MEDICAL UNIVERSITY OF SOUTH CAROLINA
DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL SCIENCES

Chairman's Research Development Fund Pilot Grant Program

09/09/2021

Purpose of the Chair's Research Development Fund Pilot Grant Program

The Chair's Research Development Fund (CRDF) supports several goals related to maintaining high quality research training programs. Primary goals are:

- Increase the number of extramurally--funded junior investigators
- Encourage integration of trainees into research projects
- Enhance mentor-mentee collaborations within and across department divisions
- Increase minority representation among funded junior investigators

The Executive Committee for Research and Research Administration (ECRRA) oversees the submission and review process. The over-arching purpose of the CRDF is to generate preliminary data to be used, or to complement, grant proposals to external entities such as, the NIH, NSF, DoD, SAMHSA, NARSAD, VAH, CDC, private foundations, and investigator-initiated submissions to the pharmaceutical industry. The scope of CRDF funding should be heavily weighted toward the generation of preliminary data that would support a subsequent application. Applicants should have a fairly well-formed concept of the external entity to which they will later be soliciting external funding *and how the generation of the specific data being proposed in the application will assist in this effort.*

The ECRRA will accept applications from junior faculty members (i.e., assistant professors, instructors or trainees meeting the criteria outlined below) seeking funding for pilot research grants to collect preliminary data designed to enhance the viability and success of independent funding in the future. Applications are also being accepted for supplemental funding to currently funded internal or external grants to meet increased costs that are within the scope of the approved project or to further the research scope of the approved project. Although the primary objective of these pilot research grants is to generate preliminary data necessary to prepare and submit a competitive grant application by junior faculty members, the ECRRA will also accept applications from psychology interns, postdoctoral fellows, doctoral advanced nurse practitioners and residents under the following conditions: 1) the candidate must be in the final year of advanced training prior to moving into a junior faculty position, 2) the candidate must make a written commitment to advancing his/her academic career in the Department of Psychiatry & Behavioral Sciences at MUSC, 3) the candidate must have a written commitment from his/her future Division Director of a faculty position in the Department of Psychiatry & Behavioral Sciences at MUSC, 4) the current training director(s) (if the study is to be conducted during the final year of training) and the future Division Director must provide a written statement that sufficient, protected time and resources are available to conduct the proposed study, and 5) prior to any award distribution, the candidate's future Division Director must provide to the Chair documentation of sufficient funds to support the candidate for a minimum of 2 years (and preferable 3 or more years). The purpose of such awards is to "jump-start" the person's research career in the Department of Psychiatry and Behavioral Sciences at MUSC.

Awards

The CRDF will support a number of awards each year to be determined by available financial resources. The maximum requested award amount will be $25,000. Most awards will be in the $10,000 – 25,000 range.

Eligibility

The PI must a) have a primary faculty appointment in the Department of Psychiatry and Behavioral Sciences at the rank of Assistant Professor or below or b) be a trainee within the Department of Psychiatry and Behavioral Sciences with a commitment from Division/Program of faculty appointment.

Award recipients are eligible to receive only one CRDF pilot research grant; once they have received a CRDF grant, they are not eligible to apply for another.

Application Submission Dates

There are two submission dates each year as funds are available: May 1 (with funding to begin on August 1) and November 1 (funding to begin on February 1). Applications must be submitted by 5:00 PM on those dates to be eligible for review.

Content and Format of Applications
Applications generally follow the format for NIH applications and must include:

- **Face Page**

- The **Budget and Justification**
  - Provide a detailed budget not to exceed $25,000. Format your budget using NIH's Detailed Budget for Initial Budget Period, found here: http://grants.nih.gov/grants/funding/phs398/phs398.html
  - Provide a justification for all budget items.

- Each investigator must have a **biosketch**. Please use the NIH formatted biosketch found here: http://grants.nih.gov/grants/funding/phs398/phs398.html (Biographical Sketch Format Page).

- The **Project Narrative** to communicate the public health relevance of the project. No more than 2-3 sentences.

- The **Project Summary/Abstract** following PHS 398 instructions: Current NIH Format (1-page limit, PDF only).

  - Summary should serve as a succinct and accurate description of the proposed work when separated from the application.
  - State the application's broad, long-term objectives and specific aims, making reference to the public health-relatedness of the project.
  - Describe concisely the research design and methods for achieving the stated goals. This section should be informative to others working in the same or related fields and understandable to a scientifically or technically literate reader.

- Using no more than two or three sentences, describe the relevance of this research to public health. More details can be accessed at http://grants.nih.gov/grants/funding/phs398/phs398.pdf

- The **Proposal**: (5-page limit, PDF only). The research proposal should be submitted using the current NIH format of *Specific Aims* and *Research Strategy* which includes Significance, Innovation, and Approach. If requesting supplemental funding, the proposal should include information justifying the supplemental dollars. The Specific Aims should state concisely the goals of the proposed research and summarize the expected outcome(s) including the impact that the results of the proposed research will exert on the research field(s) involved. List succinctly the specific objectives of the research proposal (e.g., to test a stated hypothesis, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop a new technology). The Specific Aims section must be one page or less, as in the NIH format (i.e., rest of the proposal sections can be included in the same page). The NIH format can be accessed at http://grants.nih.gov/grants/funding/phs398/phs398.html

- The research proposal should be informative enough for reviewers to understand the proposed research without any supporting documents. Further, if requesting supplemental funding, the research proposal should be clear as to what aspects of the research CRDF would be supporting. A **project timeline** is required, which is not included in the page limit.

- Additional pages are allowed for literature citations.

- Include a statement addressing any scientific or budgetary overlap between work proposed in the application and that involved in current projects or other applications.

  For trainees, 1) a written letter from the current training director(s) that sufficient, protected time and resources are available to conduct the proposed study, 2) written letter from the candidate's future Division Director indicating sufficient funds to support the candidate for a minimum of 2 years (and preferable 3 or more years), and 3) a letter of support must be provided from a faculty mentor who will provide mentorship to the trainee.

- Applications should be submitted thru MUSC InfoReady System (https://musc.infoready4.com/) by clicking on the announcement (title) and Apply. All required documents should be uploaded and are as follows:

  - Face Page
  - Detailed Budget for Initial Budget Period
  - Budget Justification
  - Biographical Sketch(s)
  - Project Narrative
  - Project Summary/Abstract
  - Proposal
  - Project Timeline
  - Citations

- Training Director letter, Division Director letter, and Mentor letter, if applicable
- Notice of Award from other funding source, if applicable for supplemental funding request

Should you encounter any issues with uploading your documents, please contact Romeka Washington (washiros@musc.edu).

Application Review Process

The priority of the Chairman's Research Development Funds is to fund pilot project by junior faculty. Supplemental funding requests are not guaranteed to be funded and are only considered after pilot projects reviews. Review of applications takes place in a two-stage process. In the first stage of the process, research scientists, who are faculty members in the Department of Psychiatry and Behavioral Sciences or members of ECRRA, conduct review of applications based on scientific and technical merit using the Review Criteria described below. In the second stage of review, the ECRRA compiles individual reviewers' comments and scores of each application, discusses the relative merits of all applications, and makes recommendations to the Chair of the Department of Psychiatry and Behavioral Sciences regarding funding priorities for these applications. As noted above for pilot projects, the primary criteria for these funding priority recommendations are proposals that have the highest potential for generating pilot data that enhance the probability of leading to extramural funding. Final funding decisions are made by the Chair of the Department of Psychiatry and Behavioral Sciences.

Review Criteria for Scoring

Review members are instructed to evaluate applications by addressing the six core review criteria and additional review criteria (listed below).

Six Core Review Criteria for Overall Impact/Priority Score:

1. **Significance including Scientific Merit of Proposed Project:**
    a. Does the project address an important health problem or a critical barrier to progress in the field?
    b. Does the research provide an important advancement in knowledge, basic or clinical science? What is the translational potential of the proposed research?

2. **Potential to Secure Future Extramural Funding:**
    Does the project have high potential to generate pilot data that will enhance the investigator's ability to secure future extramural funding?

3. **Investigator(s):**
    Are the PIs, collaborators, and other researchers well-suited to the project? Do they have established roles, skills, and experience to carry out the project?

4. **Innovation:**
    a. Is the project new and innovative?
    b. Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?

c. Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense?
d. Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

5. **Approach:**
    a. Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?
    b. Is the proposed research feasible and will lead to success?
    c. Are potential problems, alternative strategies, and benchmarks for success presented?
    d. If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?
    e. If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?
    f. Is there appropriate justification provided for the number of subjects (e.g. humans, animals) involved?

6. **Environment:**
    a. How will the scientific environment in which the research will be done impact on the probability of success?
    b. Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed?
    c. Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

7. **Additional Review Considerations:**

    a. Budget & Period Support: members will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed research.
    b. Does the proposal involve a URM investigator?

What Happens If You Are Funded?

The Chair will review the applications that the ECRRA recommend for funding. If your proposal is selected for funding, you will be notified by the Chair's office. If your proposal is selected for funding, the business manager from your division will be included on the award materials. Expenses associated with this project are cost reimbursable; your business manager will be responsible for managing your budget and securing project-related goods and materials, as well as any effort that is to be charged to the award.

Projects are meant to be one year in length. At the six month point of your project, you are required to submit a brief progress report and give a 20-minute PowerPoint presentation to the ECRRA of preliminary findings. At the conclusion of the award, a final progress report is due. Your progress reports must be accompanied by a financial report. It is expected that you will conclude your project within the one-year time frame. However,

should you need additional time, you may submit a request for a no-cost extension to the committee to consider.

Both financial and progress reports will be reviewed by the ECRRA and evaluated to determine if the project is progressing satisfactorily. If the project progress is deemed unsatisfactory, further funding may be denied.

By accepting the award, you acknowledge the requirement to cite the source of funds as *the Chairman's Research Development Fund Pilot Grant Program, Department of Psychiatry & Behavioral Sciences, Medical University of South Carolina.*

PREVIOUS AWARDS

2018 – 2019 Cycle

Gottfried, Emily, "The Use of Vaginal Photoplethysmography (VPP) to Assess Female Sexual Arousal," $10,000

Sege, Christopher, "Targeting Disordered Escape, Avoidance and Approach Coping in the Psychology Clinic," $10,000

- The long-term objective is to develop methods to directly target mechanisms of coping deficits that are central to various psychiatric disorders.

Badran, Bashar, "Trigeminal Nerve Stimulation (TNS) To Modulate Odor Sensitivity," $10,000

- This study will determine whether TNS reduces odor function in general, or whether it has a specific effect on intranasal trigeminal function.

2019 – 2020 Cycle

Cobb, Adam, "High Definition tDCS-Augmented Prolonged Exposure for Posttraumatic Stress Disorder," $10,000

- This proposal will use a within-subject stepped-wedge clinical trial design to provide an initial test of whether high definition tDCS (HD-tDCS) of dorsomedial prefrontal brain regions can enhance PE outcomes in civilians and Veterans with chronic PTSD.

Sherman, Brian, "Natural Reward Processing in Cannabis Users", $10,000

- The proposed study will adapt a personalized scripted imagery paradigm to examine the effects of natural reward scripts on reward processing in adults with CUD

King, Courtney, "Novel, gender-specific, web-based intervention for women with SUD", $10,000

- The long-term goal of this work is to develop an effective web-based, gender-specific resource to support long-term recovery of women with SUD.

2020 – 2021 Cycle

Shapiro, Mary, "Return to substance use among women with a history of trauma and problematic substance use", $4,500

- This project will provide critical pilot data to design and test a trauma-informed substance use prevention intervention for postpartum women

Tomko, Rachel Lynn, "Cytochrome P450 and Subjective Cannabis Response in Youth Cannabis Use Disorder," $10,000

- The goal of this pilot study is to estimate associations between CYP genotypes, particularly CYP2C9 and CYP3A4, and subjective cannabis effects and symptoms of CUD in a sample of adolescents and emerging adults with a substance use disorder

Taylor, Danielle Lynn, "Optimizing Transdiagnostic Non-invasive Vagus Nerve Stimulation to Enhance Learning," $9,967

- This proposal will determine the optimal taVNS dose and its influence on the course of fear learning and basic cognitive processes during goal-directed activity, while evaluating the psychophysiological profile in each context.

Rancher, Caitlin, "The Social-Ecological Impact of COVID-19 on Child Well-being," $5,350

- The findings from this project will provide unprecedented empirical data on the multilevel impact of the COVID-19 pandemic on parent and child well-being which can inform effective public health policies and intervention strategies.