



Call for Submissions Critical Research Equipment Funds (CREF)

Purpose

The purpose of this Call for Proposals is to identify, and enable acquisition of, equipment that is critical to the productivity and competitiveness of Lehigh research programs in areas that are dependent upon such equipment. Purchases proposed under this program should be important to research programs in multiple departments, with greatest priority given to those that fulfill needs across colleges.

Submissions to the CREF program should be thought of as strategically-driven capital budget requests, in which the questions to be addressed are

1. What research programs are we intending to maintain and grow over the coming several years?
2. What critical gaps do we have in capital equipment to support these programs?
3. Among these critical gaps, which are most appropriately filled at a level that spans academic units, especially across colleges?

Funding for this program is from end-of-year carryover funds resulting from both careful use of resources and external factors. Availability of carryover funds varies from year to year.

Eligibility

The focus of this call is on individual pieces of equipment or highly integrated suites, whether purchased in finished form or assembled by investigators, that are particularly difficult to acquire through extramural programs or through other means - such as college and departmental revenue streams - by which colleges, departments and centers develop and maintain their research facilities. Equipment that departments are poised to acquire as part of new faculty startup packages should not be proposed for acquisition under this program, nor should large equipment that would be competitive in the NSF Major Research Instrumentation (MRI) or similar programs. However, pooling of resources that would otherwise be devoted to individual startup packages, as cost sharing under this program and as a means to enhance shared resources that would be attractive to multiple recruits, is encouraged.

While no fixed range of costs is imposed here, requested funding should generally be in the range of \$75,000 to \$200,000. Submissions for more expensive equipment will be accepted with the expectation that the portion of a purchase borne by the CREF program will be limited to \$200,000. Those proposing larger purchases should therefore have other sources in place for any additional amount needed. Cost sharing for smaller purchases is welcomed and, considering limited availability of funds, may affect determination of which submissions are approved.

As described below, each submission must identify each of the Lehigh faculty members and groups whose work will be enhanced by availability of the equipment. There is no limit as to the number of proposals on which a faculty member may be included.

Selection criteria

Selections will be made according to

- the critical importance of the equipment to the productivity and competitiveness of research programs to which multiple members of the faculty are committed, most particularly across departments and colleges. The number of faculty members and scope of research programs that will be aided by the acquisition will be important factors in making this judgment, as will alignment with the priorities and directions set by the colleges.
- recognition that the need is unlikely to be met by other means, such as extramural grant programs, or startup packages and infrastructure enhancements related to recruiting processes. Timeliness and certainty of acquisition may be considered in making this judgment.

Naturally, more expensive acquisitions will be expected to have proportionately greater impact, especially considering that these will affect the total number of acquisitions that can be made. Cost sharing from other sources will be welcomed and will naturally increase the total impact that can be obtained with available funds. As noted above, cost sharing from other sources will be expected for proposals exceeding \$200,000.

In addition, it will be necessary in each case to have

- a suitable site for location of the equipment, whether existing or to be prepared using resources provided by colleges, departments or centers.
- clear and unqualified assurance that all Lehigh investigators who are in a position to benefit from use of the equipment will have ready access to it.
- availability of personnel for any necessary technical and user support.
- clarity with regard to the ability to maintain the equipment, and with regard to responsibility for doing so.

Funding decisions will be made by the vice president and associate provost for research and graduate studies and the deans of the colleges represented on proposals, in consultation with the provost.

Submission instructions

Each submission must be organized as follows:

1. The **cover sheet** must include
 - a. A descriptive title
 - b. Names and signatures of those responsible for acquisition and ongoing support
 - i. Name(s) and signatures of the faculty members submitting the request. This should include all who are committed to involvement in planning and completing the acquisition and in the operation of the equipment. The first individual listed will be considered to be the contact person for the group and will take responsibility for the budget.
 - ii. Signatures of department chair(s) and/or center director(s) responsible for stewardship of the space in which the equipment will be placed and for any renovation, technical support and operation costs identified in the section on operating plans.
 - c. Names and signatures of those attesting to the importance of the acquisition
 - i. Names and signatures of all faculty members whose research programs are described in Section 3.b below.
 - ii. Names and signatures of the Chairs of the academic departments of the faculty represented in Section 3.b below.
2. **Equipment to be acquired.** *Limit to one page.*
 - a. Describe the equipment to be acquired, including its purpose and specific capabilities.
 - b. Describe the relationship between the equipment to be acquired and any equipment already on hand. Will it replace existing equipment that is deficient in some way? Is the capability currently absent at Lehigh? If so, are Lehigh investigators accessing outside facilities, working through collaborators, or simply doing without the capability?
 - c. Describe how any judgments were made in trading off cost and capabilities, with the goal of meeting current and future needs.
 - d. Provide an accompanying budget for the acquisition, including your request from the CREF fund and any costs to be borne by other sources. A formal quotation should be attached if at all possible. Aggressive pursuit of discounts is expected. While long-term plans for maintenance must be part of the operating plans for the equipment, service agreements for up to the first three years of ownership may be included in the acquisition cost.
3. **Statement of need.** Thoroughly but succinctly describe how availability of the equipment is important to the productivity and competitiveness of research at Lehigh. The statement should reference specific ongoing and intended lines of research for which the equipment is of major importance. Include the following:
 - a. *In one half page or less*, provide a summary statement of the need.
 - b. *In one to two pages*, specifically identify the individual faculty or group research programs that depend upon the equipment. **For each individual or**

group research program listed, the proposal must specifically identify the importance of the equipment in the research.

4. **Faculty listing.** Provide a summary table listing of each of the faculty members included above, identifying each by name and department.
5. **Alternatives means of acquisition.** Describe alternative means of acquisition, including extramural programs, that have been considered or attempted, and why those approaches are unlikely to succeed (or why attempting is unwise considering chances of success and urgency of need).
6. **Operating plans. Limit to one page.** Succinctly describe plans for assuring ongoing operation and availability of the equipment, including
 - a. where it will be housed and how any necessary adaptation of facilities will be accomplished.
 - b. how the equipment will be made broadly available to those whose programs can benefit from its use and, as applicable, to catalyze formation of team projects.
 - c. how necessary technical and user support and maintenance will be accomplished, and consumable supplies provided, including sources of support for personnel, e.g. user fees or departmental support.

Submission

Submit as a **single pdf**, by **email to VPresearch@lehigh.edu**, by **5:00 PM on October 23, 2015**. As necessary, applicants may be asked for additional information, and may be asked to present requests in person. Also as necessary, full plans for financial management may be required prior to initiating purchases.

If at all possible, selections will be made by November 6, 2015.