SEATTLE SCIENCE FOUNDATION

7th Annual
Seattle Science Foundation
Robotics Course

aka Everything Cool in Spine

Saturday, December 10, 2022

Syllabus

DISTINGUISHED FACULTY

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Vice Chair, Neurosurgery
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Beau Standish, Ph.D.
Chief Executive Officer
7D Surgical
Toronto, Ontario

Timur Urakov, M.D. *(virtual)*
Neurosurgeon
University of Miami
Miami, Florida

AGENDA

7 a.m. **Registration & Breakfast**

7:30 a.m. **Welcome, Introductions, Course Overview**
Doniel Drazin, M.D., Isador Lieberman, M.D., M.B.A., J. Patrick Johnson, M.D. & Jens R. Chapman, M.D.

7:35 a.m. **Live Demonstration Broadcast Lab No. 1** *(virtual)*
Nuances of Pre-Operative Planning
Isador Lieberman, M.D., M.B.A.
Objectives:
- *Elucidate the types of cases that would benefit from preoperative planning*
- *Demonstrate a typical case of preoperative planning*
- *Summarize the key steps needed to plan a case preoperatively*

7:55 a.m. **Q & A**

8 a.m. **Enabling Technology in Scoliosis Surgery**
Terrence Kim, M.D.
Objectives:
- *Describe the indications for enabling technologies in scoliosis surgery*
- *Illustrate the workflow for enabling technologies in scoliosis surgery*

8:15 a.m. **Q & A**

8:20 a.m. **Minimally Invasive Robotic-Assisted Single Position Surgery**
Martin Pham, M.D.
Objectives:
- *Identify which cases are suitable for single-position surgery*
- *Describe steps to perform MIS robotic-assisted single-position surgery*

8:35 a.m. **Q & A**

8:40 a.m. **Expanding the Frontiers of Robotic-Assisted Surgery** *(virtual)*
Timur Urakov, M.D.
Objectives:
- *Describe examples on the state of robotic-assisted surgery today*
- *Outline the expanding frontiers of robotic-assisted surgery*
- *Present cases that illustrate the expanding frontiers of robotic-assisted surgery*

9 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 2**
Robotic Single Position Oblique L4-S1 Fusion
Martin Pham, M.D.
Objectives:
- *Outline the workflow for setting up a robotic single-position surgery*
- *Demonstrate the nuances of performing the oblique corridor for the fusion*
- *Illustrate the pearls of performing single-position oblique fusion*

9:35 a.m. **Pearls and Pitfalls of Robotic-Assisted Surgeries**
Moderator: Doniel Drazin, M.D.

Panel: Isador Lieberman, M.D., M.B.A., Terrence Kim, M.D., Martin Pham., M.D., Andrew Manista, M.D. & J. Patrick Johnson, M.D.,
Objectives:
- *Outline pearls for successful robotic-assisted surgeries*
- *Contrast pitfalls of unsuccessful robotic-assisted surgeries*
- *Identify and evaluate lessons learned from failures of robotic-assisted surgeries*

10:05 a.m. **Q & A**

10:10 a.m. **Break & Exhibits** *(not for CME Credit)*

10:25 a.m. **Robotic-Assisted Cervical Pedicle Screws** *(virtual)*
Isador Lieberman, M.D., M.B.A.
Objectives:
- *Explain the challenges of the robotic-assisted cervical pedicle screws*
- *Describe the indications for robotic-assisted cervical surgery*

10:40 a.m. Q & A

10:45 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 3**
Robotic-Assisted Open and MIS Fusion
Andrew Manista, M.D.
Objectives:
- *Demonstrate robotic-assisted open thoracic fusion*
- *Demonstrate minimally invasive thoracic fusion using robotic assistance*
- *Employ robotic-assisted surgery in the thoracic spine using different techniques*

11:15 a.m. **Q & A**

11:20 a.m. **How Does One Decide Between Robotics and Navigation?**
Chester Donnally, M.D.
Objectives:
- *Compare the utility of robotics vs. navigation for spine surgery*
- *Outline the common decisions to be made when deciding which technology to utilize*
- *Describe the various pearls and pitfalls of each technology*

11:35 a.m. **Q & A**

11:40 a.m. **Current & Emerging Trends in Endoscopic Spine Surgery**
Christoph Hofstetter, M.D., Ph.D.
Objectives:
- *Describe the current emerging trends in endoscopic spine surgery*
- *Outline the current indication for utilizing endoscopy in the spine*
- *Predict emerging trends in endoscopic spinal surgery*

11:55 a.m. **Q & A**

12 p.m. ***End of CME Accredited Content***

12 p.m. **Lunch Break & Exhibits**

12:30 p.m. **Paradigm Shift In Spinal Oncology: Carbon Implants & Intraoperative Radiotherapy** *(virtual)*

	Ehab Shiban, Ph.D., Dr. med.
12:50 p.m.	**Q & A**
12:55 p.m.	**<u>Live Demonstration Broadcast from BioSkills Lab No. 4</u>** **FLASH Navigation with 7D Technology** *Beau Standish, Ph.D. & Jeff Larson, M.D.*
1:20 p.m.	Q & A
1:25 p.m.	**The Brainlab Robotic Suite** *(virtual)* *Praveen Mummaneni, M.D., M.B.A.*
1:40 p.m.	**Q & A**
1:45 p.m.	**Technology Lab Interviews** *Doniel Drazin, M.D.*
2 p.m.	**Hands-on Technology Showcase** *All Faculty* Practice the following procedures/techniques: • Robotic-assisted spine surgery: Medtronic & Globus • Mobile robotic imaging: Brainlab • Image-guided open navigation platform: 7D/SeaSpine • Clarity through advanced imaging and intraoperative guidance systems: Stryker
3 p.m.	**Adjourn**

Acknowledgements

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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/Robotics-2022

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

Accreditation
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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, in the last 24 months, have/had a financial relationship with a commercial interest:
(S = Speaker; P = Planner)

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

Chester Donnally, M.D. (S): Consultant: NuVasive

Christoph Hofstetter, M.D., Ph.D. (S): Consultant: J&J, Globus, Innovasis, Joimax

J. Patrick Johnson, M.D. (S, P): Research: Medtronic

Terrence Kim, M.D. (S): Consultant: Medtronic

Isador Lieberman, M.D., M.B.A. (S, P): Consultant: Globus Medical, Bioventus, Inc., Ecentinal Robotics, SI-Bone, Safe Orthopaedics, Inc., Assure Neuromonitoring; Royalties: Safe Orthopaedics Inc.; Ownership: AGADA Medical

Andrew Manista, M.D. (S): Teaching: Globus, SI Bone

Praveen Mummaneni, M.D. (S): Consultant: DePuy, Globus Medical, NuVasive, Stryker; Honoraria: Brainlab; Stocks: Spinicity, ISD; Research: ISSF, AO

Martin Pham, M.D. (S): Consultant: Medtronic, Thompson Surgical

Timur Urakov, M.D. (S): Speaker: Globus Medical; Consultant: Pantheon Spinal

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

Doniel Drazin, M.D. (S); **Ehab Shiban, M.D.** (S); **Jonathan Plümer, 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.