

13th Annual Multimodal Treatment of Spinal Tumors
Saturday, May 20, 2023
at the Seattle Science Foundation

AGENDA

7 a.m. Registration & Breakfast

7:30 a.m. Welcome and Course Introduction

Jens R. Chapman, M.D., Rod J. Oskouian, Jr., 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 Management of Spinal Metastases (virtual)

Ilya Laufer, M.D.

Objectives:

- Identify indications for surgery and stereotactic body radiotherapy
- Outline surgical options for treatment of spinal metastases

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

Percutaneous Spinal Fixation with Fenestrated Screws with Cement

Amir Abdul-Jabbar, M.D.

Moderator: Jens R. Chapman, M.D.

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

8:30 a.m. Radiotherapy Options for Patients With Primary Tumors (virtual)

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

8:45 a.m. Radiosurgical Management of Spinal Metastasis (virtual)

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

9 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 2**
Cement Augmentation and Ablation for Spinal Tumors (Kyphoplasty vs. Vertebroplasty)
Glen David, M.D. & Gavin Nixon, M.D.
Moderator: Amir Abdul-Jabbar, M.D.
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

9:40 a.m. **Surgical Management of Spine Tumors with Radiolucent Implants (virtual)**
Bernhard Meyer, M.D., Ph.D.
Objectives:

- Outline surgical concepts within spinal oncology
- Describe the use of screw-rod systems and distractable cages in the treatment of primary and secondary spine tumors
- Explain the limitations of radiolucent implants

9:55 a.m. **Survivorship Prediction in Metastatic Tumor Disease (virtual)**
Michael Galgano, M.D.
Objectives:

- TBD

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

10:30 a.m. **Break & Exhibits (not for CME credit)**

SESSION 2: PRIMARY BONE TUMORS

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

10:40 a.m. **Surgical Management of Primary Malignant Bone Tumors (virtual)**
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 a.m. **Surgical Management of Lumbosacral Primary Bone Tumors (virtual)**
Ehud Mendel, M.D., M.B.A.
Objectives:

- Identify current diagnosis and treatment of sacral tumors
- Illustrate indications for operative & non-operative treatment of primary sacral tumors

11:25 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 3**
Spinal Reconstruction with Radiolucent, Artifact Reducing Carbon/PEEK Implants
Amanda Sacino, M.D., Ph.D. & Gregory Cannarsa, M.D.
Moderator: Michael Galgano, M.D.
Objectives:

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

12:10 p.m. **Lunch Break & Exhibits (not for CME credit)**

- 12:40 p.m. Interactive Roundtable Discussion**
The Role of Carbon Fiber Implants in The Management of Spine Tumors
All Faculty & Featured Panelists: John J. Kresl, M.D., Ph.D. and Joshua D. Palmer, M.D.
Moderators: Jens R. Chapman, M.D., Michael Galgano, M.D., & Ehud Mendel, M.D., M.B.A.
Objectives:
- Describe the multidisciplinary therapy concept for spinal tumors and metastases
 - Outline the dosimetric impact of implant material (Carbon/PEEK vs. Titanium)
 - Explain how material choice impacts radiotherapy options and treatment safety

SESSION 3: OTHER TOPICS

Moderated by: Rod J. Oskouian Jr., M.D.

- 1:10 p.m. **Complication Avoidance in Spine Tumor Surgery** (virtual)**
Maxwell Laurans M.D., M.B.A.
Objectives:
- Appreciate that a detailed surgical plan is critical to avoiding complications
 - Describe how an interdisciplinary approach can minimize additional risks
 - Summarize how relying on patterns and processes effectively minimizes unintended errors

- 1:25 p.m. Live Demonstration Broadcast from BioSkills Lab No. 4**
Laminectomy Techniques and Principles with Multi-Rod Constructs in Spinal Reconstruction
Jens R. Chapman, M.D.
Moderator: Amir Abdul-Jabbar, M.D.
Objectives:
- Describe techniques to effectively decompress posterior thoracolumbar spine
 - Outline the indications for mutli-rod constructs
 - Describe strategies to effectively create mutli-rod constructs

- 2:05 p.m. **Deformity Correction in the Set-Up of Spine Tumors** (virtual)**
Luis Kolb, M.D.
Objectives:
- Identify common spinal deformities associated with tumor
 - Outline treatment strategies for spinal tumors

- 2:20 p.m. **Surgery for Intradural Tumors** (virtual)**
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

- 2:35 p.m. **New Technologies - Augmented Reality and Robotics****
Amanda Sacino, M.D., Ph.D.
Objectives:
- Recognize the challenges of arthrodesis and reconstruction after resection of primary spinal tumors
 - Evaluate the feasibility and applicability of augmented reality in spine tumor surgery
 - Highlight the advantages of augmented reality-based computer navigation in surgery planning and execution

- 2:55 p.m. **SINS (Spinal Instability Neoplastic Score) 2023** (virtual)**
Wende Gibbs, M.D.
Objectives:

- TBD

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

3:35 p.m. Break & Exhibits (*not for CME credit*)

3:50 p.m. Live Demonstration Broadcast from BioSkills Lab No. 5 (*pre-recorded*)

Novel Approaches for the Treatment of Spine Fractures

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

Objectives:

- Outline the height restoration technique
- Compare the bilateral vs. unilateral approach
- Compare & contrast the following techniques: kyphoplasty, vertebroplasty, intervertebral fraction reduction, and fixation

4:20 p.m. Course Wrap-Up

4:30 p.m. Adjourn

DISTINGUISHED FACULTY

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Complex Spine Surgeon
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Faculty are virtual unless designated ()*

Surgical Demonstrations Supported by Swedish Neuroscience Institute Spine Fellows
Mauricio Avila, M.D., Jared Cooke, D.O., Gregory Cannarsa, M.D., James Hicks, M.D., Gavin Nixon, M.D.,
Abe Schlauderaff, M.D., & Chris Seidel, D.O.