



**14th Annual
Multimodal Treatment of Spinal
Tumors Course**

Saturday, March 16, 2024

Syllabus

DISTINGUISHED FACULTY

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Swedish Neuroscience Institute
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New York City, New York

Surgical Demonstrations Supported by Swedish Neuroscience Institute Spine Fellows

Bryan Anderson, D.O., Donald Davis III, M.D., Neel Patel, M.D.

AGENDA

7 a.m. Registration & Breakfast

7:30 a.m. Welcome and Course Introduction

Jens R. Chapman, M.D. and Ehud Mendel, M.D., M.B.A.

SESSION 1: METASTATIC TUMORS

Moderated by: Ehud Mendel, M.D., M.B.A.

7:35 a.m. Surgical & Non-Surgical Options for Patients with Spinal Metastases

Ehud Mendel, M.D., M.B.A.

Objectives:

- Identify the thought process for surgical vs. nonsurgical options for patients with spinal metastases
- Outline surgical options for treatment of spinal metastases

7:50 a.m. Live Demonstration Broadcast from BioSkills Lab No. 1

Lumbar Pedicle Screw Fixation

Amir Abdul-Jabbar, M.D. & Bryan Anderson, D.O.

Objectives:

- Illustrate the surgical technique
- Identify complications and mitigation strategies

8:30 a.m. Building a Spinal Radiosurgery Program & Radio surgical Management of Spinal Metastasis

Yi An, M.D.

Objectives:

- Define the role of the radiation oncologist in specialty care coordination for patients with spinal metastasis
- Describe the approach to determination of primary cancer in spinal metastasis patients
- Outline the concepts of targeted medical therapy of spinal metastasis

8:55 a.m. Complications Avoidance & Management in Patients with Spine Tumors

Professor Dr. Bernhard Meyer

Objectives:

- Comprehend the spectrum of complications
- Evaluate strategies for complication avoidance and management

9:10 a.m. Surgical Management of Spine Metastases with Carbon Fiber Implants

Miki Katzir, M.D.

Objectives:

- Describe the use of screw-rod systems and distractible cages in the treatment of primary and secondary spine tumors
- Explain the limitations of carbon fiber implants

9:25 a.m. Survivorship Prediction in Metastatic Spine Disease: A Spine Surgeon's Perspective

Michael Galgano, M.D.

Objectives:

- Identify the many scoring algorithms that exist for survivorship prediction
- Explain how many scoring systems are becoming obsolete with evolving systemic therapies
- Describe the shift towards examining body composition metrics to predict survival more accurately

9:40 a.m. Break & Exhibits *(not for CME credit)*

9:55 a.m. [Live Demonstration Broadcast from BioSkills Lab No. 2](#)

[Cement Augmentation and Ablation for Spinal Tumors \(Kyphoplasty vs. Vertebroplasty\)](#)

Amir Abdul-Jabbar, M.D. & Bryan Anderson, D.O.

Objectives:

- Compare and contrast when one should perform a vertebroplasty or a kyphoplasty
- Outline the different types of cement to be used in both a kyphoplasty and vertebroplasty

10:30 a.m. SINS (Spinal Instability Neoplastic Score) 2024

Wende Gibbs, M.D.

Objectives:

- Describe the diagnosis and triage process for SINS
- Outline how to communicate and report SINS
- Highlight important aspects of treatment planning based on SINS

10:45 a.m. Session 1 Q&A

[SESSION 2: PRIMARY BONE TUMORS](#)

Moderated by: Ehud Mendel, M.D., M.B.A.

11 a.m. Strategies for Primary Tumors: 'One Trick Pony' En Bloc vs. Rational Integration of Effective Radiation

Mark H. Bilsky, M.D.

Objectives:

- Summarize the rationale for urgent surgical decompression in patients with myelopathy or cauda equina syndrome in the setting of an unknown primary
- Describe the rationale for urgent surgery even for radio/chemosensitive tumors such as myeloma and lymphoma
- Outline the rationale for urgent surgery even for primary bone tumors

11:15 a.m. Primary Spinal Column Tumors

Ziya Gokaslan, M.D.

Objectives:

- Recognize the difference in management between metastatic and primary tumors of the spine
- Describe the role of en bloc resection in the management of primary bone tumors

11:30 a.m. Break & Pick Up Lunch (not for CME credit)

**11:45 a.m. [Live Demonstration Broadcast from BioSkills Lab No. 3](#)
Lumbar Spinal Reconstruction with Radiolucent, Artifact Reducing Carbon/PEEK Implants**

Jens Chapman, M.D. & Neel Patel, M.D.

Objectives:

- Outline intraoperative handling of Carbon/PEEK implants
- Describe considerations of material choice and implant positioning for adjuvant radiation therapy
- List the open stabilization techniques for spinal tumors and metastasis

SESSION 3: OTHER TOPICS

Moderated by: Jens R. Chapman, M.D.

12:25 p.m. Minimally Invasive Spine Surgery in Patients with Spine Tumors

Rod Oskouian, MD

Objectives:

- Master the principles and techniques of minimally invasive spine surgery (MISS)
- Integrate multidisciplinary approaches for optimal patient care

12:40 p.m. Deformity Correction in the Set-Up of Spine Tumors

Luis Kolb, M.D.

Objectives:

- Identify common spinal deformities associated with tumor
- Outline treatment strategies for spinal tumors

12:55 p.m. Surgery for Intradural Spine Tumors

Paul C. McCormick, M.D.

Objectives:

- Outline surgical techniques for removal of spinal cord tumors
- Explain the steps in diagnosing spinal cord tumors
- Describe the surgical anatomy of the spinal cord

1:05 p.m. Break & Exhibits *(not for CME credit)*

**1:15 p.m. Live Demonstration Broadcast from BioSkills Lab No. 4
Laminectomy Techniques and Principles with Multi-Rod Constructs in Spinal Reconstruction**

Jens Chapman, M.D. & Neel Patel, M.D.

Objectives:

- Describe techniques to effectively decompress posterior thoracolumbar spine
- Outline the indications for multi-rod constructs
- Describe strategies to effectively create multi-rod constructs

1:55 p.m. New Technologies in Spine Tumor Surgery - Navigation & Robotics

Ori Barzilai, M.D.

Objectives:

- Evaluate the role of navigation and robotics in spine tumor surgery
- Implement navigation and robotics techniques

2:10 p.m. Session 3 Q&A

2:30 p.m. Break & Exhibits *(not for CME credit)*

**2:45 p.m. Live Demonstration Broadcast from BioSkills Lab No. 5
Percutaneous Spinal Fixation with Fenestrated Screws with Cement**

Anu Amin, M.D. & Bryan Anderson, D.O.

Objectives:

- Summarize how to increase pull-out strength of screw with cement
- Outline potential complications of hardware failure
- Discuss increasing fixation options for tumor reconstruction

3:25 p.m. Interactive Roundtable Case Presentations

All Faculty

Moderators: Anu Amin, M.D., Amir Abdul-Jabbar, M.D., Rod Oskouian, M.D., Jens R. Chapman, M.D., & Ehud Mendel, M.D., M.B.A. – come up with cases to show

Objectives:

- Describe the multi-disciplinary therapy concept for spinal tumors and metastases
- Outline the diametric impact of implant material (Carbon/PEEK vs. Titanium)
- Explain how material choice impacts radiotherapy options and treatment safety

3:55 p.m. Course Wrap-Up

4 p.m. Adjourn

Acknowledgments

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Educational Grant

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Exhibit Support

Carbofix
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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/SpinalT2024>

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

Accreditation

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AMA PRA Category 1 Credits™

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Non-Physician Attendance

Certificate of participation will be provided to other healthcare professionals requesting credits. Participants should ensure in advance that their credentialing or licensing organization accepts AMA PRA Category 1 Credits™.

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: 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 past 24 months, have/had a financial relationship with a commercial interest: (*S = Speaker; P = Planner*)

Anu Amin, M.D. (S): Consultant: Icotec

Mark Bilsky, M.D. (S): Royalties: Globus Medical, DePuy Synthes; Speaker: Brainlab

Jens R. Chapman, M.D. (S, P): Advisor: Globus Medical; Grant/Research: DePuy Synthes, Medtronic, SeaSpine (relationship has ended)

Michael Galgano, M.D. (S): Consultant: Medtronic

Ziya Gokaslan, M.D. (S): Research Support: AO Spine Knowledge Forum; Shareholder: Lenoss stock options, Magpie, Smoltap; Honoraria: AO Foundation, AO Spine Tumor Knowledge Forum; Board Memberships: JNS, Journal of Spinal Disorders, European Spine Journal, World Neurosurgery, Journal of Spinal Oncology; Advisory Board: Proprio; Meeting Expenses: AO Spine, Proprio

Miki Katzir, M.D. (S): Advisor: Carbofix; Grant/Research: Carbofix

Bernhard Meyer, M.D., Ph.D. (S): Consultant: Icotec, Brainlab, Zeiss; Grant/Research: Zeiss, Brainlab, Ulrich; Stocks: Medacta

Rod J. Oskouian, Jr., M.D. (S, P): Consultant: Alphatec Spine, Globus Medical, SeaSpine, Stryker, Spineart, Medtronic, DePuy (relationship has ended), Blue Ocean (relationship has ended); Royalties: Stryker, Globus Medical

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

Amir Abdul-Jabbar, M.D. (S); **Yi An, M.D.** (S); **Ori Barzilai, M.D.** (S); **Wende Gibbs, M.D.** (S); **Luis Kolb, M.D.** (S); **Paul McCormick, M.D., MPH** (S); **Ehud Mendel, M.D., MBA** (S,P); **Clifford Pierre, M.D.** (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