



### **Biography**

Dr. Shi is currently a Joe R. & Teresa Lozano Long Distinguished Chair Professor in Metabolic Biology at Barshop Institute for Longevity and Aging Studies, University of Texas Health Science Center at San Antonio. He led a unique career path that combines his previous pharmaceutical research experience in a major drug company with current appointment at various academic institutions. His research work at Barshop strives to identify novel molecular mechanisms underlying the connection of aging with aging-related metabolic diseases, including type 2 diabetes, obesity, diabetic complications, and cardiovascular diseases, with an overarching goal to develop novel treatments for these conditions. His laboratory pioneered the research work on cardiolipin remodeling in obesity and type 2 diabetes, and demonstrated a key role of pathological remodeling of cardiolipin in controlling mitochondrial etiology of aging-related metabolic diseases. Prior to his current appointment at UTHSCA, he held various positions at Penn State University College of Medicine and Eli Lilly and Company. His research work at Penn State University uncovered a novel signaling pathway by which GLP-1 regulates glucose-sensing by pancreatic beta cells. A loss of glucose responsiveness by pancreatic beta is a major pathological event that triggers the onset of type 2 diabetes. During his 11 years of tenure at Lilly, he led a major effort in the development of early stage drug pipeline for diabetes and obesity, including the successful launch of Byetta (Exenatide), the first-in-class treatment for type 2 diabetes. His research work at Lilly also led to the cloning and characterization of PERK kinase, a major regulator of ER-stress and translational control.