



THE INNOVATION INSTITUTE

at the MassTech Collaborative

Collaborative Research & Development Matching Grant Program

Applicant Workshop Presentation

2021

R&D Fund Going Forward

\$626 Million Economic Development Bill signed by Governor Baker

The Bill authorizes up to \$50M over 5 years for R&D Fund for Stimulus:

- *Anticipate \$8M+ in new awards in FY'22*
- *Traditional R&D Fund cited for use in Governor's "Partnerships for Recovery" economic recovery plan*

The Opportunity Moving Forward:

- *Pilot more awards...smaller awards for University-Industry Partnerships that are close to marketplace.*
- *Make investments higher on Technology Readiness Levels (TRL's)*
- *Allow more institutions to participate in Collaborative Research Matching Grant Program*

"Our current circumstances call for a plan with the size and scope to match the urgency we need to address the most pressing challenges we now face"

– Mike Kennealy, Secretary of Housing and Economic Development



R&D Fund – Building Upon Success

The Innovation Institute's work intersects with industry through our University Research Center Portfolio. This work falls into four categories:

- Advanced Manufacturing
- Advanced Materials
- Systems Integration
- Advanced Computing



Building Upon Success:

- **\$28M Awarded**
- **\$50M in Matching Contributions**
- **\$78M Total across 10 Awards**

Current & Past R&D Fund Grantees :

- Worcester Polytechnic Institute - Ventilator Development Project
- Harvard/Boston University - New England Research Cloud
- Woods Hole Oceanographic Institute - D'Works Innovation Fund
- Worcester Polytechnic Institute's - PracticePoint at WPI for Smart, Secure Medical Devices
- UMass-Amherst Data Science/Cybersecurity Collaborative Research and Education
- Northeastern University's Advanced Nanomanufacturing Cluster for Smart Sensors and Materials
- UMass-Lowell Printed Electronics Research Collaborative (PERC)
- Woods Hole Oceanographic Institution's - Center for Marine Robotics
- Boston University - Massachusetts Open Cloud project

Expanded Research & DEVELOPMENT Matching Grant Program

The purpose of the revised solicitation is to stimulate **ECONOMIC RECOVERY** through **COLLABORATIVE PROJECTS** with industry leading to increased business revenues, hiring & upskilling in the **NEAR TERM**.

- **Economic Recovery** – direct impact on applicants & partners; spill-over impacts in markets; COVID-19 mitigation.
- **Collaborative Projects** – infrastructure investments supporting development & demonstration of new products/processes.
- **Near Term Impacts** – as soon as possible – we are crowdsourcing what is feasible (not 3-5 years).



Applicants

The following entities are encouraged to form partnerships and collaborate with industry on joint applications:

Traditional Higher Education Partners - Institutions conducting STEM and related research & training in relevant academic disciplines, such as Community Colleges.

Technology & Innovation Partners - Organizations that can contribute to technology development and commercialization, such as Industry Organizations.

Other R&D Assets - Non-university organizations that can contribute a necessary or unique element to an application, such as Workforce Training Organizations.

Regional Assets - Entities that can enhance dissemination of R&D outcomes to companies and clusters, contribute to outcomes or otherwise promote geographical equity, such as Incubators & Accelerators and Affiliated Organizations.

University-Based Research Centers



Threshold Requirements

- There must be a research/development element to the Collaborative project.
- Applications must identify and describe an opportunity that focuses on:
 - Collaborative project intended to result in job growth & business revenue in the near term.
 - Contributing to the expansion of a key industry cluster(s).
- All applications must include collaboration from two or more partners.
- Industry engagement is required.
- Applicants must demonstrate an ability to secure the statutory 1:1 matching funds requirement.



FUNDING CAN ONLY SUPPORT CAPITAL EXPENDITURES - purchase of equipment and the development of new technology platforms or systems, the acquisition of land and existing facilities, construction of new buildings and the renovation of existing buildings.

Evaluation Considerations & Criteria

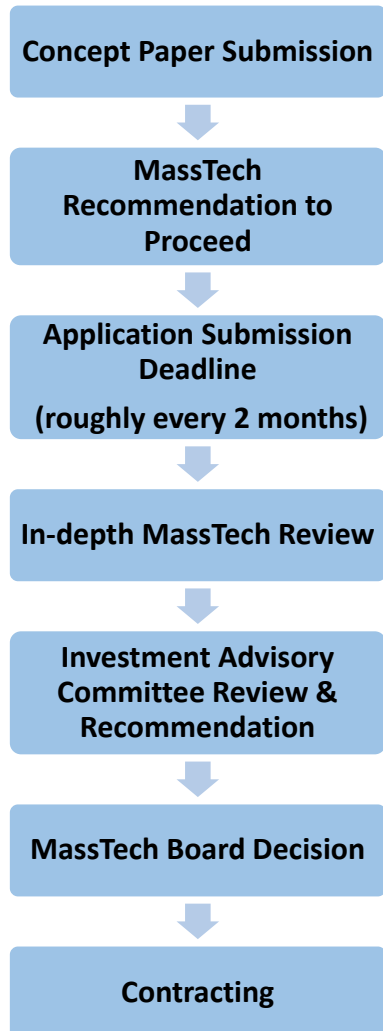
FUNDING DECISIONS WILL BE MADE BASED UPON THE ANTICIPATED IMPACT THAT THE PROPOSED R&D PROJECT WILL HAVE ON THE MASSACHUSETTS ECONOMY.

Successful applications will prioritize among the following criteria for their project:

- **Strength of R&D Collaboration**
- **Relevance to Focus Industry/Technology**
- **Cluster-Based Strategy & Effects on Focus Industry/Technology**
- **Regional Impact Beyond Traditional Innovation Centers**
- **Workforce Development, Talent Pipeline & Retention**
- **Scientific & Technological Merit**
- **Equality**



Solicitation -- Mechanics



- Applicants are welcome to submit at any time.
 - Proposals will be reviewed on a bimonthly basis (as schedule allows).
 - Decisions for applicants approximately 2 months following submittal
 - Concept papers (“pre-application”) reviewed as received, with replies & questions within approximately 3 weeks
 - Funding Levels:
 - Level One - \$3-5 million awards for project with duration of ~1-2 years
 - Level Two - up to \$1 Million for projects with near term impacts
- NOTE: Applicants may exceed a \$1 Million funding for projects that offer a tangible near term impact on economic recovery in any of the priority focus areas

SOLICITATION CAN BE FOUND AT: <https://masstech.org/procurements>

Focus Areas

Applications should incorporate MassTech priority industries & technologies listed below.

- **Cybersecurity**
- **Robotics**
- **Defense & Aerospace**
- **Marine Technology**
- **Digital Health**
- **Artificial Intelligence**
- **Quantum Mechanics**
- **FinTech**
- **Blockchain**





APPENDIX



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Summary of Collaborative R&D Matching Grant Program:

- ❑ \$28M+ in awards to date, leveraging more than \$50M in matching contributions
- ❑ Ten awards made to projects across the Commonwealth, helping support innovative industry/academic collaborations and R&D infrastructure
- ❑ First award announced in April 2014 with the most recent made in February 2020
- ❑ Emerging industries supported: cloud computing, marine robotics, printed electronics, cybersecurity, nanomaterials/smart sensors
- ❑ 14 new industry partnerships formed in 2020
- ❑ 37 Intellectual Property and Licensing Agreements generated in 2020.

