



8th Annual MIS Spine Symposium

Saturday, July 23, 2022

Syllabus

Esteemed Faculty

Christoph Hofstetter, M.D., Ph.D. (virtual)

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

Director, Neurosurgery Spine Program

Professor, Neurological & Orthopaedic Surgery

University of Michigan

Ann Arbor, Michigan

Neel Anand, M.D.

Director of Spine Trauma

Cedars-Sinai Medical Center

Los Angeles, California

Shane Burch, M.D. (virtual)

Professor in Residence, Dept. of Orthopaedic Surgery

University of California, San Francisco

San Francisco, California

Victor Chang, M.D. (virtual)

Neurosurgeon

Henry Ford Health System

West Bloomfield, Michigan

Richard A. Hynes, M.D. (pre-recorded)

President & Spine Surgeon

The B.A.C.K. Center

Melbourne, Florida

Osama Kashlan, M.D., M.P.H.

Clinical Assistant Professor

Neurological & Orthopaedic Surgery

University of Michigan

Ann Arbor, Michigan

Isador Lieberman, M.D., M.B.A. (virtual)

Orthopaedic Spine Surgeon

Texas Back Institute

Plano, Texas

Martin H. Pham, M.D. (virtual)

Associate Professor

University of California San Diego

San Diego, California

Luiz Pimenta, M.D., Ph.D. (virtual)

Neurosurgeon

Director, Instituto de Patologia da Coluna

Sao Paulo, Brazil

Timur Urakov, M.D.

Neurosurgeon

University of Miami

Miami, Florida

Surgical Demonstrations Supported by Swedish Neuroscience Institute Fellows

Mauricio Avila, M.D., Jared Cooke, D.O., Jonathan Plümer, M.D.,

Jerry Robinson, M.D., Amanda Sacino, M.D. & Zachary Tataryn, M.D.

AGENDA

- 7 a.m. **Breakfast, Exhibits & Registration**
- 7:30 a.m. **Welcome & Course Overview**
Rod Oskouian, M.D., Jr., Paul Park, M.D., & Christoph Hofstetter, M.D., Ph.D.
- 7:35 a.m. **Cutting Edge of LLIF Technology (pre-recorded)**
Richard A. Hynes, M.D.
Objectives:
- Identify ergonomics of the surgeon matter
 - Describe why simultaneous access to spine is key
 - Explain how to do each procedure in the best position
- 7:50 a.m. **Q & A**
- 7:55 a.m. **Incorporating Robotics into Simple & Complex MIS Cases (virtual)**
Martin Pham, 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”
- 8:10 a.m. **Q & A**
- 8:15 a.m. **Oblique Lateral Interbody Fusion (OLIF) vs. Lateral**
Neel Anand, M.D.
Objectives:
- Describe reasons why to go oblique
 - Explain why to try L5-S1
 - Summarize whether you need an access surgeon
- 8:30 a.m. **Q & A**
- 8:35 a.m. **Why Go Prone vs. Lateral (virtual)**
Luiz Pimenta, M.D., Ph.D.
Objectives:
- Summarize the indications associated with the prone transpoas approach
 - Outline the steps of the prone transpoas approach
 - Describe pearls & limitations for the prone transpoas approach
- 8:50 a.m. **Q & A**
- 8:55 a.m. **MIS TLIF (virtual)**
Victor Chang, M.D.
Objectives:
- Provide pearls for the MIS TLIF
 - Outline the limitations of the MIS TLIF
- 9:15 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 1**
Tubular MIS TLIF
Neel Anand, M.D. & Jerry Robinson, M.D.
Objectives:
- Demonstrate an MIS TLIF Tubular
 - Provide pearls for the MIS TLIF Tubular
 - Outline the limitations of the MIS TLIF Tubular procedure

- 9:45 a.m. **When to Use Iliac Fixation in the Setting of MIS Posterior Procedures** *(virtual)*
Shane Burch, M.D.
Objectives:
- Compare technique and indications of S2AI vs. Iliac screws
 - Describe when to place pelvic screws
 - Illustrate why you should fuse the SI joint
- 10 a.m. **Q & A**
- 10:05 a.m. **Break & Exhibits** *(not for CME credit)*
- 10:20 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 2**
Prone Transpsoas
Rod Oskouian, M.D., Jonathan Plümer, M.D. & Jared Cooke, D.O.
Objectives:
- Demonstrate a prone corpectomy
 - Summarize the indications associated with a prone corpectomy
 - Describe pearls & limitations for a prone corpectomy
- 10:50 a.m. **Preferred Approaches for Adult Deformity: MIS, TLIF, Lateral or ALIF**
Neel Anand, M.D.
Objectives:
- Describe complications associated with MIS
 - Outline the lateral contraindications
 - Compare and contrast ALIF vs. TLIF
- 11:05 a.m. **Q & A**
- 11:10 a.m. **Single-Stage Lateral Lumbo-Sacral Arthrodesis with Robotic Assistance**
Timur Urakov, M.D.
Objectives:
- Describe lessons learned from past robotic assisted cases
 - Outline reasons why to use a robot
 - Summarize the reasons to use single-stage
- 11:25 a.m. **Q & A**
- 11:30 a.m. **Robotic MIS Deformity Surgery** *(virtual)*
Isador Lieberman, M.D., M.B.A.
Objectives:
- Outline the risks of robotic MIS deformity surgery
 - Explain the accuracy of using a robot for MIS deformity surgery
 - List potential complications of robotic MIS deformity surgery
- 11:45 a.m. **Q & A**

- 11:50 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 3**
Endoscopic TLIF
Osama Kashlan, M.D. & Zachary Tataryn, M.D.
Objectives:
- Demonstrate the endoscopic TLIF
 - Provide pearls for the endoscopic TLIF
 - Outline the limitations of the endoscopic TLIF

12:20 p.m. **Lunch Break** (*not for CME credit*)

12:35 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 4**
Anterior to Psoas (ATP)

Osama Kashlan, M.D. & Amanda Sacino, M.D.

Objectives:

- Demonstrate the ATP approach
- Provide pearls for the ATP approach
- Outline the limitations of the ATP approach

1:05 p.m. **Case Presentation: Spine Endoscopy**

Osama Kashlan, M.D.

Objectives:

- Discuss the indications associated with endoscopic spine surgery
- Outline the potential complications of endoscopic spine surgery
- Describe pearls and limitations for the endoscopic LIF

1:20 p.m. **Q & A**

1:25 p.m. **Endoscopic TLIF** (*virtual*)

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

Objectives:

- Discuss the indications of endoscopic TLIF
- Outline the steps of the endoscopic TLIF
- Describe pearls and preliminary outcomes following endoscopic TLIF

1:40 p.m. **Q & A**

1:45 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 5**
Robotic-Assisted SI Joint Fusion

Paul Park, M.D. & Mauricio Avila, M.D.

Objectives:

- Demonstrate MIS SI-joint fusion technique
- Outline the indications and risks of the MIS SI joint fusion technique
- Show the benefits of robotics in SI-joint fusion

2:15 p.m. **Enhanced Diagnostics for MIS** (*virtual*)

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

Objectives:

- Advanced imaging modalities for decision-making in MIS
- Imaging pearls for planning MIS procedures
- When to get diagnostic blocks

2:30p.m. **Q&A**

2:35 p.m. **Panel Discussion: Too Many MIS LIFs: Which is Best?**

All Faculty

Moderator: Neel Anand, M.D.

Objectives:

- Outline the relative advantages of each type of MIS LIF
- Describe sub-optimal condition/indication for each MIS LIF technique

3:05 p.m. **Adjourn**

Acknowledgements

The Planning Committee gratefully acknowledges support for this conference from the following:

Educational Grant

Atec Spine
Globus Medical
Joimax
SeaSpine
SpineArt
Stryker

Exhibit Support

Atec Spine
DePuy Synthes
Globus Medical
SpineArt
Spineology

In-Kind Support

Atec Spine
Medical Device Business
Services
Globus Medical
Joimax
SpineArt
Viseon

Course Planning Committee

Christoph Hofstetter, M.D., Ph.D

University of Washington Medical Center
Seattle, Washington

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

Swedish Neuroscience Institute
Seattle, Washington

Paul Park, M.D.

University of Michigan
Ann Arbor, Michigan

Amir Abdul-Jabbar., M.D.

Swedish Neuroscience Institute
Seattle, Washington

Linda Sahlin

Seattle Science Foundation
Seattle, Washington

Course Evaluation

Please take a moment to complete our online evaluation, which will be emailed to you. Your feedback helps to ensure the effectiveness of this CME activity, as well as improve future educational activities. All responses are considered anonymous. https://www.surveymonkey.com/r/MIS_2022

If you do not receive the survey via email, please call (206) 732-6500 or email cme@seattle-science-foundation.org.

Accreditation

Seattle Science Foundation is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

AMA PRA Category 1 Credits™

Seattle Science Foundation designates this live activity for a maximum of 7 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Identifying and Resolving Conflicts of Interest

Purpose: The information provided addresses several requirements of the ACCME to help **ensure purpose** in CME activities. Everyone in a position to control the content of a CME activity must disclose all relevant financial relationships with commercial interests to the CME provider. This information must be disclosed to participants prior to the beginning of the activity. Also, CME providers must resolve current conflicts of interest prior to the educational activity.

Definitions: “Financial relationships” are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria for promotional speakers’ bureau, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received, or expected. ACCME considers relationships of the person involved in the CME activity to include financial relationships of a spouse or partner.

The ACCME defines a “**commercial interest**” as any entity producing, marketing, re-selling or distributing health care goods or services consumed by, or used on, patients. Among the exemptions to this definition are government organizations, non-health care related companies and non-profit organizations that do not advocate for commercial interests.

Circumstances create a “**conflict of interest**” when an individual has an opportunity to affect CME content about products or services of a commercial interest with which he/she has a financial relationship.

ACCME focuses on financial relationships with commercial interests in the 12-month period preceding the time that the individual is being asked to assume a role controlling content of the CME activity. ACCME has not set a minimal dollar amount for relationships to be significant. Inherent in any amount is the incentive to maintain or increase the value of the relationship.

The ACCME defines “**relevant financial relationships**” as financial relationships in any amount occurring within the past 12 months that create a conflict of interest.

CME Activity Planning Committee Members: If a conflict of interest exists, the Planning Committee member must withdraw from the Planning Committee unless the conflict can be resolved. Resolution may be made by one of the following methods: (1) Peer review of CME content will be conducted at another oversight level to assure no commercial bias exists; (2) Change in focus of course so the activity does not include information related to products or services about which the planning committee member has a conflict; (3) Severing relationship(s) between the member and any related commercial interest; (4) Others to be determined by SSF CME Committee.

CME Activity Presenter: When a conflict of interest exists, the Planning Committee must address the conflict by one of the following methods: (1) Review content to be presented by speaker in advance to assure content balance; (2) Change topic so the presentation is not related to products or services where a conflict exists; (3) Select a different presenter without any related commercial interest; (4) Include presentations by other faculty to provide an overall balance to the content of the course; (5) Limit or specify the sources for recommendations that the presenter can use. Each speaker is required to give a balanced, evidence-based presentation based on published research. No conclusions or recommendations without external validation may be made by a speaker with a conflict of interest.

Faculty Disclosure Summary

The following planners and presenters (or their spouses/domestic partners) have/had a financial relationship with a commercial interest: (*S = Speaker; P = Planner*)

Neel Anand, M.D. (S): Consultant: Medtronic, Globus Medical; Stocks: Globus Medical, Medtronic, Paradigm Spine, Bonovo, Spinal Balance; Royalties: Medtronic, Globus Medical, El Sevier

Shane Burch, M.D. (S): Consultant: Medtronic, NuVasive; Research: Medtronic, NuVasive; Stocks: NuVasive; Royalties: Medtronic

Victor Chang, M.D. (S): Consultant: Globus Medical

Christoph Hofstetter, M.D., Ph.D. (P,S): Consultant: J&J, Globus Medical, Innovaxis, Joimax

Richard A. Hynes, M.D. (S): Research, Royalties & Education: Medtronic

Osama Kashlan, M.D. (S): Consultant: Joimax

Isador Lieberman, M.D. (S): Consultant: Medtronic, SI Bone, Misonix, Globus Medical; Royalties: Globus Medical, SI-Bone; Research: Medtronic, Inc, SI-Bone

Rod J. Oskouian, Jr., M.D. (P,S): Consultant: Atec Spine, Blue Ocean Sine, DePuy Synthes, Globus Medical, SeaSpine, Stryker; Royalties: Stryker, Globus Medical

Paul Park, M.D. (P,S): Consultant: Globus, NuVasvie, Accelus, DePuy Synthes; Research: Cerapedics, ISSG, DePuy Synthes, SI Bone; Royalties: Globus Medical

Martin Pham, M.D. (S): Consultant: Medtronic, Thompson Surgical; Research: Medtronic

Luiz Pimenta, M.D., Ph.D. (S): Consultant, Stocks, Royalties, Property Rights: Atec Spine

Timur Urakov, M.D. (S): Speaker: Globus Medical; Consultant: Pantheon Spinal

The following planners and/or presenters (or their spouses/domestic partners) have/had no financial relationship with a commercial interest (*S = Speaker; P = Planner*)

Amir Abdul-Jabbar, M.D. (P); **Linda Sahlin** (P) **Jonathan Plümer, M.D.** (P)

All planners and presenters attested that their content suggestions and/or presentation(s) will provide a balanced view of therapeutic options and will be entirely free of promotional bias. All presentations have been reviewed by a planner with no conflicts of interest to ensure that the content is evidence-based and unbiased.