

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

DATE: February 27, 2019
TIME: 2:00 p.m. EST
PLACE: Massachusetts Technology Collaborative
2 Center Plaza
Suite 200
Boston, Massachusetts

DIRECTORS PRESENT: Julie Chen (designee for UMass President Martin Meehan)
Damon Cox (designee for Secretary Jay Ash)
Gary Kearney
Bill McNamara (designee for Secretary Michael Heffernan)

1. Call to Order

Bill McNamara called the meeting of the Board of Directors (the “Board”) of the Massachusetts Life Sciences Center (the “MLSC” or “Center”) to order at 2:01 p.m. The meeting, having been duly convened, was ready to proceed with its business.

2. Approval of Board Minutes

The Board decided that since a quorum of Board members who attended the December 12, 2018 Board meeting were not in attendance that approval of the December 12, 2018 Board meeting minutes would be deferred until the next Board meeting.

3. Chair’s Update

Assistant Secretary McNamara updated Board members on the budget cycle and revenue projections. Mr. Cox, the Assistant Secretary for Technology, Innovation and Entrepreneurship with the Executive Office of Housing and Economic Development, introduced himself to the other Board members and provided a summary of his employment in the private, philanthropic and public sectors.

4. CEO Update

Travis McCready ceded his time to Cheryl Sadeli, Vice President of Finance, who provided a quarterly update on the Center’s finances. She indicated that as of the end of calendar year 2018, the Center was on budget and had received the \$10 million from the Consolidated Net Surplus and a nearly \$1 million from a repayment by an Accelerator company.

Mr. McCready then provided updates on a variety of the Center's activities including: (1) the appointment of a new Board member, Stuart Abelson, the CEO of Ora, Inc.; and (2) programs that will be presented at the April Board meeting for consideration of awardees for the MassNextGen Program, the Milestone Achievement Program, and the Tax Incentive Program. Regarding the Tax Incentive Program, Mr. McCready indicated that applicants had requested \$38 million in incentives but since the Center's authorization is capped this year at \$20 million, difficult decisions were made to support the Center's priorities such as biomanufacturing and enhanced regionalization. Mr. McCready then noted that the Center would move within 5 weeks to 1075 Main Street and due to the work of Sharon Tapper and the Operations Team, there would be no disruption to business.

5. Competitive Capital Program

Mr. McCready indicated that the sixth round of the Competitive Capital Program would be presented by Jennifer due to a death in Beth Nicklas' family. Jennifer Griffin, the Vice President of Industry Programs and Relations, began by reviewing the objectives of the program, its eligibility criteria and the implementation schedule. She then presented the Center's strategic priorities for the investments and indicated how each of the 11 proposals met one or more of those priorities. In addition, Dr. Griffin emphasized that in each case, private funding supplemented the Center's funding.

Mr. Cox indicated that the finalists looked tremendous and inquired as to the review process. Dr. Griffin reported that the Center's Scientific Advisory Board reviewed the research institution proposals, incubator applicants presented to the Board's Investment Committee and the Center's Biomanufacturing Review Panel evaluated the biomanufacturing workforce proposals. Messrs. McNamara and Kearney were interested in the decision criteria used to select the finalists. Mr. McCready explained that the Center's overall goal in using its capital resources is to place innovation infrastructure throughout the Commonwealth for utilization by PIs, researchers and private companies. Applicants are evaluated based on their ability to promote innovative technology that leads to therapies and commercialization, to expand the life sciences ecosystem outside of the Boston/Cambridge metro area, and to ensure accessibility of these investments through partnerships with Massachusetts-based companies and academics. In response to the Boards' interest in output and outcome measures associated with these investments, Mr. McCready committed to a report within six months that would include the use of these investments and their accessibility, how the Center's funds are leveraged by private and philanthropic contributions, partnerships established and sustained, commercialization potential, publications

generated and any other available measures. In addition, Dr. Chen suggested that the Center include a specific question in next year's application as to how the infrastructure is made available to others and Dr. Griffin recommended that we inquire as to the institution's business model and marketing strategy.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$30,957,207 in funding from the Center's capital resources to fund the Competitive Capital finalists.

6. Building Breakthroughs Program

Mr. McCready explained that the Building Breakthroughs Program was developed to drive innovation in biomanufacturing since the promise of the US Department of Commerce/National Institute of Standards and Technology in the NIIMBL (National Institute for Innovation in Manufacturing Biopharmaceutical) program has not been realized. Due to the complexities of federal contracting, the fairly steep membership fee for SMEs and the prescriptive partnering requirements, monies have not been awarded and utilized expeditiously.

As a result, Dr. Carla Reimold, the Director of Industry Programs, reported that the Center engaged in a series of conversations to understand the need for innovative engineering solutions to improve multiple treatment modalities, focused especially on bottlenecks in manufacturing cell and genetic therapies. The Building Breakthroughs program offers up to \$750,000 in capital dollars to academic researchers partnering with industry colleagues on a two-year project to address these needs provided that the industry partner commits to paying the salary of at least one postdoctoral fellow engaged in the project.

Dr. Reimold then described the application and review process (comprised of experts in the Center's Biomanufacturing Review Panel from Alnylam, Surface Oncology, GE Healthcare, WuXi Apptec, and Sanofi), and proceeded to summarize the four final proposals that are being recommended for funding. These proposals were advanced by the Massachusetts Institute of Technology, Worcester Polytechnic Institute, and the University of Massachusetts at Lowell.

Dr. Kearney asked if there was a mechanism for keeping track of drug shortages as he had frequently encountered this in his clinical practice. Dr. Griffin indicated that it is very difficult to ascertain the causes and that they can be very different, but by investing in new processes for innovative manufacturing, it is hoped that some of these shortages might be alleviated.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$2,826,618 in funding from the Center's capital resources to fund the Building Breakthroughs proposals.

7. NIIMBL

Dr. Carla Reimold then updated Board members on NIIMBL Project Call 2.1 and the four proposals that had been advanced by the Center’s federal partners. She described each of the finalists and indicated that the Board would be asked to vote on three of them today, as the budget of the fourth proposal had not been finalized. She described MIT’s proposal for funding a nanofluidics analytics platform, MIT’s proposal for a perfusion bioreactor system, and MIT/MassBiologics’ proposal to fund its continuous cell culture project. Dr. Kearney inquired whether the federal funding was stable and Mr. McCready responded that all indications were that it appeared to be. Dr. Reimold reported that each of the projects is entirely independent, rather than related, in response to an inquiry from Mr. McNamara.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve the three NIIMBL Project Call 2.1 projects with a total of up to \$740,871 in capital funding.

8. STEM District Proposals

Ryan Mudawar, the Senior Director of Academic and Workforce Programs, presented the Center’s pilot approach for advancing STEM education in under-resourced schools and Gateway Cities by selecting five districts – Boston, Brockton, Lawrence, Lowell and Springfield – to target for funding. Mr. Mudawar provided an overview of the STEM investments to date by the Center with \$16.5 million dollars to 170 different middle and high schools. Mr. McCready noted that 1 out of 4 students in the Commonwealth have been trained on STEM equipment and supplies provided by the Center and that Center personnel meet on a quarterly basis with Secretary Peyser and his staff. Mr. Mudawar then described the details of each grant to the five school districts. Messrs. Mr. Cox inquired about the Center’s metrics for evaluating the impact of these grants and Mr. McNamara suggested that we also consider the need in more rural districts.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve the STEM District grants with a total of up to \$992,167 in capital funding and up to \$145,888 in professional development training from the Center’s Investment Fund.

9. Adjourn

Bill McNamara adjourned the meeting at 4:01 p.m.

List of Materials and Exhibits Used During Meeting:

- Board Agenda
- Minutes from December 12, 2018 Board meeting
- Motion: To approve December 12, 2018 Minutes
- Presentation of the Center's FY19 Q2 Financial Summary
- Presentation of the 2019 Competitive Capital Program
- Motion: To approve the 2019 Competitive Capital Program Awardees
- Presentation of the Building Breakthroughs Program
- Motion: To approve the Building Breakthrough Awardees
- Presentation of the NIIMBL Project Call 2.1
- Motion: To approve the NIIMBL Project Call 2.1 Awardees
- Presentation of the STEM District Proposals
- Motion: To approve the STEM District Proposals