Welcome To The 2016 Advancing Pain Relief Symposium

We are excited to welcome you to the inaugural Advancing Pain Relief Symposium at UC Davis. We hope this event will provide you with the opportunity to build collaborations with colleagues across UC Davis, who work to relieve pain, reduce suffering and improve quality of life. We are thrilled that faculty from the UC Davis Schools of Law, Medicine, Nursing and Veterinary Medicine, as well as the Colleges of Biological Sciences, Agriculture, Engineering, and Letters and Sciences join us today to share and showcase their diverse work that contributes to informing and relieving the complex problem of pain.

Pain is the most common reason that a person seeks health care and pain represents an incalculable resource burden on our health care system. Approximately 100 million Americans—which is about one in three of us—report suffering chronic pain at a cost of $600 billion per year. Pain is ubiquitous and rising, both in the United States and globally, but treatment is often inadequate and even unsafe.

The goal of the UC Davis Center for Advancing Pain Relief is to break down barriers across professions and disciplines as well as create a network of faculty, researchers, policymakers and educators who will spark innovation and dramatically improve the quality of life for pain sufferers.

The Advancing Pain Relief Symposium addresses a core problem of pain management: the fragmentation of science, education, health policy and patient care. We believe reducing pain will require the synergistic integration of clinical, research, scholarly and community investigation and innovation. UC Davis, with its world-class health and research facilities and its tradition of collaboration, is uniquely positioned to lead this effort. The Center for Advancing Pain Relief will galvanize the resources of UC Davis to ensure that the brightest minds, across disciplines and areas of practice, are brought together to combat the crisis of pain management at the highest level.

We look forward to your feedback on the symposium and encourage you to complete the evaluation included in your packet. If you would like to be kept informed of future initiatives of the Center for Advancing Pain Relief, please sign up for the listserv on our website: AdvancingPainRelief.ucdavis.edu.

Thank you for joining us!

Warm regards,
Scott M. Fishman, MD
Director, Center for Advancing Pain Relief
Professor and Executive Vice Chair, Anesthesiology and Pain Medicine
Chief, Pain Medicine, School of Medicine

Heather M. Young, PhD, RN, FAAN
Co-Director, Center for Advancing Pain Relief
Associate Vice Chancellor for Nursing
Dean and Professor, Betty Irene Moore School of Nursing

Wednesday, November 30, 2016
Education Building, Lecture Hall 2222

11:30 A.M.-NOON
Registration and Lunch

NOON-12:15 P.M.
Welcome
Julie A. Freischlag, MD
Vice Chancellor for Human Health Sciences
Dean and Professor, School of Medicine

Michael D. Lairmore, DVM, PhD
Dean and Professor, School of Veterinary Medicine

Heather M. Young, PhD, RN, FAAN
Associate Vice Chancellor for Nursing
Dean and Professor, Betty Irene Moore School of Nursing
Co-Director, Center for Advancing Pain Relief

12:15-12:30 P.M.
Introduction to Center for Advancing Pain Relief
Scott M. Fishman, MD
Director, Center for Advancing Pain Relief
Professor and Executive Vice Chair, Anesthesiology and Pain Medicine
Chief, Pain Medicine, School of Medicine

12:30-1:10 P.M.
From Telescope to Microscope: Pain’s Impact on Individuals and Society Panel

1:10-1:40 P.M.
Clinical Research: Panel A

1:40-1:50 P.M.
Break

1:50-2:20 P.M.
Pain and Public Safety Panel

2:20-2:50 P.M.
Clinical Research: Panel B

2:50-3:20 P.M.
Basic Science Panel

3:20-3:30 P.M.
Break

3:30-4 P.M.
Design Panel

4-4:30 P.M.
Pain Education Panel

4:30-5 P.M.
Building Collaborations and Closing Remarks

5:30-7 P.M.
Dinner and Table Discussion (prior registration required)

Panel descriptions and speaker biographies follow on next pages
Session Descriptions

12:30–1:10 P.M.
From Telescope to Microscope: Pain's Impact on Individuals and Society Panel

Precision Health
Frederick J. Meyers, MD, MACP
Associate Dean, Precision Medicine
Professor, Internal Medicine and Hematology-Oncology

Precision medicine is a multidimensional approach that takes advantage of the many individualized advances of the past few decades and synthesizes a new paradigm—a new model—that will be the driving research link to clinical excellence, and that more rapidly improves health care quality and value. It brings together innovations in genomics, metabolomics, mobile health, biomedical data sciences, imaging, social engagement and networking, communication and environmental sciences to make diagnostics, therapeutics and prevention more individualized, proactive, predictive and precise.

Pain, Palliative Care and Widgets?: Introducing Health Economics
Jeffrey S. Hoch, PhD
Professor, Public Health Sciences
Associate Director, Center for Healthcare Policy and Research

Professor Hoch will introduce concepts from economics and how they apply to health care. He will describe different health economics studies, provide examples and suggest future avenues for collaboration.

1:10–1:40 P.M.
Clinical Research: Panel A

Preliminary Finds of a Mindfulness Meditation Intervention for Chronic Pain
Philip R. Goldin, PhD
Assistant Professor, Betty Irene Moore School of Nursing

A pilot study of a two-month, mindfulness-based stress reduction (MSBR) intervention for chronic pain (n = 65) found significant decreases in pain interference, clinical increases in mindfulness skills, self-compassion and quality of life. These findings suggest that mindfulness meditation may alter adaptive and maladaptive forms of emotion regulation that account for pain interference, clinical symptoms and wellbeing.

A Randomized Trial of a Mobile Health App to Facilitate N-of-1 Trials in Chronic Pain
Richard L. Krantl, MD MPH
Professor and Co-Vice Chair of Research, Internal Medicine

N-of-1 trials are the epitome of patient-centered evidence but are challenging to implement. The PREEMPT Study evaluates a mobile application (Trialist) designed to facilitate n-of-1 trials for patients with chronic pain. In this study, 1,092 patients were assessed for eligibility and 215 patients were randomized to undertake a mobile-device-assisted n-of-1 trial or usual care. The most popular designs incorporated non-steroidal, anti-inflammatory drugs or complementary therapies and ran for eight weeks. Most patients found the app helpful in achieving treatment goals and reported more confidence in pain management going forward. Trialist uses an interactive design to help patients collect and understand their data and provides results for joint decision-making. Achieving the study’s aim will set the stage for broader uptake of n-of-1 trials in mobile health.

1:50–2:20 P.M.
Pain and Public Safety Panel

Using Prescription Drug Monitoring Programs to Combat and Track Prescription Opioid Overdose in California
Stephan G. Henry, MD, MSc
Assistant Professor, Internal Medicine

California’s Controlled Substance Utilization and Review System (CURES) is a database that records all controlled substance prescriptions dispensed by California pharmacies. Prescribers and pharmacists can check the database online when they are seeing patients. The research team works with the California Department of Justice to evaluate effects of recent CURES upgrades, including new laws that require clinicians to register with and check CURES. They also work with the California Department of Public Health to use CURES data to evaluate statewide programs aimed at reducing opioid misuse and overdose, improving access to addiction treatment and promoting pain management best practices.

Prescription Drug Overdoses and Rising Mortality Rates: A Reflection of Despair
Lisa P. Pruitt, PhD
Martin Luther King, Jr. Professor of Law, School of Law

Overdose deaths, particularly those involving opioids, have been rising rapidly since the 2000s. A survey of social science research reveals that this increase has resulted in heightened mortality rates for two populations in particular: rural residents and young, white adults. In rural communities, this rise in mortality is the result of concentrated societal risk factors, e.g., economic stressors, inequality, occupations more susceptible to injury, generally lower levels of education attainment and a higher percentage elderly population. In rural communities, the problem is exacerbated by a lack of resources to respond to addiction and overdoses. Identifying the groups most affected is critical to developing a remedy tailored to the populations most impacted.

2:20–2:50 P.M.
Clinical Research: Panel B

Art Rx: A Novel Public Health Partnership to Reduce Social Disconnection and Pain
Ilan Koldobskiy, PhD (candidate) MSc, MACK, LA
Director, Integrative Pain Management

Actively treating the social disconnection that often accompanies chronic pain is very rare, despite a growing body of literature demonstrating social connection is analgesic. The Art Rx study assessed the feasibility of specialized museum tours of an art museum to reduce perceived social disconnection and pain among individuals with chronic pain. Initial results suggest that a free, one-hour tour of an art museum may reduce the burden of chronic pain and social disconnection. These findings warrant further research that explores the durability, predictors and mechanisms of socially based analgesia.

Clinical Pain Evaluation of Facial and Postural Changes in Animal Patients with Development of an Automated, Computer-Recognition Program
Jamil L. Poyton, OVOH, DAVCO, DACVECC
Chief Integrative Veterinary Medicine

In veterinary medicine, pain recognition can be a challenging area due to the non-verbal communication that can differ between species and is often influenced by prey or predator behaviors. In an effort to develop a clinically translational pain evaluation test, a database of videos of multiple types of animal patients with acute and chronic pain are collected both in the direct presence of observers and with hidden cameras. The goal is to evaluate the facial and postural expressions of different species to correlate each behavior with signs of pain, response to pain therapies and further development of an objective, computer-automated system for clinical and research applications.

2:50–3:20 P.M.
Basic Science Panel

Path to the Clinic for Soluble Empathic Hydroxide Inhibitors to Treat Inflammatory and Neuropathic Pain
Bruce D. Hammock, PhD
Distinguished Professor, Entomology

The treatment of chronic pain remains a major unmet medical need. Pain signals originate in peripheral nerve fibers that transduce chemical, mechanical or thermal stimuli into action potentials that propagate along the axons ofafferent pain fibers to synaptic nerve terminals in the spinal dorsal horn. Voltage-gated sodium (Nav) channels are key molecular determinants of action potential generation and propagation in excitable cells. The overarching goal of this laboratory is to exploit the structure of human Nav channels involved in pain signaling to rationally design novel therapeutics using RosettaDesign computational modeling software and whole-cell, patch-clamp electrophysiology.
Interventions to Reduce Musculoskeletal Pain and Discomfort among California Farmworkers

Fadi A. Fathallah, PhD
Assistant Professor, Anesthesiology and Pain Medicine
UC Davis ECHO® Pain Management TeleMentoring Program. His research focuses on the prevention and management of musculoskeletal disorders among agricultural workers.

Scott M. Fishman, MD
Scott Fishman is an internationally recognized expert on pain management and pain education. He advocates for improving pain management through the safe and effective use of pain treatments as well as educating patients on a variety of topics related to pain. Fishman’s work is widely published in medical literature and he is the author of several texts related to pain management. The UC Davis Center for Pain Medicine was recognized as a center of excellence and awarded excellence in education.

Julie A. Freischlag, MD
Julie A. Freischlag is one of the most prominent leaders among the nation’s academic health centers and has more than 30 years of experience leading patient-care services at nationally ranked hospitals. She received a bachelor’s degree in biology from the University of Illinois and a medical degree from Rush University Medical College. She completed her surgical residency and vascular fellowship at UCLA.

Philippe R. Goldin, PhD
Philippe Goldin is currently engaged in a basic neuroscience research on cognitive-effective processes, clinical research on addiction regulation in obesity disorders and chronic pain patients, as well as clinical intervention research on cognitive-behavioral therapy, mindfulness-based stress reduction and compassion cultivation training.

Bruce D. Hamrick, PhD
Bruce Hamrick is a distinguished professor in the Department of Entomology and the UC Davis Comprehensive Cancer Center. A member of the National Academy of Sciences and the National Academy of Inventors, his research ranges from regulatory biology, through development of immunoassays, to translating basic science into pharmaceuticals to treat human and companion animals.

Stephen G. Henry is a general internal and primary care physician at UC Davis. His main research interests are promoting better patient outcomes by improving patient-physician communication (particularly for chronic pain) and opioid epidemiology.

Jeffrey S. Hoch, PhD
Jeffrey is a professor in the Department of Public Health Sciences. He teaches courses in health economics and researches value in healthcare. He wrote more than 140 peer-reviewed articles and led more than 200 invited presentations in 15 countries.

Ian Koebner, PhD
Ian Koebner is the director of integrative pain management within the Duran of Pain Medicine at UC Davis. His research interests include the development of innovative public health partnerships to address chronic pain and social disconnection.

Richard L. Kravitz, MD, MPH
Richard Kravitz is a nationally recognized investigator internal and health services researcher with interests in health communication and individualizing treatment to improve outcomes. He trained at Stanford, UCSF and UCLA before coming to UC Davis. In addition to his clinical, teaching and research roles at UC Davis Health System, he currently serves as director of UC Center for Health Care Delivery and a UC systemwide public policy education and dissemination unit based near the capital in downtown Sacramento.

Michael D. Ladomery, DO, PhD
As dean, Michael Ladomery works oversees all School of Veterinary Medicine teaching, research and service activities as well as personnel, facilities and funding resources. He oversees six academic departments, the Veterinary Medical Teaching Hospital, and various laboratories and centers. He earned a Doctor of Veterinary Medicine degree from the University of Missouri and a doctorate in experimental pathophysiology at Colorado State University, Fort Collins. He has received numerous awards and recognitions, including a nomination to the National Academy of Medicine.

Frederick J. Meyer, MD, FACMT
Frederick Meyers is the associate dean for precision medicine. He is a board certified physician in cancer patients and computational biology and then a research faculty awarded at University of Washington, Seattle. He is an associate professor in the Department of Physiology and Biomechanical Engineering at UC Davis.

Philippe R. Goldin, PhD
Philippe Goldin is currently engaged in a basic neuroscience research on cognitive-effective processes, clinical research on addiction regulation in obesity disorders and chronic pain patients, as well as clinical intervention research on cognitive-behavioral therapy, mindfulness-based stress reduction and compassion cultivation training.

David J. Copenhaver, MD, MPH
David Copenhaver is the director of cancer pain management within the Duran of Project ECHO® Pain Management TeleMentoring Program. His interests include health outcomes research, understanding barriers that prevent patients from safely and effectively receiving care, and the development of innovative tools to help evaluate and better understand the delivery of pain care.

Susan Verba, MFA
Associate Professor, Design

UC Davis ECHO® Pain Management TeleMentoring Program is a video conference monitoring program designed to support primary care clinicians at community health centers in their mission to provide high-quality pain care. A multidisciplinary team of pain medicine specialists mentors clinicians from diverse professions via weekly video conference sessions. Each video session includes an interactive didactic presentation on a core, pain-related topic and 40 minutes dedicated to case discussions. These interactive sessions demonstrate that an interactive, distance-based mentoring approach can have a positive impact on the quality of pain care delivered by primary care clinicians.

Interprofessional Case-Based Learning Modules on Pain Care

Deborah Ward, PhD, RN, FAAN
Clinical Professor, Betty Irene Moore School of Nursing

Collaboratively designed, interprofessional learning modules help break down the academic silos in which students in health care professions can become isolated. The programs successfully brought together groups of prelicensure health-professionals who do not typically interact. Pain appears to be a useful focus for defining professions to learn about and with each other. Target learners for the pilot were medical, nurse practitioner, physician assistant, social work and pharmacy students. The team developed facilitator guides, didactic modules, and content fully developed case studies. Materials are available worldwide and free of charge at advancingpainrelief.ucdavis.edu.