REQUEST FOR APPLICATIONS (RFA)

Maryland Innovation Initiative (MII)
Technology Assessment Grant Application Guidelines

Purpose:

The Maryland Innovation Initiative ("MII") Innovation Commercialization Program (the "Program") was created to foster the transition of promising technologies having significant commercial potential from Qualifying Universities (defined below), where they were discovered, to the commercial sector, where they can be developed into products and services that meet identified market needs. Specifically, it is the intent of the Program to foster the commercialization of such technologies through technical validation, market assessment, licensing to a suitable commercial partner or through the creation of start-up companies in Maryland. A "Start-up" is a company reliant on technology licensed from a Qualified University for commencement of its operations. It is also the intent of the Program to foster collaborations within and among various research institutions and departments in the State.

The Program is divided into two phases, a Technology Assessment Phase for Qualified Universities, and a Company Formation Phase for Start-ups. This document outlines the details of the Technology Assessment Phase. The Company Formation Phase is outlined in a separate document.

Eligibility:

To be eligible for the Technology Assessment phase, the applicant must be a full-time faculty member at a collaborating research institution which includes:
- Johns Hopkins University
- Morgan State University
- University of Maryland, Baltimore
- University of Maryland, Baltimore County
- University of Maryland, College Park

Applications must be directed toward the commercialization of a technology or group of technologies: owned by a Qualifying University; disclosed to a Qualifying University's technology transfer office (TTO); and for which there exists appropriate intellectual property protection (a "Technology").

Funding Amount:

Subject to meeting the Program requirements, a grant award of up to $130,000 may be made for a project at a single Qualifying University (a "Sole Application"). A Joint grant award totaling up to $180,000, as described below, may be made to two or more Qualifying Universities submitting a joint proposal directed toward:

- The joint commercialization of Technologies existing at more than one of the applicants Qualifying Universities (i.e., complementary Technologies that can be licensed together); or
- Commercialization activities that would take place at more than one Qualifying University, in which case at least two of the Qualifying University Applicants must each be budgeted to receive a minimum of 25% of any Program award (a "Joint Application").

Overview and Program Description:

MII Technology Assessment award is a 9-month project with two major deliverables: a Technology Validation report and a Commercialization Plan including two separate work plans and two separate corresponding budgets. An overview of each deliverable is described in the following sub-sections.

- Technology Validation: The "Technology Validation" report builds on strong preliminary data demonstrating the utility of a Technology for a specific commercial application beyond the scope of basic research.
  - **A five-page final Technology Validation report will be the deliverable for this part of the Technology Assessment project.**
- Commercialization Plan: The "Commercialization Plan" is a document that provides clear and detailed guidance that a start-up team or licensing partner may reference in pursuit of immediate next steps to advance the commercial development of the Technology as a product or service.
  - *The purpose of the Commercialization Plan is to validate a commercial hypothesis and inform the basis for commercialization efforts beyond the scope of MII Technology Assessment.*
  - **A final Commercialization Plan document will be the deliverable for this part of the Technology Assessment project.**

Project funding will be subject to the successful completion of several project milestones. Applicants should be aware that project funding can be terminated at any point during the project if early project data suggests that the company's progress will not be sufficient for the intended commercial application or if the project is not reasonably progressing as originally proposed.

How to Apply:

Meet your Site Miner

Site Miners are individuals selected by the Qualifying Universities to assist faculty and start-ups in submitting a strong, business-oriented application focused on commercialization. These individuals work as liaisons between the applicant and the MII program by providing valuable input and feedback prior to submission of an MII application.

- **The MII program requires each applicant to engage with a Site Miner, at least one month (30 days) before application submission. Involving a Site Miner early in the application process increases an applicant's odds of success.**
- Every application must include a current, dated letter of approval, signed by a Site Miner stating their interaction with the applicant has been at least one-month (30 days) prior to application submission to meet compliance requirements. (Visit the MII web page, under "Site Miners" for the letter of support template.)
- The Site Miners are entrusted with the task of presenting the application and responding to initial reviewer concerns during the final review session.

If you do not know your Site Miner's name, please email MII@tedcomd.com for assistance or speak with your respective Institution's technology commercialization office.

Draft your Application

There are two required components to any MII Technology Assessment application – the General Application Information and the Full Application. Each component is described at length in the following sections.

General Application Information is entered directly into an online application submission portal and includes:

- Fill in the required DEI information
  - o Obtain your unique TEDCO ID number. Pursuant to the Economic Development Article of the Maryland Code, TEDCO is required to foster inclusive and diverse entrepreneurship and innovation throughout Maryland. Accordingly, TEDCO is now collecting race, gender, and ethnicity data to be used, in aggregate, to better understand the communities that are accessing TEDCO's resources/funding.
  - o Before you apply for the MII Technology Assessment program, please visit (https://tedco.tfaforms.net/74) to fill in the particulars and obtain a unique TEDCO ID number. This number is unique to your contact record, and you will need this number to apply to any of the programs under TEDCO in the future.
- A proposed project title (15 words max.),
- The proposed project duration (9 months or less),
- The Principal Investigator profile information,
- An indication of whether the application is new or is revised (resubmitted),
- The name of the Qualifying University(ies),

- If it is a Joint Application provide the collaborating university and collaborating investigator information
- An indication of the MII Phase for which an application is being submitted,
- A non-proprietary abstract of the proposal (300 words max with no special characters),
- The total budget requested for the proposed project,
- The Technology disclosure reference number and the status of the intellectual property
- A selection of the technology type/category (use the best option),
- An indication that a signed letter of approval from a technology transfer office is included in the Full Application,
- An indication that a signed letter of approval from an MII Site Miner is included in the Full Application.
- An indication that the applicant has obtained approval from their research/grants administration office before applying **(a letter from the office is not required).**

The Full Application is intended to provide enough information such that a group of reviewers can sufficiently evaluate the commercial value of a Technology. This document must:
- Be uploaded to the online application submission portal as a single Adobe PDF file.
- Be formatted as single-sided document, with one-inch margins, and a font size of at least 12 points.
  - Except for figures, figure legend and tables where a font of at least 10 points is acceptable.
- Not exceed 15 pages total (Submissions exceeding 15 pages will be rejected without consideration),
- Include all criteria described in the Full Application Components section below.

All MII Technology Assessment applications must be submitted using the MII online application portal which can be accessed at:

www.tedcomd.com/funding/maryland-innovation-initiative

Complete applications for each project must be submitted by 5:00pm on the 15th day (or first business day thereafter) of each submission month: July, October, January, and April. Applications submitted after 5:00PM will be rejected without consideration.

Full Application Components:

Information requested in the Full Application for Technology Assessment should include all the following sections:

- Cover Page (1-page)
- Technology Validation Proposal (5-page limit)
- Commercialization Plan Proposal (1 page limit)
- Supplemental Materials
    - Economic and Societal Impact Statement
    - A signed letter from the Qualifying University's Technology Transfer Office
    - A signed letter from the appropriate Site Miner
        - *All letters must be dated within one month (30 days) of application submission date.*
    - Optional supplemental materials
    - Responses to reviewer feedback for resubmissions (if applicable)

Applications must address all criteria under the following sections.

Page Count Checklist:

-	Cover Page	1 page
-	Technology Validation	5 pages
-	Commercialization Plan Development	1 page
-	TTO letter	1 page
-	Site Miner letter	1 page
		9 pages subtotal
-	Optional supplemental materials (remaining 5-6 pages)	
-	Support Letters	
-	References	
-	Etc…	
-	*Resubmission Response to comments (if applicable)*	*1 page*

A complete submission (all sections) **cannot exceed a total of 15 pages,** or it will be rejected without consideration.

Cover Page (1 page)

- The title of the project (15 words max)
- The name of the Qualifying University(ies) that is (are) applying for funding or owns the subject Technology.
- The name of the principal investigator (PI) who will be responsible for the project.
- The total amount of funding requested.

Technology Validation (5 pages, scored)

A. Technology Description and Status, Intellectual Property (Weighted 1x)
- Problem Statement
  - Describe the problem with the status quo or currently accepted best practice.
    - Who has this problem? How big is the problem?
- Solution Statement
  - Explain the overall significance of solving the specific problem that a solution will bring to customers – cost savings, time savings, convenience, improved outcomes, etc...
    - Focus on customer benefits over features (the solution may not always be "better, faster, cheaper…")
- Technology Description and Status
  - Explain what the Technology is and what it does.
  - Discuss the developmental status of the Technology.
    - Express through studies completed, conclusions derived, technology readiness level (TRL), etc.
  - Provide strong data/evidence to indicate the Technology is likely to work as predicted.
    - Figures and tables are encouraged.
  - Describe how the Technology is unique/novel in its approach to creating a product or service that solves the problem relative to existing approaches in the scientific literature and among other commercial products.
    - Define any specific indications, use-cases, and environments that are being addressed.
  - If possible, discuss additional, potential commercial products or services that could be created through the development of the Technology.
- Intellectual Property
  - Describe the intellectual property secured for the Technology and future strategies for strengthening the Technology's intellectual property portfolio.
    - Patents, patent applications, copyrights, trade secrets, etc.
  - A "light-to-medium" landscape analysis of the intellectual property (e.g., the results of a patent search) should also be included.
    - An FTO is not expected for Technology Assessment applications.

B. Market Analysis and Competition (Weighted 1x)
- Market Analysis
  - Describe the value proposition of the Technology as a product or service to a targeted market segment(s).
    - Vertical Market Segmentation
      - What is the primary, secondary, target market segment?
    - Market Size in $ (approximate)

- What is the total addressable market (TAM)?
- What is the serviceable available market (SAM)?
- What is the serviceable obtainable market (SOM) (target market)?
- Market size may also be represented using a "bottom-up" model based on specific customer segments and comparable product prices and sales.
  - Target Market Trends
    - What is assumed or forecasted in the target market that supports a commercial opportunity for the Technology as a product or service?
  - o Describe how the Technology as a product or service will be used in the target market.
  - o Discuss why customers in the target market will value the solution proposed by the Technology (e.g. "product-market fit")
- Competition
  - o Identify and describe alternatives and competitors to the Technology in the target market and clearly outline a general description of the applicant's competitive advantages over competing products and services.
  - o A competitive analysis matrix could be helpful to demonstrate and quantify advantages, features, capabilities, etc...
  - o What are the relative strengths, weaknesses, opportunities, and threats (SWOT analysis) of the Technology among competitors or competitive practices?

C. Commercialization Pathway and Risk Assessment (Weighted 1x)
- Commercialization Pathway
  - o Will the commercial development of the Technology continue through a licensing opportunity to industry or be led by a Start-up?
  - o Describe a notional business model that will support the Technology product or service.
    - What specific value propositions can this deliver to the target market?
      - Refrain from generalities and holistic economic benefits and discuss what functions the Technology as a solution provides to whom at an operational level.
  - o Provide an overview of key technical benchmarks and developmental milestones that must be achieved to prepare the Technology to be commercialized.
    - What performance standards, product technical or economic validation, scaling or integration requirements, head-to-head comparisons, clinical trials, documentation, etc. represent significant value in the target market?
    - If relevant, describe any possible regulatory approvals needed to bring the product to market.

- If relevant, a notion of future funding amounts required to achieve each developmental milestone may be helpful to demonstrate commercial feasibility.
  - Include a list of specific funding sources or programs that the applicant has leveraged as prospective means of supporting product development – grants, venture capital, pitch competitions, accelerators, contracts, etc.
  - Provide a list of the team members that will be leading the Technology Assessment award and briefly describe why their involvement is relevant to developing the technology for commercial purposes.
    - Embedded links to LinkedIn profiles are encouraged.
- Risk Assessment
  - Provide a discussion of significant technical risks that could impede development of the Technology along the commercial pathway and strategies to address them.

D. Project Milestones, and Detailed Budget/Justification (Weighted 2x)
- Project Milestones
  - Include a summary of the proposed 9-month MII Technology Assessment project and the anticipated technical milestones with a clear timeline and cost structure. Indicate which milestones will be completed by the applicant's mid-term presentation (4.5 months into the project) while describing how the completion of each milestone brings the product closer to the commercial market.
    - The scope of work proposed in each milestone should support the pursuit of commercial value.
      - What key proof of concept data will be collected to strengthen the value proposition for the Technology as a commercial opportunity?
      - Upon what evidence are benchmarks established?
      - What is the commercial significance of achieving each milestone?
    - Milestones must be quantifiable and measurable so it will be obvious when they have been successfully, or unsuccessfully, met.
    - An accompanying GANTT Chart could be helpful to illustrate the timeline for expected deliverables.
- Detailed Budget and Justification
  - *A detailed budget of the costs required to conduct the project must be provided separately in the online application portal following the format and guidance provided in Appendix A.*
  - A written justification for project costs should be provided. Any changes to the approved budgets (greater than +\- 10%) must be submitted through the online award management portal in writing to the Program Manager for approval prior to the completion date.

Commercialization Plan Proposal (1 page, not scored)

In the Full Application, the purpose of the Commercialization Plan Proposal is to outline a scope of work intended to validate a commercial hypothesis and should address how the applicant will build on the initial Market Analysis, Competition, Commercialization Pathway, and Risk Assessment to form a complete Commercialization Plan as a project deliverable. This section must include a notional list of activities to be taken during the 9-month Technology Assessment project timeline and within the allocated budget to validate assumptions, test hypothesis, and confirm the existence of a commercial opportunity to a target market so that a viable commercial pathway and go-to-market strategy is ready once an award is completed.

The Commercialization Plan Proposal must be included as a separate, one-page portion of the Full Application.

Common proposed activities for this section may include:
- Examining basic steps required to create a viable business model.
- Conducting a market assessment exercise that will inform and validate a go-to market strategy.
- Undergoing Customer discovery, for example through participation in a university run or national I-Corps Program
- Exploring potential viable revenue models
- Identifying possible funding, financing, and regulatory strategies
- Company formation related activities

A comprehensive Commercialization Plan is a key deliverable of the Technology Assessment project with a total allowance of $15,000. Typical spending might include costs for reimbursing a market analyst to conduct market research, contracting with industry experts (does not include an agency to find the talent, or advertising to attract the talent), engaging an interim CEO, developing a regulatory strategy, developing a reimbursement strategy, or covering costs associated with gathering and assembling the information required for the development of a Commercialization Plan.

The Commercialization Plan budget cannot be intermingled, for any reason, into the Technology Assessment budget. They must remain separate budget.

With the understanding the Commercialization Plan will develop over the duration of the award, applicants will have an opportunity to refine their project at the Mid-term Presentation, as described in the "Reporting Requirements" section of this RFA.

Additional Considerations for the Commercialization Plan Proposal and Budget:

TEDCO recognizes the challenges associated with developing a commercialization plan for an early-stage technology and understands that any such strategy is likely to change during the development of a commercial product. As a commercialization program, the goal of MII is to ensure that there is at least one viable pathway toward commercialization for a technology and that such a pathway has been carefully considered and can be clearly described by the applicant. To that end, applicants may spend up to $5000 on I-Corps and up to $4500 may be spent on indirect costs associated with Company Formation (See details below)

I-Corps

The I-Corps program focuses on training innovators to get out of the office or lab, and into discussions with those identified as target customers to validate that the innovation meets their needs. The Maryland Innovation Initiative (MII) encourages applicants to engage in the I-Corps "customer discovery" process before or during the Technology Assessment submission. The more first-hand data and feedback an applicant has on their target market, the more effective any investment will be in that technology or business. This program is optional for MII applicants.

An applicant of MII the Technology Assessment phase may allocate <u>up to $5000</u> of its commercialization planning budget expenses toward the I-Corps regional or short course. (<u>MII funds *may not* be used in the national I-Corps cohort where participants are already funded.</u>)

- Funds may be used to offset <u>domestic</u> travel specifically for customer discovery during the cohort.
- Funds may be used to reimburse a mentor for time advising the team during the cohort.
- Any budgeted amount for I-Corps must be detailed in the intended use of the funds.
- A signed, dated letter by the I-Corps Director must be included in the MII final report package, indicating the applicants' active involvement and completion of I-Corps. The letter must include the dates of the cohort.
- Applicants *may not* use the funds to pay for the time of the entrepreneurial lead, or PI.
- *To be reimbursed for I-Corps expenses, as outlined, all costs for I-Corps must occur during the MII effective agreement dates.*

Company Formation

Up to $4,500 of Commercialization Planning funds may be used for company formation costs or for a University Start-up's attorney costs associated with the licensing of a Technology. The Commercialization Plan budget may not be used to pay for university staff time and may not be used to pay licensing fees or other consideration for a license or option agreement with a Qualifying University (including the reimbursement of patent expenses). Commercialization Planning funds may not be used to pay for the Technology Assessment budget expenses.

Supplemental Materials (Required, not scored)

References, cover page, support letters, one-page resubmission response to reviewer comments etc., which are not counted as part of the 5 pages; however, a complete submission cannot exceed 15 pages or will be rejected without consideration. Applications must provide the following **supplemental materials**, which are not included in the page count constraint (See Page Count Checklist Below):

- An Economic and Societal Impact Statement highlighting the potential economic and societal impact on Maryland. May be captured in terms of improving infrastructure; public health; workforce development; inclusion and support of disadvantaged and marginalized individuals and communities; public safety; commonwealth; jobs created, etc.
- A current signed letter from the Qualifying University's technology transfer office indicating their approval of the project, certifying the Technology's disclosure reference number and the status of the intellectual property.
- A current signed letter from the appropriate Site Miner indicating their support of the faculty or entrepreneur submission and the fact that they have been engaged with the PI on the application a minimum of one-month (30 days) prior to submission.
- Optional Supplemental Materials may include:
    - Letters of Support for the project from interested parties (strategic partners, investors, corporate sponsors, potential customers, etc.
    - An Appendix
        - List of references
        - Figures, tables, SoWs, proposals, quotes, IRB applications/approvals, Institutional Animal Care and Use Committee, etc.

Resubmissions

Response to Reviewer's Comments. If an applicant's proposal is initially rejected, and the applicant chooses to reapply for Program funding, the applicant must submit a written response to the reviewers' comments including how those comments were addressed in the resubmitted application. The Response to Reviewer's Comments may not exceed one (1) page. and is not counted as part of the five-page application count but is counted toward the maximum of 15 pages. (Also See Page Count Checklist Below)

Include an *updated* letter from the Qualifying University's technology transfer office indicating if they are engaged in good faith negotiations with the Applicant or have executed a license agreement with the applicant for a subject Technology; please indicate any current activity or updates to tech transfer activities.

Include an *updated* letter from the appropriate Site Miner indicating their current support of this faculty or entrepreneur submission and the fact that they have provided input on the application a minimum of one-month (30 days) prior to submission.

Review Process:

Compliance Review
All applications for Program awards will be initially reviewed by MII staff to ensure that they meet the minimum requirements, as specified in this RFA (the "Compliance Review"). Applications not meeting the minimum requirements will be rejected without further consideration and the applicant will be notified.

Application Review Process
Following the Compliance Review, all Applications will be assigned to several reviewers for review and preliminary scoring. All Applications, receiving average scores above a threshold score of 3.0 will be brought to the full MII Review Committee for subsequent discussion and final scoring.

The MII Review Committee will consist of representatives of the business and investor community and MII or TEDCO staff. *Applications scoring below the threshold may be brought to the Review Meeting under extraordinary circumstances, which shall be determined at the sole discretion of the Executive Director.*

After presentation of the preliminary scores and discussion of applications at the MII Review Committee Meeting, applications will receive a final score based on an average of all the overall scores provided by the MII Review Committee Members.

All Applications will be ranked according to their final scores and the top scoring applications will be recommended to the MII Board of Directors for review and final approval approximately 75 days (about 2 and a half months) after the initial submission.

Site Miners will have access to the reviewer comments and final scores and recommendations for Board consideration with enough time to help applicants prepare a resubmission.

All Applications recommended for funding by the Executive Director will be considered by the Maryland Innovation Initiative Board of Directors.

Review Criteria:

Applicants will be evaluated based on their ability to address **each criterion listed in sections A through D of the Technology Validation proposal in their Full Application**. Scoring consideration will be contingent on how completely the applicant has provided information requested for each section and how convincingly the applicant has made a case for the commercial opportunity based on the subject Technology.

Other criteria that will be considered by the reviewers may include: the novelty of the Technology's approach to solving the problem, the strength of the Technology's competitive advantages, the likelihood that a University Start-up or licensing opportunity will be created based on the Technology, and the team's ability to carry out the project.

Scoring:

Reviewers will use the following system for scoring applications:

Score	Description
5 – Excellent	The applicant has included all the required information and has made a compelling argument in support of the criterion being scored.
4 – Above Average	The applicant has included all the required information and has made a strong argument in support of the criterion being scored.
3 – Good	The applicant has included most of the required information and has made a good argument in support of the criterion being scored.
2 – Fair	The applicant has provided most of the required information but has made a fair argument in support of the criterion being scored.
1 – Poor	The applicant has not provided enough of the required information to make a fair argument in support of the criterion being scored.

Application and Review Date Schedule FY2025 – Technology Assessment Presentations:

(Final Dates and times will be assigned by the MII Staff)

Application Cycle Deadlines	Review Meetings 9:30am – 2:30pm
7/15/2024	9/3/2024 (IT/physical sciences)
	9/5/2024 (life sciences)
10/15/2024	12/3/2024 (IT/physical sciences)
	12/5/2024 (life sciences)
1/15/2025	3/4/2025 (IT/physical -sciences)
	3/6/2025 (life sciences)
4/15/2025	6/3/2025 (IT/physical -sciences)
	6/5/2025 (life sciences)

Closing and Award Payments:

Once a project has been approved, an agreement will be executed with the Qualifying University and **the Principal Investigator will be asked to immediately start working on the Project**. The agreement will detail the award conditions and include an agreed upon number of mid-term and final milestones for each project and the dates that Mid-term and final project reports (as described below) are due.

All PIs are expected to present at TEDCO offices or virtually at MII's option for the mid-term review. Details will be sent about one month before the project's mid-term, based on the date of the executed agreement. The PI must know the start date (the signed agreement date) and the end data of their Technology Assessment grant.

Any changes to the original, approved budget must be submitted to the online award management system and approved by the Program Manager and Executive Director, *in advance*. The final expenditure report must match, including subcategories, the approved budget, within plus/minus 10% to be approved.

Award payments for Technology Assessment projects will be made as follows: 25% following execution of the agreement, 50% upon submission and approval of a Mid-term presentation and the successful completion of approved milestones, and 25% upon submission and approval of a Final Report and Commercialization Plan.

In all cases, any unused funds must be returned to TEDCO serving in its capacity as the administrator of the Program.

Reporting Requirements and Deliverables:

Each entity involved in the proposed project in the submitted application is expected to meet the reporting timelines and milestones, as submitted by the PI, who will be held accountable as part of the mid-term and final report review. Additionally, the execution of any subcontracts and joint arrangements included as part of an application are ultimately the responsibility of the PI.

Technology Assessment awardees must submit the following reports to MII including:

Program Manager Meetings – each applicant must meet with the MII Program Manager at least twice, once before the mid–term and project end. This is to assist each awardee in understanding and meeting expectations for the program. This is also an opportunity for the awardee to share feedback, discuss ideas and ask for additional assistance. *Three touch points will occur during the award.*

Mid-term Reports, (PowerPoint presentation at TEDCO offices or virtually at MII's option) which must include a description of project activities and results to date, the progress toward meeting mid-term milestones, an accounting of expenditures charged to the award, and details on the proposed Commercialization Plan progress and budget – MII will expect copies of the slides one week in advance of the Mid-term presentation.

Final Report, **(limited to 5 single-sided pages)** which must include:
- An overview of all activities undertaken during the funded project.
- A description of the results of the project and the success in achieving the milestones listed in Exhibit A (the application).
- The impact of the technical milestone results on commercialization.
- Request an accounting of all Project expenditures incurred from the accounting office to be sent directly to MII.

Commercialization Plan, (no page limit, submitted separately from the Final Report)
- A complete Commercialization Plan deliverable is a document which may be submitted to MII in the form of a text document or slide deck that must report efforts proposed in the Full Application to validate the commercial hypothesis and inform the basis for commercialization efforts beyond the scope of MII Technology Assessment.
- Ultimately, the document should provide clear and detailed guidance that a start-up team or licensing partner may reference in pursuit of immediate next steps to advance the commercial development of the Technology as a product or service and should completely answer the following questions:
  - What is the product or service?
    - Upon what intellectual property is it based?
  - Who is the target customer?
    - Who are the critical stakeholders that will purchase the product or service?

- What is the size of the market opportunity that these customers represent?
- What unit of economic value do these customers prioritize in existing acquisition processes and purchase decisions?
- Why will they be interested in the solution proposed by the Technology as a product or service?
  - What is the business model?
    - What specific value propositions are being delivered to the target customer?
  - What are the key demonstrations, validations, and proofs that must be performed and captured to prove the ability to deliver the value propositions to customers and validate adoption?
    - Upon what performance standards, product technical or economic validation, scaling or integration requirements, head-to-head comparisons, clinical trials, documentation, etc. are claims based?
  - Are there regulatory approvals needed to bring the product to market?
    - If so, what is the pathway?
    - What progress has been made toward seeking approvals?
      - Are there hurdles?
      - What additional data is required?
  - What is the "Go-to-Market" strategy?
    - What must be done to execute the business model and capture a target market opportunity?
    - What must be done to raise awareness of and ultimately deliver the product or service to the target customer?
      - What type of marketing strategy will primarily drive transactions? (e.g. B2C, B2B, B2G, etc.)
  - What are the future fundraising plans and fiscal needs required to execute the plan?
    - Will the team apply for MII Company Formation?
    - What other follow-on funding has been or will be pursued?
      - Grants (ex: SBIR/STTR)
      - Investment (ex: angel, VC, other early-stage dilutive capital)
- A complete Commercialization Plan may include the following components:
  - Executive Summary
  - Business Plan
  - Pitch Deck (if applicable)
  - *A sample, detailed outline for each component can be found in Appendix B*

Program Information:

Inquiries regarding the Maryland Innovation Initiative program should be directed to:

Griffin St Louis
Program Manager
gstlouis@tedcomd.com

Silvia Goncalves
Assistant Manager
sgoncalves@tedcomd.com

Valery Gutierrez
Administrative Coordinator
vgutierrez@tedcomd.com

All administrative, contractual, and accounting questions should be directed to Silvia Goncalves.

Appendix A: Budget

The Technology Assessment budget (maximum $130,000, if sole; or $180,000, if joint) must be entered separately into the AmpliFund spread sheet in tabular form as indicated in the example below, and each line item should be classified into one of the following categories and clearly indicated in the budget.

      a. Personnel – Salaries,
      b. Personnel – Fringe Benefits,
      c. Equipment,
      d. Materials & Supplies,
      e. Other Direct Costs, and
      f. Commercialization Plan Development

Example of a budget with category headings and sample line items:

EXAMPLE BUDGET ITEMS	AMOUNT
Personnel - Salaries	
Investigator A	30,000
Technician	10,000
Personnel – Fringe Benefits	
Investigator A	9,900
Technician	3,300
Health Insurance	-
Equipment	
Centrifuge	1,200
Computer/Software	2,500
Materials and Supplies	
Cell Lines	5,000
Pipettes/Glassware	600
Prototype design Animal Study Costs	10,000
Other Direct Costs	
Machining Costs	10,000
Subcontract to Acme, Inc.	20,000
Tuition	-
Patent Expenses	Up to 12,500
Subtotal	115,000
COMMERCIALIZATION PLAN DEVELOPMENT	
FDA Regulatory consultant	3,000
Business Consultant	2,500
Company Formation	Up to 4,500
I-Corps	Up to 5,000
TOTAL	$130,000

Up to $12,500 of the Technology Validation budget may be allocated by a Qualifying University TTO to pay for patent expenses related to the Technology, which are incurred during or prior to the Technology Assessment Project.

The Program will not allow Qualifying Universities to include facilities and administrative charges (i.e., indirect charges) except for patent expenses discussed above.

Appendix B: Commercialization Plan

Executive Summary (1-2 pages)
- An up to two (2) page Executive Summary of the Start-up company or licensing opportunity. The summary should provide a clear, concise, but complete overview of the start-up or licensing opportunity with the intent of grabbing a reader's attention and piquing their interest to learn more about it. Realize that this document may be the initial body of information that conveys the value of the company or licensing opportunity to a potential stakeholder who may have limited bandwidth. In essence, an Executive Summary is a resume that will be used to communicate with and attract additional resources. As such, the two-page Executive Summary must include the following elements:
- Header
  - Company name, logo, address, website (if applicable)
  - CEO/PI name, phone, email
  - Relevant industry category, # of employees
- Problem
  - What is the problem? What is our solution? Who cares? Why should they care? What opportunity is there to be had by solving this problem?
- Market
  - What is the market size, opportunity, growth rate, other notable trends? How is it segmented? What is the target market? Who is the target customer (may not be the same as the end-user)? Of what alternatives/competitors in the market should an interested potential stakeholder be aware?
- Value Proposition
  - A brief history/background of the company or team. Why is this the company or team that can solve the problem and capture the market opportunity?
  - What unique qualities poise this company or team to establish a strong and maintain a defensible market position (IP, domain expertise, etc.) against alternatives and competitors?
  - What evidence can you provide to a potential stakeholder that suggests customers will purchase your product or service based on your relative value?
  - Through first-hand market data (customer interviews, I-Corps, etc.), what product/service features do/can you provide that your customers find valuable?
  - How do these features give the company or team a competitive advantage?

- Business Model
  - Product development – How will you build and manufacture your product to meet the needs of the target customer? How much will/does it cost? At what price will you sell it?
    - Go-to-Market strategy - How will you convince the target customer to purchase your product/service and through what means? How many do you need to sell and how much will it cost to make a sale?
- Team
  - Provide a brief description of the team (executives, advisors, key personnel), their names, titles, biographic information, that will be leading the opportunity and guiding the commercial pathway of the product/service.
  - Why is their involvement essential to success? What valuable experience do they offer to this end? How will their involvement poise the company or team to receive follow-on funding and generate revenue?
    - If a company is being formed and building a team this may include a plan to build and attract talent to fill needed roles.
- Funding and Financial Projections
  - Funds attracted to date may include investment and grant awards that specify from whom the funding was received, the amount, and a brief description of how the funding is being leveraged.
  - A financial projection table that conveys the funding needed over time for the opportunity to breakeven. Should have a dollar amount over a definite timeline that specifies for what follow-on funding will be used. This may change depending on evolving circumstances.
- *There is no stylistic preference for how you choose to express the information above. For example, you may choose to use graphics and figures to illustrate certain elements. Regardless, the information provided in the Executive Summary should clearly, concisely, and completely provide an overview of the Start-up or licensing opportunity.*

Business Plan (no page limit)
- Market Research and Customer Discovery / Customer Segments / Product/Market Fit (for either startup or licensing scenario)
  - Based on customer discovery interviews/results with actual prospective customers or licensees, including contacts and quotes.
- Addressable Market Size / Growth Projections / Market Risks (using BCC Research, UMD Libraries business databases etc.)
- Licensing / Partnership Opportunities and Needs
- Competitive Landscape
- IP Landscape and Strategy
- Technological Risks
- Regulatory Landscape and Risks (if applicable)
- Execution Risks
- Revenue Streams

- Go-To-Market Strategy
  - R&D, MVP development
  - Manufacturing and distribution needs and plan (if applicable)
  - Regulatory plan (if applicable)
  - Beachhead market
  - Marketing and Sales
  - Secondary markets
- Funding Plan: How much money is needed, how it will be used, and where will it come from
- Financial Pro Forma (costs/burn, pricing, margins, production costs)
- Detailed milestone-driven 24-months plan
  - For each month: Milestone(s), who is responsible, success metrics, funding requirement and availability.
- General plan for additional 3-5 years, including additional products or services (if applicable)
- Team/Talent development plan: organizational matrix with timeline
  - Full time business lead/CEO
  - Full time sales staff
  - R&D team
  - Additional team / talent as needed to support company operations and growth.

Pitch Deck (*10-15 slides)*
- Executive Summary/Elevator Pitch
- What problem are you solving?
- How big is the problem (total addressable market)
- How are you solving the problem: innovation and value proposition?
- Competitive landscape
- Risk analysis: regulatory, business, and technological
- Go to market strategy
- 5-year EBIDTA (or hockey stick chart)
- Funding needs and strategy
- Team