

Fourth Annual CACPR Symposium

HOW PRECISION
HEALTH WILL INFORM
PAIN MANAGEMENT



NOV. 30, 2018

8:30 a.m. to 1 p.m.

School of Nursing Auditorium, Room 130

SYMPOSIUM SCHEDULE

8:15 a.m. **Registration, coffee, light breakfast**

9 a.m. **Welcome and Opening remarks**

9:15 a.m. **Linda Watkins, PhD**

Distinguished Professor,
Dept. of Psychology & Neuroscience and Center for Neuroscience,
University of Colorado at Boulder
*Targeted Anti-Inflammatory Gene Therapy to Treat
Neuropathic & Osteoarthritis Chronic Pain:
- from basic science to ongoing human clinical trials*

9:50 a.m. **Inna Belfer, MD, PhD**

Program Director,
Basic and Mechanistic Research Branch, Div.
of Extramural Research,
National Center for Complementary and integrative
Health (NCCIH), NIH
Personalized approach to Pain Management

10:25 a.m. **Coffee break**

10:45 a.m. **Joel Greenspan, PhD**

Professor and Chair,
Dept. of Neural and Pain Sciences,
UM School of Dentistry;
Co-Director, UM Center to Advance Chronic Pain Research;
Director, Brotman Facial Pain Clinic
*Patient Stratification as a Basis for Personalized
Chronic Pain Management*

11:20 a.m. **Panelists**

James Campbell, MD,
President and Chief Scientific
Officer, Centrexion Therapeutics, Boston, MA

Susan Dorsey, PhD, RN, FAAN
Professor and Chair, Dept. of Pain and Translational
Symptom Science, UM School of Nursing; Co-Director,
UM Center to Advance Chronic Pain Research

Massieh Moayed, PhD
Assistant Professor, Faculty of Dentistry,
University of Toronto, Canada

12:30 p.m. **Concluding remarks**

Lunch available immediately after symposium

SPEAKERS



LINDA WATKINS, PH.D., is a Distinguished Professor in the Department of Psychology and Neuroscience and a University of Colorado President's Teaching Scholar. She received her PhD in Physiology from the Medical College of Virginia in 1980 and has been at the University of Colorado Boulder since 1988. She has received career awards from the National Institute of Health and National Institute for Mental Health and numerous research grants from the National Institute for Mental Health, National Institute for

Neurological Diseases and Stroke, and National Institute for Drug Abuse. Her work has generated 2 books, 40 book chapters, 66 refereed review articles, and over 354 peer reviewed journal articles. Dr. Watkins's lab is at the forefront of the study of immune and glial dysregulation of pain, having been focused on immune and glial dysregulation of pain for the past -25 years. A major focus in recent years has been on the critical role of glial/immune priming, inflammasomes, and endogenous danger signals in pain (and other) phenomena.

Title: *Targeted Anti-Inflammatory Gene Therapy to Treat Neuropathic & Osteoarthritis Chronic Pain: ~ from basic science to ongoing human clinical trials*



DR. INNA BELFER, M.D., PH.D., is a world-recognized expert in human chronic pain conditions, pain genetics, assessment of clinical pain, and pain-related traits. She began her career as a neurologist, then received extensive training in neurobiology and human genetics. For over 15 years, her primary research interests have been the relationship between gene polymorphisms and complex phenotypes such as pain, psychiatric disorders, and addictions. Her research focused on biobehavioral aspects

of acute and chronic pain, sex influence on pain and analgesia, phenomics of human pain and genomic predictors of the transformation of acute pain into chronic condition. After an intramural post-doctoral clinical and research fellowship at NIDCR, she became a Staff Scientist

at NIDCR Pain and Neurosensory Mechanisms Branch. Afterwards, she joined the University of Pittsburgh as Associate Professor of Anesthesiology and Human Genetics, and Director of the Molecular Epidemiology of Pain Program. In 2015, Dr. Belfer returned to DHHS, joining FDA as a clinical reviewer for novel analgesics, evaluating clinical trial design and safety data, and analyzed trends and new scientific fields to assess the adequacy of clinical translational pain research including sex-specific factors controlling pain. During her clinical and scientific career Dr. Belfer focused specifically on women's pain and women-specific genetic mechanisms of chronic pain. In 2017, this passion brought her to ORWH where she served as Health Scientist Administrator and scientific lead for the Sex as Biological Variable (SABV) policy implementation core. In 2018, she joined NCCIH to direct their extramural pain portfolio.

Title: *Personalized approach to Pain Management*



JOEL D. GREENSPAN, PH.D., is Professor and Chair of the Department of Neural and Pain Sciences at the University of Maryland, School of Dentistry. He is the Co-Director of the University of Maryland Center to Advance Chronic Pain Research, and Director of the Brotman Facial Pain Clinic, UM School of Dentistry. Dr. Greenspan received his Ph.D. from the Neuroscience Program of Florida State University, and conducted postdoctoral work in the Neurobiology Program of the University

of North Carolina - Chapel Hill. He holds adjunct faculty appointments in the Department of Anatomy and Neurobiology at the University of Maryland, School of Medicine, and in the Department of Neurosurgery at Johns Hopkins University, School of Medicine. Dr. Greenspan has studied the neural mechanisms of pain and somesthesia for over 30 years, and has authored over 120 scientific publications in the field. Themes of his work include investigating the neural basis of individual variation and sex differences in pain, and serving as co-PI for the OPPERA study: a multi-center prospective study of the predictive biomarkers for temporomandibular disorder (TMD) pain. He serves on the editorial board of the *European Journal of Pain* and *Neurotherapeutics*. He also serves on the National Advisory Council for Complementary and Integrative Health, NIH.

Title: *Patient Stratification as a Basis for Personalized Chronic Pain Management*

PANELISTS



JAMES CAMPBELL, M.D., is a founder, president and chief scientific officer of Centrexion Therapeutics. Dr. Campbell is Professor Emeritus of neurosurgery at Johns Hopkins University School of Medicine. He has published over 100 peer-reviewed scientific studies in the field of pain research, which have been recognized through many national honors. In 1996, Dr. Campbell was president of the American Pain Society. Prior to joining Centrexion, he served as the CEO of Arcion Therapeutics, a biotech

company developing topical products for the treatment of neuropathic pain. Earlier in his career, he served as the CEO for Vallinex, Inc. He served as the founder of the American Pain Foundation and was chairman of the board for ten years. He also served as board observer and co-founder of CNS Therapeutics, and was co-founder and on the board of directors of Amplimmune. Dr. Campbell holds a B.A. in psychology with high honors and high distinction from the University of Michigan, and received his M.D. from Yale University. He received his training in Neurosurgery at the Johns Hopkins Hospital, and is a Diplomate of the American Board of Neurological Surgery.



SUSAN G. DORSEY, PHD, RN, FAAN, is a professor and founding chair of the Department of Pain and Translational Symptom Science, at the University of Maryland School of Nursing. She received her PhD from the University of Maryland, Baltimore and completed a postdoctoral fellowship at the National Cancer Institute in the Mouse Cancer Genetics Program. She holds secondary faculty appointments in the School of Medicine Department of Anesthesiology and the School of Dentistry

Neural & Pain Sciences Department. On campus, Dr. Dorsey co-directs the Institute for Clinical and Translational Research (ICTR) Career Development and Training Core, the campus-wide Center to

Advance Chronic Pain Research, and she serves as a Multiple Principal Investigator for the NINR-funded P30 Omics Associated with Self-Management Interventions for Symptoms (OASIS) Center. Dr. Dorsey's translational program of research incorporates molecular, cellular and omics methods to study chronic pain, cancer treatment-related neuropathic pain and co-morbid symptoms associated with pain. Her program of research has been continuously funded by NIH since 1997.



MASSIEH MOAYEDI, PH.D., is an Assistant Professor at the University of Toronto's Faculty of Dentistry. He did his PhD training under the supervision of Dr. Karen Davis, where he investigated structural abnormalities in temporomandibular disorders. He did his postdoctoral fellowship at University College London, under the supervision of Dr. Giandomenico Iannetti, where he studied the electrocortical correlates of defensive motor actions. His current work is focused on identifying

pain specific activity in the human brain in health and disease.

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