



The Board of Regents Committee on Economic Development and Technology Commercialization

Minutes of the Public Session

November 5, 2020

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 Thursday, November 5, 2020 via Zoom. Regent Leggett called the meeting to order at 12:33 pm.

Regents present were Mr. Isiah Leggett, Chair, Ms. Linda Gooden, Ms. Ellen Fish, Mr. Sam Malhotra, Ms. Meredith Mears, Mr. Gray Attman, Mr. Nathaniel L. Sansom, and Ms. Kelly Schulz. USM personnel present were J. Perman, T. Sadowski, L. Ryan, J. Boughman, D. Wilkerson, E. Herbst, T. McDonough, E. Langrill. Others present were S. Sheppard and A. Miscenich.

Mr. Barry P. Gossett, and Mr. Robert Rauch, Vice Chair.

#### **Featured Start-Up: CoapTech (Information Item)**

Vice Chancellor Sadowski presented Dr. Steven Tropello, Founder and CMO of CoapTech. Dr. Topello explained his background and current roles, including being a practicing clinician at the University of Maryland. He explained an initial interaction with a patient in 2012 that spurred the idea for their medical device to help emergency care clinicians to be able to place feeding tubes. They have received 4 NIH grants and had first in human testing due to working in Canada in 2018 before US FDA clearance in 2019 to enable commercial launch. Mr. Attman asked if the technology is patented, to which Dr. Tropello responded that they didn't receive their official patent until 2019, which was 6 years after submitting the provisional, and they have close to a dozen patents granted or in process. Dr. Topello explained that ultrasound is ubiquitous, and they use ultrasound, which means they will be able to implement broadly. There are many other procedures in addition to gastronomies that they would like to expand into. They limited who they worked with initially, but they are now at their larger product launch phase. The PUMA-G system is adult-driven, but they will be adapting it for pediatric purposes, too. They have been hiring local personnel to continue to expand the team. He thought that COVID might have sidelined them, but they have been able to launch 5 sites completely virtually across the country.

Regent Leggett asked about comparison of what is offered now versus what it in place in the market. Dr. Tropello explained that clinicians like him on the front lines who are not gastroenterologists cannot use the current technology to place feeding tubes because they aren't specialists. So, patients are kept waiting. This offers a safe way for front-line clinicians to do it themselves, which also allows for cost savings. Regent Leggett asked if there is objection from specialists. Dr. Tropello said there have been objections, but they have used the science and data to convince people, and it's working. He explained that the gastroenterologist at one of their hospitals actually prefers this to happen. Additionally, there are ways that gastroenterologists can spend their time more valuably, which results in long-term value

for them. Regent Fish asked if it has gotten to a point where insurance companies will require it to be done via PUMA as opposed to other ways. Dr. Tropello says there is a path to that, yes, and they are collecting more information to make that case. Chancellor Perman commented that he is a pediatric gastroenterologist, and he is optimistic about uses for children and asked about age ranges. Dr. Tropello answered that an NIH grant is working toward the goal of having a device to treat patients of 5 kilograms to 30 kilograms FDA cleared in the next year and a half and that they are primarily working with radiologists and surgeons, who do most pediatric feeding tubes today. Regent Gooden said that technology and cost savings are compelling and asked to which other areas they will expand. Dr. Tropello answered chest, bladder, and vascular applications could occur down the line. Regent Sansom asked about FDA approval versus clearance and what class device they are. Dr. Tropello said there was discussion of getting approved as a class II, since that would be the pinnacle, but it's not a priority right now.

### **UMB Innovation and Economic Impact (Information Item)**

Presenters were Jim Hughes, Senior Vice President and Chief Enterprise and Economic Development Officer at University of Maryland, Baltimore and Mary Morris, Director of the Baltimore Fund. Vice Chancellor Sadowski said he was glad to be part of the advisory board in guiding money allocated through the Center for Maryland Advanced Ventures (CMAV). Mr. Hughes commented that UMB is doing research work with over 300 business as we speak, including all of the major biomedical players in the industry. Mr. Hughes explained that they have had many activities related to COVID. He added that another UMB startup, Breethe, received FDA clearance 10 days ago and will begin sales. Regent Attman asked that the Rolling Stone article be sent around. Mr. Hughes explained that the Medical Device Development Fund is drawn from CMAV funding. Regent Leggett asked for an explanation of CMAV. Mr. Hughes explained that as part of MPowering the State, the state provides \$4M per year to CMAV to support commercialization and economic development, which they have integrated into UM Ventures, with Mr. Hughes as the Director, reporting to both Presidents. CMAV primarily focuses on UMB but partners with UMCP and others as well. Mr. Hughes said UMB has invested in 10 companies, with 4 exits so far and returns re-invested into economic development. Harpoon, Breethe, and SurgiGYN were acquired. Regent Attman expressed that he is glad Mr. McDonough is on the call because this the message USM investments in biotechnology generally should be shared. Mr. Hughes commented that winning companies like Harpoon and Breethe spur several other startups after and generate wealth for local investors. Mr. Hughes said they have teamed with a donor to the School of Medicine to reinvest some returns to provide a 3D printing so that early and rapid prototyping can take place.

Mr. Hughes explained that through CMAV, UMB is taking on a larger economic development role. Ms. Morris explained that the SBDC and IP Law Clinic supports UMB but also many community entrepreneurs. Ms. Morris explained that Anchor Ventures takes place in partnership with Johns Hopkins University and UMBC to serve the Baltimore region. She also added that the Maryland Department of Commerce has provided support for Anchor Ventures for FY 21. Ms. Morris explained that the Baltimore Fund can provide lease subsidies to help USM affiliated startups locate in Baltimore City and traditional economic development conditional grants to more established companies based on job creation. Ms. Morris described several other success stories. Vice Chancellor Sadowski said this is a great use of resources and important for Baltimore.

### **Maryland New Venture Fellows for Cybersecurity via UMBC (Information Item)**

Megan Wahler, Director of Entrepreneurial Services, bwtech@UMBC Research and Technology Park, presented. Ms. Wahler explained that they applied for a grant for the Economic Development Agency with a proposal to address the issue of lack of startup talent leads, as Regent Attman mentioned. She explained that she had been at Johns Hopkins University for 6 years and in coming to UMBC saw great potential for UMBC to help companies start here grow here, and stay here. She explained that partnership with USM allows UMBC to work across the System with technologists and business talent waiting to be developed, pairing them with experienced entrepreneurs as mentors. Ms. Wahler explained that 8 technologists are participating in the match event this afternoon and a dozen fellows who want to participate. All of these are from across the System. They will expand even further in the next years with federal agencies, for example. Vice Chancellor Sadowski said Gregg Smith is a corollary to Bill Niland in the cyber field. Ms. Wahler explained that the MD Department of Commerce and Baltimore County have been supportive and provided part of the match required for the grant. DataTribe is a private sector organization nurturing startups at a later stage and are looking forward to supporting teams as they develop further. Ms. Wahler explained that this will really be a group effort. She explained that much funding will be going to graduate student stipends to bring down barriers and competition with other activities they could undertake. The program will mirror different accelerators and culminate in three teams being selected to attend the top cybersecurity conference and a pitch event there. Ms. Wahler said they also wanted to put their thumb on the scale of diversity, and because of the diverse population, they will have more than 40% of participants identify as minorities and/or people of color. They are also looking for people who have had different life experiences and can benefit from a program like this as springboard. Regent Gooden said this is incredibly important initiative. Vice Chancellor Sadowski commented that the grant was a very competitive national process, and they are proud that UMBC was able to secure it.

### **USM Office of Economic Development Update (Information Item)**

Tom Sadowski, Vice Chancellor for Economic Development, presented. He referenced \$28M in funding from ARL and commented that there will be more funding and partnership announcements forthcoming. He commented that the office is working on legislation and being ready for any federal funding that will be available in the future. Industry partnerships and workforce development continue to be important and have not been slowed due to COVID. More emphasis on catalytic and early investment is to come, perhaps tapping into philanthropic resources and others, before the level of the Momentum Fund. Vice Chancellor Sadowski commented the Mr. Hughes showed the great work at UMB in regard to technology transfer, and he and Ms. Ryan are working to expand that activity to comprehensive universities, in partnership with others.

Vice Chancellor Sadowski provided an update on the COVID Research & Innovation Task Force, including the COVID I-Corps program, launching this Friday with 10 teams in the cohort. There is also exploration in partnership with the Department of Commerce in terms of bioproduction and vaccine development workforce development. A public health communications challenge is another initiative, with great help from Vice Chancellor McDonough. Regent Leggett commented that Montgomery County should be a good partner, and Vice Chancellor Sadowski said they have been in touch but is happy to connect with specific contacts if suggested. Lindsay Ryan, Venture Development Director, presented information about industry partnerships across the USM.

Secretary Schulz added that support from USM for the Maryland Marketing Partnership has been great. Their innovation uncovered campaign focuses on marketing the top 20 companies, which will be announced soon. She applauded the collaboration among so many different stakeholder, which is further developing this great ecosystem and moving the needle in a positive direction, which they anticipate more of with increased marketing through the campaign.

The meeting ended at 2:10pm.

Respectfully submitted,

Isiah Leggett, Chair  
Committee on Economic Development  
and Technology Commercialization