LINCOLN MEMORIAL UNIVERSITY-DEBUSK COLLEGE OF OSTEOPATHIC MEDICINE

FACULTY INTRAMURAL FUNDING APPLICATION

Table of Contents

Application Checklist

Applications must be received by the Research and Grants Committee (RGC) no later than end of business April 15th of the current year for funding in next fiscal year.

The completed application must contain:

☐ A completed proposal (see Appendix A) including research timelines and dissemination strategy.

☐ A comprehensive itemized budget (see Appendix B)

☐ A letter of understanding from the applicant's departmental Chair or appropriate Dean if the applicant is a Chair. This letter must include clearly defined time release with productivity expectations.

☐ Where the proposal specifies the use of research subjects (human subjects or non-human animal subjects, living or derived tissues), a certificate of completion from the appropriate online certifying agency must be appended (see Appendix C).

☐ Evidence of submission and approval by an Institutional Review Board (IRB; human subjects) or an Institutional Animal Care and Use Committee (IACUC; non-human animal subjects), if applicable.

☐ A completed NIH Biosketch of all project personnel:
https://grants.nih.gov/grants/forms/biosketch-blank-format-rev-10-2021.docx

http://grants.nih.gov/grants/forms/application-guide-biosketch-instructions-rev-06-28-2021.docx

http://grants.nih.gov/grants/forms/non-fellowship-biosketch-sample-2021.docx

Submit to:

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LMU-DCOM Director of Research
Chair of Research and Grants Committee (RGC)
MANS 433
6965 Cumberland Gap Parkway
Harrogate, TN 37752
(423) 869-6698
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AND

Pam Nelson
Administrative Assistant for Anatomy/
Body Donation Coordinator
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pamela.nelson@lmunet.edu

Information for Applicants

The following information is provided for any LMU-DCOM faculty seeking intramural funding for research. All research funds awarded via any intramural source are subject to established accountability guidelines. Awards are made with an **expectation**, but not an absolute requirement, to seek extramural funding when feasible. Applicants must adhere to reporting requirements in order to be eligible to draw funds.

For any questions or help, please contact any of the Research and Grants Committee (RGC) members listed below.

Dr. Adam Gromley (Chair)	adam.gromley@lmunet.edu	X6698	MANS 433
Dr. Syed Quadri (Co-Chair)	syed.quadri@lmunet.edu	X5724	DCOMK 239
Dr. Debasis Mondal	Debasis.mondal@lmunet.edu	X5715	DCOMK 238
Dr. Jan Zieren	jan.zieren@lmunet.edu	X7097	DCOM 121
Dr. Arshad Ahsanuddin	arshad.ahsanuddin@lmunet.edu	X5739	DCOMK 163

Eligibility

All applicants must be currently employed by LMU-DCOM as full-time faculty members. Faculty members may only submit one application per grant cycle.

Duration of Award

All awards granted for each research project are for one year. Funding of a research project will follow LMU-DCOM's fiscal year, beginning July 1st of the current funding year and ending June 30th of the following year. **AWARDED FUNDS WILL NOT CARRY OVER FROM YEAR TO YEAR**.

Amount of Award

For current faculty, research funding will be awarded to a maximum of eight thousand dollars per year ($8000.00). Amounts exceeding the maximum may be considered on case by case basis if budget allows. In some cases, new faculty proposals will be given priority over continuations of previously funded proposals. Requests for startup research funds by new faculty hires are to be determined between the new faculty member and the Dean of LMU-DCOM as a contractual agreement and may not be limited to $8000 maximum.

Application Process

All materials **must** be submitted electronically to the LMU-DCOM RGC by end of business April 15. If April 15 falls on a weekend, the applications must be in by 8 am the following Monday. **APPLICATIONS RECEIVED AFTER THAT DATE WILL NOT BE CONSIDERED**.

1) The funding process begins with an identified research proposal. The faculty member may solicit the LMU-DCOM grant writer in preparing the proposal. The proposal will include *Title*, *Goal*, *Hypothesis*, *Methods*, and *Timelines* for completion of the project (see Appendix A) and a comprehensive budget specifying materials and equipment required for completion of the project (See Appendix B).

2) Completed proposals are first presented to the Department Chair (or appropriate Dean if the applicant is a Chair) for allocation of release time. The Chair or appropriate Dean will then furnish the applicant with a letter of understanding clearly specifying time release and productivity expectations. This letter will then be appended to the proposal.

3) The applicant must complete or have completed an on-line training course in ethical issues if the proposal specifies the use of research subjects (Human Subjects or Non-human Animal Subjects) or living or derived animal tissues (see Appendix C). At the end of the course, the applicant will receive a certificate of completion from the appropriate online certifying agency which must be appended to the proposal. Note that if the applicant has already received a certificate of completion from a previous research project he/she need not retake the online course, but should simply append the previously received certificate to the proposal.

4) If applicable, the proposal is then submitted to the LMU Institutional Review Board (IRB; human subjects) or the LMU Institutional Animal Care and Use Committee (IACUC; non-human animal subjects) or to any other relevant oversight committee. Evidence of submission and approval by the IRB (approval number required) and/or the IACUC (protocol number required) must be appended to the proposal, as applicable. Please see the LMU IRB webpage at https://www.lmunet.edu/orgsp/institutional-review-board-irb/ for policies, procedures, and forms.

5) Once the IRB and/or IACUC have reviewed and sanctioned the proposal, if appropriate, it is then submitted to LMU-DCOM's RGC for review and recommendation. All applications for intramural funding are considered by the RGC after April 15th of the funding year. (Note: proposals involving the collection, use and storage of institutional data must first be approved by the LMU-DCOM Dean before submission to the IRB).

6) The RGC's recommendation of the proposal will then be forwarded to LMU-DCOM's BMS Dean for preliminary approval of funding.

7) The approved proposal is then submitted to the Dean of LMU-DCOM for final approval. The applicant will be notified in writing of the final disposition of the award no later than May 15th of the year proceeding the funding year

Spending of Intramural Funds

The LMU-DCOM BMS Dean has an annual budget line-item designated for funding of intramural research activities. Once a dollar amount has been awarded for each faculty project

approved, a subline-item identifying said project is appropriately logged under the BMS Dean's budget. Each faculty member who is awarded intramural research funds must be proactive in keeping track of how much, when and to whom intramural funds have been withdrawn. When a faculty member needs funds to purchase materials and/or equipment required for his/her research project, a request is made to the BMS Dean's Administrative Assistant at their respective site who will subsequently place the order and track spending from each award. It is the responsibility of the faculty member to provide the BMS Dean's Administrative Assistant with the name, telephone number and e-mail address of the source(s) from which the material and/or equipment are being purchased. Administrative staff are not responsible for locating and storing research deliverables. The faculty member will also furnish a description, stock number (if applicable), and cost value for all materials and/or equipment being purchased. Additionally, the faculty member must provide a time frame in which the ordered items need to arrive at LMU-DCOM and whether or not ordered items require any special handling. **No travel expenses will be approved.** For LMU-DCOM accounting purposes, all funds for each approved project should be spent by May 31st of the current fiscal year. **Awarded funds will not carry over from year to year.**

Final Report

Recipient is required to submit a final report to the Research and Grants Committee at the end of the funding period. The format for these reports is in Appendix D. Failure to submit a final report may result in denial of all future intramural grant applications.

All equipment and electronic devices (including computers, laptops, ipads, recording devices, etc.) purchased with intramural funds will remain property of LMU-DCOM. In the case where funded faculty are separated from LMU-DCOM before completion of their project, all unspent money will remain with LMU-DCOM.

Appendix A: Application

LINCOLN MEMORIAL UNIVERSITY-DEBUSK COLLEGE OF OSTEOPATHIC MEDICINE
APPLICATION FOR INTRAMURAL FUNDING

Applicant/Principal Investigator: _____

Project Title: _____

_____

Duration of internal support (indicate encompassing dates): _____

Dollar amount of internal funding requested (from Appendix B): _____

Does applicant anticipate supporting this project entirely with internal funds?   YES_____   NO_____

a) total duration of support _____   c) source of external funding _____

b) total amount of funding _____   d) duration of external funding _____

                                                    e) amount of external funding _____

Co investigators:

Name   Affiliation   Relevant Approvals

Approvals:
Most applications will require approval by one or more oversight committees or processes, such as an Institutional Review Board (IRB) where human subjects are involved, the Institutional Animal Care and Use Committee (IACUC) for projects using animals, and/or the Institutional Biological and chemical safety Committee (IBC) for projects in which bio-hazardous, toxic, or other controlled reagents/substances will be used. Provide information pertaining to these approvals below.

OVERSIGHT COMMITTEE	**APPROVAL NEEDED**	**DATE OF APPROVAL**
Institutional Review Board (IRB)	_____ NO ____YES	_____
Animal Welfare Committee (IACUC)	_____ NO ____YES	_____
Institutional Biological and chemical safety Committee (IBCSC)	_____ NO ____YES	_____
Other Committee (specify below)	_____ NO ____YES	_____

Previous Intramural Funding

Please list, in table format (provided below), previous LMU-DCOM Intramural Funding awards. Include amount, duration, and deliverables.

Project Title	Award Duration (Dates)	Award Amount	Conference Presentations*	Publications**

* Include presentation title, conference name and date. Specify poster or platform presentation. Indicate regional, national, or international conference. Use a bulleted list for multiple items.
**Indicate if published abstract, peer-refereed journal article, non peer-refereed article, or book chapter. Use a bulleted list for multiple items.

Project Description:

Provide a brief overview of the proposed project. This narrative should be written so that it is understandable to any of the science or medical school faculty or sitting members of relevant oversight committees. Include a references cited page (not part of page limits). If the proposal is a request for continuation of funding from a previous year, put as much information as needed to review the application. Do not assume that the reviewer is familiar with the previous proposal. **DO NOT exceed four pages (12-point font and 1-inch margins), excluding references, figures and tables.** Please include the following sections in your proposal and refer to the rubric in Appendix E for evaluation criteria:

I.   Title Page
The title page should contain the project title, investigator information (name, title, contact information), entities involved in the project (institutions, businesses, investigators, co-investigators), the total amount of funding requested, the estimated project dates, and a paragraph of approximately 200 words summarizing the proposed project. Indicate if this is a new proposal or request for continuation of funding on an existing project.

II.   Problem Statement
Be certain to include a clear statement of the specific aims of this project, including any hypothesis to be tested or research questions to be addressed and the contributions to the advancement of science or medicine that this study will make. Include a brief literature review and relate the research to work that has been done in the field already.

III.   Project Design and Implementation
Provide a nontechnical overview of the most important methods to be used, the kinds of data you expect to generate, and the principal means for their evaluation. Address any limitations of the research. Include a timeline for completion of the research with relevant milestones. Include grant reporting dates for the semi-annual and final progress reports in the timeline.
If this is a request for continuation of funding on an existing project, please state what milestones have been met from the previous proposal and provide enough information in the methods section for a new reviewer to understand the proposal. If needed, attach portions of the previous proposal as an appendix to the application. DO NOT ASSUME FAMILIARITY WITH YOUR PROJECT.

IV.   Potential Impact
State the importance of your research to the scientific discipline and its potential to advance the understanding of science or medicine.

V.   Dissemination Plan
Include a plan for disseminating the research results to the scientific community (conference presentations, publications, extramural grant applications, etc.). If possible, state the specific conference and provide dates of the conference. You may specify short term and long term dissemination strategies if applicable.
For continuation proposals, state any deliverables that were achieved during the previous year of work.

VI.   Optional Materials
You may wish to include the following as appendices: results of preliminary research, portions of previous proposals (for continuation applications), etc.

Append text, on separate pages, to this application as needed

Appendix B: Itemized Budget Form

Use the following table as a format for preparing your itemized budget. You may add or omit categories as appropriate for your proposal, but make sure all items are described and a calculation is provided. **Please note: No travel expenses will be approved. BUDGET TOTALS SHOULD NOT EXCEED $8000.00**

CATEGORY	DESCRIPTION	CALCULATION	TOTAL AMOUNT
ANIMAL ACQUISTION	specify by species and strain; give numbers needed in project period		
ANIMAL MAINTENANCE	cost of cages, feed, husbandry items; **specify by nature or category**		
EQUIPMENT	Itemize with acquisition cost **Note**-Equipment should have an acquisition cost of <$1000. *** Computers, iPads, and similar electronic devices are not generally allowed, but exceptions may be made on a case-by-case basis and require additional approvals. If approved, these items must be returned to the Research and Grants Committee upon completion of the project.**		
NON-CONSUMABLE SUPPLIES (generally have a unit acquisition cost < $500)	**specify by category**; (e.g. repeating pipettors, glassware, software, etc.)		
CONSUMABLE SUPPLIES	**specify by nature**, e.g., biochemicals, general chemical, ELISA reagents, RIA kits, plastic ware, etc.		
MISCELLANEOUS	**specify by nature**, e.g., reprints and publication charges, hazardous waste disposal costs, etc.; provide an explanation or justification for items not apparent from project description **DO NOT INCLUDE TRAVEL EXPENSES**		
TOTAL BUDGET REQUEST:			$$$

EXAMPLE:

CATEGORY	DESCRIPTION	CALCULATION	TOTAL AMOUNT
ANIMAL ACQUISITION	four adult *Sus scrofa*	4 X $150/pig	$600

Appendix C: CITI Training Courses for LMU

Instructions:

Go to the website: https://www.citiprogram.org/

On the right side, find the section 'Create an Account', click the REGISTER button

At 'Select your Organization Affiliation' enter Lincoln Memorial University

Click 'Continue to Step 2'

Enter your information

Click on Continue to Step 3

Enter your selected Username and Password

Click on Continue to Step 4

Continue to fill in the requested information on the subsequent pages. Course content will already be selected for you. There may be more available than is appropriate to your job function.

Appendix D: Final Report Template

Instructions for completing this progress report: Provide a brief but adequate description for each of the sections below. If the award recipient has nothing to report during this reporting period, simply indicate "nothing to report." If the category is not applicable, indicate with "N/A". This report will likely be 2-3 pages in length.

Title Page

<div align="center">

Grant Title

Name of Award Received

Principal Investigator and Project Personnel

Amount of Award

Project Start Date

Reporting Period

</div>

Accomplishments

Purpose, Goals, and Objectives of Project

Please summarize the purpose, goals, and objectives of the research. List the major goals of the project as stated in the approved application. If the application lists milestones/target dates for important activities or phases of the project, identify these dates, and show actual completion dates or the percentage of completion. Generally, the goals will not change from one reporting period to the next. However, if changes to the goals during the reporting period were approved, list the revised goals and objectives. Also explain any significant changes in approach or methods from the approved application or plan.

Goals Accomplished During this Reporting Period

For this reporting period, describe: 1) major activities; 2) specific objectives; 3) significant results, including major findings, developments, or conclusions (both positive and negative); and 4) key outcomes or other achievements. Include a discussion of stated goals not met. As the project progresses, the emphasis in reporting in this section should shift from reporting activities to reporting accomplishments. If there is nothing significant to report during this reporting period, state "Nothing to Report."

Opportunities for training and professional development:

If the research is not intended to provide training and professional development opportunities or there is nothing significant to report during this reporting period, state "Nothing to Report."

Describe opportunities for training and professional development provided to anyone who worked on the project or anyone who was involved in the activities supported by the project. "Training" activities are those in which individuals with advanced professional skills and experience assist others in attaining greater proficiency. Training activities may include, for example, courses, or one-on-one work with a mentor. "Professional development" activities result in increased knowledge or skill in one's area of expertise and may include workshops, conferences, seminars, study groups, and individual study. Include participation in conferences, workshops, and seminars not listed under major activities.

Products (conference papers and presentations)

If there is nothing significant to report during this reporting period, state "Nothing to Report."

Participants and Collaborating Organization(s)

Please list project participants, titles, role in project, and approximate weekly hours devoted to the project.

Impact

What is the real or anticipated impact of the project on scientific or medical knowledge, clinical practice, or medical education?

How is the applicant planning to deliver project results to the scientific community?

Changes/Problems

Describe any changes in approach during the reporting period and reasons for these changes. Remember that significant changes in objectives and scope should be approved by the Basic Science Dean.

- **Actual or anticipated problems or delays and actions or plans to resolve them.** Describe problems or delays encountered during the reporting period and actions or plans to resolve them.
- **Changes that have a significant impact on expenditures** Describe changes during the reporting period that may have a significant impact on expenditures.
- **Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards** Describe significant deviations, unexpected outcomes, or changes in approved protocols for the use or care of human subjects, vertebrate animals, and/or biohazards during the reporting period. If required, were these changes made to the IRB (please specify approval date)?

Budgetary Information

Only provide a description of expenditures (items/services purchased, etc.) made and any budget modification submitted during the current reporting period.

Appendix E: Application Evaluation Criteria

1. <u>Statement of the Problem (Understanding of the problem and its importance)—20%</u>
   - Clarity of problem statement and its importance to the field of study.
   - Demonstrated connection between problem and proposed research.
   - Awareness of the state of current research and/or technology (e.g. does the application include references to primary literature and relate the research to work that has been done in the area?).
   - Identification of gaps in existing research.

2. <u>Project Design and Implementation (Quality and technical merit)—40%</u>
   - Detailed and complete discussion of proposed research methods.
   - Soundness of the research methods and appropriateness to the proposed study.
   - Awareness of potential limitations of the research plan and proposed practical solutions.
   - Overall feasibility of proposed project, *including timeline*.
   - Innovation and creativity.

3. <u>Potential Impact—15%</u>

Potential for a scientific or clinical advance(s) that will improve medical practice, medical education, medical knowledge, or basic science knowledge such as—
   - Potential for important advances in the scientific or clinical understanding of the problem.
   - Potential for advances in the field and the filling of key gaps in scientific knowledge related to medical practice, policy, or education in the United States.
   - Potential to contribute useful basic science knowledge to the primary discipline.
   - Relevance for improving clinical policy and practice, patient safety and/or quality of life, or medical education.
   - Perceived potential for implementation of new technology, standards, or techniques (when applicable).
   - Potential for innovative solution to address (all or a significant part of) the stated problem.

4. <u>Capabilities/Competencies (Capabilities, demonstrated productivity, and experience of the applicant and proposed project staff)—20%</u>
   - Qualifications and experience of the researcher and/or research mentor (e.g., successful coursework completion, relevant work and/or research experience, leadership roles, mentoring experience, and record of publication).
   - Applicant's record of accomplishment with respect to successful completion of previous research projects, grants, or contracts (if applicable).
   - Applicant's record of accomplishment with respect to disseminating results of previous research projects, grants, or contracts (if applicable).
   - Applicant's academic standing with the university (student applicants ONLY).

5. <u>Plan for Dissemination to Broader Audiences (5%)</u>
   - Does the applicant include a plan for disseminating the research?
   - Is the proposed method of disseminating project results effective and feasible?
   - Does the plan include conference presentations at regional or national conferences? Published manuscripts?

6. <u>Budget (unscored)</u>

Peer reviewers will consider and may comment on the following additional items in the context of scientific and technical merit.
- Format of budget (e.g. is it itemized with descriptions and calculations of costs?)
- Total cost of the project relative to the perceived benefit (cost effectiveness).
- Appropriateness of the budget relative to the level of effort.
- Use of existing resources to conserve costs.
- Proposed budget alignment with proposed project activities.