

12th Annual Multimodal Treatment of Spinal Tumors
Saturday, May 21, 2022
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

7:35 a.m. **Surgical Management of Spinal Metastasis** *(virtual)*
Ilya Laufer, M.D.
Objectives:

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

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

8 a.m. **Live Demonstration Broadcast from BioSkills Lab No. 1**
Percutaneous Spinal Fixation with Fenestrated Screws with Cement
Rod J. Oskouian, Jr., 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

8:45 a.m. **The Management of Acute Symptomatic Spinal Compression from Unknown Primary: Emergency Surgery or Biopsy and Wait?** *(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

9:05 a.m. **Q&A**

9:10 a.m. **What's New in Radiosurgery for Spine Tumors?** *(virtual)*
Yoshiya (Josh) Yamada, M.D.
Objectives:

- TBD

9:30 a.m. **Q&A**

9:35 a.m. **Break & Exhibits** *(not for CME credit)*

- 9:45 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

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

10:10 a.m. **Vertebroplasty/Kyphoplasty/Ablation Indications for Patients with Spine Tumors**
Amir Abdul-Jabbar, M.D.

- Objectives:**
- Describe the indications for spine radiosurgery vs. conventional radiation treatments
 - Outline the side effects of radiation and how they affect our patients

10:25 a.m. **Q&A**

10:30 a.m. **[Live Demonstration Broadcast from BioSkills Lab No. 2](#)**
[Ablation for Spinal Tumors \(Kyphoplasty vs. Vertebroplasty\)](#)

- Glen David, 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

SESSION 2: PRIMARY BONE TUMORS

- 11 a.m. **Surgical Management of Primary Malignant Bone Tumors** *(virtual)*
Laurence D. Rhines, 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

11:20 a.m. **Q&A**

11:25 a.m. **Interdisciplinary Considerations in Multitmodal Spinal Tumor Treatment**
Alekos Theologis, M.D. & Steve Braunstein, M.D., Ph.D.

- Objectives:**
- Describe the UCSF multidisciplinary therapy concept for spinal tumors and metastasis
 - Outline the dosimetric impact of implant material (Carbon/PEEK vs. Titanium)
 - Explain how surgeon decisions can unlock radiotherapeutic therapy options

11:40 a.m. **Q&A**

11:45 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

12:05 p.m. **Q&A**

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

- 12:20 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 3** *(working lunch)*
Spinal Reconstruction with Radiolucent, Artifact Reducing Carbon/PEEK Implants
Alekos Theologis, 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

SESSION 3: OTHER TOPICS

- 12:50 p.m. **Surgeon as CEO of the Operating Room: 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 pattern and processes effectively minimizes unintended errors

1:10 p.m. **Q&A**

- 1:15p.m. **How to Determine Stability in Spinal Tumors?** *(virtual)*
Daniel Sciubba, M.D., M.B.A.
Objectives:
- Identify factors associated with spinal instability from tumors
 - Share case examples of instability
 - Integrate principles of tumor instability into practice

1:35 p.m. **Q&A**

- 1:40 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 4**
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; SpineJack

- 2:10 p.m. **Deformity Correction in the Set-Up of Spine Tumors** *(virtual)*
Luis Kolb, M.D.
Objectives:
- TBD

2:30 p.m. **Q&A**

2:35 p.m. **Break & Exhibits** *(not for CME credit)*

- 2:45 p.m. **Live Demonstration Broadcast from BioSkills Lab No. 5**
Laminectomy Techniques and Principles with Multi-Rod Constructs in Spinal Reconstruction
Jens R. Chapman, M.D.
Objectives:
- TBD

- 3:30 p.m. New Technologies in Spine Tumor Surgery (virtual)**
John E. Shin, M.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
- 3:50 p.m. Q&A**
- 3:55 p.m. Spinal Cord Tumors: Surgery for Intradural Tumors (virtual)**
Ian E. McCutcheon, M.D.
Objectives:
- Outline surgical techniques for removal of spinal cord tumors
 - Explain the steps in diagnosing spinal cord tumors
 - Summarize the surgical anatomy of the spinal cord
- 4:15 p.m. Q&A**
- 4:20 p.m. Spine Tumors Case Presentations (virtual)**
Michael Galgano, M.D.
Objectives:
- Describe the differential diagnosis of both vertebral column and intradural spinal tumors
 - Appreciate the technical nuances in the surgical management of spinal tumors
- 4:40 p.m. Q&A**
- 4:45 p.m. Bone Fusion for Metastatic Disease: When Is It Needed & How Do You Get It?**
Robert Hart, M.D.
Objectives:
- Outline the impact of projected life expectancy on the need for solid bone fusion in metastatic spinal disease
 - Describe the options for bone graft and biologics in the setting of metastatic spinal disease
- 5:05 p.m. Q&A**
- 5:10 p.m. Course Wrap Up**
- 5:15 p.m. Adjourn**

DISTINGUISHED FACULTY

Jens R. Chapman, M.D.
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Surgical Demonstrations Supported by Swedish Neuroscience Institute Spine Fellows