

## **13<sup>th</sup> Annual Joseph W. Howe Oration in Diagnostic Imaging**



**“Neuroimaging the pain experience  
and brain mechanisms of  
acupuncture efficacy: A 20 year  
Logan-Martinos collaboration”**

**Presented By:  
Vitaly Napadow, PhD, LicAc**

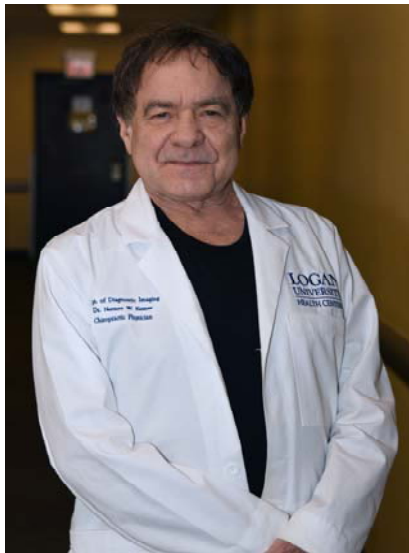
**Friday, October 16, 2020  
11:30 a.m.—12:30 p.m.  
Logan University  
Virtual Oration  
1851 Schoettler Road  
Chesterfield, Missouri**

## **JOSEPH W. HOWE, DC, DACBR, Fellow, ACCR**

There are few members of the American Chiropractic College of Radiology whose careers have been as influential as that of Joseph W. Howe, DC, DACBR. For more than six decades, Dr. Howe, has distinguished himself by his contributions as a clinician, radiologist, educator, researcher, and mentor in the field of modern chiropractic radiology. His passion for academic excellence, critical scientific insight and professional advancement has left an indelible impact on the chiropractic profession. His influence is felt daily by the numerous residents, whom he has trained, and who themselves have become inspirational leaders in the chiropractic profession. Today, Dr. Howe still enjoys what he cherishes the most, teaching, as he routinely shares his vast clinical and radiological knowledge base with interns and residents at Logan University.

Dr. Joseph W. Howe has given the American Chiropractic College of Radiology and the chiropractic profession a legacy of unparalleled achievement as a role model and mentor for several generations of chiropractic radiologists. His name will always be associated with the incredible progress of chiropractic radiology in the 20<sup>th</sup> century. The Joseph W. Howe Oration in Diagnostic Imaging is designed to honor his extensive contributions to and achievements in the education, research and practice of chiropractic radiology.

## **NORMAN W. KETTNER, DC, DACBR, FICC**



Norman W Kettner, DC, DACBR DCBCN FICC is the Dean of Research and Emeritus Professor of the Department of Radiology at Logan University. Dr Kettner has been a faculty member since 1980 and department chair since 1984. In addition to training and expertise as a board-certified radiologist and neurologist, Dr Kettner has developed experience in the tools of functional neuroimaging including fMRI, MEG and PET. In 2001, Dr Kettner formed a research collaboration with the Athinoula A Martinos Center for Biomedical Imaging of Massachusetts General Hospital, the largest teaching hospital of Harvard Medical School. The research objectives were to investigate the brain's responses to acupuncture in patients with chronic pain and carpal tunnel syndrome. Recently, spinal manipulation in patients with cLBP has been investigated using advanced functional neuroimaging. This collaboration has yielded numerous high impact factor publications in top-ranked radiology, neurology and pain research journals including NeuroImage, Human Brain Mapping, PAIN and BRAIN. Dr Kettner has authored over one-hundred publications and twenty-three textbook chapters.

## **BRUCE ROSEN, MD, PhD**



Dr. Bruce Rosen is currently a Professor of Radiology at Harvard Medical School, Director, Athinoula A. Martinos Biomedical Imaging Center, Massachusetts General Hospital. Dr. Rosen received his Bachelor of Arts degree from Harvard University and Master of Science from Massachusetts Institute of Technology. He received his Medical Degree from Hahnemann Medical College & Hospital, PA and his PhD from Harvard/MIT Division of Health Sciences .

For the past 30+ years Dr. Rosen's research has focused on the development and application of physiological and functional nuclear magnetic resonance techniques—including the introduction and continued advancement of functional magnetic resonance imaging (fMRI)—as well as new approaches to combine functional MRI data with information from other modalities such as positron emission tomography (PET), magnetoencephalography (MEG) and noninvasive optical imaging.

## **VITALY NAPADOW, PhD, LicAc**



**Dr. Vitaly Napadow is an associate professor at the Martinos Center for Biomedical Imaging at Massachusetts General Hospital and Harvard Medical School in Boston, MA. He holds secondary appointments in the Pain Management Center at Brigham and Women's Hospital and Logan University . Vitaly received his Ph.D. in biomedical engineering from the Harvard-MIT Health Sciences and Technology program and a Masters degree from the New England School of Acupuncture (NESA). His laboratory has pioneered the application of non-invasive neuroimaging techniques to better understand the brain circuitry underlying aversive perceptual states, and to better understand how therapies such as acupuncture ameliorate these states. Vitaly is the Director of the Center for Integrative Pain NeuroImaging (CiPNI) and the co-President of the Society for Acupuncture Research , a non-profit research organization responsible for organizing the premier international biennial conference dedicated to evidence-based acupuncture research.**

# Joseph W. Howe

## Oration in Diagnostic Imaging

---

### Past Speakers

- May 30, 2019 Michael S. Montlione, MD, DACR, DC, DACBR
- May 31, 2018 Gary M. Guebert, DC, DACBR
- May 25, 2017 Terry R. Yochum, DC, DACBR, Fellow, ACCR, FICC  
James M. Cox, I, DC, DACBR, FICC  
Norman W. Kettner, DC, DACBR, FICC, DCBCN
- May 26, 2016 Joseph W. Howe, DC, DACBR, Fellow, ACCR
- May 28, 2015 Victor Tong, DC, DACBR
- May 29, 2014 Lawrence H. Wyatt, DC, DACBR, FICC
- May 30, 2013 Anita L. Manne, DC, DACBR
- May 31, 2012 John A. M. Taylor, DC, DACBR
- May 26, 2011 Victor Tong, DC, DACBR
- April 8, 2010 Sharon A. Jaeger, DC, DACBR
- April 2, 2009 Reed Philips, DC, DACBR, PhD
- April 3, 2008 Terry R. Yochum, DC, DACBR, Fellow, ACCR, FICC  
James M. Cox, I, DC, DACBR, FICC  
Norman W. Kettner, DC, DACBR, FICC, DCBCN