruiting, recruiting, enrolling by invite, active, not recruiting, completed, suspended, terminated, withdrawn)
 - viii. Study Timeline (no page limit)
 - ix. Estimated date of Enrollment of First Subject
 - x. Inclusion Enrollment Report – this is a form page built into the study record.
 - d. Protection and Monitoring Plans
 - i. Protection of Human Subjects (no page limit)
 - ii. Is this a multi-site project – select yes or no

1. Applicants who check "Yes" are expected to use a single Institutional Review Board (sIRB) to conduct the ethical review required by HHS regulations for the Protections of Human Subjects Research.
2. If "Yes" describe the single IRB plan – no page limit)
- iii. Data Safety Monitoring Plan – (no page limit) – required for clinical trials, recommended for all human subjects research.
- iv. Will a Data and Safety Monitoring Board be appointed for this study – select yes or no
- v. Overall Structure of the Study Team – (no page limit) – required for clinical trials, recommended for all human subjects research.

SUPPLEMENTARY DOCUMENTATION NEEDED:

1. Subaward Sites - If collaborating with another site to be a subaward, a letter of intent, along with a scope of work, budget, and budget justification will need to be provided by the other institution.
2. Letters of support/verification of key personnel's commitment to the project, as applicable.
3. Letters of support/verification of commitment from any other Marquette resources needed, as applicable.

UNIVERSITY ROUTING VIA KUALI:

1. Basic opportunity information (Title, project dates, sponsor, deadline)
2. Key Personnel - PI and any other Marquette collaborators. Contact [ORSP Project Planning and Development](#) if you have non-Marquette collaborators that need to be added.
3. Credit Splits – designate Recognition and Allocation contributions for all key personnel.
4. Certification - PI's and key personnel should click on their names in the Key Personnel section to access the proposal person certification tab and answer the questions.
5. Questionnaire - PI to answer all questions.
6. Conflict of Interest (COI) – PI and key personnel to update annual disclosure.