



Friday, March 11, 2022
10:30 a.m. – 12:30 p.m.
Virtual (via Google Meet)
Meeting Minutes

Welcome and Introductions

Dr. Perman gave opening remarks and reviewed the ground rules of the virtual meeting. He called the meeting to order and carried out a roll call to confirm attendance. He welcomed and invited new board members Ed Margerrison, PhD, Director, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, U.S. Food and Drug Administration; Mark Mortenson, JD, Chief Scientific Officer, Clene Nanomedicine; and KaShauna Rohlehr, Associate Director for Alliance, Program and Project Management, GlaxoSmithKline, to introduce themselves.

Board Members in Attendance

1. Jay Perman, MD – Chancellor University System Maryland [Chair]
2. Richard A. Bendis – President and CEO, BioHealth Innovation, Inc.
3. Rebecca Fisher, PhD – Deputy Director, Congressionally Directed Medical Research Programs, U.S. Army Medical Research and Development Command
4. Jesse Christopher – CEO, Longeviti Neuro Solutions
5. Mike Gill – Secretary, Maryland Department of Commerce (Ex Officio)
6. Edward Margerrison, PhD – Director, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, U.S. Food and Drug Administration
7. Mark Mortenson, JD – Chief Scientific Officer, Clene Nanomedicine
8. Sanjay Rai, PhD – Senior Vice President, Academic Affairs, Montgomery College
9. KaShauna Rohlehr – Associate Director for Alliance, Program and Project Management, GlaxoSmithKline
10. Martin Rosendale – CEO, Maryland Technology Council
11. Joseph F. Sanchez, PhD – Director, North America R&D Science Engagement, AstraZeneca
12. Arti Santhanam, PhD – TEDCO (Ex Officio)
13. Brian Stamper – Director, Manufacturing, Kite Pharma
14. Bob Storey – Principal, The MVR Company
15. Christy Wyskiel – Senior Advisor to the President and Head of Johns Hopkins Technology Ventures, Johns Hopkins University

Department of Commerce Attendees

Margia Argüello – Senior Manager, Business Development, Life Sciences
Ulyana Desiderio, PhD – Director, Life Sciences
Heather Gramm – Senior Director, Strategic Industries & Entrepreneurship
Tamar Osterman – Senior Business Development Representative, Carroll and Frederick Counties
Stefanie Trop, PhD – Manager, Business Development and Innovation, Life Sciences

General Public Attendees

Mary Morris – University of Maryland, Baltimore

Troy LeMaile-Stovall – TEDCO
Lindsay Ryan – University System of Maryland

Dr. Perman reminded everyone about the Board charge to maintain Maryland's preeminence in the life sciences industry and reviewed the meeting's agenda.

Review and Acceptance of September 24, 2021 Meeting Minutes

Dr. Perman asked for feedback on the minutes of the September 24, 2021, LSAB meeting. Hearing none, he asked for a motion to approve the minutes, which was made by Mr. Rosendale and seconded by Mr. Storey. Dr. Mortenson abstained as he wasn't present at the last meeting. The meeting minutes were approved.

Office of Life Sciences Activities Update

Ulyana Desiderio provided updates on major initiatives of the Department of Commerce's Office of Life Sciences (OLS). She introduced the new Manager of Business and Innovation Development, Dr. Stefanie Trop who joined the team in January. Dr. Desiderio described the efforts to increase the usage of the Maryland Life Sciences directory, a newly updated free online tool that puts the strengths of Maryland's assets on display. Any member of the life sciences community in Maryland can be part of this directory, it is free to create a profile and to search for potential business to business connections. OLS uses the directory often when promoting Maryland as a great location to do business. The Department has embarked on a marketing campaign to reach out to companies and organizations to make sure they know about this resource. Dr. Desiderio thanked Margia Argüello and Dr. Trop for spearheading the improvement of this resource and asked the LSAB to use, share, and make sure their organizations are listed in the directory.

Dr. Desiderio shared plans for in-person attendance at upcoming trade shows and conferences to continue to raise the visibility of Maryland as a home for innovation and a great location for doing business. The Department of Commerce is partnering with the Maryland Tech Council (MTC) to have a presence at the upcoming BIO conference in June, prioritizing meeting space for partners and companies as well as access to the conference, exhibit hall and partnering system. OLS is hoping to offer companies passes to the conference from a scholarship fund supported by its partners and sponsors. A networking reception and Maryland-themed breakfast is also planned. Mr. Rosendale added that this collaboration between the MTC and OLS is a new strategy for the BIO meeting. The MTC plans to offer a suite in the BIO Business Forum, private meeting rooms and a concierge area, and information for investors on the benefits of investing in Maryland companies.

Dr. Desiderio shared an update on developing a strategy of supporting Maryland's growing medical technology sector here in Maryland and thanked Mr. Storey for his leadership. OLS has been engaging with AdvaMed, the international trade association representing this industry in a strategic partnership that would leverage their resources for the benefit of Maryland companies. More than 20 Maryland medtech leaders from academia and the private sector attended a VIP CEO networking event Commerce sponsored at the last MedTech conference in September 2021. OLS is working with the organizers of this year's MedTech Conference that will take place in Boston in October on a series of events that would be of value to the Maryland delegation, including organizing a thought leadership session and a networking reception. In addition, OLS has renewed its communication with the

organizers of the MedTech Innovators, the Accelerator and Venture competition, to bring one of its road shows to Maryland next year, hopefully recreating the program that was planned for 2020 in Baltimore.

Mr. Storey congratulated Dr. Desiderio on organizing a successful VIP reception at the last MedTech conference, which proved to be an effective way to engage with AdvaMed. He suggested holding more events in Maryland, and, possibly, Baltimore, specifically to highlight medtech innovation in the state. Mr. Storey added that the medtech community is expressing interest in self-organizing in regional therapeutic clusters, including one dedicated to neuroscience.

TEDCO: Mission and Priorities

Troy LeMaile-Stovall provided updates on TEDCO's recent programs, mission and priorities. Along with MTC, TEDCO held the Prince George's Tech Council chapter kickoff meeting on March 9, with over 170 registrants from over 70 companies. This first regional chapter creates momentum for establishing other regional MTC chapters, with Baltimore coming next. Mr. Rosendale reiterated Mr. LeMaile-Stovall's statement on the growth of the MTC, demonstrated by the formation of these local chapters in progress.

Mr. LeMaile-Stovall shared news of new federal funding coming to Maryland: \$190M from the State Small Business Credit Initiative, \$50M of which will go to TEDCO. A portion of these funds will be awarded to life science companies and the Maryland Stem Cell Research Fund will be increased from \$8M to over \$10M. Mr. LeMaile-Stovall stressed that it is crucial that the life science community invest significantly more funds, and that bigger checks are needed across the board. He urged the community to scale up its efforts, think on a different scale, adding more zeros to investments to be competitive globally and not lose companies that can get better investment elsewhere. Mr. Rosendale agreed that "bigger checks" are needed and shared MTC's BioHub vision to improve access to international capital markets and investors. Mr. Storey also agreed and added that Maryland has a lot of technical assets that would benefit from wider distribution of these funds as well as improve the "connective tissue" among the community. Mr. LeMaile-Stovall also shared his concern about the availability of wet lab space and has been in discussion with the Johns Hopkins University and incubators located throughout the state about this issue.

Secretary Remarks

Dr. Perman welcomed back Secretary Mike Gill to LSAB. Secretary Gill shared his enthusiasm for returning to the Board and said that it is one of the most important groups he belongs to. Secretary Gill thanked Dr. Desiderio for updating him on recent LSAB and OLS activities. He said he sees a very good trajectory on business, job, and venture funding growth. The Department of Commerce's role in the community is to facilitate actions and collaborations, advocate, and provide support with financial programs, like More Jobs For Marylanders, which many life science companies are using. In the next few weeks, Maryland state and supplemental budgets will be completed and Secretary Gill feels positively about additional funding for initiatives to support Maryland's life sciences industry. He asked the LSAB for input on where the community is achieving, overachieving, or underachieving. Mr. Storey responded that the community is underachieving in strategically

attracting large medtech companies. The lack of wet lab space in Baltimore in particular is a problem and more speculative building is needed.

Christy Wyskiel agreed that lab space is a serious problem impacting the future of our ecosystem. Johns Hopkins University has invested \$100M into tech transfer efforts and building lab spaces that are 100% full. She shared that there are two companies in the University's incubator that have recently raised \$20M and \$50M that cannot stay in Baltimore due to space limitations. Ms. Wyskiel recommended convening a group of anchor institutions, state government, real estate developers, and philanthropies to work together to accelerate breaking ground on more lab space. Ms. Wyskiel volunteered to lead this effort.

Mr. Storey agreed with the previously mentioned needs for more lab space and financing. He added that the community may be underachieving in providing entry-level manufacturing workforce. Maryland has the academic institutions that provide training programs, but they need better connectivity and understanding of industry needs. Joe Sanchez agreed and shared the LSAB-MTC task force's efforts to market opportunities to teens to get them tracking towards these jobs.

BioHub Maryland: Vision and Goals

Marty Rosendale updated on MTC's BioHub Maryland Initiative. He acknowledged the efforts of the LSAB-MTC Workforce Task Force co-chaired by Dr. Sanchez and Brian Stamper in developing important parts of the initiative. BioHub Maryland would serve as a central resource providing the interface with industry. The center would supply market research, customer discovery and other business tools. It would offer key technical and business assistance including mentorship, commercial development, convening authority coordination. The center would consist of four arms:

- BioHub – Pathways will lead a workforce development center to address the challenges of sustaining a highly-trained Maryland life sciences workforce.
- BioHub – Biomanufacturing Research Institute and Accelerator, a GMP-compliant shared space would be available for mid-sized companies to facilitate manufacturing and scale-up.
- BioHub – Invests would provide life sciences companies with technical assistance for accessing international capital markets, investment banking, and expanded investor relations.
- BioHub – Intelligence would offer Maryland-based university labs and small businesses flexible laboratory and coworking facilities to support early-stage companies, product development, technology transfer and entrepreneurship.

Mr. Rosendale shared that the MTC applied for and did not receive Economic Development Administration (EDA) Build Back Better federal funding for this effort and is continuing to apply for other sources of funding, including from the Montgomery County Economic Development Corporation (funding received), EDA Good Jobs Challenge program (sought \$25M, awaiting results), other EDA construction grants (will apply). Importantly, with Senator Van Hollen's support, the MTC is set to receive a \$2.45M funding for this effort, which was included as an earmark in Congress's general appropriations bill expected to be signed by the President. Mr. Rosendale added that the task force is currently working on a business plan for building and sustaining the BioHub Pathways program.

Ed Margerrison shared that the FDA offers internships and fellowships that can help propel workers into the right careers. He offered FDA's assistance with bridging the training for the workforce. Mr. Storey shared that there are plans by Virginia Tech University, The Johns Hopkins University, and Children's National Hospital to build neuroscience hubs as public-private partnerships that could potentially be partners for BioHub Maryland.

Public-Private Partnerships for Talent Development in Cecil County and General Discussion on Workforce

Mark Mortenson shared the successes he has had finding and developing an entry-level workforce for Clene Nanomedicine in Cecil County to support its fast growth. Mr. Mortenson continuously engages with his local community on-site at high schools and community colleges, and likewise brings community leaders on site to Clene to learn about the company and work opportunities. In his role as Chair of the Board of Trustees of Cecil College, he helped develop a ten-hour certificate program to teach the technical skills needed for entry-level jobs as well as an Associate's degree in bioprocessing. Clene is on the border of Delaware, so Mr. Mortenson engages with that community as well. He would like to learn more from LSAB and offered himself as a resource to the Board.

KaShaunda Rohlehr shared the success she has had with an internship program at GSK and is interested to learn about the certificate program at Cecil College. She said that it is key in developing these programs for the community colleges to communicate with industry to ensure the curriculum is appropriately matched to industry needs. She has seen improvement in these efforts recently with Montgomery College. There was discussion over the need for better connecting such programs with emerging growth companies, instead of only large companies. Rich Bendis mentioned parallel workforce issues with PhDs and postdocs who can't find industry jobs because of lack of work experience.

Public Comments

Dr. Perman asked if any members of the public have comments. There were none.

Closing Remarks

Dr. Perman thanked everyone for attending and participating in the discussion. He summarized important take-aways from the discussion: reports from the Department of Commerce, TEDCO, BioHub Maryland and local workforce development efforts. He asked OSL staff to follow-up on the conversation regarding wet lab space needs. The next meeting will be Thursday, June 23, 2022, from 9:00 to 11:00 AM at the World Trade Center in Baltimore. Board members should let Dr. Desiderio know if they wish to submit agenda items for the next meeting. Dr. Perman adjourned the meeting at 12:17 PM.