

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

DAVID R. DOLBOW LEGACY RESEARCH GRANT

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# Application Checklist

## The completed application must contain:

- An application form.
- A proposal, completed by the student with help from the sponsor.
- The Research Committee will confirm the applicant meets the following eligibility:
  - OMS I or OMSII
  - Must be passing all courses.
  - At time of application, must have a cumulative GPA of 3.0 or higher.
  - Must not be on probation for academic or professionalism reasons.
  - Must be on schedule to take COMLEX exams.
- A **letter of support** from the proposed sponsor on institutional letterhead.
- A certificate of completion from the appropriate online training program (CITI training, including modules for Human Subjects or Animal Use or both, if applicable).
  - **NOTE: THIS TRAINING MAY TAKE SEVERAL HOURS. PLEASE PLAN ACCORDINGLY.**
- A budget (see page 12). **Proposals that do not request funds will not be accepted.**

## Return materials to:

Lindsey Miller  
DCOM Director of Research, Knoxville  
Chair of the Research and Grants Committee  
9737 Cogdill Rd  
Knoxville, TN 39432  
Lindsey.Miller@lmunet.edu

AND

Stephanie Bailey  
Administrative Assistant for Basic Medical Sciences  
DCOM Research  
423-869-6548  
[sylvia.bailey@lmunet.edu](mailto:sylvia.bailey@lmunet.edu)

## Information for Applicants

David R. Dolbow, a father of an LMU-DCOM student, has been a life-long caretaker for people with disabilities and an avid researcher of neurological disease. He has devoted his life to helping those less fortunate than himself and instilled those values through his fatherhood.

Neurological disease is one of the leading causes of disability in the world and though research on the topic is plenty, much of it is still novel, untested, expensive, and thus unfeasible for many patients. Dr. Dolbow impressed through his example that some of the greatest therapies, and those that make the most significant impact on their patients, are often the most novel, inexpensive, and practical. This grant is a tribute to a man who has shown others that thinking outside the box can have an enormous impact on those with neurological disability.

- The David R. Dolbow Legacy Research Grant will be awarded to a DeBusk College of Osteopathic Medicine student in year one or year two.
- The grant will be awarded to students who wish to do research in disability or translational neuroscience.
- Funds may be used to support research costs or student living expenses. However, if living expenses are requested, documentation that all research costs are met must be submitted with mentor approval.
- The student must adhere to the guidelines, policies and procedures outlined by Lincoln Memorial University's Office of Research, Grants and Sponsored Programs.
- Applications are reviewed and approved by the DeBusk College of Osteopathic Medicine Research Committee.
- Scholars are expected to provide a letter of gratitude, which will be submitted to the Research Department.

## Questions or help?

**Please contact any of the individuals listed below.**

Dr. Lindsey Miller (Chair)	<a href="mailto:Lindsey.Miller@lmunet.edu">Lindsey.Miller@lmunet.edu</a>	X5720	DCOMK 235
Dr. Kip Wenger (Co-Chair)	<a href="mailto:Fred.Wenger@lmunet.edu">Fred.Wenger@lmunet.edu</a>	X4192	DCOMK 167
Dr. Debasis Mondal	<a href="mailto:Debasis.Mondal@lmunet.edu">Debasis.Mondal@lmunet.edu</a>	X5715	DCOMK 238
Dr. Bradley Fleenor	<a href="mailto:Bradley.Fleenor@lmunet.edu">Bradley.Fleenor@lmunet.edu</a>	X6429	DCOM 214
Dr. Paula Archer	<a href="mailto:Paula.Archer@lmunet.edu">Paula.Archer@lmunet.edu</a>	X7447	DCOM 123

## **Application Process**

Application requirements are described in the following sections. All materials **must** be submitted as a single pdf by email to the LMU-DCOM RGC.

## **Review Procedure**

The criteria used to review applications is attached as Appendix D. If the committee requests clarification from the applicant, the revised application must be received within one week of the request.

## **Stipend**

The David R. Dolbow Legacy Research Grant provides a stipend that may be used for the student's living expenses and/or research costs, with a maximum awarded amount of \$500. An itemized budget must be provided (Appendix B). **Funding for travel expenses will not be approved.** If living expenses are requested, documentation that all research costs are met must be submitted, with mentor approval.

## **Duration and Expectations**

Specific expectations for time commitment and schedule should be determined and agreed upon between the scholar and faculty mentor. Award recipients are expected to write a letter of gratitude to be submitted to the Research Department.

Failure of award recipients to meet expectations may result in referral to the Community Standards Committee and/or the Student Progress Committee for professional deficiencies. Please see the DCOM Student Handbook "Committee Procedures for Professionalism Deficiency".

# Elements of the Application

## Proposal

The proposal must not exceed 1,000 typewritten words in 12-point font, with 1-inch margins (approximately 4 double-spaced pages). The proposal must be written so that it can be understood by non-experts, so avoid jargon and nonstandard abbreviations.

The proposal should contain the following sections:

I) Title Page that includes a project summary paragraph of approximately 200 words.

II) Problem Statement

III) Project Design and Implementation

IV) Potential Impact

V) Dissemination Plan.

See Appendix A for more detailed instructions.

## Sponsor's Letter of Support

The application must include a letter of support from the proposed sponsor written on an institutional letterhead. This letter should outline:

- The student's level of participation in the study. The sponsor's letter must indicate that the scope of the project is appropriate to the time available. If any preparations are in progress, or if any initial work has been done by the applicant, these should be noted.
- The letter should indicate whether the sponsor will directly supervise the applicant.
- The sponsor's letter must indicate that the facilities necessary for the project are available to the student. This includes any necessary laboratory facilities, office space, computers, and any other facilities needed to complete the project.
- The sponsor must indicate that all required supplies are available or will be purchased with the budget requested.
- The sponsor's letter must indicate the general expectations for the schedule and time commitment of the student and that the scope of the project is appropriate to the time available.

## Itemized Budget

The proposal must include an itemized budget (Appendix B). A sufficient explanation of the costs must be provided in the "description" column. Please ask an RGC member if you have questions about the budget form

## **Ethical Research Training Certificate (if applicable)**

Applicants will be required to complete the CITI online research training modules before beginning the scholar award, which is available at <https://www.citiprogram.org/Default.asp>. A certificate of completion must be included in the application.

Research that involves the use of human subjects, or any data or material obtained from human subjects **must** have an Institutional Review Board (IRB) approval number.

Research that involves the use of vertebrate animals **must** have an Institutional Animal Care and Use Committee (IACUC) protocol number. These approvals should be readily available from your sponsor at the Institution which is sponsoring the research. IACUC approval **must** be submitted to RGC before the research project can begin. If any research activities occur in the absence of appropriate IRB or IACUC approvals, the funding will be withdrawn immediately, and the student may be required to repay the expended amount of the scholar award. See Appendix C for information about these protocols.

## **Post-Scholar Award Letter of Gratitude & Scientific Presentation**

### *Letter of Gratitude*

Students should write a letter of gratitude addressed to the David R. Dolbow Legacy Research Grant. Letters should be typed on official LMU letterhead and emailed to the LMU-DCOM Research Department.

### *Progress Report*

Mentors should submit a progress report (see Appendix E) by email to the RGC for each student scholar at an agreed upon date.

### *Research Forum Presentations*

Award recipients must give a brief presentation on their research to students and faculty of LMU-DCOM. Award recipients will be encouraged to submit an abstract of their research to a scientific meeting. If the student is listed as the first author and the abstract is accepted for the meeting, the student is eligible to apply for funding to present the work. This funding will only be provided for meetings held within the contiguous United States. Only one meeting per year will be funded for each scholar.

# Appendix A: Application

**LINCOLN MEMORIAL UNIVERSITY-DEBUSK COLLEGE OF  
OSTEOPATHIC MEDICINE APPLICATION  
David R. Dolbow Legacy Research Grant**

**Applicant/Principal Investigator:** \_\_\_\_\_

**Project Title:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Anticipated/actual start date:** \_\_\_\_\_ **Anticipated end date:** \_\_\_\_\_

**Anticipated weekly time commitment (hours per week):** \_\_\_\_\_

**Dollar amount of support requested:** \_\_\_\_\_

**Is this project supported with internal or external funding?**

YES \_\_\_\_\_

NO \_\_\_\_\_

a) amount of internal funds \_\_\_\_\_

b) amount of external funding \_\_\_\_\_

**Co-investigators** (if any):

**Approvals:**

Most applications will require approval by one or more oversight committees, such as an Institutional Review Board (IRB) where human subjects are involved, the Institutional Animal Care and Use Committee (IACUC) for projects using animals, Institutional Biological and Chemical Safety Committee (IBCSC) for projects in which biohazardous, toxic, or other controlled reagents/substances will be used. Provide information pertaining to these approvals below. SUPPORT CANNOT BEGIN UNTIL ALL REQUIRED CERTIFICATIONS ARE ON FILE.

**OVERSIGHT COMMITTEE      APPROVAL NEEDED      DATE OF APPROVAL**

(attach copy of approval notice with Committee chair or other authorized signature)

	<b>NO</b>	<b>YES</b>	<b>DATE OF APPROVAL</b>
Institutional Review Board (IRB)	_____	_____	_____
Animal Welfare Committee (IACUC)	_____	_____	_____
Institutional Biological and Chemical Safety Committee (IBCSC)	_____	_____	_____
Online Training Certificate	_____	_____	_____
Other Committee (specify below)	_____	_____	_____



## **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 reference cited page (not part of page limits). Do not exceed 1000 words (approximately 4 pages of double-spaced text, 12-point font, and 1-inch margins). Please include the following sections in your proposal and refer to the rubric in Appendix D for evaluation criteria:

### **I. Title Page**

The title page should contain the project title, faculty sponsor information (name, title, contact information), student 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.

### **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 types 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. Report any additional employment planned during the funding period and describe how time requirements for research and additional work will be scheduled.

### **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.

### **VI. Optional Materials**

You may wish to include the following as appendices: results of preliminary research, CVs of project personnel, etc.

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

## Appendix B: Itemized Budget Form

### 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. **NOTE: THE MAXIMUM AWARDED AMOUNT IS \$500.00**

CATEGORY	DESCRIPTION	CALCULATION	TOTAL AMOUNT
RENT	Specify type of housing	Itemized amount paid for housing for duration of scholar award	
UTILITIES	electricity, water, gas (if not included in rent)	Itemized estimation of these expenses	
GROCERIES			
NON-CONSUMABLE SUPPLIES (generally, have a unit acquisition cost < \$500)	<b>specify by category</b> (e.g., repeating pipettors, glassware, etc.)		
CONSUMABLE SUPPLIES	<b>specify by nature</b> (e.g., biochemicals, general chemicals, ELISA reagents, RIA kits, plastic ware, etc.)		
MISCELLANEOUS	<b>specify by nature</b> (e.g., preparation of graphics for presentation at meetings, hazardous waste disposal costs, etc.; provide an explanation or justification for items not apparent from the project description)		

EXAMPLE:

CATEGORY	DESCRIPTION	CALCULATION	TOTAL AMOUNT
RENT	1 BR apartment	\$500/month x .5 month	\$250
CONSUMABLE SUPPLIES	Pipet tips	\$100.00	\$250
	Assay Reagent	\$150.00	

## Appendix C:

### 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: Application Evaluation Criteria

## 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. **Budget (unscored)**

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.

# APPENDIX E

## PROGRESS REPORT TEMPLATE

\*Completed by mentors, submitted to RGC on an agreed upon timeline.

Grant Title: \_\_\_\_\_

Name of scholar receiving the award: \_\_\_\_\_

Research Sponsor \_\_\_\_\_

Amount of Award: \_\_\_\_\_

Project Start Date: \_\_\_\_\_

Has the scholar submitted a letter of gratitude to the Research Department?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

Has the scholar met all expectations for this project and has made acceptable progress towards the goals stated in the scholar award application?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

If no, please explain how these deficiencies will be addressed: