## **UAMS News Bureau**

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## NIH Awards Additional \$3.7 Million to UAMS to Continue Groundbreaking Research into High Blood Pressure

LITTLE ROCK — In a major boost to cardiovascular research, the National Institutes of Health has awarded an additional \$3.7 million to Shengyu Mu, Ph.D., and his team of researchers at the University of Arkansas for Medical Sciences (UAMS) to continue their groundbreaking study on the role of immune cells in hypertension.

Mu, an associate professor in the UAMS College of Medicine Department of Pharmacology and Toxicology, was awarded an initial \$1.89 million grant in 2019 to fund his laboratory's exploration of the link between immune cells and hypertension, a widespread and serious health condition.

During that time, the team made substantial discoveries indicating that immune disorders contribute to high blood pressure, paving the way for the next phase of research.

The five-year grant renewal began with a \$685,749 payment in April and is expected to fund a comprehensive series of experiments and advanced analyses over the next five years.

"We are thrilled to receive this continued support from the NIH," said Mu, a leading expert in hypertension. "Our initial research has provided strong evidence that immune cells play a key role in the development and progression of hypertension. This new funding will allow us to delve even deeper, aiming to identify new therapeutic targets and develop novel strategies to manage hypertension."

His team includes researchers Yunmeng Liu, Ph.D., an assistant professor in the Department of Pharmacology and Toxicology; Lin-Xi-Li, Ph.D., an associate professor in the Department of Microbiology and Immunology; Lu Huang, Ph.D., an assistant professor in the Department of Microbiology and Immunology; John Imig, Ph.D., professor and chair of the Department of Pharmaceutical Sciences in the College of Pharmacy; and key lab members Katherine Deck, Tonya Rafferty and Christoph Mora.

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"Together, they will leverage their diverse expertise and state-of-the-art technology and methods to further investigate this important area of research," Mu said.

He said the ongoing research has the potential to advance scientific knowledge and translate insights into clinical practice.

"By unraveling the influence of immune cells on hypertension, it could pave the way for new interventions designed to modulate the immune response, potentially offering more effective and personalized treatments for patients," Mu said.

The NIH's support underscores the importance of the research in addressing a critical public health crisis, Mu said.

"Hypertension remains a leading cause of illness and death worldwide," Mu said. "Innovative research like that being done at UAMS is crucial for developing new ways to prevent and treat it."

He hopes that the research findings will help reduce the burden of hypertension and improve cardiovascular health globally.

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UAMS is the state's only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; a hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and eight institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute, Institute for Digital Health & Innovation and the Institute for Community Health Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS' clinical enterprise. UAMS is the only adult Level 1 trauma center in the state. UAMS has 3,275 students, 890 medical residents and fellows, and five dental residents. It is the state's largest public employer with more than 12,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children's, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on Facebook, X (formerly Twitter), YouTube or Instagram.

