The Armstrong Fund for Science

The Armstrong Fund for Science was established to encourage faculty at UMass Amherst to pursue research that has a significant likelihood of major science or engineering impact. Made possible through the generosity of John and Elizabeth Armstrong, this fund was created in 2006 with the belief that major scientific advances in society can be achieved by supporting researchers with bold vision, documented credentials, and a passion for results. The Armstrong Fund for Science seeks to support researchers willing to challenge conventions in their field. Grants will be made from this fund, administered by the Office of the Vice Chancellor for Research and Engagement, on an annual basis.

Purpose

The Armstrong Fund for Science is intended for faculty members with aggressive research visions. Grants from this program should be used to strategically expand their programs by positioning their research for large, extramural grants or key industrial partnerships. The research should represent a new initiative: either a bold, new line of research, or the application of prior research to a field in which it has no precedent. Projects should be no longer than 2 years, with total budgets not to exceed $40,000.

All full time STEM faculty are eligible to apply. Junior faculty and faculty at all levels who are women or members of minorities underrepresented in science, technology, engineering and mathematics (STEM) disciplines are encouraged to apply. Proposals from senior faculty will be considered if they represent a new and somewhat risky direction for the faculty member’s research program. Team proposals are encouraged. Only projects in areas of strategic relevance to the campus will be funded.

The Armstrong Fund for Science is intended to:

- Enhance faculty members’ ability to develop significant sponsored activities in areas of strategic relevance to the campus;
- Permit faculty members to pursue adventurous ideas;
- Build tangible, working relationships with industry; and
- Raise the campus’s national profile as a source of scientific innovation.

Allowable Use of Funds

These funds may be used for:

- Graduate student stipends and fringe benefits;
- Equipment, supplies, materials, and core facility user fees required to accomplish the proposed research project;
- Publication costs for articles disseminating findings of the proposed research project;
- Research-related travel;
- Dependent care expenses associated with research-related travel;
- Support for grant development and writing, e.g., external reviewer, graphic designer, release time; and
- Honoraria and expenses related to bringing to campus key people who can help the research have the desired impact.
These funds may not be used for:

- The writing and preparation of manuscripts intended to be used as standard textbooks;
- The preparation of lectures, demonstrations, syllabi or other course related materials;
- The remedy of budgetary deficiency in other research contracts or grants;
- Reprint costs or library fees;
- Publication costs for individuals or department/disciplinary monographs or series; or
- Travel to sabbatical research sites.

The Submission and Review Process

Grants from the Armstrong Fund for Science are awarded annually. Proposals are selected for awards through an internal limited submission process. Pre-proposals are reviewed for both technical and programmatic merit by a committee of the Deans of the various colleges or their representatives. Applicants who submit the strongest pre-proposals are invited to submit full proposals. The full proposals receive technical reviews from faculty from across the university with relevant expertise. The members of the Faculty Senate Research Council consider the technical reviews and program priorities to select proposals to award. The Council may solicit external perspectives and input, and the donors may request additional representation on the Council.

The review criteria that will be considered include:

Technical Review Criteria

- Innovation: The proposed research represents a bold new idea or the application of prior research to a field that has no precedent for it.
- Significance/Impact: If successful, the project has a significant likelihood of major scientific or engineering impact in an area of strategic relevance to the campus. Connections to society and/or industry should be well articulated.
- Likelihood of success: The methods are appropriate to the research problem and the investigators have adequate training and experience in their use.
- Future funding and/or collaborations: If successful, the project will position this line of research for large, extramural grants or key industrial partnerships

Program Priorities

- Research must support priority initiatives as determined by the Deans and approved by the Provost, related to a specific program or a professorship involved in the highest quality work in STEM disciplines.
- Proposals from junior faculty and from faculty at all levels who are women or members of minorities underrepresented in STEM fields are encouraged.
- Team proposals are encouraged.
- Proposals from senior faculty should represent a completely new and somewhat risky direction for the faculty member’s research program.
- There are no match requirements but potential for external funding or industry engagement will be viewed favorably.

Application Process

Applications should follow the detailed submission instructions and use the forms available for download on the
program website [https://www.umass.edu/research/armstrong-fund-science](https://www.umass.edu/research/armstrong-fund-science).

Pre-proposals will include an application form, a two-page concept paper, a list of current and pending support, a pro forma budget, a short CV for the Principal Investigator (PI), and a letter of support from the applicant’s department head or chair that affirms the strategic importance of the applicant’s research to the college.

Full proposals will include an application form, a five-page project narrative, a references list, a list of current and pending support, a budget and budget justification, and short CVs for the PI and Co-PIs.

**Application Timeline:**

- October 15: Pre-proposals due to the Office of Research Development.
- November 15: Invitations to submit full proposals issued to applicants
- January 10: Full proposals due to the Office of Research Development.
- Early March: Awards announced.
- Early August: Funds will be disbursed annually for each year of funding

**Final Report & Public Dissemination**

At the end of the project awardees are required to provide a final report. Awardees must also commit to presenting their research findings to a lay audience through a public lecture or other means of public dissemination.

**Contact**

Mary K. Green, M.H.S.
Research Development Associate
*Armstrong Fund for Science Program Administrator*
Office of Research Development
101 University Drive, Suite B-5
Amherst, MA 01002
413-545-8641
413-577-3787 (fax)
[mkgreen@umass.edu](mailto:mkgreen@umass.edu)