

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

DATE: December 12, 2018
TIME: 1:00 p.m. EST
PLACE: Massachusetts Technology Collaborative
2 Center Plaza
Suite 200
Boston, Massachusetts

DIRECTORS PRESENT: Julie Chen (designee for UMass President Martin Meehan)
Jonathan Cosco (designee for Secretary Jay Ash)
Bill McNamara (designee for Secretary Michael Heffernan)
Pam Randhawa

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 1:05 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 October 25, 2018 Board meeting were not in attendance that approval of the October 25, 2018 Board meeting minutes would be deferred until the next Board meeting.

3. Chair’s Update

Mr. McNamara updated Board members on activities at Administration and Finance to prepare the FY2020 budget and plan for the future based on current revenue projections. Last week Senate and House Ways & Means Committees held a joint consensus hearing with Secretary Heffernan who reported an overall positive forecast and full employment numbers, but noted that the strong economy is not evenly shared across the Commonwealth. Mr. McNamara reported that they anticipate respectable growth with hiring challenges continuing for highly-skilled positions and a long-term concern with the state’s aging population and the need to retain young people.

Ms. Randhawa observed that the Commonwealth continues to attract small companies from across the globe, including companies in Hong Kong and Dubai where she visited an incubator with 150+ companies, a large number of which are in biotechnology. Mr. McNamara noted that some challenges associated with our competitive advantage are the higher housing costs and longer

commuting times. Ms. Randhawa affirmed this observation that commuting times have substantially increased in the last 3 years.

Dr. Chen inquired about the state's bond rating as she had heard about an adjustment in local media reports. Mr. McNamara indicated that S&P had made a technical correction in how bonds are rated and as a result, there was some decrease for Massachusetts.

4. CEO Update

Travis McCready provided an update on the Worcester biomanufacturing park and the business development efforts to secure WuXi as an anchor tenant. He recounted that conversations with WuXi have been ongoing for close to 2 years and that at the close of BIO 2018, a Memorandum of Understanding was signed for WuXi to rent up to 100,000 square feet on the site of the former Worcester State Hospital. At the time, the MLSC had made a commitment to supply up to \$5M in capital infrastructure to offset costs of development on the public portions of the park. Since WBDC has been unable to deploy the MLSC's capital funding on aspects of park infrastructure that would benefit the public, MLSC instead offered \$6M in tax incentives directly to the company for job creation projected at the site over FY20 and FY21. Mr. McCready explained that although this level of tax incentive is an outlier - \$40,000 per job - in comparison to the Center's historical offering to companies, it is justified because WuXi is the third largest CDMO of biologics in the world, this would be its first manufacturing site in North America, and it is an important regional investment to incentivize other manufacturers in central Massachusetts. Mr. McCready stressed that this level of tax incentive is only available to WuXi at the Worcester biomanufacturing park and not at any other location in Massachusetts.

Ms. Randhawa inquired whether we were entertaining other companies of this size for the Worcester site such as Brammer Bio which has experienced significant growth. Mr. McCready affirmed that the Center is fielding many inquiries for business development and that Jennifer Griffin, Vice President of Industry Programs and Relations, and Chris Gilrein, Director of Business Development, would provide a business development presentation in this meeting.

Mr. McCready also reported that the Center had signed a lease for 1075 Main Street in Waltham with a fixed rental rate for 10 years on a little over 9,000 square feet. In addition, he reported that the Competitive Capital solicitation had closed with a total of 42 proposals and requests for close to \$120 million. Proposals will be evaluated in January with an expectation of approvals in February.

5. MLSC Brand Refresh

Martha Waldron, Vice President of Marketing and Communications, summarized the brand messaging, design development, website development, testing and deployment work to be undertaken by Captains of Industry, the creative marketing consultancy that is recommended for selection following an RFP process that reached out to 26 vendors and resulted in presentations by 4 finalists.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$100,000 in funding from the Center’s Investment Fund to fund services to support brand messaging and website development.

6. Business Development Presentation

Mr. McCready introduced this portion of the meeting by commending Jennifer Griffin, Vice President of Industry Programs & Relations, on the Pitch of Her Own event for women entrepreneurs that was held at LabCentral for potential investors and interested collaborators. Sanofi Genzyme’s contribution of \$250,000 to support the program was announced. Ms. Randhawa indicated that she was speaking with contacts at Merck to see if they would be willing to contribute as well.

Mr. McCready announced the Center’s successful receipt of a \$300,000 award from the U.S. Economic Development Administration to support the building of an infrastructure to incentivize investors to fund early-stage life sciences companies in Gateway cities across the Commonwealth.

Dr. Griffin then explained that business development at the Center has been centralized so that the team can take a concentrated approach to make sure we are connected to the right people and companies across the ecosystem. Externally, the team seeks insights from smart capital investors to understand successful company formation, speaks with experienced construction, real estate and wet lab space developers and regional authorities to identify what sites are available and coming on line. The team receives a significant number of inbound requests from companies interested in understanding opportunities in Massachusetts. The team also conducts its own research by targeting companies that are starting clinical trials and seeking FDA approvals. For example, the BD team has developed a lead list for 30+ companies in clinical or pre-clinical stages. In addition, the team regularly meets with international delegations and attends major conferences and trade shows. Through engagement with the Center’s MarComm team, the BD team seeks to increase the Center’s visibility and to drive more inbound traffic, particularly on tailored strategies such as data science, microbiome, and bio-

manufacturing. The life sciences industry is significantly different than it was 10 years ago when the Center began, it is now a mature ecosystem with 18 out of top 20 largest, global biotech companies and 20 out of the top 30 medtech companies.

Chris Gilrein, the Director of Business Development, then presented the current BD pipeline by describing a sample of companies that the BD team is courting with tailored, strategic outreach. In addition, Mr. Gilrein presented existing commitments that promise about 1,500,000 square feet of GMP manufacturing space and an additional 3,000 jobs. Mr. Gilrein and Dr. Griffin highlighted the strategic win for the state by attracting the health IT firm MediData which will employ 140 data scientists.

Mr. Gilrein indicated the strong interest in the competitive tax incentive program with companies of different modalities and geographic distribution across the Commonwealth. In many cases, the Center is approached confidentially by companies testing the state's receptivity to their re-location. They include an international CDMO interested in the microbiome and another CDMO specializing in cell & gene therapy. Mr. McCready recognized the strong partnerships with HED and A&F for recruiting prospects and indicated that discussions were ongoing with A&F regarding the Center's tax incentive cap which has remained at \$20 million over the past three years. Mr. McCready also noted the importance of the open competition which introduces many new and worthy potential awardees. Dr. Griffiths added that without a higher cap of \$25 or \$30 million, it is difficult for Massachusetts to compete against Rhode Island or other states that are promising more funding. Rhode Island recently attracted Amgen through significant incentives.

Dr. Griffin explained the importance of focusing on niche innovation sectors such as advanced biomanufacturing rather than competing with the small molecule or monoclonal antibody mature companies located in North Carolina. She indicated that the Center's pitch is: "Discover it here, Develop it here, and Make it here."

Dr. Chen asked what the top two questions are that companies have in considering locating in Massachusetts. Dr. Gilrein responded that it is whether the talent is available and the cost of hiring such talent. As companies shift to manufacturing new modalities, there is a gap in training.

7. 2019 Internship Challenge and High School Apprenticeship Programs

Beth Nicklas, General Counsel and Vice President of Academic & Workforce Programs, introduced the 2019 Internship Challenge and High School Apprenticeship Programs by explaining that these are the Center's two signature workforce programs. The Internship Challenge Program will be in its 11th year and the High School Apprenticeship Program, launched under Mr. McCready's leadership, will be in its 4th year. Ms. Nicklas then turned the presentation over to Ryan Mudawar, Senior Director of Academic & Workforce Programs, who explained the details of each program and reported that since 2009, the MLSC has funded more than 3,800 internships with nearly 750 companies and that last summer, the MLSC funded 117 high school apprenticeships with research institutions and companies. In addition, the MLSC supported after-school or summer lab training programs for 71 trainees at Brockton, Cambridge and Worcester.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$3,700,000 in funding from the Center's Investment Fund to support the Internship Challenge Program. Upon another motion duly made, seconded and carried, the Board adopted the resolution to approve \$550,000 in funding from the Center's Investment Fund to support the High School Apprenticeship Program.

8. Mass IGNITE

Dr. Griffin presented MassMEDIC's IGNITE Program which seeks to mentor and provide resources for mid-career entrepreneurs. Brian Johnson, MassMedic's new President, has requested funding to create a virtual accelerator for future founders with experience in the medtech industry, provide a framework for mentorship and education, leverage partners in the ecosystem and challenge participants to identify existing technology which matches a particular disease state. and re-boot the program. Mr. McNamara and Ms. Randhawa inquired about matching support from the larger medtech companies. Dr. Griffin indicated that Mr. Johnson is seeking additional support from industry members and bringing MassMEDIC resources to the table. Dr. Chen suggested that MassMEDIC consider a requirement that participating companies pay a small percentage to MassMEDIC when a significant funding threshold is reached so that the program can be sustained. Mr. McCready noted that Massachusetts is regarded as third or fourth in the country for the prevalence of medtech companies.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$100,000 in funding from the Center's Investment Fund to support MassMEDIC's IGNITE Program.

9. NIIMBL

Dr. Carla Reimold presented a request by the University of Massachusetts at Lowell to increase funding for its NIIMBL lyophilization project. In formalizing its budget, the UMass team had underestimated the cost to renovate existing space to accommodate the equipment. Mr. McCready spoke with the Principal Investigator and is comfortable that the project is still sound and needed by industry.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve an additional \$300,000 in capital funding to support UMass Lowell's lyophilization project.

10. Adjourn

Bill McNamara adjourned the meeting at 3:52 p.m.

List of Materials and Exhibits Used During Meeting:

- Board Agenda
- Minutes from October 25, 2018 Board meeting
- Presentation of Website and Brand Refresh Project
- Motion: To approve funding for Captains of Industry, a creative marketing consultancy
- Presentation of Business Development Pipeline
- Proposal for 2019-20 Internship Challenge Program
- Motion: To approve 2019-20 Internship Challenge Program
- Proposal for 2019 High School Apprenticeship Program
- Motion: To approve 2019 High School Apprenticeship Program
- Proposal to re-launch MassMEDIC's IGNITE Program
- Motion: To approve funding for MassMEDIC's IGNITE Program
- Proposal to increase funding for UMass Lowell's Lyophilization NIIMBL Project
- Motion: To approve additional funding for UMass Lowell's Lyophilization NIIMBL Project