

Pain and Addiction: Mechanisms and Management

Health Sciences Innovation Building, Forum

1670 E. Drachman St., Tucson AZ

7:30 a.m. – 6:00 p.m., November 5, 2025

WEDNESDAY, NOVEMBER 5

7:30 - 8:00 Breakfast

8:00 - 8:25 Opening Remarks

Todd Vanderah, PhD, Director, Comprehensive Center for Pain & Addiction, University of Arizona Health Sciences, Regents Professor and Head, Department of Pharmacology, College of Medicine – Tucson, University of Arizona

Don Kyle, PhD, Chief Executive Officer, National Center for Wellness and Recovery

Frank Porreca, PhD, Cosden Professor of Pain and Addiction Studies, Associate Head, Department of Pharmacology, College of Medicine – Tucson, University of Arizona

5-minute meet & greet

Session 1 – Todd Vanderah, PhD, Chair

8:30 - 8:55 **Allan Basbaum**, Professor & Chair, Department of Anatomy, University of California San Francisco
Biomedical Science Graduate Program

Imaging pain processing mechanisms in the awake, behaving animal

8:55 - 9:00 Q&A

9:00 – 9:20 **Frank Porreca, PhD**, Cosden Professor of Pain and Addiction Studies, Associate Head, Department of Pharmacology, College of Medicine – Tucson, University of Arizona

Neuroendocrine regulation of female sensory thresholds

9:20 - 9:25 Q&A

9:25 - 9:45 **Aubin Moutal, PhD**, Assistant Professor, Saint Louis University School of Medicine

Systemic lupus erythematosus unmasks a prolactin-driven female axis of autoimmune pain

9:45 - 9:50 Q&A

9:50 - 10:05 Coffee/Media Break/Group Picture

10:05 - 10:15 **Amol Partwardhan, MD, PhD**, Medical Director, Multidisciplinary Pain Clinic, A.H. “Buddy” Giesecke, Jr., M.D. Distinguished Professor in Anesthesiology and Pain Management, UT Southwestern Medical Center, Dallas

Human validation of analgesic targets: an ex vivo assay

- 10:15 - 10:20..... Q&A
- 10:20 - 10:30..... **Chung Jung Mun (“Moon”), PhD**, Associate Professor, Edson College of Nursing and Health Innovation
Arizona State University
Timing Matters: Circadian rhythmicity of pain sensitivity and implications
- 10:30 - 10:35 Q&A
- 10:35 - 10:45..... **Julie Pilitsis, MD, PhD, MBA**, Professor and Chair, Department of Neurosurgery,
University of Arizona, Physician Executive, Functional Neurosurgery, Banner Health
LIFU Neuromodulation: From concept to bedside
- 10:45 - 10:50 Q&A
- 10:50 - 11:00..... **Ilknur Telkes, PhD, MS**, Assistant Professor, Department of Neurosurgery, Department of Biomedical
Engineering, Department of Neurosurgery, College of Medicine – Tucson, University of Arizona
Neuromodulation alters attentional bias in chronic pain
- 11:00 - 11:05 Q&A
- 11:05 - 11:15..... **Jennifer S. De La Rosa, PhD**, Assistant Research Professor, Department of Family and Community
Medicine, Strategy Director, Comprehensive Center for Pain & Addiction, University of Arizona
*Toward population neuroscience: Do overlapping symptoms bias depression screening in the context of
chronic pain?*
- 11:15 - 11:20 Q&A
- 11:20 - 11:30..... **Juyoung Park, PhD**, Professor and Associate Director, Brain Digital Technology Laboratory
College of Nursing, University of Arizona
*Remotely supervised home-based nonpharmacological intervention for osteoarthritis pain in older adults
with Alzheimer’s disease and related dementias*
- 11:30 - 11:35 Q&A
- 11:35 - 11:45..... **Marianne Matthias, PhD**, Associate Dean of Research, Professor, College of Nursing
University of Arizona
Patient-centered approaches to chronic pain management
- 11:45 - 11:50 Q&A
- 11:50 - 12:00..... **Beth Meyerson, MDiv, PhD**, Beverly Benson McCord Endowed Chair of Nursing, Director, Harm
Reduction Research Lab, Policy Director, Comprehensive Center for Pain & Addiction, Professor, College of
Nursing, University of Arizona
Aging at the intersection of opioid use: Implications for intervention precision and patient care
- 12:00 - 12:05 Q&A

12:05 - 1:00 Lunch

Session 2 – Don Kyle, PhD, Chair

1:00 - 1:10 **Justin LaVigne, PhD**, Research Scientist, Department of Pharmacology, University of Arizona
Rethinking opioid overdose reversal agents: combating agonism with partial agonism

1:10 - 1:15 Q&A

1:15 - 1:25 **Amanda Wunsch, PhD**, Principal Investigator, National Center for Wellness and Recovery,
Removing β -arrestin drives negative emotional states in rats

1:25 - 1:30 Q&A

1:30 - 1:40 **Tally Largent-Milnes, PhD**, Associate Professor, Department of Pharmacology, University of Arizona
It's only a headache...

1:40 - 1:45 Q&A

1:45 - 1:55 **Edita Navratilova, PhD**, Associate Professor, Department of Pharmacology, University of Arizona
Sexually dimorphic mechanisms of migraine

1:55 - 2:00 Q&A

2:00 - 2:10 **Carol Kopruszinski, PhD**, Assistant Professor, Department of Pharmacology, University of Arizona
Optogenetic activation of meningeal CGRP-expressing neurons elicits migraine-like pain

2:10 - 2:15 Q&A

2:15 - 2:25 **Shailesh Khatri, PhD**, Principal Investigator, National Center for Wellness and Recovery
A state-dependent sodium channel blocker to treat pain

2:25 - 2:30 Q&A

2:30 - 2:40 **Rebecca Wachs, PhD**, Associate Professor, School of Biological and Health Systems
Engineering, Arizona State University
Engineering treatments for chronic low back pain

2:40 - 2:45 Q&A

2:45 - 3:00 Refreshment Break

Session 3 – Frank Porreca, Ph.D., Chair

3:00 - 3:10 **Art Riegel, PhD**, Associate Professor, Department of Pharmacology, University of Arizona
A molecular signature for pain in the VTA

3:10 - 3:15 Q&A

- 3:15 - 3:25 **John Streicher, PhD**, Professor, Vice Chair for Research, Department of Pharmacology, University of Arizona
The orphan receptors GPR63 and GPR153 suppress microglial activation in pathological pain
- 3:25 - 3:30 Q&A
- 3:30 - 3:40 **Trent Anderson, PhD**, Associate Professor, Department of Pharmacology, University of Arizona
From Impact to Aura: The role of cortical spreading depression in post-traumatic headache
- 3:40 - 3:45 Q&A
- 3:45 - 3:55 **Laurent Martin, PhD**, Assistant Professor, Departments of Anesthesiology and Pharmacology, University of Arizona
The green light at the end of the tunnel
- 3:55 - 4:00 Q&A
- 4:00 - 4:15 **Mohab Ibrahim, MD, PhD**, Professor, Departments of Anesthesiology, Neurosurgery, and Pharmacology, Director, Chronic Pain Clinic, Director, Chronic Pain Fellowship, Medical Director, Comprehensive Center for Pain and Addiction, University of Arizona, Banner-University Medical Center
Research...Education...Healthcare
- 4:15 - 4:20 Q&A
- 4:20 - 5:00 **Data Blitz** (5-minute presentations followed by 3-min Q&A)
- Siri Williams, PhD**, Director, Division of Neuroscience and Behavior, National Institute of Drug Abuse (NIDA), National Institutes of Health
Translational research evaluating novel approaches to reduce pain with intrauterine device insertion
- Grace Lee, PhD**, Research Scientist, Navratilova Lab, Department of Pharmacology, University of Arizona
CGRP in female pelvic pain
- Harrison Stratton, PhD**, Post-doctoral Fellow, Ross Lab, Pittsburgh Center for Pain Research, University of Pittsburgh
PIPER: a new tool for multiphoton population imaging in the DRG
- Ingrid Peterson, PhD**, Post-doctoral Researcher I, Largent-Milnes Laboratory, Department of Pharmacology, University of Arizona
Formoterol impacts endocannabinoid tone in the periaqueductal grey inducing headache
- Jerry Carr**, Graduate Research Assistant, Streicher Laboratory, Department of Pharmacology, University of Arizona
Terpenes from Cannabis sativa alleviate pathological pain by activating Pax2+ inhibitory interneurons through the Adenosine A2a receptor
- 5:00 - 6:00 Evening poster session and mixer