



Nov. 4, 2022

Dear UMB Community,

We are pleased to announce that six professors from the University of Maryland, Baltimore (UMB) and the University of Maryland, College Park (UMCP) have been named MPower Professors. Three professors from each university received this distinction from the University of Maryland Strategic Partnership: *MPowering the State* (MPower), which recognizes, incentivizes, and fosters collaborations between faculty in Baltimore and College Park.

Please join us in congratulating these innovative researchers and outstanding leaders who were carefully chosen from a strong, competitive pool of nominations spanning both universities. The six selected for this honor are working across disciplines to address the most complex challenges facing society today. They are utilizing the latest advancements in computer science, machine learning, and augmented reality to revolutionize medical care, linguistics, and neuroscience; developing enhanced understanding and treatment for cancers, fungal infections, and a range of diseases; investigating cutting-edge approaches and new materials to regenerate human tissue; and examining the relationship among agriculture, energy, and water to create a safer and sustainable global food supply.

These new MPower Professors are bridging research and scholarship between institutions to foster innovation that will impact citizens in Maryland, across the country, and around the world. Each professor will receive \$150,000, allocated over three years, to apply to their salary or to support supplemental research activities.

The 2022 MPower Professors:

John P. Fisher, PhD, is the Fischell Family Distinguished Professor, Distinguished Scholar-Teacher, and chair of the Fischell Department of Bioengineering in the A. James Clark School of Engineering at UMCP. Dr. Fisher also is the director of the National Institute of Biomedical Imaging and Bioengineering/NIH Center for Engineering Complex Tissues, which aims to create a broad community focusing on 3D printing and bioprinting for regenerative medicine applications. As director of the Tissue Engineering and Biomaterials Laboratory, Dr. Fisher and his group investigate biomaterials, stem cells, bioprinting, and bioreactors for the regeneration of lost tissues, particularly orthopedic and soft tissues.

Mary Ann Jabra-Rizk, PhD, is a professor in the Department of Oncology and Diagnostic Sciences at the University of Maryland School of Dentistry. She also is an adjunct professor in the Department of Microbiology and Immunology at the University of Maryland School of Medicine. She has a broad background in investigating the

virulence factors in the opportunistic fungal pathogen *Candida albicans*, and the host and pathogen factors that play a role in the transition between colonization and infection.

Sarah B. Murthi, MD, FACS, is a professor of surgery at the University of Maryland School of Medicine, and an attending physician and director of the Critical Care Ultrasound Program at the R Adams Cowley Shock Trauma Center. She is the director of the new *Center for Medical Innovations in Extended Reality*, known as MIXR, located at UMB. The center is developing virtual reality, augmented reality, and other immersive media technologies for use in clinical trials and eventually for widespread use in medical care. Dr. Murthi's research includes implementing innovative extended reality medical displays that could improve bedside procedures.

Philip S. Resnik, PhD, is a professor of linguistics in the UMCP College of Arts & Humanities and holds a joint appointment as professor in the University of Maryland Institute for Advanced Computer Studies (*UMIACS*). He also is an affiliate professor in the Department of Computer Science in UMCP's College of Computer, Mathematical, and Natural Sciences. Dr. Resnik's research focuses on computational modeling of language that brings together linguistic knowledge, domain expertise, and machine learning methods. His current work emphasizes applications in computational social science and scientific research questions in computational cognitive neuroscience.

Amy R. Sapkota, PhD, MPH, is a professor of environmental health science in the Maryland Institute for Applied Environmental Health at the UMCP School of Public Health. She also serves as director of the *CONSERVE* Center of Excellence and director of the *UMD Global Stewards* Research Traineeship program funded by the National Science Foundation. Dr. Sapkota's research focuses on ensuring the safety of agricultural and municipal water reuse and understanding the impact of environmental microbial exposures on the human microbiome.

David J. Weber, PhD, is a professor in the Department of Biochemistry and Molecular Biology at the University of Maryland School of Medicine, with a joint appointment as professor of chemistry and biochemistry in the UMCP College of Computer, Mathematical, and Natural Sciences. He is co-director of the Institute for Bioscience and Biotechnology Research, based at the Universities at Shady Grove; director of the Center for Biomolecular Therapeutics; and director of the Maryland Center for Advanced Molecular Analysis. His research examines the structure, function, and inhibition of potential therapeutic targets in cancer, diabetes, heart disease, and infectious disease.

We are extremely proud to recognize this talented group of MPower Professors, who truly embody the *MPower* mission of fostering innovation through interdisciplinary collaboration.

Sincerely,

Bruce E. Jarrell, MD, FACS
President
University of Maryland, Baltimore

Darryll J. Pines, PhD, MS
President
University of Maryland, College Park

This note was authorized for distribution to the University of Maryland, Baltimore community by the Office of the President.

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