

Application for
BIOMEDICAL RESEARCH GRANT

INDIANA UNIVERSITY SCHOOL OF MEDICINE
BIOMEDICAL RESEARCH COMMITTEE

SUBMISSION DEADLINE: Wednesday, January 16, 2019

*Please note that you will be submitting through the Indiana CTSI's grants management software WebCAMP.
Please allow enough time to be familiar with the system.*

*The WebCAMP user's guide is also available under the funding announcement here:
<https://www.indianactsi.org/researchers/funding/open-funding-opportunities/>*

INFORMATION FOR APPLICANTS

OBJECTIVE

The objective of the Biomedical Research Grant Program is to foster scholarly and creative research by worthy investigators so that they can compete successfully for extramural research support. In general, two categories of research projects will benefit from this program:

- 1) Research projects of investigators new to Indiana University School of Medicine who do not yet have extramural funding and who need support to acquire the preliminary data necessary to compete for extramural funding;
- 2) Research projects of established investigators of Indiana University School of Medicine who are between funding periods from extramural sources.

Applications for both categories are considered small grants and should have a maximum requested amount of \$50,000 and be limited to one (1) year duration.

WHO MAY APPLY

All full-time faculty, regardless of tenure status, having an appointment of Assistant Professor or Assistant Scientist and above at time of submission, are eligible to apply for a Biomedical Research Grant. Primary appointment must be in the School of Medicine. Faculty in visiting ranks are not eligible for funding through this mechanism.

RESTRICTIONS

1. Grant applications will be considered from applicants who have <\$100,000 (direct costs) in extramural funding as of the proposed award start date. Extramural funding should be construed to mean grants from Federal and state agencies (e.g. NIH, NSF, VA, USDA, ISDH), National Organizations and Foundations (e.g. National Heart Association, Robert Wood Johnson Foundation, Howard Hughes Foundation), and Industry (e.g. GlaxoSmithKline, Eli Lilly Company) of \$100,000 (direct costs) or greater per annum. Clinical trial contracts and salary support on career development award(s) do not count toward the \$100,000 limit and grants in no-cost extensions or nearing the end of their award term may list remaining fund balances in lieu of the full awarded amounts. The amount of all extramural funding available to the applicant, if any, must be detailed. This includes any funding through program projects, centers, joint grants and any other mechanisms. If such funds are available, the relevant specific aims of that portion of the project or center grant must be provided. In listing support, the PI must specify dollar amounts for collaborative grants as well as for individual grants. If they are not the PI, the role in the project must be clearly specified, along with any resources or funding for that role.
2. Funding for personnel is meant to provide interim support for technical assistance needed to carry out the project. Salaries for faculty members (including anyone eligible to apply for the grant) are not allowable.

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3. Applicants for Biomedical Research funds who have submitted or have pending an application for extramural funding may use the same or similar proposal to apply to the Biomedical Research Committee, but this must conform to the Committee's guidelines and application format. **The applicant must address the Specific Aims for the single year of funding requested.** It is to the applicant's advantage to focus and establish priorities for the year, and to describe how the one year of funding requested will aid in either "jump-starting" a project or strengthening a planned or pending submission. The relevant parts of an extramural proposal may be appended if desired, but the priorities for the proposed year of funding must be clearly justified.
4. Applications from new (within 2 years at the time of submission) faculty must have a letter from the departmental chairman stating the amounts of start-up funds and continued support the applicant is receiving from departmental funds. The School of Medicine strongly endorses the development of mentoring committees for new faculty. If such a mentoring committee or faculty mentor has been appointed it should be included in the Chair's letter as a facet of the new investigator's support system.

Applicants are strongly encouraged to have their mentor or a senior researcher review the proposal before the Chair signs the cover letter. It would be helpful if the Chairs, in their cover letter, indicate who had helped the applicant review the proposal before submission.

5. If the applicant is between extramural funding periods, it is to the applicant's advantage to focus and establish priorities for the year, and to describe how the one year of funding requested will aid in strengthening a planned or pending (re)submission. If the funding gap arises because the applicant is between a submission and a resubmission, the applicant should provide details about the previous grant period and must whenever possible provide the IRG evaluation ("pink sheet") in the appendices and indicate how this application will help address IRG comments and improve a resubmission. The relevant parts of the extramural proposal may be appended if desired, but the priorities for the proposed year of funding must be clearly justified.
6. A complete and unedited copy of reviewer's comments must be included in the appendices for all proposals previously submitted for any type of extramural or intramural funding, including a revised Biomedical Research Grant application.
7. Requests for purchase of capital equipment will not be considered, nor will requests for funds to pay equipment service maintenance contracts.
8. Applications for the sole purpose of maintaining animals and animal colonies will not be considered. However, animal purchase and per diem costs, related to the proposed research project, are allowable.
9. Requested grant funding period cannot exceed 12 months. However, funded projects may be extended for up to one year with approval. Guidelines for submitting a request

for a no cost extension may be found: <https://www.indianactsi.org/researchers/funding/no-cost-extension/>

10. Frequency and number of submissions:

- Highly similar proposals may not be submitted as both a Biomedical Research Grant and Showalter Trust application. If eligible for both programs, the investigator is encouraged to submit to the Showalter Trust. Questions regarding application similarity should be sent to the IUSM Office of Operations and will be forwarded to the BRC for review.
- Investigators may not simultaneously apply for a Biomedical Research Grant and a Research Enhancement Grant. An applicant may submit only one BRG or one REG application per deadline.
- An applicant may not apply for a BRG or REG if they have received funding from either source in two of the preceding four twelve-month periods from the date of submission of the proposed application.
- An applicant may not submit either a BRG or REG application with a start date which would overlap with the original project year of a current BRG or REG award; a BRG or REG recipient may submit if, on the proposed start date of the new application, the current award will be in a no-cost extension period.
- The committee will not review a proposal more than three times (original plus two revised submissions) regardless to which mechanism it is submitted.

11. The independence of the investigator is an important criterion in the review of BRG and REG proposals. Non-tenure track faculty members who apply for Biomedical Research funding must provide a letter from the Department Chair¹ clearly addressing their independence including departmental plans for fostering their independence. Applicants who are, or have been, associated with a senior investigator at Indiana University are strongly advised to also include a letter from the senior investigator addressing the relationship of the applicant's project to the senior investigator's research.

REVIEW CRITERIA

A broad range of research activities will be considered. An attempt will be made to identify research with the highest probability of leading to external funding. A sample review template is provided with RFA documents here: [CTSI BRG Jan 2019 Link](#)

MECHANISM FOR SUBMISSION OF APPLICATION

Applications will be considered three times a year. **Submission due dates are 1) one week following the first regular business day in January, 2) the first regular business day in**

¹ Applicants from the Departments of Medicine and Pediatrics may substitute a letter from the Division Chief in lieu of a letter from the Department Chair.

May, and 3) the first regular business day in September. The electronic application must be uploaded to the CTSI website on the submission due date.

However, for this round only, the submission deadline is January 16, 2019.

Applications will be assigned for review prior to the next scheduled meeting of the Biomedical Research Committee, which will generally meet within six weeks of the submission date. Approximately two months should be allowed from submission of the application to the desired starting date (no earlier than March 1, July 1, and November 1 respective to submission due dates). The starting date of proposed project cannot be later than three months after the proposal submission deadline.

Application forms may be obtained from: [CTSI BRG Jan 2019 Link](#)

Applications will follow this sequence:

Page 1. Face page, which specifies the title of the proposal, principal investigator and his/her affiliation, where work will be performed, and the total budget. Note block indicating that a letter from the departmental chairman is required if the application is to be reviewed.

Page 2. Abstract page listing all professional individuals involved in the project and an abstract of the proposed research.

Page 3. State the reasons for the application at the present time and specify whether these are start-up funds for a new investigator or bridge funding between periods of extramural grant support. This should not exceed one page.

If the request is a resubmission of a proposal previously reviewed by the Biomedical Research Committee, the applicant must include a detailed introduction showing what changes have been made to address the previous comments. Changes should also be noted in the body of the proposal and prior review comments included in the appendices.

Page 4-5. Budget page listing the direct costs for all personnel. **No capital equipment and no investigator travel can be requested.** Patient care costs, which might include travel, can be requested. Supplies and other costs must relate directly to performance of the project. All costs should be specifically justified on page 5 (limit justification to one page). The budget provided in this document does not automatically total or calculate amounts; an Excel version of the budget is also available and may be used as page 4.

Page 6-10. **Biographical sketch** of the principal investigator – use the NIH Biographical Sketch Format, excluding section D.

Page 11. **Other Support** of principal investigator: Since the guidelines restrict funding to applicants who do not have extramural funding of \$100,000 (direct costs) or

greater per annum, it is critical that the Other Support page be clear and detailed, and include funding through program projects, centers, joint grants, etc., as well as the role of the applicant in each grant and any potential overlap.

Page 12-end. Research Plan (items A-D below) should be typed on 8 ½ x 11 white paper with at least 1/2 inch margins and is **not to exceed 7 pages**. Type size should follow NIH guidelines: Arial, Helvetica, Palatino Linotype or Georgia typeface and a font size of 11 points or larger. Type must be clear and readily legible, and reasonable size.

The Research Plan should address the single year of funding requested. Relevant parts of an extramural proposal may be included, if desired, to show the scope of the overall project and to justify how the funding requested will aid in either “jump-starting” a project or strengthening a planned or pending submission. It is to the applicant’s advantage to focus and establish priorities for the year. These priorities should be made clear in all relevant sections of the Research Plan.

References should follow the research plan but are not counted in the page limit.

The application narrative should be structured in accordance with the following format. Please be sure to address the new areas of focus from the NIH regarding scientific premise, rigor, biological variables, and authentication (<http://grants.nih.gov/grants/RigorandReproducibilityChart508.pdf>).

A. Specific Aims:

This section should include objective, rationale, central hypothesis, and specific aims of the proposal. Follow NIH R01 format.

B. Significance: (sections B-D should not exceed 7 pages)

This section should include background and importance of proposed work as well as its potential for extramural support. Follow NIH R01 format.

C. Innovation:

How does the proposed project seek to challenge existing paradigms including novel concepts, approaches, methodologies, instrumentation, or inventions of current research or clinical practice? Are these innovations new to one field of research or unique in a broad sense? Follow NIH R01 format.

D. Approach:

This section should include preliminary data and research strategy. Research strategy should include for each separate specific aim, rationale, proposed experiments and anticipate results/alternate strategies. Please follow NIH R01 format.

E. References

F. Facilities Available:

Describe the facilities available for this project including laboratories, clinical resources, office space, animal quarters, etc. List major items of equipment available for this work.

G. Collaborative Arrangements:

If the proposed project requires collaboration with other investigators, describe the collaboration and provide evidence to assure the reviewers that the other collaborators agree (letters of support in the addendum).

H. Letters of Support:

1. Department Chair Letter² (required)

Letter should include:

- If the applicant is non tenure track, the independence of the applicant, including departmental plans for fostering independence
- Amount of start-up funds and continued departmental support, if the applicant is within the first 2 years of the faculty appointment
- Verification that a faculty mentor and/or mentoring committee is in place
- Who, if anyone, has reviewed and approved the application prior to submission
- If the applicant is between extramural funding periods, indicate that there is a plan for departmental support via matching funds until new extramural funding is obtained

2. Senior Investigator Letter (optional)

This letter is optional but strongly advised for research-track applicants who are, or have been, associated with a senior investigator. Letter should address the relationship of the project to the senior investigator's research.

I. Supporting Information:

Attach any supporting material as an addendum. If applicable, **one copy of the latest approval form for recombinant DNA, human subjects, or animal protocols must be attached to the original application.**

Submit electronic application online using the “[Start a submission](#)” link at [CTSI BRG Jan 2019 Link](#)

² Applicants from the Departments of Medicine and Pediatrics may substitute a letter from the Division Chief in lieu of a letter from the Department Chair.
Office of the Dean

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The electronic application (including addendum) should be in a single PDF file **that includes scanned signatures**.

REPORTING REQUIREMENTS FOR AWARDEES:

All award recipients must agree to comply with the reporting requirements as described below.

1. At time of award, provide all required investigator and study (regulatory) information.
2. Semi-annual progress reporting while the project is still active
3. Annual follow up for 5 years after the project is complete, to provide (a) publications (b) grants submitted; (c) grants funded that used data generated by core, and (d) intellectual property.
4. By accepting this award, grant recipients agree to have their names and project titles publicly posted on the website and/or in a publication.
5. Notify the Indiana CTSI @ icreate@iu.edu in writing if leaving the university prior to the closure of this project. Spending on the account must immediately cease, and any remaining balance will be pulled back by the Dean's Office. The CTSI must be notified, and approval obtained, for all transfers to a new PI.
6. Grant recipients are required to acknowledge receipt of support in any presentation or publication of work funded by a BRG award: *This [(publication was made possible) (project was supported)] by an award from the Indiana University School of Medicine. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Indiana University School of Medicine."*