



**3rd Annual Advances in Motion
Preservation of the Spine
October 22 - 23, 2021**

Syllabus

ESTEEMED FACULTY

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Matthew Scott-Young, M.D. (virtual)

Orthopaedic Surgeon
Gold Coast Spine
Southport, Australia

AGENDA

FRIDAY, OCTOBER 22, 2021

- 6 p.m. Registration & Appetizers**
- 6:25 p.m. Welcome & Course Overview**
- 6:30 p.m. Featured Lecture: Return to Play in Contact Sports: What Does the Data Show?**
Wellington Hsu, M.D.
Objectives:
- Evaluate the known evidence behind surgical procedures for cervical disc herniations in the elite athlete population
 - Assess evidence-based literature regarding total disc arthroplasty in return to play for different types of sporting activities
 - Describe the indications of surgical versus conservative management for nerve root compression in the cervical spine
- 6:45 p.m. Case Reviews and Panel Discussion**
Failed Cervical and Lumbar Disc Arthroplasty
Moderator: Jens. R Chapman, M.D.
Panelists: Jack E. Zigler, M.D., Armen Khachatryan, M.D., Scott Blumenthal, M.D., & Wellington Hsu, M.D. (virtual)
Objectives:
- Summarize how to approach failed disc arthroplasty diagnostically
 - Explain treatment for managing osteolysis vs. infection after cervical TDR
 - Outline therapeutic interventions for failed lumbar disc arthroplasty
- 8 p.m. Adjourn**

SATURDAY, OCTOBER 23, 2021

- 7 a.m. Breakfast & Registration**
- 7:25 a.m. Welcome & Introductions**
Jens R. Chapman, M.D.

SESSION 1: UPDATE ON DISC ARTHROPLASTY

- 7:30 a.m. What's New Cervical Arthroplasty 2021**
Armen Khachatryan, M.D.
Objectives:
- Outline new peer reviewed literature in 2021
 - Outline FDA approvals 2021
 - Describe implant additions and removals from the market
- 7:40 a.m. Q&A**

7:45 a.m. Expanded Indications for Cervical Arthroplasty (virtual)

Todd Lanman, M.D.

Objectives:

- Outline the scientific evidence for hybrids and multiple levels
- Explain the scientific evidence for expanded use

7:55 a.m. Q&A

**8 a.m. Live Broadcast Demonstration from BioSkills Lab No. 1
Single Level Cervical Disc Arthroplasty**

Hyun Bae, M.D

Objectives:

- Demonstrate a single level cervical disc replacement
- Demonstrate safe instrumentation practices and how to avoid complications

8:20 a.m. What's New in Lumbar Disc Replacement in 2021

Jack E. Zigler, M.D.

Objectives:

- List new peer-reviewed literature
- Outline what is in the pre-market approval (PMA) pipeline and what is in use outside of the US (OUS)
- Provide an update on insurance coverage and/or class-action legal actions

8:30 a.m. Q&A

SESSION 2: TWO LEVEL CERVICAL TDR

**8:35 a.m. Live Broadcast Demonstration from BioSkills Lab No. 2
Two Level Cervical Disc Arthroplasty: A Demonstration of Different Technologies
Side-by-Side**

Armen Khachatryan, M.D. & Scott Blumenthal, M.D.

Moderator: Jack E. Zigler, M.D.

Objectives:

- Demonstrate similarities and differences in implantation techniques for 2 level cervical total disc replacement
- Identify how to avoid complications with the procedure
- Utilize safe instrumentation practices

9:15 a.m. Lumbar Facet Replacement Surgery Revisited (virtual)

Roland Kent, M.D.

Objectives:

- Explain the role of facets in normal spinal motion and how they contribute to spinal pathology
- Describe the FDA IDE study design for the Premia Spine TOPS device
- Present the preliminary data of the study

9:30 a.m. Q&A

**9:35 a.m. Endoscopic Spine Surgery for Reduction of Surgical Invasiveness
Cervical and Lumbar Spine Clinical Applications**

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

Objectives:

- Outline indications and contraindications for endoscopic cervical and lumbar decompressions
- Describe three clinical cases where endoscopic surgery was successful in reducing surgical invasiveness
- Describe learning curve and suggested educational venues

9:50 a.m. Q&A

**9:55 a.m. Live Broadcast Demonstration from BioSkills Lab No. 3
Side-by-Side**

Moderator: Jack E. Zigler, M.D. & Scott Blumenthal, M.D.

Part 1. Microscopic Cervical Foraminotomy

Jens R. Chapman, M.D.

Part 2. Endoscopic Lumbar Foraminotomy

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

Objectives:

- Outline the surgical techniques for endoscopic cervical and lumbar decompression
- Describe troubleshooting methods for endoscopic surgery
- Describe how to avoid complications in endoscopic surgery

SESSION 3: ADVANCED TECHNOLOGY AND ITS USE IN MOTION PRESERVATION

10:25 a.m. Posterior Based Motion Preservation Procedures: Past & Present

Hyun Bae, M.D.

Objectives:

- Outline the necessary requirements for posterior based motion preservation procedures
- Describe conditions would motion preservation options provide benefit
- List the potential complications of motion preservation

10:40 a.m. Q&A

10:45 a.m. Young Surgeons: Practice Building in 2021

John Burleson, M.D.

Objectives:

- Define the three most common practice models in the US and their relative pros and cons
- Evaluate impediments to starting a practice for a new spine surgeon
- Outline how to use new technology as a young surgeon

11 a.m. Q&A

- 11:05 a.m. **Live Broadcast Demonstration from BioSkills Lab No. 4**
Lumbar Disc Arthroplasty: A Side-by-Side Look at Different Techniques
Jack E. Zigler, M.D. & Scott Blumenthal, M.D.
Moderator: Jens Chapman, M.D.
Objectives:
- Describe details of disc space surgical preparation
 - Explain how to perform a comprehensive intradiscal release
 - Outline tips and tricks for correct implant placement

11:50 a.m. **Break, Exhibits & Pick Up Lunch** (*not for CME credit*)

SESSION 4: CONTROVERSIES IN USING NON-FUSION TECHNOLOGIES

- 12 p.m. **Down Under Experience: Cervical ADR in Collision Sports** (*virtual – working lunch*)
Matthew Scott-Young, M.D.
Objectives:
- Outline pros and cons of cervical ADR in the high-level athlete
 - Describe the experience of ADR in professional athletes in Australia
- 12:15 p.m. **Q&A**
- 12:20 p.m. **North American Perspective: Return to Play in Contact & Collision Sports – Does Cervical ADR Help?** (*virtual*)
Gregory Schroeder, M.D.
Objectives:
- Outline the pros and cons of cervical ADR in the high-level athlete
 - Describe the experience in professional athletes in North America
- 12:35 p.m. **Q&A**
- 12:40 p.m. **Controversy: Symptomatic L5-S1, Degenerative Disk Disorder, Fusion or ADR**
Scott Blumenthal, M.D.
Objectives:
- Describe degenerative conditions at L5-S1 that would contraindicate ADR
 - Dispel the myth that ADR shouldn't be used at L5-S1
 - List diagnostic "tips" that may suggest fusion vs ADR in preop planning
- 12:55 p.m. **Q&A**

- 1 p.m. **Live Broadcast Demonstration from BioSkills Lab No. 5**
Open Door Laminoplasty: How to Do It
Jens R. Chapman, M.D.
Objectives:
- Show safe and effective expansion and stabilization techniques for opening door spinal laminoplasties
 - Demonstrate differences of surgical techniques for open door laminoplasty compared to other techniques

- 1:30 p.m. Cervical Artificial Disc Replacement (C-ADR): A Big Picture Perspective on Market Acceptance** *(virtual)*
Ravi Nunna, M.D.
Objectives:
- Summarize the development and implementation history of C-ADR
 - Compare and contrast C-ADR vs. ACDF (Anterior Cervical Discectomy and Fusion)
 - Describe future directions for C-ADR
- 1:45 p.m. Q&A**
- 1:50 p.m. Course Wrap Up**
Jens Chapman, M.D. & Jack Zigler, M.D.
- 2 p.m. Adjourn**

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Educational Grant

Aesculap
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Course Planning Committee

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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/MotionPres2021>

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

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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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Faculty Disclosure Summary

The following planners and presenters have/had a financial relationship with a commercial interest in the past 12 months: (*S = Speaker; P = Planner*)

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

Scott Blumenthal, M.D. (S, P): Royalties or Patent Beneficiary: Aesculap, Baylis Medical, Centinel Spine, European Spine Journal, Orthofix, NeoSpine, NuVasive; Deputy Editor: European Spine Journal; Scientific Advisory Board: Fziomed

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

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

Wellington K. Hsu, M.D. (S): Royalty: Stryker; Consultant: Stryker, Bioventus, Medtronic; Contracted Research: Inion

Roland Kent, M.D. (S): Contracted Research: Globus Medical, SI Bone; Speaker: Globus Medical, SI Bone; Product Design Funding: Globus Medical

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

Gregory Schroeder, M.D. (S): Consultant: Zimmer, Stryker, Innovative Surgical Designs, Astura, Teledoc, Bioventus, Wolfers Kluwer, AOSpine, Medtronic

Jack Zigler, M.D. (S, P): Consultant: Medtronic, Orthofix, Simplify Medical, Centinel Spine, Aesculap; Patent Holder: Zimmer Spine

The following planners and/or presenters have/had no financial relationship with a commercial interest in the past 12 months: (*S = Speaker; P = Planner*)

Todd Lanman, M.D. (S), **Ravi Nunna, M.D.** (S), **Matthew Scott-Young, M.D.** (P, S), **Periklis Godolias, M.D.** (P), **Linda Sahlin, B.A.** (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.