Adult Spinal Deformity: Surgical Techniques and Research from the ISSG to Improve Patient Outcomes

Friday, May 15 – Saturday, May 16, 2020
Specialty Education & Research Center (SERC)
Burr Ridge, IL (Chicago suburb)

Co-Chairs: Christopher P. Ames, MD and Shay Bess, MD

Invited Faculty (subject to change):
Michael P. Kelly, MD
Virginie Lafage, PhD
Lawrence Lenke, MD
Peter Passias, MD
Themistocles S. Protopsaltis, MD

This course is a combined International Spine Study Group (ISSG) and NASS deep-dive in a relaxed setting, sharing the current knowledge base and ongoing research efforts to improve outcomes for adult spinal deformity (ASD) patients. A combination of didactic and hands on cadaver-based components will be used to improve ASD practical knowledge for physicians, physician assistants and nurse practitioners.

Upon completion of this course, participants should gain strategies to:
- Identify and measure radiographic, demographic and frailty associated parameters most associated with disability and poor health related quality of life in adult spinal deformity;
- Use patient reported outcome measures (PROMs) and predictive analytic methods to evaluate and council ASD patients;
- Optimize ASD patients physically and mentally when preparing for surgery;
- Use surgical techniques procedures to improve alignment and avoid complications in ASD.

Credits
The North American Spine Society designates this live activity for a maximum of 13.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
Day 1: Friday, May 15

7:00 a.m.  Registration  
Continental Breakfast  
Registration Area  
Break Room

8:00 a.m.  Introduction  
Auditorium

8:05 a.m.  The Health Impact of Symptomatic Adult Spinal Deformity and Anticipated Treatment Outcomes

8:20 a.m.  Combined Assessment of Pelvic Tilt, Pelvic Incidence/ Lumbar Lordosis Mismatch and Sagittal Vertical Axis Predicts Disability in Adult Spinal Deformity: A Prospective Analysis

8:35 a.m.  Objective Realignment Guidelines in Corrective ASD Surgery Accounting for Reciprocal Truncal and Pelvic Compensation

8:50 a.m.  A Risk Benefit Analysis of Increasing Surgical Invasiveness Relative to Frailty Status in Adult Spinal Deformity Surgery

9:05 a.m.  Outcomes of Surgical Treatment for 138 Patients with Severe Sagittal Deformity at a Minimum 2-Year Follow Up

9:20 a.m.  Questions

9:30 a.m.  Prospective Multicenter Assessment of Complication Rates Associated with Adult Spinal Deformity (ASD); ISSG and Scoli Risk Outcomes

9:45 a.m.  Evolution of Adult Spine Deformity Surgery Practice Patterns Over the Past Decade Has Impacted the Rates and Types of Complications

10:00 a.m.  Multiple Rod Construct for Sagittal and Coronal Correction: A Survival Analysis with Minimum 2 Year Follow-Up

10:15 a.m.  Comprehensive Alignment Planning (CAP) for Adult Spinal Deformity (ASD) More Effectively Predicts Surgical Outcomes and Proximal Junctional Kyphosis than Previous Classifications

10:30 a.m.  Effective Prevention of Proximal Junctional Failure (PJF) in Adult Spinal Deformity (ASD) Surgery Requires a Combination Of Surgical Implant Prophylaxis and Avoidance of Overcorrection of Age-Adjusted Sagittal Parameters

10:45 a.m.  Questions, Break and transition to lab
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>11:05 a.m.</td>
<td><strong>Hands-on Skills Lab</strong></td>
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<td>Pedicle Screw Fixation</td>
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<td>Iliac Fixation</td>
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<td>Thoracolumbar Osteotomy Techniques and Closing the Osteotomy</td>
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<td>Rod Constructs to Prevent Rod Fracture</td>
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<td>Tethers</td>
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<td>Robotics</td>
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<td>1:05-1:45 p.m.</td>
<td>Lunch &amp; Learn</td>
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<td>1:45 p.m.</td>
<td>Choosing Minimally Invasive vs. Open Surgery in the Treatment of Adult Spinal Deformity (ASD): Analysis of a Prospective, Non-Randomized Multi-Center Study</td>
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<td>2:00 p.m.</td>
<td>Two and Three Year Outcomes of Minimally Invasive and Hybrid Correction of Adult Spinal Deformity</td>
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<td>2:15 p.m.</td>
<td>The Minimally Invasive Interbody Selection Algorithm (MIISA) for Spinal Deformity</td>
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<td>2:30 p.m.</td>
<td>Are Complications in Adult Spinal Deformity (ASD) Surgery Related to Approach or Patient Characteristics? A Prospective Propensity Matched Cohort Analysis of Minimally Invasive (MIS), Hybrid (HYB), and Open (OPEN) Approaches</td>
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<td>2:45 p.m.</td>
<td>Does ACR Result in Greater Morbidity than LLIF Alone When Treating Adult Spinal Deformity?</td>
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<td>3:00 p.m.</td>
<td>Questions, Break and transition to the lab</td>
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<td>3:20 – 5:20 p.m.</td>
<td><strong>Hands-on Skills Lab</strong></td>
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<td>Percutaneous Thoracolumbar and Iliac Screws</td>
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<td>Percutaneous Osteotomies</td>
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<td>Lateral Fusion and ACR, DLIF, OLIF</td>
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<td>Robotics</td>
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<td>5:30 – 6:30 p.m.</td>
<td>Reception for All Attendees (includes hors d'oeuvres and beer/wine)</td>
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<td>6:30 – 8:00 p.m.</td>
<td>Wine &amp; Spine</td>
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<td>Case Presentations and Clinical Application of Presented Research</td>
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Day 2: Saturday, May 16

8:30 a.m. Breakfast Break Room
9:00 a.m. Introduction Auditorium
9:05 a.m. The Impact of Standing Regional Cervical Sagittal Alignment on Outcomes in Posterior Cervical Fusion Surgery
9:20 a.m. Prioritization of Realignment is Associated with Superior Clinical Outcomes for Surgical Cervical Deformity Patients
9:35 a.m. PI and Age-Optimal Alignment within the Fusion in ASD Surgery Improves Outcomes and Minimizes Mechanical Failures
9:50 a.m. Prospective Multicenter Assessment of Early Complication Rates Associated with Adult Cervical Deformity Surgery in 78 Patients
10:05 a.m. Spinopelvic Alignment and Successful Outcomes Following Correction of Severe Cervical Deformity
10:20 a.m. A Risk Benefit Analysis of Increasing Surgical Invasiveness Relative to Frailty Status in Adult Spinal Deformity Surgery
10:35 a.m. Questions, Break and transition to the lab

11:00 a.m. – 1:00 p.m. Hands-on Skills Lab Bio-skills Lab

Posterior Cervical Fixation
Avoiding Screw Pull Out
Achieving Lordosis
Cervical Osteotomies
Hyperlordotic Cages
Uncovertebral Resection
Robotics

1:00 p.m. Course Adjourns