



Be part of the nation's most exciting cranial, spine and nerve meeting, located at the beautiful Silvertree Hotel in Snowmass Village,

Colorado.

## **Objectives**

Intended audience: neurosurgeons, orthopaedic surgeons, neurosurgical residents, fellows, nurse practitioners & physician assistants

#### Upon completion of this educational activity, participants should be able to:

- Describe the evaluation and management of benign and malignant lesions affecting the peripheral nerve.
- Discuss and review the contemporary avoidance, evaluation, pathophysiology, and treatment of surgical complications.
- Discuss the process of clinical decision making as it pertains to the day-to-day realities of clinical practice.
- Review the benefits and complications of surgical approaches for interbody fusion.
- Review of the current status of lumbar arthroplasty and utilization both in and outside
  of the U.S.
- Discussion of indications for interbody fusion and review of Millman Criteria.
- Review of current alternatives to bone morphogenetic protein and lumbar fusion.
- Discuss the use of minimally invasive biologics for spinal reconstruction.
- Discuss current translational research being conducted on the use of stem cells for disc regeneration and possible future clinical applications.
- Describe currently available posterior cervical fusion procedures, and review the indications, surgical techniques, and complications of these procedures.
- Review the indications, contraindications, potential complications and understand basic techniques for C-Meds.
- Define relevant structures, identify anatomic variations and discuss alternatives for C1 lateral mass screw placement.
- Describe research and clinical applications for biological disc replacement in degenerative disc disorders.
- Review of radiographic and clinical outcomes, technique and modifications, and complications regarding minimally invasive TLIF.
- Describe and review recent advances in the management of neurosurgical patients in the ICU.
- Discuss new research projects in Traumatic Brain Injury.
- Introduce and review treatment options for tumors, vascular malformations, aneurysms and cerebrovascular disease utilizing endovascular techniques.
- Describe and review advances in the use of stereotactic radiosurgery specifically as it relates
  to new techniques such as frameless radiosurgery, methods such as 5 fraction radiosurgery,
  and disease processes such as the use of radiosurgery for gliomas. In addition, potential
  complications of radiosurgery, namely radiation necrosis, and its management will be
- Discuss newer technologies as well as treatment paradigms for complex intracranial non-vascular disorders. Review of the peer-review literature for each of several disorders and justification for the newer treatment algorithms including outcome reporting will be used and future directions of clinical and basic science research will be discussed.
- Introduce and discuss the necessity of understanding that detailed surgical anatomy apply to specific surgical corridors.
- Describe how industrial engineering practices and simulation technologies can be applied to reduce the incidence of Medical Adverse Events in the training for and the practice of neurosurgery.
- Discuss the neurosurgical options available for treatment of atypical pain and pain that
  does not respond to traditional decompression or fusion surgeries and present guidance for
  which patients may be appropriate candidates.

## CME

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of AANS and the Mayfield Clinic. The AANS is accredited by the ACCME to provide continuing medical education for physicians.

The AANS designates this live activity for a maximum of 25.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Before the program, all faculty members will disclose the existence of any financial interest and/or the relationship they or their significant other might have with the manufacturer(s) of any commercial product(s) to be discussed during their presentation.

## Sunday, February 27, 2011

7:00 - 9:30am Peripheral Nerve Tumors

Moderator: Robert J. Spinner, MD

The Suspected Nerve Tumor: Evaluation and Indications for Surgery Eric L. Zager, MD, FACS

**Mechanisms and Treatment: Benign Lesions** Robert J. Spinner, MD

Mechanisms and Treatment: Malignant Lesions Marie-Noëlle Hébert-Blouin, MD

**Case Presentations** 

#### 4:00 - 6:30pm Worst Complication: What I Learned

Moderator: Charles Kuntz, IV, MD

Occipitocervical Michael W. Groff, MD, FACS

**Cervical** Michael P. Steinmetz, MD

Thoracic Robert J. Bohinski, MD, PhD

**Thoracolumbar** Bradford A. Curt, MD

**Lumbar** Richard G. Fessler, MD, PhD

**Spinopelvic** Charles Kuntz, IV, MD

**Panel Discussion** 

Welcome Reception to follow



### Monday, February 28, 2011

7:00 - 9:30am
"Fireside" Case Discussion:
What Would You Do?

Moderator: Robert J. Bohinski, MD, PhD

This session is designed to allow the audience to actively participate in the diagnostic evaluation, differential diagnosis, treatment algorithm, surgical technique, outcome, and complication management relevant to the index case. Cases that demonstrate key controversies in spine care, the application of new and emerging technology, and complication management will be emphasized.

Case Presentations Robert J. Bohinski, MD, PhD Claudio Feler, MD, FACS Andrew Utter, MD

Interested To Present A Case? If you are interested to bring a case to present, please contact Christa McAlpin at cmcalpin@mayfieldclinic.com before January 14, 2011.

#### 4:00 - 6:30pm Controversies In Lumbar Spine Surgery

Moderator: William D. Tobler, MD

ALIF, PLIF, TLIF, AxiaLIF: Benefits and Evidence to Support These Approaches Chad Morgan, MD

Alternatives to Interbody Fusion: Motion Preservation Procedures Michael Hisey, MD

Problems with BMP and Alternative Options for Interbody Fusion
Larry T. Khoo, MD

Reimbursement Issues Impacting Lumbar Fusion William D. Tobler, MD

Innovative Technologies Neel Anand, MD, Mch Orth

### Tuesday, March 1, 2011

7:00 - 9:30am Spine: Open Papers

Moderator: H. Gordon Deen, MD

Minimally Invasive Biologics Mick J. Perez-Cruet, MD, MS

Review of Posterior Cervical Fusion Techniques H. Gordon Deen, MD

Minimally Invasive Decompression of Cervical Stenosis Richard G. Fessler, MD, PhD

Nucleoplasty after Lumbar Discectomy: Preliminary Results Edmund Frank, MD, FACS

Biological Disc Replacement for Degenerative Disc Disorders Roger Hartl, MD

Minimally Invasive TLIF: The First 100 Cases Armond Levy, MD

3:30 - 6:30pm Neurocritical Care: Myths and Complications in the NSICU

Moderator: William A. Knight, IV, MD

**Moderator Remarks** 

**Hot Areas of TBI Research** William A. Knight, IV, MD

**Complications in the NSICU** Erin Grise, MD

Non-convulsive Seizures in the NSICU Jan Claassen, MD

Myths in the NSICU Jordan Bonomo, MD

Medical Management of Vasospasm in the ICU Ed Manno, MD

Introduction, Jeffrey T. Keller, PhD

10 Spiritual Guidelines That Will Make You a Better Neurosurgeon Allan J. Hamilton MD, FAANS, FACS

Special Gathering to follow

## Wednesday, March 2, 2011

7:00 - 9:30am Cerebrovascular/Endovascular

Moderator: Andrew J. Ringer, MD

**Endovascular Training for Neurosurgeons** Andrew J. Ringer, MD

Atherosclerotic Disease Ricardo A. Hanel, MD, PhD

Aneurysm Treatment Alan S. Boulos, MD

**AVM and DAVF Treatments** Richard Klucznik, MD

**Overview of a Private Endovascular Practice** Erol Veznedoroglu, MD, FACS, FAHA

#### 4:00 - 6:30pm Neuro-oncology: Radiosurgery

Moderator: Christopher McPherson, MD

Accuracy and Efficacy of Frameless Radiosurgery Christopher McPherson, MD

Five Fraction Radiosurgery: Efficacy in Metastatic Brain Tumor Population Jessica Guarnaschelli, MD

**Update on Radiosurgery for Gliomas** David W. Andrews, MD

Management of Radiation Necrosis Glenn H.J. Stevens, DO, PhD

**Update on Gamma Knife Radiosurgery** George Bovis, MD

**Update on Radiosurgery for Acoustic Neuroma** Bharat Guthikonda, MD

**Case Presentations** 



### Thursday, March 3, 2011

7:00 - 9:30am Complex Intracranial Surgery

Moderator: Philip V. Theodosopoulos, MD

The Role of Imaging in Treatment of Brain Tumors Which is Both Historical and Focused on Recent Developments John M. Tew Jr., MD

**Total Sensory Rhizotomy for Trigeminal Neuralgia** John DePowell, MD

New Technical Approaches to Deep Brain Targets Philip A. Starr, MD, PhD

**Subtotal Resection of Large Acoustic Neuromas** Philip V. Theodosopoulos, MD

**Surgical Treatment of Hemifacial Spasm** Michael J. Link, MD

**Foramen Magnum Meningiomas** Joung H. Lee, MD

**Case Presentations** 

4:00 - 6:30pm Cranial: Open Papers

Moderator: Jeffery T. Keller, PhD

Anatomy: Does it Hold the Key to the Future of Surgical Development?
Jeffrey T. Keller, PhD

Reappraising Medical Adverse Events— Developing a Simulation Think Tank to Change Regional Healthcare Allan J. Hamilton MD, FAANS, FACS

Cortical Anatomy for Dummies Harry R. van Loveren, MD

The Application of the Endoscope in Craniopharyngioma Surgery Sebatsien Froelich, MD

Lateral Cerebellar Transtentorial Approach: An Alternative to Radical Skull Base Approaches Troy D. Payner, MD

What To Do on the Second Microvascular Decompression for Trigeminal Neuralgia Robert G. Parrish, MD, PhD

Neuromodulation for Intractable Pain James W. Leiphart, MD, PhD **Lodging and Location** 

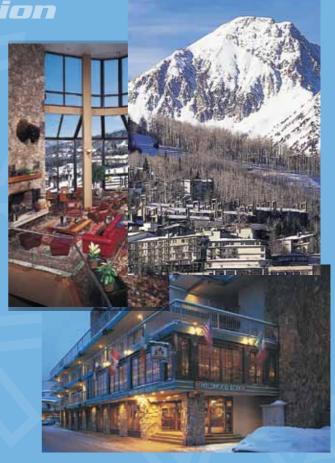
Snowmass Village is a beautiful area, perfect for wintertime fun. Nestled in the Colorado Rockies, Snowmass provides a serene backdrop for this educational program.

The Silvertree Hotel is the Village's full-service, ski-in, ski-out hotel. Improvements include a remodel of all public areas of the hotel and the addition of high-speed, wireless Internet access throughout The Silvertree Hotel, Wildwood Lodge and the Snowmass Conference Center.

**The Wildwood Lodge,** offers the relaxed atmosphere and comfort of a mountain lodge.

When you register for the conference, remember to make lodging reservations as well. The Silvertree Hotel, Wildwood Lodge, and Village Property Management are holding a limited number of rooms at a discounted price until January 14, 2011.

To make reservations, call (800) 525-9402. Reservations will be accepted based on availability.



#### Tuition

Full Program	\$1300
Spinal Program Only (Feb. 27-March 1)	\$1100
Cranial Program Only (March 1 - March 3)	\$1100
Residents/Fellows, Nurses, Physician Assistants	\$600
(Full Program Only)	

For more detailed information and to register, visit www.winterclinics.com.

Registration deadline: February 11, 2011

## Exhibitors\*



Aesculap, Inc., Integra, KLS Martin, L.P., K2M, Inc., Mizuho America, Inc., Orthofix, Inc., Paradigm BioDevices, Pioneer Surgical, Stryker



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# the winter clinics for cranial & spinal surgery

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Snowmass, Colorado Sunday, Feb. 27 - Thursday, Mar. 3, 2011

# Faculty

**Advocate Lutheran General Hospital** *George Bovis, MD* 

Albany Medical Center Alan S. Boulos, MD

Capital Health Stroke and Cerebrovascular Center of New Jersey Erol Veznedaroglu, MD, FACS, FAHA

Cedars-Sinai Center for Spinal Disorders Neel Anand, MD, Mch Orth

**Cleveland Clinic** 

Joung H. Lee, MD Ed Manno, MD Michael P. Steinmetz, MD Glen H.J. Stevens, DO, PhD

Columbia University
Jan Claassen, MD

Cornell University
Roger Hartl, MD

George Washington University James W. Leiphart, MD, PhD

**Goodman Campbell Brain and Spine** *Troy D. Payner, MD* 

Harvard University
Michael W. Groff, MD, FACS

Louisiana State University Bharat Guthikonda, MD **Mayo Clinic** 

H. Gordon Deen, MD Ricardo A. Hanel, MD, PhD Michael J. Link, MD Robert J. Spinner, MD

McGill University, Canada Marie-Noëlle Hébert-Blouin, MD

Methodist Neurological Institute Richard Klucznik, MD Robert G. Parrish, MD, PhD

Michigan Head & Spine Institute Mick J. Perez-Cruet, MD, MS

Northwestern University Richard G. Fessler, MD, PhD

**Oregon Health & Science University** *Edmund Frank, MD, FACS* 

Semmes-Murphey Neurologic & Spine Institute
Claudio A. Feler, MD

Spine Institute of Louisiana Andrew Utter, MD

**Springfield Neurological and Spine Institute** *Chad J. Morgan, MD* 

**St. Clare Health Center** *Armond Levy, MD* 

Texas Back Institute Michael Hisey, MD The Spine Clinic of Los Angeles at Good Samaritan Hospital Larry T. Khoo, MD

**Thomas Jefferson University Hospital** *David W. Andrews, MD* 

University of Arizona
Allan J. Hamilton, MD, FAANS, FACS

University of California, San Francisco Philip A. Starr, MD, PhD

University of Cincinnati / Mayfield Clinic

Robert J. Bohinski, MD, PhD Jordan Bonomo, MD Bradford A. Curt, MD John DePowell, MD Erin Grise, MD Jessica Guarnaschelli, MD Jeffrey T. Keller, PhD William Knight, IV, MD Charles Kuntz, IV, MD Christopher McPherson, MD Andrew J. Ringer, MD John M. Tew, Jr., MD Philip V. Theodosopoulos, MD William D. Tobler, MD

University of Pennsylvania Eric L. Zager, MD, FACS

University of South Florida Harry R. van Loveren, MD

**University of Strasbourg, France** Sebastien Froelich, MD