

# 4<sup>th</sup> Annual Advances in Motion Preservation of the Spine

Friday-Saturday, October 21 – 22, 2022

**Syllabus** 

#### **ESTEEMED FACULTY**

### Jens R. Chapman, M.D. Course Co-Chair

Complex Spine Surgeon Swedish Neuroscience Institute Seattle, Washington

# Jack E. Zigler, M.D. Course Co-Chair

Orthopaedic Spine Surgeon Texas Back Institute Plano. Texas

# Scott L. Blumenthal, M.D. Course Co-Chair

Orthopedic Spine Surgeon Texas Back Institute Plano, Texas

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#### Peter Derman, M.D. (virtual)

Orthopaedic Spine Surgeon Texas Back Institute Plano, Texas

#### Wayne Gluf, M.D.

Professor of Clinical Practice in Neurosurgery & Director of Neurosurgical Trauma
University of Colorado Anschutz Medical Campus Aurora, Colorado

#### Armen Khachatryan, M.D.

Orthopedic Surgeon & Founder & Director The Disc Replacement Center Holladay, Utah

#### Frank Phillips, M.D. (virtual)

Professor
Director of Minimally Invasive Spine Surgery
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#### John Burleson, M.D. (virtual)

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#### Lisa Ferrara. Ph.D.

Founder, Owner & President OrthoKinetic Technologies, LLC Southport, North Carolina

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

Associate Professor

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#### Isador Lieberman, M.D. (virtual)

Orthopaedic Spine Surgeon Texas Back Institute Plano, Texas

#### Rick Sasso, M.D. (virtual)

President, Indiana Spine Group Professor and Chief of Spine Surgery Indiana University School of Medicine Carmel, Indiana

#### Antonio Webb, M.D. (virtual)

Orthopaedic Spine Surgeon South Texas Spinal Clinic San Antonio and New Braunfels, Texas

#### **AGENDA**

#### FRIDAY, OCTOBER 21, 2022

6 p.m. Registration and Appetizers

6:25 pm. Welcome & Course Overview

Jens R. Chapman, M.D. & Jack E. Zigler, M.D.

6:30 p.m. Cervical Total Disc Replacement 2.0: When Do Things Go Wrong?

Scott L. Blumenthal M.D.

**Objectives:** 

• Identify failure modes of cervical total disc replacement

Explain various revision strategies

6:50 p.m. Discussion

7 p.m. Clinical Experiences with Cervical Viscoelastic Disc Replacements (virtual)

Frank Phillips, M.D.

Objectives:

 Describe the current rates of secondary unplanned surgeries in cervical viscoelastic disc replacements

 Outline the advantages of a viscoelastic disc replacement over conventional ball-and socket disc replacements

7:15 p.m. "I Wish I Hadn't..." An Arthroplasty Case That Embarrassed Me

Armen Khachatryan, M.D., & Rick Sasso, M.D. (virtual)

Objectives:

- Identify indications and contraindications for ADR surgery
- Outline predictable causes of failure
- Describe troubleshooting and complication avoidance measures

7:45 p.m. Discussion

8 p.m. Adjourn

#### SATURDAY, OCTOBER 22, 2022

7 a.m. Breakfast & Registration

7:25 a.m. Welcome & Introductions

Jens R. Chapman, M.D. & Jack E. Zigler, M.D.

7:30 a.m. Keynote Addresses: We Don't Need Lumbar Arthroplasty, Fusion Works Fine:

**Refuting the Arguments of Year 2000** 

Jack E. Zigler, M.D.

**Objectives:** 

- Provide comparative data of outcomes of fusion vs. motion sparing disc replacement surgery in the management of degenerative lumbar disc disease
- Assess practical aspects to full unrestricted function and disability as well as unplanned secondary surgeries in lumbar disc replacement surgery versus fusion surgery in the management of degenerative disc disorders

## 7:50 a.m. IDE Data & Long-Term Follow-Up Shows Cervical TDR has Earned Its Place as the Gold Standard for Cervical Disc Disease (virtual)

Rick Sasso, M.D.

#### Objectives:

- Present latest data on cervical disc arthroplasty surgery outcomes in comparison to the fusion cohorts of the IDE studies
- Describe learning points of limitations of cervical disc arthroplasties
- Present best case vs. worst case scenarios for successful outcomes and poor outcomes

# 8:10 a.m. Material Science & Motion Implants: Why Are We Stuck with Ball-and-Socket Motion Implants? Where Are the Viscoelastic Biomimetics We've Been Promised? Lisa Ferrara, Ph.D.

#### Objectives:

- Describe the biomechanical functions of FDA approved cervical and lumbar disc replacements in contrast to an intact human disc
- Assess adverse impact potential of current generation of implants on the host's surrounding motion segments
- Identify limitations of current viscoelastic bioimplants that prevent use in patients

# 8:30 a.m. With Newer Technologies & Approaches (XLIF, TLIF, Biologics, Robots, Navigated Screws) Fusion Clearly Remains the Better Operation for Lumbar Degenerative Disc Disease (virtual)

Isador Lieberman, M.D.

#### Objectives:

- Outline advances in how and when to perform lumbar fusion surgery in degenerative disorders to be successful
- Distinguish differential reflection on advantages of fusion outcomes relative to lumbar disc replacement surgery

#### 8:40 a.m. Discussion

#### 8:50 a.m. Break & Exhibits (not for CME credit)

#### 9:05 a.m. <u>Live Demonstration from BioSkills Lab No. 1</u>

**Cervical ADR Triple Demonstration** 

Single level Simplify vs. single level MobiC vs. single level ProDisc Vivo Jack E. Zigler, M.D., Scott L. Blumenthal M.D., & Armen Khachatryan, M.D. Moderator: Jens R. Chapman, M.D.

#### Objectives:

- Demonstrate cervical ADR
- Provide pearls for a cervical ADR
- Outline the limitations of a cervical ADR

#### 10:05 a.m. Discussion

## 10:20 a.m. Where We Are with Hybrid Arthroplasty: How to Get It Covered by Insurers and a Way Forward for Surgeons and our Patients

Armen Khachatryan, M.D.

#### Objectives:

- Outline current status of clinical experience, approval status
- Describe practical technical tips to facilitate approval
- Identify caveats to consider when thinking about doing a hybrid surgery

#### PRACTICE MAKES PERFECT: Learning from our Younger Colleagues

#### 10:30 a.m. Tips for Negotiating Your First Contract in Private Practice (virtual)

John Burleson, M.D.

#### Objectives:

- Discuss common hurdles for young surgeons entering practice
- Describe advantages and risks of personal negotiation strategies versus having an attorney negotiate on your behalf

#### 10:40 a.m. Using Social Media in Your Practice (virtual)

Antonio Webb, M.D.

#### Objectives:

- Identify common pitfalls and limits of use of social media in a medical practice setting
- Describe opportunities and gains attainable from social media for use in a spine surgeon's practice

#### 10:50 a.m. What I'd Do Differently When Preparing for Boards (virtual)

Peter Derman, M.D.

#### **Objectives:**

- Describe an overview of the ABOS oral board certification process
- Identify measures that examinees can take to better prepare

#### 11 a.m. Discussion

#### 11:10 a.m. Lunch Break & Exhibits (not for CME credit)

#### 11:30 a.m. <u>Live Demonstration from BioSkills Lab No. 2</u>

**Lumbar ADR and ALIFs Side-by-Side** 

Jack E. Zigler, M.D. & Scott L. Blumenthal, M.D.

Moderator: Jens R. Chapman, M.D.

#### **Objectives:**

- Demonstrate combined lumbar ADR and ALIF procedures
- Provide pearls for combined ADR and ALIF procedures
- Outline the limitations of a lumbar ADR and ALIF construct

#### **ENDOSCOPIC SURGERY**

#### 12:10 p.m. My Learning Curve for Lumbar Endoscopic Surgery in Early Practice (virtual)

Peter Derman, M.D.

#### **Objectives:**

- Identify the learning curve for lumbar endoscopic spine surgery
- Explain how best to incorporate endoscopic techniques into practice

#### 12:20 p.m. Tips from a Veteran: Early Pitfalls in Endoscopic Surgery (virtual)

Christoph Hofstetter, M.D.

#### **Objectives:**

- Outline basic principles of safe spinal endoscopy surgery
- Compare outcomes of data of open and more traditional spinal decompression surgery to spinal endoscopic decompression surgery

#### 12:30 p.m. Discussion

#### 12:40 p.m. Live Demonstration from BioSkills Lab No. 3

#### Cervical Laminoplasty

Jens R. Chapman, M.D.

Moderator: Scott L. Blumenthal, M.D.

#### **Objectives:**

- Demonstrate a cervical laminoplasty
- Provide pearls for a cervical laminoplasty
- Outline the limitations of a cervical laminoplasty

#### 1:10 p.m. Break & Exhibits & Change into Scrubs (not for CME credit)

#### **ADVICE FROM THE OLDER GUYS**

#### 1:25 p.m. Why I Chose A Hybrid Privademic Career. Regrets?

Jack E. Zigler, M.D.

#### **Objectives:**

- Appreciate the difficulties in establishing an academically-oriented private practice model
- Describe various models for success in the USA and identify common denominators for their continued appeal

#### 1:35 p.m. Why I Chose A Military Career. Regrets?

Wayne Gluf, M.D.

#### Objectives:

- Describe typical military academic career pathways
- Illustrate common frustrations and special career rewards

#### 1:45 p.m. Why I Chose an Academic Career. Regrets?

Jens R. Chapman, M.D.

#### Objectives:

- Describe the usual academic pathway with common expectations and frustrations
- Identify opportunities and limitations of recent health care changes in terms of job satisfaction

#### 1:55 p.m. Discussion

#### 2:10 p.m. Foraminotomy vs. Disc Replacement: Where Does the Evidence Point?

Hyun Bae, M.D. (virtual)

#### **Objectives:**

- Reconsider indications and outcomes of cervical foraminotomy
- Define the limits of cervical foraminotomy
- Weigh the advantages of disc replacement over foraminotomy

#### 2:25 p.m. Discussion

#### 2:35 p.m. Break, Exhibits & Transition to BioSkills Lab (not for CME credit)

#### 2:50 p.m. Hands-on BioSkills Lab (20 minute rotations)

All Faculty

- 1. Single level cervical disc arthroplasty
- 2. Lumbar disc arthroplasty
- 3. Cervical laminoplasty

#### **Objectives:**

- Practice the following procedure:
  - Cervical disc arthroplasty
  - Lumbar disc arthroplasty
  - Cervical laminoplasty

3:50 p.m. Course Wrap Up

Jens R. Chapman, M.D.

4 p.m. Adjourn

#### **Acknowledgements**

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#### **Course Planning Committee**

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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. <a href="https://www.surveymonkey.com/r/MotionPres2022">https://www.surveymonkey.com/r/MotionPres2022</a>. If you do not receive the survey via email, please call (206) 732-6500 or email <a href="mailto:cme@seattlesciencefoundation.org">cme@seattlesciencefoundation.org</a>.

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#### **Identifying and Resolving Conflicts of Interest**

**Purpose:** The information you provide addresses several requirements of the Accreditation Council for Continuing Medical Education (ACCME) to help **ensure independence** in CME activities. Everyone in a position to control the content of a CME activity must disclose all relevant financial relationships with an ineligible company to the CME provider. This information must be disclosed to participants prior to the beginning of the activity. Also, CME providers must mitigate 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, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit.

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

ACCME focuses on financial relationships with ineligible companies in the 24-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 24 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 mitigated. Mitigation 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 ineligible company 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 ineligible company; (4) Others to be determined by SSF CME Committee.

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#### **Faculty Disclosure Summary**

The following planners and presenters, in the past 24 months, have/had a financial relationship with a commercial interest:

(S = Speaker; P = Planner)

Hyun Bae, M.D. (S): Royalty: Zimmer Biomet, DePuy Synthes, NuVasive, Stryker

**Scott Blumenthal, M.D.** (S, P): Consultant/Teaching/SAB/Royalty/Investment: Aesculap, Centinel Spine, Orthofix, Zimmer Biomet, Simplify

John Burleson, M.D. (S): Consultant: Kalitec, Degen Medical, CTLAmedica

Jens R. Chapman, M.D. (S, P): Consultant: Globus Medical

**Peter Derman, M.D.** (S): Consultant & Speaker: DeGen Medical, Accelus, Joimax; Grant/Research Support: Aesculap; Stock Shareholder: Goldfinch Health; Consulting, Royalties, & Speaker/Teacher: DeGen Medical, Accelus

Lisa Ferrara, Ph.D. (S): Stock Options/Advisory Board: 4 Web Medical

**Christoph Hofstetter, M.D., Ph.D.** (S): Consultant: Innovasis, Globus Medical, Joimax, J&J; Grant Support: Raisbeck Foundation, NIH, Department of Defense, Neilsen Foundation

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**Armen Khachatryan, M.D.** (S): Consultant: Zimmer Biomet, Orthofix, Dymicron; Contracted Research: NuVasive, Centinel Spine, SpineArt

**Isador Lieberman, M.D.** (S): Advisory Board: Assure Neuromonitoring, Bioventus, Inc., ECential Robotics; Consultant: Assure Neuromonitoring, Bioventus, Inc., ECential Robotics, Medtronic, Safe Orthopaedics, Inc., SI-Bone, Misonix, Globus Medical; Research: Medtronic, SI-Bone; Royalties: Globus Medical, Safe Orthopaedics, Inc., SI-Bone; Shareholder & Founder: AGADA Medical

**Frank Phillips, M.D.** (S): Consultant: NuVasive, SI-Bone, Medtronic, Globus, Stryker, Spinal Kinetics, SpineArt; Stock Shareholder: Augmedics, Edge Surgical, NuVasive, Providence, SI-BONE, Spinal Simplicity, Surgio, Theracell; Royalties: NuVasive, SI-Bone

**Rick Sasso, M.D.** (S): Consulting Fee: NuVasive; Research Support: AO, Cerapedics, Lilly, Medtronic, Inc., Orthofix, Simplify, Smith & Nephew, Stryker; Royalties: Medtronic, Inc., Saunders Elsevier **Jack Zigler, M.D.** (S, P): Consultant: Centinel Spine, Orthofix, Simplify; Investment Interest: Centinel Spine

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Wayne Gluf, M.D. (S); Jonathan Plümer, M.D. (P); Linda Sahlin (P); Angela Tran (P); Antonio Webb, M.D. (S)

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.