



THE UNIVERSITY OF ARIZONA
COLLEGE OF MEDICINE TUCSON

Physiology

Seminars in Translational & Advanced Research (STAR)

Friday, October 16
Arizona Health Sciences Center
Room 8403
11:00am - 12:00pm

<https://arizona.zoom.us/j/85062222452>



Changwei Li, PhD

*Associate Professor; O'Donnell
School of Public Health,
University of Texas
Southwestern Medical Center*

Host: Jason Wu

"Using multi-omics approach to study gene-environment interactions in cardiometabolic disease"

Dr. Li's research focuses on the genetic, epigenetic, and metabolic mechanisms underlying chronic kidney disease (CKD), cardiovascular disease, and cognitive decline. His work has demonstrated that early-life exposure to the Chinese Great Famine is associated with persistent DNA methylation changes and increased risk of chronic disease, providing important evidence for developmental programming in human health. He has also conducted pioneering genome-wide studies of gene-sodium and gene-potassium interactions in hypertension, contributing to a better understanding of the genetic determinants of salt sensitivity and blood pressure regulation.

Currently, Dr. Li leads multiple NIH-funded, multi-institutional studies within the Chronic Renal Insufficiency Cohort (CRIC) and Trans-Omics for Precision Medicine (TOPMed) programs. His recent research examines environmental determinants of APOL1-associated CKD progression, mitochondrial DNA abnormalities in kidney disease, and molecular mechanisms linking kidney dysfunction with cognitive decline.