



**BOARD OF REGENTS
COMMITTEE ON ECONOMIC DEVELOPMENT
AND TECHNOLOGY COMMERCIALIZATION**

Minutes of the Public Session
September 10, 2015
Towson University

The Committee on Economic Development and Technology Commercialization of the University System of Maryland (USM) Board of Regents met in public session on Thursday, September 10, 2015, in Ballroom C of the West Village Commons at Towson University.

Chairman Attman called the meeting to order at 12:36 p.m. The regents in attendance included Mr. Attman, Mr. Gossett, Dr. Gourdine, Mr. Pevenstein, and Mr. Rauch. Also present at the meeting were Dr. Caret, Mr. Vivona, Mr. Balakrishnan, Mr. Darmody, Ms. Doyle, Mr. Hogan, Ms. Moultrie, Assistant Attorney General Bainbridge, Ms. Baker, Dr. Blankenship, Mr. Drake, Ms. Brasington, Mr. Fink, Ms. Hemmerly, Ms. Hess, Dr. Hill, Mr. Hughes, Ms. Kropp, Mr. Leaderman, Mr. Lurie, Ms. Martin, Dr. Robilotto, Dr. O'Shea, Dr. Sandborn, and Dr. Wolf.

To inform the new regents about the work of the committee, Regent Attman introduced a chart summarizing the USM's strategic priorities and initiatives for economic development and technology commercialization. Mr. Balakrishnan highlighted some of the key USM and State initiatives that have been launched over the last three years to strengthen the ecosystem internally focused to the USM as well as the external entrepreneurial ecosystem. In terms of policy initiatives, the recently approved USM Policy on Investments enables USM institutions to directly invest in start-ups that license USM intellectual property and are located in Maryland. In addition, USM faculty APT and Sabbatical Leave policies were revised to recognize and reward research with potential for commercial development. The USM is the first University System to establish such faculty policies.

The USM has also implemented measures to augment and more effectively leverage its assets, including increasing the number of site miners and licensing staff and establishing UM Ventures to bring together the complementary assets of UMB and UMCP. The site miners were instrumental in helping UMB, UMBC, and UMCP win 74 MII awards, totaling more than \$7 million. In turn, the State of Maryland has passed a series of legislative initiatives to spur economic activity through partnership with the USM. The current major collaborations include the Maryland Innovation Initiative, the RIS Zone Program to stimulate significant financial investments in designated zones around USM campuses, and the E-Innovation Initiative, a matching fund program to attract entrepreneurial faculty.

1. Chancellor Caret's Comments (Information Item)

Chancellor Caret delivered opening comments for the first meeting of this fiscal year. The Chancellor mentioned that the USM 2020 Strategic Plan is right on target and observed that the USM is an economic force in Maryland, granting about 80% (or 36,000) of the bachelor's degrees awarded in 2014. In addition, the number of STEM degrees has increased more than 40% over the past five years. Dr. Caret also noted that Maryland ranks 2nd in the most recent Milken Institute's State Technology and Science Index, which evaluates the states' science and technology capabilities and their success at converting those assets into companies and high paying jobs. Earlier this year, Genetic Engineering and Biotechnology News, the premier biotechnology publication, ranked Maryland's bio/pharma cluster among the highest in the nation.

Chancellor Caret stated that, later this fall, he will be embarking on two statewide listening initiatives. He will visit each USM campus for a day and will also undertake a bus tour to meet with business leaders, educators, government officials, and advocacy organizations. In addition, he will be holding Presidents' and Board of Regents' retreats in October. Finally, as evidence of the USM's momentum, Dr. Caret cited the rapid growth in USM-facilitated start-ups and other key technology commercialization indicators such as licensing agreements in the past few years. He remarked that a key area of focus will be leveraging USM's assets to create expansive internal and external partnerships and collaborations to propel Maryland's economy and that the work of this committee will be crucial in guiding these efforts.

2. Featured Start-Up – Maryland Development Center, LLC (Information Item)

Dr. Gil Blankenship, CEO of the Maryland Development Center, LLC (MDC), presented highlights of the company. Dr. Blankenship, who has co-founded several high technology companies, is also Professor and Associate Chairman in the Department of Electrical and Computer Engineering and Venture Coordinator for the University of Maryland, College Park.

MDC complements the University of Maryland's technology transfer offices and its goal is to translate USM intellectual property into sustainable and valuable companies located in Maryland. The company provides shared engineering, management, and business development resources, building companies around inventors. MDC's initial focus is medical devices based on IP from surgeons at the University of Maryland, Baltimore, working with engineers at the University of Maryland, College Park. The company plans to extend its operations to College Park in the near future and is now raising funds and building the business. Four start-ups have been founded through MDC so far.

3. Discovery to Product Accelerator (Information Item)

Mr. Phil Robilotto, Asst. Vice President of the Office of Technology Transfer, spoke about UMB's New Ventures Accelerator initiative. Modeled on UPenn's highly successful UPStart Program, the accelerator program will utilize UMB's internal New Ventures Team (NVT) to initiate new UMB start-up companies around technologies with a high commercial potential. The objective is to directly increase the success rate of start-ups founded on UMB technologies, focusing primarily on therapeutic/diagnostic technologies.

The NVT, with guidance from an experienced external New Ventures Advisory Panel, will form the new start-up; function as initial management; develop and execute the business plan; prepare investor presentations; obtain non-dilutive and/or dilutive funding; and recruit the eventual development/clinical stage management team. UMB will receive an initial equity position in these start-ups, and will look to exit through a major pharma or biotech alliance, an acquisition/IPO, or other capital investment.

4. USM New Company Formation – January to June 2015 Report (Information Item)

Mr. Suresh Balakrishnan briefed the Committee on new companies facilitated by the USM institutions for the reporting period January through June 2015. Since the tracking and reporting process was first adopted in July 2011, USM institutions have significantly supported the creation of 388 tier 1 & 2 new companies. This result measures well against the 2020 Strategic Plan goal of 325 companies and the USM has now exceeded that goal.

During this latest reporting period, January to June 2015, USM institutions supported the creation of 7 tier 1, 71 tier 2, 62 tier 3, and 24 tier 4 companies for a total of 164 companies (refer to the report and chart in the public session Board materials). Mr. Balakrishnan also highlighted some of the successes of USM start-ups, including Breethe, Inc., FlexEI, BackPack'Em, and Harpoon Medical. Breethe, Inc. is developing the first wearable artificial lung and has raised \$1.7 million, including a \$100,000 investment from UM Ventures. FlexEI, a custom battery solutions company, announced that it is leasing 10,000 SF of design and manufacturing space in College Park and is on pace to add 50 jobs in the next few years. Finally, Harpoon Medical, a previously featured start-up, is commercializing a surgical device for beating heart mitral valve repair. The company has raised \$3.75 million, including \$100,000 from UM Ventures. Harpoon began clinical trials in Europe in early 2015 and has successfully treated five patients.

5. Empowering the State's Economy – USM Partnering with the State on an Investment Fund Program (Information Item)

As mentioned earlier, the USM and the State are partnering on several economic development and technology commercialization initiatives. Regent Attman raised

the possibility of extending the partnership to a venture fund program and introduced the topic for consideration at the meeting.

The Maryland Innovation Venture Capital Fund would be a seed and early-stage venture capital fund with \$50 million (\$10 million annually over 5 years) to support and attract new high-growth businesses. The fund would be structured to provide critical funding to promote and accelerate the commercialization of new technologies, incentivize economic growth and encourage job creation across Maryland, and generate financial returns to enable it to be an evergreen fund. Regent Attman emphasized the importance of increasing access to early stage capital as a strategy for keeping our companies in Maryland. Mr. Balakrishnan described the current USM investment infrastructure as having all of the necessary critical elements, including a USM Investments Policy, an external ventures advisory board, and a robust due diligence process. Mr. Hughes stated that current UM Ventures' investments are in the \$50,000 to \$100,000 range and that such a venture fund would provide the flexibility to make larger investments in selected opportunities.

Committee members expressed a strong interest in continuing to work on developing the Maryland venture capital fund program.

The public session was adjourned at 2:01 p.m.

Respectfully submitted,

Gary L. Attman, Chair
Committee on Economic Development
and Technology Commercialization