

UNIVERSITY OF MASSACHUSETTS - PRESIDENT'S OFFICE

Program Announcement 2016 Science & Technology Initiatives Fund

Introduction

The University of Massachusetts (UMass) President's Office is pleased to announce the 2016 Science and Technology (S&T) Initiatives Fund.

The fund represents President Meehan's commitment to building upon the University's position as a world-class research enterprise that not only focuses on basic research, solving the problems of the future, but also applied and translational research, solving the problems of today. It also directly responds to the Trustees' strategic priority on strengthening the University's research enterprise and growing its portfolio substantially. And, it supports Governor Baker's recently released economic strategy ("Opportunities for All") which calls on the UMass system to serve as "regional stewards of research, innovation, entrepreneurship and economic development".

Investments to date from the fund have totaled over \$10 M million and have helped generate additional funding of more than \$240 million for strategic projects such as the Center for Hierarchical Manufacturing (Amherst), the Mass. Medical Device Development Center (Lowell and Worcester), the UMass Center for Clinical and Translational Science (Worcester), the Bio-Manufacturing Centers in Lowell and Fall River, and the Center for Personalized Cancer Therapy (Boston, in partnership with Dana-Farber/Harvard Cancer Center).

As in the past, the S&T Initiatives Fund will be coordinated with the UMass Center for Clinical and Translational Science (UMCCTS) Life Sciences Moment Fund. Proposals for projects that are intercampus, directed toward life sciences, and include at least one investigator from the Worcester campus may be eligible for either the S&T or Life Sciences Moment Fund.

Purposes and Allowable Use of Funds

Science and Technology Initiatives Fund

The S&T Fund is a tool to catalyze research collaborations among UMass campuses and with other partners to create impact and economic engagement. It provides resources to support well-established faculty who have a proven track record of securing external funding and who are positioned to attract major research and development funding opportunities for the University as part of an overall strategy to grow and strengthen the University's R&D enterprise.

The intent of the program is to focus on areas of strategic importance to campus research and to the state and its Innovation Economy (e.g., clean energy, life sciences, digital healthcare, medical devices, the Internet of things, "big data," cyber security, advanced manufacturing, robotics, marine technology, and the like). Key criteria also include catalyzing partnerships with other UMass campuses, other research institutions and Massachusetts industry. It is expected that the Fund's portfolio of projects will

attract over time significant new investment to the University. This includes not only sponsored research awards, but also funds for infrastructure development, technology licensing, revenues from industry-related services, and philanthropy.

By providing seed funding to outstanding faculty members, this fund facilitates the development of faculty-to-faculty networks within the University system, thereby leveraging the considerable expertise and resources that exist on the individual campuses. It is assumed that successful projects will attract additional funding from extramural sources.

Funds may support research, faculty release time, sabbaticals, travel, hiring of project staff or consultants, and other such expenses associated with developing major new S&T initiatives. Funds are not intended to be used directly as a match for proposals under development. However, it is anticipated that activities undertaken with an S&T award will be synergistic with efforts to secure external support. Funds are also not intended to support technology development (e.g., prototyping, proof-of-concept activities). The Office of Technology Commercialization and Ventures manages a technology-development fund that provides this type of assistance.

Awards will likely be in the range of \$100,000 - \$150,000, but the President's Office reserves the right to be flexible in this regard. The project period is typically twelve (12) months, starting at the beginning of the University's fiscal year (July 1). Funds are disbursed in two equal shares at the beginning (July 1) and end (June 30) of the project period. An interim project report is requested in mid-December and a final report in mid-June.

UMCCTS Life Sciences Moment Fund

The University of Massachusetts Center for Clinical and Translational Science (UMCCTS) is pleased to sponsor the UMass Life Sciences Moment Fund (LSMF). The LSMF supports projects that are inter-campus in orientation and directed toward life sciences projects related to clinical and translational research. Current and future projects supported by this fund are envisioned to advance the therapeutic, device, intervention, etc., under study along the translational pipeline. The fund serves to spur inter-campus collaboration and strengthen the University's research portfolio in clinical and translational research. To support this mission, projects must include at least one investigator from the UMass Worcester campus and a collaborator from at least one of the other UMass campuses. By providing seed funding to outstanding faculty members, this fund facilitates the development of faculty-to-faculty networks within the University system, thereby leveraging the considerable expertise and resources that exist on the individual campuses. It is assumed that successful projects will attract additional funding from extramural sources.

For complete information please visit: http://www.umassmed.edu/ccts/funding/LSMF/

Criteria for S&T Fund Awards

The criteria of the S&T Fund include:

- <u>Intellectual Merit</u>: Only high-quality science and technology projects will be considered for funding:
- <u>Growth Opportunity</u>: Potential for leveraging substantial outside funding from federal, state, industry and other sources is expected;
- <u>Institutional Partnerships</u>: Collaboration with other Massachusetts academic and research institutions is highly valued *especially partnerships among UMass campuses*;
- <u>Economic Impact and Industry Collaboration</u>: Projects should demonstrate their ability to support economic growth in Massachusetts, through partnerships with individual companies or regional/statewide industry associations, or through other mechanisms;

- <u>Project Leadership</u>: The presence of strong project leadership by both faculty and administrative staff (as appropriate, including the use of external consultants) is considered crucial for success; and
- <u>Campus Commitment</u>: The endorsement of the Chancellor(s) and evidence of campus commitment to the proposed initiative (such as financial support) is essential.

Application and Review Process

The goal of the President's Office is to keep the process simple and non-bureaucratic. The timeline for the S&T Initiatives fund is as follows:

- Fri., Feb 12: Concept Papers due to campus research offices**
- Fri., March 18: President's Office feedback provided to Campus Research Offices
- Fri., April 15: Full proposals due to campus research offices
- Fri., May 20: S&T awardees notified
- Wed, July 1: Project start date

Campus research offices are expected to complete internal processing and forward materials to the President's Office within one week – Fri., Feb. 19 for Concept Papers and Fri, April 22 for Full Proposals.

*For UMass Worcester: Please submit concept paper to Nathaniel.Hafer@umassmed.edu

Guidance for S&T Concept Papers

Concept papers should:

- Be no more than two (2) pages in length;
- Outline the thrust of the project and how it will achieve the goals of the fund;
- Identify project leadership and team members;
- Provide a cost estimate for the project;
- Describe the external funding opportunities to be pursued and the expected nature of collaborations (on a preliminary basis if necessary); and
- Demonstrate the endorsement of the Chancellor. Submission via campus research offices will be
 presumed to indicate approval of the Chancellor. For multi-campus proposals, evidence of
 approval of each campus research office is needed.

Concept papers will be reviewed by the Vice President for Economic Development and office staff, in consultation with campus research offices. Applicants who submit the strongest concept papers will be asked to submit full proposals. In cases where opportunities for synergy exist, proposers may be advised to combine their ideas into a single proposal.

Guidance for S&T Full Proposals

Full proposals should:

- Be no more than five (5) pages in length;
- Elaborate on the intellectual focus presented in the concept paper and provide a more thorough project description, including anticipated performance milestones and success measures;
- Specifically address how the project will meet the selection criteria for the fund;
- Identify and address key administrative and managerial challenges to the project;
- Provide a budget for the proposed use of funds; and
- Demonstrate the endorsement of the Chancellor. Submission via campus research offices will be presumed to indicate approval of the Chancellor. For multi-campus proposals, evidence of approval of each campus research office is needed.

Proposals will again be reviewed by the Vice President and office staff, with input from the campus research offices. The President's Office staff will also actively consult with relevant government (e.g., the Massachusetts Technology Collaborative, Massachusetts Life Sciences Center, Massachusetts Clean Energy Center) and industry stakeholders (e.g., industry associations and technology councils). Proposers will likely be invited to meet in person with staff as part of the review process. Staff will make funding recommendations to the President, who has final decision-making authority.

<u>S&T Proposal Submission and For Further Information</u>

All S&T materials should be sent via campus research offices to Tom Chmura, Vice President for Economic Development, UMass President's Office. For additional information, he can be contacted at (617) 287-4832 or tchmura@umassp.edu.

For information on the **Life Sciences Moment Fund**, please contact Nate Hafer, Director of Operations for UMCCTS at UMass Medical School. He can be reached at 508-856-2511 or Nathaniel.Hafer@umassmed.edu