Center for Innovation, Commercialization and Entrepreneurship (CICE)

Research Grant Competition FY 2021

Requests for Proposals (RFP)

GUIDELINES

PLEASE READ AS IMPORTANT CHANGES HAVE OCCURED

Call for Proposals:

The Center for Innovation, Commercialization and Entrepreneurship (CICE) is accepting proposals for the 2021 CICE Innovation Grants (CIGs). All research efforts and support must be compliant with IRB guidance, IACUC guidance, 2 CFR 200, Office of Federal Research Integrity guidance and all applicable federal and state laws and regulations, and University and System policy. Total funding available is expected to be approximately \$30,000-\$55,000 with individual grants ranging from \$1,000 – \$8,000/per award, and 7 – 15 proposals are anticipated to receive funding.

The purpose of the grant program is to support and be a steward of the development or application of emerging technologies and innovations in STEM. The goal being that the principal investigator (PI) will eventually obtain external support for the development of research of these technologies at Lamar University. This call for proposal responds to the Lamar University Strategic Plan (http://www.lamar.edu/about-lu/strategic-plan.html), Area-II: Leverage Lamar University's core strengths while elevating the quality of educational programs and scholarship. The administration of this grant program aims to: (1) enhance productivity and advance progress in innovative technology research, scholarship, and creative activity; and (2) develop programs in high profile niche research areas, including specialized and multidisciplinary programs.

The proposed work must fall under one of the following categories:

- 1. Research topics relevant to emerging technology that is deemed innovative, commercialization of applied research with a specific focus of creating impactful products/services to industry and/or consumers. (Award amount: \$2,000 \$4,000)
- 2. Adoption & advancement of learning new technologies for the basis of a course or a course project. (Award amount: \$2,000 \$4,000)
- 3. Projects advancing emerging technologies related to biotechnology, nanotechnology or artificial intelligence. **Award is limited to 1-2 projects**. (Award amount: \$5,000 \$7,000, with preference to projects proposing multidisciplinary approach)

CICE STEM Priority Topics:

Drone Technology	3D Printing/ Advanced	Advanced Materials	
Application/Development	Manufacturing		
Nanotechnology	Virtual/Augmented Reality	Biotechnology	
	(VR/AR)		
Artificial Intelligence	Blockchain Development	Cybersecurity	
Voice Recognition	Process Technologies	Water Treatment/Control	

Eligibility:

Participation is open to all LU faculty who are eligible to apply for external support according to the Investigator Eligibility Policy(https://www.lamar.edu/research/defining-the-eligibility-of-principal-investigators.html). Requests for exceptions to the eligibility policy should be submitted by email to CICE prior to the RFP deadline. Each PI or Co-PI must have a current Financial Conflict of Interest Policy listing all funded and non-funded research interests on file with the Office of Research and Sponsored Programs Administration. CICE expects that faculty members applying for this grant are active in research. The PI cannot have a current CICE award (as PI) extending into the time period of this proposal.



Important Dates:

Application Opens: March 18th, 2021

Application Deadline: 5:00 p.m., April 14th, 2021

Award Notification: April 26th, 2021

Award Period: May 1st – September 30th, 2021

Guidelines:

• All dates and schedules are subject to change due to force majeure (such as pandemic or natural disasters). Notifications of changes will be sent in advance.

- PIs may only submit one proposal as the lead investigator. If you submit in error, you may not withdraw the submission due to Competition Space design. A lead PI can serve as Co-PI for a second project led by another PI.
- Deadline for submittal is April 14th by 5:00 p.m. Applications that do not adhere to these RFP guidelines, or have incomplete information may result in rejection without review and/or be ineligible for funding. No late submissions will be accepted. *After the proposal submission, no changes or additions can be made to the application.*

Proposal Instructions:

- The proposal must be written in a clear, concise manner, so that external reviewers, who are not in academia but from other technical disciplines, will be capable of comprehending the intent and objectives of the research.
- Changes cannot be made after the application is submitted and any application that does not adhere to the RFP instructions will be ineligible for funding.
- Proposals must be submitted using Competition Space: https://lamar.infoready4.com/ (Available from March 18th)
- In your submission, attach your proposal as a PDF. PI is required to discuss and get permission from Department Chairs or Deans for this proposal. Please discuss your application with your approvers before submission.
- Utilize the CICE Proposal Template found at the end to guide your proposal.
- Budget: The maximum request for this grant is \$4,000, with the **exception of specialized category (3)**. Applications not in compliance with Budget Guidelines will not be reviewed.
 - Allowed Costs:
 - ALL Funds must be expended by September 15th, 2021. Any funds remaining will <u>not</u> roll over after this date.
 - The **primary use of funds is for student compensation and materials**. Student work is limited to time of the award. Please contact your College budget administrator or ORSPA pre-award staff to obtain your budget amount as it ties directly to your primary allocation in Banner
 - Graduate and undergraduate students will be budgeted at the University-approved rates. *It is expected that a large portion of the budget will be used for supporting student stipends, including graduate students.* All salary coverage must be expended by September 15th, 2021.
 - Other costs: materials and supplies related directly to the completion of the project (and compliant with State of Texas guidelines) for data collection.
 - Disallowed Costs:
 - Travel
 - Conference and/or seminar costs
 - Tuition or matriculation fees



- Patent applications or legal fees

Ouestions:

All questions regarding the request for proposal process shall be submitted in writing to Tejus Mane, CICE Commercialization Associate tmane@lamar.edu. Queries may also be directed to the CICE Director, Paul Latiolais at paul.latiolais@lamar.edu.

Proposal Processing and Review:

All proposals will be initially screened internally by CICE staff for adherence to the RFP instructions and deadlines. All proposals will be scrubbed of identifying information and the project proposal will be reviewed by three external reviewers. Reviewer identification will not be released to the PI.

Each reviewer will provide "blind" electronic feedback, not just numeric score. CICE makes final award decisions based on the funding allocated to the program, number of proposals received and merit scores of each proposal. Funding is contingent on availability of funds. The Director of the CICE, with guidance from review committee, shall determine the allocation of funds to the proposals that have been recommended for funding to maximize the impact of available funds.

In general, proposals are evaluated based on the relevance to the CICE research relevant priorities, the quality or merit of the information found in the Project Narrative Budget and Budget Justification, and evidence of the PI's knowledge and qualifications for their research field as listed in the Biosketch.

NOTE: Students will be required to attend and train on innovation and commercialization with materials provided by the CICE (Cardinal Rise), and to present to an audience of industry and business professionals during the CICE Innovation Showcase (scheduled for early October). A summary paper is also expected to be presented to the CICE to share with the CICE Advisory Council and other relevant audience members.

The external reviewer proposal scoring system and the assigned points are as follows:

1. Project Goals/Objectives: 40 points.

Do the project objectives address the CICE mission of innovation and commercialization? Are there identified industry benefits associated with project outcomes? Are there identified technologies being explored? Is there demonstrated industry support for that technology? Is there demonstrated use of innovative technology for the project – through, for example, documented support from a local industry or business?

2. Research methods: 10 points.

Are the research methods appropriate to accomplish project goals? Does the research approach contain sufficient details regarding "how and when" and the PIs' ability to perform the proposed activities?

3. Potential of intended output and outcomes: 30 points.

Are the intended project output and outcomes closely related to the proposed activities? Are the output and outcomes specific and measurable? What is the potential for the output and outcomes to lead to demonstrated benefits to industry? What is the potential for the outcomes to lead to a commercialization opportunity or opportunity to pursue a patent? Successful proposals will demonstrate that the product or service has a high likelihood of being adopted and successful as a commercially viable or public benefit technology. What is the potential for future funding from external funding sources (industry, government, etc.)?



4. Student training: 10 points.

Does the project actively involve graduate students in generating the project output? Will the student engagement in the proposed activities lead to completion of graduate theses or dissertations? Will the student be working in a multidisciplinary team?

5. Schedule of project activities: 10 points.

Does the schedule of project activities seem realistic? Are the project milestones relevant to the research objectives?

6. Budget/Budget Justification: 10 points.

Does the project budget seem reasonable with sufficient details? Are all costs allowable, allocable and consistently treated?

7. Priority Initiative: 30 points.

Interdisciplinary collaborations internal to the University are encouraged (10 points). In this funding cycle, additional priority points are offered to the CICE-relevant topics as listed above and demonstrate a sound scope of work plan for CICE funding (10 points), and/or research that has, at the time of submission, confirmed collaboration with the local industrial agency or a demonstrable pathway to commercialization for licensing or have a basis for a startup (10 points).

The external reviewer will also provide comments on the scoring criteria that will be considered in selecting the awardees.

Award Terms and Conditions:

- 1. Award extensions shall be allowed for CICE grant awards, if circumstances warrant and the review agrees to an extension. Extensions only refer to award time period.
- 2. All unexpended funding must be appropriated and expended by September 15th, 2021.
- 3. The PI is expected to prepare any F3.2s and/or purchasing for their grant project. CICE will not be responsible for any purchasing (including Cardinal Purch) or preparation of F3.2 contracts. Written approval from the CICE is required prior to implementing any change to the scope of work. Actions likely to be considered a change of scope include, but are not limited to, the following:
 - a. Change in the objectives or specific goals approved at the time of award;
 - b. Shifting emphasis of research from one area to another; or
 - c. Transferring the performance of substantive programmatic work to a third party by contract or any other means.
- 4. Budget or scope of work violations may result in loss of CICE funding eligibility for an indeterminate number years. Disallowed costs will not be permitted as part of any budget amendment.
- 5. Grant account close-out will automatically occur within 30 days following the award period end date.
- 6. A final project report documenting the accomplishment of the project is due to CICE within 30 days of the project end date. Projects late or negligent in reporting will be prohibited from future funding.
- 7. In the event that a PI leaves the University, involuntarily or voluntarily, prior to the end of the award period, the co-PI can take over as primary awardee of the project. Otherwise, awardee's Dean or department Chair has the responsibility of notifying CICE and returning the award amount to CICE.
- 8. IT related purchases including software licenses require LU compliance approval prior to processing purchase orders.
- 9. All publications/presentations shall reference/acknowledge CICE funding.



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FY 2021 Research Grant Competition COVER PAGE

[Please delete all text that is bracketed and in italics.]

<u>Project Title:</u> [State your proposal title]

PI Information: [PI Name, Co-PI(s) name, Department, College, Office Phone, and Email address.]

<u>Total Project Cost:</u> [Specify the total cost of the project.]

<u>Is this proposal being submitted to another funding source? If so, please describe</u>: [The PI shall indicate if this proposal is being submitted or will be submitted to other any internal or external funding sources for consideration. If so, please include the funding entity name and targeted submission dates.]

Compliance: Do all senior key personnel have current Financial Conflict of Interest forms on file at the ORSPA office, listing this project? [Yes/No]



Project Title

<u>Project Abstract</u>: [The project abstract is designed to describe the <u>research</u> need, goals, and results in language easily read by the general public and is used for THECB research SAM reporting. The abstract shall have a maximum word count of 200.]

Focus Area(s): [Specify one or more focus areas in General Information on Page 4.]

<u>Project Description/Scope of Work:</u> [List the problem statement or need for this specific research, project methodology, the project deliverables and timelines. State how this preliminary award lead to future external research, how results can help commercialize the research for business or industry, or identification of local needs to be addressed through the research/support.]

Measurable Outputs: [Specify the major measurable outputs that will be produced from the proposed project during the project period. Example: This project will: (1)build a new low-cost heat exchange using additive manufacturing and nanoparticles, (2) produce a peer-reviewed journal publication(s) in an appropriate journal to forward the mission of CICE, and/or (3) develop a proposal submitted to a high impact industry organization or state or federal funding agency.]

Expected Project Outcomes: [Briefly describe the expected results and the impact of your proposed research in specific terms. It is important that the project outcomes will address CICE's mission: Promotes understanding novel and innovative technology, and use of these technology to solve challenges faced by the local industries and global community through research, educational programs, and community outreach. Provide an assessment of the output/outcomes of the proposed project. The term "output" refers to an activity, effort, and/or associated work product (such as a journal publication, a proposal to external funding agency or documented progress of a long-term research program) related to the project goals that will be produced over the award period. Outputs may be quantitative or qualitative but shall be measurable. The term "outcome" means the result, effect or consequence that will occur from successfully accomplishing the project objectives (i.e., the intellectual merits and broader impacts from the results of the proposed project).]

Research methods/creative activities: [Describe the methods that you plan to apply or the approaches that you plan to develop in order to accomplish the project goals.]

Action plan, timeline and milestones: [Description of specific actions to be undertaken including a detailed timeline (Gantt Chart) for the project including milestones for measuring the progress of the projects. An example Gantt Chart (timeline) is shown below.]

Proposed Task	May	June	July	Aug	Sept
Task 1					
Task 2					



Detailed Budget:

[Provide a budget table and justifications of the proposed budget. An example of the budget table is given below. Salary calculations should utilize the primary salary amount as listed in Banner and may include a 2-3% cost of living in the second year of funding. Fringe should be calculated based on actual costs. University Career Center rates for students is \$10 per hour for undergraduate, \$1,000 per month for graduate student pursuing master degrees, and \$1,500 per month for graduates students pursuing doctoral degrees. For master and doctoral students, the specified rates are at 50% FTE, so monthly rates could be smaller if budgeted for a smaller amount of time]

Detailed Budget Justification:

[Provide budget justification. Be aware that all funding and costs are required by law to be reasonable, allowable, and allocable. These line items would include PI time along with any fringe benefits, supplies, subcontracts, equipment, printing, travel (mileage to research site only), etc. A corresponding budget narrative must clearly identify the cost of each line item. Salaries must be listed in conjunction with the identified personnel. Funding for anyone listed on other awards, grants, agreements, or contracts, or teaching is subject to ORSPA review to determine final time and effort and allowability on project.]

	Example
A. Salaries	
I. Graduate Student(s) – 2.5 months	
II. Undergraduate Student(s) – 100 hours	\$1,000
Total Salaries	\$4,750
B. Travel	\$0
C. Equipment (specify) – must have a federal threshold of \$5,000 or greater	\$0
D. Supplies	\$750
E. Other (specify)	\$200
Total Project Costs	\$5,700

^{*} Part A, II – Graduate students may only be funded for 3.5 months (max) in this RFP due to biennium funding constraints.

Parts B, C, D, E- must be expended by September 15^{th} , 2020.

PRIOR CICE FUNDED RESULTS: [If the PI has a previously-supported CICE grant, describe the project's results and how the results relate to the research needs of this proposal. Did the PI and/or Co-PIs accomplish everything as stated in the previously-supported CICE grant? What happened, what was accomplished and how do those results lead to the need for this funded research.]

SUPPORTING MATERIALS: [CV of PIs and other miscellaneous items such as letters of support. Letters of support or commitment without dates or not written on official letterhead will not be accepted. All letters of commitment or support will be submitted to the ORSPA office for review prior to being sent to reviewers.]

