Junior Faculty Seed Funding Program FY21 Application Instructions



Eligibility Criteria:

Applicants must be full-time, tenure-track BCM Assistant Professors appointed on or after Jan. 1, 2017 with appointments approved by the BCM President and Board of Trustees at the time of application and beginning no later than July 1, 2020. Investigators who have previously received support through this program or have already received an R01 grant or other independent investigator award exceeding \$200K/year in direct costs are not eligible to apply. This restriction does not include College seed packages or one-time recruitment awards such as from McNair or CPRIT.

Instructions for Preparing Your Proposal:

Please read and follow the instructions carefully. The application must be single-spaced and have at least 1/2" margins. Please use 11 point Arial font. Upload all documents as PDFs. This application is modeled after NIH R01 and R03 guidelines. Visit <u>https://grants.nih.gov/grants/peer/critiques/rpg.htm</u> to see what reviewers will look for in each submission.

Please submit applications online through the <u>Junior Faculty Seed Award submission</u> site. Only the PI may create, access, and submit the proposal. It will then go to the designated signatories. **Please attach the following to your proposal:**

REQUIRED SECTIONS:

- 1. Specific Aim (maximum 1 page)
- 2. Research Plan (maximum 4 pages)
- 3. Response to Reviewers if a RESUBMISSION Proposal (maximum 1 page)
- 4. Literature Cited (no page limit)
- 5. NIH-style Biographical Sketch
- 6. Budget and Budget Justification
- 7. Letter(s) of Support
- 8. Project Narrative

1. SPECIFIC AIM (maximum 1 page)

State concisely the goal(s) of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will have on the research field(s) involved.

List succinctly the specific objective(s) of the research proposed (e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology).

Describe how completion of the proposed aim will provide key preliminary data or demonstrate feasibility necessary for submission of a major external funding application such as, for example, an R01 application to NIH.

This link may be helpful and contains NIH-funded examples of specific aims: <u>https://www.niaid.nih.gov/grants-contracts/draft-specific-aims.</u>

2. RESEARCH PLAN (maximum 4 pages)

Include the following sections:

- A. **Significance**: Explain the importance of the problem or critical barrier to progress that the proposed project addresses. 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. Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
- B. **Innovation**: Explain how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions. Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.
- C. **Approach**: Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aim of the project. Describe the experimental design and methods proposed and how they will achieve robust and unbiased results. Include how the data will be collected, analyzed, and interpreted, as well as any resource sharing plans as appropriate. Resources and tools for rigorous experimental design can be found at the Enhancing Reproducibility through Rigor and Transparency website.

For trials that randomize groups or deliver interventions to groups, describe how your methods for analysis and sample size are appropriate for your plans for participant assignment and intervention delivery. These methods can include a group- or cluster-randomized trial or an individually randomized group-treatment trial. Additional information is available at the Research Methods Resources webpage. Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aim. If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high risk aspects of the proposed work. 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. Refer to the NIH Guide Notice on Sex as a Biological Variable in NIH-funded Research for additional information. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised. A full discussion on the use of select agents should appear in the Select Agent Research attachment below. If research on Human Embryonic Stem Cells (hESCs) is proposed but an approved cell line from the NIH hESC Registry cannot be chosen, provide a strong justification for why an appropriate cell line cannot be chosen from the registry at this time. As applicable, also include the following information as part of the Research Strategy, keeping within the three sections (Significance, Innovation, and Approach) listed above.

Include information on preliminary studies. Discuss the PD/PI's preliminary studies, data, and or experience pertinent to this application. Preliminary data can be an essential part of a research grant application and can

help to establish the likelihood of success of the proposed project. Early stage investigators should include preliminary data.

3. INTRODUCTION TO REVISED PROPOSAL

<u>For Resubmitted Proposals</u> - Resubmission of proposals previously reviewed for this program, but not funded, must include:

 A summary of previous critiques and a discussion of the modifications made in response to critiques. Successful NIH examples of how to address reviewers' comments can be found at <u>https://www.niaid.nih.gov/sites/default/files/R01-Faubion-app.pdf</u> and <u>https://www.niaid.nih.gov/sites/default/files/R01_Li_Sample_Application.pdf</u>

4. LITERATURE CITED

The NIH has no specified format. Consider a format friendly to reviewers—make it easy to read and be sure to proofread it. Consider listing at least the first six (6) authors' names before listing "et al."

5. NIH BIOGRAPHICAL SKETCH

Follow these instructions: <u>https://grants.nih.gov/grants/forms/biosketch.htm</u>

6. BUDGET

Use the web form provided in the "Budget Information" section of the application. Provide a detailed budget and justification. Funds may support laboratory personnel, patient care costs, and the purchase of supplies and equipment. Equipment costing more than \$5,000 will require special justification and approval.

EXPENDITURES NOT ALLOWED:

- Secretarial/administrative personnel
- Salary of principal investigator
- Subcontracts
- Tuition
- Travel
- Honoraria and travel expenses for visiting lectures
- Per diem charges for hospital beds
- Non-medical services to patients
- Construction or building maintenance
- Major alterations
- Purchasing and binding of periodicals and books
- Office and laboratory furniture
- Office equipment and supplies
- Rental of office or laboratory space
- Recruiting and relocation expenses

7. LETTER(S) OF SUPPORT

Attach a letter from the PI's Chair/Director/Section Chief describing:

- i. The commitment of the academic unit to the development of the researcher's career as a productive, independent investigator;
- ii. The departmental space allocated to the applicant;

You may also include letters from key individuals involved in the project (e.g., collaborators) confirming their roles.

8. PROJECT NARRATIVE

Describe for the layperson the relevance of this research to public health in, at most, three sentences. For example, NIH applicants can describe how, in the short or long term, the research would contribute to fundamental knowledge about the nature and behavior of living systems and/or the application of that knowledge to enhance health, lengthen life, and reduce illness and disability.

ASSURANCES AND COMPLIANCE

Neither pending nor approved protocols are required with this application. However, if funded, researchers must obtain institutional approval for proposals involving human subjects, animals, radioisotopes, or biohazardous materials. If any of these research types will be involved, you must create a draft protocol in BRAIN eSP1 and include the protocol number in your proposal.