

**LINCOLN MEMORIAL UNIVERSITY-
DEBUSK COLLEGE OF OSTEOPATHIC
MEDICINE**

FACULTY INTRAMURAL FUNDING APPLICATION

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Application Checklist

Applications must be received by the Research and Grants Committee (RGC) no later than 8 am May 1st. If May 1st falls on a weekend, the application will be due by 8am on the next business day.

The completed application must contain:

- A completed application form and proposal (see Appendix A)
- 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 preparation or 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:

Lindsey Miller, Ph.D.
DCOM Director of Research, Knoxville
Chair of Research and Grants Committee (RGC)
9737 Cogdill Rd
Knoxville, TN 37932
Lindsey.Miller@lmunet.edu

AND

Stephanie Bailey
Administrative Assistant for Basic Medical Sciences
423-869-6548
sylvia.bailey@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. Lindsey Miller (Chair)	Lindsey.Miller@lmunet.edu	X5720	DCOMK 235
Dr. Kip Wegner	Fred.Wegner@lmunet.edu	X4192	DCOMK 167
Dr. Debasis Mondal	Debasis.mondal@lmunet.edu	X5715	DCOMK 238
Dr. Bradley Fleenor	Bradley.Fleenor@lmunet.edu	X6429	DCOM 214
Dr. Paula Archer	Paula.Archer@lmunet.edu	X7447	DCOM 123

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.

Relevance to Osteopathic Medicine

Proposals that address the tenets of osteopathic medicine or one of the following research focus areas are encouraged and will be given priority consideration via an additional category in the scoring rubric (see item #6, Appendix E):

- Osteopathic Manipulative Medicine and Osteopathic Manipulative Treatment (OMM/OMT)
- Acute and Chronic Pain Management
- The Impact of the Osteopathic Approach on Chronic Disease and Elderly Care
- Osteopathic Manipulative Medicine (OMM) Observational & Explorative Focused Hypotheses Research Studies designed to investigate the successful effects of OMM on specific diseases.

Duration of Award

All awards are granted for one year. Funding of a research project will follow LMU-DCOM's fiscal year, beginning July 1st of the current funding year and funds should be spent by May 31st. **Award funds will not carry over year to year.**

Amount of Award

For current faculty, research funding will be awarded to a maximum of sixteen thousand dollars per year (\$16,000.00). Amounts exceeding the maximum may be considered on a case-by-case basis if the 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 made between the new faculty member and the Dean of LMU-DCOM as a contractual agreement and may not be limited to \$16,000 maximum.

Application Process

All materials **must** be submitted electronically to the LMU-DCOM RGC by 8 am May 1st. If May 1st 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) Completed proposals are first presented to the Department Chair (or appropriate Dean if the applicant is a Chair) for allocation of release time, if required. 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.
- 2) The applicant must complete 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). The certificate of completion from the appropriate on-line certifying agency must be appended to the proposal.
- 3) Requirement for approvals from oversight committees must be indicated on the application form. 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. If approvals have already been obtained, the date of approval and approval number must also be provided. Approval letters should be appended to the protocol. Note: projects may not start until all required approvals have been obtained and submitted to the RGC.
- 4) The RGC's recommendation of the proposal will be forwarded to LMU-DCOM's BMS Dean for preliminary approval of funding.
- 5) The approved proposal is then submitted to the Dean of LMU-DCOM for final approval.
- 6) The applicant will be notified in writing of the final disposition of the award. Notifications are expected approximately two weeks after the award due date.

Spending of Intramural Funds

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 their research project, a request is made to the BMS Dean's Administrative Assistant at their respective site or the Laboratory Managers 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 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

Recipients are required to submit a final report to the Research and Grants Committee at the end of the funding period (June 30th). 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, tablets, recording devices, etc.) purchased with intramural funds will remain the 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 Form &

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 (IBCSC) for projects in which bio-hazardous, toxic, or other controlled reagents/substances will be used. Provide information pertaining to these approvals below.

<u>OVERSIGHT COMMITTEE</u>	<u>APPROVAL NEEDED</u>	<u>DATE OF APPROVAL</u>
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.

Proposal Description:

Provide a brief overview of the proposed project. This narrative should be written so that it is understandable to any of the DCOM faculty or members of relevant oversight committees. Include a reference cited page (not part of page limits). If the proposal is a request for continuation of funding from a previous year, 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.** Refer to the rubric in Appendix E for evaluation criteria. The following sections must be included:

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 data you expect to generate, and the principal means for data evaluation. Address any limitations of the research. Include a timeline for completion of the research with relevant milestones, including date for the final progress report. If this is a request for continuation of funding, 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. **If the project has relevance to osteopathic medicine, please include a statement explaining this.**

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. You may specify short term and long-term dissemination strategies if applicable. For continuation proposals, state any deliverables that were achieved.

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 \$16,000.00**

CATEGORY	DESCRIPTION	CALCULATION	TOTAL AMOUNT
ANIMAL ACQUISITION	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 <i>Sus scrofa</i>	4 X \$150/pig	\$600

Appendix C: CITI Training Courses for LMU

CITI Training Courses for Lincoln Memorial University

All personnel that work with chemicals or biological agents/products, either for teaching or research, are required by the **LMU Institutional Biological and Chemical Safety Committee** to take online training for **Biosafety/Biosecurity** as supplied by the CITI program in addition to any departmental training that is provided.

All personnel that work with humans in research protocols including surveys are required by the [LMU Institutional Review Board](#) to take online training as supplied by the CITI program. If you file a protocol for human research with IRB, the protocol cannot receive approval until all persons listed including the PI have training for **Human Subjects Research** registered with the IRB in addition to any departmental training that is provided.

All personnel who work with animals, either for teaching or research, are required by the [LMU Institutional Animal Care and Use Committee](#) to take online training as supplied by the CITI program. If you file a protocol for animal use with IACUC, the protocol cannot receive approval until all persons listed including the PI have training for **Laboratory Animal Welfare** registered with the IACUC in addition to any departmental training that is provided.

Instructions:

1. Go to the website <https://www.citiprogram.org/>
2. Register using your LMU credentials.
3. Please choose the appropriate courses depending on your type of research. Course content will be available in several areas:

Q1 – Conflicts of Interest: If you have mixed functions or have financial or other interests in both LMU and with other organizations, then this would be an appropriate module to select. (*This must have an answer to submit a course request*)

Q2- Human Subjects Research: Required for any *studies that use human volunteers* as the test subjects, this includes intra-classroom comparison of teaching methods particularly if the research is intended for publication.

Q3 – Good Clinical Practice: This module is for investigators doing human pharmaceutical research that is overseen by FDA GCP regulations. Currently, there is no GCP research occurring at LMU.

Q4 – Responsible Conduct of Research: Choose the appropriate area of research interests.

Q5 – Laboratory Animal Welfare: This module is required for staff using any live vertebrate animal in teaching or research at LMU. This includes off-site teaching faculty that will have direct contact with animals used in teaching at LMU. Off-site teaching faculty that have classroom-only responsibilities are not required to have CITI training. Select the appropriate role (typically ‘Working with the IACUC’) and any relevant species with which you will be involved.

Q6 – Good Laboratory Practice: This module is for investigators doing pharmaceutical research that is overseen by FDA GLP regulations. Currently, there is no GLP research occurring at LMU.

Q7 – Biosafety/Biosecurity: This module is required for any staff conducting research with potentially dangerous chemicals or biological organisms/products.

Q8 – Institutional/Signatory Officials & IRB Chair: Students may skip this question.

Q9 – Revised Common Rule: Students may skip this question.

Q10 – Semiannual Evaluations in Depth: Students may skip this question.

Q11 – Mental Health for Higher Ed and Healthcare: Students may skip this question.

Q12 – COVID-19: Back to Campus: Not Required/optional.

All staff involved with any form of research or teaching with animals should at a minimum check box for:

Basic Biosafety Training

Note: you may at any time select Add a Course from your main CITI page and it will take you back to the course selection questionnaire.

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

Grant Title

Name of Award Received

Principal Investigator and Project Personnel

Amount of Award

Project Start Date

Reporting Period

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. Statement of the Problem (Understanding of the problem and its importance)—20%

- 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. Project Design and Implementation (Quality and technical merit)—40%

- 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. Potential Impact—15%

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. Capabilities/Competencies (Capabilities, demonstrated productivity, and experience of the applicant and proposed project staff)—20%

- 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. Plan for Dissemination to Broader Audiences (5%)

- 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. Relevance to Osteopathic Medicine (+5% bonus)

- Projects that address the tenets of osteopathic medicine or one of the following research focus areas:
 - Osteopathic Manipulative Medicine and Osteopathic Manipulative Treatment (OMM/OMT)
 - Acute and Chronic Pain Management
 - The Impact of the Osteopathic Approach on Chronic Disease and Elderly Care
 - Osteopathic Manipulative Medicine (OMM) Observational & Explorative Focused Hypotheses Research Studies designed to investigate the successful effects of OMM on specific diseases.

7. Budget (unscored)

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.