Current Techniques in the Treatment of Cranial and Spinal Disorders

SATURDAY, NOVEMBER 3, 2018
OMNI INTERLOCKEN RESORT, BROOKFIELD, COLORADO

A conference for health care providers interested in innovative technologies and the latest evidence-based clinical guidelines in the care of cranial and spinal disorders. This live educational opportunity offers relevant information for orthopedic spine surgeons, neurosurgeons, neurologist, physical medicine and rehabilitation physicians, pain management physicians, primary care physicians, physician assistant, residents, fellows, nurses, physical therapists, and allied health care professionals.
Chairman of the Board, Alan Villavicencio, MD

Dr. Villavicencio is the Founder and Chairman of the Board for the Justin Parker Neurological Institute. Dr. Villavicencio graduated from Harvard Medical School and completed a neurosurgical residency at Duke University and specialty orthopedic spine surgery fellowship at Cedars-Sinai Medical Center. He is one of only a handful of surgeons in the country with dual neurosurgery and orthopedic spine training.

Disseminating advancements, scientific discoveries, and innovative medical technologies to the medical community and into clinical practice

The 15th Annual Symposium, Current Techniques in the Treatment of Cranial and Spinal Disorders, is facilitated by Boulder Neurosurgical & Spine Associates (BNA) and Justin Parker Neurological Institute (JPNI). The symposium is a one-day extensive seminar that brings together a diverse panel of experts to discuss the latest advancements and treatment considerations in cranial, neurosurgical, and orthopedic spine technology. Presenters will discuss advances in deep brain stimulation technology, invasive procedures for neurological disease, updates on brain tumor markers and treatments, new techniques for lumbar spondylolisthesis surgical treatments, a pro-con discussion on the use of medical marijuana, the influence of cerebrovascular autoregulation impairment events on clinical outcomes for TBI patients, and military applications to civilian trauma.

JPNI is a fully accredited 501(c)(3) nonprofit organization whose principle purpose is to conduct clinical research and improve clinical outcomes. The mission of JPNI is to advance scientific discoveries and innovative medical technologies into clinical practice by conducting clinical trials to implement best practices and disseminate to the medical community. JPNI also provides fellowship and internship opportunities to neurosurgical and orthopedic spine surgeons and students pursuing careers in medicine.
Saulius Ročka, MD, PhD

Dr. Ročka is the Chairman of the Neurosurgery Center and Associate Professor of the Neurology and Neurosurgery Department at Vilnius University in Vilnius, Lithuania. Dr. Ročka received his medical degree from Vilnius University in 1998, where he also completed his residency training in 2005. In 2003, Dr. Ročka defended his Ph.D. dissertation titled *Hydrodynamic Peculiarities of the Non-Invasively Acquired Ultrasonic Intracranial Pulse Waves*. He completed clinical fellowships with the Georgia Neurosurgical Institute (Macon, Georgia), the Southern General Hospital Institute of Neurological Sciences (Glasgow, Scotland), and Sahlgrens University Hospital (Gothenburg, Sweden). Dr. Ročka currently serves as President of the Lithuanian Neurosurgical Society. He is also a member of the Training Committee for European Association of Neurosurgical Societies, World Federation of Neurosurgical Societies, Lithuanian Neuroscience Society, and Lithuanian Society of Epileptology. Dr. Ročka specializes in neuro-oncology, traumatic brain injury, neurovascular, and epilepsy surgery.

Dr. Ročka was part of a team of Lithuanian researchers who received the Congress of Neurological Surgeons (CNS) Paper of the Year award. The paper “Association of Severe TBI Patients’ Outcomes with Duration of Cerebrovascular Autoregulation Impairment Events,” is a paradigm shift in the clinical understanding of the functioning of an impaired human brain.
About the Event

Course Description
This live educational activity will review updates on the latest advances in the treatment of cranial and spinal neurosurgical and orthopedic issues. Each session provides an intensive and practical review from a panel of experts with an emphasis on evidence-based approaches in the fields of neurosurgery and orthopedic spine treatments.

Audience Response System
To promote the educational and interactive environment of our symposium, we will be using an audience response system (ARS) during each of the presentations. Each of the speakers will present multiple-choice questions for the audience to answer, followed by real-time polling. The ARS system allows for further discussion of the topics and encourages a stronger interaction between the speakers and attendees.

Learning Objectives
Upon completion of this live activity, participants should be able to:
1. Identify new treatment options for patients with spinal and cranial disorders based on evidence-based clinical practice guidelines created through the latest scientific findings.
2. Demonstrate the understanding of multidisciplinary care for those with spinal or cranial disorders.
3. Discuss evidence-based advancements in the treatment of trauma patients.

Registration
The registration fee for this live event is $90 and includes tuition, continental breakfast, lunch, afternoon snack, and beverages, as well as educational materials including presentations and CVs for all speakers. The early registration deadline is Friday, October 26, 2018, at noon. Registration will increase from $90 to $110 beginning Saturday, October 27, 2018. Dinner and cocktails are an additional $35.

How to Register
Online: www.jpni.org
Phone: Call Sarah Heil at 303.938.5700
Mail registration checks to:
JPNI, Attn: Symposium 2018
4743 Arapahoe Avenue, Suite 202
Boulder, CO 80303
An email confirmation will be sent upon payment. On-site registration is available, but not guaranteed.

Cancellation Policy
Refunds will be issued if a written cancellation is received before Monday, October 22, 2018 by 5:00 pm.

Accreditation/Designation
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the AANS and JPNI. The AANS is accredited by the ACCME to provide continuing medical education for physicians. The AANS designates this live activity for a maximum of 7.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity. Certificate of attendance will be distributed and can be submitted to accreditation boards.

Be sure to complete the attendance verification and evaluation survey that will be sent via email following the symposium.

AANS Disclosure
Before the program, anyone in control of the educational content of this activity will disclose the existence of any financial interest and/or the relationship they or their significant other have with the manufacturer(s) of any commercial product(s) to be discussed during their presentation. Disclosures will be included in the final program.

Materials
- Symposium materials including the agenda, presentations and speaker CVs will be distributed as a PDF file by email before October 31, 2018. You will be able to either print out the materials yourself or access them on a smartphone or tablet. If you would like to take notes, there are various applications, like Notability, available that allow you to take notes on your smartphone or tablet.
- Attendance verification forms will be delivered by electronic survey and must be completed and returned no later than Monday, November 30, 2018, to obtain CME certificates.
- Evaluation forms will be available by electronic survey following the symposium. These are very important and will be utilized for future planning.
# Agenda

<table>
<thead>
<tr>
<th>TIME</th>
<th>SPEAKER</th>
<th>TOPIC</th>
<th>CME</th>
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<tbody>
<tr>
<td>7:15-7:50am</td>
<td></td>
<td>Continental Breakfast &amp; Registration</td>
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<tr>
<td>7:50-8:00am</td>
<td>Alan Villavicencio, MD</td>
<td>Welcome</td>
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<tr>
<td><strong>Morning Session I</strong></td>
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<tr>
<td>8:00-8:40am</td>
<td>Kara Beasley, DO</td>
<td>Deep Brain Stimulation Therapy for the Treatment of Epilepsy</td>
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<tr>
<td>8:40-9:20am</td>
<td>Alan S. Zacharias, MD</td>
<td>Invasive Procedures for Neurological Disease</td>
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<tr>
<td>9:20-10:00am</td>
<td>E. Lee Nelson, MD</td>
<td>Update on Brain Tumors: Molecular Markers, Low Grade Tumors and New Treatments</td>
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<td>10:00-10:20am</td>
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<td>Break/Expo</td>
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<tr>
<td><strong>Morning Session II</strong></td>
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<tr>
<td>10:20-11:00am</td>
<td>Alan Villavicencio, MD</td>
<td>Advances in Degenerative Lumbar Spondylolisthesis Surgical Treatment</td>
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<tr>
<td>11:00-11:40 am</td>
<td>Mark Chandler, MD</td>
<td>Lessons Learned from the Military: Applications to Civilian Trauma</td>
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<td>11:40am-12:20pm</td>
<td>Andrew Bauer, MD</td>
<td>The Management of Complex Neurovascular Cases</td>
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<td>12:20-1:20pm</td>
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<td>Lunch/Expo</td>
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<tr>
<td><strong>Afternoon Session I</strong></td>
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<td>2.25</td>
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<tr>
<td>1:20-2:20pm</td>
<td>KEYNOTE: Professor Saulius Roˇcka, MD, PhD</td>
<td>Association of Severe TBI Patients’ Outcomes with Duration of Cerebrovascular Autoregulation Impairment Events</td>
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<td>2:20-3:00pm</td>
<td>Joseph Cohen, DO</td>
<td>Cannabis 101: Integrating Into Patient Care</td>
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<td>2:20-3:00pm</td>
<td>Kenneth P. Finn, MD</td>
<td>Marijuana in Colorado in the Face of the Opioid Epidemic</td>
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<td>3:40-4:00pm</td>
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<td>Break/Expo</td>
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<tr>
<td><strong>Afternoon Session II</strong></td>
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<td>1.25</td>
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<tr>
<td>4:00-4:40pm</td>
<td>Tripp Nanney, MD</td>
<td>The Importance of Lumbar Lordosis and Sagittal Alignment</td>
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<td>4:40-5:20pm</td>
<td>Sharad Rajpal, MD</td>
<td>The Impact of Preventative Multimodal Analgesia on Postoperative Opioid Requirements and Pain Control in Patients Undergoing Lumbar Fusions</td>
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<td><strong>Conclusion</strong></td>
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<td>5:20-5:30pm</td>
<td>Alan Villavicencio, MD</td>
<td>Adjournment, Raffle &amp; Closing Remarks</td>
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<td>5:30-7:30pm</td>
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<td>Reception &amp; Dinner (Optional)</td>
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<td><strong>Total Available Credits</strong></td>
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Andrew Bauer, MD, MBA
Dr. Bauer received his medical degree from the University of Missouri-Columbia and completed a fellowship in endovascular neurosurgery at the Cleveland Clinic. As a neurosurgeon, Dr. Bauer is trained in all aspects of care for complex cerebrovascular and skull base pathologies, including surgery, radiosurgery and endovascular procedures.

Kara Beasley, DO, MBe, FACOS
Dr. Beasley is a board-certified neurosurgeon who completed a dual degree in medicine and biomedical ethics from Midwestern University. She went on to complete a general neurosurgery residency at Philadelphia College of Osteopathic Medicine. Dr. Beasley is one of the only dually credentialed neurosurgeon bioethicists in the world. Dr. Beasley is a general neurosurgeon trained in brain disorders, spinal disorders and neuromodulation.

Mark Chandler, MD
Dr. Chandler is Associate Professor for the Department of Anesthesiology at Denver Health Medical Center. He graduated with honors from the University of Colorado School of Medicine and completed his residency at the University of Colorado Health Sciences Center and a surgery internship at Saint Joseph Hospital in Denver. Dr. Chandler entered military service in 1986 and currently serves as a Colonel in the Colorado Army National Guard Medical Service Corps and as the State Surgeon.

Joseph Cohen, DO
Dr. Cohen received his medical degree from the College of Osteopathic Medicine. He completed his residency in obstetrics and gynecology at Bridgeport Hospital in affiliation with Yale University School of Medicine. In 1991, Dr. Cohen started his private practice in Boulder and served as Department Chairman in Ob/Gyn and pediatrics and director of the Center for Integrative Therapies at Longmont United Hospital. Dr. Cohen is a member of The Institute for Functional Medicine, the American Academy of Anti-Aging Medicine and Cannabis Clinics of Colorado.

Kenneth P. Finn, MD
Dr. Finn is a board-certified physical medicine and rehabilitation and pain management doctor in Colorado Springs. Dr. Finn received his undergraduate from Southern Methodist University and his doctorate from the University of Texas Medical School-Houston. He completed his internship at Presbyterian Hospital of Dallas and residency in physical medicine and rehabilitation at the University of Utah.

Tripp Nanney, MD
Dr. Nanney received his medical degree from the University of North Carolina at Chapel Hill. He completed his neurosurgical residency at Northwestern University where he also completed two enfolded fellowship programs, one in minimally invasive spine surgery and complex spinal deformity correction and the other in skull base and open cerebrovascular surgery.

E. Lee Nelson, MD
Dr. Nelson is a board-certified neurosurgeon who received his medical degree from Baylor College of Medicine and Texas Medical Center. He has extensive training in the treatment of spinal trauma from the Ben Taub General Hospital. Dr. Nelson also underwent training at the renowned M.D. Anderson Cancer Center in surgical and non-surgical management of spinal oncology.

Sharad Rajpal, MD
Dr. Rajpal is a board-certified neurosurgeon who received his medical degree and neurosurgery training at the University of Wisconsin. He completed a combined orthopedic and neurological surgery spine fellowship at the nationally renowned Cleveland Clinic where he gained experience in the latest techniques in spinal oncology, minimal access surgery and complex spinal deformity.

Alan S. Zacharias, MD
Dr. Zacharias received his medical degree from the University of Mississippi. His neurology residency was completed at the University of Virginia followed by a neuromuscular and EMG fellowship at Emory University. He has been in private practice since 2000. He practices neurology with special interest in neuromuscular diseases and EMG.
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