

FY2023 ANNUAL REPORT OF THE

MARYLAND LIFE SCIENCES ADVISORY BOARD

As Required by Economic Development Article

Section 3-205

Respectfully submitted to the General Assembly of Maryland by

Kevin A. Anderson

Maryland Department of Commerce

401 East Pratt Street

Baltimore, MD 21202

November 2023



Introduction

The Life Sciences Advisory Board (LSAB) was established by Chapter 304, Acts of 2007, for the purpose of maintaining Maryland's preeminence in the life sciences industry. The function of the Board is to provide strategic guidance on activities that focus on:

- Promoting life sciences research, development, commercialization, and manufacturing in Maryland;
- Fostering collaboration and coordination among life science organizations in Maryland, including federal laboratories and research institutions of higher education;
- Coordinating state and federal resources to attract private sector investment and job creation in the life sciences; and
- Addressing critical needs of the life sciences industry, including access to venture capital as well as a diverse and talented workforce.

Fiscal Year 2023 Board Composition

The current LSAB was appointed by Governor Larry Hogan on July 1, 2021 to serve a two-year term. The Board consists of the following members:

Chair: Jay A. Perman, MD, – *Chancellor, University of System of Maryland*

Vice Chair: Robert Storey – *Managing Director, The MVR Company; Managing Director, The LaunchPort*TM

Appointed Members:

- 1. Richard A. Bendis President and CEO, BioHealth Innovation, Inc.
- 2. Trushar Agrawal Sr. Director, Head of Manufacturing, Kite Pharma*
- 3. Jesse Christopher CEO, Longeviti Neuro Solutions
- 4. Rebecca Fisher, PhD Deputy Director, Congressionally Directed Medical Research Programs, U.S. Army Medical Research and Development Command
- 5. Edward Margerrison, PhD Director, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, U.S. Food and Drug Administration
- 6. Mark Mortenson, JD Chief Scientific Officer, Clene Nanomedicine
- 7. Sanjay K. Rai, PhD Chief Academic Officer and Senior Vice President for Academic Affairs, Montgomery College*
- 8. Deborah D. Ricker, PhD Provost and Vice President for Academic Affairs, Hood College*
- 9. KaShauna Rohlehr Associate Director for Alliance, Program and Project Management, GlaxoSmithKline
- 10. Martin Rosendale CEO, Maryland Technology Council
- 11. Michael Weingarten Director, SBIR Development Center, National Cancer Institute, National Institutes of Health*
- 12. Ellington West CEO and Co-founder, Sonavi Labs, Inc.*
- 13. Christy Wyskiel Senior Advisor to the President and Head of Johns Hopkins Technology Ventures, Johns Hopkins University

Standing Members:

Kevin A. Anderson* – Secretary, Maryland Department of Commerce R. Michael Gill* – Secretary, Maryland Department of Commerce Arti Santhanam, PhD – Executive Director, MII, TEDCO

Fiscal Year 2023 LSAB Activities

LSAB's activities focused on the following priorities: 1) raising awareness of Maryland's life sciences assets and resources; 2) increasing access to capital for early-stage life sciences companies; and 3) improving connectivity among local workforces and the growing life sciences industry. The three meetings held throughout the fiscal year provided opportunities for the exchange of information relevant to the life sciences community as well as updates on Board initiatives. The group discussed efforts that would support the research and development of medical technologies in Maryland; made recommendations to ARPA-H on ways to collaborate with the FDA; learned of MEDCO's and TEDCO's strategic priorities and new funds; reviewed regional workforce development activities at BioHub Maryland, Hood College, University of Maryland BioPark, 4MLK and Institute for Health Computing; and supported the Office of Life Sciences' assistance to companies attending conferences such as The MedTech Conference and the BIO International Convention (see meeting minutes in Appendix I).

The Board was particularly pleased to welcome the MedTech Innovator (MTI) Road Tour event hosted in Baltimore from March 28-30, 2023. MTI is the largest MedTech accelerator in the world and its portfolio companies have been very successful in receiving follow-on capital. The three-day event coming to Baltimore was a point of pride, as it is the largest, longest event and the only East Coast location for 2023 beating out Boston, MA. Seven Maryland companies pitched at the event and five made it to the final round of the competition.

Appendix I - LSAB Meetings Minutes

Wednesday, September 14, 2022, 12:00 p.m. – 2:00 p.m. World Trade Center Baltimore, 17th floor, Room 1746 401 East Pratt St, Baltimore, MD, 21202

Welcome and Introductions

Dr. Perman gave opening remarks and reviewed the ground rules of the meeting. He called the meeting to order and carried out a roll call to confirm attendance. He welcomed and invited new board members Trushar Agrawal, Sr. Director, Head of Manufacturing, Kite Pharma; Deborah Ricker, PhD, Provost and Vice President for Academic Affairs, Hood College; and Ellington West, CEO and Co-founder, Sonavi Labs, as well as Patrick Wynn, new Senior Director of the Office of Strategic Industries and Entrepreneurship for the Department of Commerce, to introduce themselves.

Board Members in Attendance

- 1. Jay Perman, MD Chancellor University System Maryland [Chair]
- 2. Trushar Agrawal Senior Director, Head of Manufacturing, Kite Pharma
- 3. Mike Gill Secretary, Maryland Department of Commerce (Ex Officio)
- 4. Edward Margerrison, PhD Director, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, U.S. Food and Drug Administration

^{*} These members rotated on or off during the fiscal year

- 5. Mark Mortenson, JD Chief Scientific Officer, Clene Nanomedicine
- 6. Sanjay Rai, PhD Senior Vice President, Academic Affairs, Montgomery College
- 7. Deborah Ricker, PhD Provost and Vice President for Academic Affairs, Hood College
- 8. KaShauna Rohlehr Associate Director for Alliance, Program and Project Management, GlaxoSmithKline
- 9. Martin Rosendale CEO, Maryland Technology Council
- 10. Arti Santhanam, PhD TEDCO (Ex Officio)
- 11. Bob Storey Principal, The MVR Company, Managing Director, Launchport [Vice Chair]
- 12. Ellington West CEO and Co-founder, Sonavi Labs
- 13. Christy Wyskiel Senior Advisor to the President and Executive Director Johns Hopkins Technology Ventures, Johns Hopkins University

Department of Commerce Attendees

- 1. Ulyana Desiderio, PhD Director, Life Sciences
- 2. Heather Gramm Assistant Secretary, Business & Industry Sector Development
- 3. Lisa Swoboda Senior Director Military & Federal Affairs
- 4. Stefanie Trop, PhD Senior Manager, Business Development, Life Sciences
- 5. Patrick Wynn Senior Director, Strategic Industries & Entrepreneurship

General Public Attendees

- 1. Denise Genuit Longeviti Neuro Solutions
- 2. Thomas Lewis Montgomery County
- 3. Karina Mandell Baltimore Development Corporation
- 4. Michelle Masucci, PhD University System of Maryland
- 5. Lindsay Ryan University System of Maryland
- 6. Colin Tarbert Baltimore Development Corporation

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 March 11, 2022 Meeting Minutes

Dr. Perman asked for feedback on the minutes of the March 11, 2022 LSAB meeting. Hearing none, he asked for a motion to approve the minutes, which was made by Mr. Mortenson and seconded by Ms. Wyskiel. The meeting minutes were approved.

Secretary Remarks

Secretary Gill gave remarks on recent Commerce initiatives. A new Rural Maryland Economic Development Fund announced this year will give \$50M in grant funding to rural regions to stimulate economic development. Heather Gramm elaborated that applications including projects related to infrastructure, spec building, and workforce development are under review. An enhanced Global Gateway Soft Landing program opened on September 1 to provide increased benefits to foreign companies to pilot their U.S. business in Maryland. Commerce's exhibit and delegation to BIO 2022 in San Diego was a success, bringing 15 companies and boosting exposure to life sciences in Maryland. The Secretary is highly anticipating the upcoming groundbreaking at 4MLK, which will offer lab and office space in UM BioPark and address the need for lab space in Baltimore. He thanked the Chairman and the Board for doing important work to help life sciences in Maryland reach its potential.

Dr. Ricker introduced the recently announced Hood College Biomedical Research and Training Center. The center is a key initiative in Hood's strategic plan. Highly dependent on partnerships with organizations like Kite, Frederick County Office of Economic Development, Maryland Tech Council, and the local community, the new center will offer programming to prepare students for advanced research and industry. Initial training scope will follow from experiences with Kite's cell therapy training, starting with special topics courses. Long-term goals are to have programming for flexible degree, certificate, and non-degree programs and work closely with additional industry partners to support job placement. Dr. Ricker emphasized that Hood's strong education programs and high quality faculty will be the foundation that will enable Hood to connect with K-12 students and students and faculty from other universities.

Regional MedTech Hubs and Public-Private Partnerships

NIH Blueprint Neuro Hub

Mr. Storey shared that NIH Blueprint Neuro hubs were awarded to Neurotech Harbor (Hopkins/Howard) and CINTA (Boston's CIMIT consortium). The NIH solicitation was built on the RADx model for the neuroscience space, which supports national and underrepresented innovators and disease conditions, with technology that is less than three years from clinical trials. A project solicitation will be released at the end of September, funding about \$500k per project. Local impact may include R&D opportunities and some funded projects. More information about eligibility and awards will be available in the future.

FDA Partnerships

Dr. Margerrison shared updates on FDA partnerships. A consortium was established between FDA and University of Maryland and University of Michigan through the NSF Industry-University Cooperative Research Centers (IUCRC). The NSF will provide matching funds in this pilot program, which are expected to grow over five to ten years. The first project will focus on augmented and virtual reality and medical devices. In a second strategic partnership with the Veterans Affairs in Seattle, CDRH effectively will have a satellite campus to provide regulatory advice and establish an incubator. This could serve as a pilot for a new way that FDA provides increased consultancy services. In response to interest from the Board on how companies can best approach the FDA with questions, Dr. Margerrison said that companies can direct questions to him but CDRH is challenged by bandwidth and preconceived views of the FDA as intimidating. The agency is trying to break that barrier. Since medtech innovation comes from startups, startups should be their target customer.

AdvaMed

Dr. Desiderio updated on Commerce's efforts to continue engaging with AdvaMed and The MedTech Conference in October in Boston. Commerce is supporting a delegation of 20 companies and sponsoring a networking reception for CEOs and investors. The office is also working on reviving an appearance of the MedTech Innovators (MTI) road tour in Baltimore in 2023. Dr. Desiderio envisions a week of wraparound events surrounding the main pitch events. Partners, judges, and hosts will be needed. Board members mentioned their partnerships with AdvaMed; FDA has been trying to work with the AdvaMed Accel group and TEDCO has sponsored companies through AdvaMed Accel.

Update on ARPA-H Attraction Activities

A discussion on coordinated efforts to attract new federal agency ARPA-H to Maryland was led by Lisa Swoboda, Senior Director of the Office of Military, Federal Affairs at Maryland Department of Commerce, supported by Tom Lewis, Development Ombudsman for Montgomery County and Colin Tarbert, President and CEO of the Baltimore Development Corporation. The bill to establish ARPA-H introduced to the U.S. Senate currently has language restricting the location to outside of the National Capital region. However, Maryland and Virginia senators are working to remove this exclusion. In the case that the region becomes an eligible location, Commerce's role is to coordinate stakeholders across the state to deliver a uniform message on the advantages of ARPA-H locating in Maryland, regardless of location within the state. Ms. Swoboda has been working closely with the Maryland congressional delegation and sent a letter to the Secretary of HHS to that end following discussions with many partners throughout the state including counties, cities, universities, economic development agencies, and nonprofits. Key messages include that the capital region has already demonstrated capabilities thought to be important for ARPA-H by carrying out large parts of Operation Warp Speed. Maryland already has connections to the new agency with Dr. Adam Russell, Chief Scientist of University of Maryland's Applied Research Laboratory for Intelligence and Security, and the lease of a small office space in Rockville.

Mr. Lewis and Mr. Tarbert voiced their support for Maryland speaking with a single voice and shared that Montgomery County and Baltimore City represent two of the best choices for ARPA-H to meet its mission. Montgomery County's recent initiatives to incentivize life sciences development in the White Flint (recently renamed North Bethesda) metro station and the Shady Grove science cluster are unique assets, offering connectedness, size, workforce, higher education, life sciences capacity and proximity to other federal agencies supporting life sciences. Baltimore City in particular addresses equity considerations being a minority-majority city with a leading HBCU, Morgan State University, and has attractive space available in the BioPark and Port Covington areas. Overall, the presence of ARPA-H would not have a strong regional impact on economic development, as it is not expected to execute intramural programs that would fund extensive work and staff on-site. However, many cities and states are lobbying for the agency. Board members speculated that the agency could offer many program manager positions and potentially lead to creation of spinout companies locally.

Public Comments

Dr. Perman asked if any members of the public have comments.

Ms. Mandell asked if broadband initiatives are included in the Hood College Biomedical Research and Training Center plans. Dr. Ricker responded that they are not explicitly stated in the strategic plan. However, Hood staff learned during the COVID pandemic the importance of broadband access and a need to expand it at students' homes. They improvised to provide hotspots and laptops to students in need during the pandemic and will continue to do so with future programs.

Mr. Storey introduced the expiration of the SBIR/STTR programs on September 30, 2022, which poses a risk to current and future funding. Each agency operating programs is handling the issue differently. The day before, NIH announced that the program would be extended through the end of 2022 as part of an existing budget extension, and will revisit program funding in 2023. Senator Cardin's office supports reauthorization and Dr. Santhanam said the Senator was optimistic about the negotiations in discussions with him yesterday.

Closing Remarks

Dr. Perman thanked everyone for attending and participating in the discussion. He summarized important takeaways from the discussion, including regional workforce developments with the Hood College Biomedical Research and Training Center plans, the building of excitement and support for MedTech and other public-private partnerships, and efforts to attract ARPA-H to Maryland. He thanked LSAB board members and other attendees for their discussions. Any specific follow-up discussions will be held offline and at the next meeting in early 2023. Board members should let Dr. Desiderio know if they wish to submit agenda items for the next meeting. Dr. Perman adjourned the meeting at 1:47 PM.

Wednesday, February 1, 2023, 10:00 AM - 12:00 PM World Trade Center Baltimore, 17th floor, Room 1746 401 East Pratt St, Baltimore, MD, 21202

Welcome and Introductions

Dr. Perman gave opening remarks and reviewed the ground rules of the meeting. He called the meeting to order and carried out a roll call to confirm attendance. He welcomed and invited new board member Dr. Michael Weingarten, and Matthew Cimino, new Business and Innovation Development Manager at the Office of Life Sciences in the Department of Commerce, to introduce themselves.

Board Members in Attendance

- 1. Jay Perman, MD Chancellor University System Maryland [Chair]
- 2. Trushar Agrawal Senior Director, Head of Manufacturing, Kite Pharma
- 3. Richard A. Bendis President and CEO, BioHealth Innovation, Inc.
- 4. Jesse Christopher CEO and Co-founder, Longeviti
- 5. Rebecca Fisher, PhD Deputy Director, Congressionally Directed Medical Research Programs, U.S. Army Medical Research and Development Command
- 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. Deborah Ricker, PhD Provost and Vice President for Academic Affairs, Hood College
- 10. KaShauna Rohlehr Director, Strategy and Business Transformation, GlaxoSmithKline
- 11. Arti Santhanam, PhD TEDCO (Ex Officio)
- 12. Bob Storey Principal, The MVR Company, Managing Director, Launchport [Vice Chair]
- 13. Michael Weingarten, PhD NCI, NIH
- 14. Ellington West CEO and Co-founder, Sonavi Labs
- 15. Christy Wyskiel Senior Advisor to the President and Executive Director Johns Hopkins Technology Ventures, Johns Hopkins University

Department of Commerce Attendees

- 1. Kevin Anderson Secretary
- 2. Matthew Cimino, PhD Manager, Business and Innovation Development, Life Sciences
- 3. Ulyana Desiderio, PhD Director, Life Sciences
- 4. Heather Gramm Assistant Secretary, Business & Industry Sector Development
- 5. Kim Mentzell Director, Cybersecurity and Aerospace
- 6. Stefanie Trop, PhD Senior Manager, Business Development, Life Sciences

7. Patrick Wynn – Senior Director, Strategic Industries & Entrepreneurship

General Public Attendees

- 1. Matt Hooke Reporter, Baltimore Business Journal
- 2. Jim Hughes Chief Enterprise and Economic Development Officer, Senior Vice President, University of Maryland Baltimore
- 3. Troy LeMaile-Stovall CEO, TEDCO
- 4. Michele Masucci, PhD Vice Chancellor for Research and Economic Development, University System of Maryland
- 5. Helen Montag Senior Director for Ecosystem Development, Johns Hopkins University
- 6. Tom Sadowski Executive Director, Maryland Economic Development Corporation
- 7. Kelly Schulz CEO, Maryland Technology Council

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 14, 2022 Meeting Minutes

Dr. Perman asked for feedback on the minutes of the September 14, 2022 LSAB meeting. Hearing none, he asked for a motion to approve the minutes, which was made by Mr. Mortenson and seconded by Dr. Margerrison. The meeting minutes were approved.

Maryland Competitiveness Study and Proposed Equitech Growth Fund

Mr. Stovall presented a proposed \$500M Equitech Growth Fund to increase Maryland's competitiveness as an innovation economy in an equitable manner, to be overseen by TEDCO. The proposed bill establishing the fund followed as the result of the Maryland Innovation Competitiveness study sponsored by TEDCO. Mr. Stovall sought support for the legislation of the ecosystem and organizations represented on the LSAB. There was strong support by several co-sponsors following a discussion on the structure of funding that is expected to be skewed towards earlier stages of innovation. The initial legislation was broad, with more specifics to be defined at a later time.

University of Maryland Biopark, 4MLK and Institute for Health Computing

Mr. Hughes provided updates on development projects at the University of Maryland BioPark at 4MLK in Baltimore, and the Institute for Health Computing in North Bethesda. The BioPark expansion broke ground in October 2022 towards an anticipated opening in September 2024, adding 250k square feet of lab, office and conference space to the campus. The Institute for Health Computing project in North Bethesda was conceived by Montgomery County Executive Elrich to create more urban-like density. A major goal of the Institute is to mine patient data for insights into population health, for example, to determine how to treat diabetes at scale. The project team is collaborating closely with the I-270 corridor companies, federal facilities and research labs and University of Maryland, Baltimore and UM College Park. The Institute is expected to be operational in Summer 2023, with staff hiring underway. Dr. Margerrison stated the project will be a major catalyst based on his experiences with machine learning in medical devices.

Johns Hopkins Technology Ventures (JHTV)

Ms. Wyskiel gave an overview of JHTV's history and priorities. Since JHTV's founding in 2014, its portfolio companies have received over \$3B equity investment, and 38 startups have exited. When a lab-based company is ready to graduate from JHU incubator space, 39% currently stay in Baltimore and 50% stay in Maryland, compared to only 15% prior to the founding of JHTV. Much attrition is due to the lack of available lab space in Baltimore. JHTV's spinouts are well known in

cancer diagnostics, including startups Thrive, Personal Genome Diagnostics, Delfi Diagnostics, and Haystack Oncology.

JHTV's current priorities are improving the commercialization of technology and Ms. Wyskiel sought input on ideas for programming and collaboration. JHU leadership visited Philadelphia and Pittsburgh to learn about their ecosystem building strategies and shared that it is critical to have collaboration between corporate partners, commercial real estate, and the FDA. Discussion followed on existing assets and opportunities for growth. Assistant Secretary Heather Gramm mentioned that the Governor is aware of these needs and there will be new funding through Commerce for investment in building infrastructure.

General Discussion

MedTech Initiatives:

Mr. Storey and Dr. Desiderio updated on the upcoming MedTech Innovator (MTI) Road Tour happening in Baltimore March 28-30. MTI is the largest medtech accelerator in the world and its portfolio companies have been very successful in receiving follow-on capital. The three-day event coming to Baltimore is a point of pride, as it is the largest, longest event and the only East Coast location for 2023. LSAB members were invited to participate by judging and attending public portions of the event. Mr. Storey also updated on the Blueprint MedTech initiative, which received 200 applications that were being reviewed by both the JHU/Howard University hub and CINTA/Boston.

Workforce:

Mr. Mortenson sought ideas on how to better acquaint the workforce with the life sciences ecosystem, considering the evolving attitudes of younger generations towards higher education. The board discussed the need to improve messaging and accessibility of the higher education system, deploy larger career-focused initiatives, and training programs like Betamore Academy.

Funding opportunities:

Dr. Fisher introduced CDMRP funding opportunities and offered to present in more detail at a future meeting. Mr. Bendis shared information on two programs: 1) NIH Office of Extramural Research SEED - Discretionary Technical and Business Assistance (TABA) program for SBIR Phase II recipients, which can be used to contract with vendors and consultants to support commercialization activities; and 2) Montgomery County Executive in Residence program, a collaboration between the county and BioHealth Innovation, to provide executive support to startups.

Center for Medical Innovation in Mixed Reality:

Dr. Margerrison mentioned that the new National Science Foundation-funded Center for Medical Innovation in Mixed Reality (MIXR), based at the University of Maryland College Park, had its kick off meeting last week and is now open for corporate memberships.

Ms. Rohlehr asked how large companies can help with the above initiatives. The board suggested a broader discussion on that topic in the context of workforce development at a later meeting. Mr. Bendis shared that some larger companies with excess space may be willing to help incubate growing companies, and offered to gather more information for the next meeting.

Closing Remarks

Dr. Perman thanked everyone for attending and participating in the meeting. Members wishing to submit items for the next meeting's agenda should contact Dr. Desiderio. Dr. Perman adjourned the meeting at 11:45 a.m.

Thursday, June 22, 2023, 10:00 AM - 12:00 PM World Trade Center Baltimore, 17th floor, Room 1746 401 East Pratt St, Baltimore, MD, 21202

Welcome and Introductions

Dr. Perman gave opening remarks and reviewed the ground rules of the meeting. He called the meeting to order and carried out a roll call to confirm attendance.

Board Members in Attendance

- 1. Jay Perman, MD Chancellor University System Maryland [Chair]
- 2. Trushar Agrawal Senior Director, Head of Manufacturing, Kite Pharma
- 3. Richard A. Bendis President and CEO, BioHealth Innovation, Inc.
- 4. Jesse Christopher CEO and Co-founder, Longeviti
- 5. Rebecca Fisher, PhD Deputy Director, Congressionally Directed Medical Research Programs, U.S. Army Medical Research and Development Command
- 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. KaShauna Rohlehr Director, Strategy and Business Transformation, GlaxoSmithKline
- 9. Arti Santhanam, PhD TEDCO (Ex Officio)
- 10. Bob Storey Principal, The MVR Company, Managing Director, LaunchPort [Vice Chair]
- 11. Michael Weingarten Director, SBIR Development Center, NCI, NIH
- 12. Christy Wyskiel Senior Advisor to the President and Executive Director Johns Hopkins Technology Ventures, Johns Hopkins University

Department of Commerce Attendees

- 1. Kevin Anderson Secretary
- 2. Ulyana Desiderio, PhD Director, Life Sciences
- 3. Heather Gramm Assistant Secretary, Business & Industry Sector Development
- 4. Stefanie Trop, PhD Senior Manager, Business Development, Life Sciences
- 5. Matthew Cimino, PhD Manager, Business Development and Innovation

General Public Attendees

- 1. Alex Haarich Manager, Workforce Development & Partnerships, Maryland Tech Council
- 2. Helen Montag Senior Director for Ecosystem Development, Johns Hopkins University
- 3. Tom Sadowski Executive Director, Maryland Economic Development Corporation

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 February 1, 2023 Meeting Minutes

Dr. Perman asked for feedback on the minutes of the February 1, 2023 LSAB meeting. Hearing none, he asked for a motion to approve the minutes, which was made by Mr. Mark Mortenson and

seconded by Dr. Ed Margerison and Mr. Bob Storey. The meeting minutes were approved unanimously.

Secretary of Commerce Remarks

Secretary Anderson described the administration's vision for developing a vibrant equitable economy in Maryland: the state is well positioned with resources and needs to develop coordinated strategies to collaborate. He discussed the Build our Futures Grant and thanked the Board for their advocacy and participation. Mr. Christopher commented on the administration's vision to be bold and build on the state's strengths. Dr. Fisher discussed the importance of engaging multiple stakeholders across a diverse state like Maryland. Dr. Santhanam stressed the need for high-level coordination of strategies on the state level. Dr. Perman offered the Board as a resource to the Secretary and the Governor.

MEDCO Strategic Plan Overview

Mr. Tom Sadowski presented a summary of MEDCO's mission, capabilities, and projects. MEDCO is a quasi-government organization created in 1984 by the Maryland General Assembly, to fuel economic growth in Maryland. Their capabilities include issuing revenue bonds, real estate development, tax increment financing, project development and asset management, and expert advisory/consulting services. They developed a strategic plan in 2022 focused on target industry development, innovation capacity development, inclusive and equitable economic growth, and strategic placemaking. He discussed three major life sciences strategic initiatives: 1) Maryland Department of Health and Human Services State Health Laboratory (2011); 2) Regional Institution Strategic Enterprise (RISE) Zones; and 3) supporting legislation for innovation infrastructure through the Build Our Future Matching Grant Pilot Program. Board member questions focused on the size of projects MEDCO can manage (minimum ~\$2.5M) and comments on the significant needs for transitional phase medical device manufacturing (i.e., not full automation but past prototyping).

Medtech Programming

Mr. Bob Storey summarized members of the board's and Commerce's major roles in recruiting, planning, and participating in the MedTech Innovator event in March, and that the community wants to bring the event back to Baltimore. On NeuroTech Harbor, Mr. Storey shared application numbers for the first cycle of grant solicitations, which received more from Maryland than from any other state. Grants are being reviewed and are under negotiation for proceeding into contract selection. Another solicitation will be published at the end of July. The program organizers from Maryland and Massachusetts have worked together to promote the program at conferences and invited the LSAB to attend the program's national meeting in November.

ARPA-H and **FDA** Collaboration Request for Information (RFI)

Dr. Ed Margerrison has been working closely with ARPA-H on an RFI in collaboration with FDA, which closed in May. He is aware that many responses were submitted and are being reviewed. He is also working with ARPA-H separately from the RFI. While ARPA-H's operations are currently not well defined, they are structuring programs around program managers to execute projects on specific areas of medicine. Dr. Margerrison is discussing projects to provide regulatory tools to startups.

Mr. Bob Storey described the Board's previous discussions around establishing the Maryland Medical Device Guidance, Prioritization, and Support (GPS) initiative, a medical device testbed, to

validate innovative technology in settings of health disparities and varied healthcare systems. A response to the RFI on behalf of the Board was submitted on this topic to ARPA-H. Mr. Bendis mentioned an agreement in the works with ARPA-H to provide entrepreneurs-in-residence.

Federal Funding Opportunities

Mr. Michael Weingarten shared details on the NCI Small Business Transition Grant, a new underutilized open opportunity for academics to transition to small business. Commerce will help promote through marketing channels. Other Omnibus proposals and new contract topics will be opening in July.

Board members voiced their continued support for the State of Maryland providing matching funds to SBIR recipients located in Maryland. Funding can begin to be proposed September 1. Mr. Weingarten can share data from economic impact studies to support this match.

BioHub Maryland Updates

- Ms. Alex Haarich provided status updates on BioHub Maryland, which resulted from an LSAB-Maryland Tech Council-industry task force and was funded by \$5M in state and federal funds for the next two years:
- Curriculum: BioHub is currently negotiating licensing for a biotech training program curriculum with NIBRT and piloting a small cohort of virtual courses with partner Platoon 22.
- Partnerships: BioHub has created a Veterans Advisory committee and Community Outreach committee.
- Facilities: BioHub is exploring interim training facilities, possibly with academic institutions like Hood College and are searching for a facility director.

General Discussion

Mr. Bendis shared that Maryland was ranked #3 in the recent CBRE talent report.

Closing Remarks

Dr. Perman thanked everyone for attending and participating in the meeting. Members wishing to submit items for the next meeting's agenda should contact Dr. Desiderio. Dr. Perman adjourned the meeting at 11:56 a.m.