

Presents

"Targeting chronic pain: from calcium channels to brain circuits"



BY

Dr. Gerald W Zamponi, FRSC, FCAHS, FNAI (USA) – Professor and Senior Associate Dean

Host: Dr. Arthur Riegel

Abstract: Chronic pain is a debilitating condition for which there are currently few treatment options. During chronic pain states, there are persistent changes in peripheral and central nervous system neuronal circuits that process pain related information. Our laboratory has discovered a key mechanism by which dysregulation of voltage gated T-type calcium channels by deubiquitinase activity is important for aberrant pain signaling in inflammatory and neuropathic conditions, and we are developing novel pain therapies based on our findings. We are also striving to understand how brain connections are altered during neuropathic pain, and we accomplish this by using in vivo optogenetic and chemogenetics approaches, coupled with pain behavioral assessments to map how the brain processes pain related information. I will speak about these two lines of research in our laboratory.

Wednesday, January 17, 2024 11:00 am – Noon AHSC - Room 8403 https://arizona.zoom.us/j/87382571358