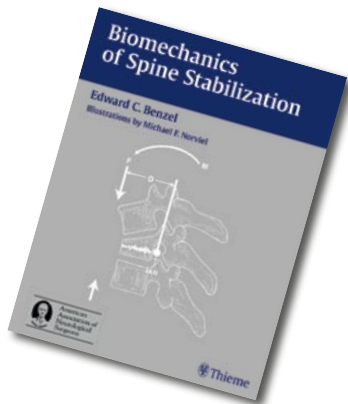




Cleveland Spine Review *Hands-On 2008*

Presented by Cleveland Clinic Center for Spine Health

A comprehensive approach for Neurosurgeons,
Orthopaedic Surgeons, and Nurses



All paid physician attendees will receive **Biomechanics of Spine Stabilization** by Edward C. Benzel, MD, on the first day of the course.



July 16-22, 2008

Embassy Suites Cleveland-Rockside
Independence, OH

Cleveland Spine Review: Hands-On 2008



Cleveland Spine Review: Hands-On 2008 is a comprehensive course utilizing the cadaver laboratory and didactic sessions with ample time for discussion. This intensive course emphasizes the fundamentals of spine surgery, particularly biomechanical considerations, and the surgery decision-making process.

Through intensive, hands-on sessions utilizing cadavers, participants study surgical techniques and strategies for a range of procedures including: screw, lateral mass, pedicle and wire fixation, as well as occipitocervical and cervical, thoracic, lumbar, and lid sacral surgical techniques. Complex surgical exposures in all regions of the spine are emphasized.

Led by experienced faculty, the course examines the multiple adjuncts to surgery, including soft tissue and bone retractors and distractors, minimally invasive surgical techniques, spinal implants (from multiple vendors), and dissection tools. Non-operative strategies are also emphasized. Significant time is dedicated to operative indication discussions. The problem-based decision-making process is introduced and emphasized during these very interactive discussions.

Upon completion of the Cleveland Spine Review, the participant will be able to:

- Utilize problem-based decision-making to develop logical algorithms for solving complex problems.
- Employ physiological and surgical principles to spinal fusion and instrumentation.
- Apply anatomic and physiologic principles to the variety of surgical approaches available to access all regions of the spine.
- Recognize the fundamental skills required to perform the most appropriate operation for any given clinical pathology, and to recognize one's own limitations in this regard.
- Evaluate available instrumentation systems and appreciate the advantages of each, as well as the relative indications for their use.



Why Should Nurses Attend?

Nurses have the unique opportunity to learn side by side, in didactic sessions as well as a cadaver laboratory, with surgeons in a relaxed, collegial atmosphere. Additionally, a special nursing seminar is held at noon the first day to meet fellow attendees and prepare for the content to be presented throughout the remainder of the course. A variety of nursing breakout sessions and a cadaver dedicated to nursing attendees gives participants a multifaceted learning experience. Social functions complete an extremely memorable course.

Cleveland Clinic (OH-045) is an approved provider of continuing education by the Ohio Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation (OBN-001-91). Provider status valid through 10-1-09.



Comments from the past course evaluation forms...

This was a one of a kind course! It was wonderful dealing with a very friendly group of people. Everyone was so helpful and willing to teach. The course was intense during the day and the social activities were a great way to unwind from the day. The lectures followed by labs enhanced the learning process.

Another great conference. A+ for the course!

I feel that this was an excellent course, truly one of a kind. Faculty was great. There was a wealth of knowledge and everyone was friendly and did not mind explaining or talking to you.

This is by far the best course I have attended. The topics covered are all pertinent and the course is the right length. The interaction with the faculty during dissections was very valuable. The hike is a great break and occurred at the right time. It would be hard to improve the course.

Happy to work in a small group especially in the lab. Thank you for offering special nursing topics.

This is the best course ever.

Great conference and social events.

Directors

Edward C. Benzel, MD

Cleveland Clinic, Cleveland, OH

Marc E. Eichler, MD

Newton Centre, MA

Lars Gilbertson, PhD

Cleveland Clinic, Cleveland, OH

Doug Orr, MD

Cleveland Clinic, Cleveland, OH

Gregory R. Trost, MD

University of Wisconsin, Madison, WI

Honored Guest

Wolfgang Rauschnig, MD, PhD

Professor of Clinical Applied Anatomy
Academin University Hospital
Uppsala, Sweden

Nursing Directors

Ann Henwood, MSN, RN, CNS

Cleveland Clinic, Cleveland, OH

Andrea Strayer, MS, A/G NP, CNRN

University of Wisconsin, Madison, WI

Course Faculty

Guest Faculty

Denise Lemke, MSN, CS-RN, ANP, CNRN

Medical College of Wisconsin
Milwaukee, WI

Raj Rampersaud, MD

University Health Network
Toronto, Ontario, Canada

Daniel Resnick, MD

University of Wisconsin
Madison, WI

Mario Alberto Rott, MD

Buenos Aires, Argentina

Abdelfattah Saoud, MD, PhD

Ain Shams University
Cairo, Egypt

Cleveland Clinic Faculty

Betty Balmat, RN

Division of Nursing

Gordon Bell, MD

Center for Spine Health

Katie Evanchick, PA-C

Center for Spine Health

Iain Kalfas, MD

Center for Spine Health

Ajit Krishnaney, MD

Center for Spine Health

Isador Lieberman, MD

Cleveland Clinic Florida

Daniel Mazenec, MD

Center for Spine Health

Robert McLain, MD

Center for Spine Health

Alfred Melillo, PA-C

Center for Spine Health

Thomas Mroz, MD

Center for Spine Health

Paul Ruggieri, MD

Neuroradiology

Judith Scheman, PhD

Chronic Pain Rehabilitation

Center for Spine Health

Richard Schlenk, MD

Center for Spine Health

Michael Steinmetz, MD

Center for Spine Health

Santhosh Thomas, DO

Center for Spine Health

Victoria Vance, Esq.

General Counsel

Lab Faculty

Cristian Brotea, MD

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Richard Burg, MD

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Samuel Critides, MD

Penn State University
Hershey, PA

Monte DeWal, MD

Long Island Spine Specialists, PD
Commack, NY

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Albany Medical College
Albany, NY

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Center for Spine Health

Eldad Hadar, MD

University of North Carolina
Chapel Hill, NC

Paul Kim, MD

Center for Spine Health

Robert Kowalski, MD

Wilford Hall Medical Center
Helotes, TX

Desmond Kwok, MD

Dubai Bone and Joint Center
Dubai, UAE

Jorge Lastra-Power, MD

San Juan, PR

William Lavelle, MD

Center for Spine Health

Vincent Miele, MD

Center for Spine Health

Luis Mignucci, MD

Neurospine Consultants
Dallas, TX

William Montgomery, MD

Center for Spine Health

Rakesh Patel, MD

Orthopedic Associates of Long Island
East Setauket, NY

Ricky Placide, MD

Westend Orthopaedic Clinic
Richmond, VA

Ashraf Ragab, MD

University of Mississippi Medical
Center
Jackson, MS

Ron Riesenburger, MD

Center for Spine Health

Andrew Wakefield, MD

Hartford Hospital
Hartford, CT

Brian Walsh, MD

University of Wisconsin
Madison, WI

Michael Wang, MD

University of Miami
Miami, FL

Wolfgang Rauschnig, MD, PhD

Professor Rauschnig developed an anatomical technique for crysectioning of fresh-frozen, nondecalcified specimens. This technique renders anatomical images of unprecedented precision and color rendition. It has been predominantly used in studies of the anatomy and pathology of the spine, ranging from normal anatomy and its variations, to a wide variety of pathologies such as trauma, degenerative conditions, tumors and metastases. In addition, a large number of specimens were processed that stem from deceased who had spinal surgery.

Professor Rauschnig has published over 200 original peer-reviewed journal articles, written over 100 textbook chapters, developed numerous electronic teaching programs, and also received numerous honors, prizes and awards, among them the Volvo Award in clinical sciences. Currently he is faculty on many international spine courses, symposia and educational meetings, he also is a member of most spine societies and several task forces and study groups. He is an orthopaedic surgeon by training and has mainly been involved in the development of knee arthroscopic surgery and reconstruction techniques. His medical studies were in Kiel, Germany, and he has been practicing in Sweden since 1967.



Course Overview

Unique Features of the Course

- Interactive Small Group Case Presentations
– Participants are **encouraged** to bring cases for discussion
- Collegial Atmosphere with Ample Opportunity to Pose Questions to the Faculty and Honored Guest One-on-One and During Lectures

Day 1 Highlights

- Problem-Based Decision Making
- Patient Selection
- Pain Management
- Coding
- Opening Reception

Day 2 Highlights

- Fundamentals and Screw Mechanics
- Spinal Column Failure of the Upper Cervical Spine
- Surgical Approaches to Craniocervical Junction
- Orthoses
- Stabilization of the Craniocervical Junction
- Biomaterials and Nanotechnology
- Ventral Surgery of the Subaxial Cervical Spine
- Transoral and Craniocervical Exposures and Ventral Cervical Exposures Hands-On Lab
- Night Out at the Corner Bowling Alley

Day 3 Highlights

- Spinal Column Failure of the Subaxial Spine
- Spinal Instrumentation and Implant Failure
- Ventral Cervical Fixation Techniques
- Evidenced-Based Methodologies
- Dorsal Cervical Fixation
- Non-Operative Management
- Ventral Cervical Fixation Hands-On Lab
- Lateral Mass, Wire, and Occipitocervical Fixation Hands-On Lab

Day 4 Highlights

- Biomechanics of Internal Fixation and Motion Preservation
- Kyphoplasty, Vertebroplasty IDET and Other Minimally Invasive Procedures
- Metallurgy/Component – Component Interfaces
- Surgical Exposure of the Cervicothoracic Region
- Spine Bowl I
- Survivor Team Challenge and Crawfish Boil



The band MB3 will perform at the Rock & Roll Hall of Fame Reception on July 21.

Day 5 Highlights

- Surgical Exposure of the Ventral & Ventral Lateral Thoracic and Lumbar Spine
- Deformity Correction and Prevention
- Thoracic and Lumbar Spine Stabilization Strategies
- Osteotomy Techniques
- Bone, Bone Physiology, and Bone Substitutes: Techniques and Complications of Bone Graft Harvesting
- Ventral & Dorsal Thoracic & Lumbar Fixation Techniques
- Spine Bowl II
- Ventral and Lateral Thoracic and Lumbar Exposures and Fixation Techniques Hands-On Lab

Day 6 Highlights

- Deformity Correction
- Pedicle Screw Fixation Techniques
- Image Guided Navigation
- Minimally-Invasive Surgery
- Spine Bowl Finale
- Lumbar Fixation Hands-On Lab
- Lumbar Fixation and Minimally Invasive Surgery Hands-On Lab
- Rock & Roll Hall of Fame Reception, featuring our own Dan Resnick on the sax with his band, MB3

Day 7 Highlights

- Lumbo-Sacral-Pelvic Regional Anatomy and Biomechanics
- Lumbo-Sacral-Pelvic Fixation Techniques
- Technology: Economic Impact
- Spine Tumor Satellite Symposium (requires separate registration and fee – see page 6 for details)

General Information

Location

Embassy Suites Cleveland - Rockside Hotel
5800 Rockside Woods Boulevard
Independence, Ohio, USA 44131
Telephone: 216-986-9900 or 1-800-Embassy

The Embassy Suites Cleveland - Rockside Hotel is located 12 miles from Cleveland Hopkins International Airport. Free shuttle service is available from the hotel to the airport by calling 216-986-9900 when you arrive at the airport.

Hotel Reservations

Hotel reservations are separate from the course registration and are the responsibility of the participant. Rooms have been blocked for attendees at the following hotel:

Embassy Suites Cleveland - Rockside Hotel (Course Headquarters)

5800 Rockside Woods Blvd., Independence, Ohio, USA 44131
\$129 plus tax, per night

Course Schedule

- The program runs from Wednesday, July 16 through Tuesday, July 22
- The physician program begins at 3 pm on the first day and ends by 12 noon on the last day
- The pre-course RN lectures begin at 12 noon on July 16

Registration/Refund Policy

Register at www.ccfme.org/spinereview08. The course size is limited. The registration deadline is Wednesday, July 9, 2008, or until all available slots have been taken. To register after July 9, please contact Martha Tobin at 216-445-3449 or tobinm@ccf.org.

Please Note: If you register online, you should receive an immediate confirmation notice indicating that you are registered and your credit card payment was processed. The name and date of the program will be on the notice. If the notice contains the word "error" or does not contain the program information, please contact the registration office at 216-297-7303 to confirm receipt. If you register by fax, please allow up to two weeks for your registration to be processed. If you register by mail, please allow up to three weeks for your registration to be processed. Mailed or faxed registrations will receive a confirmation notice by U.S. mail unless requested otherwise on the registration form. To check on the status of a faxed or mailed registration, please call 216-297-7303.

In case of cancellation, a \$50 cancellation fee will be deducted from your refund. Written notification of your cancellation is required in order to process your refund. **NO REFUNDS WILL BE ISSUED AFTER JULY 9, but registration is transferable through JULY 22, 2008.**

Accreditation

The Cleveland Clinic Foundation Center for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cleveland Clinic Foundation Center for Continuing Education designates this educational activity for a maximum of 52.0 *AMA PRA Category 1 Credits*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This activity may be submitted for American Osteopathic Association Continuing Medical Education credit in Category 2.

Faculty Disclosure

The Cleveland Clinic Foundation Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Commercial Support requiring resolution of all faculty conflicts of interest. Faculty declaring a relevant commercial interest will be identified in the activity syllabus.

Special Needs

If you have any special needs that require additional assistance, please contact Martha Tobin at 216-445-3449. Requests must be received at least two weeks prior to the start of the course.

For additional information: Ms. Martha Tobin – 800-223-2273 ext. 53449
(e-mail) tobinm@ccf.org / (fax) 216-445-4527





RN Special Lectures

Please Note: RNs attend the same lectures as the physicians. They also attend the following lectures:

- Functional Anatomy and Physiology of the Spine, Spinal Cord and Peripheral Nerves
- Cervical Spine Pathology and Correlative Neuro Assessment
- Radiology Fundamentals
- Biomechanics Fundamentals
- Spinal Column Pathology and Medical Decision-Making: The Surgeon's Perspective
- Outcomes Assessment
- Lumbar Spine Pathology and Correlative Neuro Assessment
- Pre- and Post-Operative Nursing Care Considerations
- Surgical Issues from an RN Perspective
- Medical-Legal Issues
- Cervical/Lumbar Arthroplasty
- Interactive Cervical and Lumbar Case Discussions

Join us for this special satellite symposium

Managing Spine Tumors

Tuesday, July 22, 2008 / 11:00 am – 5:00 pm

Embassy Suites Cleveland-Rockside Hotel, Independence, OH

The management of spinal tumors has undergone a profound paradigm shift in the 21st Century. Until recently, many patients were offered limited therapy with few alternatives if the treatment failed. This half-day satellite symposium will bring together world-renowned experts who will discuss the spectrum of treatment options currently available in the management of spinal tumors. A broad range of technical and clinical experience will be presented and outcomes related to the therapies will be reviewed.

At the end of the symposium, participants will be able to:

- Identify and discuss various treatment options as they relate to spine tumors
- Recognize the role of multidisciplinary and multimodality care in the management of spine tumors
- Determine how to integrate these treatment options into clinical practice

Guest Faculty

Ziya Gokaslan, MD
Johns Hopkins
Baltimore, MD

Roy Patchell, MD
University of Kentucky
Lexington, KY

Michael Wang, MD
University of Miami
Miami, FL

Cleveland Clinic Faculty

Lilyana Angelov, MD
Brain Tumor and Neurology Center

Jorge Garcia, MD
Solid Tumor Oncology

Richard Schlenk, MD
Center for Spine Health

Edward C. Benzel, MD
Center for Spine Health

Susan LeGrand, MD
Solid Tumor Oncology

John Suh, MD
Radiation Oncology

Sam Chao, MD
Radiation Oncology

Derek Raghavan, MD, PhD
Hematology and Medical Oncology

For additional details and to register, please visit

www.ccfmc.org/SpineTumors08

Or contact Martha Tobin at 216-445-3449 or tobinm@ccf.org.

Registration Form

Cleveland Spine Review Hands-On 2008

July 16-22, 2008
Cleveland, Ohio

For Office Use Only: 020487

Fee: _____ M.O.P. _____

Date: _____ CXL/Fee: _____

Name _____ Degree _____
First M.I. Last

Specialty _____

Address _____ Home Business

City, State, Zip Code _____

Phone # _____ Fax # _____

E-mail _____ Last 4 digits of SS# _____

Confirmation Notice Preference: US Mail Fax E-mail

Surgeons Only: Neurosurgeon Orthopaedic Surgeon

RNs Only: OR Outpatient Inpatient

Course Registration Fee (please check appropriate box)

- Physicians US \$3,900
 International Physicians US \$2,475
 Residents, Fellows US \$1,500
 RNs US \$775
 Cleveland Clinic Alumni or Cleveland Clinic Health System Physician Organization US \$2,350
 Comprecare Affiliate Member: \$2,544 – Member I.D. # _____

Course fee includes registration materials, continental breakfasts and lunches, Opening Reception, Bowling Night, Crawfish Boil Dinner, and Rock Hall Reception.

Additional tickets for social activities may be purchased:

Opening Reception - Wednesday, July 16 \$35 # extra tickets _____
Bowling Night - Thursday, July 17 \$25 # extra tickets _____
Crawfish Boil Dinner - Saturday, July 19 \$35 # extra tickets _____
Rock Hall Reception - Monday, July 21 \$65 # extra tickets _____

Payment Options (please check appropriate box)

Check enclosed (made payable to: The Cleveland Clinic Educational Foundation)

Visa MasterCard AmEx Discover Card # _____

Name on Card _____ Exp. Date _____

Signature _____ 3- or 4-digit Verification No. _____
(not valid without signature) (found on back of card)

Total Amount Paid \$ _____

Mail completed registration form and payment information to:

The Cleveland Clinic Educational Foundation
P.O. Box 931653
Cleveland, OH 44193-1082

Or, if paying by credit card, registration may be faxed to 216-445-9406.
(Once faxed, do not mail original registration.)

Register online at www.ccfcmc.org/spinereview08

The Cleveland Clinic Foundation
Neurological Institute
9500 Euclid Avenue, J1-36
Cleveland, OH 44195



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