



**10<sup>th</sup> Annual MIS Spine Symposium:  
Contemporary Techniques and Emerging Technologies  
Saturday, June 29, 2024**

**AGENDA**

7 a.m.            **Breakfast, Exhibits & Registration**

7:30 a.m.        **Welcome & Course Overview**  
*Paul Park, M.D., Rod Oskouian, Jr., M.D., & Christoph Hofstetter, M.D., Ph.D.*

**Session 1: Unaccredited Content**

7:35 a.m.        **The Future VUE of MIS Surgery**  
*Christoph Hofstetter, M.D.*

7:50 a.m.        **Q & A**

7:55 a.m.        **Live Demonstration Broadcast from BioSkills Lab No. 1**  
**MIS TLIF with Teligen**  
*Christoph Hofstetter, M.D.*

8:15 a.m.        **Q & A**

8:20 a.m.        **New Drill Technology**  
*Victor Chang, M.D.*

8:35 a.m.        **Q & A**

8:40 a.m.        **Live Demonstration Broadcast from BioSkills Lab No. 2**  
**New Drill Technology**  
*Victor Chang, M.D.*

9 a.m.            **Q & A**

9:05 a.m.        **Breaks & Exhibits** (*not for CME credit*)

**ACCREDITED CONTENT BEGINS**

**Session 2: AI & Robotics in MIS Surgery**

9:35 a.m.        **Radiation Reduction in MIS Spine Surgery**  
*Muhammad Abd-El-Barr, M.D., Ph.D.*  
**Objectives:**

- Identify the dangers of ionizing radiation as it relates to MIS spine surgery
- Describe how fluoroscopic instrument-tracking navigation can decrease radiation in MIS spine surgery
- Outline different applications of fluoroscopic instrument-tracking in MIS spine - percutaneous pedicle screw placement, entrance into Kambin's triangle and lateral interbody fusion

- 9:50 a.m. **Q & A**
- 9:55 a.m. **Robotics Facilitates Simple & Complex MIS Cases** (*virtual*)  
*Corinna Zygourakis, M.D.*  
**Objectives:**
  - Identify MIS cases for which robotics can be used
  - Describe robotic workflows to decrease the cognitive and physical load
  - Describe the “Robotic Culture”
- 10:10 a.m. **Q & A**
- 10:15 a.m. **Navigation Trusted and Proven for MIS Cases**  
*Roger Härtl, M.D.*  
**Objectives:**
  - Identify MIS cases for which navigation can be used
  - Describe navigation workflow
  - Describe common navigation techniques
- 10:30 a.m. **Q & A**
- 10:35 a.m. **Break & Exhibits** (*not for CME credit*)

10:50 a.m.	<b>Live Demonstration Broadcast from BioSkills Lab No. 3</b> <b>Percutaneous Screw Placement for MIS Using Fluoroscopic-Assisted Instrument Tracking</b> <i>Muhammad Abd-El-Barr, M.D., Ph.D.</i> <b>Objectives:</b> <ul style="list-style-type: none"> <li>• Explain x-ray positioning in percutaneous screw placement</li> <li>• Review the navigation on Jamshidi needles</li> <li>• Describe safety precautions</li> </ul>
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- 11:20 a.m. **Q & A**

### **Session 3: Emerging Trends in MIS Fusion**

- 11:25 a.m. **Retropleural/Retrodiaphragmatic Approaches to the Thoracolumbar Junction**  
*Paul Holman, M.D.*  
**Objectives:**
  - Identify pathology amenable for this approach
  - Describe surgical maneuvers to facilitate an efficient approach
- 11:40 a.m. **Q & A**
- 11:45 a.m. **Lateral Transpsoas Interbody Fusion: A Workhorse for Multilevel MIS Constructs**  
*Nima Alan, M.D.*  
**Objectives:**
  - Identify pathology amenable for multi-level laterals
  - Describe surgical maneuvers to facilitate an efficient approach
- 12 p.m. **Q & A**
- 12:05 p.m. **Oblique Lateral interbody Fusion – Can Do it All?**  
*Neel Anand, M.D.*  
**Objectives:**
  - Identify pathology amenable for oblique laterals
  - Describe surgical maneuvers to facilitate an efficient approach
- 12:20 p.m. **Q & A**

12:25 p.m. **Break & Pick Up Lunch** *(not for CME credit)*

12:40 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 4** *(working lunch)*  
**Tissue-Sparing Posterior Cervical Fusion**  
*Bruce McCormick, M.D.*  
**Objectives:**

- TBD

1:10 p.m. **Q & A**

1:15 p.m. **Revival of ALIF – the MIS is in the Approach/Stand Alone**  
*Paul Holman, M.D.*  
**Objectives:**

- Identify pathology amenable for stand alone ALIF
- Describe surgical maneuvers to facilitate and efficient approach

1:30 p.m. **Q & A**

1:35 p.m. **The Gap Between MIS Spine & Providing Open Spine Surgery to Achieve Desired Outcome In Developing Country** *(working lunch)*  
*Soren Otieno, M.D.*  
**Objectives:**

- Describe the gap between MIS and open spine procedures in developing countries
- Describe how to improve outcomes in developing countries

1:50 p.m. **Q & A**

1:55 p.m. **Break & Exhibits** *(not for CME credit)*

2:10 p.m. **Live Demonstration Broadcast from BioSkills Lab No.5**  
**Retropleural/Retrodiaphragmatic Approach**  
*Paul Holman, M.D.*  
**Objectives:**

- Demonstrate the retropleural/retrodiaphragmatic approach
- Outline the surgical maneuvers to facilitate an efficient approach

2:40 p.m. **Q & A**

2:45 p.m. **PTP – The Evolution of the Lateral Approach**  
*William Taylor, M.D.*  
**Objectives:**

- Identify complications related to this approach
- Outline the indications for this approach
- Recognize the differences between lateral and prone position approaches

3 p.m. **Q & A**

3:05 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 6**  
**Navigated Lateral ALIF**  
*Neel Anand, M.D.*  
**Objectives:**

- Demonstrate a navigated lateral ALIF
- Outline the surgical maneuvers to facilitate an efficient approach

3:35 p.m. **Q & A**

#### Session 4: MIS Osteo and Neuro-Regenerative Technologies

- 3:40 p.m.      **Disc Regeneration Techniques**  
*Roger Härtl, M.D.*  
**Objectives:**
- Describe the different technologies for annular closure
  - Review the current literature regarding outcomes

3:55 p.m.      **Q & A**

4 p.m.          **Break & Change Into Scrubs** (*not for CME credit*)

- 4:10 p.m.      **Live Demonstration Broadcast from BioSkills Lab No. 7**  
**Robotic MIS Screw Placement**  
*Paul Park, M.D.*  
**Objectives:**
- Demonstrate a prone lateral
  - Summarize the indications associated with a prone lateral
  - Describe pearls & limitations for a prone lateral

4:40 p.m.      **Q & A**

4:45 p.m.      **Break & Change Into Scrubs** (*not for CME credit*)

- 4:50 p.m.      **Live Demonstration Broadcast from BioSkills Lab No. 8**  
**PTP Procedural Tips & Tricks**  
*William Taylor, M.D.*  
**Objectives:**
- Evaluate the safety and efficacy of the PTP approach
  - Optimize surgical technique and instrumentation for PTP
  - Illustrate the correct anatomy

5:20 p.m.      **Q & A**

#### Session 5: Hands-on BioSkills Lab

5:25 p.m.      **Hands-On BioSkills Lab Rotations** (*20 min. rotations*)

**Station 1: Robotic MIS Screw Placement**

*Paul Park, M.D. & William Taylor, M.D.*

**Station 2: Retropleural/Retrodiaphragmatic Approach**

*Paul Holman, M.D.*

**Station 3: Navigated Lateral ALIF**

*Neel Anand, M.D. & Joseph Schwab, M.D.*

**Station 4: Percutaneous Screw Placement for MIS**

*Muhammad Abd-El-Barr, M.D., Ph.D. & Victor Chang, M.D.*

6:45 p.m.      **Adjourn**

## ESTEEMED FACULTY

**Christoph Hofstetter, M.D., Ph.D.**

**Course Co-Chair**

Associate Professor  
Fellowship Program Co-Director  
Director of Spine Surgery  
University of Washington Medical Center  
Seattle, Washington

**Rod J. Oskouian, Jr., M.D., FAANS**

**Course Co-Chair**

Chief of Spine  
Swedish Neuroscience Institute  
Seattle, Washington

**Paul Park, M.D.**

**Course Co-Chair**

Neurosurgeon  
Semmes Murphy  
Memphis, Tennessee

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**Muhammad Abd-El-Barr, M.D., Ph.D., FAANS**

Associate Professor, Spine Fellowship Director  
Department of Neurosurgery  
Department of Orthopedic Surgery  
Duke University Medical Center  
Durham, North Carolina

**Nima Alan, M.D.**

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**Neel Anand, M.D.**

Professor of Orthopedic Surgery  
Director of the Cedars-Sinai Spine Center  
Cedars Sinai Medical Center  
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**Victor W. Chang, MD**

Neurosurgeon  
Henry Ford Health System  
West Bloomfield, Michigan

**Roger Härtl, M.D.**

Hansen-MacDonald Professor of Neurological Surgery  
Director of Spinal Surgery, Weill Cornell Medicine  
Neurosurgical Director, Ochsner at New York-  
Presbyterian / Weill Cornell Medical Center  
New York, New York

**Paul Holman, M.D.**

Endowed Chair of Spine and Peripheral Nerve Surgery  
Associate Professor of Neurosurgery  
Houston Methodist Department of Neurosurgery  
Houston, Texas

**Bruce McCormack, M.D.**

Neurosurgeon  
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San Francisco, California

**Soren Otieno, M.D.**

Orthopaedic Spine Surgeon  
National Spine Hospital  
Nairobi, Kenya

**William Taylor, M.D.**

Professor of Neurosurgery  
University California San Diego  
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**Corinna Zygourakis, M.D. (virtual)**

Assistant Professor of Neurosurgery Stanford Medicine  
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Palo Alto, California