



American  
Association of  
Neurological  
Surgeons

Jointly Provided by the AANS

2016



# The Winter Clinics

**FOR CRANIAL & SPINAL SURGERY**

**Sunday, February 21 - Thursday, February 25, 2016**

presented by:

**Mayfield Clinic**

**Mayo Clinic**

**Cleveland Clinic**

**Goodman Campbell Brain and Spine**

Be part of the nation's most exciting cranial, spine and peripheral nerve meeting, located at the beautiful Westin Snowmass in Snowmass Village, Colorado.

## Objectives

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

**Methods of instruction:** didactic lectures, case presentations/discussions, abstract presentations, panel discussions and formal discussion periods

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

- Identify management, techniques and post-operative treatment in deformity spine surgery, how to avoid or treat complications and how best to communicate about them.
- Explain and review new techniques and controversies as demonstrated in various case studies, and apply that information to future clinical decision-making processes.
- Discuss emerging technologies as well as treatment paradigms for various spinal diseases and disorders.
- Describe potential complications of peripheral nerve disorders, entrapment, injuries, tumors, and pain and how to avoid complications preoperatively, intraoperatively and postoperatively.
- Identify updates on current topics in general neurosurgery.
- A review of historical perspectives in neurosurgery.
- Identify the contemporary management, surgical techniques and post-operative treatment of intracranial lesions.
- Discuss and review the use of neuromodulation for pain and movement disorders, patient evaluation and update on surgical techniques.
- Review and discuss the best medical practices for intracerebral hemorrhage and intraventricular hemorrhage.
- Apply processes involved in clinical decision making for cases that demonstrate controversies, the application of new and emerging technology, and complication management.
- At the completion of this course, the Advanced Practice Provider understand basic and advanced neurosurgical principals as well as gain an understanding of current best neurosurgical practices through case reviews and recent clinical study updates.

**Accreditation Statement & Designation Statements:** 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 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 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Disclosure Statement:** 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.

Sunday, February 21, 2016

7:00 - 9:30am **Deformity**

**Moderator: Robert Bohinski, MD, PhD**

Morphometric Analysis of Spinal Deformity  
*Robert Bohinski, MD, PhD*

Adult Degenerative Scoliosis:  
When to Operate & How Much to Do  
*Frank La Marca, MD*

Sagittal Balance Correction  
*Tyler Koski, MD*

Surgical Management of  
Cervical Kyphotic Deformity  
*Sergey Neckrysh, MD*

Influence of Lordotic and Hyperlordotic Lateral  
Cages on the Actual Lordosis Achieved at Each  
Segmental Level  
*Neel Anand, MD*

Hyperlordotic Cages and Anterior Release for  
Minimally Invasive Deformity Treatment  
*Larry Khoo, MD*

Minimally Invasive Treatment of Degenerative  
Dextroscoliosis in the Elderly  
*Mick Perez-Cruet, MD, MS*

4:00 - 6:30pm **Controversies in Spine Surgery**  
**Moderator: R. Douglas Orr, MD**

Updates in Minimally Invasive SI Joint Fusion  
Clinical Evidence  
*Brad Duhon, MD*

Motion Reservation Frenzy: A Cautionary Tale  
*R. Douglas Orr, MD*

Quality Measurement in Neurosurgery 2016  
*H. Gordon Deen, Jr., MD*

Preliminary Results of Using an Injectable Nuclear  
Replacement  
*Ed Frank, MD*

Co-Morbidities Associated with Chiari  
Malformation  
*Rob Parrish, MD, PhD*

Discussion

6:30 - 8:00pm **Welcome Reception**

## Monday, February 22, 2016

### 7:00 - 9:30am **Emerging Treatments in Spine Surgery**

**Moderator: William Tobler, MD**

Interval Update on New Technologies  
*William Tobler, MD*

A New Protocol for Intra-operative Wound Care to Reduce Wound Infections in Open Posterior Spinal Surgery  
*Jean-Pierre Mobasser, MD*

Laser Interstitial Thermoablation for Management of Spine Tumors  
*Claudio Tatsui, MD*

Analyse du Mouvement Vertébral  
*Chad Morgan, MD*

Fetal Myelomeningocele Repair  
*Andrew Foy, MD*

Minimally Invasive Surgery in the Osteoporotic Patient  
*Leon Abram, MD*

### 4:00 - 6:30pm **Peripheral Nerve Surgery – Potpourri**

**Moderator: Robert Spinner, MD**

Controversies in PN Entrapments  
*Eric Zager, MD*

Thoracic Outlet Syndrome  
*Line Jacques, MD*

The Lateral Femoral Cutaneous Nerve: Why is it So Hard to Find?  
*Amgad Hanna, MD*

The Role of Nerve Biopsy  
*Stepan Capek, MD*

Nerve Tumors: Imaging is the Key  
*Marie-Noëlle Hébert-Blouin, MD*

Update on Brachial Plexus Reconstruction  
*Andrés Maldonado, MD, PhD*

## Tuesday, February 23, 2016

### 7:00 - 9:30am **General Neurosurgery (Spinal Trauma, Tumors)**

**Moderator: H. Gordon Deen, Jr., MD**

TBI in the Field, Special Operations Forces  
*Maj Ryan Knight, MD, US Army*

Military Neurosurgery Experience in Support of the Afghanistan War  
*Christopher Koebbe, MD*

What's New in High Grade Glioma Treatment 2016  
*Glen Stevens, DO, PhD*

Immunotherapy for Malignant Glioma  
*Mahua Dey, MD*

Low Grade Gliomas  
*Betty Kim, MD, PhD*

Management of Cavernous Sinus Meningiomas  
*Bjorn Lobo, MD*

The Effect of the Medical Review Panel Process on Neurosurgical Litigation  
*Bharat Guthikonda, MD*

### 4:00 - 6:30pm **Historical Perspectives in Neurosurgery & Looking toward the Future**

**Moderator: Troy Payner, MD**

Soar into Five Score with A Healthy Body and Brain - You Can Have Both  
*John Tew, Jr., MD*

The Benefit of Coaching in the Ultimate Contact Sport: Neurosurgical Residency Training  
*Harry van Loveren, MD*

Changes in Residency Education: Self-study, Evaluating Outside Threats & Current Expectations  
*Jeffrey Keller, PhD & Michelle Clarke, MD*

Evolution of Spine Surgical Technique: What I've Learned  
*Richard Fessler, MD, PhD*

How Do We Find a Natural Evolution to a Neurosurgical Career? Or Resolving the End of a Lifetime as a Surgeon before Someone Else Does It for You  
*Allan Hamilton, MD*

### 7:00 - 10:00pm **Special 25<sup>th</sup> Celebration at Elk Camp**

7:00 - 9:30am **Ordinary & Extraordinary Intracranial Lesions**

**Moderator: Norberto Andaluz, MD**

Nasal Neuroendoscopy:  
The Damage We Inflict or Not!  
*Lee Zimmer, MD, PhD*

Recurrent Craniopharyngiomas:  
Management Options  
*Amjad Anaizi, MD*

Extended Endonasal Skull Base Surgery:  
Lessons Learned over 12 Years  
*Theodore H. Schwartz MD, FACS*

When the First Time is Not Enough:  
Recurrent Acoustic Neuromas  
*Philip Theodosopoulos, MD*

Petroclival Meningiomas Treatment Strategy  
*Sebastien Froelich, MD*

A New Workhorse Approach in  
Skull Base Surgery?  
*Norberto Andaluz, MD*

4:00 - 6:30pm **Functional Neurosurgery**

**Moderator: George Mandybur, MD**

Update on Trigeminal Neuralgia:  
Diagnostic Dilemmas  
*George Bovis, MD*

Foramen Ovale Observations to the  
Practical Aspects of Performing a PSR  
*Andrew Grande, MD & Jeffrey Keller, PhD*

Hearing Rehabilitation in the Profoundly Deaf  
*Michael Link, MD*

The New Frontier: Upcoming Indications for DBS  
*George Mandybur, MD*

Seizures and TBI - Prevention, Diagnosis  
and Treatment  
*William Knight, IV, MD*

Pain Management: What to Do when  
Conventional Surgery Fails  
*Claudio Feler, MD*

7:00 - 9:30am **Intracerebral Hemorrhage**

**Moderator: Mario Zuccarello, MD**

Current Management of IVH  
*Issam Awad, MD*

Cerebral Aneurysms Presenting with ICH  
*Fady Charbel, MD*

MISTIE III: An Update  
*Mario Zuccarello, MD*

Reversal of Direct Acting Oral Anticoagulants  
*Shaun Keegan, PharmD, BCPS*

Management of Vertebrobasilar Disease post Veritas  
*Ziad Hage, MD*

**Concurrent Session: Advanced Practice Provider**

**Moderator: Christy Smith, MSN, ARNP**

Neuroanatomy and Localization  
*William Clifton, MD*

Intro to Neuroimaging or Advanced Neuroimaging  
*David Miller, MD*

Critical Care Management of SAH  
*Christy Smith, MSN, ARNP*

Spine Case Studies  
*H. Gordon Deen, Jr., MD*

4:00 - 6:30pm **CPC – “Stump the Chump” - 4 Cases**

**Moderator: William Knight, IV, MD**

Faculty:  
*H. Gordon Deen, Jr., MD*  
*Joung Lee, MD*  
*George Mandybur, MD*  
*Rob Parrish, MD*  
*Troy Payner, MD*

Residents:  
*William Clifton, MD*  
*Steve Gogela, MD*  
*Yair Gozal, MD, PhD*  
*Jeff Mullin, MD*  
*Kashif Shaikh, MD*

**Concurrent Session: Advanced Practice Provider**

**Moderator: Christy Smith, MSN, ARNP**

Neurovascular Surgery Updates & Case Studies  
*Rabih Tawk, MD*

Cranial Surgery Updates & Case Studies  
*Belinda Bradley, ARNP*

The Basics of EEG Interpretation  
*Christy Smith, MSN, ARNP*

Pain Management Updates  
*Shaun Keegan, PharmD, BCPS*



### 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 Westin Snowmass is a full-service, ski-in, ski-out hotel featuring fully renovated guest rooms including the Heavenly Bed & Bath®, along with a luxurious renovated lobby, lounge and public spaces, two new restaurants, a new Westin Spa, slope-side pool, hot tub & sun deck, as Westin WORKOUT™ fitness center, and private ski valet.



The Holiday Inn Express (formerly Wildwood Snowmass) offers a completely different experience with a retro-chic design and energetic vibe. Guests will enjoy fully renovated rooms where style meets function, featuring hip art, functional space, radical design and colorful decor.

When you register for the conference, remember to make lodging reservations as well. The Westin Snowmass and Holiday Inn Express (formerly Wildwood Snowmass) hotels are holding a limited number of rooms at a discounted price until **January 20, 2016**.

To make reservations: Westin Snowmass (800) 525-9402  
Holiday Inn Express (formerly Wildwood Snowmass) (970) 923-8400

Reservations will be accepted based on availability.



## Registration deadline: February 5, 2016

For more detailed information and to register, [visit winterclinics.com](http://www.winterclinics.com)

### Tuition

<b>Full Program</b>	Feb. 21-25	\$1300
<b>Spinal Program Only</b>	Feb. 21-23	\$1100
<b>Cranial Program Only</b>	Feb. 23-25	\$1100
<b>Residents/Fellows Nurse Practitioners Physician Assistants</b>	Feb. 21-25	\$600



## Exhibitors

Aesculap

Integra

K2M

Medtronic

NuVasive

Pfizer

RTI Surgical

SeaSpine

Spine Wave

\* as of November 30, 2015



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**Mayfield Clinic Brain & Spine**  
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# The Winter Clinics

## FOR CRANIAL & SPINAL SURGERY

Sunday, February 21 - Thursday, February 25, 2016  
Westin Snowmass, Snowmass Village, Colorado

## Faculty

**Cedars Sinai Medical Center**  
Neel Anand, MD

**Center of Brain and Spine Surgery**  
George Bovis, MD

**Cheyenne Regional Medical Center**  
Claudio Feler, MD

**Cleveland Clinic**  
Glen Stevens, DO, PhD  
R. Douglas Orr, MD  
Jeff Mullin, MD

**Cornell University**  
Theodore Schwartz, MD

**Danville Orthopedic Spine Center**  
Leon Abram, MD

**Florida Spine Institute**  
Christopher Koebbe, MD

**Georgetown University**  
Amjad Anaizi, MD

**Indiana University/Goodman  
Campbell Brain and Spine**  
Mahua Dey, MD  
Jean-Pierre Mobasser, MD  
Troy Payner, MD  
Kashif Shaikh, MD

**Lariboisière Hospital, Paris**  
Sebastien Froelich, MD

**Louisiana State University**  
Bharat Guthikonda, MD

**Mayo Clinic**  
Belinda Bradley, ARNP  
Stepan Capek, MD  
Michelle Clarke, MD  
William Clifton, MD  
H. Gordon Deen, Jr., MD  
Betty Kim, MD, PhD  
Michael Link, MD  
Andrés Maldonado, MD, PhD  
David Miller, MD  
Christy Smith, MSN, ARNP  
Robert Spinner, MD  
Rabih Tawk, MD

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

**MD Anderson Cancer Center**  
Claudio Tatsui, MD

**Medical College of Wisconsin**  
Andrew Foy, MD

**Methodist Neurological Institute**  
Rob Parrish, MD, PhD, FAANS

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

**Neurosurgical and Spine Specialists**  
Brad Duhon, MD

**Northwestern University**  
Tyler Koski, MD

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

**Pacific Brain Tumor Center**  
Bjorn Lobo, MD

**Rush University Medical Center**  
Richard Fessler, MD, PhD

**The Hycy and Howard Hill Neuroscience  
Institute, Providence St. Joseph Medical  
Center**  
Joung Lee, MD

**The Spine Clinic of Los Angeles**  
Larry Khoo, MD

**University of Arizona**  
Allan Hamilton, MD

**University of California, San Francisco**  
Line Jacques, MD  
Philip Theodosopoulos, MD

**University of Chicago**  
Issam Awad, MD

**University of Cincinnati/Mayfield Clinic**  
Norberto Andaluz, MD  
Robert Bohinski, MD, PhD  
Steve Gogela, MD  
Yair Gozal, MD, PhD  
Shaun Keegan, PharmD, BCPS  
Jeffrey Keller, PhD  
William Knight, IV, MD  
George Mandymbur, MD  
John Tew, Jr., MD  
William Tobler, MD  
Lee Zimmer, MD, PhD  
Mario Zuccarello, MD

**University of Illinois at Chicago**  
Fady Charbel, MD  
Ziad Hage, MD  
Sergey Neckrysh, MD

**University of Michigan**  
Frank La Marca, MD

**University of Minnesota**  
Andrew Grande, MD

**University of Missouri/Springfield  
Neurological and Spine Institute**  
Chad Morgan, MD

**University of Pennsylvania**  
Eric Zager, MD

**University of South Florida**  
Harry van Loveren, MD

**University of Wisconsin**  
Amgad Hanna, MD

**Womack Army Medical Center  
at Fort Bragg**  
Maj Ryan Knight, MD