



Cleveland Spine Review: *Hands-On 2010*

Presented by Cleveland Clinic Center for Spine Health

A comprehensive approach for Neurosurgeons,
Orthopaedic Surgeons, and Nurses

NEW THIS YEAR
Spinal Injection
Therapeutic and Diagnostic
Techniques – Best Practices
A Parallel Course For
Interventionalists
July 10-11, 2010



July 7-13, 2010

Cleveland Clinic Lutheran Hospital • Renaissance Cleveland Hotel
Cleveland, OH

Cleveland Spine Review: Hands-On 2010



Cleveland Spine Review: Hands-On 2010 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-045/10-1-12) is an approved provider of continuing nursing education by the Ohio Nurses Association (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.



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.

Course Faculty

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

Lawrence G. Lenke, MD

The Jerome J. Gilden Endowed Professor of Orthopaedic Surgery
Professor of Neurological Surgery
Washington University Medical Center
at Washington University School of Medicine
Co-Chief Adult/Pediatric Scoliosis and Reconstructive Spinal Surgery

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

Samuel Critides, MD

Naval Medical Center -
Portsmouth
Portsmouth, VA

Eldad Hadar, MD

University of North Carolina
Chapel Hill, NC

Alex Jones, MD

Hudson Valley Neurosurgical
Associates, LLC
Goshen, NY

Cumhur Kilincer, MD, PhD

Trakya University
Edirne, Turkey

Denise Niklasch, MSN, CS, RN, ANP, CNRN

Medical College of Wisconsin
Milwaukee, WI

Rakesh Patel, MD

Orthopedics Associates of
Long Island
New York, NY

Raj Rampersaud, MD

University Health Network
Toronto, Ontario, Canada

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

Edward Covington, MD

Center for Spine Health

Katie Evanchick, PA-C

Center for Spine Health

Fran A. Feldkamp, MS, MPAS, PA-C

Center for Spine Health

Iain Kalfas, MD

Center for Spine Health

Ajit Krishnaney, MD

Center for Spine Health

Eric Mayer, MD

Center for Spine Health

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

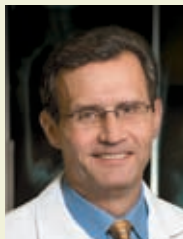
Center for Spine Health

Santhosh Thomas, DO

Center for Spine Health

Dr. Lawrence G. Lenke

Dr. Lenke is the Jerome J. Gilden Endowed Professor of Orthopaedic Surgery at Washington University School of Medicine (WUSTL). His practice is devoted exclusively to spinal surgery with an emphasis on complex reconstructive surgery and the treatment of various spinal deformities such as scoliosis, kyphosis and spondylolisthesis.



After receiving his medical degree at Northwestern University Medical School, Dr. Lenke completed his internship and residency training in Orthopaedic Surgery at WUSTL. While there, he also completed a fellowship in pediatric and adult spinal surgery.

Since 1991, Dr. Lenke has been active in the field of spine research and a recipient of major grants for research pursuit. His peers have acknowledged the merit of his research with various honors.

Lab Faculty

Luiz Henrique Abad, MD

Rio de Janeiro, Brazil

Frank Bishop, MD

Cleveland Clinic Center for
Spine Health

Nathaniel Brooks, MD

Cleveland Clinic Center for
Spine Health

Todd Francis, MD, PhD

Wayne State University School
of Medicine
Detroit, MI

Ran Harel, MD

Cleveland Clinic Center for
Spine Health

Desmond Kwok, MD

Hamilton General Hospital
Hamilton, Ontario, Canada

Jorge Lastra-Power, MD

San Juan, Puerto Rico

Michael Marone, MD, PhD

Billings Clinic
Indianapolis, IN

Luis Mignucci, MD

Neurospine Consultants
Dallas, TX

William Montgomery, MD

Northeast Orthopedics
Saratoga Springs, NY

Ioannis Polythodorakis, MD

University of Crete
Arta, Greece

Sharad Rajpal, MD

Cleveland Clinic Center for
Spine Health

John Shin, MD

Cleveland Clinic Center for
Spine Health

Robert Talac, MD

Cleveland Clinic Center for
Spine Health

Fernando Techy, MD

Cleveland Clinic Center for
Spine Health

Daisuke Togawa, MD, PhD

Hakodate Central General
Hospital
Hokkaido, Japan

Eve Tsai, MD, PhD

Ottawa Hospital
Ottawa, Ontario, Canada

Gandhi Varma, MD

Cleveland Clinic Center for
Spine Health

Lucas Perez de Vasconcellos, MD

São Paulo, Brazil

Andrew Wakefield, MD

Hartford Hospital
Hartford, CT

Steven Will, MD

Hingham, MA

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

Course Schedule

- The program runs from Wednesday, July 7 through Tuesday, July 13.
- On July 8, 9, 11 & 12, the course begins at 6:30 am and ends at 5:30 pm. On July 10, the course begins at 6:30 am and ends at 2:00 pm.
- The physician program begins at 3 pm on July 7 and ends at 11:30 am on July 13.
- The pre-course RN lectures begin at 12 noon on July 7 and end at 11:30 am on July 13.
- **Round-trip transportation from the Renaissance Hotel to Cleveland Clinic Lutheran Hospital will be provided each day.**

Day 1 Highlights

- Pain Management: Diagnosis and Treatment
- Using Interventional Techniques to Guide Surgery
- Selecting Patients for Surgery
- Mimics of Spinal Pathology
- Psychology of Spinal Disorders
- Outcome Instruments: What to Use and Why

Day 2 Highlights

- Biomechanics 101
- Craniocervical Junction Pathologies and Stabilization
- Orthotics
- Surgical Approaches to the Craniocervical Junction
- Cervical Spondylotic Myelopathy Diagnosis and Treatment
- Transoral and Craniocervical Exposures Lab
- Cervical Radic and Axial Neck Pain Diagnosis and Treatment
- Assessment and Treatment of Cervical Deformity
- Emerging Technologies in Cervical Spine
- Ventral Cervical Exposures and Fixation Lab



Day 3 Highlights

- Biomechanics 201
- Biomechanics of Implant Failure
- Dorsal Cervical Fixation Techniques
- Complications and Avoidance in the Cervical Spine
- Posterior Cervical, Lateral Mass O/C Laminoplasty Lab
- Dorsal Thoracic Exposures
- Thoracic Instrumentation Techniques Tricks and Pearls
- “Lenke Lab” Dorsal Thoracic Exposures and Instrumentation
- Lumbosacral Fixation Alternatives

Day 4 Highlights

- Biomechanics of Motion Preservation
- Surgery of the Geriatric Spine
- Surgical Exposure of the Cervico-Thoracic Junction
- Evidence and Outcomes: Making Sense of the Literature
- Spine Bowl I
- Injection Course – Lumbar and Cervical Techniques
- Hike and Crawfish Boil

Day 5 Highlights

- Surgical Exposure of the Ventral Thoracic and Lumbar Spines
- Principles of Deformity Correction
- Ventral and Lateral Cervico-Thoracic and Thoracic Exposures Lab
- What’s New in Image Guidance
- Degenerative Spondy and Scoliosis Treatment Options
- Spine Surgery in Haiti after the Quake
- Lumbar Complications Avoidance and Treatment
- Thoracic and Lumbar Stabilization Strategies
- Radiosurgery in the Spine
- Ventral Thoracic, Lumbar Exposures, and Instrumentation Lab
- Spine Bowl II
- Injection Course – Diagnostic Injections Improving Surgical Outcomes

Day 6 Highlights

- Interbody Fusions: Indications and Techniques
- Bone and Bone Substitutes Evidence and Options
- Failed Back Assessment and Treatment
- Spinal Infections
- Lumbar Fixation Lab
- MIS Surgery Tricks, Pearls, and Results
- Lumbar Fixation and ALIF Lab
- Spine Bowl Finale
- Corner Alley Bowling Reception

Day 7 Highlights

- Spine Surgery – Pearls and Tricks of the Trade
- Lumbosacral and Pelvic Fixation
- Cost Effectiveness of Spine Surgery
- MIS Surgery Complications and Avoidance
- Surgeons Role in Implant Cost Containment
- Vertebral Augmentation and The NEJM

General Information

Location

Lectures and Labs – Cleveland Clinic Lutheran Hospital:

1730 W. 25th Street, Cleveland

Lodging – Renaissance Cleveland Hotel

(Note: The opening lectures on Wednesday, July 7, will be held at the Renaissance Hotel. All other lectures from Thursday through Tuesday will take place at Cleveland Clinic Lutheran Hospital.)

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:

Renaissance Cleveland Hotel

24 Public Square, Cleveland, Ohio, USA 44113

\$149 plus tax, per night

Telephone: 216-696-5600 or 800-468-3571

The Renaissance Cleveland Hotel is located 12 miles NE from Cleveland Hopkins International Airport. Public transportation through the RTA is available from the airport to Tower City. The hotel is attached to Tower City.

Registration/Refund Policy

Register at www.ccfme.org/spinereview10. The course size is limited. The registration deadline is Wednesday, June 30, 2010 at 5:00 PM EST, or until all available slots have been taken. To register after June 30, 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 216-448-0777 or by e-mail at cmeregistration@ccf.org to confirm receipt.

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 JUNE 30**, but registration is transferable through JULY 13, 2010.

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 34.25 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association Council on Continuing Medical Education for Category 2 credit.

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

The Cleveland Clinic Foundation Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify Monet Smith at 216-444-9380 at least two weeks prior to the activity.

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



July 10-11, 2010

Spinal Injection Therapeutic and Diagnostic Techniques – Best Practices

A Parallel Course for Interventionalists

This unique course includes didactic and hands-on instruction of an integrated practice model with surgeons who are supported by non-operative physicians. Management, diagnosis, maximizing non-operative benefit, improving outcomes and maximizing efficiency will be explored. The program integrates best-practice research and evidence-informed techniques. This special parallel course is limited to 24 participants, but must have at least 8 to be held.

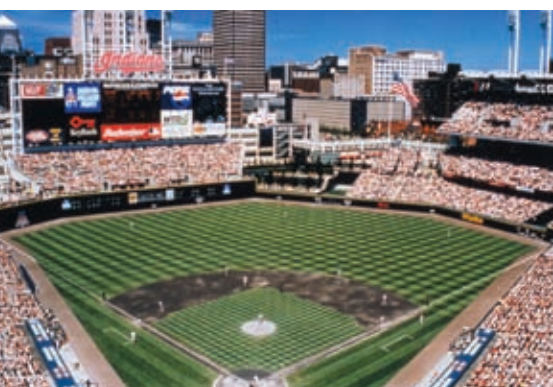
RN Special Lectures

Please Note: RNs attend the same lectures as the physicians. They also begin with a 3-hour pre-course session on the first day. Special, nurses-only lectures include:

- 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
- Interactive Cervical and Lumbar Case Discussions



Great Lakes Science Center



Progressive Field

Have Your Family Vacation in Cleveland in 2010!

For family entertainment, Cleveland offers a wealth of fun and excitement sure to intrigue families with children of all ages. From thrilling rides at area amusement parks to fun-filled attractions and interesting museums, there's plenty to see and do year round in Greater Cleveland. An official visitors guide, with dozens of savings coupons, will be sent to each registered attendee.

Some Area Attractions

- Cedar Point Amusement Park
- Cleveland Metroparks Zoo and RainForest
- Rock and Roll Hall of Fame and Museum
- Great Lakes Science Center
- NASA John H. Glenn Research Center at Lewis Field
- Cleveland Botanical Garden
- The Steamship William G. Mather
- Cleveland Museum of Natural History
- Pro Football Hall of Fame
- Cleveland Orchestra
- Playhouse Square Center
- Cleveland Play House
- Quicken Loans Arena
- Progressive Field



Flats entertainment center



Rock and Roll Hall of Fame and Museum

Register online at www.ccfcm.org/spinereview10

Registration Form

Cleveland Spine Review: Hands-On 2010

July 7-13, 2010
Cleveland, Ohio

For Office Use Only: 020674

Fee: _____ M.O.P. _____

Date: _____ CXL/Fee: _____

Name _____ Degree _____
First M.I. Last

Company/Organization _____

Address _____

City, State, Country, Zip Code _____

Phone # _____ Fax # _____

E-mail _____

Surgeons Only: Neurosurgeon Orthopaedic Surgeon

RNs Only: OR Outpatient Inpatient

Course Registration Fees (please check appropriate box)

- Surgeons:** \$4900
- International Surgeons:** \$3475
- Residents/Fellows:** \$2500
- Nurses:** \$1500

Parallel Course for Interventionalists July 10 - 11, 2010

- Injection Course Only:** \$1500
- Injection Course and
Spine Review Course:** \$500 additional

Note: The Injection Course is limited to 24 participants,
but must have at least 8 to be held.

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

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 216-448-0783

(Once faxed, do not mail original registration.)

Register online at www.ccfcmc.org/spinereview10

The Cleveland Clinic Foundation
Neurological Institute
9500 Euclid Avenue, S-40
Cleveland, OH 44195



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