

REQUEST FOR APPLICATION (RFA)

MARYLAND INNOVATION INITIATIVE TECHNOLOGY VALIDATION PROGRAM

Purpose:

The Maryland Innovation Initiative (MII)'s University Pilot Program (the "Program") was created to support technology development in Maryland's Comprehensive Universities and to foster the transfer of that technology to commercial entities. The Technology Validation Program is designed to run as part of the Program for Bowie State University and Frostburg State University with the purpose of expanding opportunities for technology validation, entrepreneurial development, and industry engagement at each university. Successful results of the Technology Validation Program will be assessed by the number of technologies developed and IP disclosed because of this grant funding.

Program Overview and Funding Amount:

The Technology Validation Program is a \$50,000 award that includes two distinct components which are to be completed within a 6-month project period: a Technology Development Report and a Market Assessment.

- The Technology Development Report component consists of awards up to \$40,000 to conduct proof-of-principle studies that validate a technology's use for a specific commercial application and advance it to a point where it might generate a strong Intellectual Property (IP) and/or be attractive to a prospective licensee.
- The Market Assessment component consists of awards of up to \$10,000 to support a market analysis and the development of a Commercialization Plan (defined below) for a technology.

Funding Mechanism:

All Program awards will be made as a grant. Awards do not include any repayment obligation; however, they do include end of project and some annual reporting requirements.

Eligibility:

Universities participating in the MII University Pilot Program, namely, Bowie State University and Frostburg State University, are the only entities eligible for this grant currently ("Eligible

Universities”). The Principal Investigators for this grant must be full-time faculty at Eligible Universities.

In all cases, an applicant must also meet the following requirements to be eligible:

- (i) The technology, which is the subject of a proposal, (a “Subject Technology”), must be disclosed to a technology transfer office at the Eligible University (or equivalent), and
- (ii) The technology transfer office (or equivalent) must provide a signed letter to indicate whether they already have or will secure appropriate intellectual property protection (a patent, patent application, copyright, trademark, or other form of intellectual property) for the Subject Technology.

Applying for the Technology Validation Program:

All applications for the Program should propose a project plan for the Technology Development and Market Assessment phases of the grant, as described below. Since the grant period is short, the applicant should identify any necessary internal approvals and resources, including staff or students performing the tasks under this grant prior to submitting the application. For the Market Assessment, we strongly encourage the applicant to work with the university's entrepreneurship centers, business school students, and related Faculty.

Applications may be submitted to MII at any time before 06/01/2024. Eligible University applicants must route applications through their grants management office as required by their university's policies and procedures. Completed applications received will be reviewed and presented to the MII Board for approval at the earliest meeting date. The full review process takes not more than 30 days.

Applications may be submitted via e-mail to Griffin St Louis (gstlouis@tedcomd.com) but require a TEDCO DEI ID number assigned which may be obtained by visiting: [TEDCO MII PI REGISTRATION](#)

Application Components:

There are three major components to the Technology Validation application: the General Application Information, Full Proposal, and a project Budget.

The **General Application Information** should be included in a cover e-mail to the Technology Validation Program Manager and should include:

- TEDCO ID Number
- A Project Title
- The Principal Investigator's name and contact information

- The principal investigator's Eligible University and source of the Subject Technology including the name of a contact person at the institution responsible for the commercialization of the Subject Technology (usually a technology transfer person or equivalent), and that person's contact information
- A non-proprietary abstract of the technology and its potential market application; and
- Key words describing the Subject Technology

Then, a **Full Proposal**, which contains the Budget (described below), must be submitted as a single document in PDF format and it must adhere to the guidelines described below. The Full Proposal should be submitted as an attachment to the email containing the General Application Information.

Finally, the **Budget** is included as part of the Full Proposal. When creating a budget, please classify each budget item into one of the following categories in tabular format:

- Personnel, Fringe Benefits
- Materials & Supplies and
- Other Direct Costs (must be itemized)

MII funds may not be used for Indirect Costs.

Full Proposal Guidelines:

Full Proposals must follow the guidelines stated below. Any proposal that does not follow these guidelines will be returned without review.

The Full Proposal may not be more than **5 pages** (one-sided) in length excluding Technology Transfer (or equivalent) Letter, References, and other Support Letters with at least **one-inch margins** and a **12-point font**, and each page must be **numbered**. Applications not meeting these requirements will be rejected and returned after an initial Compliance Review, described below.

In drafting the Full Proposal, applicants should understand that Technology Validation Program reviewers have broad technical backgrounds but might not be well-versed in the investigator's scientific discipline; therefore, sufficient background information should be included so that the reviewers can understand the relevance of the Subject Technology within its specific scientific discipline.

The Full Proposal should contain the following in the order given below:

Abstract:



An abstract of the Full Proposal should be included. The abstract should be **non-proprietary** in nature. This section may be the same as the abstract required for the General Application Information.

Description of the Technology:

This section should start with a **general description** of the technology with an emphasis on its importance, its degree of novelty, and its potential commercial applications. Regarding its commercial applications, applicants should describe the problem that the technology addresses, its importance, and why it is a better alternative to competing approaches that address the problem. Next, the applicant should provide a **detailed description** of the technology including a brief survey of competing approaches in the scientific literature and the advantages of the technology in view of the competing approaches. The detailed description should include preliminary data or other convincing evidence that the technology will work as anticipated.

Intellectual Property:

A description of all intellectual property associated with the technology must be disclosed to the University Technology Transfer Office (or equivalent) and included with relevant disclosure reference number, patent or patent application serial numbers and filing dates listed. The description should also include a strategy for strengthening the intellectual property associated with the **invention**. Any technology disclosed should belong to the university.

Project Plan and Milestones:

A clear description of the proposed project must be included. The description should include specific aims, a detailed description of the work to be performed, and quantitative endpoints so it will be obvious when they have been successfully, or unsuccessfully, met. Descriptions for Technology Validation projects should include a final project milestone associated with demonstrating the technology for a specific market application.

Market Assessment:

The description of the Market Assessment project portion should include a plan to develop a Commercialization Plan as the final deliverable. The application should describe an approach to draft a document that comprehensively outlines specific steps required to complete the development of a product such as its distribution to customers that may include its manufacture, regulatory approvals, etc. The purpose of a Commercialization Plan is to identify and create steps to resolve high-risk portions of a business model.

Guidelines for the proposal and development of a Commercialization Plan can be found at the end of this RFA.



Project Team:

A list of project personnel should be provided for the proposed study with a brief statement of their background and their proposed contribution to the proposed project. The reviewers will want to ensure the project team is qualified to carry out the proposed work.

Budget & Budget Justification:

A detailed budget must also be included in the Full Proposal. This budget should match the general format described above in the Application Components - Budget section. A justification for each line item in the budget should be included in a narrative form.

The Technology Validation Program does not have any cost sharing or matching requirements. Justification should include total hours committed to the proposed project, the cost/hour for everyone included in the budget, and the associated fringe benefits. Travel costs may not be included unless justified as critical to completion of the proposed project.

Up to \$4,000 of the Technology Development budget may be allocated by an Eligible University technology transfer office (or equivalent) to pay for intellectual property protection expenses related to the Subject Technology, which are incurred prior to or during the Technology Validation project.

References & Support Letters:

The applicant should include any relevant references and letters of support in an appendix.
This section does not count toward the 5-page limit for the Full Proposal

Review Process:

Once a Technology Validation Program application has been submitted, MII will begin its review process, which includes the following steps:

Compliance Review:

MII Staff will first review all applications to ensure they meet the basic requirements indicated by this RFA. Those not meeting the specified requirements will be rejected without further review and the applicant will be so notified.

Technical Review:

MII conducts an internal review of the Full Proposal by a selection of individuals with technical and commercial experience. The technical review is conducted under terms of confidentiality.

The reviewers comprehensively evaluate elements of the Full Proposal for translational potential, appropriateness of design, methods, analysis, innovation, the potential of the applicant to carry out the proposed project with special focus on the commercial application and commercialization potential for the innovation. After reviewing the application, the reviewers will provide a recommendation for funding to the MII Board of Directors. For applications not recommended for funding, the reviewers will list their concerns with the application so they can be provided to the applicant. The final decision for awards is made by MII Board of Directors.

Notification of Award:

In the event of an award, an award letter will be sent to the applicant with a copy of the MII Technology Validation Program funding agreement. MII will also send a copy of the award letter and the funding agreement to the applicant’s grants and contracts office and technology transfer office, as applicable. If an application is rejected, MII will notify the applicant. Such notification will include the Review Committee’s comments and concerns and a copy of any independent technical review, if available.

Review Criteria:

The Review Committee will base its recommendation for funding to the MII Board of Directors using the following Criteria for each application.

Description	
Recommended	The applicant has included all the required information and has made a very convincing argument in support of the criterion being scored.
Not Recommended	The applicant has not provided enough of the required information to make a fair argument in support of the criteria being scored.

Adherence to the Purpose:

This consideration will be based on applicants’ ability to articulate technical novelty, tenable development aims, and appropriate endpoints within scope of the funding amount and timeline. The extent to which the proposed project will advance the technology toward commercial viability, generation or strengthening of intellectual property and/or create an opportunity for a start-up company will be considered.

Commercialization Potential:

The Review Committee will assess the commercial potential of the Subject Technology. This assessment will be based on the strength of arguments made by the applicant through the Detailed Description of the Technology, Project Plan and Milestones, and Market Assessment sections of the Full Proposal in terms of the ability to license the Subject Technology, the ability to develop a product based on the Subject Technology, the size of the market for such a product, and the product's competitive advantage.

Intellectual Property Position:

The strength of the existing and potential intellectual property is evaluated since it is often the only competitive advantage for technology at an early stage. This consideration will be based on the quality of information provided in the Intellectual Property section of the Full Proposal.

Strength of the Proposed Project:

The strength of the proposed project and the likelihood of its success will be considered. The appropriateness of the budget and the rationale used for its justification will also be evaluated. This assessment will be based on a comprehensive evaluation of the Full Proposal and its supplemental supporting elements.

Resubmissions

If a Technology Validation Program application is rejected and contingent on the availability of program funding, the applicant may resubmit a new application with a revised Full Proposal. In such cases, the applicant must include an additional section, the Resubmission Summary, as part of the new application. The Resubmission Summary section must describe an overview of the reviewers' concerns, and it must include a description of how those concerns were addressed in the revised Full Proposal.

*The Resubmission Summary, which is **limited to 1 page in length**, is to be included as part of the Full Proposal, but it does not count toward the 5-page limit of the Full Proposal.*

Award Process:

Once a proposal is recommended for funding, a funding agreement will be sent to the applicant for processing and an authorized signature. The applicant will have 30 days to sign the agreement and to return a copy to MII. If the agreement is not signed and returned within 30 days, the proposal becomes inactive, and the applicant must reapply to receive an award.

Final Deliverables: Project Report and Commercialization Plan:

There are two deliverables at end of the project:



- Project Report
 - 5-page, final technical results report
 - An overview of all activities undertaken during the funded project.
 - A description of the results of the project and the success in achieving the proposed project milestones
 - The impact of the technical milestone results on commercialization.
- Commercialization Plan
 - There are no page limits to the Commercialization Plan, but the deliverable must include sections discussing the following elements
 - Business Opportunity
 - Product or Service Description
 - Intellectual Property/Regulatory Strategy
 - Marketing Analysis and Marketing

As a condition of the Technology Validation Program award, the Grantee must submit an annual report on their funded Technology Validation projects to identify those projects which have been licensed or optioned and their economic impact. These reports are due over 5 years following the completion of a funded project.

Commercialization Plan Guidance:

To assist applicants with understanding the nature of a Commercialization Plan, as the specified deliverable for a Market Assessment project, the following guidelines are included. The Commercialization Plan should include the following sections and address the questions listed for each question. Applicants may choose to focus the efforts of their proposed project on one section of the guidelines, but MII requests that a full Commercialization Plan be developed as part of a funded Market Assessment project.

Business Opportunity: This section should describe the business opportunity that the applicant is addressing.

- What is the problem in the market?
- What is currently in the marketplace or being developed for the marketplace to address this problem?
- How does your technology offer a better solution?
- Who would the customers be for this product?

Product or Service Description: This section should describe the products or services derived from the technology.

- Describe the underlying technology on which the product or service will be based. The technology description should be clear to a lay audience but contain sufficient detail so that it can be assessed by someone 'skilled in the art' of the technology.
- The stage of development of the technology should be described.
- Any preliminary data or other findings demonstrating a proof of principle for the technology should be included.
- Applicants are encouraged to include diagrams, illustrations, photos, or other means to support written descriptions of the technology, or the products being developed.

Intellectual Property/Regulatory Strategy: The applicant should describe the strategy for expanding intellectual property protection and a strategy for obtaining any required regulatory approvals (if applicable).

Market Analysis & Marketing: The applicant should demonstrate that they have a clear understanding of the market for their products or services. This may include:

- Market size and general market trends
- A market segmentation analysis with initial and secondary markets identified
- The size of the markets and a justification for pursuing these markets
- Target customers and suggesting why these customers will buy the company's product or service
- A complete description of products and services that will directly and indirectly compete with the company's products and services and how the company's products and services compare (Applicants are encouraged to use tables.)
- Barriers to entry for new products to enter the market after the company products and services are available
- Compelling revenue model that will lead to profitability
- How the products and services will be marketed (how the product will be promoted to customers through distribution channels and partnerships)

Program Manager Information:

Inquiries regarding the Technology Validation Program should be directed to:

Griffin St Louis
Program Manager
Maryland Innovation Initiative
gstlouis@tedcomd.com