



UNIVERSITY OF MARYLAND STRATEGIC PARTNERSHIP MPOWERING THE STATE

Annual Report October 1, 2018

This document provides an update on activities and actions outlined in the University of Maryland Strategic Partnership Act of 2016 that have occurred in the past 12 months.

About the University of Maryland Strategic Partnership: *MPowering the State*

Overview: The University of Maryland Strategic Partnership is a formal collaboration between the University of Maryland, Baltimore (UMB) and the University of Maryland, College Park (UMCP). The framework for the Strategic Partnership began in 2012 when the University System of Maryland (USM) Board of Regents created an alliance between UMB and UMCP called *MPowering the State*. The alliance was formalized and strengthened by the University of Maryland Strategic Partnership Act, enacted on October 1, 2016.

Leadership: The University of Maryland Strategic Partnership is jointly managed by the President of UMB Jay A. Perman, MD and the President of UMCP Wallace D. Loh, PhD, JD. Each President is responsible for administration and leadership of his campus, and together for accomplishing the initiatives and programs of the Strategic Partnership.

A Joint Steering Council consisting of leaders from UMB and UMCP is appointed by the Presidents and charged with achieving the goals of the Strategic Partnership Act. The Joint Steering Council oversees MPower operations and programs including funding allocations and development of partnership opportunities.

Programs: The University of Maryland Strategic Partnership: *MPowering the State* leverages the complementary strengths of UMB and UMCP to boost research, attract research dollars to the state, improve technology transfer, address workforce needs, create new educational opportunities, attract exceptional students, faculty and researchers, and solve important problems relevant to the people of Maryland and the nation. The Strategic Partnership Initiative enables programs that would not be achieved by UMB or UMCP alone.

Implementation of the Strategic Partnership Act of 2016

The University of Maryland Strategic Partnership Act of 2016 outlines a series of charges to the universities, and a structure for reporting to the Chancellor, Board of Regents and/or the Maryland General Assembly. This document provides a summary of those duties, and progress toward implementation, on the second anniversary of the law's enactment.

Charge #1

*The Presidents jointly shall develop and implement a plan that encourages and promotes alignment, cooperation, and collaboration between the College Park campus and the Baltimore campus. The plan shall: **Identify all undergraduate and graduate academic and research programs that may benefit from alignment and collaboration between the campuses.***

In Fiscal Year 18, the working group charged with this effort continued to meet regularly, seeking new opportunities for collaboration and alignment of undergraduate and graduate academic and research programs across the two campuses. Because our programs are almost completely non-overlapping, the best opportunities for academic program collaborations seem to be in creating seamless articulation of UMCP undergraduate programs with UMB professional schools; examining enrollment marketing opportunities and recruitment materials; identifying financial aid opportunities; streamlining the admission process for international students seeking dual degrees; and identifying opportunities for joint hires for faculty. A particular area of interest in FY18 has been between bioengineering and the School of Medicine, but many others are possible.

Building on our successful MLAW undergraduate programs in law and summer internship programs, efforts in FY18 supported the development of several new certificate and degree programs for UMB and UMCP students, including:

- An innovative joint UMB/UMCP master's degree and stackable certificates in policing and public safety administration;
- A health informatics and data science specialization within the Bachelor of Science in Information Science at UMCP;
- Possible joint degrees between the UMB School of Social Work and the UMCP School of Public Policy; and
- An interdisciplinary Ph.D in health professional education between the UMB Graduate School and the UMCP College of Education.

The working group continues to review other programs in UMB and UMCP's already robust relationship to study areas where collaboration may be expanded, and/or to identify obstacles or infrastructure barriers that make it difficult for students to engage at the opposite university. There are numerous collaborative academic and research programs already in place, as well as 11 dual degree offerings; 3+3 programs that allow students to attend UMCP for three years and then matriculate to spend three years at UMB's schools of dentistry, law or pharmacy; guaranteed admission pathways for UMCP students to the UMB School of Nursing; and a bachelor of science pathway to a PharmD at the UMB School of Pharmacy, designed to increase the number of pharmacists in the state.

Charge #2

*The Presidents jointly shall develop and implement a plan that encourages and promotes alignment, cooperation, and collaboration between the College Park campus and the Baltimore campus. The plan shall: **Identify competitor state peers for the University of Maryland to be used in funding guidelines.***

As noted earlier, UMB and UMCP are almost completely complementary, and make a unique and powerful combination. This means UMB and UMCP have very few real peers in competitor states, and finding a slate of true competitor state peers proved difficult. A committee of UMB and UMCP experts named by the Joint Steering Council, studied at length the peer lists for UMB and UMCP as identified by the Maryland Higher Education Commission. After reviewing the peer lists and carefully exploring options such as combining competitor peers, the committee recommended leaving the peer comparison for the individual campuses in place as it is today. Thus, *UMB and UMCP will continue to have separate competitor state peers* because any other option puts one or both campuses at a disadvantage in funding comparisons.

Charge #3

*The Presidents jointly shall develop and implement a plan that encourages and promotes alignment, cooperation, and collaboration between the College Park campus and the Baltimore campus. The plan shall: **Promote effectiveness and efficiencies between the campuses, including potential savings in human resources, procurement, and information technology.***

An active committee of senior leaders from UMB and UMCP meets monthly to assess opportunities for alignment, cooperation and collaboration between the universities in four focus areas: procurement, finance, information technology (IT) and human resources (HR). The committee is actively examining existing systems and processes, as well as operations and contracts at UMB and UMCP, and throughout the University System. Proposed actions have completion dates ranging from one to 10 years.

In procurement, the working group recommended establishing master contracts for vendors whenever feasible. This is being implemented and the procurement groups are developing programs to stimulate higher use of these contracts across both institutions. UMB/UMCP have begun combining contracts at both institutions for printer/copier costs, and are actively examining other areas to leverage the power of collective buying.

In finance, the group is evaluating opportunities to renegotiate contracts with travel merchants, and ways in which to coordinate processes across UMB and UMCP.

In HR, the committee is examining the feasibility of joint systems, standardizing processes, and sharing programs. In one example, UMB and UMCP jointly purchased a marketing compensation pricing tool that will benefit both by providing accurate market values for jobs.

In IT, an identity management process was implemented to allow faculty, staff, and students at either university to gain access to IT systems and resources by simply using their UMB and/or UMCP ID and password. In 2018, a shared research database will merge, allowing authorized personnel easy access to shared research and grant data using their individual credentials. The team has identified licensing agreements that have potential to save money in annual support costs.

Charge #4

The Presidents shall actively seek collaboration with other institutions and entities, particularly in the Baltimore metropolitan region, as appropriate, to benefit the state. The Presidents shall report annually to the University System of Maryland Board of Regents and the USM Chancellor regarding collaboration with the City of Baltimore, Prince George’s County, and the City of College Park, in the area of community development.

UMB and UMCP have long histories of community engagement and collaboration with other institutions and entities, and both have strong relationships within the Baltimore metropolitan area. In addition, UMCP manages the state extension service and the state experiment stations for the benefit of the people of the entire State of Maryland. The Presidents are committed to harnessing the power of the University of Maryland Strategic Partnership to expand collaborations in Baltimore, as well as in UMCP’s home community of College Park and Prince George’s County. Some current examples include:

- In FY 18, the Strategic Partnership awarded funding to a new cross-university research collaboration working with Baltimore City Public Schools studying interventions to mitigate the impact of “toxic stress” on academic achievement of school children. These factors include: poverty, violence, abuse, and neglect and are particularly prevalent in many Baltimore City neighborhoods. In 2019, the team will begin testing possible interventions in Baltimore City Public Schools, and move toward expanding and partnering with schools in Prince George’s County. Dr. Nancy Grasmick, former Maryland Superintendent of Schools and presidential scholar at Towson University, is serving as an advisor to this project, which includes faculty participants from the schools of medicine and social work at UMB, and the colleges of education, public health, and behavioral and social science at UMCP.
- The University of Maryland S.A.F.E. (Support, Advocacy, Freedom and Empowerment) Center for Human Trafficking Survivors is a Strategic Partnership initiative providing comprehensive direct services, research, and advocacy to victims of sex and labor trafficking. The Center is located in College Park. In the 2.5 years since launching, the Center has developed a state-wide reputation for excellence and timely intervention, and is supporting Maryland in its coordinated state, local and federal effort against the horror of human trafficking. In addition to MPower, the Center is supported by grants from Prince George’s County, the Governor’s Office of Crime Control and Prevention, and together with Prince George’s County, a \$1.3 million grant from the U.S. Department of Justice.
- The Steering Council for the Strategic Partnership is exploring ways to engage with the University of Maryland Capital Region Health/Prince George’s Hospital Center. The acquisition of the hospital by University of Maryland Medical System and the development of a new hospital in Largo, provide opportunities for new research, outreach and student training. Together UMB and UMCP have deep experience with community health and health disparities, primary care delivery networks, ambulatory care, and clinical research. New programs may expand student training, attract and retain health and social service professionals to Prince George’s County, and improve health care provided to under-served populations in Maryland.

Charge #5

*The University of Maryland Joint Steering Council consists of members appointed by the President of the College Park campus and the President of the Baltimore campus. The Council shall: **Develop guidelines for faculty appointments that are joint between UMB and UMCP; make recommendations to the Presidents on joint faculty appointments.***

The new collaborations in research and education between UMB and UMCP have fueled a desire to jointly hire new faculty and to create cross-campus appointments for existing faculty at both institutions. University appointments may take the form of affiliate, secondary, adjunct, visiting or joint appointments, and require different levels of detail to implement. Guidelines will ensure that each appointment is managed consistently, respecting the credential review that usually has already been done on the home campus. Discussions are underway regarding policies of promotion and tenure on each campus that will hopefully facilitate joint appointments at all levels.

The guidelines will state that all faculty appointments will be facilitated by the offices of the provost at each institution. Faculty appointment letters will include a faculty member's professorial rank and tenure status, the date on which the appointment is effective, the assigned Department, Center or Institute, and the primary institution in which the appointment will reside. The primary institution's responsibilities will include administering compensation, benefits and administrative support; setting the criteria for evaluation and conducting promotion, tenure and post-tenure reviews; and managing conflicts of interest. The professional conduct policies of each university will be followed while a faculty member is on the other institution's campus.

Still in development, but nearing completion, are principles that will outline the structure for detailing these appointments. These will include workload expectations, resources, professional conduct, etc.

When completed, the recommendations will be presented to the Joint Steering Council, who in turn will make a recommendation to the Presidents.

Charge #6

Establish the Center for Maryland Advanced Ventures (CMAV) on the UMB Campus in Baltimore City; Presidents jointly appoint Executive Director.

The University of Maryland Strategic Partnership Act of 2016 created and funded the Center for Maryland Advanced Ventures (CMAV) to be located on the UMB campus in Baltimore City. The legislation provides \$4 million annually, with a goal to strengthen the commercialization of high-potential, university-based discoveries.

Prior to the start of funding on July 1, 2017, Presidents Wallace Loh and Jay Perman named James Hughes Executive Director of CMAV. Mr. Hughes is the co-director of UM Ventures, and UMB's Vice President and Chief Enterprise and Economic Development Officer.

Beginning in FY18, UM Ventures – the successful MPower-created, joint, UMB/UMCP technology transfer enterprise – took over leadership of CMAV. It structured a series of strategic and thoughtful initiatives that fulfil the goal of the legislation, while also connecting and expanding to existing UM Ventures' programs that support the advancement of technology commercialization.

Under this structure, the majority of the funding is dedicated for use on targeted grants and investments, with priority to UMB and UMCP faculty, students and university-affiliated start-up companies. It also provides entrepreneurial assistance to any Maryland public higher education institution that requests it.

CMAV staff are managing the "Baltimore Fund", which is a \$1 million portion of the CMAV funding defined by legislation to create jobs in Baltimore City by encouraging university-created or -sponsored technology companies to locate in Baltimore. (*See page 10 for more detail.*)

The initial year was focused on launching and growing the first CMAV initiatives to facilitate technology transfer, identify research projects for commercialization, and to develop programs to support commercialization. The programs are still under development and will be refined to ensure success and growth.

PROGRAM HIGHLIGHTS

Maryland Momentum Fund (MMF): the MMF is a \$25 million University System of Maryland fund (\$10 million investment from USM and \$15 million from private co-investors directly into portfolio companies) that is investing up to \$500,000 in early stage, Maryland-based, USM-affiliated startup companies. University faculty, students, and alumni from all USM schools are eligible to participate. In a first round of competition, 115 companies from six USM campuses – Towson University, University of Baltimore, UMB, University of Maryland Baltimore County (UMBC), UMCP, and University of Maryland Eastern Shore – sought investments from the fund. Eight companies (three from UMB, three from UMCP, and two from UMBC) were awarded/identified for funding.

In FY18, MMF invested \$792,000 in three of these companies: MF Fire, a UMCP startup selling advanced wood burning fireplaces; NextStep Robotics, a UMB startup developing a rehab device; and

NAWEC, a UMCP startup developing a rocket engine. The MMF Director actively helped the three companies raise an additional \$3.9 million from external investors, far surpassing a goal of a 2 to 1 match. The companies have 13 employees. Investments also have been approved in two additional companies, a cyber security company affiliated with UMBC, and a therapeutic company affiliated with UMB. MMF staff are assisting these companies to raise the required matching funds from private investors. The MMF approved investing in three additional companies, but the companies were successful in raising funding from private sources, and declined the MMF funding. Staff from MMF and UM Ventures are mentoring many of the companies which have not yet been selected for investment.

Life Sciences IP Fund: This initiative provides proof of concept funding to accelerate commercialization of technologies at UMB and UMCP. The funding further develops intellectual property (IP) through external validation and analysis. In FY18, more than \$600,000 was committed to support nine early stage technologies move toward commercialization. One of the nine was licensed for commercialization with a corporate partner in early FY19. The commercial value of this technology transferred to the commercial industry is difficult to quantify at this early stage; it is highly speculative to value technologies when they are first licensed. With the acquisition of three companies and the early success of the MMF, UM Ventures startups raised over \$120 million in FY 18. The most successful company was Harpoon Medical, a UMB medical device startup that was acquired by Edwards Lifesciences for \$100 million. Edwards has retained Harpoon's operation in Baltimore City. The original technology was licensed from UMB in 2013.

President's Entrepreneurial Fellows: Designed to educate the next generation in technology commercialization, this program was created to mentor eight students per academic year from UMB and UMCP. The Fellows worked on interdisciplinary teams to commercialize UMB-owned technologies.

M1 Venture Accelerator: UM Ventures teamed with Johns Hopkins University (JHU), Plank Industries, and Brown Advisory, to create this startup accelerator program that provides a rigorous 16-week curriculum specifically for companies creating wearable health informatics. The program helps these companies effectively identify a viable product and move it into the market. One of the first graduates of the program is the health informatics company b.well, now located in the University of Maryland BioPark.

OnEx: In April 2018, OnEx was launched as an online, express license store to provide a streamlined licensing experience for select software and materials from UMB and UMCP. Interested industry collaborators can access the information to peruse technology ripe for commercialization.

Office of Industry Alliances: Created in 2017, this new office is focused on increasing the number and the impact of academic/industry collaborations. Staff are targeting pharmaceutical and biotech companies to attract more funded research that will increase grant funding. In FY18, efforts led to sponsored research from two leading Maryland-based companies: BD Diagnostics and GSK Vaccines.

The GRID: Located in the UM BioPark at UMB, the GRID is designed to serve students, faculty, staff, and entrepreneurs in a centralized location. It features co-working and collaboration spaces, plus education and programming to support innovators as they develop and test ideas. Tenants include 11 incubator companies, who receive program and rent support. Educational opportunities include workshops, office hours, new degree programs and a home base for the **President's Entrepreneurial Fellows**. On-site resources include:

- **Small Business Development Center:** this Federal small business outreach provides direct assistance to local and university affiliated entrepreneurs.
- **UMB's Carey School of Law's Intellectual Property and Entrepreneurship Clinic (IPEC):** the IPEC law clinic helps new ventures get off the ground. Nearly 100 clients have received assistance in the areas of business law, trademarks, and patents.
- (Future) UMCP's **Robert Fischell Institute for Biomedical Devices** will support more device development with UMB's faculty, researchers and entrepreneurs, and with partners across Baltimore City.

Trajectory Next: UM Ventures teamed with Betamore and Johns Hopkins Technology Ventures to create another consortium to accelerate the development of select, high-tech companies in Baltimore through intensive mentoring and training. Supported with a \$125,000 grant from TEDCO, the program worked with seven local life science entrepreneurs to focus on their sales process. Already the work of Trajectory Next is achieving outcomes: NextStep Robotics, a firm created with UMB-licensed intellectual property, opened negotiations with a national distributor for their product as a direct result of participation in Trajectory Next.

Anchor Ventures: UM Ventures teamed with USM and JHU to create Anchor Ventures, an effort to strengthen a citywide cluster of entrepreneurs, startups, and investors. It connects Baltimore's technology companies to Baltimore's academic innovators to build a community that attracts Baltimore-based students and entrepreneurs to stay in the city. It is supported with a \$125,000 grant from TEDCO.

Baltimore Fund: The Baltimore Fund encourages university created or sponsored technology companies to locate in Baltimore City. Eligible organizations can be affiliated with any University System institution, along with Morgan State University and St. Mary's College. FY18 funds were committed to 13 university-affiliated or sponsored technology entities which resulted in the creation of 200 jobs in Baltimore City with grants and lease subsidies. Two notable examples include:

- Breathe, a UMB startup that is developing a portable artificial lung, raised over \$3 million expanded its local facility, and increased staff to 17 employees.
- Paragon Bioservices, a contract development and manufacturing organization that supports and collaborates with university academic partners and affiliates created 50 new jobs in Baltimore City with a conditional grant from CMAV designed to encourage expansion within the UM BioPark, and to continue their collaboration with UMB.

The Baltimore Fund was also used to provide lease subsidies to nine emerging companies to establish operations in Baltimore City. CMAV leaders identified and collaborated with six Baltimore City locations that will support additional emerging companies with programming and incubation space in 2019.

Staff is working collaboratively with TEDCO, Baltimore Development Corporation, and the Maryland Department of Commerce to ensure that the initiatives are fully integrated and complimentary to existing state programs.

Summary: FY 18 Annual Report of Progress

1. Technology transfer transaction efforts at UMB and UMCP have been augmented with CMAV initiatives resulting in 326 disclosures, 58 licenses and 13 new start-up companies in 2018.
2. CMAV initiated extensive outreach to university entrepreneurs and industry partners, and developed funding, educational and programmatic support delivered in the form of multiple, strategic initiatives.
3. Through the Life Sciences IP fund, CMAV identified approximately \$1 million in nine early stage technologies for possible future commercialization. In support of CMAV initiatives, UM Ventures pursued and was awarded more than \$250,000 in grants to directly enhance technology transfer activities.
4. CMAV has worked with and supported faculty, staff, and students from three USM institutions: UMB, UMCP and UMBC. Expansion to additional institutions is planned in FY19.
5. UM Ventures' startups raised over \$120 million in equity investments in FY18. The majority of the companies are located in Maryland.
6. CMAV initiatives directed financial assistance to at least 137 companies impacting and supporting a conservative estimate of 225 employees.
7. *Future note:* USM hired the Regional Economic Studies Institute (RESI) to evaluate how USM institutions measure economic development and tech transfer, and to create a common tool to calculate results. It is anticipated that the initial findings by RESI will be available in FY 19 and will be used to further improve and measure CMAV activities.

Charge #7

Establish the University of Maryland Center for Economic and Entrepreneurship (UMCEED) on the UMCP campus; Presidents jointly appoint Executive Director.

UMCEED, based at UMCP, advances education and research in neuroscience, virtual and augmented reality, biomedical devices, data analytics and cybersecurity with the purpose of advancing education and research in fields where job growth and entrepreneurial potential are high. These are fields judged to be important to the Maryland state economy, and all involve multiple, interdisciplinary, academic opportunities.

Mary Ann Rankin, PhD, a member of the Joint Steering Council of the University of Maryland Strategic Partnership and UMCP Senior Vice President and Provost, was appointed Executive Director of UMCEED by Presidents Wallace Loh and Jay Perman.

Summary: FY 18 Annual Report of Progress

The Center's funding of \$2 million for year 1, began on July 1, 2017. In fiscal year 2018, UMCEED funds were designated to hire new faculty and build new educational programs. Examples of funding support include the following:

- **Enhancement of the Department of Computer Science** – in response to the significant increase in undergraduate majors and the ongoing demand for graduate training, UMCEED funds were allocated to increase the number of tenure track and professional track Computer Science faculty. Two senior, tenured hires have been made; two additional full-time professional track hires have been made; and two academic advisors have been added to increase student support and to assure students make timely progress to graduation. Additional hires are in process. The current enrollment is at an all-time high with 3,239 undergraduate majors enrolled for fall 2018 and 297 graduate students. This reflects an increase in undergraduate majors of more than 50% since 2014.
- **Enhancement of the Fischell Bioengineering Program** – Funds have been provided to expand the capabilities of The Robert E. Fischell Institute for Biomedical Devices which is bringing together skilled scientists, medical doctors, health practitioners, and bioengineers who are working to research, design, and build biomedical devices to benefit humanity, while simultaneously training the next generation of innovators. The Institute enrolls 490 students in its undergraduate major in Bioengineering and 80 students in its graduate programs.
- **Enhancement of the undergraduate major in Information Sciences** was established to meet the demand of students interested in computing, data analytics and information sciences. Initiated in fall 2017, 709 students have enrolled in the major and continued growth is anticipated. Funds have been allocated to recruit tenure track and professional track faculty and academic advisors. It is anticipated that this new major will expand to include health informatics in the next fiscal year.

- **Development of an undergraduate major in Neuroscience** is underway. This will be an interdisciplinary program spanning the Colleges of Behavioral and Social Sciences, Engineering, and Computer and Natural Sciences. Contingent on approval from the Maryland Higher Education Commission, the Neuroscience major will launch in fall 2019. Funds have been provided for faculty recruitment.
- **Development of the Immersive Media major** – Planning funds have been provided to develop the curriculum and a budget to establish an undergraduate major in Immersive Media Design, a collaborative program between the department of computer science and the Colleges of Arts and Humanities and Behavioral and Social Sciences. This major will train students in the use of virtual and augmented reality technology for a wide range of job opportunities, including training medical professionals and police.

Charge #8

On or before December 1, 2016, the Presidents shall study and recommend to the Chancellor of the USM mechanisms that would permit the joint reporting for national university rankings of the campuses of the University of Maryland, including reporting under a unified federal identification number.

The UMB and UMCP Presidents studied and recommended to the chancellor on December 1, 2016, mechanisms that would permit the joint reporting for national university rankings. Since that time, the Presidents with the Joint Steering Council have taken steps to implement those recommendations to demonstrate how the University of Maryland is functioning as one research institution.

In FY18, President Wallace Loh and President Jay Perman together appointed a single, joint, vice president for research (VPR) to further develop and nurture the goal of building a transformative research enterprise. Effective July 1, 2018, Laurie Locascio, PhD, assumed this role. Reporting to the Presidents, she is charged with bringing discovery and research closer together, reducing barriers for UMB and UMCP to work with each other, and expanding opportunities to attract significant new funding.

A unified University of Maryland Office of Research manages the entire research administration process and reports to Dr. Locascio. It features a single reporting office for institutional research reporting to external agencies; a combined electronic research administration system; and a shared services approach to administration.

A research office website serves as a portal to the research enterprise that comprises the University of Maryland. UMB and UMCP are identified as the University of Maryland by a single, federal identification D-U-N-S number through Dun and Bradstreet.

UMB and UMCP are actively pursuing changes to the reporting requirements of the National Science Foundation (NSF) to be allowed to report as one institution in NSF's annual Higher Education Research and Development Survey. The survey serves as the preeminent rankings report for higher education institutions engaged in sponsored research in the US.

Charge #9

The Presidents of the University of Maryland campuses (UMB, UMCP) and other campuses serving the Baltimore metropolitan region shall develop a joint plan to advance employment levels in Baltimore City, including the creation of entry level employment opportunities for individuals that includes a plan for on-the-job skills training that will result in a measurable employment skill, certification or license.

The Presidents of UMB and UMCP are committed to strengthening economic and community development and working with community partners and anchor institutions in Baltimore to advance employment levels. In FY18 and continuing in FY19, UMB began discussions with area universities in the Baltimore metropolitan areas on potential areas of collaboration. Cybersecurity was identified as a top area of focus. It's an area of high global interest, and one with significant economic, political and military impact. It is also an area in which the need for a superior, trained workforce is projected to be considerable.

Several universities and entities in the region are providing different types of training and certifications around the topic. UMB's Francis King Carey School of Law through the University of Maryland Strategic Partnership, offers a master of science in law degree and certificate program with concentrations that include cybersecurity. Nearby, UMBC offers an established master's program and certificates in cybersecurity.

Early discussion have begun to create a dual-degree program between UMB and UMBC, in which UMBC may accept law school course credits toward its master of professional studies degree. It is projected that the degree program would create a new pathway for those seeking to advance their education and training, and a further opportunity to serve the state to develop experts in this important field.

In addition, work continues in the Strategic Partnership to advance employment in Baltimore City and to build on a platform of relationships and programs established by UMB in West Baltimore. UMB has a long history of collaboration with Baltimore City and the Mayor's Office of Employment Development; community partners like the Southwest Partnership, the Chesapeake Center for Youth Development and Bon Secours Community Works; industry partners like Humanim; other universities; and anchor institutions like the medical systems in East and West Baltimore.