AGENDA

7 a.m.  Registration & Breakfast

7:25 a.m.  Welcome and Course Introduction
Jens R. Chapman, M.D. and Ehud Mendel, M.D., M.B.A.

7:30 a.m.  Keynote Speaker
Novel Implant Technologies for Spine Oncology & Reconstruction Surgery
Bernhard Meyer M.D., Ph.D.
Objectives:
• Outline the various implant technologies for spine oncology
• Summarize how the new technology applies to reconstruction surgery

8 a.m.  Live Demonstration Broadcast from BioSkills Lab No. 1 (not for CME credit)
Basic Principles of En Bloc Sacral Resection
Ehud Mendel, M.D., M.B.A., and Ryan Goodmanson, M.D.

8:40 a.m.  A Systems Approach to Coordinated Care of Spinal Metastasis
John W. Henson, M.D.
Objectives:
• Define the role of the neuro-oncologist in specialty care coordination for patient 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.  What Type of Fusion Material to use for Cancer Patients: What Is the State of the Data?
Jens R. Chapman, M.D.
Objectives:
• Outline special circumstances and needs of spine oncology patients
• Identify the differences of biologic and xenograft options
• Describe the durability of constructs relative to host circumstances

9:20 a.m.  Break & Exhibits

9:35 a.m.  Live Demonstration Broadcast from BioSkills Lab No. 2 (not for CME credit)
Posterior Lateral for Thoracic Corpectomy for Primary Spine Tumor
Jens R. Chapman, M.D., & Sven Frieler, M.D.

10:15 a.m.  Surgery for Intradural Tumors: Diagnostic & Surgical Aspects
David W. Newell, M.D.
Objectives:
• Outline surgical techniques for removal of intradural tumors
• Explain the steps in diagnosing intradural tumors
• Summarize the surgical anatomy of the spinal cord

10:35 a.m.  Surgical Treatment of Sacral Tumors
Ehud Mendel, M.D., M.B.A.
Objectives:
• Recognize when and when not to perform a sacrectomy
• Identify potential complications of a sacrectomy

11:05 a.m.  Break & Exhibits
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 11:20 a.m.  | **Live Demonstration Broadcast from BioSkills Lab No. 3** (not for CME credit)  
**Spinal Reconstruction Using Novel Biomaterials**  
*Bernhard Meyer, M.D., Ph.D., & Lincoln Jimenez, M.D.* |
| 12 p.m.     | **Break and Pick Up Lunch**                                           |
| 12:15 p.m.  | **Embolization of Spine Tumors** (working lunch)  
*Zane Tymchak, M.D.*  
**Objectives:**  
- Describe different techniques  
- Compare and contrast when to use glue and when to use coils |
| 12:35 p.m.  | **Kyphoplasty vs. Vertebroplasty**  
*Rod Oskouian, Jr, 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 |
| 12:55 p.m.  | **Multi-Rod Constructs (MRC) in Spinal Reconstruction**  
*Amir Abdul-Jabbar, M.D.*  
**Objectives:**  
- Outline the concepts of MRC  
- Describe emerging techniques and their application to tumor surgery |
| 1:15 p.m.   | **Live Demonstration Broadcast from BioSkills Lab No. 4** (not for CME credit)  
**Kyphoplasty Pearls of the Thoracic Spine**  
*Rod Oskouian, Jr., M.D., and Erik Hayman, M.D.* |
| 2 p.m.      | **Break & Exhibits**                                                  |
| 2:15 p.m.   | **Live Demonstration Broadcast from BioSkills Lab No. 5** (not for CME credit)  
**Reducing Complications in Hardware Failure (Fenestrated Screws with Cement)**  
*Rod J. Oskouian, Jr., M.D. and Benjamin Schell, M.D.* |
| 2:55 p.m.   | **Spinal Tumor Instability Evaluation & Stabilization**  
*Ehud Mendel, M.D., M.B.A.*  
**Objectives:**  
- Outline the basics of spine instability  
- Explain the spinal instability neoplastic score algorithm |
| 3:15 p.m.   | **Quality of Life in Patients with Spine Tumors and Use of the SINS Score**  
*Noojan Kazemi, M.D.*  
**Objectives:**  
- Describe how to assess quality of life in patients with spine tumors  
- Explain whether surgical treatment increases quality of life in spine tumor patients and what are the factors impacting quality of life  
- Summarize the cost-effectiveness of oncologic spine surgery |
| 3:35 p.m.   | **Break & Exhibits**                                                  |
| 3:50 p.m.   | **Live Demonstration Broadcast from BioSkills Lab No. 6** (not for CME credit)  
**Percutaneous Spinal Fixation with Corpectomy**  
*Noojan Kazemi, M.D., & Bilal Quitteineh, M.D.* |
4:30 p.m.  Tumor Board: Spinal Metasteses Indication for Surgery  
Moderator: Jens R. Chapman, M.D.  
Panel: Ehud Mendel, M.D., M.B.A; Amir Abdul-Jabbar, M.D.; John W. Henson, M.D., and Bernhard Meyer, M.D., Ph.D.  
Objectives:  
• Evaluate challenging spine tumor cases including complications and subsequent next steps  
• Describe the anatomic challenges of spine tumors

5:15 p.m.  Panel Discussion: Setting Up a Multidisciplinary Oncology Program  
Moderator: Ehud Mendel, M.D., M.B.A.  
Panel: John W. Henson, M.D., Bernhard Meyer, M.D., Ph.D.  
Objectives:  
• Outline the benefits of a multidisciplinary oncology program and its beneficial impact on patient care  
• Describe how to operationalize a multidisciplinary oncology program  
• Summarize the role of “evidence-based” vs. “eminence-based” oncologic care

6 p.m.  Adjourn
ESTEEMED 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
Professor of Neurosurgery, Oncology & Orthopaedics
Director, Spine Program
The Ohio State University
Columbus, Ohio

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

John W. Henson, M.D.
Neuro-oncologist
Ben & Catherine Ivy Center
Seattle, Washington

Noojan Kazemi, M.D., FACS, FRACS
Associate Professor
University of Arkansas
Little Rock, Arkansas

Bernhard Meyer, M.D., Ph.D.
Professor of Neurosurgery
TUM School of Medicine
Munich, Germany

David W. Newell, M.D.
Neurosurgeon
Seattle Neuroscience Institute
Seattle, Washington

Sven Frieler, M.D.
Clinical Research Fellow
Swedish Neuroscience Institute
Seattle, Washington

Ryan Goodmanson, M.D.
Neurosurgery Fellow
Swedish Neuroscience Institute
Seattle, Washington

Erik Hayman, M.D.
Neurosurgery Fellow
Swedish Neuroscience Institute
Seattle, Washington

Bilal Qutteineh, M.D.
Neurosurgery Fellow
Swedish Neuroscience Institute
Seattle, Washington

Ben Schell, M.D.
Neurosurgery Fellow
Swedish Neuroscience Institute
Seattle, Washington

Lincoln Jimenez, M.D.
Neurosurgery Fellow
Swedish Neuroscience Institute
Seattle, Washington