

Collaborative Research Opportunity (CORE) Grant Guidelines

Program Description

The CORE program is part of Lehigh's strategy for building a vital research portfolio that is responsive to the grand challenges of our society. Such challenges are complex and multifaceted. As such, they are best addressed by teams incorporating combinations of knowledge, skills, and perspectives. Multi- and inter-disciplinary teams can be positioned to identify questions not yet been posed, approaches not yet taken, problems not previously identified, and solutions not yet tried. Teams can thereby distinguish themselves in the academic community, with partners and constituents in society, and with funding sources, for the novelty, relevance and value of their work. We therefore provide support, through this program, for establishment and growth of faculty research teams, with the expressed purpose of enabling teams to earn sustained extramural support.

As described in detail below, a CORE proposal should describe an opportunity to establish a new multi-faculty research program, or to add a substantial and enduring new element to an existing program. In each case, applicants should begin with a clear vision for the future of their program, describing how the work will be of value to academic and constituent communities including those expected to provide sustained support. The statement of opportunity should further include a description of how the group will distinguish itself through the novelty of its ideas, approach and/or composition. Applicants should write clearly and convincingly about their potential impact and competitive position.

Teams must describe, as specifically as possible, their paths to sustained extramural support. A strong application will identify what work, if successfully completed, would provide others with compelling reasons to invest in the project. Often this involves identification of what are currently seen as obstacles to the long-term viability of the program – such as the unproven nature of the approach or the absence of a track record among the team members – and proposing a plan to reduce or eliminate these obstacles. Groups should identify programs for which they expect to qualify, and should plan to pursue external funding within six months after the end of the award.

With the understanding that outcomes cannot be guaranteed, teams should be eager to capitalize on unexpected results, and should approach their planning with a sense of agility. The ability of the team to define ways in which it can distinguish itself in the long term may therefore be as important as the potential of the specific project described in the application. Teams are also strongly encouraged, taking advantage of their multidisciplinary nature, to identify multiple sources to which they can offer value, thereby increasing the stability of the program over time.

Funding for the CORE program is provided by the Smith Fund for Research and Innovation in Science and Engineering for projects in the natural sciences and engineering, and by university funds for projects in all fields.

Award

A CORE grant provides funding of up to \$60,000. The actual budget must be commensurate with the specific needs of the research project. Generally, it is expected that the awardees are ready and eager to commence on the proposed work and able to complete the project within 12 months from the start date. To allow time for recruiting of students and other preparatory work such as preparation and approval of protocols or other factors related to the nature of the work, the project start may be delayed for up to six months. See instructions below regarding the project timeline.

Awards may not be used to replace or to supplement current funding. An award may not be used to support work within the scope of a pending grant application or an active or recently completed research grant. However, awards are intended to enable major programs to be assembled from existing strengths. Efforts toward significant expansion of the scope of existing programs and to establish teams of existing program leaders wherein the whole exceeds the sum of the parts are invited.

Funds may not be used for remodeling or alteration of facilities, faculty salaries or tuition. Grant funds must be expended in furtherance of the goals of the project as described in the proposal.

Eligibility

The proposed project must involve at least two tenure-track faculty members. Like major co-authors of a scholarly publication, each investigator should have contributed to the conception of the program and preparation of the application. At least two should be clearly committed to ongoing involvement in the project and should, collectively, be capable of sustaining it.

Transient involvement of additional faculty and students to translate or transfer ideas or approaches from one area to another is welcomed. Joint faculty commitments to students who serve to translate or synthesize ideas can be particularly effective.

All team members must have made timely submission of all reports and other required materials under all prior internal grant awards. A faculty member with a current Lehigh internal grant may apply as a member of a team, provided that team composition is different and the project goals and scope of work are significantly different from those of the current award.

The team will designate one member as Principal Investigator (PI). The PI will often be a team member who has taken a leadership role in conception of the project and is expected to have an ongoing leadership role and/or particular ongoing commitment to the program. The PI will receive all correspondence, manage the budget, and be responsible for reporting.

Review Process

Lehigh's Internal Review Committee (IRC) will review proposals. IRC members are nominated by their deans in accord with their experience and representation of the scope of research endeavors at Lehigh. As part of the review process, applicants may be asked to present their plans to the IRC.

Reviewers will be reading and evaluating proposals within and across subject areas. Proposals should therefore describe the project and its import in a manner that can be readily appreciated by non-specialists. Details necessary for evaluation by specialists should be kept as concise as possible.

Final selections for funding will be made by the Vice President and Associate Provost for Research and Graduate Studies.

Selection Criteria

Reviewers will evaluate each proposal according to each of the following criteria. While reviewers may judge that some criteria are more critical than others for a given project, these criteria will form the entire basis for evaluation. The following will be provided, verbatim, in instructions to reviewers:

- **Opportunity, originality and potential impact.** Do the applicants describe an opportunity to build a sustained multi-investigator research program with broad impact? Do they identify a field of study or application of rising importance? Do they identify distinguishing characteristics of their approach or their combination of talents, experience, capabilities and perspectives? Could the novelty of their approach, the broad importance of the problems being addressed, and the constitution of the team confer a distinct advantage over time?
- **Quality of the research plan.** Do the applicants present a well-conceived plan for use of CORE funding? Have they identified critical questions about the feasibility or promise of their approach, or about the long-term importance and viability of their program, and focused their plan on addressing those questions? Have the applicants proposed a sound research plan that makes good use of their talents and existing physical and programmatic resources? Is the budget appropriate for the scope of the plan? Is the proposed timeline appropriate?
- **Continuation plan.** Do the applicants describe a sound plan for pursuing funding for continuation of the program? Have the applicants identified potential funding sources and cited prerequisites to success with those sources? Does their vision for the project serve the missions and priorities of those sources? Do they describe a funding strategy, considering potential paths such as qualification for major center grants and/or

coordinated use of multiple smaller grants? If expected outcomes are achieved, are the applicants likely to be competitive in the near term?

- **Long-term potential and strategic fit.** Is there potential for continued growth of the program at Lehigh? Is it likely that the program offers a significant opportunity for multiple co-investigators, thereby assuring their ongoing commitment? Might it, over time, naturally draw in others or establish connections with other programs? Is future development of the program fully supported by existing or planned facilities and programs?

Proposal Preparation Instructions

Electronic submission of proposals through our [InfoReady Review](#) website is required.

When submitting, the online system will prompt for the following:

- A descriptive project title, suitable for publication on our public web site.
- Name, position, and department of each participating faculty member. One faculty member must be correspondent and will be responsible for all deliverables and management of the budget.
- IRB/IACUC status. Please refer to our Research Integrity web page at <http://research.cc.lehigh.edu/research-integrity>.
- Abstract: a 250-word abstract suitable for a sophisticated lay audience, suitable for publication on our web site. The abstract should describe the project's broad significance, the proposed activities and the project's intended results.

The following must be uploaded to the online system as a single pdf. Page margins must be at least one inch. Exclusive of any figures, text must be 11 point or larger.

- **A proposal narrative**, not to exceed six pages, that enables reviewers to judge the merits of the project using the criteria listed above. Please adhere to the following outline:
 1. Background, context, opportunity and long-term goals.
Describe the opportunity.
 - Describe the long-term goals and potential of the research program, beyond the initial period of CORE support. Describe how the program could overcome existing barriers, open up new possibilities, lead to innovation in practice, or otherwise merit attention and support.
 - Describe the project in the context of the backgrounds, capabilities and research interests of the faculty members involved. Highlight any unique combination of background, prior experience and capabilities that are being brought to bear on the project. This section should enable the reader to fully appreciate how the team could distinguish itself.
Identify the most critical barriers to moving forward with the project, with emphasis on what is required to convince others of the substantial merits of the research program. This may relate to the novelty and unproven nature of the team's approach, lack of a track record of joint publication, etc.
 2. Project plan
Against the background provided in the previous section, describe the work you plan to undertake and its expected outcomes. Make it clear to reviewers that you have devised a well-crafted plan that makes good use of talent, experience and existing resources. After reading this section, reviewers should appreciate how expected outcomes would address the critical barriers that you identified in the previous section
 3. Plans for continuation
Identify expected sources of extramural support. For each, include
 - the agency or organization and any recurring or special program to which you plan to apply, and any known submission deadlines.
 - a description of how the project will be responsive to the funding source's priorities and/or the requirements of the specific program.
 - a description of how funding through this source would advance the project in accord with your long-term plans. Continuation plans may include intent to apply for one or

more large multi-investigator grants, and/or a combination of single- or multi-investigator grants that, collectively, will enable the group to continue its work. The team is expected to be agile and entrepreneurial. In addition to identification of specific sources as outlined above, applicants may cite agency priorities and plans that align with the team's goals and capabilities, thereby supporting an expectation of success in future sustenance and growth of the program.

- **Timeline** Provide a timeline for completion of the proposed work in simple, readable form such as a short paragraph or simple diagram. The earliest start date is June 1, 2019. The start date may be delayed for up to six months as necessary for reasons such as recruiting students, seasonal factors in conducting fieldwork, or preparation of regulatory protocols. Unless justified based on the nature of the work involved, the work should generally be completed within 12 months of the start.
- **1-page budget and justification.** If matching funds will be used or in-kind resources dedicated to the project, specify these including amounts and sources. Funding of renovation, faculty salaries or tuition is not permitted. **Your proposed budget, not including any cost sharing, may be up to \$60,000. Your budget must be appropriate for the proposed work, and the work you propose must be appropriate for your goals.**
- **Short-form biographical sketches** for each of the faculty members involved in the project. You may use the form prescribed by any federal agency or a listing, not to exceed two pages, of educational preparation, research activity and relevant publications, presentations, etc.
- **List of all current and pending internal and external grants** of all faculty involved in the project, including title, award amount, funding period and funding agency. For each, indicate either "no relationship," or succinctly describe the relationship between the work supported by the grant and the proposed project.

Proposal Deadline

Full proposals must be submitted through our [InfoReady Review](#) website no later than **5PM EST** on the deadline date.

General Requirements

- **Collegial exchange.** Awardees will be expected to make brief presentations of their programs and plans at an open symposium to be held early in the funding period and/or to provide written materials about their projects for sharing with Lehigh colleagues.
- **Required reports.** Awardees will be required to submit end-of-project reports and follow-up outcome assessments, using reporting forms provided by the Office of the Vice President and Associate Provost for Research and Graduate Studies.
- **Research integrity.** Conduct of research must adhere to university policies, including those pertaining to research involving human subjects, vertebrate animals, and hazardous materials. Information on these is available on the [Research Integrity webpage](#).

Need More Information?

For a list of prior awards or for additional information regarding the submission process, please visit our [website](#) or email VPRresearch@lehigh.edu.