

8th Annual Spinal Deformity Symposium

Saturday, August 26, 2023

Syllabus

ESTEEMED FACULTY

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Complex Spine Surgeon Swedish Neuroscience Institute Seattle, Washington

Amir Abdul-Jabbar, M.D. Course Chairman

Orthopedic Surgeon Swedish Neuroscience Institute Seattle, Washington

Jens R. Chapman, M.D.

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Munish Gupta, M.D.

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Roland Kent, M.D.

Spine Surgeon Axis Spine Center Coeur d' Alene, Idaho

Bassel G. Diebo, M.D. (virtual)

Spine & Scoliosis Surgeon Brown University Orthopedics Providence, Rhode Island

Steve Enguidanos, M.D. (virtual)

Orthopaedic Surgeon Twin Cities Orthopedics & Sports Medicine Center Niceville, Florida

Kristen Jones, M.D. (virtual)

Assistant Professor, Department of Orthopedic Surgery & Neurosurgery University of Minnesota Minneapolis, Minnesota

Christopher Shaffrey, MD

Professor of Orthopaedic and Neurological Surgery - Chief, Spine Division Duke University Hospital Durham, North Carolina

Alekos Theologis, M.D.

Assistant Professor, Spine Surgeon UCSF Orthopaedic Surgery San Francisco, California

Surgical Demonstrations Supported by Swedish Neuroscience Institute Fellows

Brian Anderson, D.O.; Donald Davis, M.D.; Neel Patel, M.D.; Gautam Rao, M.D.

AGENDA

8 a.m.	Registration & Breakfast
8:25 a.m.	Welcome & Course Overview Robert A. Hart, M.D. & Amir Abdul-Jabbar, M.D.
8:30 a.m.	 Keynote Talk Should There Be a Spine Residency - If So, How to Bring it About Christopher Shaffrey, M.D. Objectives: Evaluate the demand for spine specialists in the medical field to gauge the necessity for a residency program Develop a comprehensive proposal outlining the program's structure, curriculum, benefits and potential impact
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8:45 a.m. **Q & A**

8:50 a.m.	Live Demonstration Broadcast from BioSkills Lab No.1 Procedural Solutions Driving Both Ultrasonic & BGS Portfolios of Product in
	Complex Spine
	Munish Gupta, M.D.
	Objectives:
	Illustrate use of bone scalpel in spine surgery
	Demonstrate use of the bone scalpel for treatment of spinal deformity
	Describe use of bone scalpel in VCR

9:20 a.m. **Q&A**

9:25 a.m. Rod Fracture: Incidence and Prevention Strategies Robert Hart, M.D.

Objectives:

- Describe techniques for avoidance of rod fractures
- Illustrate new metal alloys with the potential to reduce incidence of non-union and rod fracture

9:40 a.m. **Q & A**

- 9:45 a.m. Evolution of MIS Capacity for Deformity Correction Robert Eastlack, M.D. Objectives:
 - Describe the role and pitfalls of MIS deformity correction
 - Illustrate how to preform LLIF and ACR when correcting adult deformity

10 a.m. **Q & A**

10:05 a.m.	Live Demonstration Broadcast from BioSkills Lab No.2 Intradiscal Osteotomy Robert Eastlack, M.D. Objectives: • Describe intradiscal osteotomy techniques and • Review indication in deformity surgery
10:35 a.m.	Q & A
10:40 a.m.	Break & Exhibits (not for CME credit)
10:55 a.m.	 Restoring Cervical Lordosis Amir Abdul-Jabbar, M.D. Objectives: Review literature on cervical thoracic measurements Describe techniques for improving cervical alignment
11:10 a.m.	Q & A
11:15 a.m.	 Complex Spinal Deformity Using the MoRe Alloy (virtual) Steve Enguidanos, M.D. Objectives: Review available alloys for spinal instrumentation Describe strengths and drawbacks of individual options
11:30 a.m.	Q & A
11:35 a.m.	Live Demonstration Broadcast from BioSkills Lab No. 3 Dual Pelvic Screws Alekos Theologis, M.D. Objectives: Illustrate variable techniques for pelvic screw placement Describe relationships to the lumbar construct
12:05 p.m.	Q & A

12:10 p.m. Break & Pick Up Lunch (not for CME credit)

12:30 p.m. Intradiscal Osteotomy - A Different Way to Change Alignment Jens Chapman, M.D. **Objectives:** • Review posterior based Deformity correcton options Illustrate techniques of IDO • Describe early results and learning points • 12:45 p.m. Q & A 12:50 p.m. **Robotics and Image Guidance in Adult Deformity Surgery** Roland Kent, M.D. **Objectives:** Discuss the rationale of using robotic assistance in deformity reconstruction • • Identify potential complications associated with the use of robotics and image guidance in the Deformity patient

1:05 p.m. **Q & A**

1:10 p.m.	Live Demonstration Broadcast from BioSkills Lab No.4 Quad Rod Constructs: Satellite and Outrigger Constructs
	Roland Kent, M.D.
	Objectives:
	Illustrate alternate techniques for increasing stability in spinal constructs
	Describe applications in relation to osteotomy techniques

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

- 1:45 p.m.
 The Rail Technique for Correction of Complex Spinal Deformities

 Alekos Theologis, M.D.
 Objectives:
 - Define the benefits of the "Rail Technique" for correction of spinal deformity
 - Illustrate the step-by-step approach to preforming the "Rail Technique"

2:00 p.m. **Q & A**

2:05 p.m. **Pedicle Subtraction Osteotomies, Lessons Learned** *Munish Gupta, M.D.*

Objectives:

- Describe technical pearls
- Explain complications
- Identify pitfalls

2:20 p.m. **Q & A**

2:25 p.m. Live Demonstration Broadcast from BioSkills Lab No.5 Posterior Cervical - Novel Quad-Rod OC Fusion Amir Abdul-Jabbar, M.D. Objectives: Illustrate techniques of increasing rigidity in OC fusions Describe relationships to occipital plating techniques

2:55 p.m. **Q & A**

3:00 p.m. **Technology & Techniques to Prevent latrogenic Deformity** *Kristen Jones, M.D. (virtual)*

Objectives:

- Describe pre-operative spinal alignment planning steps to avoid creating iatrogenic deformity
- Identify surgical techniques commonly associated with creation of iatrogenic deformity

3:15 p.m. **Q & A**

3:20 p.m.	Live Demonstration Broadcast from BioSkills Lab No.6
	Multi-Rod Constructs in Cervical Spine
	Christopher Shaffrey,, M.D.
	Objectives:
	 Describe indications for multi-rod constructs in cervical spine
	Illustrate possible patterns of multi-rod constructs in cervical spine

3:50 p.m. **Q & A**

3:55 p.m. Lumbar Alignment in the Normal, Degenerated and Deformed Spine Bassel G. Diebo, M.D. (virtual)

Objectives:

- Discuss the evolution of spinal alignment analysis in degenerative and deformity
- Illustrate a step by step approach for surgical planning of degenerative spine surgery from alignment perspective
- Explain the importance of restoring segmental lumber lordosis, shape and apex in preventing adjacent segment disease and improving PROMS

4:10 p.m. **Q & A**

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- 4:15 p.m. **Wrap Up**
- 4:25 p.m. **Adjourn**

Acknowledgements

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Educational Grant

Atec Bioventus Globus Medical Medtronic SeaSpine/Orthofix Stryker

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In-Kind Support

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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. <u>https://www.surveymonkey.com/r/Deformity2023</u>

If you do not receive the survey via email, please call (206) 732-6500 or email <u>cme@seattlesciencefoundation.org</u>.

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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.

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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 a commercial interest with which he/she has a financial relationship.

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CME Activity Planning Committee Members: I 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, in the last 24 months, have/had a financial relationship with a commercial interest:

(S = Speaker; P = Planner)

Jens R. Chapman, M.D. (S): Advisor: Globus Medical Inc; Speaker: DePuy Synthes, Medtronic, SeaSpine Bassel Diebo, M.D. (S): Consultant: SpineArt, Clariance, Spinevision

Robert Eastlack, M.D. (S): Royalties: Globus Medical, NuVasive, SeaSpine, Aesculap, SI Bone; Speaker: Radius;
Consultant: NuVasive, SI Bone, SeaSpine, Medtronic, Spinal Elements, Biedermann Motech, DePuy, Silony, Neo;
Stocks: Alphatec Spine, NuVasive, SeaSpine, Spine Innovations, SI Bone; Research: NuVasive, SeaSpine,
Medtronic, Titan, SI Bone, Scripps Clinic Medical Group; Advisory: Scoliosis Research Society, San Diego
Orthopaedic Society, San Diego Spine Foundation; Material Support: NuVasive, SeaSpine, AONA
Munish Gupta, M.D. (S): Consultant: Globus, DePuy, Medtronic; Speakers: HSS, Wright State, LSU; Stocks:
Johnson & Johnson; Advisory: SRS; Royalties: DePuy, Innomed, Globus, SRS

Robert Hart, M.D. (P,S): Consultant: DePuy Synthes, MiRus, Medtronic, Orthofix, SeaSpine, Aplify, SpineArt,

Allosource; Speaker: DePuy Synthes, Globus Medical; Royalties: DePuy Synthes, Globus Medical, SeaSpine

Roland Kent, M.D. (S): Research: Globus Medical, Carlsmed, Premia Spine, SI Bone; Consultant: Globus Medical, SI Bone; Surgeon Education: Globus, SI Bone

Christopher Shaffrey, M.D. (S): Consultant: Proprio, SI Bone, Medtronic; Research: NIH, ISSG Foundation; Stocks: Proprio, NuVasive; Royalties: NuVasive, Medtronic, SI Bone

Alekos Theologis, M.D. (S): Consultant: DePuy Synthes, Alphatec, Restor3D, Surgalign, Icotec, Carbofix, Stryker, K2M; Royalties: Ulrich Medical USA, Restor3D

The following planners and/or presenters, in the last 24 months, have/had no financial relationship with a commercial interest (S = Speaker; P = Planner)

Amir Abdul-Jabbar, M.D. (P, S); Steve Enguidanos, M.D. (S); Clifford Pierre, M.D. (P); Cory Kepler, SSF (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.