

**Bina Joe, PhD, FAHA, FAPS, ISHF**

Chair, Department of Physiology and Pharmacology  
Frederick-Hiss Endowed Professor  
Director, Center for Hypertension and Precision Medicine  
University of Toledo, College of Medicine and Life Sciences

PhD – University of Mysore

Dr. Bina Joe is a member of the executive cabinet of the Dean, Distinguished University Professor, Chairwoman of the Department of Physiology and Pharmacology, Frederick-Hiss Endowed Professor and the founding Director of the Center for Hypertension and Precision Medicine at the University of Toledo, College of Medicine and Life Sciences.

Dr. Joe received her Ph.D. from the University of Mysore in India. After a brief postdoctoral fellowship at the Indian Institute of Science in Bangalore, she moved to the Pharmaceutical Industry working for AstraZeneca India and subsequently immigrated to the United States in 1997 as an International Fogarty Scholar to conduct Molecular Genetics research on Arthritis in the Intramural Research Division of the National Institutes of Health, Bethesda, MD. Her work in Hypertension began in 2001 when she accepted a faculty position at her current Institution, the University of Toledo College of Medicine (erstwhile known as the Medical College of Ohio). In 2011, she founded the Center for Hypertension and Precision Medicine, which is a University Research Council approved Center. Since 2015, she has assumed the position of Department Chairwoman. For the past two decades, she has been instrumental in leading Hypertension Research, which is now recognized as a Spotlight research area of unique distinction in the University of Toledo.

Dr. Joe is an internationally recognized leader in hypertension research who has been continually funded with >\$22 million by the US Government over the past 17 years. She has published over 150 peer-reviewed articles, many documenting pioneering discoveries and 6 book chapters. Her research work is published in several top-tier journals including PNAS, Cell, Cell Reports and Nature Communications. Her laboratory was the first to use CRISPR-Cas9 gene editing to positionally clone non-coding variants causing hypertension. More recent pioneering recent innovative discoveries of her laboratory include (1) the identification of gut microbiota as causal factors for blood pressure regulation, (2) the ketone body betahydroxybutyrate as an antihypertensive metabolite, (3) the link between energy metabolism and hypertension and (4) the association between diurnal rhythms of gut microbiota with hypertension.

She is the first Asian-American recipient of several research awards in hypertension research including the International Harriet Dustan Award for women in science as well as the Lewis K. Dahl Memorial Lecture Award from the American Heart Association, the Ernest Starling Distinguished Lectureship Award from the American Physiological Society and the Young

Scholar Award from the American Society of Hypertension. She has been invited for presentations in several countries including UK, US, Greece, China, Australia, Cuba and Canada and at congresses as a keynote speaker in the U.S.

Dr. Joe has mentored several Research Assistant Professors, postdoctoral fellows and graduate students, many of whom have attained independent academic careers.

Dr. Joe is the Ex-Editor-in-Chief of Physiological Genomics, a Journal of the American Physiological Society and the current Editor-in-Chief of a new journal affiliated with the European Endocrine Society titled 'Microbiota and Host'. She continues to serve on multiple NIH and other international review panels, is the Scientific Organizer of several International Conferences in USA and UK. She is currently engaged in various executive leadership activities to promote research locally, nationally, and internationally. Besides being an internationally recognized Researcher, she has taken on multiple leadership positions within the American Physiological Society and the American Heart Association and the International Society of Hypertension.

Besides her scientific pursuits, Dr. Joe is an artist in Classical Indian Dance and has graduated many students in this art. She is active in Philanthropy as a Board of Trustees member of the Greater Toledo Community Foundation as well as an active member of the Women in Philanthropy organization in Toledo, OH.