

**MINUTES OF A REGULAR MEETING
OF THE BOARD OF DIRECTORS OF THE
MASSACHUSETTS LIFE SCIENCES CENTER**

DATE: December 09, 2020
TIME: 2:00 p.m. EST
PLACE: Via WebEx: Meeting number: 132 131 0929

DIRECTORS Connected: Stuart Abelson
Julie Chen, Ph.D. (designee for Marty Meehan)
Mark Fuller (designee for Secretary Michael Kennealy)
Catharine Hornby (designee for Secretary Michael Heffernan)
Gary Kearney, M.D.
Pam Randhawa

1. Call to Order

Mr. Mark Fuller called the meeting of the Board of Directors (the “Board”) of the Massachusetts Life Sciences Center (the “MLSC” or “Center”) to order at 2:06 p.m. The meeting, having been duly convened, was ready to proceed with its business.

2. Approval of Minutes

The Board reviewed the minutes of the October 28, 2020 Board meeting. Upon motions duly made, seconded and carried, the Board adopted the resolutions to approve the minutes.

The Board then reviewed the minutes of the October 30, 2020 Board meeting. Upon motions duly made, seconded and carried, the Board adopted the resolutions to approve the minutes.

3. Chairs’ Updates

Mr. Fuller reported a continued focus on COVID-19 as the Governor announced a return to Phase 3 Step 1, including capacity changes for businesses. Mr. Fuller encouraged everyone to review the Phase 3 Step 1 information, and to continue exercising safe practices of wearing masks and social distancing. Mr. Fuller announced the start date of the new President and CEO, Kenn Turner, who will officially join the Center on December 14. Mr. Fuller closed his remarks by commending the MSLC team and Interim President and CEO Damon Cox for keeping the Center

on track during the search and onboard process.

Ms. Catharine Hornby shared that the Legislature enacted the annual budget for the current fiscal year. Ms. Hornby acknowledged that reviewing the budget in the sixth month of the fiscal year can be frustrating; however, she also noted this is a positive sign that matters with legislature are getting back on track. Ms. Hornby advised the Board she will be leaving the meeting at 3:00pm.

4. CEO Update

Mr. Cox, Interim President and CEO, updated Board members on status of the Center's programs and operations. Mr. Cox reported on the positive reception and feedback for the Governor's announcement of extending the Internship Challenge initiative for Massachusetts residents who attend or attended a Historically Black College or University. Mr. Cox further reported that the Research Infrastructure Capital Program closed and applications are currently being reviewed. Twelve applications were submitted from 10 institutions, including Tufts, Mass Eye and Ear, Dana Farber, and the Museum of Science. There were a few interesting applications including an infectious disease pathology core at Tufts' North Grafton campus, and a "Race to the Vaccine" exhibit at the Museum of Science. The MLSC team will bring funding recommendations to Board in February following a January review panel.

Mr. Cox reported the new round of Tax Incentive Program launched on Monday. The MLSC is hoping to deploy close to \$20M to support companies hiring and growing in the Commonwealth. The application period is scheduled to close on February 5, and we look forward to bringing you our recommendations in April. In the Education & Workforce programs, Mr. Cox stated that the STEM Equipment and Professional Development Program application period will open on January 4th.

In closing, Mr. Cox reiterated it was a pleasure to serve as Interim President and CEO, and will continue to support the Center and its initiatives and programs.

5. Vote: Seed Fund Investment Opportunity - Haystack Diagnostics, Inc.

Dr. Jennifer Griffin, Vice President of Industry Strategy and Investments, began her

presentation by identifying the investment opportunity as the fifth investment of the Seed Fund, a program focused on driving economic development to specific geographies throughout the commonwealth outside of Cambridge/Boston and to invest in early stage companies to drive follow-on funding. The Seed Fund was enabled by a federal grant to offset operational expenses.

Dr. Griffin explained Haystack Diagnostics is addressing the unmet clinical need to identify and treat individuals suffering from genetic, autoimmune, un-inherited or unknown factors of neuromuscular disease (NMD). Dr. Griffin explained the current standard of care has been relatively unchanged for the past eighty years and has low diagnostic performance with data outputs that are subjective and difficult to quantify. She further explained that Haystack Diagnostics reengineered the needle in the iEMG diagnostic, including 4 electrodes for electrical impedance and 2 electrodes for EMG. The Haystack diagnostic provides more information on the health of muscles, an effective means to track disease progress, includes IoT instrument that interfaces with current EMG needles (26 gauge) and utilizes functional software (mobile, web app) that provides data in real time. Dr. Griffin stated that it also has potential to inform therapeutic treatments for clinical trials, being able to measure where a therapy or treatment is effective in a clinical trial setting.

Dr. Griffin reported that the market is significant, with \$650 Million associated with the current EMG devices, and an expected growth to \$740 Million by 2024. Dr. Griffin states that Haystack Diagnostics has identified market entry opportunities to include partnering with clinical trial developers, as well as looking at carpal tunnel and radiculopathy where current diagnostics are insufficient. Haystack does have a potential partner for its clinical trial strategy, with a neuromuscular drug developer in Denmark. Dr. Griffin further informed of Haystack's fundraising strategy, Cap table, funding timeline and use of funds. Dr. Griffin then closed the presentation with Haystack Diagnostic's management team credentials and its intent to expand operations and therefore job growth potential in Lowell by locating corporate headquarters there. Board members confirmed the unmet need that the proposed device would address, while enthusiastically showing support to fund the investment.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve a \$250,000 equity investment in Haystack Diagnostic, Inc. through a convertible note.

6. Vote: 2021-22 Internship Challenge

Ryan Mudawar, Senior Director of Academic and Workforce Programs, began his presentation noting this is the Center’s largest and longest running program, and is requesting another round of funding to run the program in FY22. Mr. Mudawar provided a historical overview of prior funding for the program, noting that it annually creates over 500 new internship opportunities for college students by enabling small companies to hire paid interns. After providing details of the program objectives and statistics, Mr. Mudawar reminded the Board of program goals, eligibility and criteria and spotlighted the Project OnRamp internship program for underserved college students and the 2020 pilot Data Science Internship Program. The presentation then ended with a program timeline highlighting the relaunch in January 2021, for internships taking place between April 2021 and May 2022. Board members voiced their support and praise for use of Center funding to support the Commonwealth’s workforce development, moving the program to a vote.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve two million five hundred thousand dollars (\$2,500,000) from the Investment Fund, to administer the 13th round of the Internship Challenge.

7. Vote: 2021-22 High School Apprenticeship Challenge

Ryan Mudawar, Senior Director of Academic and Workforce Programs, began his presentation noting this is a program that launched in 2016 through which MLSC facilitates and funds paid internship opportunities for over 100 high school students each year and offers a pre-internship lab training program for underserved and unrepresented students. Mr. Mudawar is requesting another round of funding to run the sixth iteration of the program in FY22. Mr. Mudawar provided a historical overview of prior funding for the program, noting since its inception in 2016, the MLSC has supported 416 internships at 103 companies and research institutions, the Interns represent 124 Massachusetts high schools, and 264 students participated in MLSC-sponsored lab training programs. After providing details of the program objectives, Mr. Mudawar reminded the Board of program goals, eligibility and criteria. The presentation then ended with a program timeline highlighting the relaunch in January 2021, for internships taking place between April 2021 and May 2022. Board members voiced their support and praise for use

of Center funding to support the Commonwealth's education and workforce development, moving the program to a vote.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve five hundred thousand dollars (\$500,000) from the Investment Fund, to administer the 6th round of the High School Apprenticeship Challenge.

8. Update: A.C.T.S. Program

Dr. Jennifer Griffin, Vice President of Industry Strategy and Investments, provided the Board with an update on the Accelerating Coronavirus Testing Solutions (ACTS) Program. Beginning with an update on how the MLSC moved quickly in April 2020 to enlist longstanding relationships in the life sciences ecosystem and engage in weekly stakeholder discussions to respond to the pandemic's impact in Massachusetts, Dr. Griffin explained how there were two priority areas identified: (1) Diversification of testing modalities and novel approaches for rapid turnaround and (2) Supply chain bottlenecks for molecular testing, impeding factors limiting large-scale testing capabilities. With an initial budget of \$1.8M Capital Funds and \$1.8M Investment Funds, Dr. Griffin stated that a total of \$3.6M was available for this program, with potential to identify additional funding. Dr. Griffin then provided an overview of the proposal submission and evaluation process, including detailed information on the ACTS advisory panel membership and an explanation of the rolling proposal submission progress and status.

Dr. Griffin closed her update presentation with information regarding four proposals that have been recommended for funding based on the Advisory Panel's scorecard review and virtual review session discussions and preview of where ACTS can go in the next phase of the program. Dr. Griffin and her team received the commendation and appreciation of the Board for the excellent work with this program. Discussion regarding the focus of the next phase followed, including topics of mass distribution of vaccines (freezers, logistics), vaccine education to drive adoption, investing in tests for the next pandemic and the biobank initiative.

9. Update: MassNextGen

Dr. Jennifer Griffin, Vice President of Industry Strategy and Investments, provided the Board with an update on the MassNextGen Program and a preview to Round 4. Beginning with an overview of the MassNextGen program, which is a public-private partnership devoted to gender parity in life science entrepreneurship involving a 5 year, \$2M initiative with annual grants and coaching to be awarded to early-stage women-led life science companies following a competitive process. Dr. Griffin stated the program is described as a “Community-wide effort to support diversity in the life sciences and a robust pipeline of innovative early-stage life science companies in MA”. After providing the Board with a sponsorship update, Dr. Griffin invited Anne Walsh, Senior Program Associate, to provide a review of the first, and second year of the program and its competition winners. Ms. Walsh further explained how the executive coaching network continues to grow with venture capitalists, serial entrepreneurs, and executives from corporate partners.

Dr. Griffin and Ms. Walsh closed the update presentation with a summary of the application and selection process, success stories and highlights, and an overview of the program strategies and goals moving forward. Dr. Griffin stressed the strategy goal of additional sponsors and welcomed the Board to support that effort. Discussion followed where the Board provided feedback and support of the program.

Adjourn

Mark Fuller, Board Co-Chair, adjourned the meeting at 3:35 p.m.

List of Materials and Exhibits Used During Meeting:

- Board Agenda
- Minutes from October 28, 2020 Board Meeting
- Motion: to Approve October 28, 2020 Board Meeting Minutes
- Minutes from October 30, 2020 Board Meeting
- Motion: to Approve October 30, 2020 Board Meeting Minutes
- Presentation of the Seed Fund Investment Opportunity
- Motion: Approval of the Seed Fund Investment Opportunity
- Presentation of the 2021-22 Internship Challenge
- Motion: Approval of the 2021-22 Internship Challenge
- Presentation of the 2021-22 High School Apprenticeship Challenge
- Motion: Approval of the 2021-22 High School Apprenticeship Challenge
- Presentation of the Accelerating Coronavirus Testing Solutions (ACTS): Program Update
- Presentation of the MassNextGen Update and Preview of Round 4