Testimony to the Maryland House Appropriations Committee By Min Wu, PhD, Professor, University of Maryland School of Engineering John Hamlyn, PhD, Professor, University of Maryland School of Medicine Miroslaw Janowski, MD, Professor, University of Maryland School of Medicine Piotr Walczak, MD, Professor, University of Maryland School of Medicine

## HB 1054 Higher Education – High Impact Economic Development Activities – Alterations March 12, 2024 FAVORABLE WITH AMMENDMENT

We would like to support HB1054 (Higher Education – High Impact Economic Development Activities) with an amendment that retains the Conflict-of-Interest (COI) waiver for employees of the University System of Maryland who would like to participate in commercialization and entrepreneurial efforts as inventors and innovators.

Universities today have the critical mission of contributing to a highly competitive economy in their regions. They can play this crucial role in economic development through their core missions of teaching, research, and service, but also through talent development, innovation and technology incubation, and university-supported entrepreneurship. We have witnessed the impact of US universities on regional economic development in diverse ways: from California (with Stanford University, Berkeley\*, UCLA\* and UCSD\*) which have provided decades of STEM talent and Technology innovators, and the Seattle Area (with the University of Washington\*), to the East Coast, with the Boston area (with MIT and Harvard), New York City (with NYU, Columbia, and Cornell Tech), North Carolina Research Triangle (UNC Chapel Hill\* and Duke) and Pittsburgh (with Carnegie Mellon University), and Atlanta (with Georgia Tech). Austin has now become a new tech hub (with UT Austin\*). Detroit has been a leader in engineering (with the support of the University of Michigan, Ann Arbor\*). (We indicated public universities here marked by \*.)

Dr. Henry Samueli, who has been on the UCLA engineering faculty for decades, is a fine example of the enormous impact that entrepreneurial efforts by faculty can have on the university and its students, the state, and the world. Dr. Samueli co-founded Broadcom in California in 1991 with one of his UCLA doctoral students to commercialize research breakthroughs in broadband communications, circuits, and digital signal processing. Today, Broadcom is an international tech giant with a market value over \$800 billion. Till this day, Dr. Samueli is listed as a UCLA faculty member on leave.

**Restrictions on Faculty Leave Without Pay (LWOP) and Fiduciary Roles**: Universities support the development of the incubation centers for technology, of new business, and of novel economic growth for their regions – either through traditional corporate models or through starups. Visionary faculty members are often the intellectual leaders behind the new

innovations that revolutionize an industry sector. These exceptional faculty members serve as the spokepersons to evangelize the investor communities and attract VC funding and other local investment support that is necessary to transform powerful inventions into commercial products. The de-facto University of Maryland obstacle, disallowing faculty to play fiduciary roles in the startups that they launch, hampers the faculty's ability to achieve the mission of supporting substantial regional economic development. A one-year Leave-without Pay (LWOP) arrangement that can be possibly extended to maximum of 2 years is typically inadequate for a faculty inventor to support the transformation of their startups into thriving businesses. In contrast, our peer universities often offer 4+ years arrangements for LWOP with industry engagement; this extended duration is also on par for the duration of leave at government-related assignments at federal agencies, roles that tenured faculty are encouraged by University of Maryland to assume.

**COI and Lost Opportunities for Students and Maryland**: The ethical concerns related to Conflict of Interest (COI) at the University of Maryland are often excessive and unjustified to the point that they are both harmful to students and the State; we have seen recent examples of excessive COI limitations at Electrical and Computer Engineering and Quantum Computing at University of Maryland College Park, and also at University of Maryland Baltimore. Visionary faculty typically have many more lucrative options; they are working in an academic institution not for the financial rewards, but to contribute to training the next generation of researchers. The over-constraining COI policies place unnecessary burdens that strongly discourage faculty from assuming first-hand entrepreneurial roles and providing entrepreneurial experiences for students, thereby leading to significant lost opportunities for the students, who ultimately can benefit the most from such career experiences. Unfortunately, some visionary faculty are choosing to leave the University of Maryland and the State of Maryland, to take advantage of more flexible research environments.

Our trainees are life blood of our innovation sector; they also contribute to a highly effective workforce in more conventional areas. Even startup companies that do not succeed provide excellent experiences for our students. Students working in tech startups will likely continue to do innovative research, and they frequently will choose to remain in Maryland - providing Maryland is supportive of innovative companies. Over-constraining COI policies would be a serious hurdle for the recruitment and retention of talented faculty and students.

To foster a healthy, vibrant environment at Maryland for technology innovation and booming entrepreneurship, the State of Maryland and the University of Maryland must first carefully re-examine the inhibitor effects of existing universities policies on regional and State economic development. Furthermore, the State of Maryland and the University of Maryland need to relax the current COI policies and restrictions on faculty LWOP arrangements and their assuming fiduciary roles in startups. The current bill HB1054 should be amended to retain the COI waiver for researchers to avoid creating additional obstacles for faculty inventors. The State of Maryland should strongly communicate positive encouragement of its faculty for university-industry engagement and collaboration. This progressive and innovative mindset is especially critical during the current climate when we are expecting a dramatically reduced level of federal support for university research and scientific discovery.