## GRANTS TO PROMOTE COLLABORATIVE AND TRANSLATIONAL RESEARCH (GCAT)

OFFICE OF THE DEAN OF THE SCHOOL OF MEDICINE 2025

### **Purposes:**

- Develop insights and approaches to clinically relevant issues that have the potential to make a difference in the lives of patients
- Promote collaborations between clinical and basic scientists within the School of Medicine
- Develop grant preparation skills and generate preliminary data for subsequent extramural peerreviewed proposals

Goal: To gather the preliminary data needed to compete for a Foundation, R03 or R21 grant (or equivalent)

#### Indicators of success:

- Publication of one or more peer-reviewed manuscripts
- Submission of one or more applications for a Foundation, R03, R21 or R01 grant (or equivalent)

## **Description:**

Maximum award: \$75,000
Term of award: 24 months
Number of awards for 2025: Up to 4

# **New Applications:**

Letters of Intent must be submitted no later than: Monday, July 8, 2024 - 5:00 PM
 Deadline for submission: Monday, August 12, 2024 - 5:00 PM

Application pre-review date:
 Monday, August 19, 2024

Anticipated date of award announcement:
 December 2024

**Letters of Intent and Application Process:** Intent to submit a GCAT application must be indicated by completing the **Letter of Intent form**, *including the signatures of both PIs*, and submitting it to Research Affairs via email <a href="mailto:rapreaward@llu.edu">rapreaward@llu.edu</a>. Your LOI will be used to create your LLeRA record for uploading your application documents. Questions should be directed to the <a href="mailto:Pre-Award team">Pre-Award team</a> <a href="https://researchaffairs.llu.edu/pre-post-award/contacts">https://researchaffairs.llu.edu/pre-post-award/contacts</a>.

### **Eligibility:**

- The project must be co-directed by two faculty members, both of whom meet the requirements of the PI Eligibility policy. Both must have primary appointments within the LLU School of Medicine, and the two Principle Investigators must have their primary appointments in two different departments. Additional individuals can provide letters of support as co-investigators, but no more than two Principle Investigators may be named on an application.
- One member must be a clinician, with a primary appointment in one of the clinical departments of LLU, and the other must be a full-time basic scientist with a primary or secondary appointment in one of the basic science departments (Department of Basic Science or the Department of Pathology and Human Anatomy).
- At least one co-PI must have received less than \$100,000 in direct support for their research activities during the 12 months preceding the deadline for applications. There are no financial restrictions on the funding that has been available to the other co-PI.
- Publication of a minimum of one peer-reviewed manuscript during the past year [to be included in the biosketch(es)] is required for eligibility. This publication can be authored by either member of the team.

- Individuals who have received prior awards through the GCAT mechanism may reapply for GCAT support provided that for each prior GCAT award one or both of the PIs have met the indicators of success noted above, where both the manuscript submission(s) and the grant application(s) must have occurred after receiving the prior GCAT award. This requirement applies regardless of whether the proposed partnership is the same as previously or represents a new team. Additional details are noted in the section below.
- Teams that submitted applications that were not funded in a previous round may be invited to resubmit a revised application. The application should be preceded by an "Introduction to the Revised Application", of up to one page, that describes the changes made to the proposal.
- Only studies conducted at facilities within the School of Medicine will be considered, though supplies, services or reagents from other facilities are allowed.
- While an individual or a team may submit more than one application per cycle, no more than one
  award will be made to any investigator. For example, if a clinician submits two applications, each of
  which represents a partnership with a different basic scientist, only one would be eligible for an
  award. Individuals can serve as the PI on only one active GCAT award at a time.

**Eligibility for previous GCAT recipients** (one page per previous awardee): If one or both of the applicants is a previous GCAT recipient, provide the following for each previous GCAT award.

- A. Peer-reviewed and published papers:
  - Citations for one or more articles that were published or accepted subsequent to the previous GCAT award and that acknowledge GCAT funding support from LLU.
  - PDF of or hyperlink to the article(s).
- B. Extramural grant applications:
  - LLeRA number
  - Principal Investigator
  - Title
  - Sponsor name
  - Date of submission
  - Amount
  - Current status (i.e., funded, pending, scored, not discussed, etc.)

## Application pre-review:

To ensure that a quality application has been submitted, an administrative/scientific merit review will be conducted by Research Affairs. Administrators will decide which application(s) should move forward for reviewer assignment and consideration for funding. This review will include a rigorous evaluation of the formatting and science to determine if NIH standards are met. Administrators will decide and communicate directly with PIs if edits will be allowed or if the application will be withdrawn.

**Criteria for Evaluation:** Awards will be based on primarily on scientific merit, including significance, innovation, approach, and investigator. The strength of the basic/clinical collaboration, the PI leadership plan, alignment with institutional interests and goals, and the adequacy of the budget, with justification, will also be considered. Inclusion of preliminary data supporting the proposed study is highly recommended. In the absence of preliminary data, strong literature support for the planned study is required. The focus will be on funding high impact, paradigm shifting, innovative projects. Consequently, the application must clearly describe the potential impact of the project on the field, and highlight its innovative elements. Applications are expected to appropriately address issues of rigor and reproducibility.

Proposals will be reviewed by a panel of investigators, selected to include those with a record of extramural funding and a preference for those who have served on federal grant review panels. To the extent possible, applications will be kept confidential, but the abstracts of funded projects may be published.

**Application Format:** Text must be 11 point or larger with six lines per inch and margins of at least one-half inch. Headers and footers should not be used. The sections identified below may not exceed their indicated page limits, and appendices are not allowed. The following headings are expected.

**Title Page** (one page): Include the title of the project, names of both principle investigators, their contact information (including (as applicable) institutional e-mail, phone numbers, WhatsApp ID, Skype ID, Zoom ID, ORCID ID, name of department and/or center and any collaborating institution(s)), a list of all key personnel involved in the project, and total dollars requested.

Abstract and Key Words (up to 30 lines of text): The project summary/abstract is a succinct and accurate description of the proposed work and should be able to stand on its own (separate from the application). This section should be informative to other persons working in the same or related fields and understandable to a scientifically literate reader. Please be concise. State the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe the research design and methods for achieving the stated goals. Be sure that the project summary reflects the key focus of the proposed project. Four to six key words are required to identify the general area of research and the principal elements of the study.

**Biographical Sketches** (up to five pages per investigator): Provide NIH style biosketches for the co-PIs and key personnel (Other Significant Contributors) in the format provided in link <a href="http://grants.nih.gov/grants/forms/biosketch.htm">http://grants.nih.gov/grants/forms/biosketch.htm</a>.

**Budget:** Design a complete budget for up to 24 months of support. Identify amounts for each co-PI, expenditures for salaries, supplies, and miscellaneous costs. GCAT awards may not be used for equipment costing \$5,000 or more, travel expenses, or indirect costs. The total budget may not exceed \$75,000. **Only non-faculty salaries and wages** are permitted, however, co-PIs are expected to commit a minimum of 10% effort to the project. All other Key-Personnel should be listed as "Other Significant Contributors," (OSC); no internal consultants or co-investigators should be listed on the application. OSCs are individuals who have committed to contribute to the scientific development or execution of the project, but are not committing any specified measurable effort (i.e., person months) to the project and will not receive a salary. LLU core facilities must be utilized – In the event that LLU does not have the resource on campus, contact your Pre Award team member to discuss an alternative. Consult with a Pre Award team member (ext. 55160).

**Budget Justification** (one page): Indicate the purpose of supplies, support personnel and other costs. Indicate how the total budget will be split between the two investigators and which costs will be carried by which co-PI. For example, a team may wish to divide up the funds into two accounts covering different types of expenses, with one co-PI responsible for each account, or they may wish to consolidate funds into one account with one co-PI serving as the point of contact for all financial matters.

**Research Plan**: Much of the text below is taken from NIH instructions (https://grants.nih.gov/grants/funding/r21.htm) to facilitate conversion to a R03, R21, etc. application.

- **A. Introduction to Revised Application** (one page, required only for revised applications): Summarize the substantial additions, deletions and changes to your application. In addition, concisely address each of the concerns raised by the previous reviews.
- **B.** Specific Aims (one page): 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 proposed.

- **C.** Research Strategy (limited to 6 pages): Six pages in total are allowed for the subsections of Significance, Innovation, and Approach. Suggested allocations of this space for those three subsections are noted below.
  - a. **Significance** (suggested length of ½ page): Does the project address an important problem or a critical barrier to progress in the field? Is the prior research that serves as the key support for the proposed project rigorous? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?
  - b. **Innovation** (suggested length of ½ page): 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? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?
  - c. **Approach** (suggested length of 5 pages): Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Have the investigators included plans to address weaknesses in the rigor of prior research that serves as the key support for the proposed project? Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed? Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?

If the project involves human subjects and/or NIH-defined clinical research, are the plans to address 1) the protection of human subjects from research risks, and 2) inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion or exclusion of individuals of all ages (including children and older adults), justified in terms of the scientific goals and research strategy proposed?

**D. References:** Include references that demonstrate the need for this research, establish feasibility for hypotheses and procedures, and provide support for the approach. Include titles and authors.

**Leadership Plan** (one page): Both Pls must make major contributions to the project. Indicate the individual research assignments of the Pls. State how the Pls will coordinate their activities, resolve problems, and allocate responsibilities for management and reporting.

**Grantwriting training** (one page): If one or both PIs have received formal grantwriting training or successfully obtained extramural funding in the past, describe briefly the training program, including dates, format (in person, online, individual coaching, group sessions, etc.). If neither PI has received such training or obtained funding in the past, indicate one or more possible courses or programs, including the provider, approximate dates, approximate cost, etc. Note that up to \$5,000, which does not count against the \$75,000 total, can be requested for such training.

**Future Directions** (one page): Briefly describe the future directions to be taken with this project, assuming that this initial phase is successful. For example, describe grants or industry funding to be applied for and how the preliminary data obtained in this first phase will enhance those applications. Also, if this pilot data will allow design of a larger study, describe briefly the anticipated study design for this larger study.

**Letter of Support (Department)** (up to two pages): Provide a letter of support from the Chair of the Department in which the clinical scientist resides. This letter must include the following elements:

- A commitment to transfer an amount equal to half the total support (\$37,500 of the total award of \$75,000) into an account dedicated to the research described in the accompanying application, should the application be funded. This deposit will need to be made within one month of the opening of this account.
- A description of the time the clinical scientist will be able to dedicate to this project, free of clinical responsibilities.

Letters of Support (Others): Letters of support from key personnel and consultants are encouraged.

**Compliance:** When the proposal involves human embryonic stem cells, ionizing radiation, laboratory animals, human subjects, or other elements that require approval by an oversight committee, integrate the descriptions into the Research Strategy section. If the proposal is awarded, separate applications must be made to the appropriate committee **before** the work can begin, e.g., Institutional Animal Care and Use Committee (IACUC), Institutional Review Board (IRB), Institutional Biosafety Committee (IBC), and/or the Stem Cell Research Oversight Committee (SCRO).

**Final Report**: Extensions of the project period may be requested and if granted, will follow NIH guidelines. Within 60 days of the end of the project period, a final report is due. It should include accomplishments, significant results, manuscripts prepared for publication, and plans for extramural grant applications. Send reports to <a href="mailto:basicscienceadmin@llu.edu">basicscienceadmin@llu.edu</a>.

### Contacts:

For General Information, Technical and Application Guidance: <a href="https://researchaffairs.llu.edu/pre-post-award/contacts">https://researchaffairs.llu.edu/pre-post-award/contacts</a>.

For Pre-Award information: <a href="mailto:rapreaward@llu.edu">rapreaward@llu.edu</a>. For Cindy Dickson: X44571, <a href="mailto:cdickson@llu.edu">cdickson@llu.edu</a>.

For eligibility questions, contact the office of the Associate Dean for Basic Science and Translational

Research: basicsciencesadmin@llu.edu.