

6th Annual Spinal Deformity Symposium

Saturday, August 28, 2021

Syllabus

ESTEEMED FACULTY

Robert A. Hart, M.D.

Course Chairman Complex Spine Surgeon Swedish Neuroscience Institute Seattle, Washington

Amir Abdul-Jabbar, M.D.

Orthopedic Surgeon Swedish Neuroscience Institute Seattle, Washington

Andrew Jack, M.D., MSc, FRCSC

Complex Spine & Peripheral Nerve Surgeon Division of Neurosurgery University of Alberta Edmonton, Alberta

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

Course Co-Chair Chief of Spine Swedish Neuroscience Institute Seattle, Washington

Andrew J. Pugley, M.D.

Assistant Professor of Orthopedics and Rehabilitation University of Iowa Iowa City, Iowa

Richard A. Hynes, M.D.

President & Spine Surgeon The B.A.C.K. Center Melbourne, Florida

Sang H. Lee, M.D., Ph.D. (virtual)

Director, Complex Cervical Spine & Spine Tumor Surgery Assistant Professor of Orthopaedic Surgery Johns Hopkins Medicine Columbia, Maryland

Peter Passias, M.D., FAAOS

Clinical Associate Professor Dept. of Orthopedic Surgery New York University Grossman School of Medicine Westbury, New York

Christopher I. Shaffrey, M.D., FACS (virtual)

Chief of Spine Division Duke University Durham, North Carolina

Vincent C. Traynellis, M.D. (virtual)

Director, Neurosurgery Spine Fellowship Program Rush University Medical Center Chicago, Illinois

AGENDA

| 8 a.m. | Registration & Breakfast |
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| 8:25 a.m. | Welcome & Course Overview Robert A. Hart, M.D. |
| 8:30 a.m. | Avoiding latrogenic Cervical Deformities (via broadcast) Christopher I. Shaffrey, M.D., FACS Objectives: Identify factors associated with developing cervical deformity Discuss techniques/methods to appropriately evaluate cervical deformity Discuss methods for preventing cervical deformity Select the best treatment(s) for correction of cervical deformity if it develops. |
| 8:45 a.m. | Q & A |
| 8:50 a.m. | Live Demonstration Broadcast from BioSkills Lab No.1 Anterior Cervical Corpectomy Amir Abdul-Jabbar, M.D., & Yev Freyvert, M.D. Objectives: • Demonstrate an anterior cervical corpectomy • Provide pearls of anterior cervical corpectomy • Outline the limitations of anterior cervical corpectomy |
| 9:20 a.m. | Prevention of Pseudoarthosis and Lordosis Restoration in Multilevel Anterior Cervical Discectomy & Fusion (ACDF) Richard A. Hynes, M.D. Objectives: Discuss possible cause of increased pseudoarthrosis with increasing levels of ACDF Explain rationale for segmental plate fixation to maximize fusion and prevent ASD |
| 9:35 a.m. | Q & A |
| 9:40 a.m. | Multi-Rod Constructs in Cervical Deformity Surgery Robert A. Hart, M.D. Objectives: Outline various patterns of multiple rod constructs for cervical deformity surgery Describe indications for multi-rod constructs Identify technical points regarding placement of instrumentation for multi-rod constructs |
| 9:55 a.m. | Q & A |
| 10 a.m. | Live Demonstration Broadcast from BioSkills Lab No.2 Anterior Cervical Discectomy and Fusion (ACDF) with Segmental Plate Richard A. Hynes, M.D., & Zac Tataryn, M.D. Objectives: Demonstrate ACDF with segmental plate Provide pearls of ACDF with segmental plate Outline the limitations of ACDF with segmental plate |

| 10:30 a.m. | Evolution of Adult Cervical Deformity (ACD) Surgery Clinical and Radiographic Outcomes Based on a Multicenter Prospective Study: Are Behaviors and Outcomes Changing with Experience? Peter Passias, M.D. Objective: Outline the development of literature in recent years that has improved our understanding of cervical deformity, cervical deformity surgery, development of complications, and alignment targets among other aspects of caring for cervical deformity patients Describe trends in operative management of cervical spinal deformity as seen in the first multi-center cervical deformity prospective study (2013 – 2017), and outline changes in the patient population treated |
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| 10:45 a.m. | Q & A |
| 10:50 a.m. | Live Demonstration Broadcast from BioSkills Lab No.3 Multi-Rod Constructs in Cervical Spine at C2-T2 Robert A. Hart, M.D., & Jared Cooke, D.O. Objectives: Demonstrate a multi-rod construct in cervical spine at C2-T2 Provide pearls for a multi-rod construct in cervical spine at C2-T2 Outline the limitations multi-rod constructs in cervical spine at C2-T2 |
| 11:20 a.m. | Osteotomies for Cervical Deformity Correction (via broadcast) Vincent C. Traynelis, M.D. Objectives: Describe the indications for cervical osteotomies Explain and categorize the types of osteotomies |
| 11:35 a.m. | Q & A |
| 11:40 a.m. | Upper Cervical Spine Deformity (via broadcast) Sang H. Lee, M.D., Ph.D. Objectives: Evaluate the upper cervical spine alignment Describe upper cervical spine and occipital instrumentation Explain surgical strategy of upper cervical spine pathology |
| 11:55 a.m. | Q & A |
| 12p.m. | Lunch & Exhibits (not for CME credit) |
| 12:20 p.m. | Live Demonstration Broadcast from BioSkills Lab No. 4 Upper Thoracic Pedicle Subtraction Osteotomy (PSO) Rod J. Oskouian, M.D., & Jerry Robinson, M.D. Objectives: • Demonstrate upper thoracic PSO • Provide pearls of an upper thoracic PSO • Outline the limitations of upper thoracic PSO |

| 12:50 p.m. | Cervical Spine Arthrodesis: Functional Limitations Due to Stiffness as a Collateral Outcome Andrew Jack, M.D. Objectives: Discuss possible cervical spondylotic myelopathy (CSM) outcomes Recognize stiffness as a collateral outcome of arthrodesis Outline future directions and update on CSRS Cervical Stiffness Disability Index (CSDI) |
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| 1:05 p.m. | Q & A |
| 1:10 p.m. | Live Demonstration Broadcast from BioSkills Lab No.5 Occipital Cervical Junction Robert A. Hart, M.D., & Zac Tataryn, M.D. Objectives: Demonstrate occipital cervical junction Provide pearls of occipital cervical junction Outline the limitations of occipital cervical junction |
| 1:40 p.m. | The Role of Anterior Cervical Corpectomy in Treating Cervical Deformity Andrew J. Pugley, M.D. Objectives: Outline the appropriate role/indications for anterior corpectomy in correcting regional cervical deformity Recognize the importance of additional augmentation through posterior approach/instrumentation when severe focal cervical deformity Summarize the potential complications of anterior corpectomy for cervical deformity and avoidance techniques |
| 1:55 p.m. | Q & A |
| 2 p.m. | Live Demonstration Broadcast from BioSkills Lab No.6 C2-T2 Fusion with Posterior Column Osteotomy Andrew Jack, M.D., & Periklis Godolias, M.D. Objectives: Discuss anatomical considerations Outline correction strategies Outline fixation strategies |
| 2:30 p.m. | Course Wrap Up |

2:45 p.m. **Adjourn**

Acknowledgements

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Educational Grant

Medical Device Business Services, Inc. Globus Medical Medtronic SeaSpine SpineArt Stryker

Exhibit Support DePuySynthes Globus Medical Medtronic SeaSpine SpineArt Stryker

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Course Planning Committee

Robert A. Hart, M.D. Course Co-Chair

Orthopaedic Surgeon Swedish Neuroscience Institute Seattle, Washington

Periklis Godolias, M.D.

Orthopaedic Surgeon Swedish Neuroscience Institute Seattle, Washington Amir Abdul-Jabbar, M.D. Orthopaedic Surgeon Swedish Neuroscience Institute Seattle, Washington

Linda Sahlin Director of Education Seattle Science Foundation

Ashley Martin Education Specialist 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. <u>https://www.surveymonkey.com/r/Deformity21</u>

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.

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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 have/had a financial relationship with a commercial interest: (S = Speaker; P = Planner)

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

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

Sang H. Lee, M.D., Ph.D. (S): Consultant: DePuySynthes, Medtronic Inc.

Peter Passias, M.D., FAAOS (S): Consultant: Medicrea, Royal Biologics, SpineWave, Terumo, Zimmer Biomet; Speaker: Globus Medical; Grant/Research Support: Cervical Scoliosis Research Society; Royalty: Allosource

Andrew Pugley, M.D. (S): Consultant: Globus Medical, Medtronic; Royalty: Globus Medical
Christopher Shaffrey, M.D., FACS (S): Consultant: NuVasive, Medtronic Inc., Zimmer Biomet, SI Bone;
Royalties: Zimmer Biomet, Medtronic Inc., NuVasive; Research: ISSG, DOD, Globus
Vincent Traynellis, M.D. (S): Consultant: NuVasive, Medtronic Inc.; Royalties: Medtronic Inc.

Amir Abdul-Jabbar, M.D. (P, S); Richard A. Hynes, M.D. (S); Andrew Jack, M.D., MSc, FRCSC (S); Periklis Godolias, M.D. (P); Linda Sahlin (P); Ashley Martin (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.

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