

**Register Early! The Following Courses Sold Out Last Year!****Practical Clinics**

- 002** Anterior and Lateral Approaches to Skull Base
- 005** Spinal Endoscopic Techniques to the Thoracic and Lumbar Spine
- 008** Basics of Spinal Stabilization, Fusion and Instrumentation
- 009** Thoracic and Lumbar Stabilization and Fusion: Indications and Complications
- 022** Intracranial Endoscopy: Indications, Techniques, Outcome and Complications
- 023** Head Trauma: Current Treatments and Controversies with Hands-On Practical Session in Brain Monitoring and Techniques
- 037** Artificial Cervical Disc Arthroplasty: Biomechanics and Clinical Application

**NEW Practical Clinics in 2009!**

- 003** Current Surgical Techniques and Approaches to MIS Spine Surgery
- 014** Dynamic Treatments of Degenerative Lumbar Disc Disease
- 020** Neurotrauma Critical Care Review and Update for the Practicing Neurosurgeon
- 025** Deep Brain Stimulation: Update and New Directions
- 036** Update on Spinal Surgery for the Practicing Neurosurgeon

**PRACTICAL CLINIC  
8:00 AM–12:00 PM****700****International Spine Masters****Director:**

Edward C. Benzel, MD

**Faculty:**

Richard Assaker, MD; Roberto Assietti, MD; Steve Gill, MD; Miguel Giudicissi-Filho, MD; H. Michael Mayer, MD, PhD; Mehmet Zileli, MD

This is a didactic course comprised of lectures, case presentations and discussion concerning a number of spinal issues. The faculty has broad and comprehensive experience with techniques commonly utilized by North American neurosurgeons as well as familiarity with new

techniques which can be expected to be performed in North America in the near future.

**Clinic Fee:** \$450**Learning Objectives:**

After completing this educational activity, participants should be able to:

- Describe the evaluation and management of a number of spinal pathologies including trauma, degenerative disease, and neoplasms
- List the advantages and disadvantages of spinal surgical techniques

**701****International Skull Base Masters****Director:**

Arnold H. Menezes, MD

**Faculty:**

Luis Alencar Borba, MD; Albino P. Bricolo, MD; Takeshi Kawase, MD; Andrew H. Kaye, MD; Basant Kumar Misra, MD; Bhawani S. Sharma, MBBS, FACS

This is a didactic course comprised of lectures, case presentations and discussion concerning skull base surgery. Surgical approaches and operative techniques for anterior, middle, and posterior cranial base lesions will be presented.

**Clinic Fee:** \$450**Learning Objectives:**

After completing this educational activity, participants should be able to:

- Describe the evaluation and surgical management of anterior, middle, and posterior cranial base lesion
- Discuss the advantages of various surgical approaches in terms of exposure and reconstruction
- Review the tenets of complication avoidance and management in skull base surgery

**702****International Neurovascular Masters****Director:**

Christopher M. Loftus, MD, FACS

**Faculty:**

Atos Alves De Sousa, MD; Evandro De Oliveira, MD, PhD; Alexander David Mendelow, FRCS, PhD; Michael K. Morgan, MD; Hirotohi Sano, MD; Gabriele Schackert, MD; Ugur Ture, MD

This is a didactic course comprised of lectures, case presentations and discussion addressing intracranial neurovascular disease. The management and treatment outcomes for vascular malformations, aneurysms, and intracerebral hemorrhage will be reviewed.

**Clinic Fee:** \$450**Learning Objectives:**

After completing this educational activity, participants should be able to:

- Describe the pathogenesis, natural history, evaluation and medical and surgical management of the entire spectrum of intracranial vascular disease including vascular malformations, aneurysms and intracerebral hemorrhage
- List the treatment options for each of these pathological conditions and explain the latest treatment concepts

**703****International Endoscopy Masters****Director:**

Jeremy D. W. Laws, MD

**Faculty:**

Paolo Cappabianca, MD; Sergio Cavaheiro, MD; Luiz Carlos de Alencastro, MD; Chandrashek Deopujari, MD; Michael R. Gaab, MD, PhD; Shizuo Oi, MD; Charles Teo, MD

This is a didactic course comprised of lectures, case presentations and discussion focused on the use of endoscopic techniques for the management of a variety of neurosurgical lesions. The course will include high quality video examples of endoscopic surgery with emphasis on intraoperative technique.

**Clinic Fee:** \$450**Learning Objectives:**

After completing this educational activity, participants should be able to:

- Describe the advantages and disadvantages of endoscopy as it relates to neurosurgical procedures
- Explain the advantages and disadvantages of this minimally invasive approach
- List the procedures which can be performed with endoscopy

## PRACTICAL CLINIC

### 8:00 AM–5:00 PM

001

### Practical and Technical Aspects of Transsphenoidal Surgery

#### Co-directors:

William T. Couldwell, MD, PhD;  
Gail L. Rosseau, MD

#### Faculty:

William F. Chandler, MD, FACS; Matthew G. Ewend, MD, FACS; Carl B. Heilman, MD; John A. Jane Jr., MD; Amin Kassam, MD; Daniel F. Kelly, MD; Edward R. Laws Jr., MD; Ian E. McCutcheon, MD; Basant Kumar Misra, MD; Edward H. Oldfield, MD; Jean Regis, MD; Warren R. Selman, MD; Jonas M. Sheehan, MD

This clinic will review traditional transsphenoidal approaches and present contemporary modifications of the technique, including endoscopic approaches. This clinic will also update the neurosurgeon on current medical and radiosurgical adjuncts to transsphenoidal surgery.

**Clinic Fee:** \$1,500

#### Learning Objectives:

- After completing this educational activity, participants should be able to:
- Describe the transsphenoidal approach and contemporary modification
  - Cite the advantages of the endonasal, endoscopic technique
  - Outline current approaches to transsphenoidal surgery
  - Evaluate adjunctive therapies for patients with pituitary tumors

002

### Anterior and Lateral Approaches to Skull Base

#### Co-directors:

Ossama Al-Mefty, MD; Chandranath Sen, MD

#### Faculty:

Ryojo Akagami, MD; Chun Siang Chen, MD; William T. Couldwell, MD, PhD; Franco De Monte, MD, FACS; Evandro De Oliveira, MD, PhD; Kadir Erkmen, MD; Paulo Abdo Kadri, MD; Wesley A. King, MD; Sandeep M. Kunwar, MD; Anil Nanda, MD, FACS; Thomas C. Origitano, MD, PhD; Raj K. Shrivastava, MD; Ugur Ture, MD

Skull base approaches will be taught by

recognized experts in the field through lectures and hands-on cadaver dissections.

**Clinic Fee:** \$1,500

#### Learning Objectives:

- After completing this educational activity, participants should be able to:
- Describe the surgical anatomy of approaches to the skull base
  - Evaluate advantages/disadvantages of approaches for specific pathologies
  - Discuss minimizing morbidity of tumor resection in the skull base

003 

### Current Surgical Techniques and Approaches to MIS Spine Surgery

#### Co-directors:

Richard G. Fessler, MD, PhD;  
Daniel H. Kim, MD, FACS

#### Faculty:

Sean D. Christie, MD; Kurt M. Eichholz, MD; Anthony K. Frempong-Boadu, MD; Vishal C. Gala, MD, MPH; Robert E. Isaacs, MD; Larry T. Khoo, MD; John C. Liu, MD; John E. O'Toole, MD; Alfred T. Ogden, MD; Mick J. Perez-Cruet, MD; Faheem A. Sandhu, MD, PhD; Justin S. Smith, MD, PhD; John K. Song, MD; Trent L. Tredway, MD; Jean-Marc Voyadzis, MD

The course is designed to provide residents/fellows and practicing neurosurgeons with the comprehensive exposure to spinal surgical anatomy and techniques by doing side by side comparisons of minimally invasive (MIS) and traditional surgical approaches. For each segment of the spine, the surgical anatomy will be reviewed in detail using cadaveric specimens to help the participant gain insight into both the landmarks for placement of instrumentation as well as the techniques for complication avoidance.

**Clinic Fee:** \$1,500

#### Learning Objectives:

- After completing this educational activity, participants should be able to:
- Discuss the anatomical nuances of all types of approaches and techniques in spinal surgical procedures including instrumentation
  - Describe the anatomy of the cervical, thoracic and lumbar regions
  - Cite the pros and cons of minimally invasive approaches

## INTERNATIONAL SYMPOSIUM

### 1:00–5:00 PM

#### Moderator:

Neil D. Kitchen, MD, FRCS

This symposium is comprised of lectures and discussion addressing the areas of skull base, spinal and neurovascular surgery and neuro-oncology. The presentations will provide a comprehensive update for each of these subspecialty areas.

No charge for registered attendees; please indicate on registration form if you plan to attend.

#### Learning Objectives:

- After completing this educational activity, participants should be able to:
- Explain the current concepts in terms of evaluation and management of conditions involving the skull base, spine, vasculature and CNS neoplasms

1:00–2:00 PM

#### Skull Base

##### Moderator:

Jose Alberto Landeiro, MD

##### Speakers:

Atul Goel, MD; Hee-Won Jung, MD; Imad N. Kanaan, MD; Takeshi Kawase, MD

2:00–3:00 PM

#### Spine

##### Moderator:

William Sears, MD

##### Speakers:

Luiz Pimenta, MD, PhD; Miguel Angel Arraez Sanchez, MD; Young-Soo Kim, MD; Hiroshi Nakagawa, MD

3:00–4:00 PM

#### Cerebrovascular

##### Moderator:

Ivan Ng, MD

##### Speakers:

Alexei L. Krivoshapkin, MD; Mika Niemela, MD, PhD; Jizong Zhao, MD

4:00–5:00 PM

#### Neuro-Oncology

##### Moderator:

Johannes Schramm, MD, Prof

##### Speakers:

Andrew H. Kaye, MD; Basant Kumar Misra, MD; Takanori Ohnishi, MD, Prof; Kyu-Sung Lee, MD, PhD

**PRACTICAL CLINIC**  
**1:00–5:00 PM**

004

**Minimally Invasive Treatment of Trigeminal Neuralgia***Co-directors:*Jeffrey Thomas Keller, PhD;  
John M. Tew Jr., MD*Faculty:*

Kim J. Burchiel, MD, FACS; Aaron A. Cohen-Gadol, MD; Joseph C.T. Chen, MD, PhD; Andrew W. Grande, MD; Robert G. Kerr, MD, PhD; Michael J. Link, MD; George T. Mandybur, MD; Nancy A. McMahon, RN; Chad J. Morgan, MD; Philip V. Theodosopoulos, MD

This course will familiarize participants with the pathophysiology of trigeminal neuralgia and the entire breadth of treatment options,

including percutaneous lesions, open surgical management, endoscopic approaches as well as radiosurgical treatment. The relevant anatomy will be extensively reviewed with an emphasis on key surgical points that maximize the effectiveness of treatment both in standard pathologic findings as well as atypical presentations, recurrences after treatment and lesion related symptoms. A treatment algorithm will be presented and the nuances of treatment decision making will be extensively discussed.

*Clinic Fee:* \$450*Learning Objectives:*

After completing this educational activity, participants should be able to:

- Discuss the standard techniques for the treatment of trigeminal neuralgia
- Explain the decision making process regarding which treatment modality is “best” for the patient

- Discuss the current thoughts regarding the pathophysiology of trigeminal neuralgia
- Explain the diagnosis of trigeminal neuralgia versus atypical facial pain
- Discuss the issues related to recurrence of trigeminal neuralgia following treatment as well as the subsequent treatment of these patients

# A Standard of Protection



**Intra-Op Monitoring Services (IOM)** is a team of health care professionals specialized in intraoperative neurophysiological monitoring. Each IOM technologist has immediate contact with our medical directors who, via telemetry, view real time information from the operating room. IOM provides:

- ▶ Increased Patient Care
- ▶ All Modalities: SSEP, EMG, TceMEP, EEG, BAER, Cortical Mapping, DBS
- ▶ Specialized Monitoring Teams
- ▶ Independent Medicolegal Protection
- ▶ Support and Outsourcing Options



**Intra-Op Monitoring Services • 866-845-4595 • Visit us online at [www.iomservices.com](http://www.iomservices.com)**