AAOS Contemporary Principles of Minimally Invasive Spinal Surgery Including Navigation and Robotics

Focused hands-on training with the newest navigation and robotics tools

June 23 – 24, 2017
OLC Education & Conference Center, Rosemont, IL

Steven C. Ludwig, MD
Isador H. Lieberman, MD, MBA, FRCSC
Course Directors
Enhance your knowledge and technical skills related to minimally invasive spinal surgery under the guidance of world-renowned experts.

Gain hands-on experience with navigation technologies including 2D and 3D navigation guidance, intraoperative CT, as well as various robotics systems, so you can weigh the pros and cons of each and incorporate new skills into your practice! Learn strategies to limit radiation exposure, and how to avoid complications and enhance operating room efficiency.

Course highlights include:

- Minimally invasive options to restore lumbar lordosis:
  - Direct lateral interbody fusion
  - Transforaminal interbody fusion
- Understand workflow for multi-level, complex procedures such as MIS TLIF, and lateral-based surgery
- Interactive debate on the advantages and disadvantages of anterior column release and hyperlordotic cages
- Bring your cases for discussion!

Who should take this course?

Practicing orthopaedic spine surgeons who would like to advance their skill set in a minimally invasive or deformity capacity.
FRIDAY, JUNE 23
Morning 7:15 am – 12:45 pm

MIS & LUMBAR LORDOSIS

LECTURES
MIS Techniques “Step by Step”
- Direct Lateral Transpsoas Approach
- Lateral Pre-psoas Approach
- MIS TLIF
- Percutaneous Pedicle Screw Placement
- How to Use “Navigation to Place Pedicle Screws”
- How to Use “Robotic Guidance to Place Pedicle Screws”
- MIS TLIF + Cortical Screws
- MIS Techniques for Trauma
- Robotic Guidance for S2 Alar Iliac Screws
- Questions and Discussion

HANDS-ON SKILLS LAB
Registrants Will Rotate Through Two of the Following:
TLIF
TLIF With Cortical Screws
DL Transpsoas
DL Pre-Psoas
Navigated Pedicle Screw Placement
Robotic Guided Pedicle Screw Placement
Long Construct With Iliac Fixation

Afternoon 1:00 pm – 5:00 pm

DEBATE
- Pro: Advantages of Anterior Column Release and Hyperlordotic Cages
- Con: Disadvantages of Anterior Column Release and Hyperlordotic Cages
- Pro and Con Rebuttal
- Audience Discussion

HANDS-ON SKILLS LAB
Registrants Will Rotate Through Two of the Following:
TLIF
TLIF With Cortical Screws
DL Transpsoas
DL Pre-Psoas
Navigated Pedicle Screw Placement
Robotic Guided Pedicle Screw Placement
Long Construct With Iliac Fixation

LECTURES
- Literature to Support Navigation
- Literature to Support Robotics

CASE DISCUSSION
- Faculty and Participants Encouraged to Bring Cases

INDUSTRY SPOTLIGHT SESSION #1 (Non-CME)
Schedule and faculty subject to change.
Details online aaos.org/3085

15.25 Total Credits of Category 1 CME
**SATURDAY, JUNE 24**

**INDUSTRY SPOTLIGHT SESSION #2 (Non-CME)**

**Morning 8:10 am – 12:15 pm**

**NAVIGATION, ROBOTIC GUIDANCE, & MIS ECONOMICS**

<table>
<thead>
<tr>
<th>LECTURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science of Registration and Referencing “What Happens in the Black Box”</td>
</tr>
<tr>
<td>Economics of Navigation and Robotics</td>
</tr>
<tr>
<td>Economics of MIS Surgery</td>
</tr>
<tr>
<td>Minimizing Radiation Exposure During MIS Surgery</td>
</tr>
<tr>
<td>Viability of Outpatient MIS Surgery</td>
</tr>
<tr>
<td>How Has Navigation Helped This Patient</td>
</tr>
<tr>
<td>How Has Robotics Helped This Patient</td>
</tr>
<tr>
<td>Questions and Discussion</td>
</tr>
</tbody>
</table>

**HANDS-ON SKILLS LAB**

Registrants Will Rotate Through Two of the Following:
- TLIF
- TLIF With Cortical Screws
- DL Transpsoas
- DL Pre-Psoas
- Navigated Pedicle Screw Placement
- Robotic Guided Pedicle Screw Placement
- Long Construct With Iliac Fixation

**LUNCH & LECTURES**

- MIS Surgery Strategies for Tumors
- MIS Surgery Strategies for Kyphosis Correction
- MIS Strategies for Adult Deformity Surgery

Questions and Discussion

**Afternoon 1:00 pm – 4:00 pm**

**HANDS-ON SKILLS LAB**

Registrants Will Rotate Through Last Rotation Followed by Open Lab
- TLIF
- TLIF With Cortical Screws
- DL Transpsoas
- DL Pre-Psoas
- Navigated Pedicle Screw Placement
- Robotic Guided Pedicle Screw Placement
- Long Construct With Iliac Fixation
Faculty

Shane Burch, MD
Gurvinder S. Deol, MD
Terrence T. Kim, MD
Gregory Lopez, MD
Kornelis A. Poelstra, MD
Sheeraz Qureshi, MD
Krzysztof B. Siemionow, MD

For a complete list of faculty with their affiliations and to register, visit www.aaos.org/3085. Please note: Course faculty subject to change. All faculty members have disclosed potential conflicts of interest. These disclosures can be viewed online at www.aaos.org under ‘Member Services’.

Course Tuition

Registration fee includes course materials, electronic syllabus, lunch, and refreshment breaks.

- AAOS Candidate Member/International Member/Emeritus Member $1,669
- Nonmember Orthopaedic Surgeon/International Nonmember $2,069
- AAOS Resident Member/Resident/Post-Residency Fellow/Military* $1,469

*For AAOS members in active U.S. military duty only

How to Register

1. Online at aaos.org/3085
2. Call AAOS Customer Service at 1-800-626-6726 from 8:00 am to 5:00 pm CT. Outside U.S. dial +1-847-823-7186.
3. Print registration form at aaos.org/3085. Mail the completed form to AAOS, 9400 W. Higgins Rd., Rosemont, IL 60018. Or fax to 1-800-823-8025. Outside U.S. fax to +1-847-823-8125.

Hotel

Hampton Inn & Suites
9480 W. Higgins Road
Rosemont, IL 60018
Phone 1-847-692-3000

The Hampton Inn offers the following amenities: free shuttle service to and from O’Hare airport, complimentary hot breakfast, free Wi-Fi, swimming pool, exercise room, and a business center.

Accreditation Statement

The American Academy of Orthopaedic Surgeons is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education (CME) for physicians.

AMA Credit Designation Statement

AAOS designates this live activity for a maximum of 15.25 AMA PRA Category 1 Credits™. Physicians should claim only the credits commensurate with the extent of their participation in the activity.

Obtaining CME Credit

Course participants must complete and submit an online evaluation form to receive CME credit.
AAOS Contemporary Principles of Minimally Invasive Spinal Surgery Including Navigation and Robotics

June 23 – 24, 2017 • Rosemont, IL

Steven C. Ludwig, MD
Course Director

Isador H. Lieberman, MD, MBA, FRCSC
Course Director