

UMB-UMBC Research and Innovation Partnership Grant Program

Request for Proposals

The University of Maryland, Baltimore (UMB) and the University of Maryland, Baltimore County (UMBC) are pleased to announce the second round of the Joint UMB-UMBC Research and Innovation Partnership Grant Program for 2016/2017. The intent of this initiative is to promote structured collaborations between UMBC and UMB and to advance the institutions' joint goals in research and innovation.

The UMB-UMBC Research and Innovation Partnership Grant Program will:

- Foster creative teams of investigators working across disciplinary boundaries and institutions;
- Support new research foci and the underlying basic science to pursue future health care improvements and/or technologies; and
- Stimulate submission of innovative basic and translational science research proposals to federal, public or private funding agencies.

The University of Maryland, Baltimore (UMB) is comprised of the Schools of Medicine, Pharmacy, Dentistry, Nursing, Law and Social Work. The University of Maryland, Baltimore County (UMBC) is comprised of the Colleges of Natural and Mathematical Sciences; Engineering and Information Technology; and Arts, Humanities and Social Sciences as well as the Erickson School and the School of Social Work.

The UMB-UMBC Research and Innovation Partnership Grant Program seeks to encourage groups of researchers to collaborate on new avenues of research that would not otherwise be explored by any single group or to boost an existing collaboration toward a major proposal submission.

All areas of research connecting research initiatives at UMB and UMBC will be considered for funding. Projects that promote and further the strategic collaborative interests between the two institutions; generate pilot data for new and ambitious research projects; and provide a clear path toward subsequent major external funding will be given preference in this cycle's review.

This Request for Proposals provides two funding track opportunities, detailed below. Note that "PI" in the context of this program is used to refer to two individuals on each proposal, with one PI from each institution.

- **The UMB-UMBC Innovation Seed Track** to stimulate innovative and collaborative ideas between faculty at the two campuses, with a goal of preparing a joint research proposal to federal or private institutions. For the *Innovation Seed Track*, all full-time tenure-track and research-track faculty members having primary academic appointments at UMB or UMBC are eligible to serve as PIs. UMB School of Medicine PIs must be NIH-funded investigators and tenured Full or Associate Professors. Any exceptions require approval by the respective Dean of the College or School prior to submission. Investigators who are ineligible to serve as the PIs from their institution are encouraged to participate in this program by teaming with collaborators at their institution who are eligible.
- **The UMB-UMBC Innovation Challenge Track** to allow senior investigator teams representing both campuses to further develop collaborative activities that will lead to major research proposals to federal or private institutions. Priority will be given to projects that will generate pilot data over a two-year period for new and ambitious research projects, which advance some of the major scientific challenges and which will be positioned to acquire a large federal funding base, such as NIH program project grants or center grants (P-series awards), cooperative agreements (U01 awards), or equivalent large awards from other Federal (NSF, DoD) or private agencies.

For the *Innovation Challenge Track*, at least one PI must be a senior, tenured investigator, i.e. Associate or Full Professor, and PI or Co-PI on a current, federally funded award. UMB School of Medicine PIs must be NIH-funded investigators and tenured Full or Associate Professors. Investigators who are ineligible to serve as the lead instigator from their institution are encouraged to participate in this program by teaming with collaborators at their institution who are eligible.

Individual investigators may submit only one proposal per cycle in response to this Request for Proposals as a PI, but can serve as non-PI collaborators on multiple proposals. Investigators who are PIs on previous UMB-UMBC Research and Innovation Partnership awards are eligible to apply as PIs for new *Innovation Challenge Track* project funding but not for the *Innovation Seed Track* program.

To be considered for the UMB-UMBC Research and Innovation Partnership Grant opportunity, a complete proposal must be submitted electronically by **February 15, 2016**. Proposals should address the merits of the proposed research and specifically identify and justify NIH, NSF, DOD or other external funding opportunities to submit a proposal to attract subsequent external funding, equivalent to NIH R awards, P-series awards, cooperative agreements (U01 awards) or other major federal research grants. Further details are provided in the Appendix.

The number of awards will depend on the quantity and quality of proposals received as well as their proposed budgets.

- *Innovation Seed Track* proposals: the maximum award per grant is **\$50,000** for a project duration of up to 15 months. A second phase of funding will not be provided. Prior UMB-UMBC Research and Innovation Partnership Grant recipients are not eligible to apply for the *Innovation Seed Track* opportunity.
- *Innovation Challenge Track* proposals: the maximum award per grant is **\$75,000/year for up to 2 years**. Selected project teams may be eligible for a second year of funding for up to \$75,000 each if the team successfully meets all milestones during the initial 12 months, including submission of a major research grant proposal. Prior Innovation Seed Track PIs or recipients of the 2013 UMB-UMBC Research and Innovation Partnership Grant program may apply for *Innovation Challenge Track* awards if they meet the eligibility criteria for this track.

Indirect costs are not to be included in the proposal budget, since this UMB-UMBC Research and Innovation Partnership Grant program is supported by internal, institutional funds from a variety of sources. Awards will not be given for existing projects funded by other sources.

For questions regarding application guidelines, please contact Dr. Don Engel (donengel@umbc.edu) at UMBC or Sue Hobbs (shobbs@som.umaryland.edu) at UMB.

Proposals must be submitted electronically as a combined PDF file by 5:00 pm EST February 15, 2016 to <http://research.umbc.edu/umb-umbc-research-and-innovation-partnership-grant-program/>

Anticipated announcement of awards is late April 2016.

Anticipated funding start date is July 1, 2016.

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Appendix

Eligibility: For both the *Innovation Seed Track* and the *Innovation Challenge Track*, any exceptions to the following eligibility requirements require approval by the respective Dean of the College or School prior to submission.

For the *Innovation Seed Track*, all full-time tenure-track and research-track faculty members having primary academic appointments at UMB or UMBC are eligible to serve as PIs, except that (1) UMB School of Medicine PIs must be NIH-funded investigators and tenured Full or Associate Professors and (2) Prior PIs on *Innovation Seed Track*, *Innovation Challenge Track*, or the 2013 UMB-UMBC Research and Innovation Partnership Grant program may not apply.

For the *Innovation Challenge Track*, at least one of the two PIs must be a senior, tenured investigator, i.e. Associate or Full Professor, and PI or Co-PI on a current, federally funded award. UMB School of Medicine PIs must be NIH-funded investigators and tenured Full or Associate Professors. Prior *Innovation Seed Track* PIs or recipients of the 2013 UMB-UMBC Research and Innovation Partnership Grant program may serve as PIs on *Innovation Challenge Track* proposals if they meet the PI eligibility criteria for this track, but prior *Innovation Challenge Track* PIs are not eligible to serve as PIs on an *Innovation Challenge Track* proposal.

Individual investigators may submit only one proposal in response to this Request for Proposals as a PI per cycle, but can serve as collaborators on multiple proposals. Investigators who are ineligible to serve as the lead instigator from their institution are encouraged to participate in this program by teaming with collaborators at their institution who are eligible.

This Research and Innovation Partnership Grant Program seeks to encourage groups of researchers to collaborate on new avenues of research that would not otherwise be explored by any single group or to develop an existing collaboration toward a major proposal submission. It is required that the program will support cross-campus teams. The proposed project must be original, creative, innovative and disruptive and be beyond the scope of a typical single research group. The research is expected to generate pilot data that will lead to new external funding through major awards or future commercialization. New areas of research for existing collaborative teams will be considered.

Expectations: Award recipients are expected to produce sufficient preliminary results so that a major proposal for external funding will be submitted within 18 months after the start of an *Innovation Seed Track* award and within 12 month of an *Innovation Challenge Track* award. There is a clear expectation that publications or manuscripts will result from the funded work. Awardees will participate in Quarterly Progress Reviews or other events that bridge campuses and bring researchers together. Recipients will remain faculty members of the participating school throughout the course of the grant, with any substitutions requiring approval by the Executive Director, Office of Research Affairs, School of Medicine, UMB and the Vice President of Research, UMBC.

Review Criteria: Proposals will be evaluated by a committee comprised of faculty from UMB and UMBC and representatives from public, private or federal institutions, with wide-ranging expertise appropriate to the types of proposals submitted. This Request for Proposals provides two funding track opportunities. Investigators must state clearly for which Track they are applying.

- The UMB-UMBC *Innovation Seed Track* to stimulate innovative and collaborative ideas between faculty at the two campuses, with a goal of preparing a joint research proposal to federal or private institutions.
- The UMB-UMBC *Innovation Challenge Track* to allow senior investigator teams representing both campuses to further develop collaborative activities that will lead to major research proposals (e.g. multiple R grants, or P and U awards from NIH) to federal or private institutions.

Proposals will be reviewed according to the following weighted criteria:

- Scientific or Intellectual Merit (40%)
- Likelihood to attract subsequent major external funding award (30%)
- Academic excellence of investigator team (20%)
- Contribution to the broader goals of the UMB-UMBC Research and Innovation Partnership Grant Program (10%)

Allowable Expenses: Research supplies; purchase or rental of equipment for new research; travel for research purposes (excluding travel to meetings or symposia); and salary support for a temporary position (12 months or less) for technicians, research associates (post-docs) and/or graduate students.

Unallowable Expenses: Salaries for PIs, administrative support, alterations or renovations of laboratory space, purchase of laboratory or office furniture, purchase of periodicals and books, general telephone services and postage and dues and memberships in scientific societies.

Conditions of the Award:

- Awards are made to PIs and are not transferable without prior approval by the Executive Director, Office of Research Affairs, School of Medicine, UMB and the Vice President for Research, UMBC.
- Equipment purchased with these funds is the property of UMB and UMBC and must remain at the institution should the PI leave his/her University.
- Quarterly Progress Reports are required to track scientific progress, expenditures to date, personnel status, presentations, publications and external grant proposals and awards.
- Periodic surveys may be required to track progress on patents, invention, creation of new companies, technology for commercialization or other areas of interest to the institutions.
- A Final Report is required within 12 months after the end of the project. The PI will submit an update listing all presentations, published papers and extramural funds that have resulted, in whole or in part, from the project. These shall be submitted to the Executive Director, Office of Research Affairs, School of Medicine, UMB and the Vice President for Research, UMBC.
- Funds should be budgeted for completion and exhausted at the end of 12 months. Remaining or unspent funds are to be returned for subsequent competitions.

Other: The proposal should also identify specific research goals that will enhance the success of a future major proposal to federal, public or private funding agencies and provide a specific targeted timeline by which these objectives can be reasonably achieved. Finally, the proposal should provide a budget that adequately reflects the intended use of the funds with respect to the proposed objectives for each institutional partner.

Application Guidelines

The proposal must contain the items outlined below, within the page limitations provided. Proposals failing to meet these guidelines will not be considered for funding. **Proposals must be submitted electronically as a combined PDF file by 5:00 pm February 15, 2016 to <http://research.umbc.edu/umb-umbc-research-and-innovation-partnership-grant-program/>.**

Anticipated announcement of awards is late April 2016.

Anticipated funding start date is July 1, 2016.

Cover Page (limited to 1 page):

- Title of Innovation Grant Project
- Names, Academic Rank and Appointments of all Co-PIs.
- Statement of Collaborative Effort. Include a specific statement as to how the collaboration between the investigators from each campus is necessary to further the goals of this research proposal. Include processes for maintaining communication and interactions between campuses and monitoring of equitable distribution of intellectual involvement.

Proposed Research Description (maximum 6 single-spaced pages) including:

Specific Aims - Describe the overall strategy, methodology and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed and interpreted as well as any resource sharing plans, as appropriate.

Project Description - (including Project Plan and expected outcomes) include two or three sentences describing the public health relevance of the project and commercial benefit (where applicable).

Please comment on how this interaction will impact the research program's future direction and the following:

Significance:

- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses;
- Explain how the proposed project will improve scientific knowledge, technical capability and/or clinical practice in one or more broad fields; and
- Describe how the concepts, methods, technologies, treatments, services or preventative interventions that drive this field will be changed if the proposed aims are achieved.

Innovation:

- Explain how the application challenges and seeks to shift current research or clinical practice paradigms;
- Describe any novel theoretical concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used and any advantage over existing methodologies, instrumentation or intervention(s); and
- Explain any refinements, improvements or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.

Budget (limited to 2 pages): Total amount of funds being requested; individual and detailed budgets for each campus, Total amount of funds being requested; individual and detailed budgets for each campus, explicitly stating which items are UMB v. UMBC expenses, and a budget justification for each campus. The maximum allowable budget is based on the Track selected by the investigators.

For Innovation Seed Track proposals: the maximum award per grant is **\$50,000** for a project duration of **up to 15 months**. A second phase of funding will not be provided. Prior Research and Innovation Partnership Grant recipients are not eligible to apply for the *Innovation Seed Track* opportunity.

For Innovation Challenge Track proposals: the maximum award per grant is **\$75,000/year for up to 2 years**. Selected project teams will be eligible for a second year of funding for up to \$75,000 each if the team successfully meets all milestones during the initial 12 months, including submission of a major research grant proposal. Prior *Innovation Seed Track* awardees or recipients of the 2013 UMB-UMBC Research and Innovation Partnership Grant Program are eligible to apply for *Innovation Challenge Track* awards.

Additional Information:

- Identified future funding source. Be explicit - which program at which agency will be targeted for a future application
- References (including full titles)
- IRB and IACUC approvals – if required for proposed effort; if approvals are not complete for submission, selected applicants must secure them by April 1, 2016.
- Biosketches – NIH or NSF format are accepted (for each participating faculty)

As a condition for accepting an award, the grant recipients will agree to the following:

- Prepare and submit a publication on this research project within 12 months after the start of the Innovation Partnership Grant Program.
- Prepare and submit an application to a major federal, public or private funding agency within 18 months after the start of the program.
- Present results of the research at an institutional Workshop or Symposium, if requested.
- Provide Quarterly Progress Reports listing major findings, presentations, publications, grant applications and awards, personnel status and financial expenditures update.
- List support from the UMB-UMBC Research and Innovation Partnership Grant on all publications and presentations

Table 1: Summary of UMB-UMBC Research and Innovation Partnership Grant Program

SECTION	Page Limit	Content
Cover Page	1	Use Cover Page form provided. Sign and date form. Clearly indicate <i>Innovation Seed Track</i> or <i>Innovation Challenge Track</i> application
Research Description	6	Describe Significance and Innovation Specific Aims, proposed method used to realize each Specific Aim, Plans for human subjects research or animal use
Budget & Justification	2	Provide an itemized budget and Budget Justification for each campus. Budget lines should specify if they are UMB v. UMBC and a subtotal should be listed for each university.
External Funding Plan	1	Provide specific information on programs and program officers at federal agencies to submit follow-up proposal.
References	No limit	References including full titles
IRB and IACUC Approvals	No limit	Attach IRB and IACUC approvals (if applicable). If approvals are not complete for submission, selected applicants must secure them by April 1, 2016.
Biographical Sketches	2 each	No more than two pages each for each Co-PI and collaborators.