

APPROVED MINUTES

TWO HUNDRED AND SEVENTY THIRD MEETING

of the

EXECUTIVE COMMITTEE

of the

MASSACHUSETTS TECHNOLOGY PARK CORPORATION

September 15, 2021
Zoom Videoconference

The Two Hundred Seventy Third Meeting of the Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation (“Mass Tech Collaborative”) was held on September 15, 2021, via Zoom videoconference pursuant to notice duly given to the Directors and publicly posted on the Mass Tech Collaborative website with corresponding notice provided to the Office of the Secretary of State and the Executive Office for Administration and Finance.

The following members of the Mass Tech Collaborative Executive Committee were present and participated: Secretary of Housing and Economic Development Mike Kennealy (represented by Damon Cox of the Executive Office of Housing and Economic Development), Alexandra Drane, Christina Royal, and Julie Chen.

The following members of the Mass Tech Collaborative Board of Directors were present and participated: Patrick Lynch and Nate Walton.

The following members of the Mass Tech Collaborative staff were present: Carolyn Kirk, Brianna Wehrs, Michael Baldino, Stephanie Helm, Lisa Erlandson, William Fuqua, Jennifer Saubermann, James Byrnes, Holly Lucas Murphy, Laurance Stuntz, Pat Larkin, Joseph Downing, Brian Noyes, Kelly Kleanthous, Megan Marzsalek, and Christine Nolan.

Mr. Cox did a roll call of attendance for the Mass Tech Executive Committee, observed the presence of quorum, and called the meeting of the Mass Tech Executive Committee to order at 2:06 p.m.

Agenda Item I Approval of Minutes

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation, acting on behalf of the full Board pursuant to section

three of Chapter Forty J of the General Laws of the Commonwealth, hereby adopts the Draft Minutes of the open session portion of the Two Hundred and Seventy Second Meeting of the Executive Committee, held on June 24, 2021 via Zoom teleconference, as the formal Minutes thereof.

Agenda Item II Report of the Chairperson

Mr. Cox had no updates and yielded his time to Ms. Kirk.

Agenda Item III Report of the Executive Director

Ms. Kirk indicated she would be providing a personnel and organizational chart update, beginning with the Massachusetts eHealth Institute (MeHI), stating that this information had previously been presented to the Personnel and Governance Committee. Sharing the organizational chart from June, Ms. Kirk said that the MeHI Medicaid team had been on a ramp down timetable as their federally funded contract through the Executive Office of Health and Human Services (“EOHHS”) was coming to an end, which has been accounted for in the FY22 budget. She then explained that the HIway team is also supported with federal funds through EOHHS, and that MassTech got unexpected news over the summer that those funds would be drastically cut, resulting in a 75% loss of the HIway account management team, and the loss of the entire outreach and education team. Ms. Kirk stated that notice has been given to those employees that their employment is ending at the end of September, which was difficult. Ms. Kirk explained that the impact of the reduction of the HIway contract on MassTech's budget is almost \$1 million including a portion of that amount used for associated MassTech central office expenses. In response to this, Ms. Kirk indicated that the MassTech team has been looking for ways to offset the loss of contract revenue in FY22 by pulling from resources within MeHI rather than other divisions. Ms. Kirk went on to explain that there are FY23 implications as well, and we must figure out ways to account for the loss of contract revenue going forward. She stated that because of lack of a MassTech appropriation, all of MassTech's revenue comes from programs, and we need to find sustained revenue sources. Ms. Kirk said that she had no solutions today, but she is actively working the problem with the Executive Office of Housing and Economic Development.

Ms. Kirk then stated that this situation has provided an opportunity to look at the organization of MassTech to find opportunities for growth. Ms. Kirk explained that she has decided to consolidate on the program side under a Chief of Program Strategy (Mr. Pat Larkin), and she created a new Chief of Investment Strategy position. For that position an offer has been made to and accepted by to Ben Linville-Engler at MIT. Ms. Kirk stated this new structure will help streamline MassTech's work and make sure divisions have independence in building clusters, with the goal of fostering collaboration across divisions. The Committee was supportive of the changes.

Agenda Item IV Innovation Institute – Collaborative Research and Development Matching Grants (motion item)

Mr. Larkin stated the Innovation Institute is recommending approval of three new Collaborative Research and Development Matching Grant proposals vetted by its Investment

Advisory Committee. Mr. Larkin explained that MassTech has restructured the Collaborative Research and Development Matching Grant Program over the last few years, and released an updated solicitation with the goals of: stimulating economic recovery, funding projects that are higher on the tech readiness scale by looking for programs that would promise an impact in 2-3 years, expanding the pool of grantees to new universities and non-traditional entities, and increasing diversity and inclusion in the tech sector. Mr. Larkin then explained that the Innovation Institute held five workshops as a way of outreach, which generated a large number of external attendees, resulting in the submission of a significant number of proposals. MassTech received applications requesting over \$34 million in grant funding. Mr. Larkin then stated that the three proposals being presented today requested funding totaling over \$7 million over the next five years. Each applicant submitted a three minute video explaining the highlights of their proposal, which were shown during the meeting to introduce each proposal.

Mr. Byrnes provided details on the UMass Dartmouth Marine Environmental Testing Laboratory, explaining that UMass Dartmouth is seeking \$739,936 to support the development of biodegradable and ocean-safe plastics and other materials at a new Plastics Biodegradation Laboratory. He explained that supporting the development of this lab will contribute to the University's ambitions to create a critical mass of research capabilities to take advantage the opportunities presented by the broader Blue Economy in the region. Mr. Byrnes stated that attributes that the Innovation Institute felt were important were things such as partner companies appear likely to experience positive economic impacts within two years; there is a large potential market for biodegradable products that is driven by both consumer demand and legislation; the project will help establish Massachusetts as leader in biodegradable materials development, testing, and manufacturing; UMass Dartmouth serves a diverse student body; and two of the industry partners are women-owned businesses. Finally, the project offers \$1,000,000 in match funding, which is more than the required 1:1 match, with \$450,000 coming from industry.

Next, Mr. Byrnes explained that Harvard University is seeking \$3,005,000 to develop next generation rehabilitation technologies to improve the lives of people with neuro-motor impairments, creating a new category of rehabilitation and assistive devices that can be lightweight, affordable and connected. Partnering with Boston University they propose four related research projects with near term commercialization potential: an ankle device for home/community-based gait training after strokes, a soft robotic glove with new sensing and diagnostic approaches for high dose/high frequency rehabilitation at home, a lower-limb neuroprosthesis for electrical stimulation of muscles, and wearable sensors for strength and movement assessment by medical and fitness professionals. Mr. Byrnes stated that some of the key factors that MassTech liked about this proposal are that it is stimulus oriented with job and revenue creation at industry partners projected to begin in the first year; it strengthens the Commonwealth's robotics and medical device clusters; there is a strong research partnership where Boston University will receive 25% of funds and provide infrastructure support; the team is diverse and is working to provide research opportunities to diverse students from Bunker Hill Community College; and beyond economic growth benefits the medical devices developed stand to materially improve the lives of many patients in Massachusetts and globally.

Finally, Mr. Byrnes discussed the Northeastern University proposal, which requests \$3,500,000 to support the creation of an Experiential Quantum Advancement Laboratory (“EQUAL”) to develop next-generation quantum technologies for use in sensing applications. The ultrasensitive room-temperature quantum sensors to be developed by EQUAL collaborators have the potential for impacting a sizable fraction of the \$100B sensor market. Factors that impressed MassTech were: the proposal is stimulus oriented and targeted at quantum use cases with near term commercialization potential; sensors are a high value enabling technology; it has a strong economic impact potential in both in the sensors and analytic instruments market, and has strong spillover potential for other Massachusetts clusters; it provides an opportunity to establish Massachusetts as the top location for quantum sensing research, development, and commercialization through unique research capabilities; there is a \$6,750,000 match commitment from Northeastern and its partners (nearly 2:1), and a significant commitment by faculty with over 40 members affiliated with the proposal; and they have a strong commitment to diversity, equity, and inclusion with plans to engage 250-300 BIPOC students through their partnerships with community colleges.

A discussion then ensued around access by other institutions to equipment purchased under this program; making sure that equity was included in these projects, not just diversity and inclusion; and the process for marketing the grants.

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation (“Mass Tech Collaborative”), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby authorize the following grant awards under the Collaborative Research Matching Grant Program (RFP No. 2020-JAII-04) to be funded through the Scientific and Technology Research and Development Matching Grant Fund (M.G.L. Chpt. 40J, Sec. 4G):

- **To the University of Massachusetts at Dartmouth in an amount not to exceed \$739,936 to support the Marine & Environmental Testing Laboratory (METL), as presented;**
- **To Harvard University in an amount not to exceed \$3,057,320 to support the Assistive Technology Initiative (ATI), as presented; and**
- **To Northeastern University in an amount not to exceed \$3,500,000 to support the Experiential Quantum Advancement Laboratories (EQUAL), as presented.**

The grant awards are subject to the execution of grant agreements in a form and with terms approved by MassTech Collaborative’s Executive Director.

Agenda Item IV Innovation Institute – Scientific and Technology Research and Development Matching Grant Fund and John Adams Innovation Institute Fund – UMass Lowell Applied Research Corporation and MassDevelopment (motion item)

Ms. Kirk next discussed another Innovation Institute project, an award to the UMass Lowell Applied Research Corporation (“UMLARC”) and to MassDevelopment to fund a partnership with the U.S. Army Futures Command. She explained that this award was to be funded from two different sources- the Scientific and Technology Research and Development Matching Grant Fund, and the John Adams Innovation Institute Fund. Since this project did not come through the Collaborative Research Matching Grant solicitation, it did not go to the Investment Advisory Committee for review. Ms. Kirk explained that UMLARC and the U.S. Army Futures Command – Combat Capabilities Development Command is requesting \$892,000 for equipment and capital facilities improvements at UMass Lowell Research Institute’s (“UMLRI”) Northstar Campus, adjacent to Hanscom Air Force Base, for a “Convergence Facility”. The source of funds requested is the Scientific and Technology Research and Development Matching Grant Fund. In addition, \$750,000 in funding from the John Adams Innovation Institute Fund is requested to support the lease for the facility over five years (\$150,000 per year). This amount would be paid to, and is matched by, funds from MassDevelopment, who will enter into an agreement with UMLARC for the Convergence Facility. Ms. Kirk went on to say that a partnership of this nature has been a long-time ambition of the Commonwealth in its goal to become a regional epicenter of innovation for the Department of Defense ("DOD"). She explained that because of the difficulty in getting non-military personnel inside Hanscom Airforce Base, the DOD wants a collaborative facility “outside the gates” to host problem-focused workshops with innovators, where the military can bring forward problems, and civilian organizations can come together and work on solutions. Ms. Kirk stated that this is a radically different way for DOD to do business. MassTech will convene the innovation ecosystem on behalf of the DOD. Additional benefits of this project include the fact that the personnel who will be in the Convergence Facility will represent a broad range of DOD sectors and technical areas, plans call for a rapid activation of this site with events in Artificial Intelligence and Additive Manufacturing being scheduled over the next couple of months, and the facility and its associated convening will strengthen and expand the impact of UMLRI’s Northstar Campus by increasing defense expenditures within Massachusetts and developing new business opportunities, while retaining high-tech talent and creating high-tech jobs that remain within the Commonwealth.

After a period of discussion and upon a motion duly made and seconded, it was unanimously and without abstention VOTED:

The Executive Committee of the Board of Directors of the Massachusetts Technology Park Corporation (“Mass Tech Collaborative”), acting pursuant to the authority delegated under Chapter 40J of the General Laws of the Commonwealth, does hereby authorize the following grant awards to support a Convergence Facility at the UMass Lowell Research Institute, as presented:

- **To the UMass Lowell Applied Research Corporation (“UMLARC”) for equipment and capital facilities improvements in an amount not to exceed \$892,000 to be funded through the Scientific and Technology Research and Development Matching Grant Fund (M.G.L. Chpt. 40J, Sec. 4G); and**

- **To the Massachusetts Development Finance Agency (“MassDevelopment”) in an amount not to exceed \$750,000 to be funded through the John Adams Innovation Institute Fund (M.G.L. Chpt. 40J, Sec. 6A) to support a lease with UMLARC for the Convergence Facility.**

The grant awards are subject to the execution of grant agreements in a form and with terms approved by MassTech Collaborative’s Executive Director.

Agenda Item V Governance – Finance and Audit Committee Nomination to Fill Vacancy (motion item)

Ms. Saubermann explained that Dr. Julie Chen had been nominated to fill a vacant seat on the Finance and Audit Committee.

After a period of discussion and upon a motion duly made and seconded, with Ms. Chen abstaining, it was VOTED:

The Executive Committee (“Committee”) of the Board of Directors of the Massachusetts Technology Park Corporation (“Mass Tech Collaborative”), acting pursuant to the authority delegated by the Board of Directors under Chapter 40J of the General Laws of the Commonwealth, does hereby appoint Julie Chen, Vice Chancellor for Research and Innovation, UMass Lowell, to the Finance and Audit Committee of the Board of Directors of the Mass Tech Collaborative, who should serve until a successor is appointed.

There being no other business to discuss and upon motion duly made and seconded, it was unanimously and without abstention voted to adjourn the meeting at 3:18 p.m.

A TRUE COPY
ATTEST: (Secretary)

DATE:

Materials and Exhibits Used at this Meeting:

1. Draft Minutes for the June 24, 2021 Mass Tech Collaborative Executive Committee Meeting
2. Presentation- Executive Director’s Report
3. Presentation- Innovation Institute – Collaborative Research and Development Matching Grant Program (motion item)
4. Presentation- Innovation Institute – Scientific and Technology Research and Development Matching Grant Fund and John Adams Innovation Institute Fund Awards – UMass Lowell Applied Research Corporation & MassDevelopment (motion item)
5. Presentation- Governance – Finance and Audit Committee Nomination to Fill Vacancy (motion item)