### **PHARMACY** UNIVERSITY OF MICHIGAN

The University of Michigan College of Pharmacy is pleased to present the

## Shaomeng Wang Drug Discovery Award

"Pharmacological Adaptation of Proteostasis to Ameliorate Aging-associated Degenerative Diseases"

# Jeffery W. Kelly, PhD

Lita Annenberg Hazen Professor of Chemistry Department of Chemistry Scripps Research Institute

April 11 2024, 11:00AM-12:00PM

Great Lakes Room South Palmer Commons The Shaomeng Wang Family Lecture Fund was established in 2021 by Dr. Shaomeng Wang and Dr. Ju-Yun Li to support the prestigious Shaomeng Wang Drug Discovery Distinguished Lecture series.

Dr. Jeffery Kelly is the recipient of the third annual Shaomeng Wang Drug Discovery Award.





### Jeffery W. Kelly, PhD Lita Annenberg Hazen Professor of Chemistry Department of Chemistry The Scripps Research Institute

A central theme of the Kelly Group's research is to understand the chemistry and biology of protein homeostasis (proteostasis) and the influence of proteostasis pathways on the competition between protein folding, misfolding and aggregation, the latter two processes being associated with a spectrum of human diseases. A recent focus has been on adapting the innate biology of protein maintenance carried out by the proteostasis network within the cell pharmacologically to enhance the folding and trafficking or clearance of aggregation-prone and/or misfolding-prone proteins. Proteostasis is influenced by the energetics of protein folding, misfolding and aggregation, as well as by numerous regulated networks of interacting and competing biological pathways comprising the proteostasis network; including ribosomal protein quality control, chaperone (chaperonin) and enzyme-mediated folding vs. proteasome- and autophagy-mediated degradation. Knowledge gained from our mechanistic investigations is used to conceive of new small molecule therapeutic strategies that in one case have led to the discovery of a first-in-class small molecule drug for the amelioration of gain-of-toxic-function transthyretin amyloid diseases - characterized by degeneration of the nervous systems and/or the heart. The Kelly Group is also currently developing novel therapeutic strategies for degnerative diesases including Alzheimer's and Parkinson's diseases, and for loss-of-function diseases such as the lysosomal storage diseases.

scripps.edu/kelly/



#### Shaomeng Wang, PhD

Warner-Lambert/Parke-Davis Professor of Internal Medicine, Medical School, and Professor of Medicinal Chemistry, College of Pharmacy

Dr. Shaomeng Wang received his B.S. degree in Chemistry from Peking University, Beijing, China in 1986 and his Ph.D. in Chemistry from Case Western Reserve University, USA in 1993, followed by a postdoctoral fellowship at the National Cancer Institute, NIH, USA. Dr. Wang was assistant professor between 1996-2000 and associate professor between 2000-2001 at Georgetown University Medical Center. Dr. Wang joined the University of Michigan in 2001 as a tenured associate professor in the Department of Internal Medicine of the Medical School and was promoted to full professor with tenure in 2006. Dr. Wang is currently the Warner-Lambert/Parke-Davis Professor in Medicine and Professor of Internal Medicine and Pharmacology of the Medical School and Professor Medicinal Chemistry of the College of Pharmacy, and Director, Michigan Center for Therapeutic Innovation.

Dr. Wang has authored 326 peer-reviewed publications and has an H-index of 96 with total citations of >33,000 according to Google Scholar. Dr. Wang is an inventor of 66 granted US patents and >100 US patent applications.

Dr. Wang was the 2014 University of Michigan Distinguished Innovator and the recipient of the 2020 Division of Medicinal Chemistry Award of the American Chemical Society. Dr. Wang was elected as Fellow of the National Academy of Inventors in 2014 and as Fellow of the American Association for the Advancement of Science (AAAS) in 2019. Dr. Wang was inducted into the Hall of Fame of the Division of Medicinal Chemistry of American Chemical Society in 2020. Dr. Wang served as the co-Editor-in-Chief for Journal of Medicinal Chemistry of the American Chemical Society between 2012-2020.

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