



CURRICULUM VITAE

Ziya L. Gokaslan, M.D., F.A.C.S.

Signature

DEMOGRAPHIC INFORMATION

Current Appointments

Primary Appointment

Donlin M. Long Professor
Professor of Neurosurgery, Oncology and Orthopaedic Surgery
Vice Chairman, Department of Neurosurgery
Director, Neurosurgical Spine Program
Director, Neurosurgical Spine Metastasis Center
Department of Neurosurgery
Johns Hopkins University
Baltimore, Maryland

Personal Data

Citizenship and Visa Status
United States

Home Address

1421 Winespring Lane
Towson, Maryland 21204
Phone (410) 296-6894
Fax (410) 296-6893

Office Address

Johns Hopkins University
Department of Neurological Surgery
Meyer 7-109
600 North Wolfe Street
Baltimore, Maryland 21287
Phone (410) 955-4424
Fax (410) 502-3399
E-mail: zgokasl1@jhmi.edu

Education and Training

Degree-Granting Education

Istanbul Faculty of Medicine, University of Istanbul, Istanbul, Turkey, M.D., 1983, Doctor of Medicine

Postgraduate Training

Fellow, Clinical Spinal Surgery, Department of Orthopedics/Neurosurgery, New York University Medical Center, New York, NY, Dr. Paul Cooper, 1993-1994

Resident, Department of Neurosurgery, Baylor College of Medicine, Houston, TX, Dr. Robert Grossman, 1988-1993

Fellow, Clinical Research, Neurotraumatology, Department of Neurosurgery, Baylor College of Medicine, Houston, TX, Dr. Robert Grossman, 1986-1988

Intern, General Surgery, Baylor College of Medicine, Houston, TX, Dr. Charles McCollum, 1985-1986

Fellow, Post-Doctoral Clinical Research, Department of Psychiatry, Sleep Disorder and Research Center, Baylor College of Medicine, Houston, TX, Dr. Ismet Karacan, 1984-1985

Professional Experience

Academic Appointments

Clinical Assistant Professor of Neurosurgery, Baylor College of Medicine, Houston, TX, 1994-2002

Assistant Professor of Neurosurgery, Department of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX, 1994-2000

Associate Professor of Neurosurgery (tenured), Department of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX, 2000-2002

Professor of Neurosurgery, Oncology and Orthopaedic Surgery, Department of Neurosurgery, Johns Hopkins University School of Medicine, Baltimore, MD. 2002-Present

Academic Administrative Appointments/Responsibilities

Advisory Panel, The Journal World Neurosurgery, 4/1/10 - Present

Member, Professional, Economic, and Regulatory Committee, North American Spine Society, 4/6/09 - Present

Member, CPA Contracting Committee, Johns Hopkins University, Baltimore, MD 2004-Present

Vice-Chairman, Department of Neurosurgery; Director, Neurosurgical Spine Program, Johns Hopkins University School of Medicine, Baltimore, MD, 2002-Present

Deputy Chair, Department of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX, 2000-2002

Chief, Spine Program, Department of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX, 1999-2002

Chief, Neurosurgery Clinic, Department of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX, 1995-1996

RESEARCH ACTIVITIES

Publications

Peer-reviewed scientific articles

1. Robertson CS, Narayan RK, **Gokaslan ZL**, Pahwa R, Grossman RG: Cerebral arteriovenous oxygen difference as an estimate of cerebral blood flow in comatose patients. J Neurosurg 70:222-230, 1989.
2. Robertson CS, Narayan RK, Contant CF, Grossman RG, **Gokaslan ZL**, Pahwa R, Caram PC, Bray RS, Sherwood AM: Clinical experience with a continuous monitor of intracranial compliance. J Neurosurg 71:673-680, 1989.

3. Robertson CS, Contant CF, **Gokaslan ZL**, Narayan RK, et al: Cerebral blood flow, AVDO2 and neurosurgical outcome in head-injured patients. *J Neurol Neurosurg Psych* 55(7): 594-603, 1992.
4. Mawad ME, Mawad JK, Cartwright J, **Gokaslan ZL**: Long-term histopathologic changes in canine aneurysms embolized with Guglielmi detachable coils. (GDC). *Am J Neuroradiol* 16:7-13, 1995.
5. Rao VH, Bridge JA, Neff JR, Schaefer GB, Buehler BA, Viswanatha JK, **Gokaslan ZL**, Pollock RE, Nicolson GL, Yamamoto M, Stetler-Stevenson WG, Sawaya R, Rao JS: Expression of 72-kDa and 92kDa Type IV collagenases from human giant cell tumor of bone. *Clin Exp Metastasis* 13:420-426, 1995.
6. Rao JS, Yamamoto M, Monaham S, **Gokaslan ZL**, Fuller GN, Stetler-Stevenson WG, Rao VH, Liotta LA, Nicolson GL, Sawaya R: Expression and localization of 92-kDa type IV collagenase in human astrocytomas in vivo. *Clin Exp Metastasis* 14:12-18, 1996.
7. Sivaparvathi M, Yamamoto M, Nicolson GL, **Gokaslan ZL**, Fuller GN, Liotta LA, Sawaya R, Rao JS: Expression and immunohistochemical localization of cathepsin L during the progression of human gliomas. *Clin Exp Metastasis* 14:27-34, 1996.
8. Yamamoto M, Mohanam S, Sawaya R, Fuller GN, **Gokaslan ZL**, Seiki M, Sato H, Liotta LA, Rao JS: Differential expression of membrane-type matrix metalloproteinase with gelatinase A activation in human malignant brain tumor, both in vivo and in vitro. *Cancer Res* 56:384-392, 1996.
9. Chintala SK, Sawaya R, Fuller GN, **Gokaslan ZL**, Rao JS: Immunolocalization of ECM proteins in human glioma, both in vitro and in vivo. *Cancer Lett* 107-114, 1996.
10. Rao JS, Sawaya R, **Gokaslan ZL**, Yung WKA, Goldstein GW, Latterra J: Modulation of serine proteinases and metalloproteinases during morphogenic glial-endothelial interactions. *J Neurochem* 66:1657-1664, 1996.
11. Sivaparvathi M, Sawaya R, **Gokaslan ZL**, Chintala SK, Go Y, Rao J: Expression of cathepsin D during the progression of human gliomas. *Neurosci Lett* 208:1-4, 1996.
12. Chintala SK, Sawaya R, **Gokaslan ZL**, Rao JS: The effect of type III collagen on migration and invasion of human glioblastoma cell lines in vitro. *Cancer Lett* 102:57-63, 1996.
13. Rao JS, Yamamoto M, **Gokaslan ZL**, Fuller GN, Stetler-Stevenson WG, Rao VH, Liotta LA, Nicolson GL, Sawaya RE: Expression and localization of 92-kDa type IV collagenase/gelatinase B (MMP-9) in human gliomas. *Clin Exp Metastasis* (1996) Jan; (14) 1:12-8.
14. Sawaya R, Yamamoto M, **Gokaslan ZL**, Stetler-Stevenson WG, Mohanam S, Fuller GN, McCutcheon IE, Nicolson GL, Rao JS: Expression and localization of 72-kDa type IV collagenase (MMP-2) in human malignant gliomas in vivo. *Clin Exp Metastasis* 14:35-42, 1996.
15. Chintala SK, **Gokaslan ZL**, Go Y, Sawaya R, Rao JS: Role of extracellular matrix proteins in regulation of human glioma cell invasion in vitro. *Clin Exp Metastasis* 14: 358-366, 1996.
16. Chintala SK, Sawaya R, **Gokaslan ZL**, Rao JS: Modulation of matrix metalloprotease-2 and invasion in human glioma cells by $\alpha 3 \beta 1$ integrin. *Cancer Letter* 103:201-208, 1996.
17. Sivaparvathi M, Sawaya R, **Gokaslan ZL**, Shravan K, Chintala SK, Go Y, Rao JS: Expression and the role of cathepsin H in human glioma progression and invasion. *Cancer Letter* 104:121-126, 1996.
18. Go Y, Chintala SK, Oka K, **Gokaslan ZL**, Sawaya R, Rao JS: Invasive pattern of lac-Z-transfected human glioblastoma cells in nude mice brain. *Cancer Lett* 110:225-231, 1996.
19. Chintala SK, Ali-Osman F, Mohanam S, Rayford A, Go Y, **Gokaslan ZL**, Gagercas E, Venkaiah B, Sawaya R, Nicolson GL, Rao JS: Effect of cisplatin and BCNU on MMP-2 levels in human glioblastoma cell lines in vitro. *Clin Exp Metastasis* 15:400-409, 1997.
20. Mohanam S, Chintala SK, Go Y, Bhattacharya A, Venkaiah B, Boyd D, **Gokaslan ZL**, Sawaya R, Rao JS: In vitro inhibition of human glioblastoma cell line invasiveness by antisense uPA receptor. *Oncogene* 14:1351-1359, 1997.
21. Go Y, Chintala SK, Rayford A, Gagercas E, Ali-Osman F, Venkaiah B, **Gokaslan ZL**, Sawaya R, Nicolson GL, Rao JS: Cisplatin but not BCNU inhibits urokinase type plasminogen activator levels in human glioblastoma cell lines in vitro. *Clin Exp Metastasis* 15:447-452, 1997.
22. **Gokaslan ZL**, Samudrala S, Deletis V, Wildrick DM, Cooper PR: Intraoperative monitoring of spinal cord function using motor evoked potentials via transcutaneous epidural electrode during anterior cervical spinal surgery. *J Spinal Disord* 10:299-303, 1997.
23. Chintala SK, Mohanam S, Go Y, Venkaiah B, Sawaya R, **Gokaslan ZL**, Rao JS: Altered in vitro spreading and cytoskeletal organization in human glioma cells by downregulation of urokinase receptor. *Mol Carinog* 20:355-365, 1997.
24. Go Y, Chintala SK, Mohanam S, **Gokaslan ZL**, Bjerkvig R, Oka K, Nicolson GL, Sawaya R, Rao JS: Inhibition of in vivo tumorigenicity and invasiveness of a human glioblastoma cell line transfected with antigens uPAR vectors. *Clin Exper Metastasis* 15:440-446, 1997.

25. Walsh GL, **Gokaslan ZL**, McCutcheon IE, Mineo MT, Yasko A, Swisher SG, Schrupp DS, Nesbitt JC, Putnam JB, Roth JA: Anterior approaches to the thoracic spine in patients with cancer; indications and results. *Ann Thorac Surg* 64:1611-1618, 1997.
26. **Gokaslan ZL**, Romsdahl MM, Kroll SS, Walsh GL, Gillis TA, Wildrick DM, Leavens ME: Total sacrectomy for malignant neoplasms with Galveston L Rod reconstruction. Technical note. *J Neurosurg* 87:781-787, 1997.
27. Chintala SK, Sawaya R, Aggarwal BB, Majumder S, Giri DK, Kyritsis AP, **Gokaslan ZL**, Rao JS: Induction of matrix metalloproteinase-9 requires a polymerized actin cytoskeleton in human malignant glioma cells. *J Bio Chem* 22:13545-13551, 1998.
28. **Gokaslan ZL**, York JE, Walsh GL, McCutcheon IE, Lang FF, Putnam JB, Wildrick DM, Swisher SG, Abi-Said D, Sawaya R: Transthoracic vertebrectomy for metastatic spinal tumors. *J Neurosurg* 89:599-609, 1998.
29. **Gokaslan ZL**, Chintala SK, York JE, Boyapati V, Jasti S, Sawaya R, Fuller GF, Wildrick DM, Nicolson GL, Rao JS: Expression and role of matrix metalloproteinases MMP-2 and MMP-9 in human spinal column tumors. *Clin Exp Metastasis* 16:721-728, 1998.
30. **Gokaslan ZL**, Chintala SK, York JE, Boyapati V, Jasti S, Sawaya R, Fuller GF, Wildrick DM, Nicolson GL, Rao JS: Expression and localization of urokinase-type plasminogen activator in human spinal column tumors. *Clin Exp Metastasis* 16:713-718, 1998.
31. Escalante C, Raad I, **Gokaslan ZL**, Fuller GF, Garcia R: Cerebellar Mass: Is it malignancy or histoplasmosis? *Primary Care & Cancer* 18:35-40, 1998.
32. Sawaya R, Go Y, Kyritsis AP, Uhm J, Venkajah B, Mohanam S, **Gokaslan ZL**, Rao JS: Elevated levels of MR 92,000 type IV collagenase during tumor growth in vivo. *Biochem Biophys Res Commun*: (1998) Oct 20, 251 (2): 632-6.
33. York JE, Berk RH, Fuller GF, Rao JS, Abi-Said D, Wildrick DM, **Gokaslan ZL**: Chondrosarcoma of the spine: 1954 to 1997. *J Neurosurg (Spine I)* 90:73-78, 1999.
34. York JE, Kaczaraj A, Abi-Said D, Fuller GN, Skibber JM, Janjan NA, **Gokaslan ZL**: Sacral Chordoma: 40-year experience at a major cancer center. *Neurosurgery* 44(1):74-80, 1999.
35. Mohanam S, Go Y, Sawaya R, Venkaiah B, Mohan P, Kouraklis GP, **Gokaslan ZL**, Lagos GK, Rao JS: Elevated levels of urokinase-type plasminogen activator and its receptor during tumor growth in vivo. *Int J Oncol* 14:169-174, 1999.
36. Jackson RJ, **Gokaslan ZL**: Occipitocervicothoracic fixation for spinal instability in patients with neoplastic processes. *J Neurosurg* 91(Spine 1):81-89, 1999.
37. York JE, Walsh GL, Lang FF, Putnam JB, McCutcheon IE, Swisher SG, Komaki R, **Gokaslan ZL**: Combined chest wall resection with vertebrectomy and spinal reconstruction for the treatment of Pancoast tumors. *J Neurosurg Spine* 91(Spine 1):74-80, 1999.
38. Mohan PM, Chintala SK, Mohanam S, Gladson CL, Kim ES, **Gokaslan ZL**, Lakka SS, Roth JA, Fang B, Sawaya R, Kyritsis AP, Rao JS: Adenovirus-mediated delivery of antisense gene to urokinase-type plasminogen activator receptor suppresses glioma invasion and tumor growth. *Cancer Res* 59:3369-3373, 1999.
39. Gandhi S, Walsh GL, Komaki R, **Gokaslan ZL**, Nesbitt JC, Putnam JB, Roth JA, Merriman KW, McCutcheon IE, Minden FR, Swisher SG: A multidisciplinary surgical approach to superior sulcus tumors with vertebral invasion. *Ann Thorac Surg* 68(5):1778-1784; discussion 1784-1785, 1999.
40. York JE, Stringer J, Ajani JA, Wildrick DM, **Gokaslan ZL**: Gastric cancer and metastasis to the brain. *Ann Surg Oncol* 6:771-776, 1999.
41. **Gokaslan ZL**, Aladag MA, Ellerhorst JA: Melanoma metastatic to the spine: a review of 133 cases. *Melanoma Res* 10:78-80, 2000.
42. Jackson RJ, **Gokaslan ZL**: Spinal-pelvic fixation in patients with lumbosacral neoplasms. *J Neurosurg* 92(Spine 1):61-70, 2000.
43. Miller DJ, Lang FF, Walsh GL, Abi-Said D, Wildrick DM, **Gokaslan ZL**: Coaxial double-lumen methylmethacrylate reconstruction in the anterior procedures of the cervical and upper thoracic spine following tumor resection. *J Neurosurg (Spine 2)* 92:181-190, 2000.
44. Chang DW, Lee JE, **Gokaslan ZL**, Robb GL: Closure of hemicorporectomy with bilateral subtotal thigh flaps. *Plast Reconstr Surg* 105(5):1743-1746, 2000.
45. Fourny DR, Fuller GN, **Gokaslan ZL**: Intraspinal extradural myxopapillary ependymoma of the sacrum arising from the filum terminale externa. *J Neurosurg (Spine 2)* 93:322-326, 2000.
46. Fourny DR, Abi-Said D, Lang FF, McCutcheon IE, **Gokaslan ZL**: The use of pedicle screw fixation in the management of malignant spinal disease; Experience in 100 consecutive procedures. *J Neurosurg (Spine 1)* 94:25-37, 2001.

47. Jackson RJ, Fuller GN, Abi-Said D, Lang FF, **Gokaslan ZL**, Shi WM, Wildrick DM, Sawaya R. Limitations of stereotactic biopsy in the initial management of gliomas. *Neuro Oncol.* 2001 Jul;3(3):193-200.
48. Jackson RJ, Loh SA, **Gokaslan ZL**: Metastatic renal cell carcinoma of the spine: Surgical treatment and results. *J Neurosurg (Spine 1)* 94:18-24, 2001.
49. Fourney DR, Abi-Said D, Rhines L, Walsh GL, Lang FF, McCutcheon IE, **Gokaslan ZL**: Simultaneous anterior-posterior approach to the thoracic and lumbar spine for the radical resection of tumors, reconstruction and stabilization. *J Neurosurgery (Spine 2)* 94, 232-244, 2001.
50. Michael CB, **Gokaslan ZL**, DeMonte F, McCutcheon IE, Abi-Said D, Sawaya R, Lang FF: Surgical resection of calvarial metastases overlying dural sinuses. *Neurosurgery* 48(4): 745-755, 2001.
51. Lacroix M, Abi-Said D, Fourney DR, **Gokaslan ZL**, Shi W, DeMonte F, Lang FF, McCutcheon IE, Hassenbusch SJ, Holland E, Michael C, Miller D, Sawaya R: A multivariate analysis of 416 patients with glioblastoma multiforme: prognosis, extent of resection and survival. *J Neurosurg* 95:190-198, 2001.
52. Marmor E, Rhines LD, **Gokaslan ZL**: Case report and technical note of a total en bloc lumbar spondylectomy. *J Neurosurg (Spine 2)* 95:264-269, 2001.
53. Lang FF, Olansen NE, DeMonte F, **Gokaslan ZL**, Holland EC, Kalhorn C, Sawaya R: Surgical resection of intrinsic insular tumors: complication avoidance. *J Neurosurg* 95:638-650, 2001.
54. Hachem R, Afif C, **Gokaslan ZL**, Raad I: Successful treatment of vancomycin-resistant *enterococcus* meningitis with linezolid. *EJ Clin Mb & Inf Dis* 20(6):432-434, 2001.
55. Liebross RH, Starkschall GS, Wong PF, Horton J, **Gokaslan ZL**, Komaki R: The effect of titanium stabilization rods on spinal cord radiation dose. *Med Dosimetry* 27,1: 21-24, 2002.
56. Marmor E, Fourney DR, Rhines LD, Skibber JM, Fuller GN, **Gokaslan ZL**: Case Report: Sacrococcygeal Ganglioneuroma. *J Spinal Disorders* . 15: 265-268, 2002.
57. Lin PP, Guzel VB, Maura MF, Benjamin RS, Weber KL, Morello FA, **Gokaslan ZL**, Yasko AW: Long-term follow-up of patients with giant cell tumor of the sacrum treated with selective arterial embolization. *Cancer* 95(6): 1317-25, 2002.
58. Fourney DR, Prabhu SS, Cohen ZR, **Gokaslan ZL**, Rhines LD: Early sacral stress fracture after reduction of spondylolisthesis and lumbosacral fixation: case report. *Neurosurgery* 51(6): 1507-10; discussion 1510-1, 2002.
59. Hanbali F, Marmor E, Suki D, Rhines LD, Weinberg JS, McCutcheon IE, Suk I, **Gokaslan ZL**: Spinal Cord Ependymoma: Radical surgical resection and outcome. *Neurosurgery.* 51(5): 1162-72; discussion 1172-4, 2002.
60. Cohen ZR, Fourney DR, Marco RA, Rhines LD, **Gokaslan ZL**: Total cervical spondylectomy for primary osteogenic sarcoma. Case report and description of operative technique. *J Neurosurg* 97(3 suppl): 386-92, 2002.
61. Rahlfs TF, Ferson DZ, Law BK, **Gokaslan ZL**, Arens J: Pulse oximeter malfunction caused by the Stealth Station system during neurosurgery. *Anesthesiology* 96: A597, 2002.
62. Fourney DR, Schomer DF, Nader R, Chlan-Fourney J, Suki D, Ahrar K, Rhines LD, **Gokaslan ZL**: Percutaneous vertebroplasty and kyphoplasty for painful vertebral body fractures in cancer patients. *J Neurosurg* 98(1 Suppl):21-30, 2003.
63. Fourney DR, Prabhu SS, Cohen ZR, Rhines LD, **Gokaslan ZL**: Thoracolumbopelvic stabilization for the treatment of instability caused by recurrent myxopapillary ependymoma. *J Spinal Disord Tech.* 16 (1): 108-11, 2003.
64. Fourney DR, York JE, Cohen ZR, Suki D, Rhines LD, **Gokaslan ZL**: Management of atlantoaxial metastases with posterior occipitocervical stabilization. *J Neurosurg* 98(2 Suppl):165-70, 2003.
65. Fourney DR, **Gokaslan ZL**: Spinal instability and deformity due to neoplastic conditions. *Neurosurg Focus* 14(1):Article 8, 2003.
66. Fourney DR, **Gokaslan ZL**: Current management of sacral chordoma. *Neurosurg Focus* 15(2):Article 9, 2003.
67. Fourney DR, **Gokaslan ZL**: Thoracolumbar spine: surgical treatment of metastatic disease. *Curr Opin Orthop* 14:144-152, 2003.
68. Ryken TC, Eichholz KM, Gerszten PC, Welch WC, **Gokaslan ZL**, Resnick DK: Evidence-based review of that surgical management of vertebral column metastatic disease. *Neurosurg Focus* (2003): Nov 15; 15 (5).
69. Yao KC, Boriani S, **Gokaslan ZL**, Sundaresan N: En bloc spondylectomy for spinal metastases: a review of techniques. *Neurosurg Focus* (2003); 15(5).

70. Fournay DR, Siadati A, Bruner JM, **Gokaslan ZL**, Rhines LD: Giant cell ependymoma of the spinal cord: Case report and review of the literature. *J Neurosurg (Spine 1)* 100:75-79, 2004.
71. Gallia GL, Weiss N, Campbell JN, McCarthy EF, Tufaro AP, **Gokaslan ZL**. Vertebral synovial chondromatosis. *J Neurosurg* 2004; 2: 211-218.
72. Hentschel S, Rhines L, Wong F, **Gokaslan Z**, McCutcheon I: Subarachnoid-pleural fistula after resection of thoracic tumors. *J Neurosurg: Spine* (2004) 100:332-336.
73. Bagley C, **Gokaslan Z**: Cauda equina syndrome caused by primary and metastatic neoplasms. *Neurosurg Focus* (2004): June 15; 16(6).
74. Fournay D, **Gokaslan ZL**: Anterior approaches for thoracolumbar metastatic spine tumors. *Neurosurg Clin N Am*: October 2004; 15:4
75. Schmidt MH, Fournay DR, **Gokaslan ZL**. Metastatic spine disease. *Neurosurg Clin N Am*. 2004 Oct;15(4):xv-xvi. No abstract available.
76. Cohen ZR, Fournay DR, **Gokaslan ZL**, Walsh GL, Rhines LD: Anterior stabilization of the upper thoracic spine via an "interaortocaval subinnominate window." *J Spinal Disord Tech*. December 2004; 17(6): 543-8.
77. Bagley CA, Dudukovich KJ, Wolinsky JP, **Gokaslan ZL**. Surgical Management of Cervical Spinal Epidural Abscesses. *Operative Techniques in Neurosurgery*. December 7(4):193-198, 2004.
78. Bagley CA, Dudukovich KJ, Wolinsky JP, **Gokaslan ZL**. Surgical Management of Lumbrosacral Spinal Epidural Abscesses. *Operative Techniques in Neurosurgery*. December 7(4):206-211, 2004
79. Khanna AJ, Shindle MK, Wasserman BA, **Gokaslan ZL**, Gonzales RA, Buchowski JM, Riley LH III: Use of magnetic resonance imaging in differentiating compartmental location of spinal tumors. *Am J Orthop* 34(10):472-476, 2005.
80. Marco, RA, Gentry, JB, Rhines LD, Lewis VO, Wolinsky JP, Jaffe N, **Gokaslan ZL**: Ewing's Sarcoma of the Mobile Spine. *Spine* 2005; 30(7):769-773.
81. Fournay D, **Gokaslan ZL**: Use of "MAPS" for Determining the Optimal Surgical Approach to Metastatic Disease of the Thoracolumbar Spine: Anterior, Posterior, or Combined. Invited submission from the Koint Section Meeting on Disorders of the Spine and Peripheral Nerves. *J Neurosurg Spine*: January 2005; 2: 40-49.
82. Rhines LD, Fournay DR, Siadati A, Suk I, **Gokaslan ZL**: En bloc resection of multilevel cervical chordoma with C2 involvement: Case report and description of operative technique. *J Neurosurg Spine*: 2005 Feb; 2(2): 199-205.
83. Mantha A, Legnani FG, Bagley CA, Gallia GL, Garonzik I, Pradilla G, Amundson E, Tyler BM, Brem H, **Gokaslan ZL**: A novel rat model for the study of intraosseous metastatic spine cancer. *J Neurosurg Spine*. 2005 Mar; 2(3): 303-307.
84. Holman P, Suki D, McCutcheon I, Rhines L, **Gokaslan ZL**: Surgical Management of Metastatic Disease of the Lumbar Spine: Experience with 139 Patients. *J Neurosurg: Spine* 2; May 2005:550-563.
85. Brastianos P, Pradilla G, McCarthy E, **Gokaslan ZL**: Solitary thoracic osteochondroma: case report and review of the literature. *Neurosurgery*. 2005 Jun; 56: E1379.
86. Amundson E, Pradilla G, Bastianos P, Bagley C, Riley LH III, Garonzik IM, McCarthy E, Wolinsky JP, **Gokaslan ZL**: A novel intravertebral tumor model in rabbits. *Neurosurgery* (2005) Aug; 57(2): 341-6; discussion 341-6.
87. Guo Y, Palmer J, Shen L, Kaur G, Wiley J, Bruera E, **Gokaslan ZL**: Bowel and Bladder Continence, Wound Healing and Functional Outcomes in Patients who had Undergone Sacrectomy. *J Neurosurgery: Spine*. 2005 Aug; 3(2):106-110.
88. Fournay DR, Rhines LD, Hentschel SJ, Skibber JM, Wolinsky JP, Weber KL, Suki D, Gallia GL, Garonzik I, **Gokaslan ZL**: En Bloc Resection of Primary Sacral Tumors: Classification of Surgical Approaches and Outcome. *J Neurosurgery: Spine* 3. 2005: 111-122.
89. Raza SM, Anderson WS, Eberhart CG, Wolinsky JP, **Gokaslan ZL**: The application of surgical cordectomy in the management of an intramedullary-extramedullary atypical meningioma: case report and literature review. *J Spinal Disord Tech*. 2005 Oct; 18(5): 449-54.
90. Khanna AJ, Shindle MK, Wasserman BA, **Gokaslan ZL**, Gonzales RA, Buchowski JM, Riley LH 3rd. Use of magnetic resonance imaging in differentiating compartmental location of spinal tumors. *Am J Orthop*. 2005 Oct;34(10):472-6 Review.
91. Gallia GL, Haque R, Garonzik I, Witham TF, Khavkin YA, Wolinsky JP, Suk I, **Gokaslan ZL**. Spinal pelvic reconstruction after total sacrectomy for en bloc resection of a giant sacral chordoma. Technical note. *J Neurosurg Spine*. 2005 Dec;3(6):501-6.

92. Witham TF, Khavkin YA, Gallia GL, Wolinsky JP, **Gokaslan ZL**. Surgery Insight: Current Management of Epidural Spinal Cord Compression from Metastatic Spine Disease. *Nat Clin Pract Neurol*. 2006 Feb; 2(2) 87-94; quiz 116. Review.
93. McPherson CM, Suki D, McCutcheon IE, **Gokaslan ZL**, Rhines LD, Mendel E: Metastatic Disease from Spinal Chordoma: 10-Year Experience at the M.D. Anderson Cancer Center. *J Neurosurgery:Spine*. 2006 Oct; 5(4):277-80.
94. Gallia GL, Burger PC, Suk I, Bagley CA, Wolinsky JP, Garonzik IM, **Gokaslan ZL**. Concomitant conus medullaris ependymoma and filum terminale lipoma: case report. *Neurosurgery*. 2006 Jun;58(6):E1214; discussion E1214.
95. Sciubba DM, Mavinkurve GG, PF, Gaullioud P, Garonzik IM, Recinos PF, McGirt MJ, Woodworth GF, Witham T, Khavkin Y, **Gokaslan ZL**, Wolinsky JP. Preoperative imaging of cervical spine hemangioblastomas using three-dimensional fusion digital subtraction angiography. Report of two cases. *J Neurosurg Spine*. 2006 Jul;5(1):96-100.
96. Sciubba DM, Garonzik IM, Suk I, Gallia GL, Tufaro A, Wolinsky JP, **Gokaslan ZL**. Frameless stereotaxy in a transmandibular, circumglossal retropharyngeal cervical decompression in a Klippel-Feil patient: Technical note. *Eur Spine J*. 2006 Aug;15(8):1286-91.
97. McPherson CM, Suki D, McCutcheon IE, **Gokaslan ZL**, Rhines LD, Mendel E: Metastatic Disease from Spinal Chordoma: 10-Year Experience at the M.D. Anderson Cancer Center. *J Neurosurgery: Spine*. 2006 Oct; 5(4):277-80.
98. Sciubba DM, **Gokaslan ZL**. Diagnosis and Management of Metastatic Spine Disease. *Surg Oncol*. 2006 Nov;15(3):141-51. Epub 2006 Dec 20.
99. Kretzer RM, Sciubba DM, Bagley CA, Wolinsky JP, **Gokaslan ZL**, Garonzik IM. Translaminar Screw Fixation in the Upper Thoracic Spine: Cases Series and Technical Note. *J Neurosurg Spine*. 2006 Dec;5(6):527-533.
100. Wolinsky JP, Sciubba DM, Suk I, **Gokaslan ZL**. Endoscopic image-guided odontoidectomy for basilar invagination via a standard anterior cervical approach. Technical Note. *J Neurosurg Spine*. 2007 Feb; 6(2):184-191
101. Sciubba DM., Witham TF., **Gokaslan ZL**: Management of Metastatic Spine Disease With Spinal Cord Compression. *Neurosurgery Quarterly*: 17(1):40-47, March 2007.
102. Sciubba DM, Gallia GL, McGirt MJ, Woodworth GF, Garonzik IM, **Gokaslan ZL**, Witham T, Wolinsky JP. Thoracic kyphotic deformity reduction with a distractible titanium cage via an entirely posterior approach. *Neurosurgery*. 2007 Apr;60(4 Suppl 2):223-31.
103. Sciubba DM, **Gokaslan ZL**, Suk I, Suki D, Maldaun MVC, McCutcheon IE, Nader R, Theriault R, Rhines LD, Shehadi JA. Positive and Negative Prognostic Variables for Patients Undergoing Spine Surgery for Metastatic Breast Disease. *Eur Spine J*. 2007 May 8 [Epub ahead of print]; *Eur Spine J*. 2007 Oct; 16(10): 1659-67.
104. Klezl Z, Bagley CA, Bookland MJ, Wolinsky JP, Rezek Z, **Gokaslan ZL**. Harms titanium mesh cage fracture. *Eur Spine J*. 2007 May 12; [Epub ahead of print].
105. Witham TF, **Gokaslan ZL**. Lumbar disc herniation – to operate or not to operate? *Nat Clin Pract Neurol*. 2007 Jun; 3 (6): 316-7. Epub 2007 Apr 24.
106. Gallia GL, Sciubba DM, Bydon A, Suk I, Wolinsky JP, **Gokaslan ZL**, Witham TF. Total L-5 spondylectomy and reconstruction of the lumbosacral junction. Technical note. *J Neurosurg Spine*. 2007 Jul;7(1):103-11. Review.
107. Woodworth GF, Chaichana K, McGirt MJ, Sciubba DM, Suk I, Jallo GI, **Gokaslan ZL**, Wolinsky JP, Witham TF. Predictors of ambulatory function after surgical resection of intramedullary spinal cord tumors. *Neurosurgery*. 2007 Jul;61(1):99-106.
108. Shehadi SA, Maldrum M, Suki D, McCutcheon I, Theriault R, Nader R, Rhines LD, **Gokaslan ZL**: Surgical Treatment and Outcome in Patients with Metastatic Breast Cancer to the Spine: A Review of 87 Patients. *Eur Spine J*. 2007 Aug;16(8):1179-92. Epub 2007 Apr 4.
109. Bagley CA, Bookland MJ, Pindrik JA, Ozmen T, **Gokaslan ZL**, Witham TF. Local delivery of OncoGel delays paresis in rat metastatic spinal tumor model. *J Neurosurg Spine*. 2007 Aug;7(2):194-8.
110. Bagley CA, Khavkin YA, Witham TF, Wolinsky JP, **Gokaslan ZL**. Surgical Management of Malignant Spinal Tumors: Part I. *Contemporary Neurosurgery*. 2007 Aug 15;29(16):1-4.
111. Bagley CA, Khavkin YA, Witham TF, Wolinsky JP, **Gokaslan ZL**. Surgical Management of Malignant Spinal Tumors: Part II. *Contemporary Neurosurgery*. 2007 Aug 31;29(17):8.

112. Bagley CA, Bookland MJ, Pindrik JA, Ozmen T, **Gokaslan ZL**, Wolinsky JP, Witham TF. Fractionated, single-port radiotherapy delays paresis in a metastatic spinal tumor model in rats. *J Neurosurg Spine*. 2007 Sep;7(3):323-7.
113. Sciubba DM, Wolinsky JP, Than KD, **Gokaslan ZL**, Witham TF, Murphy KP. CT fluoroscopically guided percutaneous placement of transiliosacral rod for sacral insufficiency fracture: case report and technique. *Am J Neuroradiol*. 2007 Sep; 28 (8): 1451-4.
114. Sciubba DM, Lin LM, Conway JE, Bydon A, **Gokaslan ZL**, Kebaish K. Development of scoliosis following intrathecally placed opioid pump for chronic low back pain. *Spine*. 2007 Nov 15; 32(24): E718-22. Review.
115. Sciubba DM, McLoughlin GS, **Gokaslan ZL**, Bessman E, Pantle H. Are computed tomography scans adequate in assessing cervical spine pain following blunt trauma? *Emerg Med J*. 2007 Nov; 24(110): 803-4.
116. Sciubba DM, Nelson C, Hsieh P, **Gokaslan ZL**, Ondra S, Bydon A. Perioperative challenges in the surgical management of ankylosing spondylitis. *Neurosurg Focus*. 2008;24(1):E10. Review.
117. Chi JH, Bydon A, Hsieh P, Witham T, Wolinsky JP, **Gokaslan ZL**. Epidemiology and demographics for primary vertebral tumors. *Neurosurg Clin N Am*. 2008 Jan; 19(1):1-4. Review
118. Sciubba DM, Chi JH, Rhines LD, **Gokaslan ZL**. Chordoma of the spinal column. *Neurosurg Clin N Am*. 2008 Jan;19(1):5-15. Review
119. Chi JH, Sciubba DM, Rhines LD, **Gokaslan ZL**. Surgery for primary vertebral tumors: en bloc versus intralesional resection. *Neurosurg Clin N Am*. 2008 Jan;19(1):111-7.
120. Hsu W, Sciubba DM, Sasson AD, Khavkin Y, Wolinsky JP, Gailloud P, **Gokaslan ZL**, Murphy K. Intraoperative localization of thoracic spine level with preoperative percutaneous placement of intravertebral polymethylmethacrylate. *J Spinal Disord Tech*. 2008 Feb;21(1):72-5.
121. Chi JH, **Gokaslan ZL**. Vertebroplasty and kyphoplasty for spinal metastases. *Curr Opin Support Palliat Care*. 2008 Mar;2(1):9-13. Review
122. Chaichana KL, Woodworth GF, Sciubba DM, McGirt MJ, Witham TJ, Bydon A, Wolinsky JP, **Gokaslan ZL**. Predictors of ambulatory function after decompressive surgery for metastatic epidural spinal cord compression. *Neurosurgery*. 2008 Mar;62(3):683-92; discussion 683-92.
123. McGirt MJ, Attenello FJ, Sciubba DM, **Gokaslan ZL**, Wolinsky JP. Endoscopic transcervical odontoidectomy for pediatric basilar invagination and cranial settling. *J Neurosurg Pediatrics*. 2008 Apr;1(4):337-42.
124. Sciubba DM, Chaichana KL, Woodworth GF, McGirt MJ, Gokaslan ZL, Jallo GI. Factors associated with cervical instability requiring fusion after cervical laminectomy for intradural tumor resection. *J Neurosurg Spine*. 2008 May;8(5):413-9.
125. McLoughlin GS, Nuchtern JG, Dauser RC, Sciubba DM, **Gokaslan ZL**, Wolinsky JP. Mediastinal lymphangioma presenting as an acute epidural hematoma. *J Neurosurg Pediatrics*. 2008 Jun;1(6):474-476
126. McLoughlin GS, Sciubba DM, Suk I, Witham T, Bydon A, **Gokaslan ZL**, Wolinsky JP. En bloc sacrectomy performed in a single stage through a posterior approach. *Neurosurgery*, 2008 Jul;63(1 Suppl 1):ONS115-20; discussion ONS120.
127. O'Brein JR, **Gokaslan ZL**, Riley LH 3rd, Suk I, Wolinsky JP. Open reduction of C1-C2 subluxation with the use of C1 lateral mass and C2 translaminar screws. *Neurosurgery* 2008 Jul;63(1 Suppl 1): ONS95-8; discussion ONS98-9.
128. Gok B, Sciubba DM, McLoughlin GS, McGirt MJ, Ayhan S, Wolinsky JP, Bydon A, **Gokaslan ZL**, Witham TF. Surgical treatment of cervical spondylotic myelopathy with anterior compression: A review of 67 patients. *J Neurosurg Spine* August 2008.
129. Rao G, Suki, D, Chakrabarti I, Feiz-Erfan I, Mody MG, McCutcheon IE, **Gokaslan ZL**, Patel S, Rhines LD. Surgical management of primary and metastatic sarcoma of the mobile spine. *J Neurosurg Spine* Aug 2008, Vol. 9, No. 2: 120-128.
130. Gok B, Sciubba DM, McLoughlin GS, McGirt M, Ayhan S, Wolinsky JP, Bydon A, **Gokaslan ZL**, Witham TF. Revision surgery for cervical spondylotic myelopathy: surgical results and outcome. *Neurosurgery*. 2008 Aug;63(2):292-8; discussion 298.
131. Hsieh P, Sciubba DM, Moller DJ, Li K, O'Shaughnessy BA, Koski TR, **Gokaslan ZL**, Ondra SL, Fessler R, Liu JC. Maximizing the potentials of minimally invasive spine surgery (MISS) in complex spinal disorders: Illustrative cases and review of MISS for spinal trauma, spinal deformity, and spinal oncology. *Neurosurg Focus* August 2008 (in press).
132. Chaichana K, Sciubba DM, Li K, Gokaslan ZL. Surgical management of spinal cord herniation: technical consideration. *J Spinal Disord Tech* September 2008 (in press).

133. McLoughlin GS, Sciubba DM, Suk I, Bydon A, Witham TF, **Gokaslan ZL**, Wolinsky JP. En bloc sacrectomy performed in a single stage through a posterior approach. *Neurosurgery* (in press).
134. Gok B, McGirt MJ, Sciubba DM, Ayhan S, Bydon A, Witham TF, Wolinsky JP, **Gokaslan ZL**. Surgical resection plus adjuvant radiotherapy is superior to surgery or radiotherapy alone in the prevention of neurological decline in a rat metastatic spinal tumor model. *Neurosurgery* (in press).
135. Gok B, Sciubba DM, McLoughlin GS, McGirt MJ, Ayhan S, Wolinsky JP, Bydon A, Gokaslan ZL, Witham TF. Revision surgery for cervical spondylotic myelopathy: surgical results and outcome. *Neurosurgery* (in press).
136. Sciubba DM, Gokaslan ZL. Practical Point: Spinal cord stimulation for failed back surgery syndrome – does it work and is it cost effective? *Nat Clin Pract Neurol* (in press).
137. McLoughlin GS, Sciubba DM, Suk I, Witham TF, Wolinsky JP, Bydon A, **Gokaslan ZL**. Resection of a retropharyngeal craniocervical junction chordoma through a posterior cervical approach. *J Spinal Disord Tech* (in press).
138. Gebauer GP, Farjoodi P, Sciubba DM, **Gokaslan ZL**, Riley LH, III, Wasserman BA, Khanna AJ: Magnetic resonance imaging of spine tumors: compartmental classification, differential diagnoses, and spectrum of disease. *J Bone Joint Surg Am*, in press, 2008.
139. McGirt MJ, Garces-Ambrossi GL, Dato G, Sciubba DM, Witham T, Wolinsky JP, **Gokaslan ZL**, Bydon A. Limited versus aggressive discectomy for the treatment of primary disc herniation with radiculopathy: Meta-analysis of long-term outcome and recurrent disc herniation. *Neurosurgery* (in press).
140. Sciubba DM, Nelson C, Gok B, McGirt MJ, McLoughlin GS, Noggle JC, Wolinsky JP, Witham TF, Bydon A, **Gokaslan ZL**. Evaluation of potential factors associated with infection following sacral tumor resection. *J Neurosurg Spine* (in press).
141. Suki D, Lang FF, Meyers CA, Owolabi Bo, **Gokaslan ZL**, Sawaya R: Brain metastasis outcomes study: patients' expectations and early results. (Submitted to *J Neurosurg*).
142. Bagley CA, Wolinsky JP, **Gokaslan ZL**, Witham TF. Assuring optimal physiologic craniocervical alignment and avoidance of swallowing related complications following occipitocervical fusion by preoperative halo-vest placement. (Accepted to *J Spinal Disorders & Techniques*).
143. Gok B, McGirt M, Sciubba DM, Ayhan S, Bydon A, Witham TF, Wolinsky JP, Gokaslan ZL. Surgical resection plus adjuvant radiotherapy is superior to surgery or radiotherapy alone in the prevention of neurological decline in a rat metastatic spinal tumor model. *Neurosurgery*, 2008 August; 63 (2):346-51.
144. Xu R, Sciubba DM, **Gokaslan ZL**, Bydon A. Ossification of the ligamentum flavum in a Caucasian man. *Neurosurg Spine*, 2008 Nov; 9(5):427-37.
145. Sciubba D, Chaichana K, Woodworth G, McGirt MJ, **Gokaslan ZL**, Jallo GL. Predictors of cervical instability requiring fusion after cervical laminectomy for intradural tumor resection. *Journal of Neurosurgery: Spine* 8(5): 413-20, 2008.
146. Gebauer GP, Farjoodi P, Sciubba DM, **Gokaslan ZL**, Riley LH, III, Wasserman BA, Khanna AJ: Magnetic resonance imaging of spine tumors: classification, differential diagnosis, and spectrum of disease. *J Bone Joint Surg Am* 90(Suppl 4):146-162, 2008.
147. Sciubba DM, Nelson C, Gok B, McGirt MJ, McLoughlin GS, Noggle JC, Wolinsky JP, Witham TF, Bydon A, **Gokaslan ZL**. Evaluation of factors associated with postoperative infection following sacral tumor resection. *J Neurosurg Spine*. 2007 Dec;9(6):593-9.
148. Sciubba DM, Nguyen T, **Gokaslan ZL**. Solitary vertebral metastasis. *Orthop Clin North Am*. 2009 Jan;40(1):145-54, viii Review
149. McGirt MJ, Gok B, Shepherd S, Noggle J, Garces Ambrossi GL, Bydon A, **Gokaslan ZL**. Effect of hyperglycemia on progressive paraparesis in a rat metastatic spinal tumor model. *J Neurosurg Spine* 2009 Jan;10(1):9-15.
150. Chaichana KL, Sciubba DM, Li KW, **Gokaslan ZL**. Surgical management of thoracic spinal cord herniation: technical consideration. *J Spinal Disord Tech*. 2009 Feb;22(1):67-72.
151. McGirt MJ, Ambrossi GL, Dato G, Sciubba DM, Witham TF, Wolinsky JP, **Gokaslan ZL**, Bydon A. Recurrent disc herniation and long-term back pain after primary lumbar discectomy: review of outcomes reported for limited versus aggressive disc removal. *Neurosurgery*, 2009 Feb;64(2):338-44; discussion 344-5. Review
152. Matthew J. McGirt, M.D., Beril Gok, M.D., Starane Shepherd, B.S., Joseph Noggle, B.S., Gianna L. Garces Ambrossi, M.D., Ali Bydon, M.D. and **Ziya L. Gokaslan, M.D.**: Effect of hyperglycemia on progressive paraparesis in a rat metastatic spinal tumor model. *J Neurosurg Spine* 10: 9-15, 2009
153. McGirt MJ, Ambrossi G, Dato G, Sciubba D, Witham T, Wolinski JP, **Gokaslan Z**, Bydon A.

- Limited versus aggressive discectomy for the treatment of primary disc herniation with radiculopathy: A systematic review of long-term outcome and recurrent disc herniation. *Neurosurgery* 64(2):338-45, 2009.
154. Gok B, McGirt MJ, Sciubba D, Bydon A, Wolinsky JP, Witham T, **Gokaslan Z**. Adjuvant treatment with locally delivered Oncogel delays the onset of paresis after surgical resection of experimental spinal column metastasis. *Neurosurgery* [In Press]
 155. Parker S, McGirt MJ, Mehta V, Sciubba D, Ambrossi G, Witham T, **Gokaslan Z**, Wolinski JP. Translaminar versus pedical screws for instrumented fixation at C2: Review of 180 cases. *Neurosurgery* [In Press]
 156. Ambrossi G, McGirt MJ, Sciubba D, Dato G, Witham T, Wolinski JP, **Gokaslan Z**, Bydon A. Recurrent lumbar disc herniation after single-level lumbar discectomy: Incidence and health care cost analysis. *Neurosurgery* [In Press]
 157. McGirt MJ, Sutter G, Xu R, Pindrik J, **Gokaslan Z**, Bydon A. Biomechanical comparison of T1 and T2 translaminar versus pedicle screws in subaxial cervical constructs. *Neurosurgery* [In Press]
 158. Gok B, McLoughlin G, Sciubba D, McGirt MJ, Wolinsky JP, Bydon A, **Gokaslan Z**, Witham T. Surgical management of cervical spondylotic myelopathy with laminectomy and instrumented fusion. *Neurological Research* [In Press]
 159. Ambrossi G, McGirt MJ, Mehta V, Sciubba D, Witham T, Wolinski JP, Bydon A, **Gokaslan Z**. Factors associated with long-term neurological outcome and tumor progression after resection of intramedullary spinal cord tumors: Analysis of 103 consecutive cases. *Journal of Neurosurgery: Spine* [In Press]
 160. Mehta V, McGirt MJ, Parker S, Sciubba D, Ambrossi G, Bydon A, **Gokaslan Z**, Witham T. Morbidity and outcome comparison between TLIF and PLIF from a single institutional experience. *Surgical Neurology* [In Press]
 161. Ambrossi G, McGirt MJ, Parker S, Sciubba D, Wolinski JP, Bydon A, **Gokaslan Z**, Witham T. Spinal deformity following laminoplasty versus laminectomy for resection of intradural spinal tumors: Analysis of 238 patients. *Neurosurgery* [In Press]
 162. McGirt MJ, Mehta V, Ambrossi G, **Gokaslan Z**, Samdani A, Jallo G. Incidence, time course, and factors associated with scoliosis progression after pediatric tethered cord release. *Journal of Neurosurgery: Pediatrics* [In Press]
 163. Hsieh P, Xu R, McGirt MJ, Wolinsky JP, Bydon A, Witham T, **Gokaslan Z**. Oncological and clinical outcomes following attempted en bloc sacrectomy with judicious sacral nerve root preservation for primary malignant sacral tumors. *Spine* [In Press]
 164. Parker S, Xu R, McGirt MJ, Bydon M, **Gokaslan Z**, Bydon A. Recurrent back and leg pain after surgical resection of spinal synovial cysts: Systematic review of reported outcomes. *Journal of Neurosurgery: Spine*
 165. Xu R, McGirt MJ, Parker S, Bydon M, Witham T, Wolinsky JP, **Gokaslan Z**, Bydon A. Factors associated with recurrent back and leg pain after surgical resection of spinal synovial cysts: Analysis of 150 consecutive cases *Neurosurgery*
 166. Xu R, Sciubba D, McGirt MJ, **Gokaslan Z**, Bydon A. Hemorrhagic synovial cyst of the lumbar spine: Case report and review of the literature. *Neurosurgery*
 167. Mehta V, Gottfried O, McGirt MJ, **Gokaslan Z**, Jallo G. Concurrent untethering and correction of spinal deformity in patients with pediatric tethered cord syndrome. *Journal of Neurosurgery: Pediatrics*
 168. McLoughlin G, Sciubba D, McGirt MJ, Wolinski JP, Bydon A, Fourney D, **Gokaslan Z**, Witham T. Postoperative infection of the instrumented spine: Review of 1,332 procedures. *Journal of Neurosurgery: Spine*
 169. Samuels R, Ambrossi G, McGirt MJ, Sutter G, **Gokaslan Z**, Carson B, Jallo GI. Effect of duraplasty on incidence and time course of re-tethering after tethered cord release in children. *Child's Nervous System*
 170. Chan P, Boriani S, Fourney DR, Biagini R, Dekutoski MB, Fehlings MG, Ryken TC, **Gokaslan ZL**, Vrionis FD, Harrop JS, Schmidt MH, Vialle LR, Gerszten PC, Rhines LD, Ondra SL, Pratt SR, Fisher CG. An assessment of the reliability of Enneking and Weinstein-Boriani-Biagini classifications for staging of primary spinal tumors by the Spine Oncology Study Group. *Spine* (Phila Pa 1976). 2009 Feb 15;34(4):384-91.

171. Gok B, McLoughlin GS, Sciubba DM, McGirt MJ, Chaichana KL, Wolinsky JP, Bydon A, **Gokaslan ZL**, Witham TF. Surgical management of cervical spondylotic myelopathy with laminectomy and instrumented fusion. *Neurol Res.* 2009 Feb 11.
172. Chi JH, **Gokaslan, Z**, McCormick P, Tibbs PA, Kryscio RJ, Patchell PA. Selecting treatment for patients with malignant epidural spinal cord compression-does age matter? : results from a randomized clinical trial. *Spine* (Phila Pa 1976). 2009 Mar 1;34(5): 431-5
173. Sciubba DM, Petteys RJ, Garces-Ambrossi GL, Noggle JC, McGirt MJ, Wolinsky JP, Witham TF, **Gokaslan ZL**. Diagnosis and management of sacral tumors. *J Neurosurg Spine.* 2009 Mar;10(3):244-56. Review
174. Hsieh PC, Ondra SL, Grande AW, O'Shaughnessy BA, Bierbrauer K, Crone KR, Halpin RJ, Suk I, Koski TR, **Gokaslan ZL**, Kuntz C. Posterior vertebral column subtraction osteotomy: a novel surgical approach for the treatment of multiple recurrences of tethered cord syndrome. *J Neurosurg Spine.* 2009 Apr;10(4):278-86.
175. **Gokaslan ZL**, McGirt MJ. Kyphoplasty with intraspinal brachytherapy for metastatic spine tumors. *J Neurosurg Spine.* 2009 Apr;10(4):334-5; author reply 335. No abstract available.
176. Williams BJ, Fox BD, Sciubba DM, Suki D, Tu SM, Kuban D, **Gokaslan ZL**, Rhines LD, Rao G. Surgical management of prostate cancer metastatic to the spine. *J Neurosurg Spine.* 2009 May;10(5): 414-22.
177. Bagley CA, Witham TF, Pindrik JA, Davis RF, Bydon A, **Gokaslan ZL**, Wolinsky JP. Assuring optimal physiologic craniocervical alignment and avoidance of swallowing fusion by preoperative halo vest placement. *J Spinal Disord Tech.* 2009 May;22(3):170-6.
178. Parker SL, McGirt MJ, Garces-Ambrossi GL, Mehta VA, Sciubba DM, Witham TF, **Gokaslan ZL**, Wolinsky JP. Translaminar versus pedicle screw fixation of C2: comparison of surgical morbidity and accuracy of 313 consecutive screws. *Neurosurgery.* 2009 May;64(5 Suppl 2):343-8; discussion 348-9.
179. McGirt MJ, Parker SL, Wolinsky JP, Witham TF, Bydon A, **Gokaslan ZL**. Vertebroplasty and kyphoplasty for the treatment of vertebral compression fractures: an evidenced-based review of the literature. *Spine J.* 2009 June;9(6):501-8. Epub 2009 Feb 28.
180. Hsu W, Kosztowski TA, Zaidi HA, Dorsi M, **Gokaslan ZL**, Wolinsky JP. Multidisciplinary Management of Primary Tumors of the Vertebral Column. *Curr Treat Options Oncol.* 2009 June 23.
181. Gok B, McGirt MJ, Sciubba DM, Garces-Ambrossi G, Nelson C, Noggle J, Bydon A, Witham TF, Wolinsky JP, **Gokaslan ZL**. Adjuvant treatment with locally delivered OncoGel delays the onset of paresis after surgical resection of experimental spinal column metastasis. *Neurosurgery, 2009 Jul;65(1):193-9: discussion 199-200.*
182. Chaichana KL, Pendleton C, Sciubba DM, Wolinsky JP, **Gokaslan ZL**. Outcome following decompressive surgery for different histological types of metastatic tumors causing epidural spinal cord compression. Clinical article. *J Neurosurg Spine* 2009 July;11 (1):56-63.
183. Chaichana KL, Pendleton C, Wolinsky JP, **Gokaslan ZL**, Sciubba, DM, Vertebral compression fractures in patients presenting with metastatic epidural spinal cord compression. *Neurosurgery, 2009 August: 65(2):267-74.*
184. Hsieh Patrick C., Galia Gary, Sciubba Daniel, Wolinsky Jean-Paul, **Gokaslan ZL**. En-bloc Excision of Chordomas in the Cervical Spine: Review of 5 Consecutive Cases with Over 4-year Follow up. *Annual Meeting Scientific Sessions. 2009 September*
185. Sciubba, Daniel, Nguyen, Trang, **Gokaslan, ZL**. Solitary Vertebral Metastasis. *Spine Oncology: Orthopedic Clinics of North America, Volume 40, Number 1, January 2009.*
186. Sciubba, Daniel, Wasserman, Bruce, **Gokaslan, ZL**. Tumors of the Spine. *MRI for Orthopaedic Surgeons.*
187. Xu R, Garces-Ambrossi GL, McGirt MJ, Witham TF, Wolinsky JP, Bydon A, **Gokaslan, ZL**, Sciubba DM. Thoracic vertebrectomy and spinal reconstruction via anterior, posterior, or combined approaches: clinical outcomes in 91 consecutive patients with metastatic spinal tumors. *J Neurosurg Spine.* 2009 Sept; 11(3):272-84. PMID: 19769508 (PubMed – indexed for MEDLINE) Related citations
188. Garces-Ambrossi GL, McGirt MJ, Samuels R, Sciubba DM, Bydon A, **Gokaslan, ZL**, Jallo GI. Neurological outcome after surgical management of adult tethered cord syndrome. *J Neurosurg Spine.* 2009 Sept; 11(3):304-9, PMID: 19769511 (PubMed – indexed for MEDLINE) Related citations

189. Xu R, Bydon M, **Gokaslan, ZL**, Wolinsky JP, Witham TF, Bydon A. Epidural steroid injection resulting in epidural hematoma in a patient despite strict adherence to anticoagulation guidelines. *J Neurosurg Spine*. 2009 Sept; 11(3):358-64. PMID: 19769520 (PubMed – indexed for MEDLINE) Related citations
190. Hsieh PC, Xu R, Sciubba DM, McGirt MJ, Nelson C, Witham TF, Wolinsky JP, **Gokaslan ZL**. Long-term clinical outcomes following en bloc resections for sacral chordomas and chondrosarcomas: a series of twenty consecutive patients. *Spine (Phila Pa 1976)*. 2009 Sept 15;34 (20): 2233-9. PMID: 19752710 (PubMed – indexed for MEDLINE) Related citations
191. McGirt MJ, Mehta V, Garces-Ambrossi GL, Gottfried O, Solakoglu C, **Gokaslan, ZL**, Samdani A, Jallo GI. Pediatric tethered cord syndrome: response of scoliosis to untethering procedures. *Clinical article. J Neurosurg Pediatr*. 2009 Sep;4(3):270-4. PMID: 19772413 (PubMed – indexed for MEDLINE) Related citations
192. Fisher CG, Keynan O, Ondra S, **Gokaslan ZL**. Introduction to focus issue in spine oncology: the synthesis of evidence and expert opinion for best practice recommendation. *Spine (Phila Pa 1976)*. 2009 Oct 15;34(22 Suppl): S21-5. Review PMID: 19829273 (PubMed – indexed for MEDLINE) Related citations
193. Sciubba DM, Okuno SH, Dekutoski MB, **Gokaslan ZL**. Ewing and osteogenic sarcoma: evidence for multidisciplinary management. *Spine (Phila Pa 1976)*. 2009 Oct 15;34(22 Suppl): S58-68. Review PMID: 19829278 (PubMed – indexed for MEDLINE) Related citations
194. Sciubba DM, Petteys RJ, Shakur SF, **Gokaslan ZL**, McCarthy EF, Collins MT, McGirt MJ, Hsieh PC, Nelson CS, Wolinsky JP. En bloc spondylectomy for treatment of tumor-induced osteomalacia. *J Neurosurg Spine*. 2009 Nov; 11(5):600-4, PMID: 19929364 (PubMed – indexed for MEDLINE) Related citations
195. Sciubba DM, Cheng JJ, Petteys RJ, Weber KL, Frassica DA, **Gokaslan ZL**. Chordoma of the sacrum and vertebral bodies. *J Am Acad Orthop Surg*. 2009 Nov;17(11):708-17. Review: PMID: 19880681 (PubMed – indexed for MEDLINE) Related citations
196. Hsieh PC, Li KW, Sciubba DM, Suk I, Wolinsky JP, **Gokaslan ZL**. Posterior-only approach for total en bloc spondylectomy for malignant primary spinal neoplasms: anatomic considerations and operative nuances. *Neurosurgery*. 2009 Dec;65(6 Suppl):173-81; discussion 181. Review PMID: 19934992 (PubMed – indexed for MEDLINE) Related citations
197. Sciubba DM, **Gokaslan ZL**. *Spine J*. 2010 Jan;10(1):63-5. Epub 2009 Nov 18. Are patients satisfied after surgery for metastatic spine disease? No abstract available. PMID: 19926344 (PubMed – indexed for MEDLINE) Related citations
198. Quraishi NA, Wolinsky JP, Bydon A, Witham TF, **Gokaslan ZL**. Giant destructive myxopapillary ependymomas of the sacrum. *J Neurosurg Spine*. 2010 Feb;12(2):154-9, PMID: 20121349 (PubMed – indexed for MEDLINE) Related citations
199. Alish H, Parker SL, McGirt MJ, **Gokaslan ZL**, Witham TF, Bydon A, Wolinsky JP, Sciubba DM. Preoperative radiographic factors and surgeon experience are associated with cortical breach of C2 pedicle screws. *J Spinal Disord Tech*. 2010 Feb;23(1):9-14. Review PMID: 20068474 (PubMed – indexed for MEDLINE) Related citations
200. Rao G, Chang GJ, Suk I, **Gokaslan ZL**, Rhines LD. Midsacral amputation for en bloc resection of chordoma. *Neurosurgery*. 2010 Mar;66(3 Suppl Operative):41-4. PMID: 20124926 (PubMed – indexed for MEDLINE) Related citations

201. Itshayek E, Yamada J, Bilsky M, Schmidt M, Shaffrey C, Gerszten P, Polly D, **Gokaslan ZL**, Varga PP, Fisher CG. Timing of surgery and radiotherapy in the management of metastatic spine disease: a systematic review. *Int J Oncol*. 2010 Mar;36(3):533-44. PMID: 20126972 (PubMed – in process)
Related citations
202. Taghva A, Li KW, Liu JC, **Gokaslan ZL**, Hsieh, PC. Minimally invasive circumferential spinal decompression and stabilization for symptomatic metastatic spine tumor: technical case report. *Neurosurgery*. 2010 Mar;66(3):E620-2. PMID: 20173535 (PubMed – indexed for MEDLINE) Related citations
203. Ayhan S, Nelson C, Gok B, Petteys RJ, Wolinsky JP, Witham TF, Bydon A, **Gokaslan ZL**, Sciubba DM. Transthoracic surgical treatment for centrally located thoracic disc herniations presenting with myelopathy: a 5 year institutional experience. *J Spinal Disord Tech*. 2010 Apr;23(2):79-88 Review
PMID: 20065866 (PubMed – indexed for MEDLINE) Related citations
204. Xu R, McGirt MJ, Parker SL, Bydon M, Olivi A, Wolinsky JP, Witham TF, **Gokaslan ZL**, Bydon A. Factors associated with recurrent back pain and cyst recurrence after surgical resection of one hundred ninety-five spinal synovial cysts: analysis of one hundred sixty-seven consecutive cases. *Spine (Phila Pa 1976)*. 2010 May 1;35(10):1044-53. . PMID: 20173680 (PubMed – in process) Related citations
205. Bekelis K, Gottfried O, Wolinsky JP, **Gokaslan, ZL**, Omeis, I. Severe dysphagia secondary to posterior C1-C3 instrumentation in a patient with atlantoaxial traumatic injury: a case report and review of the literature. *Dysphagia*. 2010 Jun;25(2): 156-60. Epub 2009 Sept 30. PMID: 19789914 (PubMed – in process) Related citations
206. McLoughlin GS, Sciubba DM, Suk I, Bydon A, Witham TF, Wolinsky JP, **Gokaslan ZL**. Resection of a retropharyngeal craniovertebral junction chordoma through a posterior cervical approach. *J Spinal Disord Tech*. 2010 Jul;23(5):359-65. Review PMID: 20084032 (PubMed – indexed for MEDLINE)
Related citations
207. Omeis I, Bekelis K, Gregory A, McGirt M, Sciubba D, Bydon A, Wolinsky JP, **Gokaslan ZL**, Witham TF. The use of expandable cages in patients undergoing multilevel corpectomies for metastatic tumors in the cervical spine. *Orthopedics*. 2010 Feb 1;33(2):87-92. doi: 10.3928/014774447-20100104-12. PMID: 20192145 (PubMed – indexed for MEDLINE) Related citations
208. Quraishi NA, Wolinsky JP, Bydon, A. Witham, T., **Gokaslan, ZL**, Giant destructive myxopapillary ependymomas of the sacrum. *J Neurosurg Spine*. 2010 Feb: 12(2):154-9
209. Hsu W, Wolinsky JP, **Gokaslan ZL**, Sciubba DM. Transoral approaches to the cervical spine. *Neurosurgery*, 2010 Mar;66(3 Suppl): 119-25. Review. PMID: 20173513 (PubMed – indexed for MEDLINE) Related citations)
210. Rao G, Chang CJ, Suk I, **Gokaslan Z**, Rhines LD. Midsacral amputation for en bloc resection of chordoma. *Neurosurgery*, 2010 Mar;66 (3 Suppl Operative):41-4.
211. Itshayek E, Yamada J, Bilsky M, Schmidt M, Shaffrey C, Gerszten P, Polly D, **Gokaslan Z**, Varga PP, Fisher CG. Timing of surgery and radiotherapy in the management of metastatic spine disease: a systematic review. *Int J Oncol*. 2010 Mar;36(3):533-44. Review
212. Taghva A, Li KW, Liu JC, **Gokaslan, ZL**, Hsieh PC. Minimally invasive circumferential spinal decompression and stabilization for symptomatic metastatic spine tumor: technical case report. *Neurosurgery*, 2010 Mar;66(3): E620-2.
213. Chaichana KL, Pradilla G. Witham TF, **Gokaslan ZL**, Bydon A. The clinical significance of pneumorachis: a case report and review of the literature. *J Trauma*. 2010 Mar;68(3):736-44. PMID: 20220428 (PubMed – indexed for MEDLINE) Related citations)
214. Sciubba DM, Petteys RJ, Kang S, Than KD, **Gokaslan ZL**, Gallia GL, Wolinsky JP. Solitary spinal metastasis of Hurthle cell thyroid carcinoma. *J Clin Neurosci*. 2010 Jun;17(6):797-801. Epub 2010 Apr 1. PMID: 20359896 (PubMed – indexed for MEDLINE) Related citations)
215. Hsu W, Kosztowski TA, Zaidi HA, **Gokaslan ZL**, Wolinsky JP. Image-guided, endoscopic, transcervical resection of cervical chordoma. *J Neurosurg Spine*. 2010 Apr;12(4):431-5. PMID: 20367380 (PubMed – indexed for MEDLINE) Related citations)

216. McGirt MJ, Garces-Ambrossi GL, Parker SL, Sciubba DM, Bydon A, Wolinsky JP, **Gokaslan ZL**, Jallo G, Witham TF. Short-term progressive spinal deformity following laminoplasty versus laminectomy for resection of intradural spinal tumors; analysis of 238 patients. *Neurosurgery*. 2010 May;66(5): 1005-12. PMID: 20404708 (PubMed – indexed for MEDLINE) Related citations)
217. Peeling L, Frangou E, Hentschel S, **Gokaslan ZL**, Fourney DR. Refinements to the simultaneous anterior-posterior approach to the thoracolumbar spine. *J Neurosurg Spine*. 2010 May;12(5):456-61. PMID: 20433292 (PubMed – indexed for MEDLINE) Related citations)
218. Xu R, McGirt MJ, Parker SL, Bydon M, Olivi A, Wolinsky JP, Witham TF, **Gokaslan ZL**, Bydon A. Spine (Phila Pa 1976) 2010 May 1;35(10):1044-53. Factors associated with recurrent back pain and cyst recurrence after surgical resection of one hundred ninety-five spinal synovial cysts: analysis of one hundred sixty-seven consecutive cases. *Spine (Phila Pa 1976)*. 2010 May 1;35(10):1044-53.
219. Xu R, Sciubba DM, **Gokaslan ZL**, Bydon A. Metastasis to the occipitocervical junction: A case report and review of the literature. *Surg Neurol Int*. 2010 May 31;1:16.
220. Hsu W, Zaidi HA, Suk I, **Gokaslan ZL**, Wolinsky JP. A new technique for intraoperative reduction of occipitocervical instability. *Neurosurgery*, 2010 Jun;66(6 Suppl Operative): 319-23; discussion 323-4. PMID: 20489523 (PubMed – in process Related citations)
221. Mehta VA, McGirt MJ, Ambrossi GL, Parker SL, Sciubba DM, Bydon A, Wolinsky JP, **Gokaslan ZL**, Witham TF. Trans-foraminal versus posterior lumbar interbody fusion: comparison of surgical morbidity. *Neurol Res*. 2010 Jun 11. (Epub ahead of print) PMID: 20546682 (PubMed –as supplied by publisher) Related citations
222. Fisher CG, Dipaola CP, Ryken TC, Bilsky MH, Shaffrey CI, Berven SH, Harrop JS, Fehlings MG, Boriani S, Chou D, Schmidt MH, Polly DW, Biagini R, Burch S, Dekutoski MB, Ganju A, Gerszten PC, **Gokaslan ZL**, Groff MW, Liebsch NJ, Mendel E, Okuno SH, Patel S, Rhines LD, Rose PS, Sciubba DM, Sundaresan N, Tomita K, Varga PP, Vialle LR, Vrionis FD, Yamada Y, Fourney DR. A Novel Classification System for Spinal Instability in Neoplastic Disease: An Evidence-Based Approach and Expert Consensus From the Spine Oncology Study Group. *Spine (Phila Pa 1976)*. 2010 June 18. (Epub ahead of print) PMID: 20562730 (PubMed –as supplied by publisher) Related citations
223. Sciubba DM, Petteys RJ, Kang S, Than KD, **Gokaslan ZL**, Gallia GL, Wolinsky JP. Solitary spinal metastasis of Hurthle cell thyroid carcinoma. *J Clin Neurosci*. 2010 Jun;17(6):797-801. Epub 2010 Apr 1.
224. Hsieh PC, Stapleton CJ, Moldavskiy P, Koski TR, Ondra SL, **Gokaslan ZL**, Kuntz C. Posterior vertebral column subtraction osteotomy for the treatment of tethered cord syndrome: review of the literature and clinical outcomes of all cases reported to date. *Neurosurg Focus*. 2010 Jul;29 (1): E6. PMID: 20594004 (PubMed –as supplied by publisher) Related citations
225. Gottfried ON, Parker SL, Omeis I, Bydon A, **Gokaslan ZL**, Wolinsky JP. Spondylolysis of C-2 in 2 athletically active individuals. *J Neurosurg Spine*. 2010 Jul;13(1): 17-23 PMID: 20594012 (PubMed – in process) Related citations
226. Bydon A, Xu R, Conte JV, **Gokaslan ZL**, Brinker JA, Witham TF, Yassari R. Surgical Mystery: Where is the Missing Pituitary Rongeur Tip? *Spine (Phila Pa 1976)*. 2010 Jul 12. (Epub ahead of print) PMID: 20628330 (PubMed –as supplied by publisher) Related citations
227. Parker SL, McGirt MJ, Farber SH, Amin AG, Rick AM, Suk I, Bydon A, Sciubba DM, Wolinsky JP, **Gokaslan ZL**, Witham TF. Accuracy of free-hand pedicle screws in the thoracic and lumbar spine: Analysis of 6,816 consecutive screws. *Neurosurgery*. 68(1):170-178, 2011
228. McLoughlin GS, Sciubba DM, Suk I, Bydon A, Witham T, Wolinsky JP, **Gokaslan ZL** Resection of a retropharyngeal craniocervical junction chordoma through a posterior cervical approach *J Spinal Disord Tech*. 2010 Jul;23(5):359-65

229. Sciubba DM, Petteys RJ, Dekutoski MB, Fisher CG, Fehlings MG, Ondra SL, Rhines LD, **Gokaslan ZL**. Diagnosis and management of metastatic spine disease. *J Neurosurg Spine*. 2010 Jul;13(1):94-108.
230. Bydon A, Xu R, Conte JV, **Gokaslan ZL**, Brinker JA, Witham TF, Yassari R. Surgical mystery: where is the missing pituitary rongeur tip? *Spine (Phila PA 1976)* 2010 Aug 1;35(17):E867-72.
231. Gallia GL, Suk I, Witham TF, Gearhart SL, Black JH 3rd, Redett RJ, Sciubba DM, Wolinsky JP, **Gokaslan ZL**. Lumbopelvic reconstruction after combined L5 spondylectomy and total sacrectomy for en bloc resection of a malignant fibrous histiocytoma. *Neurosurgery*. 2010 Aug;67(2):E498-502.
232. Hsu W, Nguyen T, Kleinberg L, Ford EC, Rigamonti D, **Gokaslan ZL**, Lim M. Stereotactic radiosurgery for spine tumors: review of current literature. *Stereotact Funct Neurosurg*. 2010;88(5):315-21. Epub 2010 Aug 13.
233. Dasenbrock HH, Kathuria S, Witham TF, **Gokaslan ZL**, Bydon A. Successful treatment of a symptomatic L5/S1 discal cyst by percutaneous CT-guided aspiration. *Surg Neurol Int*. 2010 Aug 10;1 pii:41.
234. Quraishi NA, **Gokaslan ZL**, Boriani S. The surgical management of metastatic epidural compression of the spinal cord. *J Bone Joint Surg Br*. 2010 Aug;92(8):1054-60.
235. Bydon A, Xu R, Conte JV, **Gokaslan ZL**, Brinker JA, Witham TF, Yassari R. Surgical mystery: where is the missing pituitary rongeur trip? *Spine (Phila Pa 1976)*. 2010 Aug 1;35(17):E867-72.
236. Bydon A, Xu R, Parker SL, McGirt MJ, Bydon M, **Gokaslan ZL**, Witham TF. Recurrent back and leg pain and cyst reformation after surgical resection of spinal synovial cysts: systematic review of reported postoperative outcomes. *Spine J*. 2010 Sep;10(9):820-6. Epub 2010 May 20. Review.
237. Fisher CG, DiPaola CP, Ryken TC, Bilsky MH, Shaffrey CI, Berven SH, Harrop JS, Fehlings MG, Boriani S, Chou D, Schmidt MH, Polly DW, Biagini R, Burch S, Dekutoski MB, Ganju A, Gerszten PC, **Gokaslan ZL**, Groff MW, Liebsch NJ, Mendel E, Okuno SH, Patel S, Rhines LD, Rose PS, Sciubba DM, Sundaresan N, Tomita K, Varga PP, Vialle LR, Vrionis FD, Yamada Y, Fourney DR. A novel classification system for spinal instability in neoplastic disease: an evidence-based approach and expert consensus from the Spine Oncology Study Group. *Spine (Phila Pa 1976)*. 2010 Oct 15; 35(22):E1221-9.
238. Mehta VA, Gottfried ON, McGirt MJ, **Gokaslan ZL**, Ahn ES, Jallo GI. Safety and Efficacy of Concurrent Pediatric Spinal Cord Untethering and Deformity Correction. *J Spinal Disord Tech*. 2010 Dec. 8.
239. Xu R, McGirt MJ, Sutter EG, Sciubba DM, Wolinsky JP, Witham TF, **Gokaslan ZL**, Bydon A. Biomechanical comparison between C-7 lateral mass and pedicle screws in subaxial cervical constructs. Presented at the 2009 Joint Spine Meeting. Laboratory investigation. *J Neurosurg Spine*. 2010 Dec;13(6):688-94.
240. Sciubba DM, Burdette EC, Cheng JJ, Pennant WA, Noggle JC, Petteys RJ, Alix C, Diederich CJ, Fichtinger G, **Gokaslan ZL**, Murphy KP. Percutaneous computed tomography fluoroscopy-guided conformal ultrasonic ablation of vertebral tumors in a rabbit tumor model. Laboratory investigation. *J Neurosurg Spine*. 2010 Dec;13(6):773-9.

241. Dasenbrock HH, Pendleton C, Cohen-Gadol AA, Witham TF, **Gokaslan ZL**, Quinones-Hinojosa A, Bydon A. No Clinical Puzzles More Interesting. Harvey Cushing and Spinal Trauma. The Johns Hopkins Hospital 1896-1912. Neurosurgery. 2010 Dec 22.
242. Mehta VA, McGirt MJ, Garces Ambrossi GL, Parker SL, Sciubba DM, Bydon A, Wolinsky JP, **Gokaslan ZL**, Witham TF. Trans-foraminal versus posterior lumbar interbody fusion: comparison of surgical morbidity. Neuro Res. 2011 Jan;33(1):38-42 Epub 2010 Jun 11.
243. Goodwin CR, Recinos PF, Omeis I, Momin EN, Witham TF, Bydon A, **Gokaslan ZL**, Wolinsky JP. Prevention of facial pressure ulcers using the Mayfield clamp for sacral tumor resection. J Neurosurg Spine. 2011 Jan;14(1):85-7. Epub 2010 Dec 3.
244. Gottfried ON, Omeis I, Mehta VA, Solakoglu C, **Gokaslan ZL**, Wolinsky JP. Sacral tumor resection and the impact on pelvic incidence. J Neurosurg Spine. 2011 Jan;14(1):78-84. Epub 2010 Dec 3.
245. Parker SL, McGirt MJ, Farber SH, Amin AG, Rick AM, Suk I, Bydon A, Sciubba DM, Wolinsky JP, **Gokaslan ZL**, Witham TF. Accuracy of free-hand pedicle screws in the thoracic and lumbar spine: analysis of 6816 consecutive screws. Neurosurgery. 2011 Jan;68(1):170-8;discussion 178.
246. Bydon A, Dasenbrock HH, Pendleton C, McGirt MJ, **Gokaslan ZL**, Quinones-Hinojosa A. Harvey Cushing, the Spine Surgeon: The Surgical Treatment of Pott's Disease. Spine (Phila Pa 1976). 2011 Jan 8.
247. Omeis IA, Dhir M, Sciubba DM, Gottfried ON, McGirt MJ, Attenello FJ, Wolinsky JP, **Gokaslan ZL**. Postoperative Surgical Site Infections in Patients Undergoing Spinal Tumor Surgery: Incidence and Risk Factors. Spine (Phila Pa 1976). 2011 Jan 13.
248. Hsu W, McCarthy E, Wolinsky JP, **Gokaslan ZL**. Clear-cell Chondrosarcoma of the Lumbar Spine: Case Report and Review of the Literature. Neurosurgery. 2011 Jan 13
249. Dasenbrock HH, Pendleton C, Cohen-Gadol AA, Wolinsky JP, **Gokaslan ZL**, Quinones-Hinojosa A, Bydon A. No performance in surgery more interesting and satisfactory. Harvey Cushing and his experience with spinal cord tumors at the Johns Hopkins Hospital. J Neurosurg Spine. 2011 Jan 21.
250. Dasenbrock HH, Pendleton C, McGirt MJ, Sciubba DM, **Gokaslan ZL**, Quinones-Hinojosa A, Bydon A. Fulfilling the chief of his duties as a physician. Harvey Cushing, selective dorsal rhizotomy and elective spine surgery for quality of life. J Neurosurg Spine. 2011 Jan 21.
251. Hsieh PC, Galia GL, Sciubba DM, Bydon A, Marco RA, Rhines L. Wolinsky JP, **Gokaslan ZL**. En-bloc excision of chordomas in the cervical spine: Review of 5 consecutive cases with over 4-year follow-up. Spine (Phila Pa 1976). 2011 Feb 1.
252. McGirt MJ, **Gokaslan ZL**, Chaichana KL. Preoperative grading scale to predict survival in patients undergoing resection of malignant primary osseous spinal neoplasms. Spine J 2011 Feb 1.
253. Mukherjee D, Chaichana KL, **Gokaslan ZL**, Aaronson O, Cheng JS, McGirt MJ. Survival of patients with malignant primary osseous spinal neoplasms: results from the Surveillance, Epidemiology, and End Results (SEER) database from 1973 to 2003. J Neurosurg Spine. 2011 Feb;14(2):143-50. Epub 2010 Dec 24.
254. Xu R, Solakoglu C, Maleki Z, McGirt MJ, **Gokaslan ZL**, Bydon A. Hemorrhagic synovial cyst: the possible role of initial trauma and subsequent microtrauma in its pathogenesis: case report. Neurosurgery. 2011 Mar; 68(3):E858-65.

Non-peer reviewed articles

1. **Gokaslan ZL**: Spine surgery for cancer. Curr Opin Oncol 8:178-181, 1996.

2. Fourney DR, **Gokaslan, ZL**: Column installment dialogue/ commentary on “Conflicts of Interest: Legal Perspectives for Scientific Research and Patient Care” by Benton, PG and Benzel, EC. NASS, SpineLine, September/October, 35-38, 2000.
3. **Gokaslan ZL**: Bedside Manner. OncoLog 46,11/12:8, 2001 (DiaLog)
4. Fourney DR, Kelly M, **Gokaslan ZL**: Prevention and Management of Medical Problems in Spinal Cord Injury. Seminars in Spine Surgery
5. York JE, **Gokaslan ZL**: Craniocervical Junction Neoplastic Conditions. Thieme (Published).

Scientific Exhibitions

Gokaslan ZL, Leavens ME, Romsdahl MM: Surgical approaches to tumors involving the sacrum and iliac bone and adjacent structures. American College of Surgeons Scientific Exhibition Award, Clinical Congress, New Orleans, LA, October 22-27, 1995.

Abstracts

1. **Gokaslan ZL**: Surgical management of metastatic tumors of the thoracic and lumbar spine. Canadian Congress of Neurological Sciences, Victoria, BC, June 1995.
2. Romsdahl MM, Leavens ME, **Gokaslan ZL**: Surgical approaches to tumors involving the sacrum and iliac bone and adjacent structures. American College of Surgeons, Chicago, IL October 1995.
3. **Gokaslan ZL**, McCutcheon IE, Walsh GL: Anterior thoracic/lumbar reconstruction and instrumentation using Synthes thoracolumbar locking plate/screws in cancer patients. CNS, San Francisco, CA October 1995 (Program Book p 259).
4. **Gokaslan ZL**, McCutcheon EI, Schomer DF, Sawaya R: Magnetic resonance image quality in the presence of titanium spinal implants in cancer patients. CNS, San Francisco, CA, October 1995 (Program Book p 262).
5. Berk H, **Gokaslan ZL**: Chondrosarcoma of the spine: 50 years experience at a major cancer center. CNS, San Francisco, CA, October 1995 (Program Book p 223).
6. Chintala SK, **Gokaslan ZL**, Sawaya R, Rao JS: Role of extracellular matrix proteins in regulation of human glioma cell invasion *in vitro*. American Association for Cancer Research, Washington, DC, April 1996.
7. Yamamoto Y, Sawaya R, Mohanam S, **Gokaslan ZL**, Rao JS: Expression of membrane type matrix metalloproteinase and gelatinase A activation in human malignant glial tumors. American Association for Cancer Research, Washington, DC, April 1996.
8. Schoppa DM, **Gokaslan ZL**, Hess KR, Sawaya R: Thyroid carcinoma metastatic to the spine: a 50-year experience at a major cancer center. American Association of Neurological Surgeons (AANS), Minneapolis, MN, April 1996 (Program Book p157).
9. **Gokaslan ZL**, Gentry JB, Hess KR, Ginsberg LE: Primary Ewing’s sarcoma of the spine: 35 years of experience at M. D. Anderson Cancer Center. AANS, Minneapolis, April 1996 (Program Book p 171).
10. Razack N, **Gokaslan ZL**, Hess KR, Sawaya R: Neurosurgical management of unknown primary tumors metastatic to the spine. AANS, Minneapolis, MN, April 1996 (Program Book p 147).
11. Rao JS, Mohanam S, Kumar C, Sawaya R, **Gokaslan ZL**: Effects of antisense inhibition of uPAR on *in vitro* invasion of human glioblastoma cells. AANS, Minneapolis, MN, April 1996 (Program Book p 316).
12. Aladag, MA, **Gokaslan ZL**, Hess KR, Sawaya R: Malignant melanoma metastatic to the spine: A 10-year experience at a major cancer center. AANS, Minneapolis, MN, April 1996 (Program Book p 156).
13. **Gokaslan ZL**, Romsdahl MM, Kroll SS, Leavens ME, Gillis TA: Total resection of the sacrum for malignant neoplasms. Congress of Neurological Surgeons (CNS), Montreal, Canada, September 1996 (Program Book p 335).
14. **Gokaslan ZL**, McCutcheon IE, Lang FF, Sawaya R: Cervical thoracic stabilization and fusion in cancer patients. CNS, Montreal, Canada, September 1996 (Program Book p 321).
15. Berk H, **Gokaslan ZL**: Chondrosarcoma of the spine: 50 years experience at a major cancer center. North American Spine Society(NASS), Vancouver, B. D., Canada, October 1996.
16. **Gokaslan ZL**, McCutcheon EI, Schomer DF, Sawaya R: Magnetic resonance image quality in the presence of titanium spinal implants in cancer patients. NASS, Vancouver, B. D., Canada, October 1996.
17. Sawaya R, Chintala SK, **Gokaslan ZL**, Rao JS: Modulation of matrix metalloprotease-2 and invasion in human glioma cells by a $\alpha 3\beta 1$ Integrin. Society for Neuro-Oncology, Santa Fe, NM November 1996.

18. Chintala, SK, Sawaya R, **Gokaslan ZL**, Rao JS: The effect of type III collagen on migration and invasion of human glioblastoma cell lines in vitro. Society for Neuro-Oncology, Santa Fe, NM, November 1996.
19. **Gokaslan ZL**, McCutcheon IE, Lang FF, Sawaya R: Cervical thoracic stabilization and fusion in cancer patients. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Newport Beach, CA, February, 1997 (Program Book P 140).
20. Venhakah B, Chintala SK, Sawaya R, Tofilon PJ, **Gokaslan ZL**, Rao JS: Role of protein kinases in regulation of proteolytic enzymes in human glioma cell lines. American Association for Cancer Research, San Diego, CA, April 1997.
21. Mohanam S, Sawaya R, **Gokaslan ZL**, Rao JS: Increased invasion of neuroglioma cells transfected with urokinase plasminogen activator receptor cDNA. American Association for Cancer Research, San Diego, CA, April 1997.
22. Chintala SK, Mohanam S, Sawaya R, **Gokaslan ZL**, Rao JS: Downregulation of urokinase receptor by antisense transfection modulates human glioma cell adhesion and spreading in vitro. American Association for Cancer Research, San Diego, CA, April 1997.
23. **Gokaslan ZL**, McCutcheon IE, Walsh GL, Putnam JB, Nesbitt JC: Transthoracic vertebrectomy in cancer patients. NASS, New York, NY, October 1997 (Proceedings p 183).
24. **Gokaslan ZL**, Kaczaraj A, York JE: Sacral chordoma: 40-year experience at a major cancer center. AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves, Rancho Mirage, CA, February 1998.
25. **Gokaslan ZL**, Stringer JD: Gastric Cancer and Brain Metastases. AANS, Philadelphia, PA, April 1998 (Poster Program Book p 282).
26. York JE, **Gokaslan ZL**, Cooper PR, Errico TJ: Spinal reconstruction and stabilization in cancer patients using methylmethacrylate. NASS, San Francisco, CA, October 1998 (Proceedings pp 95-96).
27. York JE, Walsh GL, **Gokaslan ZL**: Combined chest wall resection with vertebrectomy and spinal reconstruction for the treatment of Pancoast tumors. Section on Disorders of the Spine and Peripheral Nerves (AANS/CNS), Lake Buena Vista, FL, February 1999 (Program Book pp 91-99).
28. York JE, Rao JS, **Gokaslan ZL**: Expression and role of matrix metalloproteases and urokinase-type plasminogen activator in spinal column tumors. AANS, New Orleans, LA, April 1999. (Poster Program Book p134).
29. Jackson R, **Gokaslan ZL**: Occipital-cervical-thoracic fixation for spinal instability in neoplastic conditions. AANS, 67th Annual Meeting, New Orleans, LA, April 1999. (Poster Program Book p136).
30. Miller D, **Gokaslan ZL**: Coaxial double lumen methylmethacrylate reconstruction of cervical spine following tumor resection. AANS, New Orleans, LA, April 1999. (Poster Program Book p162).
31. Hao L, **Gokaslan ZL**: Occipital-cervical fixation for the treatment of atlanto-axial instability from metastatic disease. NASS, Chicago, IL, October 1999. (Proceedings pp267-268).
32. York JE, **Gokaslan ZL**: Vertebral body reconstruction with methylmethacrylate in cancer patients: Long-term follow-up. CNS, Boston, MA, October/November 1999 (Scientific Program Book p 235).
33. Jackson RJ, **Gokaslan ZL**: Spinal-pelvic fixation in patients with lumbosacral neoplasms. CNS, Boston, MA, October/November 1999 (Scientific Program Book p 376).
34. **Gokaslan ZL**, York JE, Hao L: Occipital-cervical fixation for the treatment of metastatic disease involving the upper cervical spine. CNS, Boston, MA, October/November 1999 (Scientific Program Book p 382).
35. Jackson RJ, Shi WM, Abi-Said D, **Gokaslan ZL**, Sawaya R: Is stereotactic biopsy necessary in the initial management of gliomas? CNS, Boston, MA, October/November 1999 (Scientific Program Book pp 641-642).
36. Michael C, McCutcheon IE, **Gokaslan ZL**, DeMonte F, Sawaya R, Lang FF: Resection of calvarial metastases overlying dural sinuses. CNS, Boston, MA, October/November 1999 (Scientific Program Book p 667).
37. **Gokaslan ZL**, York JE, Miller DN: Reconstruction of the cervical and upper thoracic spine following corpectomy using coaxial methylmethacrylate technique and anterior plate stabilization. Cervical Spine Research Society, Seattle, WA, December 1999 (Program Book p 266).
38. **Gokaslan ZL**, Jackson RJ: Surgical treatment renal cell carcinoma of the spine. Poster presentation at the Annual American Association of Neurological Surgeons meeting, San Francisco, CA, April 9-13, 2000 (Poster Program Book p. 93).
39. Fournay DR, Abi-Said D, Walsh GL, Lang FF, McCutcheon IE, **Gokaslan ZL**: Pedicle screw fixation in the management of malignant spinal disease: Experience in 100 consecutive procedures. Abstract. Congress of Neurological Surgeons Annual meeting, San Antonio, Texas, September 2000.

40. Fourney DR, Abi-Said D, Walsh GL, Lang FF, McCutcheon IE, **Gokaslan ZL**: Simultaneous anterior-posterior approach to the thoracic and lumbar spine for the radical resection of tumors, reconstruction, and stabilization. Abstract. AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix, Arizona, February 2001.
41. Fourney DR, Abi-Said D, Lang FF, McCutcheon IE, **Gokaslan ZL**: Simultaneous anterior-posterior approach to the thoracic and lumbar spine for the radical resection of tumors, reconstruction, and stabilization. Abstract. Annual American Association of Neurological Surgeons meeting, Toronto, Ontario, April 2001.
42. Cohen ZR, Suki D, Shi W, DeMonte F, McCutcheon IE, Hassenbusch SJ, **Gokaslan ZL**, Rhines LD, Weinberg JS, Sawaya R, Lang FF: "Surgical Resection of Anaplastic Astrocytoma: Prognostic Factors and Outcome" Oral presentation presented at the 2002 AANS/CNS Annual Meeting, Chicago, IL, April 6-11, 2002.
43. Prabhu SS, Weinberg J, Ferson D, Lang FF, McCutcheon IE, Rhines LD, Hassenbusch SJ, **Gokaslan ZL**, DeMonte F, Sawaya R: "Awake Craniotomy for Parenchymal Brain Tumors, Patient Selection, Technique and Outcome" Oral presentation presented at the 2002 AANS/CNS Section on Tumors Fifth Biennial Brain Tumor Satellite Symposium, Chicago, IL, April 12, 2002.
44. Fourney DR, Schomer DF, Nader R, Fournay-Chlan J, Suk I, Ahrar K, Rhines LD, **Gokaslan ZL**, "Percutaneous Vertebroplasty and Kyphoplasty for Painful Vertebral Body Fractures in Cancer Patients" CNS Annual Meeting, Philadelphia, PA, 2002.
45. Shehadi JA, Mccutcheon I, Maldaun M, Suki D, Bonnen M, Symmans F, Rhines LD, **Gokaslan ZL**, "Surgical Treatment and Outcome in Patients with Metastatic Breast Cancer to the Spine: A review of 87 patients, CNS Annual Meeting, Philadelphia, PA, 2002.
46. Wang M, Weber D, Burton A, Schomer DF, Ahrar K, **Gokaslan ZL**, "Value of Vertebroplasty and Kyphoplasty for Painful Vertebral Compression Fractures in Multiple Myeloma (MM), 2002.
47. **Gokaslan ZL**, Rhines LD: "Lung Metastasis to the Spine" Abstract presented at NASS Spine Across the Sea Symposium, Maui, HI, July 29-31, 2003.
48. Gallia G, Haque R, Garonzik I, Wolinsky JP, Suk I, **Gokaslan ZL**: "Spinal Pelvic Reconstruction After Total En Bloc Sacrectomy for a Giant Sacral Chordoma," 73rd AANS Meeting, New Orleans, LA.
49. Sciubba DM, Conway J, Kretzer RM, Pindrik J, Long, DM, **Gokaslan ZL**, Garonzik IM. Ipsilateral screw fixation of the axis. *CNS Meeting, Chicago, IL, October 2006*
50. McGirt MJ, Woodworth G, Chaichana K, **Gokaslan ZL**, Jallo GI. Predictors of neurological outcome and progressive spinal deformity after resection of intramedullary spinal cord tumors in 80 consecutive patients. *Annual Meeting of the Southern Society of Neurological Surgeons, March, 2007.*
51. Sciubba DM, Lin LM, **Gokaslan ZL**, Kebaish KM. Neuromodulation Induced Scoliosis. *23rd Annual Meeting of the ANNS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2007, Phoenix, Arizona.*
52. Shehadi J, Sciubba DM, Suki D, McCutcheon IE, Rhines LD, **Gokaslan ZL**. Surgical Treatment Strategies and Outcome in Patients with Breast Cancer Metastatic to the Spine: a Review of 87 Patients. *23rd Annual Meeting of the ANNS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2007, Phoenix, Arizona.*
53. Wolinsky JP, Sciubba DM, Suk I, **Gokaslan ZL**. Endoscopic image-guided odontoidectomy for basilar invagination via a standard anterior cervical approach. *23rd Annual Meeting of the ANNS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2007, Phoenix, Arizona.*
54. McGirt MJ, Woodworth GF, Sciubba DM, Wolinsky JP, Jallo GI, **Gokaslan ZL**. Predictors of cervical instability requiring fusion after cervical laminectomy for intradural tumor resection. *23rd Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2007, Phoenix, Arizona.*
55. Shehadi J, Sciubba DM, Suki D, McCutcheon IE, Rhines LD, **Gokaslan ZL**. Positive and Negative Prognostic Variables for Patients Undergoing Spine Surgery for Metastatic Breast Disease. *23rd Annual Meeting of the ANNS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2007, Phoenix, Arizona.*
56. Sciubba DM, Wolinsky JP, Than KD, **Gokaslan ZL**, Murphy KP. Computer Tomography (CT)- Guided Percutaneous Placement of Transiliacral Rod for Sacral Insufficiency Fracture: Case Report and Operative Technique. *American Society of Neuroradiology (ASNR) Meeting. Chicago, IL, June 9-14, 2007.*

57. Woodworth G, McGirt MJ, **Gokaslan ZL**, Witham T, Jallo GI, Wolinski JP. Predictors of Ambulatory Function following Surgical Resection of Intramedullary Spinal Cord Tumors. *Annual Meeting of the Congress of Neurological Surgeons, October, 2007.*
58. Sciubba DM, Chaichana, KL, Woodworth GF, McGirt MJ, **Gokaslan ZL**, Jallo GI. Predictors of cervical instability requiring fusion after cervical laminectomy for intradural tumor resection. *35th Annual Meeting of the Cervical Spine Research Society (CSRS). San Francisco, CA November 28th-December 1st,2007..*
59. Chaichana KL, Sciubba DM, Woodworth GF, **Gokaslan ZL**, McGirt MJ, Bydon A. *Predictors of ambulatory function following decompressive surgery for metastatic epidural spinal cord compression.. Abstract presented at the 24th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, February 27-March 1, 2008.*
60. Sciubba DM, Woodworth GF, Gok B, Chaichana KL, Nelson C, McLoughlin GS, **Gokaslan ZL**, McGirt MJ. *Predictors of infection following sacral tumor resection: A five year institutional experience. Abstract presented at the 24th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, February 27-March 1, 2008*
61. Sciubba DM, McLoughlin GS, Wolinsky JP, **Gokaslan ZL**, Noggle JC, Vellimana AK. *Radiographic and clinical evaluation of free-hand placement of C2 pedicle screws. Abstract presented at the 24th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, February 27-March 1, 2008.*
62. Sciubba DM, Ayhan S, Nelson C, Wolinsky JP, Witham TF, Bydon A, **Gokaslan ZL**, Noggle JC. *Transthoracic surgical treatment for centrally located thoracic disc herniations causing myelopathy: A five-year institutional experience. Abstract presented at the 24th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, February 27-March 1, 2008.*
63. Sciubba DM, Alix C, Pennant WA, Fitchtinger G, **Gokaslan ZL**, Murphy KP, Noggle JC, Burdette C. *Percutaneous CT-guided conformal ultrasonic ablation of vertebral tumors using a rabbit tumor model. Abstract presented at the 24th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, February 27-March 1, 2008.*
64. Sciubba DM, Nelson C, McLoughlin GS, Wolinsky JP, **Gokaslan ZL**. *Evaluation of risk factors for infection following sacral tumor resection: a five-year institutional experience. 8th Annual Meeting of the Canadian Spine Society (CSS), March 2008, British Columbia, Canada.*
65. Sciubba DM, Nelson C, McGirt MJ, Noggle JC, Woodworth GF, Chaichana K, Wolinsky JP, Gok B, **Gokaslan ZL**. *Surgical outcome in patients undergoing resection of sacral tumors. 24th Annual Meeting of the AANS/CNS Section on Disorders of the Spine and Peripheral Nerves. March, 2008, Orlando, FL.*
66. Gok B, McGirt MJ, Sciubba DM, Garces-Ambrossi GL, Nelson C, Noggle JC, Bydon A, Witham TF, Wolinsky JP, **Gokaslan ZL**. *Adjuvant treatment with locally delivered Oncogel delays the onset of paresis after surgical resection or radiotherapy of experimental spinal column metastasis. CNS Meeting, October 2008, Orlando, FL.*
67. Sciubba DM, Nelson C, Blakely J, McGirt MJ, Witham TF, Bydon A, Wolinsky JP, **Gokaslan ZL**. *Factors associated with survival after resection of malignant nerve sheath tumors. Annual meeting of the Congress of Neurological Surgeons, Sept, 2008*
68. Matthew L. McGirt, M.D., Giannina L. Garces Ambrossi, B.S., Frank J. Attenello, M.S., Jon Weingart, M.D., Daniel Sciubba, M.D., George Jallo, M.D. *Title: Outcome of Chiari-associated syringomyelia after hindbrain decompression in children: Analysis of 49 consecutive cases*
69. Matthew J. McGirt, M.D., Giannina L. Garces Ambrossi, B.S., Kaisorn L. Chaichana, M.D., Frank J. Attenello, M.S., Daniel M. Sciubba, M.D., Ziya L. Gokaslan, M.D., George I. Jallo, M.D. *Spinal deformity after resection of cervical intramedullary spinal cord tumors in children*
70. Giannina L. Garces Ambrossi, B.S.; Matthew J. McGirt, M.D.; Scott L. Parker, B.S.; Vivek A. Mehta, B.S.; Daniel M. Sciubba, M.D.; Timothy F. Witham, M.D.; Gokaslan L. Ziya, M.D., JP Wolinsky, M.D. *Trans-laminar versus pedicle screw fixation of C2: Comparison of surgical morbidity and accuracy of 313 consecutive screws*
71. Giannina L. Garces Ambrossi, B.S.; Matthew J. McGirt, M.D.; Daniel M. Sciubba, M.D.; Timothy F. Witham, M.D.; Ali Bydon, M.D.; JP Wolinsky, M.D.; George Jallo, M.D.; Ziya L. Gokaslan, M.D. *Factors associated with progression-free survival and long-term neurological outcome after resection of intramedullary spinal cord tumors in adults: Analysis of 101 consecutive cases*
72. Matthew J. McGirt, M.D.; Giannina L. Garces Ambrossi, B.S.; Daniel J. Sciubba, M.D.; Ali Bydon, M.D.; JP Wolinsky, M.D.; Timothy Witham, M.D.; Ziya L. Gokaslan, M.D., George I. Jallo,

- M.D. *Spinal deformity following laminoplasty versus laminectomy for resection of intradural spinal tumors: Analysis of 238 patients*
73. The abstract “The effect of surgery on health related quality of life and Functional outcome in patients with metastatic epidural spinal cord compression – Initial results of the AOSpine North America prospective multicenter study” has been accepted for an Oral Presentation at the 2011 AANS/CNS Section on Disorders of the Spine and Peripheral Nerves conference in Phoenix, AZ, March 9-12, 2011.
 74. The abstract “The effect of surgery on health related quality of life and Functional outcome in patients with metastatic epidural spinal cord compression – Initial results of the AOSpine North America prospective multicenter study” has been accepted for an Oral Presentation at the 2011 Global Spine Congress March 24-26, 2011 in Barcelona Spain.
 75. The abstract “The Short-Term Effect of Surgery on Health Related Quality of Life and Functional Outcome in Patients with Metastatic Epidural Spinal Cord Compression (MESCC)- Initial Results of the AOSpine North America Prospective Multicenter Study” has been accepted for an Oral Presentation at the 2011 AANS Annual Meeting April 9-13, 2011 in Denver, CO.

Editorials, Reviews

1. **Gokaslan ZL**, Sawaya R: Sawin PD, VanGilder JC: Spinal cord compression from metastatic Leydig’s cell tumor of the testis: A case report. *Neurosurgery* 38:407-411, 1996 (Comments).
2. **Gokaslan ZL**, Sawaya R: Primary spinal epidural non-Hodgkins lymphomas – a clinical study. *Surg Neurol* 46:343, 1996 (Comments).
3. **Gokaslan ZL**, Sawaya R: Bremnes R, Hauge HN, Sagsveen R: Radiotherapy in the treatment of symptomatic vertebral hemangiomas: Technical case report. *Neurosurgery* 39:1054-1058, 1996 (Comments).
4. **Gokaslan ZL**, Sawaya R: Giant ventral intradural extramedullary neuroma: case report. *Neurosurgery* 44:1340-1341, June 1999 (Comments).
5. Hanbali F, Fournay DR, Marmor E, Suki D, Rhines LD, Weinberg JS, McCutcheon, IE, Suk I, **Gokaslan ZL**: Spinal cor ependymoma: Radical surgical resection and outcome. *Neurosurgery* 51:1162-1174, 2002 (Comments)
6. **Gokaslan ZL**, Selassie A: Editorial for 2004 The Spine Journal Supplement 4/5S. *The Spine Journal*, in press.

Book Chapters, Monographs

1. Narayan RK, **Gokaslan ZL**, Bontke CF: Delayed neurological sequelae of head injury. *In* Griffith ER, et al. (eds): *Rehabilitation of the Adult and Child with Head Trauma*. 2nd Edition. Davis Company.
2. **Gokaslan ZL**, Narayan RK: Intracranial hemorrhage. *In* Drayer B, Hayman LA, Taber KH, (eds): *The Hypertensive Patient. Neuroimaging Clinics of North America*, W. B. Saunders Company, Philadelphia, 1992, pp 171-186.
3. **Gokaslan ZL**, Sawaya R: Brain Tumors: anatomic considerations. *In* Morantz RA, Walsh JW (eds): *Brain Tumors: A comprehensive Text*. Marcel Dekker, Inc., New York, NY, 1994, pp 135-171.
4. **Gokaslan ZL**, McCormick P: Surgical techniques: thoracic and lumbar. *In* Benzel EC, Tator CH (eds): *Contemporary Management of Spinal Cord Injury*. AANS Publication Committee, Park Ridge, IL: 1995, 1: pp 153-165.
5. **Gokaslan ZL**, Cooper PR: The cervical spine. Ventral and anterolateral subaxial decompression: surgical technique, avoidance of complications and management. *In* Youmans JR (ed): *Neurological Surgery*. W. B. Saunders Company, New York, NY, 1995, IV:pp 2253-2261.
6. **Gokaslan ZL**, Grossman RG, Hamilton WJ: Trauma of the Nervous System. *In* Bone RC (ed): *Current Practice of Medicine, Neurology Section*, Philadelphia, PA, 1996, IX:pp 12.1-12.9.
7. Moelleken A, **Gokaslan ZL**, Cooper PR: Iatrogenic Deformities of the Spine. *In* Tindall GT, Cooper PR, Barrow DL (eds): *The Practice of Neurosurgery*, Williams & Wilkins, Baltimore, MD, 1996, 3:pp 2594-2607.
8. **Gokaslan ZL**, Romsdahl NM, Kroll SS, Gillis TA, Wildrick DM, Leavens ME: Total Sacrectomy. *In* Rengachari SS (ed): *Neurosurgical Operative Color Atlas*, AANS Publication, Lebanon, NH, 1998, 7:pp 11-20.
9. York JE, **Gokaslan ZL**: Instrumentation of the spine in metastatic disease. *In* Errico TJ (ed): *Spine: State of the Art Reviews*, Hanley & Belfus, Inc., Philadelphia, PA, 1999. pp 335-350.

10. York JE, Wildrick DM, **Gokaslan ZL**. Metastatic tumors of the thoracic spine. *In* Benzel EC, Stillerman BC (eds): *The Thoracic Spine*, Quality Medical Publishing, Inc., St. Louis, MO, 1999, pp 392-411.
11. **Gokaslan ZL**, Cooper PR: Ventral and ventrolateral subaxial decompression. *In* Benzel EC, (ed): *Spine Surgery. Techniques, Complication Avoidance, and Management*. Churchill Livingstone, Philadelphia, PA, 1999, I pp 219-227.
12. **Gokaslan ZL**, Walsh GL: "Trap Door" exposure of the cervicothoracic junction. *In* Rengachari SS (ed): *Neurosurgical Operative Color Atlas 1999*, AANS Publications, Lebanon, NH, 1999, VIII:pp 253-260.
13. York JE, **Gokaslan ZL**, Grossman RG: Trauma of the nervous system. *In* Bone RC (ed): *Current Practice of Medicine, 2nd Edition, Neurology Section*, Philadelphia, PA 1999.
14. **Gokaslan ZL**, McCormick P: Surgical Techniques: Thoracic and Lumbar. *In* Benzel EC, Tator CH (eds): *Contemporary Management of Spinal Cord Injury, 2nd Edition* AANS Publication Committee, Park Ridge, IL: 2000, pp 173-188.
15. Fourny DR, **Gokaslan ZL**: Spinal Epidural Tumors. *In* Rengachary SS, Maciunas RJ, Wilkins RH (ed): *Neurosurgery, 3rd Edition* The McGraw-Hill Companies, Philadelphia, PA, 2001.
16. Hanbali F, **Gokaslan ZL**: Prevention and Management of Complications. *In* Perez-Cruet MJ, Fessler RG (ed): *Outpatient Spinal Surgery*, Quality Medical Publishing, Inc. St. Louis, MO, 2002.
17. Jackson RJ, **Gokaslan ZL**: Treatment of disc and ligamentous diseases of the cervical spine. *In* Youmans JR (ed): *Neurological Surgery* W.B. Saunders Company, New York, NY, 2003.
18. Weinberg JS, Lenzi R, **Gokaslan ZL**: Brain Metastasis from Upper Gastrointestinal Tract Cancers: Esophageal, Gastric, Hepatic, Gallbladder, and Pancreatic" *In* Sawaya R (ed): *Intracranial Metastases: Current Strategies*, Futura Publishing Co., Inc., 2003.
19. York JE, **Gokaslan ZL**: Neoplastic Conditions" *In* Hurlbert RJ (ed): *Seminars in Neurosurgery Cranio-cervical Junction*, 2003.
20. Fourny DR, **Gokaslan ZL**: Spinopelvic Fixation. *In* Zileli M, Ozer AF: *Spine and Spinal Cord Surgery*, META Basim, Izmir, Turkey, 2003, 2:pp 1673-1685.
21. Hanbali F, **Gokaslan ZL**, Cooper P: Ventral and Centrolateral Subaxial Decompression. *In* Volume One: *Spine Surgery*, Elsevier, Inc., p. 341-350, 2005.
22. Lastra-Power J, **Gokaslan ZL**, Sosa I: Primary Bony Spiral Lesion: Surgery for Cure. *In* Volume One: *Spine Surgery*, Elsevier, Inc., p. 1015-1024, 2005.
23. **Gokaslan ZL**, Tihan T: Pleomorphic Xanthoastrocytoma. *In* Berger MS, Prados MD: *Textbook of Neuro-Oncology*, Elsevier, Inc., p. 156-159, 2005.
24. Chou D, **Gokaslan ZL**: Malignant Primary Tumors of the Vertebral Column: *In* Berger MS, Prados MD: *Textbook of Neuro-Oncology*, Elsevier, Inc., p. 517-520, 2005.
25. Bohinski RJ, Rhines LD, **Gokaslan ZL**: Perioperative Care for Neurosurgical Neoplasms-2: Spinal Surgery. *In* Shaw A, Riedel B, Burton A, Fields A, Feeley T (eds): *The Acute Care of the Cancer Patient*, Marcel Dekker, 2005, in press.
26. Bagley C, **Gokaslan ZL**: Epidural Tumors and Metastases. *In* Tonn J, Westphal M, Grossman SA, Rutka JT (eds): *Neuro-Oncology of CNS Tumors*, Springer Verlag, Berlin 2006.
27. Fourny DR, **Gokaslan ZL**: Sacral Tumors: Primary and Metastatic. *In* Dickman CA, Fehlings MG, Gokaslan ZL (eds): *Spinal Cord and Spinal Column Tumors: Principles and Practice*, Thieme Medical Publishers, Inc., New York (In Press).
28. Fourny DR, **Gokaslan ZL**: Lumbosacral and Pelvic Reconstruction. *In* Dickman CA, Fehlings MG, Gokaslan ZL (eds): *Spinal Cord and Spinal Column Tumors: Principles and Practice*, Thieme Medical Publishers, Inc., New York (In Press).
29. Resection of Sacral Tumors. *In* Dickman CA, Fehlings MG, **Gokaslan ZL** (eds): *Spinal Cord and Spinal Column Tumors: Principles and Practice*, Thieme Medical Publishers, Inc., New York 2006.
30. Fourny DR, Schomer DF, **Gokaslan ZL**: Percutaneous vertebroplasty and kyphoplasty. *In* Dickman CA, Fehlings MG, Gokaslan ZL (eds): *Spinal Cord and Spinal Column Tumors: Principles and Practice*, Thieme Medical Publishers, Inc., New York (In Press).
31. Combined Vertebrectomy and Chest Wall Resection for the Pancoast Tumor. *In* Dickman CA, Fehlings MG, **Gokaslan ZL** (eds): *Spinal Cord and Spinal Column Tumors: Principles and Practice*, Thieme Medical Publishers, Inc., New York (In Press).
32. Fourny DR, **Gokaslan ZL**: Tumors of the Lumbar and Lumbosacral Spine. *In* Fessler R, Sekhar L (eds): *Atlas of Neurosurgical Techniques*, Thieme Medical Publishers, Inc., New York 2006.
33. Fourny DR, **Gokaslan ZL**: Sacral Resection and Stabilization. *In* Schmidek and Sweet's *Operative Neurosurgical Operative Atlas, 2nd Ed*, AANS Publications (In press).

34. **Gokaslan ZL**, Bagley CA, Garrett LW: "Trap Door" Exposure of the Cervicothoracic Junction. In Neurosurgical Operative Atlas, 2nd Ed, AANS Publications (Submitted).
35. Bagley CA, **Gokaslan ZL**: Neoplasia. In Surgical Management of Spinal Deformities, Errico, Baron, Lonner and Moulton (Submitted).
36. Bagley CA, **Gokaslan ZL**: 2 Tumors – 2.2 Primary Spinal Tumors. In AOSpine Manual – Clinic Applications (In Press).
37. Fourny DR, **Gokaslan ZL**: Complex Lumbosacral Resection and Reconstruction Procedure. In Cancer in the Spine, Comprehensive Care, Humana Press, Totowa, New Jersey 2006.
38. Fourny DR, **Gokaslan ZL**: Sacral Resection and Stabilization. In Schmidek and Sweet's Operative Neurosurgical Techniques, Indications, Methods, and Results, Volume 2, 5th Ed, Elsevier, Inc. 2006.
39. Chi JC, Bydon A, Hsieh P, Witham TF, Wolinsky JP, **Gokaslan ZL**: Epidemiology and Demographics for Primary Vertebral Tumors. In Neurosurgery Clinics of North America. New York: Elsevier, 2008.
40. Sciubba DM, Chi JH, Rhines LD, **Gokaslan ZL**: Chordoma of the Spinal Column. In Neurosurgery Clinics of North America. New York: Elsevier, 2008.
41. Chi JH, Sciubba DM, Rhines LD, **Gokaslan ZL**: Surgery for primary vertebral tumors: En bloc versus intralesional resection. In Neurosurgery Clinics of North America. New York: Elsevier, 2008.
42. Dekutoski, MB, Cassivi S, **Gokaslan ZL**: Thoracic Spine. In Relevant Surgical Exposures. Philadelphia: Wolters Kluwer, 2008.
43. Daniel M. Sciubba, M.D., **Ziya L. Gokaslan, M.D.**: Tumors of the Spine: Dainel H. Kim, Ung-Kyu Chang, Se-Hoon Kim and Mark H. Bilsky. Philadelphia: Elsevier Saunders, 2008.

Books

1. Schmidt MH, Fourny DR, Gokaslan ZL: Metastatic spine disease. Philadelphia: Saunders, 2004.
2. Dickman C, Fehlings MG, **Gokaslan ZL**: Principals and Practice: Spinal Cord and Spinal Column Tumors. New York: Thieme Medical Publishers, 2006.
3. Chi JH, Gokaslan ZL, Ames CP: Primary Vertebral Tumors. Neurosurgery Clinics of North America. New York: Elsevier, 2008.

Other Media

1. **Gokaslan ZL**: Management of metastatic spinal tumors (video recording). Clinical Oncology Grand Rounds, The University of Texas M. D. Anderson Cancer Center, Video Production Services, Houston, TX, 1996.
2. **Gokaslan ZL**: Management of sacral tumors (video recording). Clinical Oncology Grand Rounds, The University of Texas M. D. Anderson Cancer Center, Video Production Services, Houston, TX, 1997.
3. Cover, Journal of Neurosurgery, Vol. 87: Color illustration of operative field during Stage II of a total sacrectomy (dorsal view of the lumbosacral region), 1997.
4. Cover, Journal of Neurosurgery, Vol. 89: Color illustration of a thoracic vertebrectomy, reconstruction with methylmethacrylate, and placement of anterior locking plate and screw construct, 1997.
5. Cover, Journal of Neurosurgery, Vol. 91: Color illustration of Occipitocervicothoracic fixation with inset of closer view depicting Wisconsin interspinous process wiring technique, 1999.
6. Cover, Neurosurgical Focus, 6 (5) Article 3, Combined Chest wall Resection with Vertebrectomy and Spinal Reconstruction for the Treatment of Pancoast Tumors, 1999.
7. Cover, AANS: Journal of Neurosurgery CD-ROM Vol 90-95 (January 1999-December 2001).
8. Cover, Journal of Neurosurgery: Spine, Vol 92. Color illustration of cervical vertebra with anterior locking plate/screws, 2000.
9. Cover, Journal of Neurosurgery, Vol 92. Color illustration of spinal-pelvic fixation technique, 2000.
10. Cover, AANS: Journal of Neurosurgery CD-ROM Vol. 92-97 (January 2000-December 2002).
11. Cover, Journal of Neurosurgery: Spine, Vol 94. Color illustration of T8 vertebrectomy, 2001.
12. Cover, Journal of Neurosurgery: Spine, Vol. 95(2). Color illustration of L4 vertebrectomy, 2001.
13. Cover, Journal of Neurosurgery: Vol. 95(4). Color illustration of insular tumor resection, 2001.
14. Trap Door Approach to the Cervicothoracic Junction and Vertebrectomy for Spinal Tumors (Video Recording), CNS Meeting, Philadelphia, PA 2002.
15. Cover, Journal of Neurosurgery: Spine, Vol. 97(3). Color illustration of en-block multilevel cervical chordoma resection, 2002.
16. Cover, Neurosurgery: Vol. 51(5). Color illustration of cervical spinal cord ependymoma resection, 2002.
17. **Gokaslan ZL**. Trap Door Approach to Cervicothoracic Junction and Vertebrectomy for Spinal Metastases. (Video recording), CNS Meeting, Philadelphia, 2002.

18. **Gokaslan ZL**. Spinal Column Tumors. Practical Reviews in Neurosurgery for Johns Hopkins Hospital Co-sponsored CME Activity. (Audio recording), May 2003.
19. **Gokaslan ZL**, Weinberg JS. Surgical Management of Spinal Cord Ependymomas. (Video recording), CNS Meeting, Denver, CO 2003.
20. **Gokaslan, ZL**: “En bloc resection of primary cervical spine tumors” (video recording). The Johns Hopkins Hospital for “Digital Masters”, recorded May 21, 2004.
21. **Gokaslan ZL**, Riley L: The Johns Hopkins Guide to Back Pain (Patient education brochures), 2004.
22. **Gokaslan ZL**, Haque R: Active correction of kyphotic deformity using an anterior distractible cage via a posterior approach (Poster Presentation). 2005 AANS Annual Meeting, April 16-21, 2005.
23. **Gokaslan ZL**, Haque R: Spinal pelvic reconstruction after total sacrectomy for en bloc resection of a giant sacral chordoma. 2005 AANS Annual Meeting, April 16-21, 2005.
24. Skolasky RL, Daruwalla Z, Cohen D, Kebaish K, **Gokaslan ZL**, Long D, Riley L: Examining the utility of pre-existing hospital records as a data source for a quality of care study of lumbar surgeries. NASS Annual Meeting, September 27-October 1, 2005.

Extramural Sponsorship

Grants

1. Principal Investigator, Spinal Reconstruction Using SYNTHES Spine SYNEX™ System Following Corpectomy/Vertebrectomy in Tumor Patients, Number CS01-138, 2001, \$250,000. Data Management Support for Ongoing Research, \$56,796.00.
2. SYNTHES Core Grant: Verbally approved \$300,000.
3. AO North America Spine Fellowship Educational Grant \$ 75,000 x 2 (\$150,000).
4. EBI Study: Prospective Randomized Study for Posterolateral Lumbar Fusion with Bone Stimulator \$210,000.

Basic Science Projects

1. Principal Investigator, Administration of tumor necrosis factor-alpha induces increased monocyte recruitment following peripheral nerve crush injury, Protocol Number: MO02M452, Initiation date: 10/28/2002, Expiration date: 10/28/2003, Other Investigators: Ajay Mantha, Eric Amundson M.D., Betty Tyler, Status – Active
2. Specialist Consultant, Establishment of a novel intravertebral tumor model and efficacy study of controlled release chemotherapy polymers in rabbits, Protocol Number: RB02M413, Initiation date: 10/30/2002, Expiration date: 10/30/2003, Other Investigators: Eric Amundson M.D., Betty Tyler, Henry Brem M.D. (P.I.), Status – Active
3. Principal Investigator, A graded model of aneurysm clip induced spinal cord compression injury in the mouse: examination of experimental methods through behavioral and histological considerations, Protocol Number: M002M450, Initiation date: 10/30/2002, Expiration date: 10/30/2003, Other Investigators: Ajay Mantha, Eric Amundson M.D., Betty Tyler, Status – Active
4. Principal Investigator, Controlled release of osteoinductive growth factors for posterior lateral spine fusion in a rabbit model, Protocol Number: RB02M454, Initiation date: 01/20/2003, Expiration date: 01/20/2004, Other Investigators: Sherwin Hua M.D., Eric Amundson M.D., Paul Wang M.D., Betty Tyler, Status – Active
5. Principal Investigator, Controlled release of osteoinductive growth factors within vertebrate bodies to augment pedicle screw pull-out resistance, Protocol Number: SH02M700, Initiation date: 02/05/2003, Expiration date: 02/05/2004, Other Investigators: Sherwin Hua M.D., Eric Amundson M.D., Paul Wang M.D., Betty Tyler, Status – Active
6. Principal Investigator, Anterior Cervical Corpectomy Using Interbody Cage and Anterior Plate: Comparison of Autograft, Allograft, and Demineralized Bone Matrix, Protocol Number: SH02M700, Initiation date: 01/01/2004, Expiration date: 12/31 /2004, Co-Investigator: Sherwin Hua M.D., Status – In Progress
7. Goat Disc Degeneration Model (Sherwin Wu and Jennifer Elisseeff BME) – Active

Other

1. Collaborator, Surgery versus stereotactic radiosurgery in the treatment of single brain metastases: a randomized prospective trial, NS 97-199, PI Frederick Lang, M.D., Active 1998-2002.
2. Collaborator, Surgery with Whole Brain Radiation Therapy versus whole Brain Radiation Therapy Alone in the Treatment of Multiple Brain Metastases: A Prospective Randomized Trial, ID98-028, PI Raymond Sawaya, M.D., Active, 1998-2002.

3. Collaborator, Prospective, Randomized, Double Blind, Placebo-Controlled Trial of Prophylactic Phenytoin for Patients Undergoing Resection of Metastatic Brain Tumors, ID99-318, PI Frederick Lang, Not Activated, IRB Approved, 1999-2002.
4. Collaborator, Prospective, Randomized, Double Blind, Placebo-Controlled Trial of Prophylactic Phenytoin for Patients Undergoing Resection of Primary Brain Tumors, ID99-320, PI Dr. Frederick Lang, Not Activated, IRB Approved, 1999-2002.
5. Principal Investigator, Spinal cord compression by epidural neoplasm, Animal Protocol #9-99-08031.
6. Principal Investigator, The role of proteases and their inhibitors in spinal tumors, Protocol #LAB95-025, 1999-2001.
7. Principal Investigator, Spinal Reconstruction Using Synthes Spine Synex™ System Following Corpectomy/Vertebrectomy In Tumor Patients, Protocol ID01-442, 10/2001, \$250,000 (\$125,000/year), 2001-2002.
8. Principal Investigator, A Prospective Multi-Center, Randomized Controlled Study to Compare the Spinal Sealant System as an Adjunct to Sutured Dural Repair to Standard of Care Methods during Spinal Surgery, Protocol Number: DRS-05-001, Status: Submitted.

EDUCATIONAL ACTIVITIES

Teaching

Courses Taught

1. 1) Management of primary spinal cord tumors; 2) Controversies in spinal cord compression; 3) Image-guided surgery “Mini Course”: Spinal applications. The University of Texas M. D. Anderson Cancer Center 40th Annual Clinical Conference: Cancer and the Central Nervous System, Houston, TX, March 1997.
2. Spinal instrumentation Review Course. The University of Texas M. D. Anderson, Houston, TX, January 1999.
3. Spinal Instrumentation Review Course. The University of Texas M. D. Anderson, Houston, TX, August 5, 2000.

Other Educational Programs

1. Surgical management of metastatic tumors of the spinal column. The University of Texas M. D. Anderson Cancer Center, Brain Tumor Center, Partners in Excellence, January, 1996.
2. Management of metastatic spinal tumors. Clinical Oncology Grand Rounds, The University of Texas M. D. Anderson Cancer Center Continuing Medical Education, Houston, Texas, January, 1996.
3. Department of Neurosurgery Didactic Lecture Series: Metastatic spinal disease. The University of Texas M. D. Anderson Cancer Center, Houston, TX, December, 1998.
4. Management of metastatic spinal tumors. Rehabilitation/Physical Therapy Seminar Series, The University of Texas M. D. Anderson Cancer Center, Houston, TX, September, 1999.
5. “Spinal Program: From Occiput to Coccyx” presented at Neurosurgical Oncology: The Decade Ahead sponsored by UT M. D. Anderson Cancer Center, January 26-28, 2001.
6. “Pain and Spine” moderator at Neurosurgical Oncology: The Decade Ahead sponsored by UT M. D. Anderson Cancer Center, January 26-28, 2001.
7. “Metastatic Spine Disease: Conventional Treatment Options” presented at the UT MD Anderson Cancer Center Grand Rounds, April 6, 2001.
8. “Surgical Management of Spinal Neoplasms” presented at the UT MD Anderson Cancer Center Radiation Oncology Grand Rounds, June 27, 2001.
9. Department of Neurosurgery Didactic Lecture Series: Sacral Tumors. The University of Texas M. D. Anderson Cancer Center, Houston, TX, January, 2002.
10. Department of Neuro-Oncology Core Curriculum Lecture: Management of Metastatic Tumors. The University of Texas M. D. Anderson Cancer Center, Houston, TX, January, 2002.
11. “Management of Sacral Tumors” presented at the Department of Surgical Oncology Grand Rounds at The University of Texas M. D. Anderson Cancer Center, February 20, 2002.
12. “Challenging Spine Tumor Cases” moderator at the American Association of Neurological Surgeons and Congress of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves 18th Annual Meeting, Orlando, Florida, March 1, 2002.
13. “Surgical Treatment of Spinal Neoplasms” presented at Neurosurgical Grand Rounds at Johns Hopkins Hospital, January, 2003.

14. "Degenerative Lumbar Spine: Indications & New Approaches" presented for University of Michigan Medical School Office of Continuing Medical Education, Ann Arbor, Michigan, January 11, 2003.
15. "Neurosurgery of the Spine" presented at Surgical Grand Rounds in Hurd Hall at Johns Hopkins Hospital, April, 2003.
16. "Surgical Management of Spinal Neoplasms" presented at Neurosurgical Critical Care Unit (NCCU) at Johns Hopkins Hospital, June, 2003.
17. "Vertebral Augmentation/Fusion" moderator at the North American Spine Society 18th Annual Meeting, San Diego, California, October 25, 2003.
18. "Metastases to the Spine" Moderator at AO ASIF, Davos Platz, Switzerland, December 14-19, 2003.
19. "Bone graft harvesting set" interactive workshop at AO ASIF, Davos Platz, Switzerland, December 14-19, 2003.
20. "Management of Spinal Cord Ependymomas" presented at Neurosurgical Grand Rounds at Johns Hopkins Hospital, January, 2004.
21. "Surgical Management of Breast Mets to the Brain" presented at Current Concepts in the Multidisciplinary Management of Breast Cancer at Johns Hopkins Breast Center/The Institute for Johns Hopkins Nursing, April 2, 2004.
22. "Surgical Management of Breast Mets to the Spine" presented at Current Concepts in the Multidisciplinary Management of Breast Cancer at Johns Hopkins Breast Center/The Institute for Johns Hopkins Nursing, April 2, 2004.
23. "Spinal Cord Tumors" presented at Neurology Conference at the Johns Hopkins Hospital, May 18, 2004.
24. "Discogenic Back Pain" presented at the AO ASIF Advanced Concepts in the Management of Spinal Disorders, September 11, 2004.
25. "Neoplastic Disease" presented at the AO ASIF Residents' Forum. Annapolis, Maryland, October 1, 2004.
26. "Principles of Anterior Plating: Avoiding Complications, Dynamic vs. Static" and "Occipitocervical Fixation: Anatomy, Fixation Techniques and Alignment" present at the North American Spine Society Cervical Fixation Hands-On Course. Chicago, Illinois, January 21-22, 2005.
27. "Spinal Metastases" presented at NIH Oncology Residents Luncheon, February 22, 2005.
28. "En bloc Resection for Primary Spinal Neoplasms" presented at George Washington University, Washington, DC, February 22, 2005.
29. Guest Examiner, Spring Examinations of the American Board of Neurological Surgery, May 24-28, 2005.
30. "Surgical Management of Spinal Tumors" presented at Orthopaedic Surgery Grand Rounds at Johns Hopkins Hospital, June 9, 2005.
31. "Thoracolumbar Spine Trauma", Moderator and "Anterior Fusion: Techniques, Indications and Devices," Presenter at the AO Spine Advanced Concepts in Management of Spinal Disorders Course, Monterey, California, August 10-14, 2005.
32. En Bloc Resection for Primary Spinal Tumors," Spine Tumor Update Pre-Course, Presenter, "Lumbar Fusion", Concurrent Session, Co-Moderator and "Tumors and Reconstruction," Special Interest Poster Presentation, Co-Moderator at the North American Spine Society 20th Annual Meeting, Philadelphia, Pennsylvania, September 27-29, 2005.
33. "Kyphoplasty/Vertebroplasty for Low Back Pain" Section on Pain I – Low Back Pain Interventions: Where is the Evidence?, Presenter and "Surgical Approaches to Primary Spine Tumors," Metastatic Spinal Disease: Roles of Radiation and Surgery, Presenter at the Quo Vadis Masters Video Symposium/CNS Annual Meeting, Boston, Massachusetts, October 10-12, 2005.

Mentoring

Direct Supervision

Undergraduate and Allied Health Students

1. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Jake Kurian, 1999
2. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Tronya Hawkins, 1999

Medical Students

1. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Derek M. Schoppa, 1994-1995

2. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Jonathan Brett Gentry, 1995-1996 - (Currently, Chief Resident, Department of Neurosurgery, Baylor College of Medicine, Houston, TX)
3. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Vivek Bansal, BS, 1996
4. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Adriana Kaczraj, MS and Jared Stringer, MS, 1997

Residents and Fellows

1. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Maarouf Hammoud, M.D., Neurosurgical-Oncology Fellow, 1993-1995
2. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Salim Kanaan, M.D., Neurosurgical-Oncology Fellow, 1993-1995
3. Mentor, UT M.D. Anderson Cancer Center, Department of Neurosurgery, David Eng, M.D., Ph.D., Neurosurgical-Oncology Fellow, 1995-1996. (Currently Assistant Professor of Neurosurgery, University of Syracuse, Syracuse, NY)
4. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Frederick Lang, M.D., Neurosurgical-Oncology Fellow, 1995-1996. (Currently Associate Professor of Neurosurgery, Department of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX)
5. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Suresh Sankhla, M.D., Neurosurgical-Oncology Fellow, 1996-1997
6. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Emilio Nardone, M.D., Neurosurgical-Oncology Fellow, 1996-1997
7. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Haluk Berk, MD, Postgraduate, Dokuz Eylul University, Izmir, Turkey, 1996 (Currently Professor of Orthopedic Surgery Department of Orthopedic Surgery)
8. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Robert Jackson, M.D., Baylor Resident Neurosurgery Rotation, 1997
9. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Christopher Michael, M.D., Baylor Resident Neurosurgery Rotation. 1997
10. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Steve Toms, M.D., Neurosurgical-Oncology Fellow, 1997-1998. (Currently Assistant Professor of Neurosurgery, Chief, Director of Neurosurgical Oncology, University of Oregon, Portland, OR)
11. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Rick Jensen, M.D., Neurosurgical Resident, 1997-1998
12. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, M.A. Aladag, MD, Postgraduate, University of Istanbul, Malatya, Turkey, 1997 (Currently Professor of Neurosurgery, Chief of Staff, Taksim Hospital, Istanbul, Turkey)
13. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, James Garber, M.D., Neurosurgical Resident, 1997
14. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Andrew Sloan, M.D. Neurosurgical-Oncology Fellow, 1997-1998. (Currently Assistant Professor of Neurosurgery, Chief, Director of Neurosurgical Oncology, Wayne State University, Detroit, MI)
15. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Summer Lal, M.D., Neurosurgical-Oncology Fellow, 1998-2000
16. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Julie E. York, MD, Postgraduate, University of Utah, 1998 (Currently Assistant Professor of Neurosurgery, Department of Neurosurgery, Loyola University, Chicago, Illinois)
17. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Michel LaCroix, M.D. Neurosurgical-Oncology Fellow, 1998-2000. (Currently Assistant Professor of Neurosurgery, UT Medical Branch at Galveston, Galveston, TX)
18. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Gery Hsu, M.D., Baylor Resident Neurosurgery Rotation, 1999
19. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Brent Alford, M.D., Baylor Resident Neurosurgery Rotation, 1999
20. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Peter Alexander, M.D., Baylor Resident Neurosurgery Rotation, 1999

21. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Hao Liu, MD, Postgraduate, Hospital of West China University of Medical Sciences, 1999 (currently Orthopedic Spinal Surgeon, Hospital of West China University of Medical Sciences)
22. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Daryl Fourney, M.D., Postdoctoral Fellow, Royal University Hospital, Saskatoon, Saskatchewan, Canada, 1999 and Neurosurgical-Oncology Fellow, 2001-2002
23. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Paul Holman, M.D., Neurosurgical Resident, 2000
24. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, John Dickerson, M.D., Baylor Resident Rotation, 2000
25. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Chris Kalhorn, M.D., Resident, 2000
26. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Erwin Lo, M.D., UT Medical Branch Galveston Resident Neurosurgery, 2000
27. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Jonathan Brent Gentry, M.D., Baylor Resident Neurosurgery Rotation, 2000
28. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Eric Marmor, M.D., Neurosurgical-Oncology Fellow, 2000-2001. Currently Assistant Professor of Neurosurgery, The Sir Mortimer B. Davis Jewish General Hospital, McGill University, Montreal, Canada.
29. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Yashail Vora, M.D., Neurosurgical-Oncology Fellow, 2000-2001
30. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Jeffery Weinberg, M.D., Neurosurgical-Oncology Fellow, 2000-2001. (Currently Assistant Professor of Neurosurgery, UT M. D. Anderson Cancer Center, Houston, TX)
31. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Zvi Cohen, M.D., Neurosurgical-Oncology Fellow, 2000-2001
32. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Fadi Hanbali, M.D., Neurosurgical-Oncology Fellow, 2000-2001. Currently Assistant Professor of Neurosurgery, UT Medical Branch at Galveston, Galveston, TX.
33. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Tony Maioriello, M.D., UTMB Galveston Resident Neurosurgery Rotation, 2001
34. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Remi Nader, M.D., UTMB Galveston Resident Neurosurgery Rotation, 2001
35. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Jean Paul Wolinsky, M.D., Baylor Resident Neurosurgery Rotation, 2001
36. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Vijayabalan Balasingam, M.D., Neurosurgical-Oncology Fellow, 2001-2002
37. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Sujit Prabu, M.D., Neurosurgical-Oncology Fellow, 2001-2002
38. Mentor, UT M. D. Anderson Cancer Center, Department of Neurosurgery, Joseph Shehadi, M.D., Neurosurgical-Oncology Fellow, 2001-2002
39. Mentor, Johns Hopkins University, Department of Neurosurgery, Dean Chou, M.D., Chief Residency, 2002-2003.
40. Mentor, Johns Hopkins University, Department of Neurosurgery, Matt Lesniak, M.D., Chief Residency, 2002-2003.
41. Mentor, Johns Hopkins University, Department of Neurosurgery, Philip Jay Storm, M.D., Chief Residency, 2002-2003.
42. Mentor, Johns Hopkins University, Department of Neurosurgery, Dean Chou, M.D., Chief Residency, 2003-2004.
43. Mentor, Johns Hopkins University, Department of Neurosurgery, Ira Garonzik, M.D., Spine Fellowship, 2003-2004.
44. Mentor, Johns Hopkins University, Department of Neurosurgery, Jean-Paul Wolinsky, M.D., Spine Fellowship, 2004-2005.
45. Mentor, Johns Hopkins University, Department of Neurosurgery, Timothy Witham, M.D., Spine Fellowship, 2005-2006.
46. Mentor, Johns Hopkins University, Department of Neurosurgery, Yevgeniy Khavkin, M.D., Spine Fellowship, 2005-2006.

47. Mentor, Johns Hopkins University, Department of Neurosurgery, Jacob Schlosser, M.D., Chief Residency, 2005-2006.
48. Mentor, Johns Hopkins University, Department of Neurosurgery, Michael Schwarz, M.D., Chief Residency, 2005-2006.
49. Mentor, Johns Hopkins University, Department of Neurosurgery, Carlos Bagley, M.D., Chief Residency, Spine Fellowship, 2005-2007.
50. Mentor, Johns Hopkins University, Department of Neurosurgery, Ali Bydon, M.D., Spine Fellowship, 2006-2007.
51. Mentor, Johns Hopkins University, Department of Neurosurgery, Daniel Sciubba, M.D., Chief Residency, Spine Fellowship, 2006-2008.
52. Mentor, Johns Hopkins University, Department of Neurosurgery, Patrick Hsieh, M.D., Spine Fellowship, 2007-2008.
53. Mentor, Johns Hopkins University, Department of Neurosurgery, John Chi, M.D., Spine Fellowship, 2007-2008.
54. Mentor, Johns Hopkins University, Department of Neurosurgery, Ibrahim Omeis, M.D., Spine Fellowship, 2008-present.
55. Mentor, Johns Hopkins University, Department of Neurosurgery, Oren Gottfried, M.D., Spine Fellowship, 2008-present.

Editorial Activities

Editorial Board Appointments

1. Journal of Spinal Disorders & Techniques, 2001-present.
2. The Spine Journal, 2003-present (Associate Editorial Board Member).
3. The Journal of Neurosurgery: Spine, 2006-present.
4. The European Spine Journal, 2006-present
5. Nature Reviews in Neurology, 2006-present
6. Journal of Surgical Oncology, 2008-present.
7. World Neurosurgery, 2010-present.

Journal Reviewer

1. Neurosurgery (ad hoc reviewer), 1996-present.
2. Journal of Neuro-Oncology (ad hoc reviewer), 1997-present.
3. Journal of Neurosurgery, Neurosurgical Focus “Metastatic Spine Disease” Invited Topic Editor, December 2001.
4. Journal of Neurology, Neurosurgery and Psychiatry (ad hoc reviewer), 2001-present.

CLINICAL ACTIVITIES

Certification

Licensures (Active)

Medical Doctor, 1983
 E.C.F.M.G. Certification, 367-730-9, 1983
 F.L.E.X., 1986
 Texas, H7150, 1990
 California, A049007, 1990
 New York, 192346, 1993
 Maryland, D0058481, 2002

Licensures (Inactive)

Illinois, 00186767, 12/10/86, 1992.

Board Certification

The American Board of Neurological Surgery, 1997, [97032].

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

Member, Quality Improvement – Alternate, 1995-2002.
Point of Contact, Disaster Ride-out Team, 1995-2002.
Member, Faculty Senate, 1996-2002.
Member, Clinical Research Committee, 1997-1999.
Member, PRS Business Operations & Fees Committee, 1998-2002.
Member, Pharmacy and Therapeutics Committee, 1998-2001.
Member, Promotions Committee, Division of Surgery, 1998-2002.
Vice Chair, Medical Practice Committee, 2000-2002.
Member, M. D. Anderson Associates Steering Committee, 2000-2001.
Member at Large, Executive Committee of Medical Staff, 2001-2002.
Member, Neuroscience Promotions Committee, JHU, 2002-present.
Member, Johns Hopkins University Promotions Committee, 2002-present.
Member, Johns Hopkins University Policy in Health Affairs, 2003-present.
Director, Johns Hopkins International, Anadolu Medical Center, 2006-present.
Member, Johns Hopkins School of Medicine Admissions Committee, 2007-present.
Member, Johns Hopkins Medical Staff Conference Committee, 2007-present.
Member, Johns Hopkins CPA Contracting Committee, 2007-present.
Member, Johns Hopkins Value Analysis Committee, 2007-present.

Professional Society Activities, with Offices Held

Chairman, AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves, 2010 - Present
Member Ethics Committee of the North American Spine Society (NASS), 1999-present.
Chairman, AO ASIF Committee on “Tumor, Infection & Osteoporosis,” 2000-present.
Chairman, Fellowship & Awards Coordinating Committee of the AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves, 2000-present.
Member, North American Spine Society Recognition and Awards Committee, 2001-2004.
Member, AO ASIF, North American Education Committee, 2001-2003.
Chairman, AO ASIF, North American Education Committee, 2003-present.
Member, Scoliosis Research Society, 2005-present.
Member, Senior Advisory Council to the Executive Committee, AANS/CNS Joint Section on Disorders of the Spine and Peripheral Nerves, 2008-present.

Local/state

Member, Harris County Medical Society, 1986-present.
Member, Houston Neurological Society, 1986-present.
Member, Texas Medical Association, 1995-present.
Member, Texas Association of Neurological Surgeons, 1996-present.

National and International

Member, American Medical Association, 1984-present.
Member, North American Spine Society, 1994-present.
Member, Congress of Neurological Surgeons, 1997-present.
Member, The American Association of Neurological Surgeons, 1998-present.
Member, American College of Surgeons, 1999-present.
Member, American Society of Clinical Oncology, 2001-present.
Member, Cervical Spine Research Society, 2003-present.
Member, Society of Neurological Surgeons, 2007-present.

RECOGNITION

Awards, Honors

- Magna Cum Laude-Valedictorian, Istanbul Faculty of Medicine, University of Istanbul, Istanbul, Turkey, 1983.
- Honor List, Ministry of Health, Ankara, Turkey, 1983.
- Recipient of the Congress of Neurological Surgeons Resident Trauma Research Award, 1987.
- Congress of Neurological Surgeons AME Spine Fellowship Award, 1993.
- Best Doctors in America, 1999.
- Fellow of American College of Surgeons, 1999.
- Faculty Achievement Award in Patient Care, UT M. D. Anderson Cancer Center Foundation, 2001.
- Donlin M. Long Professor of Neurosurgery, Johns Hopkins University, 2003.
- Richard J. Otenasek, Jr. Faculty Teaching Award, Dept. of Neurosurgery, Johns Hopkins University, 2003.
- Elected Member, Society of Neurological Surgeons, 2004.
- Best Doctors in America, 2005-2006.
- Baltimore Magazine, Top Doctors, 2007.

Invited Talks, Panels

Invited Reviews, Editorials

1. Invited Topic Editor: Metastatic Disease of the Spine, *Neurosurgical Focus*, December 2001.
2. Member of the Selection Committee for the 2002 Outstanding Paper Awards for *The Spine Journal* North American Spine Society (NASS), March 2002.
3. Member of Committee grading abstracts for the NASS 17th Annual Meeting, March 2002.

Chairing National or International Conferences/Symposia

1. AO ASIF, Comprehensive & Interactive Spine Courses, Tucson, Arizona, Co-Chairman, 5/2001-6/2001.
2. AO ASIF, International Symposium on Spinal Tumors, Houston, Texas, Co-Chairman, 3/2002.
3. 4. AO ASEC (North American Spine Education Committee), Chairman, 2003.
5. Cervical Spine Research Society, Neoplastic Disease of the Cervical Spine, Scottsdale, Arizona, Moderator and Lecturer, 2003.
6. North American Spine Society (NASS) Scientific Program Committee, Chicago, IL, Chairman 2004.
- 7.. AO Spine North America, Faculty Development Forum, Southampton, Bermuda, Chairman, November 4-7, 2004.
8. AO North America, AO Challenges and Complications in Complex Spine Surgery Symposium, Baltimore, MD, Co-Chairman, April 30-May 1, 2005.

Presentations at National or International Conferences

1. Faculty of AANS/CNS: Tumors of the sacral region. Joint Section on Disorders of the Spine and Peripheral Nerves of the AANS/CNS, Miami, FL, February, 1996.
2. Faculty of AO ASIF: Comprehensive and Interactive Spine Course: Neurosurgical and orthopedic spinal concepts and techniques. Lecture: Neoplastic disease of the spine. Hands-on course: an overview of the Universal Spinal System. Vancouver, Canada, April, 1996.
3. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Houston, TX, November 10, 1997.
4. Faculty of AANS: Sacral Neoplasms: Management and biomechanical implication. AANS, Philadelphia, PA, April, 1998.
5. Faculty of AO ASIF: Comprehensive and Interactive Spine Course: When decompression alone. An overview of anterior thoracolumbar plate/screw system. Hands-on course: Spinal Instrumentation. Quebec City, Canada, July, 1998.
6. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Baltimore, MD, November, 1998.
7. Faculty of AANS: Practical Clinic Seminar: Surgical exposure, decompression, and stabilization of the cervical spine. AANS, New Orleans, LA, April, 1999.
8. Faculty of CNS: Management strategies for spinal neoplasms. Luncheon Seminar. CNS, Boston, MA, October/November, 1999 (Scientific Program Book p 113).

9. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Baltimore, MD, May, 1999.
10. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Los Angeles, CA, May, 2000.
11. Faculty of CNS: "Anterior and Posterior Approaches and Stabilization Techniques for the Thoracolumbar Spine." Luncheon Seminar, San Antonio, TX, September, 2000.
12. Faculty of CNS, Practical Clinic Seminar: "Management of Disorders of the Cervical Spine." CNS, San Antonio, TX, September, 2000.
13. Modification of Oral Board Review Course. Discussion sponsored by the Education Committee (PDP) of the AANS, San Antonio, TX, September, 2000.
14. Faculty of AO ASIF: "Evaluation and Diagnosis of Axial Pain vs. Radiculopathy vs. Myelopathy", "Transoral Decompression", "Metastatic Disease of the Spine." Comprehensive and Interactive Spine Course. Captiva, FL, September, 2000.
15. Faculty of AO ASIF: "Claw Principles & Assembly", "Anatomy & Mechanics of the Cervical Spine Fixation Options", "Case Studies: Atlanto-axial and Occipital Cervical Trauma", "Mechanical & Anatomic Issues Regarding Implant Placement and Stability", "Introduction to Advanced Topics - How not to do AO." Spine Resident Course, Rosemont, IL, October 7, 2000.
16. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Houston, TX, November 5, 2000.
17. Invited Faculty: 73rd AO ASIF Interactive spine course: Degenerative and reconstructive spinal surgery, AO International, Davos, Switzerland, December, 2000.
18. Invited Faculty: "Contemporary Surgical Management of Spinal and Sacral Tumors", 4th Foundations of Clinical Cancer Research Symposium sponsored by The University of Texas M. D. Anderson Cancer Center, Houston, TX, March 8-9, 2001.
19. Faculty of AANS: "Anterior & Combined Approaches to the Thoracic, Lumbar Spine, and Sacrum", AANS Breakfast Seminar, Toronto, Ontario, Canada, April 21-26, 2001.
20. Faculty of AO ASIF: "Training and Research Opportunities in Spinal Oncology." AANS Resident's Lounge in Toronto, Ontario, Canada, April 23-25, 2001.
21. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Savannah, GA, May 29, 2001.
22. Invited Faculty: (Co-Chairman) "Metastatic Disease of the Spine", "Transoral Decompression?", "Metastatic Disease of the Spine." AO ASIF Comprehensive Spine Course, Tucson, AZ, May 31, - June 3, 2001.
23. Invited Guest Lecturer: "Management of Cancer of the Cervicothoracic Junction." 36th meeting of the Canadian Congress of Neurological Sciences, Halifax, Nova Scotia, Canada, June 12-16, 2001.
24. Invited Guest Lecturer: "Management and Reconstruction of Complex Neoplastic Disease", "Fracture Tumor Roundtable Case Discussions." 8th International Meeting on Advanced Spine Techniques (IMAST), Paradise Island, Bahamas, July 12-14, 2001.
25. Faculty of AO ASIF: "Transoral Decompression?", "Metastatic Disease of the Spine", "Evaluation and Diagnosis of Degenerative Cervical Spine Disease." AO ASIF Interactive Spine Course, Marco Island, FL, September 6-9, 2001.
26. Faculty of CNS: "Lateral Thoracotomy Approaches" - Practical Clinic Seminar, "Approaches to Spinal Neoplasms" - Luncheon Seminar. 51st CNS Annual Meeting, San Diego CA, September 29-October 4, 2001.
27. Invited Faculty: 75TH AO ASIF Interactive Spine Course: "Upper Cervical Spine Tumors", "Metastatic Spine Disease; Posterior Approach", "Is There a Place for Odontoid Resection in Rheumatoid Myelopathy". AO International Spine Course, Davos, Switzerland, December, 2001.
28. Invited Guest Lecturer: Combined Anterior Posterior Approach for Radical Resection of Spinal Tumors. 50th National Congress of Italian Neurosurgical Society. Rome, Italy, December 4-7, 2001.
29. Faculty of AANS/CNS: Moderator "Challenging Spine Tumor Cases" at the 18th Annual Meeting, Orlando, Florida March 1, 2002.
30. Faculty of AANS: Panelist "Evaluation and Management of Primary and Metastatic Vertebral Column Neoplasms" at the 2002 Annual Meeting, Chicago, IL, April 6-11, 2002.
31. Faculty of AO ASIF: Moderator of Practical Exercise III: (A) Anterior Instrumentation for Thoracolumbar Trauma (B) Pedicle Screw Insertion at the AO ASIF Comprehensive & Interactive Spine Courses, Coronado, CA, April 18-21, 2002.
32. Faculty of AO ASIF: "Spine Tumors" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Coronado, CA, April 18-21, 2002.

33. Faculty of AO ASIF: "Early Surgery for Thoraco-Lumbar Fractures" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Coronado, CA, April 18-21, 2002.
34. Faculty of AO ASIF: "Lumbar Decompression for Spinal Stenosis" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Coronado, CA, April 18-21, 2002.
35. Faculty of AO ASIF: "Transoral Decompression Techniques" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Coronado, CA, April 18-21, 2002.
36. Chairman, Instructional Course #1G "Management & Reconstruction of Complex Neoplastic Disease" presented at the 9th International Meeting on Advanced Spine Techniques, Montreux, Switzerland, May 22-25, 2002.
37. Faculty, Roundtable Discussion #2B "Fractures & Tumors" presented at the 9th International Meeting on Advanced Spine Techniques, Montreux, Switzerland, May 22-25, 2002.
38. Faculty of CNS, Moderator: Approaches to Spinal Neoplasms (Primary and Metastatic Tumors) CNS Annual Meeting, Philadelphia, PA, 2002.
39. Faculty of CNS, Practical Clinic Seminar, "Surgical Approaches and Instrumentation of Thoracolumbar Spine" CNS Annual Meeting, Philadelphia, PA, 2002.
40. Faculty of AO ASIF: 1. Evaluation of axial pain, radiculopathy and myelopathy 2. Transoral Decompression for Basilar Invagination 3. Metastatic Spine Tumors, Newport, RI, October 6, 2002.
41. Invited Faculty: AO North America-CASS Fellows Retreat, Keynote Address "Advances in Neoplastic Management, Banff, Alberta, Canada, March 20-23, 2003.
42. Faculty of Johns Hopkins Neurosurgery: "Future of Spinal Neurosurgery" presented at the Johns Hopkins Medical and Surgical Association Biennial Symposium, Baltimore, MD, May, 2003.
43. Faculty of AANS: Oral Board Preparation Course: Comprehensive Review: Spinal Surgery and Instrumentation, Cincinnati, Ohio, May 12, 2003.
44. Faculty of AO ASIF: "Primary Tumor Management" and "Metastatic Disease Management" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Annapolis, MD, June 21, 2003.
45. Faculty of AO ASIF: "Case Presentation: Cervical Myelopathy, Postoperative Neurological Deficit, and Postoperative Lumbar Infections" presented at the AO ASIF Degenerative Spine Symposium, Coronado, CA, July 19-20, 2003.
46. Invited Faculty, Moderator: "Spinal Neoplasms-Radical Surgical Resection of Primary Tumors", and Faculty participant in General Session-Spinal Tumors, "Surgical Outcome in Patients With Hematogenous Lung Cancer Metastases to the Spine: A Series of 37 Patients", Spine Across the Sea, Maui, Hawaii, July 29-31, 2003.
47. Faculty of AO ASIF: "Pearls: Osteoporotic Fractures, Complications of Cervicothoracic Trauma-Anterior Approach, Anterior Surgery for Thoracolumbar Injuries" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Quebec City, Canada, August 7-10, 2003.
48. Faculty of AO ASIF, Lecturer and Moderator: "Tumors of the Craniocervical Junction, C1-C2 Transarticular Screw Fixation, C1-C2 Pedicle Screw Fixation, Occipital Cervical Fusion" presented at the AO ASIF Comprehensive & Interactive Spine Courses, Rosemont, Illinois, August 17, 2003.
49. Faculty of AO ASIF, Moderator: "Surgical Management of Primary Spinal Neoplasms, Transmandibular Approach for En Bloc Resection" presented at AO Spine Tumor Symposium, Rochester, Minnesota, September 5, 2003.
50. Invited Faculty, Co-Moderator: Complex Cervical Reconstruction, NASS, Montreal, Quebec, Canada, October 31-November 2, 2003.
51. Invited Faculty: "Spinal and Back Pain" presented at the Johns Hopkins Medicine's women's health conference "A Woman's Journey", November 8, 2003.
52. Invited Faculty, Moderator and Lecturer: "Neoplastic Disease of the Cervical Spine, Radical resection of primary cervical spinal tumors and reconstruction" presented at CSRS Annual Meeting Symposium, Scottsdale, Arizona, December 11, 2003.
53. Faculty of AO ASIF: "Trauma/degenerative, Degenerative/deformity, Complex spine reconstruction" Comprehensive and Interactive Spine Courses. Davos Platz, Switzerland, December 14-19, 2003.
54. Faculty of AO ASIF, Lecturer: "Primary spinal tumor reconstruction" and "Metastatic spinal tumor reconstruction" 4th Live Spine Surgery Symposium. Bern, Switzerland, February 6-7, 2004.
55. Faculty of AO ASIF, Course Director, Moderator: "Complex Spine Tumors" – Advanced Concepts in the Management of Spinal Disorders. Comprehensive and Interactive Spine Courses, Sun Valley, Idaho, February 19-22, 2004.
56. Faculty of AANS/CNS: Moderator, Master Surgeon Series: Thoracolumbar – Decisions in Spinal Surgery: Patient and Technique Selection. Joint Section on Disorders of the Spine and Peripheral Nerves of the AANS/CNS, San Diego, California, March 17, 2004.

57. Faculty of AANS/CNS: Presenter, "Treatment of Metastatic Disease of the Thoracolumbar Spine: Anterior, Posterior or Both – When and Why?" Joint Section on Disorders of the Spine and Peripheral Nerves of the AANS/CNS, San Diego, California, March 17, 2004.
58. Faculty of AANS/CNS: Co-moderator, Lumbar Surgery: Old Techniques, New Technologies – "How Are New Technological Advances Changing Traditional Spinal Surgery?", Joint Section on Disorders of the Spine and Peripheral Nerves of the AANS/CNS, San Diego, California, March 17, 2004.
59. Faculty of AO ASIF: Lecturer, 1. "Management Options of Large Anterior Column Defects". 2. Case presentation. 3. "Current Management of Metastatic Disease of the Spine" Comprehensive and Interactive Spine Courses. Denver, Colorado, April 3-4, 2004.
60. Faculty of NASS Spring Break: Lecturer, "Innovations in Spine Care." Boca Raton, Florida, April 22-24, 2004.
61. Faculty of AANS: Discussant, "Metastatic Spinal Cord Compression: A Randomized Trial of Direct Decompressive Surgical Resection Plus Radiotherapy vs Radiotherapy Alone." Orlando, Florida, May 1-6, 2004.
62. Faculty of AANS: Discussant, "Case Studies: Cervical Spine" and "Case Studies: Thoracolumbar Trauma." Charlestown, South Carolina, May 14-16, 2004.
63. Invited Faculty of TNS, Lecturer: "Surgical Management of Spinal Neoplasms" and "Surgical Treatment of Sacral Tumors." Annual Scientific Congress of the Turkish Neurosurgical Society. May 22-26, 2004.
64. Course Director, AO North America: "Degenerative Spine Symposium – A Team Approach", Annapolis, Maryland, July 23-25, 2004.
65. Faculty of AO ASIF: Advanced Concepts in the Management of Spinal Disorders, Lecturer: "Anterior Fusion: Techniques, Indications and Devices". Moderator, "Thoracolumbar Spine Trauma" Session. Ponte Vedra Beach, Florida, September 8-12, 2004.
66. Faculty of AO ASIF Residents' Forum: Lecturer, "Neoplastic Disease," "Case Reviews", Annapolis, Maryland, October 1, 2004.
67. Invited Faculty: Lecturer, "Surgical Management of Spinal Metastases" presented at Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins' Current Concepts in Cancer Pain Management symposium, Baltimore, Maryland, October 14-15, 2004.
68. Chairman, North American Spine Society's 19th Annual Meeting. October 27-30, 2004.
69. Faculty of NASS Annual Meeting, Moderator: "Concurrent Focused Review 1- Vertebroplasty," Chicago, Illinois, October 27-30, 2004.
70. Chairman of AO ASIF, Faculty Development Forum. Southampton, Bermuda, November 4-7, 2004.
71. Faculty of AO ASIF: Presenter, "Spine Tumors", AO Spine Masters Course, Davos, Platz, Switzerland, December 14, 2004.
72. Faculty of AO ASIF: Lecturer, "Surgery for Primary Tumors, En Bloc Resection, Region Specific Issues and Case Examples", AO Spine Masters Course, Davos Platz, Switzerland, December 15, 2004.
73. Faculty of NASS Cervical Fixation: A Hands-On Course: Lecturer, "Principles of Anterior Plating: Avoiding complication, Dynamic vs Static," Chicago, Illinois, January 21-22, 2005.
74. Faculty of AO ASIF: Lecturer, "Discogenic Back Pain – Anterior Fusion: Techniques, Indications and Devices" – Advanced Concepts in the Management of Spinal Disorders. Comprehensive and Interactive Spine Courses, Sun Valley, Idaho, February 1-6, 2005.
75. Faculty of AANS: Lecturer, "Treatment of Thoracolumbar Spine Tumors" presented at Innovations in Spinal Fixations: An Advanced Course, Memphis, TN, February 26-27, 2005.
76. Faculty of AANS: Lecturer, "Overview and Approaches to Primary Tumors" presented at Spine and Peripheral Nerves in Phoenix, AZ, March 8-9, 2005.
77. Faculty of AO ASIF: Lecturer, "Foraminotomy Anterior or Posterior" presented at AO International Course, March 17-20, 2005.
78. Faculty, "Fixation/Instrumentation of the Upper Cervical Spine (Techniques and Tips)" presented at the 7th Annual Congress in Spinal Surgery, Antalya, Turkey, April 11-15, 2005.
79. Faculty, "Evaluation and Management of Cervical Instability and Kyphosis" presented at the 7th Annual Congress in Spinal Surgery, Antalya, Turkey, April 11-15, 2005.
80. Faculty, "Total En Bloc Spondylectomy in the Treatment of Metastatic Spinal Tumors: Indications, Techniques and Avoidance of Complications" presented at the 7th Annual Congress in Spinal Surgery, Antalya, Turkey, April 11-15, 2005.
81. Faculty, "Anterior vs. Posterior Surgical Treatment of Cervical Myleopathy Techniques: Pros and Cons" presented at the 7th Annual Congress in Spinal Surgery, Antalya, Turkey, April 11-15, 2005.

82. Faculty of AANS: Lecturer, “En Bloc Resection for Spine Tumors” and Moderator: “Evaluation and Management of Primary and Metastatic Vertebral Column Neoplasms” Session at the AANS Annual Meeting Breakfast Seminar, New Orleans, LA, April 17-18, 2005.
83. Faculty of AO Spine Latin America/AO Spine North America: Presenter, “En Bloc is Preferred” and “Debridement without Hardware Removal is Safe” at Complex Spinal Issues Symposium, Cancun, Mexico, April 20-24, 2005.
84. Co-Chairman of AO North America: AO Challenges and Complications in Complex Spine Surgery Symposium, Baltimore, MD, April 30-May 1, 2005.
85. Faculty of CSR Congressi: Lecturer, “Vertebral Column Metastases: Surgical Management” presented at the International Meeting, Updates in Neuro-Oncology, Arezzo, Italy, June 25-26, 2005.
86. Faculty of AO North America: Moderator, “Thoracolumbar Spine Trauma”, Monterey, California, August 10-14, 2005.
87. Faculty of AO North America: Lecturer, “B Lesion with Canal Compromise Session: TL Trauma”, Monterey, California, August 10-14, 2005.
88. Faculty of AO North America: Lecturer, “Case Presentation: Burst Fracture”, Monterey, California, August 10-14, 2005.
89. Faculty of AO North America: Lecturer, “Rheumatoid Instability at the Upper Cervical Level”, Monterey, California, August 10-14, 2005.
90. Faculty of AO North America: Lecturer, “Anterior Fusion: Techniques, Indications and Devices”, Monterey, California, August 10-14, 2005.
91. Faculty of AO North America: Lecturer, “Case Presentation: Grade I Spondy. With Stenosis”, Monterey, California, August 10-14, 2005.
92. Faculty of AO North America: Moderator, “Complex Spinal Disorders Session”, Monterey, California, August 10-14, 2005.
93. Course Director for AO North America: “Spine Tumor Symposium”, Baltimore, Maryland, October 28-30, 2005.
94. Faculty of AO Spine European Region: Presenter: “Complications in Intradural Tumor Surgery” and “Vertebral Artery Injury Management”, Strasbourg, France, November 16-19, 2005.
95. Faculty of AO Spine European Region: Presenter: “Case Discussions: Trauma, Tumor, Intraspinial and Cervical – Complications and Revision Surgery,” Strasbourg, France, November 16-19, 2005.
96. Faculty of AO ASIF: ISEC Meeting Principles, Advanced, Masters – Spine Interactive I & II Spine Masters Course, Teacher: AO Spine Trauma & Degenerative Interactive Workshop,” “Tumour,” “Spinal Tumours ARS,” Moderator: “TL Fracture,” Davos, Switzerland, December 9-16, 2005.
97. Faculty of AANS, Lecturer: “Treatment of Thoracolumbar Spine Tumors.” Session at the AANS Current Advances in Spinal Fixation, Memphis, Tennessee, February 11, 2006.
98. Faculty of AO Spine North America Fellows Forum: Presenter: Management Tips in Session “Rostral Kyphosis Above TL Fusion Constructs,” Banff, Alberta, Canada, March 9-13, 2006.
99. Faculty of AANS/CNS: Section of Disorders of the Spine and Peripheral Nerves: Moderator: “Oral Abstract Presentations,” Lake Buena Vista, Florida, March 15-18, 2006.
100. Faculty of 74th Annual Meeting of the AANS, Lecturer: “Vertebral Augmentation: Vertebroplasty and Kyphoplasty, Pathology of Insufficiency,” Moderator: “Management of Spinal Column Tumors”, Lecturer: “History of Facet Fusion,” San Francisco, California, April 22-26, 2006.
101. Society of Neurological Surgeons Annual Meeting, Durham, North Carolina, May 21-23, 2006.
102. Faculty of AO ASIF: Controversies in Spine Trauma Symposium: Course Director/Evaluator, Hilton Head, South Carolina, June 3-4, 2006.
103. Faculty of AO Spine European Region Interactive Spine Course: International Chairman, AO Spine Interactive Course, Istanbul, Turkey, June 16-18, 2006.
104. Faculty of AOSpine North America Degenerative Spine Symposium: Course Director, Principles and Emerging Technologies, Montreal, Quebec, July 22-23, 2006.
105. Faculty of AOSpine North America Spine Faculty Development Forum, Moderator: “AOSpine North America Welcome,” “Introduction of New Methods,” Lecturer: “Future Directions of NASEC and Tools Within Our Informatics Matrix,” Southampton, Bermuda, August 9-13, 2006.
106. Faculty of Fifth Annual International Neuro-Oncology Update, Lecturer: “Surgical Management of Spinal Tumors,” Memphis, Tennessee, August 24-25, 2006.
107. Faculty of Spine Oncology Study Group, Lecturer: “Key Controversies in the Management of Primary Spine Tumors, Surgical Intervention,” Chicago, Illinois, October 6, 2006.
108. Faculty of Congress of Neurological Surgeons 2006 Annual Meeting: Discussant: “Surgical Management of Primary and Metastatic Sarcoma of the Mobile Spine,” Lecturer: “Management of

- Primary Spinal Tumors,” “Surgery Versus Radiosurgery for Spinal Metastases,” “Patient Evaluation and Selection,” Moderator: “Metastatic Spinal Disease: The Role of Surgery and Radiation Therapy,” Lecturer: “Patient Evaluation and Literature Update,” Faculty of Digital Masters Video Symposium, “Spinal Cord Ependymoma,” October 7-12, 2006.
109. Cervical Spine Research Society 34th Annual Meeting & SCRS 11th Instructional Course, “Controversies in Surgical Management Debates: Laminectomy is Better than Laminoplasty,” “Assessment in Surgical Treatment of Craniocervical Pathology,” Palm Beach, Florida, November 29-December 2, 2006.
 110. Chairman of AO Spine Cervical Spine Course, Davos, Switzerland, December 8-16, 2006.
 111. Guest Faculty: First International Symposium on Stereotactic Body Radiation Therapy and Stereotactic Radiosurgery: “Surgical Treatments for Sacral Tumors,” Orlando, Florida, February 25, 2007.
 112. Faculty of Spine Oncology Study Group, Memphis, Tennessee, February 26, 2007.
 113. Faculty of AANS/CNS: Speaker, “Primary Bone Tumors of the Spine: Top Ten Pearls of Treatment” and “Tumor Recurrence: Spondylectomy/Local Excision” 23rd Annual Meeting of the AANS/CNS Section on Disorders of the Spine & Peripheral Nerves, Phoenix, Arizona, March 7-10, 2007.
 114. Faculty of Fifth Annual AO Spine North America Fellows Forum: Moderator: “Case Discussion: Current Concepts in the Management of Spine Metastasis,” Banff, Alberta, Canada, March 29 – April 1, 2007.
 115. Faculty of Spine Oncology Study Group, Washington, D.C., April 12-14, 2007.
 116. Faculty of 75th Annual Meeting of the AANS/CNS, Washington, D.C., April 14-19, 2007.
 117. Faculty of AO ASIF: Challenges & Complications in Complex Spine Surgery Symposium, A Team Approach, Lecture: “Complications of Tumor Surgery Including Spinal Cord Tumor,” “Management of Complications & Closing Remarks,” San Francisco, California, April 28-29, 2007.
 118. 1st International Chordoma Research Workshop, Co-Moderator: “Future Clinical Management Break-Out Group Discussions,” Bethesda, Maryland, May 3-4, 2007.
 119. Member of Society of Neurological Surgeons Meeting, Annual Meeting, San Francisco, California, May 6-8, 2007.
 120. Invited Faculty: Advanced Anterior & Posterior Spinal Strategies: Sharpening Your Surgical Skills, Henderson, Nevada, May 18-19, 2007.
 121. Faculty of AO Foundation Board of Trustees Meeting, Beijing, China, June 6-9, 2007.
 122. Faculty of Second International Meeting Updates in Neuro-Oncology, Lecture: “Metastatic Spinal Tumors: Evaluation and Decision- Making”, Corona, Italy, June 28th – July 1, 2007.
 123. Course Director, AOSNA Advanced Concepts in the Management of Spinal Disorders, Lecture: “Tumor,” Niagara on the Lake, Ontario, Canada, August 2-4, 2007.
 124. Guest Lecturer, 13th Congress of the European Association of Neurological Societies, Lecture: “Primary Tumors of the Vertebral Spine”, Glasgow, England, September 2-7, 2007.
 125. Course Director, AO Spine North America Spine Tumor Symposium, Vancouver, British Columbia, Canada, September 27-29, 2007.
 126. Faculty of CSRS Hands-On Cadaver Course, “Anterior Cervical Approach to C2-4 & C7-T3”, St. Louis, Missouri, January 17-19, 2008.
 127. Faculty of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, “Treatment of Primary and Metastatic Spine Tumors,” and “Advances in the Treatment of Thoracic and Lumbar Spine Trauma – Lumbosacral Pelvic Fixation,” Orlando, Florida, February 27-March 1, 2008.
 128. Faculty of Interurban Neurosurgical Society Annual Scientific Meeting, “Surgical Management of Spinal Neoplasms,” Chicago, Illinois, March 6-7, 2008.
 129. Speaker for 6th Annual AOSpine North America Fellows Forum, Banff Springs, Alberta, Canada, April 3-6, 2008.
 130. Faculty and Presenter of AO Spine North America Excellence in Spine Controversies in Spine Trauma Symposium, “Post-Traumatic Deformity” and “Spine Injuries in Sports”, Baltimore, Maryland, April 12-13, 2008.
 131. Presenter for AANS Annual Meeting, “Vertebral Column Tumors” Chicago, Illinois, April 26-May 1, 2008.
 132. Faculty and Presenter of AO Spine North America Strategy Summit, “Surgical Management of Metastatic Spine Tumors” Coronado, California, June 26-29, 2008.
 133. Faculty for Cleveland Clinic, “Managing Spine Tumors” Cleveland, OH, July 22, 2008.
 134. Faculty for AOSpine North America “Advanced Concepts in the Management of Spinal Disorders,” Monterey, CA, August 6-10, 2008.

135. Faculty for AO Spine North America “Cervical Stenosis With Myelopathy” and “Complex Spine Pathologies II, Baltimore, MD, September 5-7, 2008.
136. Faculty for AO Spine North America “Lecture-Cervicothoracic Injuries” and “Tumors”, Sun Valley, Idaho, February 4-8, 2009.
137. Faculty for AANS/CNS “Treatment of Primary and Metastatic Spine Tumors”, Phoenix, Arizona March 11-14, 2009.
138. Faculty for AO Spine North America “Spine Tumor Symposium”, Houston, Texas, March 27-29, 2009.
139. Chairperson AO Spine Europe “Masterclass in Degenerative and Tumor Spine, Turkey, June 11-13, 2009.
140. Faculty for AO Spine North America, “Symposium 4: Tumors, Introduction and Decision Making and Primary Spinal Tumors, San Francisco, CA, June 23-26, 2009.
141. Presenter for Neuro Oncology Conference Speaker 2009, “Intramedullary Tumors”, Columbus, Ohio, September 8-9, 2009.
142. Moderator for Scoliosis Research Society 44th Annual Meeting, “Management of Intraoperative Problems in Deformity Cases”, September 23, 2009.
143. Faculty for 5th Annual Temple Spine Symposium Spinal Oncology and Spinal Degeneration, “Spinal Neoplasms”, Philadelphia, PA, October 2, 2009.
144. Presenter for NASS Annual Meeting, “Management of Intraoperative Problems in Deformity Cases”, San Francisco, CA, November 9-11, 2009.
145. Presenter for CSRS 14th Instructional Course, “Occipital Cervical & C1-C2 Intraoperative Reduction Technique” and “Complications in Treatment of Cervical Spine Metastases”, Salt Lake City, UT, December 2, 2009.
146. Presenter for 26th Annual Meeting of the AANS/CNS Section on “Disorders of the Spine and Peripheral Nerves”, Orlando, Florida, February 17-20, 2010.
147. Faculty for AOSNA Advanced Concepts in the Management of Spinal Disorders, Salt Lake City, Utah, February 24-28, 2010.
148. Faculty for AOSNA Spine Fellows Forum, Banff, Canada, April 7-11, 2010.
149. Presenter for 2010 AANS Annual Meeting on “Complications and Complex Spinal Surgery: Lessons Learned, Philadelphia, PA, April 30 – May 5, 2010.
150. Presenter for Korean American Spine Society Meeting, July 16, 2010.
151. Presenter for 2010 CNS Annual Meeting, San Francisco, CA, October 16-21, 2010.
152. Presenter for CSRS 15th Instructional Course, Charlotte, NC, December 1-3, 2010.
153. Presenter for 5th Annual David W. Cahill Spine Symposium, Tampa, FL, January 7-8, 2011.
154. Presenter for 4th Annual CSRS, St. Louis, MO, January 27-29, 2011.

Seminar Invitations from Other Institutions

1. Invited Guest Lecturer: Surgical Treatment of Primary Spinal Cord Tumors. Presented at the International Neuro-Oncology Symposium sponsored by the Albert Einstein Hospital, Sao Paulo, Brazil, December 10, 1999.
2. Invited Guest Lecturer: Management of Spinal Metastasis. Presented at the International Neuro-Oncology Symposium hosted by the Albert Einstein Hospital, Sao Paulo, Brazil, December 11, 1999.
3. Invited Faculty: “Thoracic and Lumbar Tumor Resection and Reconstruction” presented at the Neuro-Oncology 2001: Current Concepts Symposium sponsored by The Cleveland Clinic Foundation’s Brain Tumor and Neuro-Oncology Center, February 17-20, 2001.
4. Invited Faculty: “Tumor Characterization and Biology” presented at the Neuro-Oncology 2001: Current Concepts Symposium sponsored by The Cleveland Clinic Foundation’s Brain Tumor and Neuro-Oncology Center, February 17-20, 2001.
5. Invited Faculty: “Surgical Management of Spinal Metastatic Disease” presented at the Brain Tumors Symposium at the University of Utah’s Huntsman Cancer Institute, January 27-29, 2005.
6. Invited Guest, Anadolu Medical Center, Istanbul, Turkey, January 24-28, 2007.
7. Invited Speaker: “Recent Advances in Spinal Surgery” and “Cranial Cervical Junction Abnormalities,” Anadolu Medical Center, Istanbul, Turkey, May 23-27, 2007.
8. Invited Guest Lecturer: Israel Neurosurgical Society, “The Treatment of Primary Spinal Tumors” and “Surgical Treatment of Metastatic Tumor of the Spine, March 16-20, 2010.
9. Invited Guest Speaker: “Surgical Treatment of Primary Spinal Tumors, Quebec City, June 6-10, 2010.
10. Invited Guest Speaker: NYU/HJD Spine Fellows/Residents Alumni Symposium, September 11, 2010.

Lectureships and Visiting Professorships

1. Visiting Professor: "Spine surgery for metastatic disease", Hillcrest Fentress Cancer Center, Waco, TX, June, 1996.
2. Visiting Professor: "Management of metastatic spinal tumors". The University of Texas Southwestern Medical Center at Dallas, TX, February, 1997.
3. Visiting Professor: "Complex cervical pathology and treatment strategies". The University of Cincinnati, Mayfield Clinic, Cincinnati, OH, August, 1999.
4. Visiting Professor: "Focus on Spinal Column Tumors". 5th Annual Complex Spine Day, The University of Manitoba, Winnipeg, Canada, October 28, 2000.
5. Visiting Professor: "Management of Metastatic Spine Tumors". 5th Annual Complex Spine Day, The University of Manitoba, Winnipeg, Canada, October 29, 2000.
6. Visiting Professor: "Surgical Management of Spinal Neoplasms". Spine Conference, Johns Hopkins Hospital, Baltimore, Maryland, June 5, 2001.
7. Visiting Professor: "Contemporary Surgical Management of Spinal Neoplasms" Brown University Program in Neurosurgery Grand Rounds, Providence, Rhode Island, October 22, 2001.
8. Visiting Professor: "Surgical Management of Sacral Tumors" Rhode Island Neurosurgical Society Meeting, Providence, Rhode Island, October 22, 2001.
9. Visiting Professor: "Radical Surgical Resection for the Treatment of Spinal Neoplasms" New York University School of Medicine Grand Rounds, New York, New York, January 24, 2003.
10. Visiting Professor: "Surgical Management of Spinal Neoplasms" New York Medical College Department of Neurosurgery Grand Rounds, Valhalla, New York, May 9, 2003.
11. Visiting Professor: "Spinal Metastasis" and "En Bloc Resection for Primary Spinal Neoplasms." NIH/George Washington Lecture, Department of Neurosurgery Resident Lectures, Bethesda, MD, February 22, 2005.
12. Visiting Professor: "Surgical Management of Spinal Neoplasms" University of Pennsylvania, Department of Neurosurgery Grand Rounds, February 24, 2005.
13. Visiting Professor: "Surgical Management of Spinal Neoplasms" University of Miami, Department of Neurosurgery Grand Rounds, Miami, Florida, June 2, 2005.
14. Visiting Professor: "Sacral Tumors" University of Miami, Department of Neurosurgery Lecture, Miami, Florida, June 3, 2005.
15. Lecturer: "Surgical Management of Spinal Tumors" Johns Hopkins University, Department of Orthopaedic Grand Rounds, June 9, 2005.
16. Visiting Professor: "Surgical Management of Spinal Neoplasms" Thomas Jefferson University Hospital, Department of Neurosurgery Grand Rounds, February 3, 2006.
17. Visiting Professor: "Sacral Tumors" Brigham and Women's Hospital and Children's Hospital, Department of Neurosurgery, February 9, 2006.
18. Visiting Professor: "Surgical Management of Spinal Neoplasms" Yale University School of Medicine, New Haven, Connecticut, September 22, 2006.
19. Henry Botterell Visiting Professorship: "Surgical Treatment of Spinal Cord Ependymomas" Toronto Western Hospital, Division of Neurosurgery, University of Toronto, Toronto, Ontario, Canada, October 30-31, 2006.
20. Visiting Professor: "Sacral Tumors" Brigham and Women's Hospital and Children's Hospital, Department of Neurosurgery, Boston, Massachusetts, February 9, 2007.
21. Visiting Professor: "Surgical Management of Spinal Tumors" University of Utah School of Medicine, Salt Lake City, Utah, February 21, 2007.
22. Visiting Professor: "Surgical Management of Spinal Neoplasms" Stanford University Medical Center, Department of Neurosurgery Grand Rounds, Stanford, California, March 23, 2007.
23. Guest Lecturer, 13th Congress of the European Association of Neurological Societies, Lecture: "Primary Tumors of the Vertebral Spine", Glasgow, England, September 2-7, 2007.
24. Visiting Professor: "Surgical Management of Primary Spinal Neoplasms" & "Surgical Treatment of Sacral Tumors", Washington University, St. Louis, Missouri, November 6-8, 2007.
25. Visiting Professor: "Surgical Management of Primary Spinal Neoplasms" Neurological Institute of New Jersey, Newark, New Jersey, November 13-14, 2007.
26. Visiting Professor: "Surgical Management of Primary Spinal Neoplasms" Baylor College of Medicine, Houston, Texas, February 7-9, 2008.
27. Visiting Professor: "Surgical Management of Spinal Neoplasms" University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, May 6-7, 2008.

28. Visiting Professor : “Surgical Management of Spinal Neoplasms ” Henry Ford Hospital, Detroit, MI, May 20-21, 2008.
29. Visiting Professor: “Surgical Management of Spinal Neoplasms ” University of California San Francisco, California, March 25-26, 2009.
30. Visiting Professor: “Current Surgical Management of Spinal Neoplasms” University of Washington, Seattle, Washington, July 15, 2009.
31. Visiting Professor: “Surgical Management of Spinal Neoplasms” University of Florida, April 22, 2010.
32. Visiting Professor: “Primary and Metastatic Tumors of the Spine”, The Burdenko Neurosurgical Institute, Moscow, Russia, May 18-23, 2010.
33. Visiting Professor: MGH Grand Rounds, Boston, MA, May 26-27, 2010.
34. Visiting Professor: Cedars-Sinai Medical Center, Los Angeles, CA, November 9-10, 2010.
35. Visiting Professor: Cleveland Ohio Clinic, Cleveland, Ohio, January 19-21, 2011.
36. Visiting Professor: Montefiore Medical Center, Bronx, NY, February 6-7, 2011.

OTHER PROFESSIONAL ACCOMPLISHMENTS

Presentations

1. FDA meeting regarding the use of investigational products of Synthes Spine™ in the treatment of spinal tumors with corpectomy/vertebrectomy and reconstruction. Washington, DC, March 6, 2000.

Other

1. AO ASIF Continuing Education Faculty Retreat. Discussion of details regarding the future educational courses and symposia to be organized by AO North America, Colorado Springs, CO, May 19-21, 2000.
2. Pictured in the Messenger receiving The University of Texas M. D. Anderson Cancer Center Faculty Achievement Award in Patient Care for 2001. Messenger 31, (1):2, 2002.
3. AO ASIF Continuing Education Faculty Retreat. Sagamore, NY, August, 2002.
4. Featured in Brain Waves Publication of Johns Hopkins University School of Medicine, 2002.
5. Johns Hopkins Medicine Leadership Development Program, Johns Hopkins University School of Medicine, December, 2006.
6. Harvard Leadership Development Conference, Harvard School of Public Health, October 19-31, 2008.
7. CNS/AANS, Moderator for the 2010 Annual Meeting, Philadelphia, PA, April 30 – May 5, 2010.