



**14<sup>th</sup> Annual Multimodal Treatment of Spinal Tumors**  
**Hybrid Course**  
**Saturday, March 16, 2024**  
at the Seattle Science Foundation

**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.*

**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**

## **DISTINGUISHED FACULTY**

**Jens R. Chapman, M.D.**

**Course Co-Chair**

Complex Spine Surgeon  
Swedish Neuroscience Institute  
Seattle, Washington

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

**Course Co-Chair**

Nixdorff-German Professor of Neurosurgery  
Executive Vice-Chair & Professor, Neurosurgery  
Director of Spine & Spine Oncology Program  
Yale School of Medicine & Simlow Cancer Hospital  
New Haven, Connecticut

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

**Course Co-Chair**

Chief of Spine  
Director, Spine Fellowship Program  
Swedish Neuroscience Institute  
Seattle, Washington

**Amir Abdul-Jabbar, M.D.**

Orthopaedic Surgeon  
Swedish Neuroscience Institute  
Seattle, Washington

**Anu Amin, M.D.**

Assistant Professor of Neurological Surgery  
University of Washington  
Seattle, Washington

**Yi An, M.D.**

Assistant Professor, Radiation Oncology  
Chief, Spine & Genitourinary Radiotherapy Program  
Yale School of Medicine  
New Haven, Connecticut

**Ori Barzilai, M.D.**

Spine Neurosurgeon  
Memorial Sloan Kettering Cancer Center  
New York, New York

**Mark H. Bilsky, M.D.**

William E. Snee Endowed Chair  
Vice Chairman of Clinical Affairs, Neurosurgery  
Memorial Sloan Kettering Cancer Center  
New York, New York

**Michael Galgano, M.D.**

Vice Chair, Chief Quality Officer, Assistant Professor  
UNC Department of Neurosurgery  
Chapel Hill, North Carolina

**Wende Gibbs, M.D.**

Director of Spine Imaging & Intervention, Neuroradiologist  
Barrow Neurological Institute  
Phoenix, Arizona

**Ziya L. Gokaslan, M.D.**

Julius Stoll MD Professor and Chair, Department of  
Neurosurgery; Director of the Complex Spinal Surgery  
Fellowship at The Warren Alpert Medical School of Brown  
University  
Providence, Rhode Island

**Miki Katzir, M.D.**

Assistant Professor Neurosurgery, Director of Surgical  
Spine Oncology  
Nebraska Medicine, Fred & Pamela Buffett Cancer Center  
Omaha, Nebraska

**Luis Kolb, M.D.**

Assistant Professor of Clinical Neurosurgery  
Yale School of Medicine  
New Haven, Connecticut

**Professor, Dr. Bernhard Meyer**

Professor of Neurosurgery  
TUM School of Medicine  
Munich, Germany

**Paul C. McCormick, M.D.**

Herbert & Linda Gallen Professor of Neurological Surgery  
Spine Center Director  
Columbia University Irving Medical Center  
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.