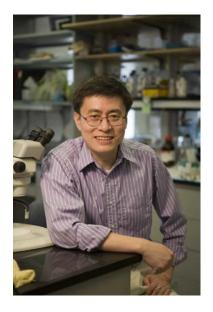


## Seminar Series Presents

## "The role of Mrgprs in pain and itch"



Xinzhong Dong, PhD Professor Department of Neuroscience Johns Hopkins University

Abstract: My laboratory has taken a multidisciplinary approach to understand the cellular and molecular mechanisms of different types of somatosensations including pain and itch, which are initiated and mediated by primary sensory neurons in dorsal root ganglia (DRG). We identified a novel family of G protein-coupled receptors (GPCRs) in mice called Mrgprs. We found that several Mrgprs are specifically expressed in DRG neurons and function as itch receptors by detecting various itchy substances. In addition to itch, certain Mrgs play an inhibitory role in spinal central sensitization and chronic pain. In addition to itch receptors, we found that MrgprX2 in humans and MrgprB2 in mice are exclusively expressed in mast cells and play an essential role in IgE-independent mast cell activation and mediate itch and pain.

Wednesday, January 16, 2019 11:00 am – 12:00 pm Arizona Health Sciences Center, Rm 8403