

**Symposia Date: Thursday, April 13**

**Symposia Time: 2:00-3:30pm**

**CIPN from bench to bedside – novel mechanism, targets, and approaches for closing translational gaps**

Primary Content: Translational

*Daniela Salvemini, Ph.D, William Beaumont Professor and Chair, Director, Institute for Translational Neuroscience, Department of Pharmacology and Physiology and Institute of Translational Neuroscience, Saint Louis University School of Medicine, St. Louis, MO; Juliana M. Navia Pelaez, PhD, Postdoctoral fellow, University of California, San Diego School of Medicine, San Diego, CA; Simon Haroutounian, MSc.Pharm, PhD, Department of Anesthesiology, Washington University School of Medicine, St. Louis, MO; Patrick Dougherty, PhD, Division of Anesthesiology, Critical Care and Pain Medicine, MD Anderson Cancer Center, Houston, TX*

Chemotherapy-induced peripheral neuropathy and neuropathic pain (CIPN/NP) are major complications of widely used cancer chemotherapeutics. 15-20% of patients receiving common chemotherapy drugs such as taxanes and platinum compounds develop chronic CIPN, affecting functioning and quality of life. There are no FDA-approved drugs for CIPN prevention or treatment. The discovery of novel therapeutic targets is necessary, along with successful bench to bedside translation. In this multidisciplinary symposium, we combine presentations of novel pharmacological target discovery for CIPN/NP, along with novel results from a pilot clinical trial, and discuss major advances and barriers toward translational CIPN research and therapeutic development.

Symposia Moderator: Patrick Dougherty

## **Let's Talk About It: Using Insights from Qualitative Interviews to Advance Mindfulness-based Interventions for Chronic Pain**

Primary Content: Clinical

*Jessica Barnhill, MD, MPH, University of North Carolina - School of Medicine; Carrie Brintz, Vanderbilt University Medical Center; Matthew Herbert, PhD, VA San Diego Healthcare System*

Mindfulness-based interventions (MBIs) for chronic pain continue to be of high interest to patients and providers. However, similar to other evidence-based psychological interventions, not every patient receives benefit from MBIs and effects on outcomes of interest remain small to medium. In an effort to better understand the receptivity, applicability, and impact of MBIs, this symposium centers on findings from qualitative interviews from three different MBIs among three different chronic pain populations to learn directly from the words of participants.

Symposia Moderator: Matthew Herbert

## **Non-coding RNAs, potential biomarkers and targets for chronic pain and itch**

Primary Content: Basic Science

*Ru-Rong Ji, PhD, Department of Anesthesiology, Center for Translational Pain Medicine, Duke University Medical Center, Durham, NC, USA; Seena K Ajit, Department of Pharmacology and Physiology, Drexel University College of Medicine, Philadelphia, PA, USA; Yuan-Xiang Tao, Department of Anesthesiology, Rutgers, The State University of New Jersey, New Jersey Medical School, Newark, NJ, USA*

Dysregulation of pain/itch-associated genes in sensory nerve system is considered to be a molecular basis of chronic pain and itch genesis. Non-coding RNAs including miRNAs and long non-coding RNAs govern gene expression. In this symposium, we will discuss the updated evidence that non-coding RNAs contribute to chronic pain and itch and are potential biomarkers and/or targets for these disorders.

Symposia Moderator: Yuan-Xiang Tao

## **Addressing Social Indicators of Health to Improve Pain and Functioning in African American Older Adults**

Primary Content: Diversity, Equity, and Inclusion

*Staja Booker, PhD, RN, University of Florida, College of Nursing; Mary Janevic, PhD, MPH, University of Michigan School of Public Health; Janiece Taylor, Johns Hopkins School of Nursing*

Psychosocial interventions for pain have typically focused on individual behavior change, with little attention to the inequitable social and environmental conditions that place minoritized and marginalized groups at high risk for pain-related disability. Our presenters discuss behavioral interventions, at various stages of development from conceptualization to implementation, that address social, cultural, and environmental factors affecting pain and whole-person health in African American older adults, a group at high risk of disabling pain.

Symposia Moderator: Tamara Baker

## **Nonopioid substance Use and Pain: Human and Animal Studies**

Primary Content: Basic science, clinical and translational

*Anushree Karkhanis, Ph.D. Assistant Professor, Department of Psychology, Binghamton University – SUNY.; Lisa R. LaRowe, Ph.D. Instructor in Investigation, Division of Palliative Care and Geriatric Medicine, Massachusetts General Hospital., Boston, MA; Nicholas Gilpin, Ph.D. Professor, Department of Physiology, LSU Health New Orleans; M. Imad Damaj, Ph.D. Professor, Department of Pharmacology and Toxicology, Virginia Commonwealth University, Richmond VA;*

Pain and substance abuse are highly comorbid conditions, and the prevalence of substance use among persons with pain is higher than the general population. Understanding the complex relationship between SUD and pain is an important area of research for the pain community. About 20 percent of adults (50 million people) in the United States had chronic pain, defined as pain most days in the previous 6 months. Recent studies suggest that around 1 in 4 adults in chronic pain reports self-medicating with alcohol, and 43–73 percent of people with alcohol use disorder (AUD) report experiencing chronic pain. This produces synergistic burdens on individuals, providers, and health-care systems. While research has focused on opioid use and misuse in acute and chronic pain, emerging literature also suggests that pain and nonopioid substance dependence such as alcohol, nicotine and cannabis are both highly prevalent and comorbid conditions. This symposium will focus on these nonopioid substances and pain relationship in animal models and human studies and explore the relationship between pain and various aspects of three substances of abuse such as nicotine, alcohol, and cannabis.

Symposia Moderator: Anushree Karkhanis