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

DATE: April 26, 2019 TIME: 1:00 p.m. EST

PLACE: Massachusetts Life Sciences Center

1075 Main Street, Suite 100 Waltham, 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)

Peter Parker 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 1:04 p.m. The meeting, having been duly convened, was ready to proceed with its business.

2. Approval of Board Minutes

The Board then reviewed the minutes of the October 25, 2018, December 12, 2018 and February 27, 2019 Board meetings. Upon a motion duly made, seconded and carried, the Board adopted each respective resolution to approve the minutes.

3. Chairs' Updates

Mr. McNamara reported that the FY20 budget is going through its process with the Governor filing his budget in January and the House of Representatives releasing its budget several weeks ago. The Administration is now engaged in comparing the budgets, outside sections and Amendments and comparing them to actual revenues available to the Commonwealth. Next, the Senate will deliver its budget and there will be a joint conference to resolve differences. On the revenue side, early indications are that tax revenues are favorable as the Commonwealth, and every other state, learns how the federal tax reform affects state budgets.

Co-Chair Damon Cox reported on the development and execution of a series of meetings around the Commonwealth for the Administration's Economic Development Plan. Mr. Cox then noted that the Executive Office of Housing and Economic Development has had some staffing reorganization including the addition of a Director of Business Development.

4. CEO Update

Mr. Travis McCready welcomed the Board of Directors to the MLSC's new space and encouraged members to join in a brief tour after the meeting. He reported that the space is fiscally very responsible and publicly thanked Ms. Sharon Tapper, Executive Assistant and Operations Manager, for managing the entire process so expertly. Mr. McCready expanded on our funding for FY20 by explaining that Governor Baker's 2020 budget included \$10 million from the Commonwealth's Consolidated Net Surplus. These funds are critical to our funding structure as they pay for our internship and apprenticeship programs as well as investments in early-stage companies. Mr. McCready reported that the House did not include this funding in its budget, but that staff is working to have a Representative file an Amendment and will do similarly with the Senate. In the first week of June, the MLSC will be attending the International BIO conference in Philadelphia with a packed agenda of meetings with companies seeking to locate or expand in Massachusetts. Finally, Mr. McCready indicated that Insulet, a medical device company that has developed the Omnipod Insulin Management System for patients with Type 2 diabetes, will have its ribbon-cutting May 2nd in Acton with the promise of onshoring 1,500 jobs from China.

5. Quarterly Financial Update

Cheryl Sadeli, Vice President of Finance, provided the quarterly update as of March 31st on the MLSC's finances. Ms. Sadeli reported that the MLSC's relocation of its offices occurred on time with some unanticipated costs associated with wiring for digital interfaces, but due to advance budget planning, the MLSC was able to account for all of those costs. In addition, Ms. Sadeli indicated that the MLSC is on track from a financial perspective with an anticipated \$500,000 favorable to budget due to savings from delayed hirings, the cost of professional services and communications as well as ERP implementation. As of March 31st, the MLSC has \$16 million in its Investment Fund, having taken into account commitments and disbursements that have not yet occurred due to multi-year agreements. Dr. Gary Kearney inquired whether the MLSC anticipates a budget for FY20 that is similar to the FY19 budget. Mr. McCready responded that with respect to current projects, yes, but that there are anticipated hires and the delayed initiatives will go forward.

6. Seed Fund

Jennifer Griffin, Vice President of Industry Programs, presented an update and funding proposal for the Seed Fund. Dr. Griffin reminded Board members that last year, Monica Anc, Manager of Industry Programs, identified an opportunity to secure federal funds to catalyze regional capacity efforts. Of 230 applications submitted, Dr. Griffin reported that the MLSC was fortunate to receive an

award of \$300,000 over 3 years and that the Board has approved matching funds as required by the federal grant. The purpose of this work is to drive economic development outside of greater Boston by investing in early-stage companies in regions with the potential to become life science clusters including Lowell, Worcester, Springfield and Western Massachusetts. To accelerate progress throughout the Commonwealth when investment dollars have historically been concentrated in the greater Boston area, the MLSC is proposing to invest up to \$1 million through up to \$250,000 in convertible notes. Dr. Griffin explained that to expand the MLSC's capacity, we are partnering with the Massachusetts Technology Transfer Center (MTTC) to operationalize the program. MTTC will conduct due diligence in a two-phased approach initially with a short, red-flag analysis followed by a deeper diligence dive if warranted. For this program, Dr. Griffin explained that the Industry Team plans to track the number of investments, the number of opportunities for the MLSC to receive a return on investment, and the amount of follow-on dollars invested in the companies.

Pam Randhawa inquired about the status of the Accelerator Program and Dr. Griffin explained that the Accelerator Program was originally launched at a time when capital was hard to come by even in the greater Boston area and that over time, there was less demand for that program. This Seed Fund Program is intended to address the current need for investments. In response to a question from Co-Chair McNamara regarding the impetus for the program, Dr. Griffin explained that the receipt of federal monies together with the regional need and the opportunity to invest in equity provided the motivating factors. Mr. McCready added that now is the time to invest in entrepreneurship.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$1,000,000 in funding from the Center's Investment Fund to fund the Seed Fund.

7. Tax Incentive Program

Ms. Sadeli presented an overview of the Tax Incentive Program – indicating that over 430 applications have been received to date with a diversity of industry segments, geographic representation and size of company with over \$200 million awarded. This year is the MLSC's 10th round of the program and requires that companies must file a 2018 Massachusetts tax return, have at least 10 FTEs as of December 31, 2018 and commit to a minimum of 10 net new hires for 2019. Ms. Sadeli reminded the Board of the claw-back provision in the MLSC's enabling statute which enables the MLSC, in collaboration with the Department of Revenue, to recoup the tax incentive benefits in the event the job hiring commitments are not met. In total, Ms. Sadeli indicated that 134 awards have been made since the program's inception to companies in 28 different cities and towns throughout the Commonwealth. Ms. Sadeli then reported that the Program received 48 applications this round with 7

of those being commitments already made by the Business Development Team. Based on an analysis of applicants to encourage expansion outside of Boston and Cambridge, to attract manufacturing capabilities to Massachusetts, and to support companies digital health offerings such as personalized medicine, bioinformatics, statistical analysis and diagnostics, the MLSC is proposing to provide tax incentives to 27 companies for a total of \$20 million and a promise of 1,259 net new jobs.

Ms. Randhawa inquired whether companies were required to commit to a specific job and Ms. Sadeli responded that the MLSC does not prescribe what kinds of jobs companies are creating, but work to select companies aligned with the MLSC's strategic priorities. Dr. Kearney inquired about the flexibility afforded companies regarding their annual hiring commitments and Ms. Randhawa noted that this was important with economic fluctuations. Co-Chair Cox asked whether the MLSC was collecting demographic meta-data on jobs created after the award of the tax incentive and Ms. Sadeli explained that the MLSC did not have the bandwidth to do so and that it might be difficult for companies to produce that data. Dr. Julie Chen inquired whether there were other categories of companies that Mr. McCready would like to see in the mix and he responded that it would be great to see more companies led by women and people of color.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve \$20,000,000 in funding for Tax Incentive benefits to 27 companies. After the vote, Mr. McCready recognized the attendance of Masy Systems, a company located in Pepperell, which is receiving a tax incentive award. Masy was originally awarded a tax incentive in 2008 and again in this round, and has grown from 28 FTEs to 146 FTEs.

8. Approval of Glaxo Smith Kline as Certified Life Sciences Company

Ms. Sadeli then brought to the Board's attention the need to approve Glaxo Smith Kline (GSK) as a certified life sciences company because GSK acquired Tesaro Bio which was awarded a tax incentive in the 2016 program. GSK has agreed to assume the responsibilities of Tesaro Bio for the 2016 award.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve Glaxo Smith Kline as a certified life sciences company.

9. Mass TAG

Chris Gilrein, Director of Business Development, provided a brief refresher on the Mass TAG Program. This program was initially launched in 2017 as a complement to the MLSC's Tax Incentive Program to provide a financial incentive to companies that are seeking to locate in Massachusetts. Mr. Gilrein reported that awards are contingent on the creation and maintenance of jobs – generally at

\$15,000 per job – and are provided in 3 funding tranches over 3 years upon proof that the company has met its hiring, or retention, commitment for that year. Mr. Gilrein then indicated that the MLSC's business development strategy is to focus on companies developing novel modalities such as microbiome and cell and gene therapies. Companies in these fields report a lack of CDMO interest or capacity to address their clinical needs. Lykan Bio fills this need by proposing to create an end-to-end contract development and manufacturing solution in a 64,000 square foot cGMP facility in Hopkinton and the creation of 28 jobs in its first year of operation. Mr. Gilrein noted that the proposal is to provide Lykan Bio with \$420,000 in grant funding provided that all job commitments are met over a 3-year period.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve the MassTAG award to Lykan Bio for \$420,000 from the MLSC's Investment Fund.

10. Milestone Achievement Program

Dr. Griffin provided an overview of the Milestone Achieve Program (MAP) that addresses a funding gap for early-stage companies. She first demonstrated why the program is needed based on the lack of investment for seed stage and early-stage companies and provided the following metrics for the companies awarded grants in the FY15 inaugural program round: (1) greater than \$41 million of follow-on funding received by those grantees; (2) an additional \$11 million in SBIR/STTR Phase I and Phase II grants; and (3) the more than doubling of the number of FTEs as of the end of December, 2017.

Ms. Anc then described the application and review process, noting that the MLSC received applications from 54 companies with representation from all life science sectors and geographic regions across the Commonwealth. To enhance the review process, the MLSC recruited reviewers from the investment community in order to triage the applications and provide a subset to the Scientific Advisory Board (SAB). Following 14 pitches at the SAB meeting, 10 companies were recommended for funding. Three of the companies are women-led and 6 out of the 10 technologies originated from Massachusetts institutions. Dr. Griffin then summarized the work of each of the companies.

Board members discussed the make-up of the infusion of capital invested in companies – whether it be milestone-based or in real-time dollars – with all agreeing that since no one is putting money into seed-stage deals, this program fills an important need.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve the 10 Milestone Achieve Program awardees with a total of up to \$1,987,300 from the Center's Investment Fund.

11. MassNextGen

Dr. Griffin provided an update on the MassNextGen Program, a public-private partnership seeking to achieve gender parity in life science entrepreneurship. She provided an overview of the successes of the inaugural cohort of MassNextGen awardees and reminded Board members of the sponsorships from Takeda, King Street Properties, and Sanofi. Last year there were 6 coaching sessions dedicated to learning how to pitch, how to read a term sheet, fundraising, and pricing and reimbursement and each of the awardees had an opportunity to pitch to investors at an event at LabCentral.

Anne Walsh, Program Associate, then described the process for recruiting applicants and selecting awardees for the current round. She emphasized the extensive outreach that was conducted by the MarComm Team to ensure that women entrepreneurs would learn of this opportunity since the Center does not have a list of women-led companies in the Commonwealth. Thirty applications were received and five are being recommended for coaching and funding at a level of \$87,500 each.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve 4 of the MassNextGen companies for funding totaling \$350,000 from the MLSC's Investment Fund.

Upon a separate motion duly made, seconded and carried, the Board adopted the resolution to approve Lucy Therapeutics for a total of \$87,500 from the MLSC's Investment Fund, with Peter Parker recusing himself from the vote.

12. NIIMBL: UMass Lowell Project

Dr. Carla Reimold, Director of Industry Programs, presented an update on NIIMBL Project Call 2.1 and introduced the need to approve the University of Massachusetts Lowell project for \$900,000 for the project titled *mAb Productivity Improvement by Metabolic Engineering of Novel Inhibitory Biomarker in Integrated Continuous Manufacturing* now that the budget has been negotiated and approved by NIIMBL.

Upon a motion duly made, seconded and carried, the Board adopted the resolution to approve capital funding for UMass Lowell's NIIMBL project in the amount of \$900,000.

13. Adjourn

Co-Chair Damon Cox adjourned the meeting at 2:50 p.m.

List of Materials and Exhibits Used During Meeting:

- Board Agenda
- Minutes from October 25, 2018 Board Meeting
- Motion: To approve October 25, 2018 Minutes
- Minutes from December 12, 2018 Board meeting
- Motion: To approve December 12, 2018 Minutes
- Minutes from February 27, 2019 Board Meeting
- Motion: To approve February 27, 2019 Minutes
- Presentation of the Center's FY19 Q3 Financial Summary
- Presentation of the MLSC Seed Fund
- Motion: To approve the MLSC Seed Fund
- Presentation of the Tax Incentive Program
- Motion: To approve the Tax Incentive Awardees
- Motion: To approve Glaxo Smith Kline plc as a Certified Life Sciences Company
- Presentation of the Lykan Bio MassTAG Application
- Motion: To approve Lykan Bio as a MassTAG Awardee
- Presentation of the Milestone Achievement Program
- Motion: To approve the Milestone Achieve Program Awardees
- Presentation of the 2019 MassNextGen Second Cohort
- Motion: To approve 4 of the 2019 MassNextGen Second Cohort Awardees
- Motion: To approve Lucy Therapeutics as a MassNextGen Second Cohort Awardee
- Presentation of the NIIMBL Project Call 2.1 Update
- Motion: To approve the UMass Lowell NIIMBL Project for Mab Productivity Improvement by Metabolic Engineering of Novel Inhibitory Biomarker in Integrated Continuous Manufacturing