My research focuses on signaling integration of a converged network of insulin receptor and adrenergic receptors, and their roles in different clinical conditions including diabetes, cardiovascular complication and Alzheimer's disease, respectively. We apply an arsenal of advanced approaches ranging from single molecular study and live cell imaging to in vivo manipulation and patient’s sample examination to understand physiology and pathophysiological roles of the receptors, and their implication in drug discovery and clinical therapy.

