# $7^{\text {th }}$ Annual Spinal Deformity Symposium 

## Saturday, October 29, 2022

## Syllabus

## ESTEEMED FACULTY

Robert A. Hart, M.D. Course Chairman<br>Complex Spine Surgeon<br>Swedish Neuroscience Institute<br>Seattle, Washington

## Amir Abdul-Jabbar, M.D.

Orthopedic Surgeon
Swedish Neuroscience Institute
Seattle, Washington

Alan Daniels, M.D. (virtual)
Chief of Spine
Rhode Island Hospital \& Brown University
Providence, Rhode Island

Khaled M. Kebaish, M.D., M.S. (virtual)
Division Chief, Orthopaedic Spine Surgery
Professor of Orthopaedic Surgery
Johns Hopkins University
Baltimore, Maryland
J. Ivan Krajbich, M.D.

Associate Professor
Orthopaedics and Rehabilitation
OHSU School of Medicine Portland, Oregon

Douglas Burton, M.D<br>Professor \& Acting Chair Orthopedic Surgery \& Sports Medicine<br>University of Kansas<br>Kansas City, Missouri

## Stephen Enguidanos, M.D.

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

Eric Klineberg, M.D., M.S.
Professor \& Vice Chair
Department of Orthopaedic Surgery
Co-Director, UC Davis Spine Center
University of California Davis Sacramento, California

Jean Christophe Leveque, M.D.
Neurosurgeon
Virginia Mason Hospital \& Seattle Medical Center
Seattle, Washington

Rod J. Oskouian, Jr., M.D., FAANS<br>Chief of Spine<br>Swedish Neuroscience Institute Seattle, Washington

## Surgical Demonstrations Supported by Swedish Neuroscience Institute Fellows

Mauricio Avila, M.D., Jared Cooke, D.O., Jim Hicks, M.D., Amanda Sacino, M.D., Ph.D., Abraham Schlauderaff, M.D., Christopher Seidel, D.O., \& Zac Tataryn, M.D.

## AGENDA

| 8 a.m. | Registration \& Breakfast |
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| 8:25 a.m. | Welcome \& Course Overview <br> Robert A. Hart, M.D. |
| 8:30 a.m. | Keynote Talk <br> Complications of Cervical Spine Deformity Surgery <br> Douglas Burton, M.D. <br> Objectives: |

- Describe the risk factors for the occurrence of complications in adult cervical deformity surgery (ACDS)
- Identify the types and rates of occurrence of complications ACDS
- Illustrate the techniques for complication prevention in ACDS

8:45 a.m. $\quad$ Q \& A

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8:50 a.m. Live Demonstration Broadcast from BioSkills Lab No.1
    Lateral Interbody Fusion
    Amir Abdul-Jabbar, M.D.
    Objectives:
    - Demonstrate a lateral interbody fusion
    - Outline potential complications of lateral approaches and how to avoid them
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9:20 a.m. Flat Back Syndrome (virtual)
Alan Daniels, M.D.
Objectives:

- Describe the etiology and natural history flatback syndrome
- Analyze the radiologic findings including spinopelvic, global and regional sagittal parameters related to flatback syndrome
- Identify modern treatment techniques for flatback syndrome

9:35 a.m. $\quad \mathbf{Q} \& \mathbf{A}$
9:40 a.m. Rod Fracture Avoidance with MoRe Alloy
Stephen Enguidanos, M.D.
Objectives:

- Identify the first FDA approved alloy for use in medical devices in over 40 years
- Describe complex deformity using molybdenum rhenium (MoRe) alloy

9:55 a.m. $\quad \mathbf{Q} \& \mathbf{A}$

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10a.m. Live Demonstration Broadcast from BioSkills Lab No. 2 Intradiscal Osteotomy
Rod J. Oskouian Jr., M.D.
Objectives:
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- Demonstrate an intradiscal osteotomy
- Outline expected lordosis from intradiscal osteotomy
$\left.\begin{array}{ll}\text { 10:30 a.m. } & \begin{array}{l}\text { Break \& Exhibits (not for CME credit) } \\ \text { 10:45 a.m. }\end{array} \\ & \begin{array}{l}\text { Complications of Three Column Osteotomy (virtual) } \\ \text { Khaled M. Kebaish, M.D., M.S. } \\ \text { Objectives: } \\ \text { - }\end{array} \\ & \text { Describe the most common complications of 3CO } \\ \text { Identify pearls to minimize these complications and learn how to deal with them when }\end{array}\right]$

12:25 p.m. Complications of Pediatric Spine Surgery
J. Ivan Krajbich, M.D.

## Objectives:

- Recognize the spectrum of etiologies of pediatric spinal deformities and their relationship to complication risks
- Identify the type and incidence of complications in pediatric spine surgery
- Demonstrate what we know about the best practice recommendations in pediatric spine surgery


## 12:40 p.m. $\quad$ Q \& A

12:45 p.m. Live Demonstration Broadcast from BioSkills Lab No. 4 Quad Rod Constructs: Satellite \& Outrigger Constructs Douglas Burton, M.D.
Objectives:

- Demonstrate technique for using satellite rods
- Describe techniques for quad-rod constructs

1:15 p.m. Complications following ADS Surgery: Definition \& Incidence Eric Klineberg, M.D.
Objectives:

- Identify the impact of complications
- Describe a novel complication classification

1:30 p.m. $\quad$ Q \& A
1:35 p.m. Neurological Deficit Following Adult Deformity Surgery Jean Christophe Leveque, M.D.
Objectives:

- Identify the most common types of neurological deficits which can arise during surgical correction of adult deformity
- Describe methods used to reduce the risk of neurologic deficits and to correct those which are identified during or after surgery

1:50 p.m. $\quad \mathbf{Q} \& \mathbf{A}$

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1:55 p.m. Live Demonstration Broadcast from BioSkills Lab No. 5 Molybdenum-Rhenium (MoRe) Alloy as a Means of Reducing Rod Fracture Stephen Enguidanos, M.D.
Objectives:
- Demonstrate technique for use of MoRe alloy rods in posterior thoracolumbar constructs
- Outline expected lordosis from intradiscal osteotomy
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2:25 p.m. Wrap up

2:30 p.m. Adjourn

## Acknowledgements

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

| Educational Grant | Exhibit Support |  |
| :---: | :---: | :---: |
| Globus Medical | Cerapedics |  |
| Medtronic | DePuy Sythes Support | Globus Medical |
| Mirus | Globus Medical | Medtronic |
| SpineArt | Medtronic | Mirus |
| Stryker | Mirus | SpineArt |
|  | SpineArt | Stryker |
|  | Stryker |  |
|  |  |  |

## Course Planning Committee

Robert A. Hart, M.D.<br>Course Co-Chair<br>Orthopaedic Surgeon<br>Swedish Neuroscience Institute<br>Seattle, Washington<br>Jonathan Plümber, M.D.<br>Orthopaedic Surgeon<br>Swedish Neuroscience Institute<br>Seattle, Washington

Amir Abdul-Jabbar, M.D.<br>Orthopaedic Surgeon<br>Swedish Neuroscience Institute<br>Seattle, Washington<br>Linda Sahlin<br>Director of Education<br>Seattle Science Foundation

Cory Kepler<br>Education Specialist<br>Seattle Science Foundation

## 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/Deformity22

If you do not receive the survey via email, please call (206) 732-6500 or email cme@seattlesciencefoundation.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 ${ }^{\text {TM }}$

Seattle Science Foundation designates this live activity for a maximum of 5.5 AMA PRA Category 1 Credits ${ }^{T M}$. 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: 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)

Douglas Burton, M.D. (S): Consultant: Globus, DePuy Spine, Blue Ocean Spine; Research: DePuy Spine, Pfizer, Bioventus; Stocks: Progenerative Medical; Royalties: DePuy Spine, Globus, Blue Ocean Spine

Alan Daniels, M.D. (S): Consultant: Stryker, Spineart, Orthofix, Medtronic; Royalties: Spineart; Research: Orthofix, Medtronic

Robert Hart, M.D. (S,P): Consultant: DePuy Synthes, Medtronic Inc.,Orthofix, SeaSpine, Amplify, SpineArt, Allosource, MiRus; Royalties: SeaSpine, Globus Medical, DePuy Synthes; Speaker: Globus Medical, DePuy Synthes

Khaled M. Kebaish, M.D. (S): Consultant: DePuy Synthes; Royalties: DePuy Synthes, Stryker, Spinecraft, Orthofix

Eric Klineberg, M.D. (S): Consultant: DePuy Synthes, Stryker, Medicrea, Medtronic; Speaker: AO Spine Fellowship; Royalties: AO Spine Chair, AO Chair

Rod J. Oskouian, Jr., M.D. (S): Consultant: DePuySynthes, Globus Medical, Stryker, Atec Spine, Blue Ocean Spine, SeaSpine; Royalties: Stryker, Globus Medical; Grants

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); J. Ivan Krajbich, M.D. (S); Jean
Christophe Leveque, M.D. (S); Jonathan Pliümber, M.D. (P); Linda Sahlin (P); Cory Kepler (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.

