

The Board of Regents Committee on Economic Development and Technology Commercialization

Minutes of the Public Session -APPROVED

December 2, 2021

The Committee on Economic Development and Technology Commercialization of the University System of Maryland (USM) Board of Regents met in public session on 12:30 pm on December 2, 2021 virtually. Regent Leggett called the meeting to order at 12:33 pm.

Regents present were I. Leggett (chair), E. Fish, R. Hur, S. Pringle, and L. Gooden.

USM personnel present were L. Ryan, E. Herbst, J. Boughman, D. Wilkerson, T. McDonough, M. Lurie, and E. Langrill. Other attendees were S. Sheppard. Presenters were V. Ehienulo, P. McQuown, E. Ford, N. Banerjee, and C. Broido Johnson.

Chair Leggett shared that this is an important time for the state and country, with economic development and technology top of mind, and the USM being an important player in Maryland's economy. He reminded everyone that the educational topic for the full Board of Regents meeting on December 10 will be Economic Development. Chancellor Perman said often when people think of higher education, they rightfully think of classroom education. However, it is critical to remember the research and economic and workforce development. Regent Leggett thanked Ms. Herbst and Ms. Ryan for their work during this time of leadership transition.

Towson University Economic Development (Information Item)

L. Ryan introduced P. McQuown, Executive Director of Entrepreneurship at Towson University. Mr. McQuown explained that he was a student entrepreneur and is not an academic. He reviewed the presentation. He explained that they have had success so far, with multiple ventures receiving or in the process of receiving follow-on investment.

Featured Startup: Plugged (Information Item)

A video of Mr. Ehienulo's lightning pitch from the Accelerator demo day was shown, detailing the company's journey and traction so far.

Mr. Legget asked about challenges and the size of the opportunity. Mr. Ehienulo said that companies are getting on board and signing up, and Plugged is vetting them. The biggest challenge is working within the politics of government and universities. For example, it may take some time to get those contracts. They have also pivoted somewhat to work with students and organizations directly.

Regent Gooden said their work was impressive. She asked how he is handling the infrastructure and security. Mr. Ehienulo said safety has been utmost from the start because of his background and his CTO's experience, and he described how they provide information security.

Workforce Development Quickfire Panel (Information Item)

L. Ryan introduced Eric Ford, Director, Choice Program at UMBC. Mr. Ford explained that they are a mentoring and advocacy program as part of the Shriver Center. Their primary mission is to disentangle youth from the juvenile legal system across five counties. Their workforce development program serves 390 young people per year across social enterprises across three locations. Over the last two years, President Hrabowski has encouraged them to explore the STEM opportunities. They are excited about a 10-week software development program with UMBC Training Centers and BGE. Through their social enterprises, they have an office location in Port Covington in the Impact Village, with is an incubator space for new businesses. They hope eventually to scale digital programs there for training in person. They have applied for funding to explore biotech opportunities as well. They are also looking to explore opportunities in the emerging cannabis industry, especially considering well-documented disparities in that workforce and potential connections to the M.S. program via UMB.

Chancellor Perman asked how young people access the program, to which Mr. Ford explained that the majority are referred through the Department of Juvenile Services. They also have word of mouth referrals and a relationship with a local high school.

Dr. Boughman asked if they are connected with University of Baltimore advocacy for youth in the legal system. Mr. Ford said they have some interactions, but not as much as they would like, and it is still a part of their strategic plan. Dr. Boughman offered to be helpful in connecting him.

L. Ryan introduced Nilanjan Banerjee, Faculty at UMBC and PI for CyMOT. Dr. Banerjee explained the CyMOT is a collaboration between UMBC, a DOD-funded manufacturing institute, UMBC Training Centers and others. They are building a training platform that is aimed at practitioners in specific roles, focusing on a niche area first. They are looking at current skills needs and those that will be needed, based on industry knowledge and input. They piloted CyMOT last year for one specific role – Manufacturing Cybersecurity Operations. 25 students earned a certificate from 10 manufacturing companies, 5 large and 5 small. 65 hours of asynchronous material was offered over 3 courses. The pilot went well, and some manufacturers are now willing to pay tuition to go through the training. They could expand to provide materials for more modern roles such as artificial intelligence and machine learning. They are also building a virtual cyber range after receiving feedback that more hands-on training is needed. They are also expanding to create a pipeline of students into the industry from community colleges and the veteran community. He explained that they could expand this to other states.

Regent Gooden said this is a high-demand area, a lot of gear is old, and it's a combination of hardware and software. She asked if they are teamed with anyone in the manufacturing arena on the range. Dr. Banerjee said they are learning from best practices through partners. They have also started conversations with MD MEP. She asked if they are tied to the Computer Science program at UMBC. He responded that he is a professor in the computer science and electrical engineering program, and they plan to leverage a lot of material they are already developing for the data science track. But they need to be shorter and more hands-on.

Regent Hur agreed that it would be high-demand. He asked about other parts of the infrastructure that aren't in manufacturing and if they are captured. Dr. Banerjee said manufacturing is a good start, but the material they are developing is applicable to anywhere with operational technology. Boeing and Dow were in the pilot, for example.

Momentum Fund Update (Information Item)

L. Ryan introduced C. Broido Johnson, Managing Director of the USM Momentum Fund. Ms. Broido Johnson reviewed the slides. Regent Leggett left the meeting at 1:20pm. Ms. Broido Johnson said she has looked at about 250 companies and MMF has funded fewer than 10%, which is fairly typical. She explained that the co-investment dollar values are great, and the added *connections* to co-investors are also very valuable. She explained that the Advisory Board is a great group of investors who volunteer their time. She explained that MMF has resulted in good press for the universities and that she has streamlined processes to provide quality investments at a good pace. She explained that money is set aside for investing further in the companies that do well. MMF has set aside only 30% for follow-on investment. Ms. Herbst asked Ms. Broido Johnson to explain how the actual decision is made. Ms. Broido Johnson explained that after the Advisory Board session, the decision is made incorporating the advice of the Advisory Board, but the actual decision is made by the Executive Committee, which consists of representatives from multiple institutions and USMO. Regent Gooden suggested moving on without discussion because several Regents are not present. Ms. Herbst agreed and said they have spoken with Regent Leggett about some of the work behind the scenes, with more information to come in the February meeting.

USM Office of Economic Development Update (Information Item)

L. Ryan presented updates regarding economic recovery, the upcoming Economic Impact Report, and the USM Strategic Plan. In the update on the early-stage resource study, she shared that all-in-all, more than 26 individuals across 15 institutions and multi-institution programs have been engaged in over 8 hours of discussion so far. Regarding the Strategic Plan, Regent Gooden asked to learn more about the goal involving MPower. Chancellor Perman clarified that it's not simply a matter of adding institutions, but using the model to make relationships through organically growing connections. Regent Hur asked if there are any no-brainer industries for collaboration. Ms. Ryan said yes, there are collaborations already to build on. Chancellor Perman provided an example of climate and environmental sciences. Dr. Boughman added that they regularly gather the STEM deans from across the USM, and there is a meeting coming up in conjunction with the USM Louis Stokes Alliance for Minority Participation (LSAMP) Research Symposium.

Regent Leggett returned at 1:52pm and thanked Ms. Herbst and Ms. Ryan again. He said that we have great potential and opportunity. We have done well as a State and University System, but we can do more and continue to communicate more about the great work being done.

The meeting ended at 1:54 pm.

Respectfully submitted,

Isiah Leggett, Chair Committee on Economic Development and Technology Commercialization