

Sixth Annual ONE Spine Resident's and Fellow's Course

Aug. 14-16, 2015
Seattle Science Foundation
550 17th Ave., Suite 600
Seattle, WA 98122

Course chairmen

Rod J. Oskouian, Jr., M.D.
Christopher I. Shaffrey, M.D.
Jens R. Chapman, M.D.
John P. Kostuik, M.D.

Featuring

Interactive case discussions
Instructive cadaveric dissections
Bioskills lab



About the course

Course objectives

The ONE Spine Course is specifically designed for orthopedic fellows and senior neurosurgical residents who are going to practice spinal surgery. The course will cover the latest advances in complex spinal disorders such as minimally invasive techniques, trauma, deformity, tumors, infection and imaging, as well as radiosurgery. The main objectives of the course are to bring orthopedic and neurological surgeons in training together to advance the art and science of modern spinal care.

The course covers the pathophysiology of subaxial cervical spine trauma; management of spinal cord injury; occipital cervical spine anatomy and pathophysiology; subaxial cervical spine anatomy; spinal cord monitoring advances; thoracic stabilization techniques and anatomy; cervicothoracic anatomy; management of thoracolumbar spine trauma; understanding the biological processes of arthrodesis; lateral approaches to the spine; posterior deformity correction; sacral and pelvic fixation; management of spinal tumors; understanding neuromonitoring changes; lumbar stabilization techniques; and anterior correction techniques and biomechanics of spine stabilization.

Since the transition into any fellowship can often be challenging for both trainee and mentor, we hope this course provides a useful starting point for this important phase of training.

Intended audience

The intended audience for this course includes orthopedic and neurosurgical fellows who are either in their last year of training or in a spine fellowship program. We will also consider surgeons in their first year of practice as well.

Registration and housing

[Register online at www.seattlesciencefoundation.org/programs/one-spine](http://www.seattlesciencefoundation.org/programs/one-spine)

The registration fee for this workshop is being supported by educational grants from industry. For out-of-town attendees, we will provide lodging, including room and tax, at the W Hotel for the nights of Thursday, August 13, Friday, August 14 and Saturday, August 15. In addition, the course will provide a travel stipend for the residents to travel to and from Seattle. Meals outside of course functions, uninvited guests and other miscellaneous expenses are not reimbursable and are the responsibility of the attendee.

For further information

Phone: 206-732-6500

Email: lindas@seattlesciencefoundation.org

Web: www.seattlesciencefoundation.org/programs/one-spine



Saturday, Aug. 15, 2015

Thoracic, lumbar and pelvis

- 6:30 a.m. **Breakfast and exhibits**
- 7 a.m. **Principles of Spinal Balance**
- 8 a.m. **Spinal Tumors: Surgical Management and Complication Avoidance**
- 9 a.m. **Occipital Cervical Fixation**
- 10 a.m. **Management of Thoracolumbar Spine Trauma and Stabilization Techniques**
- 11 a.m. **Thoracic and Lumbar Stabilization Techniques**
- 11:50 a.m. **Break and pick up lunch**
- Noon **Posterior Deformity Correction: Techniques, Pearls and Mistakes**
(Working lunch)
- 1 p.m. **Minimizing Complications of Lateral Surgery**
- 2 p.m. **Hands-on cadaver lab and exhibits**
- 5 p.m. **Adjourn**
- 7 p.m. **Course dinner**

Sunday, Aug. 16, 2015

Complex spine

- 8:30 a.m. **Minimally Invasive Surgery: Options and Opportunities**
(Working breakfast)
- 9:20 a.m. **What's New in Biologics in Spine**
- 10:20 a.m. **Spinal Vascular Malformations**
- 11:20 a.m. **Lunch**
- 12:20 p.m. **Adjourn**

Agenda

Friday, Aug. 14, 2015

Instrumentation basics and trauma

- 7:30 a.m. **Breakfast and exhibits**
- 7:45 a.m. **Welcome and overview**
- 8 a.m. **Spinal Instrumentation: Basic Concepts and Biomechanics**
- 9 a.m. **C1, C2 Anatomy and Subaxial Cervical Spine Reconstruction**
- 10 a.m. **Management of Cervical Stenosis: Anterior versus Posterior Approaches**
- 11 a.m. **Cervical Spine Trauma: Surgical and Non-operative Management**
- 11:50 a.m. **Break and pick up lunch**
- Noon **History of Spinal Deformity**
(Working lunch)
- 1 p.m. **Sacral and Pelvic Fixation**
- 2 p.m. **Hands-on cadaver lab and exhibits**
- 6 p.m. **Reception and exhibits**
- 6:30 p.m. **Adjourn**



Eight anatomical stations

Residents and fellows will rotate every hour through the stations in groups of five or six. Each station will be led by one or more faculty.

Station one – Occipital Cervical

- T1 pedicle screws
- Percutaneous thoracic screws
- Occipital fixation C1-2 screws

Station two – Tumor/Trauma with Navigation

- Costotransversectomy
- Thoracic pedicle screws (anatomic vs. straightforward)
- Lumbar pedicle screws
- Corpectomy (posteriorly)
- Posterior placement of expandable cage
- Solera with thoracic and lumbar instrumentation
- VCR set and osteotomy instrumentation
- O-Arm

Station three – Minimally Invasive

- TLIF in lumbar spine
- MIS in thoracic spine
- Thoracolumbar percutaneous instrumentation
- Lumbar pedicle subtraction osteotomy
- Vertebral body replacement with expandable cage

Station four – Lateral Approaches

- Retroperitoneal approach lateral interbody fusion
- Transthoracic
- Corpectomy
- Thoracic and lumbar lateral interbody fusion
- Anterolateral instrumentation
- Vertebral body replacement with expandable cage

Station five – Posterior Osteotomy Techniques

- Sacrectomy
- Lumbar pedicle screws
- Sacral pedicle screws (S1, S2 screws)
- Alar screws
- Lumbar instrumentation
- Pelvic instrumentation

Station six – Posterior Fixation Techniques In The Thoracic Spine

- Thoracic pedicle screws
- Osteotomies – PSO, Chevron, Smith Petersen
- Vertebral column resection
- Vertebral column manipulation

Station seven – Thoracolumbar/ Corpectomy

- Lateral transthoracic approach
- Thoracolumbar approach (diaphragmatic approach)
- Anterolateral instrumentation
- Retroperitoneal approach and closure
- Corpectomy

Station eight – Thoracic

- Thoracic fixation
- Thoracic constructs
- Thoracic stabilization
- Sublaminar wires
- Salvage strategies
- Thoracic osteotomies



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Faculty

Paul Anderson, M.D., MS
Professor, orthopedic surgery
University of Wisconsin

Hyun W. Bae, M.D.
Research director
The Spine Institute

Jens R. Chapman, M.D.
Complex spine surgeon
Swedish Neuroscience Institute

D. Kojo Hamilton, M.D.
Visiting associate professor
Residency program director
University of Pittsburgh

Wellington Hsu, M.D.
Clifford C. Raisbeck distinguished
professor, orthopedic surgery
Northwestern University

J. Patrick Johnson, M.D.
Director, Neurosurgery Spine
Fellowship Program
Cedars-Sinai Medical Center

Tyler Koski, M.D.
Neurosurgeon
Northwestern Memorial Hospital

John P. Kostuik, M.D.
Professor emeritus, orthopedics
Johns Hopkins University

Lawrence G. Lenke, M.D.
Chief, orthopedic spine surgery
Washington University

Ehud Mendel, M.D.
Professor, neurological surgery
Ohio State University
Wexner Medical Center

Stephen Monteith, M.D.
Brain and spine specialist
Neurosurgeon
Swedish Neuroscience Institute

David O. Okonkwo, M.D.
Assistant professor, neurological
surgery
Director, neurotrauma
University of Pittsburgh

Rod J. Oskouian Jr., M.D.
Spine fellowship director
Swedish Neuroscience Institute

David W. Polly Jr., M.D.
Professor, orthopedic surgery
University of Minnesota

Charles A. Sansur, M.D.
Assistant professor, neurosurgery
University of Maryland

Paul Santiago, M.D.
Associate professor, neurosurgery
and orthopedic surgery
Washington University School
of Medicine

Christopher I. Shaffrey, M.D.
Professor, neurological surgery
University of Virginia

Nicholas Theodore, M.D.
Director, neurotrauma
Director, Neurosurgery Spine
Program
Barrow Neurosurgical Associates

Juan S. Uribe, M.D.
Director, complex and minimally
invasive spine surgery
University of South Florida

