

## CURRICULUM VITAE

### The James



**NAME:** Ehud Mendel, M.D., MBA., F.A.C.S.

**PRESENT AFFILIATION:** Professor of Neurosurgery, Oncology, Orthopedics and Systems Integrated Engineering (Tenured)  
President-The Ohio State Neurosurgical Society  
Justine Skestos Endowed Chair  
Department of Neurosurgery  
Vice Chair - Academic/Faculty Affairs  
Clinical Director -The OSU Spine Research Institute (SRI)  
Director-OSU Neurosurgical Spine program  
Director-The James Cancer Hospital Spine oncology program  
Director-Complex/Oncological Spine Fellowship program  
The Ohio State University Medical Center  
Arthur G. James Cancer Hospital/  
Richard J. Solove Research Institute  
Columbus, Ohio

**CITIZENSHIP:** United States

**HOME ADDRESS:** 13 Lyonsgate  
Columbus, OH 43209

**OFFICE ADDRESS:** Department of Neurological Surgery  
The Ohio State University Medical Center  
and the James Cancer Hospital  
N1037 Doan Hall  
410 West Tenth Avenue

Columbus, Ohio 43210  
Email: [ehud.mendel@osumc.edu](mailto:ehud.mendel@osumc.edu)

**EDUCATION:**

2017	MBA	Max M. Fisher College of Business The Ohio State University Columbus, Ohio
2011 – 2013		OSU Talent Management and Leadership Development Academy (TAMELDA) – Graduated selected Surgeon The Ohio State University Columbus, Ohio
1991	M.D.	Louisiana State University School of Medicine Neuroscience Center for Excellence Honors Program Graduate New Orleans, Louisiana
1986	B.S.	Nicholls State University Chemistry Major <i>Summa Cum Laude</i> Hall of Fame Thibodaux, Louisiana

**Postgraduate Training:**

1997-1998	Clinical Instructor, Department of Neurological Surgery University of Southern California (USC)-Los Angeles County (LAC) Medical Center Los Angeles, California Chairman: Martin Weiss, M.D. Vice Chairman: Michael Apuzzo M.D.
1996-1997	Fellow, Reconstructive Spinal Surgery-Combined Neuro/Ortho Department of Neurological Surgery and Orthopedic Surgery University of Florida, Gainesville Directors: Richard Fessler, M.D. (Neurosurgery) and Michael McMillan, M.D. (Orthopedics)
1992-1997	Resident, Department of Neurological Surgery

USC-LAC Medical Center, Los Angeles, California  
Chairman: Martin Weiss, M.D.  
Vice Chairman: Michael Apuzzo, M.D.  
1991-1992 Intern, General Surgery  
University of Southern California (USC)-Los Angeles County (LAC)  
Medical Center, Los Angeles, California

**CREDENTIALS:**

**Board Certifications:**

May 12, 2010 Re-Certified, American Board of Neurological Surgeons,  
Via MOC (Maintenance of Certification)

April 27, 2004 Fellow, American College of Surgeons (F.A.C.S.) 03087704  
Fellow, American College of Neurological Surgeons

May 2002 American Board of Neurological Surgeons

**Licensures:**

1992 Diplomat, National Board of Medical Examiners of the United States of America  
Certificate #385346

**Active:**

Ohio	35.088262	07/18/2006 - Current
Texas	L5836	02/07/2003 - Current
South Carolina	022108	11/15/2002 - Current

**Inactive**

Illinois	36099094	09/23/1998 - 07/31/2002
Iowa	32449	08/13/1998 - 09/01/2002
California	G75761	02/21/1992 - 09/30/2000

**EXPERIENCE/SERVICE:**

**Academic Appointments:**

09/2006- Present Department of Neurological Surgery  
The Justine Skestos Endowed Chair  
Professor of Neurosurgery (Tenured)  
The Ohio State University / Wexner Medical Center  
Arthur G. James Cancer Hospital/ Richard J. Solove Research Institute  
Columbus, Ohio  
Department of Neurosurgery, Nationwide Children's Hospital  
Professor of Oncology, Division of Hematology/Oncology

Department of Internal Medicine  
Professor of Orthopedics, Department of Orthopedics  
Professor of Engineering, Department of Integrated Systems Engineering

8/2002- 8/2006 Associate Professor  
Department of Neurosurgery  
The University of Texas  
M. D. Anderson Cancer Center, Houston, Texas

07/2000- 07/2002 Assistant Professor  
Department of Neurosurgery  
Medical University of South Carolina,  
Charleston, South Carolina

1998-2000 Quad Cities Neurosurgical Associates

**Academic Administrative Appointments/Responsibilities:  
The Ohio State University:**

2010-Present Vice Chair-Department of Neurosurgery, Academic/Faculty Affairs  
2006-Present Clinical Director - The OSU Spine Research Institute (SRI)  
2017-2018 President- The Ohio State Neurosurgical Society  
2016-2017 Executive Committee- The Ohio State Neurological Institute; Brain and  
Spine Hospital; and, Spine Center.  
2016-2017 President Elect -The Ohio State Neurosurgical Society  
2006-Present Director, OSU Spine Program; and, Spinal Complex/Oncological Fellowship  
Program  
2006-Present Director - James Cancer Hospital Spine Oncology Program  
2006-Present Director – OSU/Neurosurgery Spinal Program  
2015-Present Director At Large - Ohio State Neurosurgical Society (OHSNS)  
2006-Present Chairman, Department of Neurological Surgery, Promotion and Tenure Committee  
2006-2011 Member, The OSU Promotion and Tenure Committee  
2013-Present Delegate to the Council of State Neurological Surgeons (CSNS)  
Representative of The Ohio State Neurosurgical Society (OHSNS)  
2008-Present The OSU Senate - Alternate Member  
2008-Present The OSU Faculty Council - Alternate Member  
2011-Present The James Cancer Center Clinical Chiefs Committee Member  
2013-Present FAME (Faculty Advancement Mentoring & Engagement) Leadership Committee  
2011-Present OSU/James Cancer Center - OR Committee  
2007-Present Creator and Moderator, Weekly Spine tumor Board, Department of Neurological  
Surgery, the James Cancer hospital  
2013-Present AO Spine International Knowledge Forum Spine Tumor (KFT), Associate Member  
2015 Journal of Neurosurgery, Neurosurgical Focus – Topic Editor Intradural Spinal  
Tumors: Neurosurgical Focus 39(2): El August 2015

2014-2015 Faculty Leadership Institute-Member  
2013-2015 OSU Grateful Patient Programs - Member  
2013-2015 OSU/James Cancer Center – Perioperative Services subcommittee  
2012-Present Master’s/PhD Examination Committee Member-Graduate Program in Industrial and Systems Engineering  
2011-Present OSU/James Cancer Center - Utilization Committee  
2010-Present OSU STAR (Stress and Resilience) – Advisory Board Member  
2010-Present The OSU Council of Faculty Affairs-member  
2010-2013 OSU Neurosciences Signature Program- Committee Member  
2009-Present Category M Status on the graduate faculty in Industrial and Systems Engineering-Master’s and doctoral examination committees  
2009 First Spine Oncology Update Symposium- OSU/James Cancer Center, Creator and Co-Chair.  
2008 First Annual Spine & Bone Tumor Symposium, Creator and Co-Chair  
2007-2013 Member, Quality Management Policy Group  
2007-2010 Member, Imaging Schematic Design Advisory Group for The OSU Medical Center Master Plan  
2007-2010 Member, Cancer Clinics Schematic Design Advisory Group for the OSU Medical Center Master Plan  
2007-2009 Member, Search Committee, Clinical Chief of Radiology Services  
2007 First Annual OSU/Case Western University Comprehensive Spine Symposium, Creator and Co-Chair  
2006-2013 Co-chair, Spine/Trauma Disease State Taskforce, Neurosciences Signature Program  
2006-Present Associate member, OSU Center for Brain and Spinal Cord Research  
2006-Present Member, Educational Committee, Department of Neurological Surgery  
2006-2010 Member, Critical Care Quality Management Committee (CQMC)  
2004-2015 Collaborator-Rice University, Houston Texas, Department of Bioengineering, Computational and Experimental Laboratory

**The University of Texas, M. D. Anderson Cancer Center, Houston, Texas:**

08/2002-08/2006 Co-Director, Spine Program  
03/2003-09/2005 Director of Education, Complex Spinal Surgery  
Co-Director, Stereotactic Radiosurgery to the Spine, bimonthly meeting with Radiation Oncology, Neurosurgery, and Pain Management  
Co-Director, Spinal Research, bimonthly meeting with faculty from Biomedical Engineering at Rice University and Pain Management, M. D. Anderson Cancer Center

**Medical University of South Carolina, Charleston, South Carolina:**

08/2000-07/2002 Director, Spine Center and Spine Program  
08/2000-07/2002 Physicians Clinical Director, Spine Center

**University of Southern California-Los Angeles County General Hospital, Los Angeles, California:**

07/1997-07/1998 Clinical Instructor

**Other Appointments/Responsibilities:**

1998-2000                      Attending Partner, Quad City Neurosurgical Associates, Davenport, Iowa

**Military or Other Governmental Service:**

1979-1983      Israeli Air Force

**HONORS AND AWARDS:**

**While at Ohio State University:**

2006-current      First recipient: The Justine Skestos Endowed Chair  
Spinal Neurological Surgery- 1.5 Million Dollars

2017                      OSU Faculty recognition and reception for acceptance into the Active Membership  
In the *American Academy of Neurological Surgery*.  
Host: OSU President, Dr. Drake

2015                      Election by peers to Active Membership to the *American Academy of Neurological  
Surgery*

2017                      OSU Medal reception for holding the *Justine Skestos chair in spine surgery*  
Host: OSU President, Dr. Drake

2016-2017              The Lawrence Mervis, MD Teacher of the year Award,  
The Ohio State University Wexner Medical Center.  
Department of Neurosurgery.

2006 - Present      "Best Doctors in America"

2013                      Graduate of The OSU Talent Management and Leadership Development  
Academy (18 Month Course given to selected "Future leaders at OSU")

2007-present      Selected to the American Association for the Advancement of Science (AAAS)

2016                      Paper selected for the front cover of *Journal of Neurosurgery* January 2016 Edition.  
"Retropharyngeal abscess with secondary osteomyelitis and epidural abscess:  
proposed pathophysiological mechanism of an under recognized complication of  
unstable craniocervical injuries: case report"

2014                      Paper selected for the front cover of *Journal of Neurosurgery* March 2014 Edition.  
Creation of false pedicles and a neo-pelvis for lumbopelvic reconstruction following  
en bloc resection of an iliosacral chondrosarcoma with lumbar spine extension.

- 2013 Paper selected for the front cover of *Journal of Neurosurgery* March 2013 Edition. Ectopic Extramedullary Hematopoiesis: Evaluation and Treatment of a Rare and Benign Paraspinal/Epidural Tumor.
- 2014- Present Recipient of \$300,000 from Tom Haven to support of the spine fellowship at The Ohio State University Wexner Medical Center.
- 2017 Recipient of \$3,060 from Gerald Todaro to support Dr. Mendel's Fellowship Fund at The Ohio State University Wexner Medical Center.
- 2016 Featured on the Ohio State Cancer Connection, *March 2016 Edition*.
- 2016 Recipient of \$3,000 from Gerald Todaro to support Dr. Mendel's Fellowship Fund at The Ohio State University Wexner Medical Center.
- 2014 - 2015 Voted "One of the Best 230 Spine Surgeons to Know" by *Becker's Orthopedic and Spine Review*
- 2009-Current Obtained accreditation to the first OSU Spine Fellowship by The Society of Neurosurgical Surgeons' Committee on Accreditation of Subspecialty Training (SNS/CAST)
- 2014 Keynote Speaker- Multimodality Treatment of Spinal Tumors  
Live demonstration broadcast- Cadaveric En Bloc Tumor Resection  
The John Jane jr, Neuroscience Lectureship series  
Seattle Science Foundation  
Seattle, Washington
- 2012-Present Selected as a member to the editorial board of the *Journal of Surgical Oncology*
- 2014 Honorary Chair: *The OSUMC Swing Classic Golf tournament*. All proceeds donated to Department of Neurosurgery with Recognition to Dr. Mendel's work, ~ \$50,000
- 2014 Recipient of \$1500 from Barbara Terzian and her husband Fred Gittes to Support Dr Mendel at The Ohio State University Wexner Medical Center
- 2013-2014 DePuy Synthes Spine Fellowship Support \$65,000
- 2013 Contribution from Mr. and Mrs. Thad Matta (OSU Head Basketball coach) to The Brain and Spine Center General support Fund at The Ohio State University Wexner Medical Center in honor of Dr. Mendel
- 2013 Recipient of proceeds from Marco Bicego event to support Dr Mendel at The Ohio State University Wexner Medical Center. Estimated \$100,000
- 2013 Recipient of \$2500 from George Barrett and his wife Debbie Neimeth to

Support Dr. Mendel at the Ohio State University Wexner Medical Center

- 2013 Paper presentation selected first place in the Ohio State Neurosurgical Society meeting. Mentor to Resident Ahmed Mohyeldin M.D., Ph.D. From Bone Cancers to Brain Cancers: Putting the brakes on Brachury
- 2012-2013 Synthes Spine Fellowship Support \$65,000
- 2012 Selected Surgeon Member of *The Association for Collaborative Spine Research*.
- 2012 Selected member of SpineNET Trauma and Tumor knowledge Forum
- 2012 Chosen as one of “America’s Top Surgeons”.
- 2012 Voted “One of the 200 Spine Surgeons & Specialists to Know” by *Becker’s Orthopedic and Spine Review*
- 2017 Voted “One of the 340 Spine Surgeons and Specialists to Know” by *Becker’s Orthopedic and Spine Review*
- 2011 Voted “One of the 100 Best Spine Surgeons and Specialists in America” *Becker’s Orthopedic and Spine Review*.
- 2011-2012 Synthes Spine Fellowship Support \$65,000
- 2011-2012 Number 1-Top Hottest Article/Most downloaded article of International Journal Of Radiation Oncology for 2011-Palliative Radiotherapy for Bone Metastases: An Astro Evidence-Based Guideline. International Journal of Radiation Oncology Biology, Physics, Volume 79, Issue 4, March 2011, pgs. 965-976
- 2011 Surgical illustration published in The Journal of Neurosurgery – August 2011, Volume 15 No.2 pgs. 168-173. Reconstruction of the Pelvis and Lumbar-Pelvic Junction using 2 vascularized Autologous bone grafts after en-bloc Resection for Iliosacral Chondrosarcoma. Won second place in a Johanna and Ralph Destefano Personalized Health Care Conference - “The future of P4 Medicine and Its Impact on Clinical Care”
- 2011 Voted “25 Great Physicians in Ohio” Becker’s Orthopedic and Spine Review
- 2010-2011 Neurosurgery Research and Education Foundation (NERF) Spine Fellowship Grant Award- \$75,000
- 2009-2013 Quinn Family Fund - Recipient of \$10,000 from the patient’s family for outstanding Patient care provided at OSU. An additional \$600,000 was received in 2012 from Mr. Quinn’s estate to be split between Dr. Mendel and Dr. Clinton.



- 2009-2011 Recipient of the AO Spinal Fellowship Grant Award \$150,000
- 2009 Identified by Vitals as one of “*America’s Leading Experts on Spine Cancer*”
- 2009 Top Surgeon in America®
- 2009 Who's Who among Executives and Professionals
- @008-2010 Who’s Who Among Executives and Professionals, "Honors Edition"
- 2008 Recipient Synthes Spine Fellowship support Award, \$75,000
- 2008 Chosen by the James Cancer Center as representative to meet with Lance Armstrong as part of *The Lance Armstrong Foundation* for the fight against cancer
- 2008 Honorary Chair: *The OSUMC Swing Classic Golf tournament*. All proceeds donated to Department of Neurosurgery with Recognition to Dr. Mendel’s work, ~\$90,000
- 2008 The Joint Spine Section-AANS/CNS *Cloward Fellowship Award* to Dr. Jeff Golan, OSU Spine Fellow, \$30,000-Mentor
- 2008 Recipient of the *2008 Columbus Business First’s Health Care Heroes Award*: Finalist and Honorable Mention for Innovator
- 2007-present Selected To *Spine Oncology Study Group (SOSG)* Group of national and international physicians responsible for the creation of guidelines for the management of spine tumors
- 2007-Current Best Doctors in Central Ohio
- 2007 Featured physician, Ohio State University Medical Center billboards in recognition of National Doctors’ Day
- 2007 Recipient, Synthes spine fellowship support Award, \$75,000
- 2006-2013 Obtain AO/Synthes, Depuy, Stryker academic Grants for OSU residents to participate in *Spine/hands-On* Courses
- 2006 Recipient, George Skestos Spine Fellowship donation, \$150,000
- 2005-2009 Who’s Who in America

**Gifts while at MD Anderson:**

2004 “Greenspun Fund for Neurosurgery Research” recipient, \$500,000 donation from a patient’s family for outstanding patient care provided at M. D. Anderson Cancer Center. The gift is shared by three physicians involved in the patient’s care and to be used for clinical research

**Other Awards:**

1997 *Alpha Omega Alpha* Medical Honor Society, University of Southern California

1991 *Honors Program* Graduate, Louisiana State University, School of Medicine, New Orleans, Louisiana

1987 *Hall of Fame*, Nicholls State University, Thibodaux, Louisiana

1986 *Summa cum laude* graduate, Nicholls State University, Thibodaux Louisiana

1986 *Phi Kappa Phi* Undergraduate Senior Honor Society

1986 Outstanding Young Men of America

1985, 1986 Who’s Who in American Universities/Colleges

1985, 1986 Dollars for Scholars Scholarship

1985 *Alpha Lambda Delta* Undergraduate Junior Honor Society

1985 James Lynn Powell Scholarship

1984-1986 National Dean’s List

1984 *Phi Eta Siga* Undergraduate Freshmen Honor Society

1984 Thibodaux Lions Club Scholarship

1983 Israeli Air Force Military Service Medal, Peace of Galilee/Lebanon War

**PROFESSIONAL MEMBERSHIPS/ACTIVITIES:**

**National and International:**

- 2015 Associate Member of the AO Spine International Knowledge Forum Tumor (KFT)
- 2012–present Member of The Association for Collaborative Spine Research (ACSR)
- 2012-2014 Neuroscience Signature Program Leader – Spine
- 2009 American Society for Radiation Oncology (ASTRO) Panel Member for Palliative Radiotherapy for painful Bone Metastasis: An ASTRO Evidence-Based Guideline Proposal
- 2007-2014 Spine Oncology Study Group-Selected National/International Spinal Oncology Experts to develop guidelines to management of Spine Tumors
- 2007-present American Association for the Advancement of Science (AAAS)
- 2007 CNS-Scientific Program Committee-San Diego
- 2006-2015 Scientific Abstract Review Committee, AANS-CNS
- 2006-2011 AANS-ANS Medical Education liaison representatives
- 2005-2011 AANS/CNS joint Spine Scientific Advisory/Program Committee
- 2005-2010 Member, Executive Committee, AANS-CNS Joint Spine and Peripheral Nerve Section of Neurological Surgeons, CME Chair
- 2004-2005 Honorary Member, Israel Spine Society
- 2002-present AO North America-AO Faculty
- 2001-2003 Membership Committee, Joint Spine Section, AANS-CNS
- 2000-present North American Spine Society
- 2000-2002 The National Spine Network Board of Directors
- 1998-present Member, Congress of Neurological Surgeons (CNS)
- 1998-present Member, AANS-CNS Trauma and Critical Care-Joint Section of Neurological

## Surgeons

1994-present Member, American Association of Neurological Surgeons (AANS)

### **Local and State:**

2013-Current Spine Research Institute Commercialization Team

2007-present Ohio State Neurosurgical Society-President

2007-present Columbus Neurological Society

2004-2006 Texas Association of Neurological Surgeons

2002-2006 Houston Neurological Society

2001-2002 South Carolina Spine Society

1998-2000 Iowa Medical Society

1998-2000 Scott County Medical Society

1992-1998 California Association of Neurological Surgeons

### **RESEARCH:**

#### **Funded Research Protocols while at Ohio State University:**

1. Co-investigator, "Spine loads in low back disorders during manual material handling." 2007H0019
2. Co-investigator, "Biomechanics of Motion in Low Back Disorder." 2007H0017
3. Co-investigator, "Longitudinal quantification of low back pain recovery." 2006H0040
4. Primary investigator, "Assessment of the lumbar spine using positional magnetic resonance imaging in patients with low back pain." IRB approved, February 2012 2007H00115.
5. Co-investigator, "Measurement of Spinal Geometry and Kinematics" H0253.
6. Co-Investigator, "Intraoperative Somatosensory Evoked Potentials and Desflurane MAC Levels for Neurosurgery."

7. Proposal submission with Bill Marras to the Bureau of Workers' Compensation (BWC) Analysis of Pushing and Pulling Biomechanics for Asymptomatic and Low Back Pain (injured) Workers.
8. Co-Investigator, "A Phase II Comparison of pre-operative CT and PET images in the Intraoperative Detection of Disease to a hand-held Probe and to an Intra-operative CT scan in Patients Undergoing Surgery for Metastatic Colorectal Cancer"
9. Multi Center Study- The Epidemiology Process and Outcomes of Spine Oncology (EPOS0). This study is coordinated by the The Spine Oncology Study Group (SOSG)
10. Primary Investigator: Phase II/III study of image-guided Radiosurgery/SBRT for Localized Spine Metastasis RTOG 0631
11. Collaborator, "ARCTIC Multi-center study, a randomized clinical trial of very early induced moderate hypothermia in patients with acute spinal cord injury", Michael Y Wang, M.D., FACS, Michel Torbey, M.D.
12. Co-Investigator, "Establishing Cell Lines and Examining Tumor and Peripheral Blood from Human Sarcoma and Other Soft tissue and Bone Tumors."
13. Co-Investigator, "A Pilot Study to Determine the Efficacy and Safety of Detecting Subtle Visual Changes during Visual Evoked Potential (VEP) Monitoring Using SightSaver Goggles in Spine Prone Surgery."
14. Co-Investigator, "An Electronic Health Record (EHR)-Based Comprehensive Bone and Soft Tissue Tumor Registry". James Cancer Hospital 2014C0181
15. Primary investigator, "A prospective, multi-center, randomized controlled study to compare the spinal sealant system as an adjunct to sutured dural repair with standard of care methods during spinal surgery." Institutional Review Board. October 2014 – 2015
16. Principal Investigator, "Phase II/III Study of Image-Guided Radiosurgery/SBRT for Localized Spine Metastasis" at the Ohio State University Wexner Medical Center. October 2015
17. Principal Investigator, Retrospective case of Percutaneous Vertebroplasty in the presence of previous posterior spinal instrumentation at the OSU Wexner Medical Center/James Cancer Center. November 2015

18. Principal Investigator, Assessment of the Lumbar Spine Positional Magnetic Resonance Imaging in Patients with Low Back Pain
19. Co-Investigator, “Local control assessment of Spine Metastases after post-operative stereotactic radiosurgery following limited versus extensive spine surgery: A retrospective analysis” November 2015.
20. Principal Investigator, “Retrospective Case Study of Transpedicular Vertebrectomy with Circumferential Spinal Cord Decompression and Anterior-Posterior Reconstruction for Patients with Spinal Metastatic Tumors at the OSU Wexner Medical Center.” Protocol: 2016H0082 March 2016
21. Principal Investigator, “Retrospective Case Study of Occipito-Cervical Fusion in Patients with Tumors at the Occipito-Cervical Junction and Upper Cervical Spine” Protocol: 30950, May 2016
22. Collaborator, “Multiscale Computational Approach for Quantifying the Mechanical Damage in the Intervertebral Disc”. Soheil Soghrati, M.D., William Marras, M.D.
23. Principal Investigator, “Retrospective Case Study Percutaneous Vertebroplasty in the Presence of Previous Posterior Spinal Instrumentation” Protocol: 2015H0302, November 2016.
24. Co-Investigator, “A Multicenter, Randomized, Double-Blind, Controlled Study of EXPAREL® (bupivacaine liposome injectable suspension) for Postsurgical Pain Management in Subjects Undergoing Open Lumbar Spinal Fusion Surgery” Protocol: 2016W0214, December 2016
25. Co-Investigator, “A Phase 1, Open-Label Study to Evaluate the Safety and Pharmacokinetics of Local Administration of EXPAREL when administered for prolonged postsurgical analgesia in subjects undergoing open spinal fusion or reconstructive surgery. Protocol: 2016W0200, January 2017.

#### **Funded Protocols while at M. D. Anderson:**

1. Principal investigator, Protocol Number 2004-0108. “Use of the Depuy-Acromed Stackable Carbon Fiber Cage for Spinal Reconstruction Following Corpectomy/Vertebrectomy in Patients with Primary or Metastatic Spinal Tumors.” Study chairman: **E. Mendel**; Study Co-chairman: Laurence Rhines. (Award Pending) \$125,000.
2. Study co-chairman, Protocol Number 2004-0099. “Spinal Reconstruction Using Synthes Spine Synex System Following Corpectomy/Vertebrectomy in Tumor Patients.” Study chairmen: L. Rhines, **E. Mendel**. (Approved May 19 2004) \$35,375/year (Active)
3. Co-investigator, “Biomechanical Effect of Augmentation Material Properties and Its Distribution on Human Vertebral Bodies after Vertebroplasty.” Investigators: M. Liebschner, L. Rhines, A. Burton, **E. Mendel**. Funding: (Orthovita), \$22,000. (Study completed)

4. Co-investigator, “Biomechanical Assessment of Adjacent Vertebral Fracture after Vertebroplasty.” Investigators: M. Liebschner, L. Rhines, A. Burton, **E. Mendel**. (Approved, Rice University June 2004). Funding (Orthovita): \$6,000. (Study completed)
5. Principal investigator, Protocol Number 2005-0641. “A Prospective, Multi-Center, Randomized Controlled Study to Compare the Spinal Sealant System as an Adjunct to Sutured Dural Repair with Standard of Care Methods During Spinal Surgery.” Study chairman: **E. Mendel**; Collaborators: S. Prabhu, L. Rhines, J. Weinberg. (Submitted August 2005). Funding: (Confluent Surgical) \$40,000. (Active)

#### **Research Protocols while at M. D. Anderson:**

1. Co-investigator, Protocol ID02-446, Phase I/II evaluation of a novel CT-on-rails stereotactic spine radiotherapy system (SSRS) for the treatment of metastatic spine disease (stereotactic spine radiotherapy core protocol data), Final March 2003. E. Chang, L. Rhines, **E. Mendel**, A. Shiu.
2. Study co-chairman, Protocol Number: RCR04-0121. “Spinal Metastases due to Renal Cell Carcinoma: Role of Surgical Resection.” Study chairman: L. Rhines; Study co-chairman: **E. Mendel**. (Approved March 2004)
3. Study co-chairman, Protocol Number: RCR04-0216. “Transpedicular Vertebrectomy for the Management of Spinal Metastasis.” Study chairman: I.E. McCutcheon; Study co-chairman: **E. Mendel**. (Approved April 2004)
4. Principal investigator, Protocol Number: RCR04-0450. “Percutaneous Vertebroplasty and Kyphoplasty in the Treatment of Painful Vertebral Compression Fractures in Patients with Multiple Myeloma.” Study Chairman: **E. Mendel**; Study Co-chairman: A. Burton. (Approved June 2004)
5. Principal Investigator, Protocol Number: RCR04-0398. “Chordoma Metastasis.” Study Chairman: **E. Mendel**; Study Co-chairman: L. Rhines. (Approved August 2004)
6. Principal Investigator, Protocol Number: 2004-0125. “Percutaneous Vertebroplasty for Painful Vertebral Body Fractures in Cancer Patients.” Study chairman: **E. Mendel**; Study co-chairmen: A. Burton and L. Rhines. (Approved September 2004)
7. Study Co-chairman, Protocol Number: RCR04-0738. “Safety and Efficacy of Expandable Titanium Cage for Thoracic and Lumbar Vertebral Reconstruction in Patients with Metastatic Disease.” Study Chairman: L. Rhines; Study co-chairman: **E. Mendel**. (Approved November 2004)
8. Study Chairman, Protocol Number: RCR05-0606. “Surgical Management of Spinal Metastasis from the Gastrointestinal Tract: A Report of 71 Cases.” Study chairman: **E. Mendel**, Study co-chairman: L. Rhines. (Submitted August 2005)
9. Study co-chairman, Protocol Number: RCR05-0709. “Protocol for Database Review of the Surgical Management of Spinal Diseases at the M. D. Anderson Cancer Center.” Study chairman: L. Rhines; Study co-chairman: **E. Mendel**. (Submitted August 2005)

#### **Patents, Technology Licenses (granted and pending), and other products:**

1. Member, Cervical Stackable Carbon Fiber Cage Surgeon Design Team  
DePuy Spine, Raynham, Massachusetts
2. Patent Submission, University of Texas (UT) M. D. Anderson  
New design of pedicle awl  
U.S. MDA File Number: MDA05-044, 12/31/2004
3. Patent Co-chairman-Composition and methods for direct therapy of tumors. VA Levin,  
**E. Mendel**, US Patent App 11/625,520, 2007  
“Intratumoral Injection of BCNU-Ethanol Mixture for Vertebral Metastases”  
Study Co-chairman, VA Levin (MDA05-134)  
Submitted to U.S. Patent and Trademark Office  
U.S. Department of Commerce UTSC: 949USP1
4. Member of selected international surgical design team in development of ***Bengle stackable Cervical cage***, By Depuy-Johnson & Johnson Co. Lunch date-May 2008
5. Member of selected international surgical design team in development of *Capri Thoracolumbar Cervical Cage* by K2M.

## **PUBLICATIONS:**

### **Books/Book Chapters:**

1. P. Albuquerque, M. Apuzzo, **E. Mendel**. Pineal Region Masses: A Unified Approach. In: Apuzzo MLJ (ed), *Surgery of The Third Ventricle*, 2<sup>nd</sup> Ed., Williams and Wilkins, Baltimore, MD, pp. 821-844, 1998.
2. **E. Mendel**, R. Fessler. Transpedicular Decompression for Thoracic Herniated Disc. In: Zdeblick TA, Benzel EC, Anderson PA, and Stillerman CB (eds), *Controversies in Spine Surgery Vol. 2: Surgical Techniques & Medical Treatment*, Quality Medical Publishing, Inc., St. Louis, MO, pp. 168-179, 2000.
3. D. Lin, **E. Mendel**, B. Guiot. Introduction to Neurophysiology. In: *Textbook of Neurointensive Care*, Layon, Gabrielli and Friedman (eds), Elsevier Inc., Philadelphia, PA, pp. 103-116, 2004.
4. B. Guiot, **E. Mendel**. Degenerative Spondylosis. In: Rengechary SS, and Ellenbogen RG (eds), *Principles of Neurosurgery*, 2<sup>nd</sup> Edition, Elsevier Inc., London, UK, pp. 747-751, 2004.
5. **E. Mendel**, S. Hentshel, B. Guiot. Injuries to the Cervical Spine. In: Rengechary SS and Ellenbogen RG (eds), *Principles of Neurosurgery*, 2<sup>nd</sup> Edition, Elsevier Inc., London, UK, pp. 369-380, 2004.
6. B. Guiot, **E. Mendel**, R. Fessler. Tumors of the Thoracolumbar Spine. In: Fessler RG and Sekhar LH (eds), *Atlas of Neurosurgical Techniques*, Thieme Publishers, New York, NY, 2006.



7. **E. Mendel**, B. Guiot, R. Fessler. Management of Thoracic Disc and the Transpedicular Decompression. In: Fessler RG and Sekhar LH (eds), *Atlas of Neurosurgical Techniques*, Thieme Publishers, New York, NY, 2006.
8. **E. Mendel**. B. Guiot, K. Yao. Anterior Thoracolumbar Instrumentation. In: Wolfa and Resnick (eds), *Neurosurgical Operative Atlas*, 2<sup>nd</sup> Edition, Ch. 38, Thieme Publishers, New York, New York, 2006.
9. **E. Mendel**. Tumors of the Extradural Spine. In: *Tumors of the Brain and Spine*, D. F, Gilbert MR, M. Mahajan, McCutcheon IE (eds) Springer Publishers, New York, New York, 2007.
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  95. M. Williams, H. Mashaly, V. Puduvalli, M. Jing, and **E. Mendel**: “Immunoglobulin G4-related disease mimicking an epidural spinal cord tumor: case report.” *Journal of Neurosurgery*.  
Vol. 26, pps: 76-80, January. 2017
  96. Hwang J, Knapik GG, Dufour JS, Best TM, Khan SN, Mendel E., Marras WS., Validation of a personalized curved muscle model of a lumbar spine during complex dynamic exertions.  
*Journal of Electromyography and Kinesiology*. April 2017;331-9
  97. H. Mashaly, Zoe Zhang., A. Shaw, P. Youssef, **E. Mendel**. “Intraoperative Transpedicular Onyx Injections to Reduce Vascularity of a Thoracic Hemangiopericytoma after unsuccessful Preoperative Endovascular Embolization”. *Operative Neurosurgery*. Accepted April 2017



Submitted and pending publications:

98. **E. Mendel**, N. Stoicea, R. Rao, W. Niermeyer, S. Revilla, M. Cluse, G. Sandhu, G. Todaro, S. Bergese. "Revisiting Postoperative Vision Loss Following Nonocular Surgery: A Short Review of Etiology and Legal Considerations." *Frontier Journal*. (Submitted 2017)
  99. **E. Mendel**, S. Ferguson, W. Thoman, R. Splittstoesser, J. S. Dufour, W. S. Marras. "Differences in Lumbar Spine Measures as a Function of MRI Posture in Low Back Pain Patients" *Journal of Neurosurgery* (**Submitted August 2015**)
  100. P. Le, A. Aurand, B. Walter, T. Best, S. Khan, E. Mendel, W. Marras. "Development of a lumbar EMG-based co-activation index for the assessment of complex dynamic tasks". *Journal of Electromyography and Kinesiology*. Sept. 2016
  101. M.W. Williams, S.A. Ferguson, D.R. Grooms, S.N Khan, E.M Yu, **E. Mendel**, W. Marras "Comparison of Low Back Functional Status between Surgical Candidates and Healthcare Workers with Occupational Low Back Pain."
  102. A. Uribe, H. Raqab, **E. Mendel**, A. Zuleta, N. Stoicea, S. Bergese. "Blood Conservation in Spinal Surgeries: A Review of Perioperative Bloodless and Blood Conservation Techniques" *JNS Neurosurgical Focus* August 2015 (Submitted)
  103. A. L. Versteeg, J-J.Verlaan, A. Sahgal, **E. Mendel**, N. Quraishi, D. Fournay, C. Fisher. "SINS: impact on oncologic decision making" *Spine Journal*, Vol. **Pending**, Num. **Pending**. **E. Mendel**, D. Sciubba, et al. Breast Systemic Review (Pending for publication March 2014) (submitted)
  104. **E. Mendel**, Z. Peters, B. Shneker, M. Abdel-Rasoul, S. Bergese. "Intraoperative Visual Evoked Potential Monitoring Using SightSaver Visual Flash Stimulator during Prone Spine Surgeries under TIVA Versus Balanced General Anesthesia" *Journal of Neurosurgery*; July 2016
- D. Dornbos, M. Galgano, C. Goulart, and **E. Mendel** "Primary Vertebral Column Sarcomas: Management of Surgical Complications and Expected Morbidities." *Journal of Surgical Oncology*. January 2016 (**Submitted**)
- C. Thongrong, **E. Mendel**, et al. Role of colloid and crystalloid in Major Spine Surgery: An Update Review. Submitted: *World Neurosurgery* 2012

**Invited Articles:**

1. A. Burton, R. Sawaya: *Surgical Neurology* 63:474-475, May 2005; commentary on the following: R.J. Halpin, B.R. Bendok, K.T. Sato, J.C. Liu, J.D. Patel, S.T. Rosen: Combination treatment of vertebral metastases using image-guided percutaneous radiofrequency ablation and vertebroplasty: a case report. *Surgical Neurology* 63(5):469-474, May 2005.
2. *Neurosurgery* 56:E1379, June 2005; commentary on the following: P. Brastianos, G. Pradilla, E. McCarthy, Z.L Gokaslan: Solitary thoracic osteochondroma: case report and review of the literature.
3. *Neurosurgery* 57(1):E196, July 2005; commentary on the following: Haridas A, Basu S, King A., Pollock J. Primary isolated amyloidoma of the lumbar spine causing neurological compromise: case report and literature review.

4. *Neurosurgery* 57(3): E598; September 2005; commentary on the following: Cheung AC, Kalkanis SN, Ogilvy CS. Paraplegia after tethered cord surgery: an uncommon combined anomaly of spinal arteriovenous fistula and sacral lipoma--case report.
5. *Neurosurgery* 56(5):E1157; 2005 May 2005; commentary on the following: Wait SD, Jones FD, Lonser RR, Lee KS. Symptomatic epidural hematoma caused by lumbar synovial cyst rupture: report of two cases and review of the literature.
6. Combination treatment of vertebral metastases using image-guided percutaneous radiofrequency ablation and vertebroplasty *Surgical Neurology* Vol. 63 Issue 5, pp. 469-474 May 2005.
7. Integrated Medical Learning; Expansion of a Concept. Spine Section *Congress Quarterly* Fall 2008 pp. 24-25
8. Predictors of ambulatory function after decompressive surgery for metastatic epidural spinal cord compression. Chaichana KL, Woodworth GF, Sciubba DM, McGirt MJ, Witham TJ, Bydon A, Wolinsky JP, Gokaslan Z. *Neurosurgery*. 2008 Mar; 62(3):683-92; discussion 683-92.
9. Vertebral Compression fractures in metastatic Spine Disease. *Neurosurgery* August 2009, Vol. 56, No. 2, p. 275
10. Management of a spontaneous spinal epidural abscess: a single-center 10-year experience. Karikari IO, Powers CJ, Reynolds RM, Mehta AI, Isaacs RE. *Neurosurgery*. Nov 2009; 65(5):919-23; discussion 923-4
11. Vertebral compression fractures in patients presenting with metastatic epidural spinal cord compression. Chaichana KL, Pendleton C, Wolinsky JP, Gokaslan ZL, Sciubba DM. *Neurosurgery*. Aug 2009; 65(2):267-74; discussion 274-5.
12. Vertebral brown tumors causing neurologic compromise: a case presentation and review of the Literature. Kyle Michael Fargen., *World Neurosurgery* Jan 2010
13. Bone morphogenetic proteins and cancer: review of the literature. Thawani JP, Wang AC, Than KD, Lin CY, La Marea F, Park P. *Neurosurgery*, Feb 2010; 66(2): 233-46; discussion 246
14. Biomechanics of a Lumbar Interspinous Anchor with Transforaminal Lumbar Interbody Fixation. Crawford RN, Yagoobi AS, Choi SK, Reves PM, Kakaria UK, Porter RW, Kaibara T, Karahalios, DG. *World Neurosurgery* May 2010; 73(5): 572-7.
15. Lumbopelvic reconstruction after combined L5 spondylectomy and total sacrectomy for en bloc Resection of a malignant fibrous histiocytoma. Gallia GL, Suk I, Witham TF, Gearhart SL, Black JH 3<sup>rd</sup>, Redett RJ, Sciubba DM, Wolinsky JP, Gokaslan ZL. *Neurosurgery*, Aug 2010; 67(2):E498-502, discussion E502.
16. Spine Instrumentation Failure Following Spinal Tumor Resection and Radiation: Comparing Conventional radiotherapy to stereotactic Radiosurgery Outcomes. Angelov L, Harel R., Chao S., Krishnaney A., Emch T, Benzel EC *World Neurosurgery*, Oct-Nov 2010; 74(4-5): 517-22.
17. Spinal Carcinoid Metastasis with dural invasion: A case Report and review of the Literature Nagel, SJ, Hughes G, Ugokwe KT, Prayson, RA *World Neurosurgery* Nov 2011; 76(5)478.
18. Expandable Versus Non-expandable Cages for Thoracolumbar Burst Fracture. Eleraky MA, Doung HT, Esp E, Kim KD. *World Neurosurgery*, 2011 Jan; 75(1)149-54. Discussion 151.
19. Spinal Meningeal Melanocytoma in the S-1 Nerve Root Sheath with Paraspinal extension Mimicking Schwannoma. Eun SS, Kim HS, Lee SH, Lic WC, Lee JH *World Neurosurgery*; Feb 2011; 75(2): 303-6. Discussion 303-305.
20. En Bloc Resection of Sacral Chordomas Aided by Frameless Stereotactic Image Guidance: A Technical Note. *Operative Neurosurgery* Vol. 70, pp. 82-88, March 2012.

21. The Incidence of Adjacent Segment Disease Requiring Surgery after Anterior Cervical Discectomy and Fusion: Estimation Using an 11-Year Comprehensive Nationwide Database in Taiwan. Wright, N. Markwalder, T.M., *Neurosurgery* 70 No. 3, pp. 594-601. March 2012
22. Choi D, Shaw A, Mendel E, Fournery DR: Giant invasive spinal schwannoma: its clinical features and surgical management. July 2012 *Neurosurgery*; 71(1):66-7
23. W. Marras, **E. Mendel**, J. Hwang, G. Knapik, T. Best, S.Khan. "Prediction of MRI-derived Trunk Muscle Geometry with Application to Spine Biomechanical Modeling" *Elsevier Clinic Biomechanics Journal* 37(2016) 60-64. June 2016

#### **Other Articles by/or Featuring Dr. Mendel:**

1. Bohinski RJ, Rhines LD, **E Mendel**: The use of a stackable carbon fiber cage to reconstruct the anterior column of the spine following transthoracic corpectomy of a T10 renal cell metastasis. *The Anterior Column—Clinical Report* Vol. 2, October 2003.
2. Fatty acid distribution in nuclear lipids of rat cerebral cortex and hippocampus. A thesis written in fulfillment of requirements for LSU Honors Program, Senior Professor: Nicholas Bazam, M.D., Ph.D. 2003
3. An article by Deborah Mann Lake entitled, "Techniques promising for tumors in spine", in which Dr. Mendel and others discussed new promising techniques for spine tumors, *Houston Chronicle*, June 18, 2003.
4. An article by Eileen A. Ellig entitled, "Radiosurgery takes on spine metastasis" appeared in the University of Texas (UT) M. D. Anderson publication, *Conquest* 18(1):12-13, summer 2003.
5. **E Mendel**. "Advances in treatment of spinal tumors." *Physicians Practice* 16(8): A-3, September 2006.
6. **E Mendel**. "Why I work here." *Health* 2007 Winter: 3. (publication of The Ohio State University Medical Center)
7. **E Mendel**. "The Role of Surgery in the Optimal Management of Spinal Tumors." *Frontiers*, Spring 2007
8. **E Mendel**. Endowed Chairs and Professorships: *Discovery*, Spring 2007, p. 39, 44. Office of Health Sciences, The Ohio State University, 200 Meiling Hall, 370 W. 19<sup>th</sup> Avenue, Columbus, OH 43120.
9. Continuing Medical Education Webcast Presentation, "Neurologic Tumors," OSUMC Med Net April 21, 2007.
10. Newscast, Channel 4 Columbus, Ohio MedBreak, April 2007.
11. Newscast, Channel 10, Columbus, Ohio "Breakthrough in Cancer," April 2007.

12. "Clinical Challenge," Insight, July/August 2007, p. 2. 660 Ackerman Road, 2-26, PO Box 183101, Columbus, Ohio.
13. OSUMC Neurosurgery Web Section, *Spine Tumors* 2007
14. Featured physician, Ohio State University Medical Center billboards in recognition of National Doctors' Day 2007
15. Top Neurosurgeons, departmental picture in the Columbus Monthly October 2007
16. An article by Suzanne Hoholik entitled, "Cancer researcher foresees a top-tier center", *Columbus Dispatch*, January 20, 2008, mentioned as top expert recruited from M.D. Anderson for management of spine tumors.
17. A book by Dr. William Marras Ph.D titled: *The Working Back: A system Review*- Featured in the acknowledgement portion of the book as a prominent surgeon and physician. 2008
18. Featured Physician in the July 2008 "*Business First*" Newspaper edition as a Health care Hero finalist and Award recipient/Honorable Mention as an Innovator with multiple Q&A interview about current health care trends and issues facing medicine today.
19. Featured on The 2007-2008 Best Doctors in central Ohio list of outstanding clinical physicians in the November 2008 issue of *Columbus Monthly Magazine*.
20. Featured in *The Ohio State University Medical Center Medical Staff News* September 2008 Edition, Leadership/excellence section for winning Health Care Heroes Award
21. Featured in *Discovery Journal*- Autumn 2009. Breakthrough News from the Ohio State University Medical Center. Snapshots of Giving – Quinn Gift of \$300,000 to support the research and training initiatives of Dr. Mendel who successfully performed a risky surgery on Quinn's daughter when she broke vertebrae in her neck.
22. Featured in *Institute Insider* – The Newsletter of the institute for Ergonomics at The Ohio State University- Marras and Mendel Receives Multi-Million Dollar Research Contract to Study "Virtual Surgery" Vol. 12, No. 3 Autumn 2009
23. Featured in *Columbus CEO*- April 2010 pp. 28-29 Health Watch: Neurology- Back Pain Management
24. Featured in the *Ohio State Cancer Connection*, monthly online publication, February 2011 Edition for being included on a list of 100 of the best spine surgeons and specialists in America by Becker's Orthopedic & Spine Review
25. Featured in the Spring Edition, May 2011 of *Frontiers Magazine* for being listed among the 100 Best Spine Surgeons and Specialists in America

26. Featured in a video and article in the *Columbus Dispatch*, May 4, 2011- *OSU doctors rebuild pelvis so man can use prosthetic leg.*
27. Featured in *OrthoSuperSite*- May 6 2011-*Surgeons rebuild pelvis of cancer patient*
28. Featured in *Surgical Products* May 6, 2011- *Surgeons rebuild pelvis of cancer patient*
29. Featured in *Columbus Dispatch* June 10, 2011- *Doing it yourself? Careful, don't do yourself in.*  
(In reference to recent article published in JNS on Nail Gun Injuries to the neck)
30. Featured in *Columbus Dispatch* Aug 28, 2011- *Treatment Braces Broken Vertebrae*
31. Featured in the *Toward a Cancer-Free World 2011 Accomplishments Report* pg 6 Surgeons Rebuild Cancer Patient's Pelvis
32. Featured in *The Ohio State University Medical Center Neuroscience 2011 Year in Review Advances in Patient Care, Research and Education* pp. 31-32 Discovery, Clinical Expertise And Powerful Connections Impact Future Therapies For Brain And Spinal Tumors.
33. Featured in "208 Spine Surgeons & Specialists to Know" in *Becker's Orthopedic, Spine & Pain Management Review*, April 2012, Vol. 2012 No 2. p. 28.
34. Featured in *Frontiers*, p. 17 Spring 2012 for being part of The Ohio State's Sarcoma Team as Surgeon for Neurosurgery.
35. Spine Leaders to Know: Dr. Ehud Mendel of The Ohio State University Medical Center. November 2013
36. Featured in *The Ohio State Wexner Medical Center Medical News Release*. Innovative 'False Pedicle' Surgery Allows for Advanced Spinal/Pelvic Reconstruction. March 2014.
37. **E. Mendel**, W. Marras, Computer Modeling in Spine- Innovative Technology Development From The Ohio State University. *Becker's Spine Review*. March 2014.
38. **E. Mendel**, William Marras, "*Building a Better Approach to Spine Surgery*" published in The Ohio State University, Neurological Institute September 2015
39. Ohio State's Drs. **E. Mendel** & William Marras intertwine medicine, Engineering to create personalized spine model: 5 highlights.  
*Becker's Spine Review*, October 19, 2015
40. 12 spine Surgeons in the Headlines. *Beckers Spine Review* October 2015
41. Featured in "315 Spine Surgeons to know-2016" in *Becker's Spine Review* January 5, 2016

42. Featured in Journal of Neurosurgery Ad Seattle Science Foundation, September 2016 issue.

**Live Facebook Demonstrations:**

- April 2017            Cadaveric En Bloc Resection of thoracic primary spinal cord tumor  
Lecture- Surgical Management of Primary Spine Tumors  
7<sup>th</sup> Annual Multimodal Treatment of spinal Tumors  
Dr. John Jane Jr. Neuroscience lectureship series  
Seattle science Foundation
- April 2016            Cadaveric En Bloc Resection of thoracic primary spinal cord tumor  
Lecture- Surgical Management of Primary Spine Tumors  
6<sup>th</sup> Annual Multimodal Treatment of spinal Tumors  
Dr. John Jane Jr. Neuroscience lectureship series  
Seattle science Foundation
- April 2015            Cadaveric En Bloc Resection of thoracic primary spinal cord tumor  
Lecture- Surgical Management of Primary Spine Tumors  
5<sup>th</sup> Annual Multimodal Treatment of spinal Tumors  
Dr. John Jane Jr. Neuroscience lectureship series  
Seattle science Foundation

**Oral Abstract Presentations:**

- October 2015        Benjamin A Walter PhD, Prasath Mageswaran PhD, Hazem MashalyMD,  
William Thoman MD, Daniel Boulter MD, Luciano Prevedello MD, Xuan V  
Nguyen MD, Mo Xiaokui PhD, **E. Mendel MD**, William S Marras PhD,  
Arunark Kolipaka PhD “*In-vivo Characterization of Human Lumbar  
Intervertebral Discs by Magnetic Resonance Elastography: Diurnal Changes  
in Shear Stiffness and Relationship with Degeneration*” Submitted for  
presentation AANS 2015
- April 2013            Marras, WS, Ferguson, SA, Splittstoesser, R., Lavender SA, **E Mendel**.  
Does Cumulative Loading of the Spine Contribute to Low Back  
Impairment? Phoenix, AZ.
- April 2013            AANS, San Francisco, CA  
T Mattei, E Bourekas, H Wayne, **E Mendel**. Pathological Vertebral  
Compression Fractures in Patients with Metastatic Cancer under Treatment  
with Denosumab (XGeva®): A contra-indication for Vertebroplasty?
- February 2009        Karas C, Golan J, Christoforidis G, **E Mendel**, Extravascular  
Transpedicular Embolization of a Renal Metastasis using The Onyx® Liquid  
Embolization System  
Munich, Germany
- March 2009            9<sup>th</sup> Annual Canadian Spine Society 2009  
Gatineau, Québec  
J Golan, **E Mendel**. Kyphoplasty and Vertebroplasty in Spinal Tumors: A  
Systematic Review of the Literature

- March 2009 Karas C, Mirza B, **E Mendel**. En Bloc Resection of a Spinal Chondroid Cyst  
Brain Lab Academy, Munich, Germany
- 2008-2009 North American Spine Society Meetings
- February 2008 Southern Neurosurgical Society Annual Meeting, Las Corabas, Puerto Rico  
Baig M, Lubow M, Immesoete P, Bergese S, El-Sayed Awad H, **E Mendel**.  
Visual loss after spinal surgery: Review of the literature and  
recommendations.
- March 2007 Southern Neurosurgical Society Annual Meeting, Sea Island, GA  
Karas CS, Julka A, **E Mendel**, Caragine Jr LP, Preoperative Endovascular  
Embolization of Renal Cell Metastasis to the Vertebral Body Using Onyx.  
Oral poster presentation.
- April 2006 AANS, San Francisco CA  
Chang E, Shiu A, **E Mendel**, Mathews L, Wang S, Woo S, Mahajan A,  
Weinberg J, Rhines L. Interim Results Phase I/II Evaluation of Stereotactic  
Radiation for Spinal Metastases.
- August 2005 World Congress of Pain Meeting, Sydney, Australia  
Burton AW, Incalcaterra JR, Fukshansky M, Driver LC, Are M, Phan PC,  
Boddu K, Hassenbusch SJ, **E Mendel**, Long SV, Brown DL. Pain Medicine  
Growth in a Tertiary Care Cancer Center: A Natural Experiment
- October 2005 CNS, Boston, MA  
Dagnew E, **E Mendel**, Lang F, Gokaslan Z, McCutcheon I. Single-stage  
Transpedicular Vertebrectomy (TPV) with Circumferential Decompression  
and Fixation for the Management of Spinal Metastasis: A 10-year  
Experience.
- March 2004 SNS, Amelia Island, FL  
Nader R, Dastgir A, Suki D, Bohinski R, **E Mendel**, Gokaslan ZL, Rhines  
LD. Surgical Resection of Sacral Metastases: A Series of 19 Patients.
- May 2004 AANS, Orlando, FL
1. Yao KC, Hentschel SJ, Fourney DR, Wang MLH, Rhines LD, Burton  
AW, **E Mendel**. Percutaneous Vertebroplasty and Kyphoplasty for  
Painful Vertebral Compression Fractures in Patients with Multiple  
Myeloma.
  2. Nader R, Dastgir A, Suki D, Bohinski R, **E Mendel**, Gokaslan ZL,  
Rhines LD. Surgical Resection of Sacral Metastases: A Series of 19  
Patients.
- June 2003 Sixth International Stereotactic Radiosurgery Society Congress,  
Kyoto, Japan
1. Chang E, Shiu A, Rhines L, **E Mendel**, Weinberg J, Cleeland C,  
Wang S, Sawaya R, Maor M, Cox J. Near-Simultaneous CT Image-  
guided Stereotactic Spine Radiotherapy: Preliminary Clinical  
Experience.
  2. Shiu A, Chang E, Lii M, **E Mendel**, Rhines L, Ye J-S. CT Image-  
Guided Stereotactic Spine Radiosurgery: A Novel Paradigm for  
Achieving True Extracranial Stereotaxy.
- March 2002 CNS, SNS, Savannah, GA

- March 2002 Figueroa B, Haines S, **E Mendel**. An Evidenced-Based Algorithm for Cervical Spine Evaluation Following Blunt Trauma. Southern Neurological Society (SNS), Savannah, GA
- September 1996 Tantuwaya V, Haines S, Tantuwaya L, **E Mendel**: Early Halo Reduction/Immobilization of Acute Cervical Spine Fractures prior to MRI. Congress of Neurological Surgeons (CNS), Montreal Canada
- April 1995 **E Mendel**, LeMay D, Zelman V, Petrovic Z, Giannotta S, Apuzzo M. Early Complications of a "Start-up" Gamma Knife Radiosurgery Unit and a New Protocol for Emergent Management of Mechanical Hydraulic Failure. AANS, Orlando, FL
- December 1994 **E Mendel**, Levy M, Gans W, Pikus H, Raffel C, McComb G. Surveillance Imaging in Children with PNET American Association of Neurological Surgeons (AANS), Pediatric Section, St. Louis, MO
1. Pikus H, Gans W, **E Mendel**, Levy M, McComb G. Outcome and Cost Analysis in Infants with Massive Grade IV Germinal Matrix Hemorrhage and Progressive Hydrocephalus.
  2. **E Mendel**, Levy M, Gans W, Pikus H, Raffel C, McComb G. Surveillance Imaging in Children with PNET.

**Editorials/Invited Abstract Reviewer:**

- March 2010 Society of University Neurosurgeons –Novel Technique for lumbo-pelvic Fixation. Miami, Florida
- Nov 2009 Academy of Neurological Surgeon, West Palm Beach, Florida  
The Use of Positional Magnetic Resonance Imaging to assess patients with Low Back Pain
- March 2009 Invited Abstract Reviewer, Section on Disorders of the Spine and Peripheral Nerves
- Sept 2007 Congress of Neurological Surgeons (CNS) Annual Meeting  
San Diego, California  
Invited Abstract Reviewer, Section on Disorders of the Spine and Peripheral Nerves
- March 2006 AANS/Congress of Neurological Surgeons (CNS) Annual Meeting  
Orlando, Florida  
Invited Abstract Reviewer, Section on Disorders of the Spine and Peripheral Nerves
- April 2005 American Association of Neurological Surgeons (AANS) Annual Meeting  
New Orleans, LA  
Invited Abstract Reviewer, Spine and Peripheral Nerve Section
- October 2004 North American Spine Society Nineteenth Annual Meeting  
Chicago, IL  
Invited Abstract Reviewer, Diagnostic/Imaging/Surgery  
Local control assessment of spine metastases after post-operative stereotactic radiosurgery following limited versus extensive spine surgery: A retrospective review



**Poster Abstracts:**

- October 2016 ASA Annual Meeting. Albert Uribe,; **E. Mendel**,; Zoe Peters,; Alicia Gonzalez,; Fabrizzio Sacchet,; Muhammad Shabsigh,; Mahmoud Abdel Rasoul,; Sergio Bergese. "*Comparison of Utility and Safety of Visual Evoked Potential Monitoring using SightSaver during Spine Surgeries*" Poster Presentation Number: A2022 – Display Dates: October 22-26, 2016 Chicago, IL
- February 2016 ASNR 54<sup>th</sup> Annual Meeting & Symposium. **E. Mendel**, A. Ajam, D. Boulter, X. Nguyen, M. Luttrull, H. Mashaly, A. Aquino. "*Complications of Percutaneous Vertebroplasty: What to Do, and What Not To Do.*" Educational Exhibit Poster #: EdE-77 - Display Dates: May 23 – 25, 2016
- December 2015 AANS Annual Scientific Meeting. Anthony Aquino MD, Amna Ajam MBBA, Daniel Boulter MD, Xuan Nguyen MD, **E. Mendel**, MD, and Eric C. Bourekas, MD, MBA, FACR. *Complications of Percutaneous Vertebroplasty: What to do and what not to do. (Submitted Dec 2015)*
- May 2015 AANS Annual Scientific Meeting, Washington D.C. Goulart, CR., Mattei, TA., Rehman, AE., **E. Mendel**. Symptomatic Epidural Lipomatosis after Multi-modal Therapy with Androgen Receptor Antagonists for Metastatic Castration-Resistant Prostate Cancer"
- May 2015 AANS Annual Scientific Meeting, Washington D.C. Goulart, CR., Mattei, TA., Rehman, AE., **E. Mendel**. "Epidural Abscess and Spinal Osteomyelitis after Unstable Traumatic Craniocervical Injury
- January 2014 AANS Annual Scientific Meeting, San Francisco, CA. TA Mattei, **E Mendel** A Shaw. Radiographic Regression of a Giant Cell Tumor of the Mobile Spine with Treatment with a new RANK-ligand Monoclonal Antibody (Denosumab).
- January 2014 AANS Annual Scientific Meeting, San Francisco, CA. TA Mattei, **E Mendel**, E Bourekas. Post-operative Cement Augmentation after 360-Degree Fusion for Highly Unstable Vertebral Fractures in patients with Multiple Myeloma: A technical Note on Extra-pedicular Trans-Instrumentation Vertebroplasty.
- January 2014 AANS Annual Scientific Meeting, San Francisco, CA. TA Mattei, **E Mendel**. Tracing the origins of organized Neurological Surgery in Central Ohio and the development at The Ohio State University.
- January 2014 AANS Annual Scientific Meeting, San Francisco, CA. TA Mattei, **E Mendel**, E Bourekas. Pathological Vertebral Compression Fractures in Patients with Metastatic Cancer under Treatment with Denosumab (XGeva): A contraindication for Vertebroplasty?
- March 2013 AO Spine North America Fellows Forum, Banff, Canada. Edwin Ramos, MD, **E Mendel**. Radiographic Regression of Giant Cell Tumor of the Spine with Denosumab Treatment.
- April 2013 Creation of "false pedicles" and "neo-pelvis" for lumbopelvic reconstruction following *en bloc* resection of an iliosacral chondrosarcoma with lumbar spine extension. Accepted to the *Journal of Neurosurgery* for the James 15<sup>th</sup> Annual Scientific Meeting, Columbus, OH. . **E Mendel**, N Nathoo, T

- April 2011 Scharschmidt, C Schmidt, J Boehmler, J Mayerson.  
The Vertebral Venous Plexus; From Brescet to Batson  
AANS Denver, Colorado  
Moment exposure of the lumbar spine system: Analysis of changes to lumbar lordosis and disc height: A preliminary Report  
Anterior cervical exposure for cervicothoracic spine: Operative nuances and Surgical strategies in avoiding manubriotmy and or sternotomy  
AANS Denver, Colorado
- June 2011 Use of Percutaneous Vertebroplasty to Augment Anterior Column Support Following Multi-Level Spinal Oncologic Reconstructive Surgery  
ASNR Seattle WA
- April 2010 8<sup>th</sup> annual AO Spine North America Fellows Forum- Banff Springs, Alberta, Canada  
The Use of Positional Magnetic Resonance Imaging to assess patients with Low Back Pain
- April 2010 8<sup>th</sup> annual AO Spine North America Fellows Forum- Banff Springs, Alberta, Canada  
Novel Technique for lumbo-pelvic Fixation for Sacral Chondrosarcoma
- Oct 2010 Massive Transfusion and Anesthesia Management during Removal of a Pelvic Chondrosarcoma and Reconstruction  
American Society of Anesthesiology (ASA) San Diego, California
- Nov 2008 International Anesthesiology Research Society  
Sergio Bergese MD, Marthabootham Mani MD, Henry Lu BS, Adolfo Bhatt BS, **E Mendel MD**, Erika Puente MD.  
Effects of Desflurane on Intraoperative Somatosensory Evoke Potentials  
Berlin, Germany
- May 2007 1. Karas CS, Baig M, Ferguson S, Marras WS, **E Mendel**. Lumbar Motion Monitoring: Biokinematic Measures for Quantitative Categorization and Prognostication in Lumbar Degenerative Disc Disease.  
American Society of Clinical Oncology
- January 2006 1. Thomas SK, Wang ML, Yao K, Villareal, Fukshansky M, Suki D, **E Mendel**, Weber DM, Alexanian R, Burton A. Percutaneous vertebroplasty and/or kyphoplasty are an effective and safe treatment for painful vertebral compression fractures in multiple myeloma (MM).  
Orthopaedic Research Society, 52<sup>nd</sup> Annual Meeting Chicago, IL
- March 2006 1. Tawackoli W, Sun K, Fukshansky M, **E Mendel**, Rhines LD, Burton A, Liebschner M. Acrylic vertebroplasty may alter fracture pattern and reduce ultimate load of adjacent vertebrae.  
2. Tawackoli W, Burton A, Rhines LD, **E Mendel**, Liebschner M. Acoustic vibration as a new diagnostic to detect the onset of vertebral fractures.  
1. Burton A, Tawackoli W, Sun K, Fukshansky M, Liebschner M, Rhines LD, **E Mendel**. Vertebroplasty does contribute to adjacent bone failure: An in-vitro study.

2. **E Mendel**, Sun K, Liebschner M, Rhines LD, Burton A. Vertebral biomechanics after vertebroplasty is more dependent on cement distribution than on cement material properties.
  3. **E Mendel**, Templeton A, Fukshansky M, Burton A, Rhines LD, Wright K, Liebschner M. Intra-operative visualization of vertebroplasty PMMA bolus in the inferior-superior anatomical direction.
- July 2006 North American Spine Society, Seattle, WA
1. Sun K, Tawackoli W, Fukshanski M, **E Mendel**, Rhines L, Burton A, Liebschner M. Disperse Cement Filling is More Important than Cement Material Properties in Biomechanics of Vertebroplasty.
  2. Efran I., Nader R., Suki D., **E Mendel**., Chakrabarti I., Gokaslan Z., and Rhines R.,: Results of Surgical Treatment for Metastatic Disease Involving the Sacrum.
- August 2005 World Congress of Pain meeting, Sydney, Australia
- Burton AW, Incalcaterra JR, Fukshansky M, Driver LC, Are M, Phan PC, Boddu K, Hassenbusch SJ, **E Mendel**, Long SV, Brown DL. Pain Medicine Growth in a Tertiary Care Cancer Center: A Natural Experiment.
- October 2005 CNS Annual Meeting, Boston, MA
1. Raiszadeh R, Doppenberg E, **E Mendel**, Rhines LD. Trans-sacral approach for resection of giant pre-sacral schwannoma: case report and description of operative techniques.
  2. Raiszadeh R, **E Mendel**, Rhines LD. Sagittal split osteotomy for en-bloc resection of a multilevel cervical sarcoma: case report and description of operative techniques.
- October 2005 American Society for Therapeutic Radiology and Oncology 47<sup>th</sup> Annual Meeting, Denver, CO
1. Chang EL, Shiu A, Rhines L, Mathews L, Allen P, Mahajan A, Woo S, Gning I, Wang S, Brown B, Cleeland, **E Mendel**. Interim results of a Phase I/II evaluation of stereotactic body radiotherapy for spinal metastases.
- October 2004 CNS Annual Meeting, Chicago, IL
- Yao K, **E Mendel**, Rhines LD. A Novel Approach to complete En Bloc Sacrectomy and Lumbopelvic Reconstruction.
- October 2003 CNS 53<sup>rd</sup> Annual Meeting, Denver, CO
1. Chang E, Shiu A, Lii J, Rhines L, **E Mendel**, Weinberg J, Cleeland C, Sawaya R, Maor M, Cox J. Preliminary Experience with Near-Simultaneous CT Image-guided Stereotactic Spine Radiosurgery for Paraspinal Metastases.
  2. Hentschel SJ, Rhines LD, Burton AW, **E Mendel**. Vertebroplasty for Spinal Metastases: Refuting Proposed Contraindications.
- September 2001 CNS, San Diego, CA
1. Tantuwaya V, Haines S, Tantuwaya L, **E Mendel**. Early Halo Reduction/Immobilization of Acute Cervical Spine Fractures Prior to MRI.
  2. Figueroa B, Haines S, **E Mendel**. An Evidenced-Based Algorithm for Cervical Spine Evaluation Following Blunt Trauma.

- February 1997 Joint Section on Disorders of the Spine and Peripheral Nerves, Newport Beach, CA
1. **E Mendel**, Giovanni M, Herbert A, Fessler R. Evaluation of Complication Rate in Plated versus Non Plated Patients following Anterior Cervical Corpectomy.
  2. Herbert A, Giovanni M, **E Mendel**, Fessler R. Anterior Cervical Corpectomy in 220 Patients: Clinical Outcome and Complications. Joint Section on Disorders of the Spine and Peripheral Nerves.
- October 1997 Congress of Neurological Surgeons (CNS), New Orleans, LA  
**E Mendel**, Giovanni M, Herbert A, Fessler R. Evaluation of Complication Rate in Plated versus Non Plated Patients following Anterior Cervical Corpectomy.
- November 1996 Spine + Science + Management, Shriners Hospitals for Crippled Children, New Orleans, LA  
**E Mendel**, Giovanni M, Herbert A, Fessler R. Evaluation of Complication Rate in Plated versus Non Plated Patients following Anterior Cervical Corpectomy.
- April 1995 American Association of Neurological Surgeons (AANS), Orlando, FL
1. **E Mendel**, Lesse G, Levy M, Newth C, McComb G. Cerebral Salt Wasting After Posterior Fossa Craniotomy in a Pediatric Population
  2. Pikus H, Gans W, **E Mendel**, Levy M, McComb G. Outcome and Cost Analysis in Infants with Massive Grade IV Germinal Matrix Hemorrhage and Progressive Hydrocephalus.
- 1985 Pittsburgh Conference and Exposition on Analytical Chemistry and Applied Spectroscopy, Pittsburgh, PA  
Mandare K, **E Mendel**, Hanley J. Formation of Carcinogenic Trihalomethanes in Drinking Water.

#### **EDITORIAL RESPONSIBILITIES:**

##### **Editor/Service on Editorial Board(s):**

- 2015-2018 Member, Editorial Board for the World Journal of Orthopedics
- 2012-present *Journal of Surgical Oncology* Editorial Board Member in the Sarcoma and Orthopedics section
- 2004-present Editorial board, SpineUniverse.com, Tumor Section
- 2003-2006 Editorial Board, *The Internet Journal of Neurosurgery*
- 2003-2006 Editorial board, *The Internet Journal of Spine Surgery*

##### **Journal Reviewer:**

- 2013-present Ad Hoc Reviewer *International Journal of Nanomedicine*
- 2011-present Ad Hoc Reviewer *Surgical Oncology*
- 2011-present Ad Hoc Reviewer *Global Spine Journal*
- 2009-present Ad Hoc Reviewer *World Neurosurgery*
- 2004-present Ad Hoc Reviewer, *Archives of Surgery*

2004-present Ad Hoc Reviewer, *Surgical Neurology*  
2003-present Ad Hoc Reviewer, *Journal of Neuro-Oncology*  
2002-present Ad Hoc Reviewer, *Cancer*  
1996-present Ad Hoc Reviewer, *Neurosurgery*

**Course Chairman/Director:**

Oct 2015 DuPuy Synthes Future Leaders Workshop: Surgical Management of Spine Tumors. Course Chairman.  
Oct 2014 Spine Oncology Future Leaders Course, Ohio State University James Cancer Hospital Cancer Center. Creator and Chair.  
Oct 2009 Oncology Update: Current and New Horizons, Ohio State University/ James Cancer Center, Creator and Co-Chair  
March 2008 AO North America Spine Operating Room Personnel Course, Columbus, OH  
May 2008 First Annual Ohio State University/ James Cancer Center Spine & Bone Tumor Symposium-Creator and Co-Chair  
March 2007 AO-ASIF Principles & Treatment of Spinal Disorders for Residents and Fellows, Atlanta, GA  
June 2007 First Annual Ohio State University/Case Western University Comprehensive Spine Symposium, Creator and Co-Chair  
March 2006 AO North America Spine Operating Room Personnel Course, Houston, TX Course Co-Chairman  
March 2006 American Association of Neurological Surgeons (AANS)/ Congress of Neurological Surgeons (CNS) Joint Spine Section, Orlando, FL  
April 2006 Course Director, Board review for spine surgery and peripheral nerve AANS, San Francisco, CA  
March 2005 Course Co-Director, Surgical anatomy of the thoracic and lumbar spine Cardinal HealthCare Hands-on Workshop, Houston, TX  
Course Co-Chairman, Treating Diseases of the Spine with Percutaneous Cement Delivery  
November 2003 AESCULAP Educational Meeting, Houston, TX  
Course Chairman, Conventional vs. Minimally Invasive Spine Surgery- Anterior Spinal Surgery  
June 2001 Course Chairman, Stryker/Lerbinger Spine Course, Seabrook Island  
Use of the TPS Drill and Lerbinger Cranial Plating Set in the Operating Room  
March 1999 AO North America Spine Operating Room Personnel Course, Charleston, SC

**TEACHING:**

***Formal Teaching: Lecturer***

**M. D. Anderson Cancer Center, Houston, Texas:**

January 2006 Institutional Grand Rounds  
Oncological Emergencies Symposium  
Management of emergent oncological neurosurgical emergencies

January 2005 Invited Speaker/Course Faculty  
Fifth Annual Oncology Update: Advances and Controversies  
Park City, Utah  
Surgical management of spine tumors

March 2005 Pain Management Grand Rounds  
Management of spinal metastases

April 2005 The University of Texas, Houston Medical School  
First year medical school curriculum  
Principles of neurosurgical intervention

October 2005 Institutional Grand Rounds  
Surgical challenges in the spine tumor patient and the role of stereotactic  
radiosurgery

January 2004 Invited Speaker/Course Faculty  
Fourth Annual Oncology Update: Advances and Controversies Steamboat  
Springs, Colorado  
Management of metastatic tumors to the spine

February 2004 Special Topic Seminar  
The University of Texas Medical Science Building  
First year medical students for the Immunology Course  
Management of hematological disorders of the spine: case presentations

March 2004 Pain Management Grand Rounds  
Management of metastatic tumors to the spine

April 2004 The University of Texas Health Science Center  
First year medical school curriculum  
Principles of neurosurgical intervention

May 2003 Pain Management Grand Rounds  
Neurosurgical implications of back pain

June 2003 Core Curriculum Lecture  
Department of Oncology for Neuro-Oncology fellows  
Spine Oncology–Case Management Presentations

**University of Southern California, School of Medicine, Los Angeles, California**

April 1996 Neurosurgical Management of Head Trauma

**University of Florida, Gainesville, Florida**

February 1997 Traumatic Cervical Spine: Treatment Choices

April 1996 Anatomy and Radiographic Pathology of Injury to the Occipito-Atlanto-  
Axial-Complex

November 1996 Medical Management of Spinal Cord Injury Patients

**TEACHING: Medical University of South Carolina (MUSC), Charleston, South Carolina**

2000-2002 Chairman, Weekly Spine Conference  
Director, Monthly Spinal Cadaveric Dissections

February 2001 Lecturer, MUSC-Neuroscience Symposium  
Minimally Invasive Spinal Surgery

June 2001	Lecturer, Celebration of Neurosurgery at MUSC Complex Image Guided Spine Surgery
July 2001	Course Chairman, Synthes AO-ASIF, Charleston Basic Spine Course for Operating Room Personnel Team Approach to the Operative Management of the Spinal Surgery Patient
October 2001	Course Chairman, Cervical Spine Problems: Diagnosis, Management, and Treatment: Presentation, Posterior Cervical Fixation Stryker Second Annual Spine on the Beach, Myrtle Beach
October 2000	Lecturer, IDET–Fiction or Reality, Neuroscience Grand Rounds

**TEACHING:**

***Supervisory Teaching: Direct Supervision: Mentor***

**University of Texas M. D. Anderson Cancer Center, Department of Neurosurgery, Houston, Texas:**

2004-2005	Zeena Dorai Egon Doppenberg Chris McPherson Paul Jensen Ramin Raizadeh	Neurosurgical-Oncology Fellow, Baltimore, MD Neurosurgical-Oncology Fellow, Chicago, IL Neurosurgical-Oncology Fellow, Cincinnati, OH Neurosurgical-Oncology Fellow, Anchorage, AK Baylor College of Medicine-Rotating Fellow, San Diego, CA
2003-2004	Elias Dagneu, MD Amos Dare, MD Roman Hlatky, MD Kevin Yao, MD	Neurosurgical-Oncology Fellow, Atlanta, GA Neurosurgical-Oncology Fellow, Wellington, FL Neurosurgical-Oncology Fellow, Deceased Neurosurgical-Oncology Fellow, Englewood, NJ
2002-2004	Stephen Hentschel, MD Giacomo Vecil	Neurosurgical-Oncology Fellow, Victoria, BC Neurosurgical-Oncology Fellow, San Antonio, TX
2002-2003	Robert Bohinski, MD	Neurosurgical-Oncology Fellow, Cincinnati, OH

**Direct Supervision: Mentor, Ohio State University Medical Center, Department of Neurosurgery, Complex/Oncological Spine Fellowship Program:**

2016-Present	Zoe Zhang	Neurosurgery Spine Fellow, Minnesota
2015-2016	Hazem Mashaly, MD	Neurosurgery Spine Fellow, Egypt
2014-2015	Michael Weicker, MD	Neurosurgery Spine Fellow, New York
2013-2014	Tobias Mattei, MD	Neurosurgery Spine Fellow, Buffalo, NY
2012-2013	Edwin Ramos, M.	Neurosurgery Spine Fellow, Chicago, IL
2011-2012	Michael Higgins, MD	Neurosurgery Spine Fellow, Detroit, MI
2010-2011	Narenda Nathoo MD	Neurosurgery Spine Fellow, Bowling Green, KY
2009-2010	Gandi Verma M.D	Neurosurgery Spine Fellow, India
2009-2010	Rick Edgar, M.D.	Neurosurgery Spine Fellow, Muskegon, MI
2008-2009	Alfonso Fuentes M.D.	Neurosurgical Spine Fellow, Peru
2008-2009	Jeff Golan M.D.	Neurosurgical Spine Fellow, Montreal, Quebec
Nov 2008	Jae Taek Hong M.D., Ph.D	Visiting Scholar, South Korea
2007-2008	Wael Musleh, M.D., Ph.D.	Neurosurgical Spine Fellow, Chicago, IL

2006-2007 Philip Immesoete, M.D. Neurosurgical Spine Fellow, Canton, OH

### **Ohio State University**

Master's Examination Committee Members: Marras, W., **E Mendel**.

#### **Graduate Program in Industrial and Systems Engineering**

Student-Zachary Elijah Huber, B.A.

*"Creation and Evaluation of a Dynamic, EMG-Driven Cervical Spine Model"*

2006-present

#### **Neurosurgery Residents**

John Ogden, M.D.  
Kaveh Asadi, M.D., Ph.D.  
Mirza Baig, M.D., Ph.D.  
Alok Chaudhari, M.D.  
Mariel Delgado, M.D.  
Rick Edgar, M.D.  
Elena Gutierrez, M.D.  
Robert Hirschl, M.D.  
Chris Karas, M.D.  
Girma Makonnen, M.D.  
Paul Porensky M.D.  
Pier Peruzzi, M.D.  
Ahmed Mohyeidin, M.D.  
Ammar Shaikhouni, M.D.  
Laura Ngwenya, M.D.  
Promod Kumar, M.D.  
Andrew Shaw M.D.  
Daniel Ikeda M.D.  
Evan Marlin M.D.  
Ali Jamshidi M.D.  
Esmiralda Yeremeyeva M.D.  
David Dombos, M.D.  
William Gross, M.D.  
Nishanta Baidya, M.D.  
Kristin Huntoon, PhD, DO  
Victoria Schunemann, M.D.  
Nguyen Hoang, M.D.  
Andrew Look, M.D.  
Luke Smith, M.D.  
Jeffrey Hatef, M.D.

#### **Medical Students:**

2006-Present

Ohio State University, Columbus Ohio

2002-2006

University of Texas, M. D. Anderson Cancer Center, Houston Texas





- March 2006 1. Moderator of Scientific Session II, Biology of Spine Tumors  
AANS-CNS Joint Spine Section Orlando, FL  
Moderator, Spine Tutorial, Oral Board Review Course, Oral Point  
Presentations
- April 2006 AANS, San Francisco, CA  
1. Panelist, Management of Spinal Column Tumors  
2. Symposium Panelist, Vertebral Augmentation: Vertebroplasty and  
Kyphoplasty
- May 2006 ABNS, Houston, Texas  
Moderator, Comprehensive Spine Review, Oral Board Preparation Course,
- October 2006 CNS, Chicago, IL  
1. Course Director, Multimodality Treatment of Cancer Involvement  
of the Spine. Scientific Program/Special Course II  
2. Presenter, The Role of Vertebroplasty and Kyphoplasty in the  
Management of Spinal Column Tumors. Scientific  
Program/Special Course II  
3. Course Moderator, Scientific Session: Disorders of the Spine and  
Peripheral Nerves I. Patient Evaluation and Selection,  
Complications and Adjuvant Options in the Treatment of Spine  
Tumors  
4. Course Faculty/Speaker, Scientific Program/Luncheon Seminars:  
Spinal Cord Tumors
- April 2005 Israel Spine Society Meeting, Eilat, Israel  
1. The Role of Kyphoplasty and Vertebroplasty in Metastatic Spine  
Disease  
2. Stereotactic Radiosurgery in Spinal Tumors
- April 2005 AANS, New Orleans, LA  
Invited Panelist, Evaluation and management of primary and metastatic  
vertebral column neoplasms: vertebroplasty and kyphoplasty for spine tumors
- May 2005 AANS, St. Louis, MO  
Moderator, Spine Tutorial, Oral Board Review Course
- October 2005 AO-ASIF Spine Tumor Symposium, Baltimore, MD  
Moderator, Reconstruction Techniques
- May 2004 AANS, New Orleans, LA  
Moderator, Spine Tutorial, Oral Board Preparation Course
- May 2004 AANS, Orlando, FL  
1. Discussant, Surgical Outcome in Lung Cancer Patients with  
Hemotogenous Metastases to the Spine: A Series of 53 Patients  
2. Panelist, Scientific Program, Evaluation and Management of  
Primary and Metastatic Vertebral Column Neoplasms
- October 2004 North American Spine Society Meeting, Chicago, IL  
Co-moderator, Concurrent Focused Review  
Abstract Group: Vertebroplasty,
- November 2004 Moderator, AO Spine North America Faculty Development Forum,  
Southampton, Bermuda
- November 2004 AANS, Houston, TX

May 2003 Moderator, Comprehensive Spine Review, Oral Board Review Course  
ABNS, Cincinnati, OH

October 2003 Moderator, Comprehensive Spine Review, Oral Board Preparation Course  
Congress of Neurological Surgeons (CNS), Denver, CO

November 2003 Moderator, Section on Disorders of the Spine and Peripheral Nerves  
Management of Cervical Spine Disorders

November 2002 American Association of Neurological Surgeons (AANS), Houston, TX

November 2002 Moderator, Comprehensive Spine Review, Oral Board Preparation Course  
American Board of Neurological Surgery (ABNS), Houston, TX

November 2002 Moderator, Comprehensive Spine Review, Oral Board Preparation Course

**Course Faculty/Invited Speaker:**

August 2016 Seventh Annual ONE Spine Residents & Fellows Course  
“Avoiding Complications with Spinal Tumors” Seattle Science Foundation.  
Seattle, WA

April 2016 Annual K2M Meeting of Minds™ Advanced Spinal Deformity Symposium.  
“Surgical Management of the Tumor Patient” Chicago, IL

April 2016 6<sup>th</sup> Annual Multimodal Treatment of Spinal Tumors. “En Bloc Resections:  
Why, When, and How?” Seattle Science Foundation. Seattle, WA

April 2016 OHSNS Annual Meeting Ohio State Neurosurgical Society. Cincinnati, OH

November 2015 Rambam Clinical Research Seminar, Management of Spine Tumors.  
Rambam, Israel

September 2015 75<sup>th</sup> Anniversary of the Neurosurgical Society of Australia/Asia  
“En Bloc Resection with Lumbopelvic Fixation for Iliosacral  
Chondrosarcoma with Lumbar Extension – A Novel Technique”  
Auckland, New Zealand

August 2015 6<sup>th</sup> Annual ONESpine Residents and Fellows Course at the Seattle Science  
Foundation. “Management of Spine Tumors” Seattle, WA

November 2014 Goodman Oral Board Presentation: Neurosurgery Review by Case  
Management Course, Faculty  
Houston, Texas

September 2014 13<sup>th</sup> Annual International Neuro-Oncology Updates Conference  
“Lumbosacral Fixation for Primary Bone Tumors of Pelvis”  
Boston, Massachusetts

August 2014 5<sup>th</sup> Annual ONESpine Residents and Fellows Course at the Seattle Science  
Foundation. “Management of Spine Tumors” Seattle, WA

August 2014 9<sup>th</sup> Annual VCF Swing Classic benefiting the Department of Neurological  
Surgery and the Division of Cognitive Neurology at the Ohio State  
University Wexner Medical Center

April 2014 AANS Annual Meeting  
San Francisco, CA

April 2014 Panelist for Vertebral Column Tumors  
Multimodality Treatment of Spinal Tumors  
Swedish Hospital, Seattle, WA

April 2014 Keynote Speaker  
“Current Surgical Management of Spinal Neoplasms”

March 2014 “Thoracic Lumbar Spondylectomy”  
2014 Disorders of the Spine and Peripheral Nerve Annual Meeting  
“Managing Metastatic Spine Tumors”  
Orlando, FL

March 2014 2014 DePuy Synthes Spine Future Leaders Workshop Surgical Management  
of Spine Tumors  
Course Chairman  
“Management of Sacral Primary Tumors”  
Columbus, OH

January 2014 2014 Association for Collaborative Spine Research (ACSR) Winter Research  
Meeting  
Spine Tumor Faculty Member  
Development of New Algorithm for Management of Spine Tumors.  
San Diego, CA

January 2013 K2M: OSSSI Lab Meeting, Leesburg, VA  
February 2013 “Primary Spine Tumors: Evaluation and Decision Making”  
Current Concepts and Techniques: Spinal Tumors  
Stryker/Las Vegas, NV

April 2013 “Surgical Management of Spine Tumors” Ohio State Neurological  
Society Annual Meeting, Columbus, OH

May 2013 Depuy Synthes Spine Future Leaders Workshop, New York, NY  
“Surgical Treatment Options for Treating Sacral Tumors”

July 2013 ACSR/AOSNA Clinical Research Summer Meeting  
Chicago, IL

August 2013 Hematology/Oncology  
Fellowship Basic Lecture Series  
“Spine Metastases”  
OSU Wexner Medical Center, Columbus, OH

September 2013 Spine Tumor Symposium: A Hands-on Human Anatomic Specimen  
Course, Baltimore, MD  
“Vertebroplasty/Percutaneous Pedicle Screws, /Cervical En Bloc  
Spondylectomy and Reconstruction Exercises/ Primary Tumor Complications  
labs and exercises”

November 2013 Medtronic Managing the Spinal Tumor Patient: Evidence Based Therapies  
& Case Based Treatment Options  
“Case based treatment principles for Spine Mets” – Tumor Panel  
“Thoracolumbar Metastases with SINS Impending Instability: Debate-  
Vertebral Augmentation vs Surgery.” E. Mendel, M.D. vs Daniel  
Sciubba, M.D.  
“Cervical Lung Metastases Pain & Early Myelopathy: 3 to 4 months life  
Expectancy: How to Make the Right Decision”  
Sunnyvale, CA

January 2012 K2M: OSSSI Silo Lab Meeting, Leesburg, VA  
March 2012 K2M: OSSSI Silo Lab Meeting, Tampa, FL  
March 2012 10<sup>th</sup> Annual AONSA Fellows Forum  
Banff Springs, Alberta, Canada

June 2012	ACSR/NuVasive Meeting Tumor Group, Chicago, IL
August 2012	AO Spine, Aurora, CO EnBloc Spondylectomy
August 2012	Vertebral Artery Exposure and Injury 3 <sup>rd</sup> Annual ONE Spine Conference Seattle, WA
September 2012	Sacral and Pelvic Fixation 11 <sup>th</sup> Annual International Neuro-Oncology Updates Baltimore, MD “Development of Novel Techniques in Lumbar Sacral Fixation For Primary Bone Tumors of the Pelvis.”
March 2011	AO Spine 9 <sup>th</sup> Annual AOSNA Spine Fellows Forum Banff, Alberta, Canada
April 2011	AANS Annual Scientific Meeting: Panelist: Vertebral Column Tumors Denver, Colorado
April 2011	BioMedCom Partners: Actifuse Regional Advisory Board Miami, FL
May 2011	AO Spine Tumor Symposium: Moderator-Metastatic Spine tumors Boston, MA
Aug 2011	2 <sup>nd</sup> Annual Spine ONE: Faculty: Management of Spine Tumors Seattle, Washington.
Sept 2011	Synthes, Nursing Continuing Education: Moderator: Traumatic Brain Injury, Baltimore, MD
October 2011	AO Spine: SpineNET Knowledge Forum Meeting-Spine Oncology Group Toronto, Canada
March 2010	Residents/Fellows Spine Course- Boston, Spine Tumor-Case Presentation
March 2010	4th Annual Advanced Techniques in Treating Spinal Tumors- Seattle, Washington <ol style="list-style-type: none"><li>1. Sacrectomy-Loumbopelvic Fixation</li><li>2. Management of Metastatic Spine Disease</li></ol>
May 2010	AANS Annual Meeting- Management of Spine Tumors, Philadelphia, Pennsylvania
Oct 2010	AO-ORP Spine Review Course: Thoracic Spine Anatomy Detroit, Michigan
Nov 2010	AANS Boards review Course: Spine Review Lecture Houston, Texas
Jan 2009	Management of Spine Tumors Professional Development Committee/Rehabilitation Services Lecture OSU Medical Center, Columbus, OH
Feb 2009	OSU Physical Therapy Class- Surgical Management of Spine Pathology
March 2009	Stryker Symposium on Spine Tumors- Sacral Tumors- Case Studies Phoenix, Arizona
March 2009	Depuy Residents and Fellow Course- Tumors and Spinal Deformity Miami, Florida

March 2009 AO Spine Tumor Symposium- The case for Kyphoplasty  
Houston, Texas

April 2009 Spine Oncology Study Group- Minimally invasive treatment in Spine  
Tumors, Chicago, Illinois

May 2009 AANS Annual Meeting- Management of Spine Tumors, San Diego,  
California

May 2009 AANS Annual Meeting- Vertebroplasty-Patient Selection and  
Complications Avoidance, San Diego, California

June 2009 North America Spine Operating Room Personnel Course, Cincinnati, OH

June 2009 AANS Oral Boards Preparation Course, Houston, TX

1. Plenary Session
2. Spine Tutorial

Oct 2009 Congress of Neurological Surgeons, New Orleans, Louisiana  
Spinal Cord Tumors: Complications, Avoidance and management

March 2008 AO Spine Principles, AO/ORP Course Columbus, OH

April 2008 AANS Annual Meeting- Management of Spine Tumors, Chicago, IL  
AANS Annual Meeting- Surgical Approaches to the Spine -The Lateral  
extracavitary Approach, Chicago, IL

May 2008 AANS Oral Boards Preparation Course, Houston, TX

1. Plenary Session
2. Spine Tutorial

May 2008 The First Ohio State University/James Cancer Center Comprehensive Spine  
And Bone Symposium  
Management of Spine Tumors  
Surgical Applications in the Multiple Myeloma Patient

June 2008 Spine University Course-Stryker  
Chicago, IL  
Management of Primary Spine Tumors  
Management of Metastatic Spinal Disease

Sept 2008 SOSG (Spine Oncology Study Group)  
Faculty

Nov 2008 Management of Spine Trauma- Symposium  
Pittsburgh, Pennsylvania

February 2007 DePuy Spine, Neurosurgery Residents Spine Education Summit, Las Vegas,  
NV

1. Case Review Sessions: The Cervical spine
2. Presentation: Surgical Management of Metastatic Disease of the  
Spine

March 2007 23<sup>rd</sup> Annual meeting, AANS/CNS Section on Disorders of the Spine and  
Peripheral Nerves

April 2007 AANS Annual Meeting, Washington, DC

1. Faculty, Surgical Approaches to the Spine: Lateral Extracavity to the  
Spine
2. Faculty, Minimally Invasive Spine Techniques:  
Vertebroplasty/Kyphoplasty-Indications, Technique and  
Complication Avoidance

3. Faculty, Surgical Management of Spine Tumors:  
Vertebroplasty/Kyphoplasty Options in the Management of Spine Tumors
  4. Joint Spine AANS/CNS Executive Spine Committee, CME representative yearly report
- May 2007 AANS Oral Boards Preparation Course, Houston, TX
1. Plenary Session
  2. Spine Tutorial
- September 2007 OSU Second Annual Neuro-Oncology Symposium  
Management of spine tumors
- September 2007 CNS Annual Meeting San Diego, California  
Faculty- Management of Spinal Cord Tumors
- September 2007 Spinal Oncology Study Group-Faculty
- September 2007 AO Spine Tumor Symposium - Vancouver, British Colombia  
Faculty, Kyphoplasty in the management of Spine Tumors  
Moderator: Surgical Techniques
- February 2006 AANS Current Advances in Spinal Fixation: An Advanced Course, Memphis, TN  
Posterior Thoracic Pedicle Screws Fixation
- March 2006 Neurosurgery Residents Spine Education Summit, Boston, MA  
Management of Spine Tumors
- April 2006 AANS, San Francisco, CA
1. Practical Clinic: Surgical Anatomy of the Thoracic and Lumbar Spine: Lateral Extracavitary
  2. Vertebroplasty: Indications and Treatment Options
  3. Symposium: Vertebral Augmentation: Vertebroplasty, and Kyphoplasty: Pathology of Insufficiency Fractures
- May 2006 AO-ASIF, Principles and Treatment of Spinal Disorders for Residents and Fellows, Cleveland, OH  
Management of Spine Tumors
- June 2006 Eighteenth Annual International Bethesda Spine Workshop, Uniformed Services University of the Health Sciences, Bethesda, MD  
Management of Spine Tumors
- November 2006 Mountaineer II Brainstorming Lab, DePuy Spine, Memphis, TN
- March 2005 AANS-CNS, Section on Disorders of the Spine and Peripheral Nerves, Phoenix, AZ  
Special Course I: Modern Management of Spinal Neoplasia
- March 2005 Advanced Spine Trauma Symposium, Miami, FL  
C1-C2 Atlantoaxial Injuries
- March-April 2005 DePuy Spine Neurosurgery Residents Spine Education Summit, Phoenix, AZ  
Surgical Management of Metastatic Disease to the Spine
- April 2005 AANS, New Orleans, LA  
Practical Clinic: Surgical Anatomy of the Thoracic and Lumbar Spine: Lateral Extracavitary
- June 2005 AO-ASIF Controversies in Spine Trauma Symposium, Coronado, CA
1. C-2 Body and Hangman Fractures

2. When Is a Burst Fracture Unstable?
  3. Cement Augmentation in the Acute TL Burst Fracture
- June 2005      Seventeenth Annual International Bethesda Spine Workshop, Bethesda, MD  
Metastatic Disease of the Cervical Spine
- August 2005      AO-ASIF Advanced Concepts in the Management of Spinal Disorders,  
Monterrey, CA  
Spine Tumors
- October 2005      CNS, Metastatic Spinal Disease: Roles of Radiation and Surgery Seminar,  
Boston, MA  
Treatment of Pathologic Fractures
- October 2005      AO-ASIF Spine Tumor Symposium, Baltimore, MD  
What Is the Role of Vertebral Body Replacement via Cage, Allograft,  
Autograft, or Vascularized Graft?
- December 2005      Spinal Fellow Program, Memphis, TN  
Management of Spine Tumors
- July 2004      Advanced Spinal Techniques: Hands-on Workshop, Chicago, IL  
Anterior Fixation of Odontoid Fractures
- August 2004      AO-ASIF Spine Course for Residents and Fellows, Chicago, IL  
Post-Operative Spine Infection
- August 2004      AANS Master Series, Innovations in Spinal Fixation: An Advanced Course,  
Boston, MA  
Anterior Thoracolumbar Reconstruction Techniques
- September 2004      AO-ASIF Advanced Concepts in the Management of Spinal Disorders, Ponte  
Vedra Beach, FL  
Kyphoplasty and Vertebroplasty
- October 2004      CNS, Practical Course, San Francisco, CA  
Mastering Spinal Disorders: Dealing with Complexities
- April 2003      AO-ASIF Spine Course, Austin, TX  
1. Lumbar Degenerative Disease  
2. Management of Lumbar Degenerative Disease
- April-May 2003      AANS, San Diego, CA  
1. Surgical Anatomy of the Thoracic and Lumbar Spine/Lateral  
Extracavitary Approach to the Thoracic and Lumbar Spine  
2. Far Lateral Disc Herniation: Outcome Analysis
- September 2003      AO-ASIF Spine Tumor Symposium, Rochester, MN  
1. Is Spinal Cord Monitoring Necessary?  
2. What is the Role of Vertebral Body Replacement via Cage, Allograft,  
Autograft, or Vascularized Graft?  
Management of Spine Tumors
- March 2002      AANS-CNS, Section on Disorders of the Spine and Peripheral Nerves,  
Orlando, FL  
What's New in Spine Surgery? Challenging Spine Trauma Cases
- October 2002      AO-ASIF Comprehensive & Interactive Spine Course, Newport, RI
- February 2001      AANS-CNS, Joint Spine Section, Phoenix, AZ  
What's New in Spine Surgery? Fundamental in Spine Surgery:  
Spondylolisthesis



- April 2001 AANS, Toronto, Ontario, Canada
1. Lumbar Spine Fusion: Indications, Patient Selection, and Current Techniques
  2. Surgical Anatomy of the Thoracic and Lumbar Spine/Lateral Extracavitary Approach to the Thoracic and Lumbar Spine
- April 2001 Sofamor-Danek Course, Memphis, TN
1. Fixation/Revision Surgery: Managing the Previously Operated Patient-Interbody Surgery Patient-Algorithm
  2. Current Techniques in Lumbar-sacral Fixation and ALIF: Patient Selection and Postoperative Management
- October 2001 South Carolina Spine Society, Charleston, SC  
C1-2 Instability: Diagnosis, Management, and Treatment
- June 2000 Idaho Spinal Surgery Think Tank, Boise, ID  
The Role of the Neurosurgeon in Spinal Surgery in the Next Decade
- September 2000 South Carolina Spine Society, Charleston, SC  
Minimally Invasive Spinal Surgery
- September 2000 CNS, San Antonio, TX  
Anterior Approaches to the Thoracic and Lumbar Spine
- October 2000 Spine on the Beach, Myrtle Beach, SC  
Posterior Cervical Instrumentation: Anatomy and Technique
- November 1999 CNS, Boston, MA  
Surgical Approaches to the Thoracic/Lumbar Spine
- October 1998 CNS, Washington, D.C.  
Surgical Approaches to the Thoracic/Lumbar Spine
- March 1996 Society of Neurosurgery, University of Southern California, Los Angeles  
Gamma Knife Frame Application/Imaging
- April 1995 AANS, Orlando, FL  
Outcome and Cost Analysis in Infants with Massive Grade IV Germinal Matrix Hemorrhage and Progressive Hydrocephalus
- December 1994 AANS-CNS, Pediatric Section, St. Louis, MO
1. Surveillance Imaging in Children with Primitive Neuroectodermal Tumors (PNET)
  2. Outcome and Cost Analysis in Infants with Massive Grade IV Germinal Matrix Hemorrhage and Progressive Hydrocephalus

### **Invitations from International Institutions:**

- November 2015 Rambam Health Care Campus. Haifa, Israel
- September 2015 NSA Scientific Meeting. Auckland, Australia
- January 2015 H3C: Health Science Innovation Conference. Mumbai, India
- May 2015 83<sup>rd</sup> AANS Annual Scientific Meeting. Washington, DC
- November 2013 EANS (The European Association of Neurological Societies) 2013  
AANS/CNS Section on Tumors  
Annual International Neuro-Oncology Updates  
“En Bloc Resection of Lumbar-Pelvic Tumors & Reconstruction”

- September 2012 2<sup>nd</sup> Annual Bologna-Budapest Spine Meeting on Tumors and Osteoporosis  
Budapest, Hungary  
“Primary Tumors: Rationale and Limitations of En Block Resection”
- Feb 2010 Catholic University of Korea, St Vincent  
Catholic University of Korea, St, Mary  
Seoul, Korea  
4<sup>th</sup> International Neurosurgery Update  
Tumor Symposium: “Surgical Management of Spine Tumors “
- July 2010 9<sup>th</sup> International Updates in Neuro-Oncology  
Cortona, Italy.  
Novel technique foe en-bloc resection of chondrosarcoma
- June 2007 Israeli Spine Society Meeting, Tel Aviv, Israel  
“Management of Spine Tumors”
- March 2006 AO Spine, Latin America. XII Course, Florianopolis, Brazil  
“Complex Spinal Issues-Applications of Vertebroplasty/Kyphoplasty in the Management of Spine Tumors”  
Host, Professor Luiz Roberto Vialle

**Lectureships:**

- March 2017 The Ohio State University/The James Cancer Hospital  
Grand Rounds Presentation  
Surgical management of spine tumors
- May 2009 University of Southern California, Los Angeles, California  
Visiting Alumni- USC Academic Day  
Management of Spine Tumors  
Host: Michael Apuzzo M.D.
- March 2008 OSU Department of Urology Grand Rounds  
Management of Spine Tumors
- April 2008 Vertebroplasty/Kyphoplasty: What are the Diagnostic and Therapeutic Indications and Outcomes  
Spine Oncology Spine Group Chicago, Illinois  
University” St. Cyril and Mehodious”, Skopje, Macedonia  
Management of Spine Tumors  
Host: Professor Aleksander Caparoski M.D, PhD.
- January 2007 Invited lecturer, Phase 1 Grant Meeting  
The Ohio State University College of Medicine, Columbus OH  
Multiple Myeloma
- July 2007 Lecturer, Grand Rounds  
MedCentral Health System-Mansfield Hospital, Mansfield, Ohio  
Management of Spine Tumors
- December 2005 Grand Rounds speaker, Department of Neurosurgery,  
The Ohio State University, Columbus OH  
OSU-Arthur G. James Cancer Center  
Surgical Management of Spinal Tumors

- April 2003 Invited speaker/Course faculty, Synthes AO-ASIF, Austin, TX  
Team approach to the operative management of the spinal surgery patient:  
spine course for operating room personnel
- November 2002 Invited speaker/Course faculty, Medtronic, Dallas, TX  
Current techniques in lumbosacral fixation, minimizing complications in  
spine surgery

**Visiting Professorships:**

- May 2017 Moffitt Cancer Center  
University of South Florida  
Grand Rounds presentation-Surgical management of spine tumors  
Chairmans : Peter Forsyth M.D.  
Louis Harrison M.D.
- March 2017 SUNY-Upstate New-York, Syracuse University  
Grand Rounds presentation-Surgical management of spine tumors  
Chairman host: Larry Chin M.D.
- March 2017 Schlthess Klinik  
Presentation-Surgical management of spine tumors  
Zurich, Switzerland  
Host: Dezso Jeszsky M.D.Ph.D
- September 2016 Northwestern University Feinberg School of Medicine,  
Chicago, IL  
Grand Rounds Presentation: Management of Spine Tumors  
Chairman host: Maciej S. Lesniak, M.D.
- November 2015 Rambam Health Care Campus.  
Haifa, Israel  
Grand Rounds presentation-Surgical management of spine tumors  
Director, Medical & Research Development  
Host: Karl Skorecki, M.D.
- October 2015 Combined neurosurgery and orthopedics grand rounds presentation  
Management of Spine Tumors.  
Prince of Wales Hospital. Randwick, NSW Australia.
- October 2015 Lake Macquarie Specialist Medical Centre.  
Gateshead, NSW Australia

October 2015      Briz Brain & Spine Institute.  
Brisbane, Australia  
Host: Dr. Steven Yang

June 2013      Stuttgart, Tubingen, Wiesbaden, Homburg, Ulm, Dachau/Munich Germany  
St Josefs-Hospital Wiesbaden  
Head of Spine Center  
Host: Marcus Richter, M.D

June 2013      University Homburg/Saar-Germany  
Host: Joachim Oertel, M.D, Head of Neurosurgery

June 2013      University Tubingen-Germany  
Host: Professor Florian Roser. Head of Neurosurgery

March 2012      Medical University of South Carolina  
Charleston, South Carolina  
Management of Spinal Tumors  
Host: Sunil Patel M.D. Chairman, Neurosurgery

May 2012      Case Western Reserve University School of Medicine  
Cleveland, OH  
Management of Spinal Tumors  
Host: Warren Selman, M.D. and Andrew Sloan, M.D.

June 2012      University of Pittsburgh, Pittsburgh, PA  
Management of Spinal Tumors  
Hosts: Peter Gerszten, M.D. and Robert Freidlander, M.D. (Chair)

February 2010      Catholic University of Korea, St Vincent  
Catholic University of Korea, St, Mary  
Seoul, South Korea  
4<sup>th</sup> International Neurosurgery Update  
Tumor Symposium: “Surgical Management of Spine Tumors “  
Host: Jae Taek Hong M.D., PhD  
Suok Cho MD- Chairman

March 2009      Duke University Medical Center  
Durham, North Carolina  
Grand Rounds Presentation: Management of Spine Tumors  
Host: Robert Isaacs M.D.

April 2008      Grand Rounds Speaker  
Georgetown University,  
Washington D.C

Host: Dr. Sandhu Faheem

- June 2008 International Grand Rounds Speaker  
Management of Spine Tumors  
Hosts: Momir Polenkovic M.D., Ph.D  
Secretary of the Macedonian Academy of Sciences and Arts  
Skopje, Macedonia June
- June 2008 Professor Jordan Saveski  
Previous Dean  
University “St. Cyril and Methodius”, University Clinical Center  
Skopje, Macedonia
- November 2008 Weill Cornell Medical College of Cornell University and  
Memorial Sloan-Kettering Cancer Center  
New York, New York  
Host: Phillip Stieg M.D.  
Chairman and Professor, Department of Neurological Surgery
- November 2007 Grand Rounds speaker  
Indiana University/Methodist Hospital  
Indianapolis, Indiana  
Management of Spine Tumors  
Host: Julius Goodman
- March 2006 Grand Rounds speaker,  
New York University, New York  
Management of Spine Tumors  
Host: Patrick Kelly, M.D.
- February 2006 Lecturer, Surgical Management of Spinal Tumors  
Department of Neurosurgery, University of Vermont, Burlington  
Host: Bruce Trenmer, M.D.
- November 2005 University of Heidelberg, The Klinikum Karlsbad-Langensteinbach,  
Karlsbad, Germany  
“Management of Spine Tumors: Case Presentations”  
Host, Professor Jurgen Harms, M.D.
- April 2004 University of Bologna, Bologna, Italy  
“Management of Complex Spine Tumors: Case Presentations”  
Host: Professor Stephano Boriani
- October 2003 Grand Rounds speaker,  
Management of Spinal Tumors  
M.D. Anderson Cancer Center, Orlando, FL