

Friday, November 30, 2018 The University of Maryland, Baltimore Saratoga Building 220 North Arch Street, Baltimore, MD 21201 1:00 P.M. - 3:00 P.M. MINUTES

I. Welcome and Introductions

II. Call to Order

Jay Perman, M.D. - Chair, LSAB President, University of Maryland, Baltimore

Dr. Perman gave opening remarks. He introduced Secretary of Commerce Mike Gill.

III. Message from the Governor

Mike Gill - Secretary, Maryland Department of Commerce

Secretary Gill, on behalf of the Governor and Commerce, summarized the strengths of the innovation sector and updated group regarding the Excel Maryland Fund.

IV. Review and Acceptance of May 15, 2018 Minutes.

Minutes were reviewed and approved, as motioned by Dr. Perman.

IV. Discussion - Maryland BioTechnology Tax Credit

Ben Wu - Deputy Secretary, Maryland Department of Commerce

Ben Wu gave an update on potential legislative initiatives impacting the Maryland Biotechnology Investment Incentive Tax Credit program. He reviewed how the tax program functions in the context of the 2017 legislative changes. He highlighted the uncertainty of the economic impact and the return on investment from the companies in the program. The program was oversubscribed for the first time in 2017. He also summarized the findings from the series of industry meetings held across the State about how to best improve the program. A discussion of investor uncertainty caused by the limited funds ensued. Senator King would like to change the program with the help of the LSAB, and the bill will likely be reviewed by LSAB. The team then highlighted recent successful companies that were aided by the tax credit. Jarrod Borkat suggested that the program should include additional metrics to qualify QMBCs that outline a roadmap for business development.

VI. Discussion - Working Group Updates:

Jay Perman and Bret Schreiber introduced the LSAB working groups. Bob Storey summarized the goals and priorities of Working Group 1; Leverage and grow current Asset base and Accelerate Commercialization. Of note, the group is compiling a list of health priorities needs that will be able to guide innovators so that inventions have a higher likelihood of reimbursability by payers. The technology subcommittee of the FDA Testbed initiative will aid in developing the metrics required to pass the regulatory process and will be applying those metrics to novel technologies that participate in the testbed.

Doug Liu summarized the work from Working Group 2; Increase Connectivity among and awareness of MD's biohealth assets and resources. He introduced the WRAIR initiative, NIMBL, and the advertising efforts of Commerce. Bret Schreiber and Ernesto Chanona expanded on the WRAIR initiative, where companies have been invited to use the excess capacity of their Pilot BioProduction Facility.

Bret gave an update on Working Group 3; Increase availability and access to capital for early through advanced stage BioHealth companies. The Maryland Asset Model was summarized. George Davis suggested that more partners would be necessary for optimal implementation of the Maryland Asset Model. Richard Bendis highlighted the BioHealth Capital Region Investment Forum which was successful in attracting investors to the state. Bret emphasized that capital initiatives should continue to be led by the private sector.

Bret gave an update on Working Group 4; Grow Talent Pool. Bret emphasized the need for a training program to build C-level talent, but also the efforts of training entry-level programs through those such as the Biotechnical Institute of Maryland. He also mentioned the entry-level digital badging initiative from the UMD and community colleges, to help employers understand the technical and soft skills attained by the graduates. Nina Lamba expanded on the Bridges to Biotech Program that helps post-docs acquire soft skills for biotechnology careers. A discussion on a C-level leadership program for life sciences, who have mid-level management experience, ensured. Steve Pennington suggested "Why Maryland" story will help in recruiting talent to the state.

Rich Bendis summarized the accomplishments of Working Group 5 - Task Force on Federal Commercialization Opportunities. He summarized the white paper "For the Competitiveness of the Nation and the Prosperity of the Region: Improving Technology Commercialization and Localizing the Impact of Federal Laboratories in the Greater Washington Region." The reauthorization SBIR pilot programs will continue funding entrepreneurs-in-residence (EIRs), and the efforts of this working group with Maryland's congressional delegation has added 5 additional EIRs. The program at the NIH will allow access to companies that are further along in their research to apply for Phase II funding. He also mentioned that *Genetic Engineering* ranked Maryland 4th in biotechnology cluster rankings in 2018. Bret re-capped the policy deliverable that will include the input from U.S. Senate Committee on Small Business and Entrepreneurship,

the LSAB and the Small Business Administration Technology Subcommittee. Jarrod Borkat suggested we mitigate the risk of looking too region-specific by showing that Maryland is a template for federal programs that then be implemented in other states.

VII. Discussion: LSAB Progress to Date - Annual Report Highlights Bret Schreiber, Senior Director, Office of BioHealth and Life Sciences

Bret provided a very brief overview of other key accomplishments from the Life Science industry in Maryland. He discussed the Annual report on the activities of the LSAB for the preceding fiscal year. Commerce's report will update the progress from the April 2017 report, "BioHealth Acceleration Initiative - Recommendations for Accelerating the Growth of the Biohealth Industry in Maryland." Bret then summarized other recent business successes and company recruitments efforts, including "Project Element" brining 800 new jobs to Frederick, the Viva White Oaks campus near the FDA, Boeing's 3D Printing facility, and the Fischell Institute for Biomedical Devices.

VIII. Next Steps - LSAB Vision for 2019 and Deliverables for 2018

Jay Perman Mike Gill Bret Schreiber

Dr. Perman then suggested the group meet again in February to outline concrete next steps for 2019.

IX. Adjournment

Next LSAB Meeting Date: TBD