

CURRICULUM VITAE FOR ACADEMIC PROMOTION
The Johns Hopkins University School of Medicine

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Timothy F. Witham, M.D., F.A.C.S.

DEMOGRAPHIC INFORMATION

Current Appointments

2006-present Director, Johns Hopkins Bayview Spine Program
2016-present Professor, Department of Neurosurgery, Johns Hopkins University
2011-present Director, Johns Hopkins Neurosurgery Spinal Fusion Laboratory
2016-present Professor, Department of Orthopaedic Surgery, Johns Hopkins University
2013-present Associate Program Director, Johns Hopkins Neurosurgery Residency Program

Personal Data

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Education and Training

Undergraduate

1990 B.S., Biochemistry, with Honors, Summa cum laude, (GPA 4.0/4.0), Pennsylvania State University, University Park, PA

Doctoral/Graduate

1994 M.D., The Johns Hopkins University School of Medicine, Baltimore, MD; Class Rank- 5/101

Postdoctoral Training

1994-1995 Intern, General Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA
1995-2001 Resident, Department of Neurological Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA
1998-2000 Research Fellow- Neuro-Oncology, Department of Neurological Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA
2000 Fellow-Image Guided Neurosurgery, Department of Neurological Surgery, University of Pittsburgh School of Medicine, Pittsburgh, PA
2005-2006 AO Spine Fellowship, Department of Neurosurgery, Johns Hopkins University, Baltimore, MD

Professional Experience

Academic Appointments

2005-2006 Instructor, Neurosurgical Spine Program, Department of Neurosurgery, Johns Hopkins University
2006-2011 Assistant Professor of Neurosurgery, Neurosurgical Spine Program, Johns Hopkins University
2011-2016 Associate Professor of Neurosurgery, Neurosurgical Spine Program, Johns Hopkins University
2012-2016 Associate Professor of Orthopaedic Surgery, Johns Hopkins University
2016-present Professor of Neurosurgery, Neurosurgical Spine Program, Johns Hopkins University
2016-present Professor of Orthopaedic Surgery, Johns Hopkins University

Academic Administrative Appointments/Responsibilities

2006-present Director, The Johns Hopkins Bayview Spine Program, Department of Neurosurgery, Johns Hopkins Bayview Medical Center, Baltimore, MD

2011-present Director, Johns Hopkins Neurosurgery Spinal Fusion Laboratory
2013-present Associate Program Director, Johns Hopkins Neurosurgery Residency Program

Military Service and Appointments

1990-1994 2nd Lieutenant, United States Air Force, Health Professions Scholarship Program
1994-2001 Captain, United States Air Force, Health Professions Scholarship Program
2001-2002 Major, United States Air Force, Staff Neurosurgeon, Keesler Medical Center, Keesler AFB, MS
2002-2005 Chief Neurosurgeon, Keesler Medical Center, Keesler AFB, MS
2005 Lieutenant Colonel select, United States Air Force

Other Hospital Appointments

1998-2000 Associate Staff Physician/Moonlighter, Department of Emergency Medicine, Western Pennsylvania, Forbes Regional Hospital, Pittsburgh, PA
2002-2005 Staff Neurosurgeon/Moonlighter, Singing River Hospital, Pascagoula, MS
2003-2005 Staff Neurosurgeon/Moonlighter, Ocean Springs Hospital, Ocean Springs, MS

RESEARCH ACTIVITIES - H-Index 34

Peer Reviewed Original Science Publications

1. Pazur JH, Miskiel FJ, **Witham TF**, Marchetti N. Affinity chromatography of two sets of isomeric antibodies with specificity for different oligosaccharide units of gum arabic. *Carbohydrate Res.* 214:1-10, 1991
2. Pazur JH, Liu B, **Witham TF**. Isolation and characterization of anti-L-fucose and anti-bovine serum albumin antibodies directed against a glycoconjugate of L-fucose and bovine serum albumin. *J Prot Chem.* 13: 59-64, 1994.
3. Oshiro EM, Walter KA, Piantadosi S, **Witham TF**, Tamargo RJ. A new subarachnoid hemorrhage grading system based on the Glasgow coma scale: a comparison with the Hunt and Hess and World Federation of Neurological Surgeons scales in a clinical series. *Neurosurg.* 41:140-148, 1997.
4. **Witham TF**, Nemoto EM, Jungreis CA, Kaufmann AM. Near-infrared spectroscopy monitored cerebral venous thrombolysis. *Can J Neurol Sci.* 26: 48-52, 1999.
5. Subach BR, **Witham TF**, Kondziolka D, Lunsford LD, Bozik ME, Schiff D. Morbidity and survival after BCNU wafer implantation for recurrent glioblastoma: a retrospective case matched cohort series. *Neurosurg.* 45: 17-23, 1999.
6. **Witham TF**, Fukui MB, Meltzer CC, Burns R, Kondziolka D, Bozik ME. Survival using intrathecal thiotriethylenephosphoramidate (thio-TEPA) for the treatment of leptomeningeal gliomatosis in patients with high grade glioma. *Cancer.* 86: 1347-53, 1999.
7. Niranjana A, **Witham TF**, Kondziolka D, Lunsford LD. The role of stereotactic cyst aspiration in the management of glial and metastatic brain tumors. *Can J Neurol Sci.* 27, 229-235, 2000.
8. **Witham TF**, Giezeman-Smits K, Villa L, Erff M, Pollack IF, Okada H, Chambers WH. Local secretion of a soluble transforming growth factor β receptor reverses glioma-mediated inhibition of NK cells in the rat 9L glioma model. *Surgical Forum LI.* 442-444, 2000.
9. Sipos EP, **Witham TF**, Ratan R, Burger PC, Baraban J, Khan WL, Piantadosi S, Brem H. Buthionine sulfoximine potentiates the antitumor effect of 4-hydroperoxycyclophosphamide when administered locally in a rat glioma model. *Neurosurg.* 48:392-400, 2001.
10. Field M, **Witham TF**, Flickinger JC, Kondziolka D, Lunsford LD. Comprehensive assessment of hemorrhage risks and outcomes after stereotactic brain biopsy. *J Neurosurg.* 94:545-551, 2001.
11. Gerszten PC, **Witham TF**, Clyde BL, Welch WC. Relationship between type of health insurance and time to inpatient rehabilitation placement for surgical subspecialty patients. *Am J Med Quality.* 16: 212-215, 2001.
12. Nakahara N, Okada H, **Witham TF**, Attanucci J, Fellows WK, Chambers WH, Niranjana A, Kondziolka D, Pollack IF. Combination stereotactic radiosurgery with cytokine gene-transduced tumor cell vaccination: a new strategy against metastatic brain tumors. *J Neurosurg.* 95: 984-989, 2001.
13. **Witham TF**, Dworacki G, Hoffman T, Cicinnati V, Okada H, Chambers WH, Pollack IF, DeLeo A. Tumor apoptotic bodies represent an effective antigen source in an intracranial murine tumor model. *Surgical Forum LII.* 407-9, 2001.
14. **Witham TF**, Erff M, Okada H, Chambers WH, Pollack IF. 7-Hydroxystaurosporine-induced apoptosis in 9L glioma cells provides an effective antigen source for dendritic cells and yields a potent vaccine strategy in an intracranial glioma model. *Neurosurg.* 50: 1327-35, 2002.

15. Singhal D, **Witham TF**, Germanwala A, Flickinger JC, Schiff D, Kondziolka D. Multi-modality therapy leads to longer survival in primary central nervous system lymphoma patients. *Can J Neurol Sci.* 29: 147-53, 2002.
16. Yang T, **Witham TF**, Villa L, Erff M, Attanucci J, Watkins S, Kondziolka D, Okada H, Pollack IF, Chambers WH. Glioma-associated hyaluronan induces apoptosis in dendritic cells via inducible nitric oxide synthase: implications for the use of dendritic cells for therapy of gliomas. *Ca Res.* 62: 2583-91, 2002.
17. **Witham TF**, Villa L, Yang T, Pollack IF, Okada H, Robbins PD, Chambers WH. Expression of a soluble transforming growth factor-beta (TGFbeta) receptor reduces tumorigenicity by regulating natural killer (NK) cell activity against 9L gliosarcoma in vivo. *J Neurooncol.* 64 (1-2): 63-9, 2003.
18. Okada H, Lieberman FS, Edington HD, **Witham TF**, Wargo MJ, Cai Q, Elder EH, Whiteside TL, Schold SC Jr, Pollack IF. Autologous glioma cell vaccine admixed with interleukin-4 gene transfected fibroblasts in the treatment of recurrent glioblastoma: preliminary observations in a patient with a favorable response to therapy. *J Neurooncol.* 64 (1-2): 13-20, 2003.
19. **Witham TF**, Okada H, Fellows W, Hamilton RL, Flickinger JC, Chambers WH, Pollack IF, Watkins SC, Kondziolka D. The characterization of tumor apoptosis after experimental radiosurgery. *Stereotactic Functional Neurosurg.* 83 (1): 17-24, 2005.
20. Sciubba DM, Gallia GL, McGirt MJ, Woodworth GF, Garonzik IM, **Witham T**, Gokaslan ZL, Wolinsky JP. Thoracic kyphotic deformity reduction with a distractible titanium cage via an entirely posterior approach. *Neurosurg.* 60: 223-230, 2007.
21. Woodworth GF, Chaichana KL, McGirt MJ, Sciubba DM, Jallo GI, Gokaslan Z, Wolinsky JP, **Witham TF**. Predictors of ambulatory function after surgical resection of intramedullary spinal cord tumors. *Neurosurg.* 61: 99-105, 2007.
22. 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.* 7: 194-198, 2007.
23. Bagley CA, Bookland MJ, Pindrik JA, Ozmen T, Gokaslan ZL, **Witham TF**. Fractionated, single port radiotherapy delays paresis in a rat metastatic spinal tumor model. *J Neurosurg Spine.* 7: 323-7, 2007.
24. McGirt MJ, Chaichana K, Attenello F, **Witham TF**, Bydon A, Yao K, Jallo GI. Spinal deformity after resection of cervical intramedullary spinal cord tumors in children. *Child's Nervous System.* 24: 735-9, 2007.
25. Chi JH, Bydon A, Hsieh P, **Witham TF**, Wolinsky JP, Gokaslan ZL. Epidemiology and demographics for primary vertebral tumors. *Neurosurg Clin N Am.* 19: 1-4, 2008.
26. McGirt MJ, Chaichana K, Atiba A, Yao K, **Witham TF**, Bydon A, Jallo GI. Incidence of spinal deformity after resection of intramedullary spinal cord tumors in children who underwent laminectomy compared to laminoplasty. *Journal of Neurosurgery: Pediatrics.* 1: 57-62, 2008.
27. Chaichana KL, Woodworth GF, Sciubba DM, McGirt MJ, **Witham TF**, Bydon A, Wolinsky JP, Gokaslan ZL. Predictors of ambulatory function after decompressive surgery for metastatic epidural spinal cord compression. *Neurosurg.* 63: 683-92, 2008.
28. 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.* 9: 152-7, 2008.
29. 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. *Neurosurg.* 63(Suppl 1): 115-20, 2008.
30. 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. *Neurosurg.* 63: 346-51, 2008.
31. 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. *Neurosurg.* 63: 292-8, 2008.
32. 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.* 9: 593-9, 2008.
33. McGirt MJ, Garces-Ambrossi GL, Dato G, Sciubba DM, **Witham TF**, Wolinsky JP, Gokaslan Z, Bydon A. Recurrent disc herniation and long-term back pain after primary lumbar discectomy: review of outcomes reported for limited versus aggressive disc removal. *Neurosurg.* 64: 338-44, 2009.

34. 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*. Feb 2009.
35. 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*. 9: 501-8, 2009.
36. 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*. 10: 244-56, 2009.
37. Bagley CA, **Witham TF**, Pindrik JA, Davis RF, Bydon A, Gokaslan ZL, Wolinsky JP. Assuring optimal physiologic craniocervical alignment and avoidance of swallowing related complications following occipitocervical fusion by preoperative halo-vest placement. *J Spinal Disord Tech*. 22: 170-6, 2009.
38. 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. *Neurosurg*. 64: 343-8, 2009.
39. 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. *Neurosurg*. 65: 193-200, 2009.
40. Ambrossi GL, McGirt MJ, Sciubba DM, **Witham TF**, Wolinsky JP, Gokaslan ZL, Long DM. Recurrent lumbar disc herniation after single-level lumbar discectomy: incidence and health care cost analysis. *Neurosurg*. 65: 574-8, 2009.
41. 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*. 34: 2233-9, 2009.
42. 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 Neurosurgery Spine*. 11: 272-84, 2009.
43. Garces-Ambrossi GL, McGirt MJ, Mehta VA, Sciubba DM, **Witham TF**, Bydon A, Wolinsky JP, Jallo GI, Gokaslan ZL. Factors associated with progression-free survival and long-term neurological outcome after resection of intramedullary spinal cord tumors: analysis of 101 consecutive cases. *J Neurosurg Spine*. 11: 591-9, 2009.
44. McGirt MJ, Sutter EG, Xu R, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Bydon A. Biomechanical comparison of translaminar versus pedicle screws at T1 and T2 in long subaxial cervical constructs. *Neurosurg*. 65: 167-72, 2009.
45. 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*. 23: 79-88, 2010.
46. Alesh 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*. 23: 9-14, 2010.
47. 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.
48. Parker SL, Xu R, McGirt MJ, **Witham TF**, Long DM, Bydon A. Long-term back pain after a single-level discectomy for radiculopathy: incidence and health care cost analysis. *J Neurosurg Spine*. 2010 Feb; 12(2): 178-82.
49. 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.
50. Hsu W, Dorsi MJ, **Witham TF**. Surgical management of cervical spondylotic myelopathy. *Neurosurgery Quarterly*. 19: 302-7, 2009.
51. Omeis I, Bekelis K, Gregory A, McGirt M, Sciubba D, Bydon A, Wolinsky JP, Gokaslan Z, **Witham T**. The use of expandable cages in patients undergoing multilevel corpectomies for the treatment of metastatic tumors in the cervical spine. *Orthopedics*. 33: 87-92, 2010.

52. McGirt MJ, Garces-Ambrossi GL, Parker SL, Sciubba DM, Bydon A, Wolinsky JP, Gokaslan ZL, **Witham TF**. Short-term progressive spinal deformity following laminoplasty versus laminectomy for resection of intradural spinal tumors: analysis of 238 patients. *Neurosurgery*. 66: 1005-12, 2010.
53. 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*. 10: 820-6, 2010.
54. Mehta VA, McGirt MJ, Garces-Ambrossi GL, Parker SL, Sciubba DM, Bydon A, Gokaslan ZL, **Witham TF**. Trans-foraminal versus posterior lumbar interbody fusion: Comparison of surgical morbidity. *Neurol Res*. 2011 Jan;33(1):38-42.
55. 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. *J Neurosurg Spine*. 13: 688-94, 2010.
56. 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*. 2011 Feb;68(2):420-30.
57. 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.
58. 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. *Neurosurg*. 2011 Jan;68(1):170-8.
59. Martin CT, **Witham TF**, Kebaish KM. Sacropelvic fixation: two case reports of a new percutaneous technique. *Spine (Phila Pa 1976)*. 2011 Apr 20;36(9):E618-21.
60. Parker SL, Adogwa O, **Witham TF**, Aaronson OS, Cheng J, McGirt MJ. Post-operative infection after minimally invasive versus open transforaminal lumbar interbody fusion (TLIF): literature review and cost analysis. *Minim Invasive Neurosurg*. 2011 Feb;54(1):33-7.
61. Parker SL, Amin AG, Farber SH, McGirt MJ, Sciubba DM, Wolinsky JP, Bydon A, Gokaslan ZL, **Witham TF**. The ability of electromyographic monitoring to determine the presence of malpositioned pedicle screws in the lumbosacral spine: Analysis of 2450 consecutive screws. *J Neurosurg Spine*. 2011 Aug; 15(2):130-5.
62. Dasenbrock HH, Clarke MJ, Bydon A, **Witham TF**, Sciubba DM, Simmons OP, Gokaslan ZL, Wolinsky JP. Reconstruction of Extensive Defects from Posterior En Bloc Resection of Sacral Tumors Using Human Acellular Dermal Matrix and Gluteus Maximus Myocutaneous Flaps. *Neurosurgery*. 2011 Dec;69(6):1240-7.
63. Dasenbrock HH, Clarke MJ, Bydon A, McGirt MJ, **Witham TF**, Sciubba DM, Gokaslan ZL, Wolinsky JP. En Bloc Resection of Sacral Chordomas Aided by Frameless Stereotactic Image Guidance: A Technical Note. *Neurosurgery*. 2012 Mar;70(1 Suppl Operative):82-8.
64. Dasenbrock HH, Clarke MJ, M D AB, Sciubba DM, **Witham TF**, Gokaslan ZL, Wolinsky JP. Endoscopic Image-Guided Transcervical Odontoidectomy: Outcomes of 15 Patients with Basilar Invagination. *Neurosurgery*. 2012 Feb;70(2):351-60.
65. Xu R, Bydon M, Sciubba DM, **Witham TF**, Wolinsky JP, Gokaslan ZL, Bydon A. Safety and efficacy of rhBMP2 in posterior cervical spinal fusion for subaxial degenerative spine disease: Analysis of outcomes in 204 patients. *Surg Neurol Int*. 2011;2:109.
66. Xu R, Ritzl EK, Sait M, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Bydon A. A role for motor and somatosensory evoked potentials during anterior cervical discectomy and fusion for patients without myelopathy: Analysis of 57 consecutive cases. *Surg Neurol Int*. 2011;2:133.
67. Veeravagu A, Ponnusamy K, Jiang B, Bydon M, McGirt M, Gottfried ON, **Witham T**, Gokaslan ZL, Bydon A. Renal osteodystrophy: Neurosurgical considerations and challenges. *World Neurosurg*. 2012 Jul;78(1-2):191. E23-33.
68. Molina CA, Sarabia-Estrada R, Gokaslan ZL, **Witham TF**, Bydon A, Wolinsky JP, Sciubba DM. Delayed onset of paralysis and slowed tumor growth following in situ placement of recombinant human bone morphogenetic protein 2 within spine tumors in a rat model of metastatic breast cancer. *J Neurosurg Spine*. 2012 Apr;16(4):365-72.
69. Dasenbrock HH, Wolinsky JP, Sciubba DM, **Witham TF**, Gokaslan ZL, Bydon A. The impact of insurance status on outcomes after surgery for spinal metastases. *Cancer*. 2012 Jan 31. doi: 10.1002/cncr.27388. [Epub ahead of print]

70. Dasenbrock HH, Pradilla G, **Witham TF**, Gokaslan ZL, Bydon A. The impact of weekend hospital admission on the timing of intervention and outcomes after surgery for spinal metastases. *Neurosurgery*. 2012 Mar; 70(3):586-93.
71. Laufer I, Sciubba DM, Madera M, Bydon A, **Witham TF**, Gokaslan ZL, Wolinsky JP. Surgical management of metastatic spinal tumors. *Ca Control*. 2012 Apr; 19(2): 122-8.
72. Dasenbrock HH, Juraschek SP, Schultz LR, **Witham TF**, Sciubba DM, Wolinsky JP, Gokaslan ZL, Bydon A. The efficacy of minimally invasive discectomy compared with open discectomy: a meta-analysis of prospective randomized controlled trials. *J Neurosurg Spine*. 2012 May; 16(5): 452-62.
73. Dasenbrock HH, Clarke MJ, **Witham TF**, Sciubba DM, Gokaslan ZL, Bydon A. The impact of provider volume on the outcomes after surgery for lumbar stenosis. *Neurosurg*. 2012 Jun;70(6): 1346-54.
74. Bydon M, Papadimitriou K, **Witham T**, Wolinsky JP, Bydon A, Sciubba D, Gokaslan Z. Novel therapeutic targets in chordoma. *Expert Opin Ther Targets*. 2012 Nov; 16(11): 1139-43.
75. Bydon M, Papadimitriou K, **Witham T**, Wolinsky JP, Sciubba D, Gokaslan Z, Bydon A. Treatment of spinal synovial cysts. *World Neurosurg*. 2013 Feb;79(2)375-80.
76. Papadimitriou K, Amin AG, Kretzer RM, Sciubba DM, Bydon A, **Witham TF**, Wolinsky JP, Gokaslan ZL, Baaj AA. Thromboembolic events and spinal surgery. *J Clin Neurosci*. 2012 Dec; 19(12):1617-21.
77. Zadnik P, Sarabia-Estrada R, Groves M, Molina C, Jackson C, McCarthy E, Gokaslan ZL, Bydon A, Wolinsky JP, **Witham TF**, Sciubba DM. A novel animal model of human breast cancer metastasis to the spine: a pilot study using intracardiac injection and luciferase-expressing cells. *J Neurosurg Spine*. 2013 Mar;18(3):217-25.
78. Kaloostian PE, Kim JE, Calabresi PA, Bydon A, **Witham T**. Clay-shoveler's fracture during indoor rock climbing. *Orthopedics*. 2013 Mar 1; 36(3):e381-3.
79. Bydon M, Xu R, Papademetriou K, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Jallo G, Bydon A. Safety of spinal decompression using an ultrasonic bone curette compared with a high-speed drill: outcomes in 337 patients. *J Neurosurg Spine*. 2013 Jun;18(6):627-33.
80. Molina CA, Zadnik PL, Gokaslan ZL, **Witham TF**, Bydon A, Wolinsky JP, Sciubba DM. A cohort cost analysis of lumbar laminectomy-current trends in surgeon and hospital fees distribution. *Spine J*. 2013 Nov;13(11):1434-7.
81. Sarabia-Estrada R, Zadnik PL, Molina CA, Jimenez-Estrada I, Groves ML, Gokaslan ZL, Bydon A, **Witham TF**, Wolinsky JP, Sciubba DM. A rat model of metastatic spinal cord compression using human prostate adenocarcinoma: histopathological and functional analysis. *Spine J*. 2013 Nov;13(11):1597-606.
82. Ju DG, Zadnik PL, Groves ML, Hwang L, Kaloostian PE, Wolinsky JP, **Witham TF**, Bydon A, Gokaslan ZL, Sciubba DM. Factors associated with improved outcomes following decompressive surgery for prostate cancer metastatic to the spine. *Neurosurgery*. 2013 Oct;73(4):657-66
83. Kaloostian PE, Kim JE, Bydon A, Sciubba DM, Wolinsky JP, Gokaslan ZL, **Witham TF**. Intracranial hemorrhage after spine surgery. *J Neurosurg Spine*. 2013 Sep;19(3):370-80.
84. Zadnik PL, Hwang L, Ju DG, Groves ML, Sui J, Yurter A, **Witham TF**, Bydon A, Wolinsky JP, Gokaslan ZL, Sciubba DM. Prolonged survival following aggressive treatment for metastatic breast cancer in the spine. *Clin Exp Metastasis*. 2014 Jan;31(1):47-55.
85. Bydon M, Xu R, Macki M, De la Garza-Ramos R, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Bydon A. Adjacent Segment Disease After Anterior Cervical Discectomy and Fusion in a Large Series. *Neurosurgery*. 2014 Feb;74(2):139-46.
86. Xu R, Bydon M, Macki M, De la Garza-Ramos R, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Bydon A. Adjacent Segment Disease After ACDF: Clinical Outcomes After First Repeat Surgery Versus Second Repeat Surgery. *Spine (Phila Pa 1976)*. 2014 Jan 15;39(2):120-6.
87. Chaichana KL, Bydon M, Santiago-Dieppa DR, Hwang L, McLoughlin G, Sciubba DM, Wolinsky JP, Bydon A, Gokaslan ZL, **Witham T**. Risk of infection following posterior instrumented lumbar fusion for degenerative spine disease in 817 consecutive cases. *J Neurosurg Spine*. 2014 Jan;20(1):45-52.
88. Mathios D, Kaloostian PE, Bydon A, Sciubba DM, Wolinsky JP, Gokaslan ZL, **Witham TF**. A novel method of anterior lumbosacral cage reconstruction. *J Neurosurg Spine*. 2014 Feb;20(2):204-8.
89. Lina IA, Puvanesarajah V, Liauw JA, Lo SF, Santiago-Dieppa DR, Hwang L, Mao A, Bydon A, Wolinsky JP, Sciubba DM, Gokaslan Z, Holmes C, **Witham TF**. A Quantitative Study of Parathyroid Hormone (1-34) and Bone Morphogenetic Protein-2 on Spinal Fusion Outcomes in a Rabbit Model of Lumbar Dorsolateral Intertransverse Process Arthrodesis. *Spine (Phila Pa 1976)*. 2014 Mar 1;39(5):347-55.

90. Puvanesarajah V, Lina IA, Liauw JA, Hsu W, Burger PC, **Witham TF**. Desmoid Tumor Formation following Posterior Spinal Instrumentation Placement. *Evid Based Spine Care J*. 2013 Oct;4(2):137-42.
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Inventions, Patents, Copyrights Not applicable.

Extramural Sponsorship

Current Grants:

- 2/28/12-present External Non-Clinical Research Proposal: Bone Muscle Joint Platform Team. Research grant for 330mg teripareotide to study its use in a rabbit spinal fusion model
Eli Lilly and Company
\$33,000
Role: PI: 0%, no salary support
- 1/1/13-present An evaluation of recombinant protein therapeutics for spinal fusion
Gordon and Marilyn Macklin Foundation
\$550,000
Role: PI: 10%, no salary support
- 1/30/14-present Preventing painful spinal compression fractures after radiation therapy to spinal metastases: mitigating risk with radiation hypofractionation and teriparatide
Gordon and Marilyn Macklin Foundation
\$205,095.75
Role: PI: 10%, no salary support
- 6/1/14-8/30/14 In vivo tracking of mesenchymal progenitor cell survival and proliferation in murine posterolateral intertransverse process lumbar spinal fusion
Medical Student Summer Research Fellowship of the Neurosurgery Research and Education Foundation (NREF)
\$2,500
PI: Ioan Lina, BS
Role: Co-PI: 5%, no salary support
- 7/1/14-present Preventing painful spinal compression fractures after radiation therapy to spinal metastases: mitigating risk with radiation hypofractionation and teriparatide
Sanford Larson Research Award of the AANS/CNS Joint Section on Diseases of the Spine and Peripheral Nerves
\$15,000
PI: Elder B
Role: Co-PI: 5%, no salary support
- 5/1/16-present Discerning the role of transplanted vs host mesenchymal stem cells in spinal fusion via mouse models.
AO Foundation Start-Up Research Grant
\$80,000 CHF
PI: Christina Holmes
Role: Project Director, no salary support

Previous:

- 7/1/98-6/30/00 Development of Vaccines for Central Nervous System Tumors
Pittsburgh Foundation's Copeland Fund
\$48,000
Role: PI: 45%, no salary support
- 7/1/98-6/30/00 Development and Characterization of Vaccines for Central Nervous System Tumors
American College of Surgeon's Resident Research Scholarship of Warren & Clara Cole Fund
\$40,014
Role: PI: 45%, no salary support

- 7/1/11-7/1/12 Rabbit Model to Investigate Long-Term Pain Control after Lumbar Spinal Fusion
Johns Hopkins Neurosurgery Pain Research Institute
\$100,000
Role: PI: 15%, no salary support
- 7/1/11-7/1/13 Neurosciences Pain Resource Team
Johns Hopkins Neurosurgery Pain Research Institute
\$273,708
PI: Norris B
Role: Faculty Mentor: 5%, no salary support

Research Program Building/ Leadership

- 2006-2011 Co-PI, The Johns Hopkins Neurosurgery Spinal Oncology Laboratory
Novel treatment of metastatic spine disease in a rat tumor model.
- 2007-present Co-PI, The Johns Hopkins Spinal Column Biomechanics and Surgical Outcomes Laboratory
Study spinal column biomechanics and surgical outcomes of spinal procedures with the goal of
outcome and safety improvement.
- 2011-present Director and PI, The Johns Hopkins Neurosurgery Spinal Fusion Laboratory
Establishment of The Johns Hopkins Neurosurgery Spinal Fusion Laboratory and the Boden Rabbit
Spinal Fusion Model to study experimental lumbar spinal fusion.
Study and improve methods of spinal fusion through biological adjuncts that have direct translational
application. Initial primary project has been: Genome Wide Expression Analysis of the Independent
and Synergistic Effects of Parathyroid Hormone (1-34) and Bone Morphogenetic Protein-2 on Spinal
Fusion Outcomes in a Rabbit Model of Lumbar Dorsolateral Intertransverse Process Arthrodesis.

EDUCATIONAL ACTIVITIES

Educational Publications

Invited Reviews

1. **Witham TF**, Khavkin Y, Gallia GL, Wolinsky JP, Gokaslan ZL. Surgery insight: current management of
epidural spinal cord compression from metastatic spine disease. *Nature Clin Practice Neurol.* 2006;2:87-94.

Editorials

1. **Witham TF**, Gokaslan ZL. Lumbar disc herniation- to operate or not to operate? *Nature Clin Practice Neurol.*
2007;3: 316-317.
2. **Witham TF**, Parker SL. In reply: *Neurosurg.* 2011 Jul;69(1):E266-7.
3. Bydon M, Macki M, **Witham TF**. Response. *J Neurosurg Spine.* 2014 Sep;21(3):318-9.

Case Reports

1. **Witham TF**, Kaufmann AM. Unruptured cerebral aneurysm producing a thunderclap headache. *Am J Emer
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3. Gallia GL, Haque R, Garonzik I, **Witham TF**, Khavkin YA, Wolinsky JP, Suk I, Gokaslan ZL. Spinal pelvic
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7. 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*. 11: 358-64, 2009.
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9. 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*. 68: 736-44, 2010.
10. 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)*. 35: E867-72, 2010.
11. 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 malignant fibrous histiocytoma. *Neurosurgery*. 67: E498-502, 2010.
12. Sciubba DM, Gokaslan ZL, Black JH 3rd, Simmons O, Suk I, **Witham TF**, Bydon A, Wolinsky JP. 5-Level spondylectomy for en bloc resection of thoracic chordoma: case report. *Neurosurgery*. 2011 Dec; 69(2 Suppl Operative):onsE248-55; discussion onsE255-6.
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14. Xu R, Solakoglu C, Kretzer RM, McGirt MJ, **Witham TF**, Bydon A. Bilateral traumatic dislocation without fracture of the lumbosacral junction: case report and review of the literature. *Spine (Phila Pa 1976)*. 2011 May 1;36(10):E662-8.
15. Clarke MJ, Hsu W, Suk I, McCarthy E, Black JH 3rd, Sciubba DM, Bydon A, Yassari R, **Witham TF**, Gokaslan ZL, Wolinsky JP. Three-level en bloc spondylectomy for chordoma. *Neurosurg*. 2011 Jun;68(2 Suppl Operative):325-33.
16. Puvanesarajah V, Lina IA, Liauw JA, Coon AL, **Witham TF**. Intercostal aneurysm causing spinal cord compression in an NF1 patient. *Eur Spine J*. 2013 Apr 19 [Epub ahead of print].
17. Parker SL, Wolinsky JP, Tufaro AP, Gokaslan ZL, **Witham TF**. Five-level cervical corpectomy for neurofibromatosis-associated spinal deformity: case report. *Eur Spine J*. 2014 Nov 22. [Epub ahead of print]
18. Wei Z, Elder BD, Goodwin CR, **Witham TF**. Bilateral pulmonary emboli associated with intraoperative use of thrombin-based hemostatic matrix following lumbar spine interbody fusion. *J Clin Neurosci*. 2015 May 2. [Epub ahead of print]
19. Bydon M, Macki M, Qadi M, De la Garza-Ramos R, Kosztowski TA, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Bydon A. Regression of an atlantoaxial rheumatoid pannus following posterior instrumented fusion. *Clin Neurol Neurosurg*. 2015 Oct;137:28-33.
20. Goodwin CR, Boone CE, Pendleton J, Elder BD, Wei Z, Hsu W, Sciubba DM, **Witham TF**. Pneumocephalus leading to the diagnosis of cerebrospinal fluid leak and esophageal perforation after cervical spine surgery. *J Clin Neurosci*. 2015 Nov 19. pii: S0967-5868(15)00543-3.
21. Elder BD, Ishida W, Iyer R, **Witham TF**. Rapid resolution of large spontaneous thoracic epidural hematoma without surgical intervention. *Spine J*. 2016 Feb 18. pii: S1529-9430(16)00366-1. doi: 10.1016/j.spinee.2016.02.013. [Epub ahead of print]
22. Elder BD, Ishida W, **Witham TF**. Spinal cord transection with a kitchen knife with minimal neurological injury. *Spine J*. 2016 Mar 10. pii: S1529-9430(16)00447-2. doi: 10.1016/j.spinee.2016.03.002. [Epub ahead of print]

Book Chapters, Monographs

1. Thompson TP, **Witham TF**, Flickinger JC, Kondziolka D, Lunsford LD. Stereotactic radiosurgery. In: Krisht A (ed). *Contemporary Neurosurgery* 22. Lippincott Williams Wilkins, Baltimore, 2000.

2. **Witham TF**, Thompson TP, Marion DW. Prevention of wound infections in neurosurgery. In: Krisht A (ed). Contemporary Neurosurgery 22. Lippincott Williams and Wilkins, Baltimore, 2000.
3. **Witham TF**, Kondziolka D. Nerve sheath tumors. In: Aminoff MJ, Daroff RB, DeAngelis (eds). Encyclopedia of the Neurological Sciences. Academic Press, San Diego, 2003.
4. **Witham TF**, Kondziolka D. Gamma knife radiosurgery. In: Winn HR (ed). Youman's Neurological Surgery, 5th Ed. W. B. Saunders, Philadelphia, 2004.
5. Wolinsky JP, Gallia GL, Bagley CA, **Witham TF**, Gokaslan ZL, Vaccaro AR: Chapter 12: Sacrectomy and Suggested Reconstruction Techniques. Approaches for Spinal Fusion and Instrumentation. Pan Arab Neurosurgical Society. Riyadh , Saudi Arabia, 2006.
6. Gallia GL, Bagley CA, **Witham TF**, Wolinsky JP, Gokaslan ZL. Total Sacrectomy. AANS Neurosurgical Operative Atlas 2nd Ed, Spine and Peripheral Nerve. 2007.
7. Sciubba DM, **Witham T**, Gokaslan ZL. Management of metastatic spine disease with spinal cord compression. Neurosurgery Quarterly 17: 2007.
8. Bagley CA, Khavkin Y, **Witham TF**, Wolinsky JP, Gokaslan ZL. Surgical Management of malignant spinal tumors: Part I. In Krisht A (ed). Contemporary Neurosurgery 29. Lippincott Williams Wilkins, Baltimore, 2007.
9. Sciubba DM, **Witham TF**, Gokaslan ZL. Management of Metastatic Spine Disease with Spinal Cord Compression. Contemporary Spine Surgery, 2008.
10. **Witham TF**, Gokaslan ZL. Surgical removal of intradural spinal cord tumors. In Vaccaro AR, Albert TJ (eds). Spine Surgery: Tricks of the Trade, 2nd Ed. Thieme, New York, 2009.
11. Mehta VA, **Witham TF**, Gokaslan ZL. Tumors of the thoracic spine. In Yue, Guyer, Johnson, Khoo, Hochschuler (eds). The Comprehensive Treatment of the Aging Spine: Minimally Invasive and Advanced Techniques. 2010.
12. Clarke M, Narajan R, **Witham TF**. Surgical Management of Penetrating Injuries of the Spine. Schmidek and Sweet Neurosurgical Techniques, 6th Ed, 2010.
13. Clarke M J, Witham TF. Spinal Cord Tumor Resection. In Baaj AA, Mummaneni PV, Uribe JS, Vaccaro AR, Greenberg MS (eds). Handbook of Spine Surgery. Thieme, New York, 2012.
14. Dasenbrock HH, Yassari R, **Witham TF**. Neurogenic claudication- Operative Management (Decompression and Fusion). In Bhandari M (ed). **Evidenced –Based Orthopedics**. Wiley-Blackwell, Hoboken, NJ, 2012.

Teaching

Classroom instruction:

- 2007-present Neurosurgery Mock Interviews
2008-2010 Neurology Clinical Clerkship for third and fourth year medical students. Low Back pain lecture for each quarter of this clerkship during this period of time, Johns Hopkins Univ School of Medicine

Clinical Instruction:

- 2005-present Johns Hopkins Neurosurgery Spine Conference. Teaching of residents and medical students on a weekly basis through case examples. Johns Hopkins Neurosurgery.
2005-present Informal teaching on the Johns Hopkins Neurosurgery Spine Service to include technical aspects of spine surgery in the operating room, clinical evaluation in the inpatient and outpatient settings, and radiological evaluation of spinal diseases. This effort includes both medical students and residents rotating on the neurosurgical spine service.
2008 Clinical Skills Preceptor for First Year Medical Students.
2013-present Neurosurgery Subinternship, Course Director, Johns Hopkins University School of Medicine and Johns Hopkins Bayview Medical center, 25-35 fourth year Johns Hopkins and visiting students/year.

CME Instruction:

Local

- 2010 Spinal Surgery in the Aging Population: The Challenges of Treating the Osteoporotic Patient. Spinal Disorders: Updates in Diagnosis and Management for the Primary Care Physician, Baltimore, MD
2010 Cervical Radiculopathy and Neck Pain: Surgical Management. Spinal Disorders: Updates in Diagnosis and Management for the Primary Care Physician, Baltimore, MD
2010 Low Back Pain Diagnosis and Surgical Management. Spinal Disorders: Updates in Diagnosis and Management for the Primary Care Physician, Baltimore, MD

- 2011 Lumbar spondylolisthesis and spondylolysis. 2nd Annual Spinal Disorders: Updates in Diagnosis and Management for the Primary Care Physician, Baltimore, M
- 2011 Metastatic Spinal Tumors. 2nd Annual Spinal Disorders: Updates in Diagnosis and Management for the Primary Care Physician, Baltimore, MD
- 2012 Low Back Pain. 3rd Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2012 Lumbar Spondylolisthesis. 3rd Annual Spinal Disorders: Updates and Management. Baltimore
- 2012 Cervical Radiculopathy. 3rd Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2013 Lumbar Spondylolisthesis. 4rd Annual Spinal Disorders: Updates and Management. Baltimore
- 2013 Low Back Pain. 4rd Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2013 Cervical Radiculopathy. 4rd Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2014 Lumbar Spondylolisthesis. 5th Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2014 Cervical Radiculopathy. 5th Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2014 Cervical Spine Manifestations of Rheumatoid Disease: Evaluation and Treatment. 5th Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2015 Lumbar Spondylolisthesis. 6th Annual Spinal Disorders: Updates and Management. Baltimore, MD
- 2015 Cervical Radiculopathy. 6th Annual Spinal Disorders: Updates and Management. Baltimore, MD

National

- 2008 Management of cervical spine trauma and degenerative disease, surgical approaches. AO North America Operating Room Personnel Course, Boston, MA
- 2008 Degenerative Spondylolisthesis: Decompression Alone. AO Spine Advanced Concepts in the Management of Spinal Disorders, Monterey, CA
- 2009 Lumbar Disc Arthroplasty. AO Spine Resident's Course, Las Vegas, NV
- 2009 Case Presentation: Cervical Myelopathy. AO Spine Resident's Course, Las Vegas, NV
- 2009 Occipital Fixation and Fusion Techniques. AO Advanced Techniques Course, Baltimore, MD
- 2009 Anterior Cervical Thoracic Junction Approaches. AO Advanced Techniques Course, Baltimore
- 2010 Lumbar disc arthroplasty. AO Spine Resident's Course, Las Vegas, NV
- 2010 Indications for Extended Thoracic Exposure. AO Advanced Techniques Course, Baltimore, MD
- 2010 Trans-Oral and Transmandibular Approaches to the Cranial Cervical Junction. Johns Hopkins 4th Annual Skull Base Course, Baltimore, MD
- 2011 Cervical disc arthroplasty: indications and devices. AO Spine Comprehensive Spine Course, Chicago
- 2011 MIS for thoracolumbar degenerative disease: is it better than open. AO Spine Comprehensive Spine Course, Chicago, IL
- 2011 Osteoporosis and spine surgery. AO Spine Comprehensive Spine Course, Chicago, IL
- 2011 Cervical disc arthroplasty. Johns Hopkins Comprehensive Spine Workshop, Baltimore, MD
- 2012 Indications for Extended Thoracic Exposure. AO Advanced Techniques Course, Burr Ridge, IL
- 2012 Cervical deformity. Johns Hopkins Comprehensive Spine Workshop, Baltimore, MD
- 2013 Cervical deformity case review. Johns Hopkins Spine Workshop, Baltimore, MD
- 2013 Adult Deformity case Discussion. Johns Hopkins Spine Workshop, Baltimore, MD
- 2013 Thoracic Access: En Bloc Spondylectomy. AO Spine Complex Spine Surgery: Innovations in Practice Course, Tampa, FL
- 2013 Cervical Procedures: C1 Fixation. AO Spine Complex Spine Surgery: Innovations in Practice Course
- 2014 Thoracolumbar kyphosis. AO Spine Resident's Course. Las Vegas, NV
- 2015 Cervical Deformity Case Review. Johns Hopkins Spine Workshop, Baltimore, MD
- 2016 Osteotomies: Principles and Techniques. AANS Spinal Deformity Course for Residents, Baltimore, MD
- 2016 Overview of cervical Spinal Deformity. AANS Spinal Deformity Course for Residents, Baltimore, MD

Invited Workshops/Seminars

Local

- 2003 Approaches in neurosurgery. Singing River Hospital RN First Assist program, Pascagoula, MS
- 2008 The Female Spine. A Woman's Journey. Baltimore Convention Center, Baltimore, MD

- 2010 Degenerative Spine Disease and Women. Johns Hopkins Neuroscience Nurses Symposium. Baltimore, MD
- 2012 The Back Story. A Woman's Journey. Baltimore, MD

National

- 2008 Stryker Spine's North South Debate. Epidural Steroid Injections in Spinal Stenosis Delay the Inevitable and are Not Cost Effective. Jacksonville, FL
- 2008 Stryker Spine's North South Debate. Obtaining a Solid Radiographic Lumbar Fusion Does not Correlate with Clinical Outcomes. Jacksonville, FL
- 2008 Stryker Spine North South Debate. Con- Debilitating Mechanical Low Back Pain in a WCB Patient is not a Surgical Indication. Jacksonville, FL
- 2013 Spinal Stenosis: A Common Ailment Affecting the Aging Spine. Webinar, Healthnetwork Fndn

Mentoring: Pre- and Post-Doctoral

Advisees (R=Research Reference)

Residents and Fellows:

- 2005-2007 Carlos Bagley, M.D., Neurosurgery Resident/Spine Fellow, Johns Hopkins University, currently Associate Professor of Neurosurgery, Duke University, Durham, NC **(R22,23)**.
- 2005-2009 Daniel Sciubba, M.D., Neurosurgery Resident/Spine Fellow, Johns Hopkins University, currently Associate Professor of Neurosurgery, JHU **(R21,28,31,34)**.
- 2005-2010 Matt Mcgirt, M.D., Neurosurgery Resident and Spine Fellow, Johns Hopkins University, currently Associate Professor of Neurosurgery, Carolinas Medical Center, Charlotte, NC **(R21,28,31,34,51-54,58,61)**.
- 2005-2011 Wesley Hsu, M.D., Neurosurgery Resident and Spine Fellow, Johns Hopkins University, currently Assistant Professor of Neurosurgery, Wake Forrest University, Greensboro, NC **(R50,90)**.
- 2007-2009 Beril Gok, M.D., Post-Doctoral Research Fellow, Johns Hopkins University, currently radiologist, Philadelphia, PA **(R28,31,34)**.
- 2008-2009 Ibrahim Omeis, M.D., Neurosurgery Spine Instructor/Spine Fellow, Johns Hopkins University, currently Assistant Professor of Neurosurgery, Baylor College of Medicine, Houston TX **(R51)**.
- 2011-2015 Jason Liauw, M.D., Neurosurgery Resident and Spine Fellow, Johns Hopkins University, Johns Hopkins Neurosurgery Spinal Fusion Laboratory, currently Neurosurgeon, Los Angeles, CA **(R89-91,96)**.
- 2012-2013 Paul Kaloostian, MD, Neurosurgery Spine Instructor/Spine Fellow, Johns Hopkins University, currently in private practice, Los Angeles, CA **(R78,83,88,93,99)**.
- 2012-present Sheng-Fu Larry Lo, M.D., Neurosurgery Resident and Spine Fellow, Johns Hopkins University, Johns Hopkins Neurosurgery Spinal Fusion Laboratory **(R89,96,120,124,131)**.
- 2012-2015 Mohamad Bydon, M.D., Neurosurgery Resident and Spine Fellow, Johns Hopkins University, currently Attending Neurosurgeon, The Mayo Clinic, Rochester, MN **(R53,87,92,93,97,99,101,103,111,112,126,131,132)**.
- 2013-present Benjamin Elder, M.D., Ph.D., Neurosurgery Resident and Spine Fellow, Johns Hopkins University, Johns Hopkins Neurosurgery Spinal Fusion Laboratory **(R119,120,124,131,132)**.
- 2013-present Christina Holmes, Ph.D, Post-Doctoral Research Fellow, Johns Hopkins University, Department of Neurosurgery, Johns Hopkins Neurosurgery Spinal Fusion Laboratory **(R89,119,120)**.
- 2015-present Wataru Ishida, M.D., Post-Doctoral Research Fellow, Johns Hopkins University, Department of Neurosurgery, Johns Hopkins Neurosurgery Spinal Fusion Laboratory.

Medical Students:

- 2009-2011 Scott Parker, M.D., Johns Hopkins University School of Medicine, Spinal Outcomes Research, currently Resident in Neurosurgery, Vanderbilt University, Nashville, TN **(R52-54, 58,61,91)**.
- 2011-2012 Lee Hwang, M.D., Visiting Medical Student UT Southwestern, Johns Hopkins Neurosurgery Spinal Fusion Laboratory, currently Intern/Resident, Cleveland Clinic, Cleveland, OH **(R87,89,108)**.
- 2011-2013 David Santiago-Dieppa, M.D., Johns Hopkins University School of Medicine, Johns Hopkins Neurosurgery Spinal Fusion Laboratory, currently Intern/Resident University of California San Diego, Department of Neurosurgery, San Diego, CA **(R87,89,91,92,97,108)**.

- 2012-present Ioan Lina, B.S., University of Maryland School of Medicine, Johns Hopkins Neurosurgery Spinal Fusion Laboratory (**R89,90,96,124**).
- 2013-2014 Matthew Naumann, B.S., Johns Hopkins University School of Medicine, Johns Hopkins Neurosurgery Spinal Fusion Laboratory (**R101**).
- 2013-2015 Varun Puvanesarajah, B.S., Johns Hopkins University School of Medicine, Johns Hopkins Neurosurgery Spinal Fusion Laboratory (**R89,90,96,119**).
- 2013-present Debebe Theodoros, B.S., Johns Hopkins University School of Medicine, Johns Hopkins Neurosurgery Spinal Fusion Laboratory (**R131-132**).

Thesis committees Not applicable

Training grant participation Not applicable

Educational Program Building/Leadership

- 2013-present Neurosurgery Sub-Internship, Johns Hopkins University School of Medicine, Course Director, 20-30 senior medical students/year
- 2013-present Clinical Elective in Neurosurgery, Johns Hopkins University School of Medicine, Course Director, 5-8 senior international medical students/year
- 2013-present Introduction to Neurosurgery, Johns Hopkins University School of Medicine, Course Director, 2-4 senior medical students/year

Educational Extramural Funding Not applicable.

CLINICAL ACTIVITIES

Certification

Medical, other state/government licensure

- 1995 United States Medical Licensing Examination Diplomate
- 1996 Pennsylvania, MD060580L
- 1997 DEA registration, BW5326257
- 2002 Mississippi, 17832
- 2004-present Maryland, D0061713

Boards, other specialty certification

- 1999 Certified, American Board of Neurological Surgery (91st percentile)
- 2003 Certified Diplomate of the American Board of Neurological Surgery, Inc., 2003, re-certified 2014

Clinical (Service) Responsibilities

- 2005-present Adult Neurosurgery Clinic: 1.5 days per week x 50 weeks per year
(12 hours per week, 10 new patients and 20 follow up patients per week)
- 2005-present General Adult Neurosurgery Consultation/On-call: 3 weeks per year
- 2005-present Specialty: Spine, Secondary Call Every 5th night for Johns Hopkins Hospital and Bayview
- 2005-present Neurosurgical operations: total approximately 160 cases per year (100% spinal cases)
Average 3-4 cases per week x 50 weeks per year (20-25 hours per week)

Clinical Program Building Leadership

- 2006-present The Johns Hopkins Bayview Spine Program, Director.
- 2006-present The Johns Hopkins Neurosurgical Spine Deformity Program, Director.

Clinical Extramural Funding

- 2006 Comparing surgical to conservative management in the treatment of Type II Odontoid fractures among the elderly (GOF)
1000.04.2 GOF
AOSpine North America
Role: Co-PI
- 2006 An Assessment of Surgical Techniques for Treating Cervical Spondylotic Myelopathy (CSM)
#1076436 CSM

- AOSpine North America
Role: Co-PI
- 2007 Clinical study comparing dynamic stabilization of the lumbar spine with Stabilimax NZ™ Dynamic Spine Stabilization System to posterolateral instrumented fusion
NA_00007335
Applied Spine Technologies.
Role: PI (Hopkins site)
- 2007-2009 Randomized controlled trial of DuraGen Plus adhesion barrier matrix to minimize adhesions following lumbar discectomy
NA_00004894
Integra Life Sciences
\$134,796.
Role: PI (Hopkins site)
- 2008-2009 Surgical versus Non-operative Treatment of Metastatic Epidural Spinal Cord Compression (MESCC): Quality of Life and Cost-Effectiveness Outcomes.
NA_00013681
AOSpine North America
PI: Gokaslan Z
Role: Co-PI
- 2010 Retrospective study of sacrectomies
NA_00038361
JHU Department of Neurosurgery, Spine Division
PI: Gokaslan Z
Role: Co-PI
- 2015 Safety and Efficacy of Staph aureus 4-antigen vaccine in lumbar spinal fusion
B3451002
Pfizer
PI: Sood, G
Role: Co-PI

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

System Innovation and Quality Improvement Publications (R=research ref)

1. **(R3)** Oshiro EM, Walter KA, Piantadosi S, **Witham TF**, Tamargo RJ. A new subarachnoid hemorrhage grading system based on the Glasgow coma scale: a comparison with the Hunt and Hess and World Federation of Neurological Surgeons scales in a clinical series. *Neurosurgery* 41:140-148, 1997.
2. **(R4)** **Witham TF**, Nemoto EM, Jungreis CA, Kaufmann AM. Near-infrared spectroscopy monitored cerebral venous thrombolysis. *Can J Neurol Sci* 26: 48-52, 1999.
3. **(R6)** **Witham TF**, Fukui MB, Meltzer CC, Burns R, Kondziolka D, Bozik ME. Survival using intrathecal thiotriethylenephosphoramidate (thio-TEPA) for the treatment of leptomeningeal gliomatosis in patients with high grade glioma. *Cancer* 86: 1347-53, 1999.
4. **(R7)** Niranjana A, **Witham TF**, Kondziolka D, Lunsford LD. The role of stereotactic cyst aspiration in the management of glial and metastatic brain tumors. *Can J Neurol Sci* 27, 229-235, 2000.
5. **(R10)** Field M, **Witham TF**, Flickinger JC, Kondziolka D, Lunsford LD. Comprehensive assessment of hemorrhage risks and outcomes after stereotactic brain biopsy. *J Neurosurgery* 94:545-551, 2001.
6. **(R12)** Nakahara N, Okada H, **Witham TF**, Attanucci J, Fellows WK, Chambers WH, Niranjana A, Kondziolka D, Pollack IF. Combination stereotactic radiosurgery with cytokine gene-transduced tumor cell vaccination: a new strategy against metastatic brain tumors. *J Neurosurg* 95: 984-989, 2001.
7. **(R15)** Singhal D, **Witham TF**, Germanwala A, Flickinger JC, Schiff D, Kondziolka D. Multi-modality therapy leads to longer survival in primary central nervous system lymphoma patients. *Can J Neurol Sci* 29: 147-53, 2002.

8. (R18) Okada H, Lieberman FS, Edington HD, **Witham TF**, Wargo MJ, Cai Q, Elder EH, Whiteside TL, Schold SC Jr, Pollack IF. Autologous glioma cell vaccine admixed with interleukin-4 gene transfected fibroblasts in the treatment of recurrent glioblastoma: preliminary observations in a patient with a favorable response to therapy. *J Neurooncol* 64 (1-2): 13-20, 2003.
9. (R20) Sciubba DM, Gallia GL, McGirt MJ, Woodworth GF, Garonzik IM, **Witham T**, Gokaslan ZL, Wolinsky JP. Thoracic kyphotic deformity reduction with a distractible titanium cage via an entirely posterior approach. *Neurosurgery* 60: 223-230, 2007.
10. (R26) McGirt MJ, Chaichana K, Atiba A, Yao K, **Witham TF**, Bydon A, Jallo GI. Incidence of spinal deformity after resection of intramedullary spinal cord tumors in children who underwent laminectomy compared to laminoplasty. *Journal of Neurosurgery: Pediatrics* 1: 57-62, 2008.
11. (R27) Chaichana KL, Woodworth GF, Sciubba DM, McGirt MJ, **Witham TF**, Bydon A, Wolinsky JP, Gokaslan ZL. Predictors of ambulatory function after decompressive surgery for metastatic epidural spinal cord compression. *Neurosurgery* 63: 683-92, 2008.
12. (R28) 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* 9: 152-7, 2008.
13. (R29) 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* 63(Suppl 1): 115-20, 2008.
14. (R31) 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* 63: 292-8, 2008.
15. (R33) McGirt MJ, Garces-Ambrossi GL, Dato G, Sciubba DM, **Witham TF**, Wolinsky JP, Gokaslan Z, 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** 64: 338-44, 2009.
16. (R35) 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* 9: 501-8, 2009.
17. (R37) Bagley CA, **Witham TF**, Pindrik JA, Davis RF, Bydon A, Gokaslan ZL, Wolinsky JP. Assuring optimal physiologic craniocervical alignment and avoidance of swallowing related complications following occipitocervical fusion by preoperative halo-vest placement. *J Spinal Disord Tech* 22: 170-6, 2009.
18. (R38) 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* 64: 343-8, 2009.
19. (R45) 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* 23: 79-88, 2010.
20. (R51) Omeis I, Bekelis K, Gregory A, McGirt M, Sciubba D, Bydon A, Wolinsky JP, Gokaslan Z, **Witham T**. The use of expandable cages in patients undergoing multilevel corpectomies for the treatment of metastatic tumors in the cervical spine. *Orthopedics* 33: 87-92, 2010.
21. (R57) 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*. 2010 Dec 8. [Epub ahead of print]
22. (R58) 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.
23. (R59) Martin CT, **Witham TF**, Kebaish KM. Sacropelvic fixation: two case reports of a new percutaneous technique. *Spine*. 2011 Jan 17 [Epub ahead of print].
24. (R61) Parker SL, Amin AG, Farber SH, McGirt MJ, Sciubba DM, Wolinsky JP, Bydon A, Gokaslan ZL, **Witham TF**. The ability of electromyographic monitoring to determine the presence of malpositioned pedicle screws in the lumbosacral spine: Analysis of 2450 consecutive screws. *J Neurosurg Spine*, 2011 Aug; 15(2):130-5.

25. (R64) Dasenbrock HH, Clarke MJ, M D AB, Sciubba DM, **Witham TF**, Gokaslan ZL, Wolinsky JP. Endoscopic Image-Guided Transcervical Odontoidectomy: Outcomes of 15 Patients with Basilar Invagination. *Neurosurgery*. 2011 Aug 5. [Epub ahead of print]
26. (R65) Xu R, Bydon M, Sciubba DM, **Witham TF**, Wolinsky JP, Gokaslan ZL, Bydon A. Safety and efficacy of rhBMP2 in posterior cervical spinal fusion for subaxial degenerative spine disease: Analysis of outcomes in 204 patients. *Surg Neurol Int*. 2011; 2:109. Epub 2011 Aug 13.
27. (R79) Bydon M, Xu R, Papademetriou K, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Jallo G, Bydon A. Safety of spinal decompression using an ultrasonic bone curette compared with a high-speed drill: outcomes in 337 patients. *J Neurosurg Spine*. 2013 Jun;18(6):627-33.
28. (R85) Bydon M, Xu R, Macki M, De la Garza-Ramos R, Sciubba DM, Wolinsky JP, **Witham TF**, Gokaslan ZL, Bydon A. Adjacent Segment Disease After Anterior Cervical Discectomy and Fusion in a Large Series. *Neurosurgery*. 2013 Oct 21.
29. (R) Mathios D, Kaloostian PE, Bydon A, Sciubba DM, Wolinsky JP, Gokaslan ZL, **Witham TF**. A novel method of anterior lumbosacral cage reconstruction. *J Neurosurg Spine*. 2013 Dec 6.
30. (R92) Bydon M, Xu R, Santiago-Dieppa D, Macki M, Sciubba DM, Wolinsky JP, Bydon A, Gokaslan ZL, **Witham TF**. Adjacent-segment disease in 511 cases of posterolateral instrumented lumbar arthrodesis: floating fusion versus distal construct including the sacrum. *J Neurosurg Spine*. 2014 Jan

System Innovation and Quality Improvement Efforts within JHM Not applicable

System Innovation and Quality Improvement Efforts outside JHM Not applicable

Production of guidelines and/or protocols Not applicable

System Innovation and Quality Improvement Program Building/Leadership Not applicable

Extramural Funding Not applicable

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2013-present Clinical Competency Committee, Department of Neurosurgery

2013-present Program Evaluation Committee, Department of Neurosurgery

Editorial Activities

Editorial Board appointments

2015-present Global Spine Journal

Journal Reviewer

2007-present European Spine Journal, *ad hoc* reviewer

2007-present Journal of Neurosurgery: Spine, *ad hoc* reviewer

2007-present Neurosurgery, *ad hoc* reviewer

2007-present Annals of Surgical Oncology, reviewer

2013-present Journal of Neurosurgical Sciences, reviewer

2013-present Global Spine Journal, reviewer

2014-present British Medical Bulletin, *ad hoc* reviewer

Advisory Committees, Review Groups/Study Sections

2009 Member, Scientific review committee for AANS/CNS Spine Section

2010 Member, Scientific review committee for AANS/CNS Spine Section

2013-present Operation Backbone- provide surgical review for this not for profit organization to support active duty military members and veterans

2014-present Member, Association for Collaborative Spine Research, Deformity Study Group

Professional Societies

1994-present Member, The Johns Hopkins Medical and Surgical Society.

1994-present American Medical Association.

- 1995-2001 Resident Member, Congress of Neurological Surgeons.
1995-2001 Resident member, American Association of Neurological Surgeons.
1998-2005 Candidate and Associate Fellow, American College of Surgeons.
1998-2012 Member, American Association of Neurological Surgeons/Congress of Neurological Surgeons
Section on Neurotrauma and Critical Care.
1998-2013 Member, American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint
Section on Tumors.
2001-present Member, American Association of Neurological Surgeons.
2001-present Member, Congress of Neurological Surgeons.
2005-present Fellow (F.A.C.S.), American College of Surgeons.
2007-present AO Spine North America
2009-present Member, The North American Spine Society.
2014-present Member, American Association of Neurological Surgeons/Congress of Neurological Surgeons Joint
Section Section on Disorders of the Spine and Peripheral Nerves
2015-present Member, Lumbar Spine Research Society

Professional Society Activities

- 1996-1999 American Association of Neurological Surgeons Sergeant at Arms Committee
1997 Congress of Neurological Surgeons Registration Committee
1997 Congress of Neurological Surgeons Sergeant at Arms Committee

Conference Organizer, Session Chair Not applicable

Consultantships Not applicable

RECOGNITION

Awards and Honors

- 1987 Golden Key National Honor Society Scholarship Winner
1988 Department of Biochemistry Scholarship
1989 Department of Biochemistry Scholarship
1989 Shigley Award, Outstanding junior biochemistry student
1990 Health Professions Officer Indoctrination Course Distinguished Graduate
1990 United States Air Force, Health Professions Scholarship
1990 Student Marshal, College of Science Commencement
1990 Phi Kappa Phi
1990 Phi Beta Kappa
1990 GTE-Cosida First Team at large Academic All-America (swimming), 1990 Ernest B. McCoy Award,
Penn State's outstanding male student-athlete
1990 Department Honors, Biochemistry, "The Isolation, Purification and Characterization of Anti-
Carbohydrate Antibodies Using Affinity Chromatography and other Analytical Techniques"
1994 Alpha Omega Alpha
1998 American College of Surgeons (ACS) Resident Research Scholarship of Warren and Clara Cole Fund
1998 Pittsburgh Foundation's Copeland Grant, The Development of Vaccines for Central Nervous System
Tumors
2000 University of Pittsburgh, Department of Neurological Surgery- Resident Teaching Award
2005 Meritorious Service Medal, United States Air Force
2007 "Top Doctors" as featured in Baltimore Magazine
2007 Appointed as AO/ASIF Spine Faculty
2014 Neurosurgery Chairman's Award for Excellence in Teaching

Invited Talks/Panels

Lectureships, Visiting Professorships and Grand Rounds: Scientific and Clinical

International

- 2007 Invited speaker. Spinal injuries. Taiwan Hospital, Saudi Arabia

- 2011 Invited speaker. Management of Primary Spine Tumors. 1st International Joint Symposium on the Advancements in Neurosurgery, Seoul, South Korea
- 2011 Invited speaker. Treatment Strategies for Thoracolumbar Spine Deformity. 1st International Joint Symposium on the Advancements in Neurosurgery, Seoul, South Korea
- 2012 Invited speaker. Management of primary spinal column tumors. Top of The World Meets Top of China, Tang Du Hospital, Xi' An, China
- 2013 Invited speaker. Spinal Decompression With deformity Correction. 15th World Congress of Neurosurgery, Seoul, South Korea
- 2013 Invited speaker. Management of Lumbar Degenerative Kyphosis: Surgery with Posterior Osteotomy Only. 15th World Congress of Neurosurgery, Seoul, South Korea
- 2015 Invited speaker. Cervical Radiculopathy- Non-Operative versus Operative Treatment. CMC Spine Summit, Beirut, Lebanon
- 2015 Invited speaker. Adjacent Segment Disease- Natural Disease History vs Biomechanical Alteration. CMC Spine Summit, Beirut, Lebanon
- 2015 Invited speaker. Discogenic Low Back Pain- Non-Operative vs Operative Treatment. CMC Spine Summit, Beirut, Lebanon
- 2015 Invited speaker. Lumbar Spinal Stenosis- Decompression vs Decompression and Fusion. CMC Spine Summit, Beirut, Lebanon
- 2015 Invited speaker. Osteomyelitis/Discitis: Medical vs Surgical Treatment Options. CMC Spine Summit, Beirut, Lebanon
- 2015 Invited speaker. Updates on the Role of Steroids in Acute Spinal Cord Injury. CMC Spine Summit Beirut, Lebanon
- 2015 Invited speaker. Operative vs Non-operative management of Type 2 Odontoid Fractures. CMC Spine Summit, Beirut, Lebanon
- 2015 Invited speaker. Cervical Spine Facet Dislocations: Operative Management. CMC Spine Summit, Beirut Lebanon
- 2016 Invited speaker. Adult Spinal Deformity: Surgical Challenges. 2nd Annual Arab Spine Society Meeting, Casablanca, Morocco.

National

- 2006 Invited speaker. Cervical spine anatomy. Globus Medical training course, Philadelphia, PA
- 2006 Invited speaker. Surgery of the cervical spine. Globus Medical training course, Philadelphia, PA
- 2006 Invited speaker. Degenerative conditions of the lumbar spine- evaluation and treatment options. Globus Medical training course, Philadelphia, PA
- 2007 Invited speaker. Neurosurgical approaches to the spine. Johns Hopkins Neuroradiology Review Course, Baltimore, MD
- 2009 Invited speaker. Management of Spine Trauma. Stryker Spine Rep Training Course, NJ
- 2009 Invited speaker. Interbody fusion techniques and case presentations. Stryker Spine Rep Training Course.
- 2009 Invited speaker. Current diagnostic and medical treatments for vertebral compression fractures. NASS Spring Break, Puerto Rico
- 2009 Invited speaker. Instrumentation in the aging spine. NASS Spring Break, Puerto Rico
- 2011 Invited speaker. Revision strategies for lumbar pseudoarthrosis. Congress of Neurological Surgeons Annual Meeting, Lunch symposium, Washington, DC.
- 2011 Invited speaker. Osteoporosis. Synthes Spine National Sales Meeting, Tucson, AZ.
- 2013 Invited speaker. Managing Long-term Complications of Cervical and Lumbar Spine Surgery: Managing Cervical and Lumbar Adjacent Segment Disease. Congress of Neurological Surgeons Annual Meeting, Lunch symposium, San Francisco, CA.
- 2015 Invited speaker. Shoulder versus Spine. American Association of Neurological Surgeons Annual Meeting, Breakfast seminar, Washington, DC.

Regional

- 2006 Invited speaker. Treatment of cervical and lumbar stenosis. Suburban Hospital Grand Rounds, Bethesda, MD

- 2007 Invited speaker. Evaluation and management of neck pain. Doctors' Community Hosp, Greenbelt MD
- 2007 Invited speaker. Is lumbar fusion surgery an efficacious treatment modality for low back pain? The Center for Pain Management, Frederick, MD
- 2008 Invited speaker. The Management of Low Back Pain. Fort Meade Medical Staff, Fort Meade, MD
- 2014 Invited speaker. Low Back Pain: Clinical and Laboratory Progress at Johns Hopkins. St. Joseph's Hospital, Grand Rounds, Towson, MD
- 2015 Invited speaker. Low Back Pain: Clinical and Laboratory Progress at Johns Hopkins. Medstar Good Samaritan Hospital, Grand Rounds, Baltimore, MD

Invited Intramural Lectures/Grand Rounds

- 1996 Gunshot wounds to the head in the pediatric population. Benedum Pediatric Trauma Series, Pittsburgh, PA
- 1996 Management of traumatic brain injury. Department of General Surgery, Keesler Medical Center, Keesler AFB, MS
- 2003 Neurosurgical emergencies. Department of Military Medicine Lecture Series, Keesler Medical Center, Keesler AFB, MS
- 2005 Acute traumatic central cord syndrome. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2006 Atlanto-Occipital dislocation (AOD). Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2006 Thoracolumbar fractures: classification and management. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2006 The management of low back pain. Outpatient Internal Medicine Conf, Johns Hopkins Bayview Medical Center, Baltimore, MD
- 2006 Is lumbar fusion surgery an efficacious treatment modality for low back pain? Neurosurgery Grand Rounds Johns Hopkins Univ SOM
- 2007 Management of spinal cord injury and cervical spine trauma. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2007 Neurosurgeon as a spinal deformity surgeon. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2008 Stabilimax and Duragen Plus clinical trials at Johns Hopkins University. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2008 Management of solitary vertebral column tumors. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2008 Idiopathic spinal cord herniation. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2009 Lumbar Disc Arthroplasty: New and Improved Treatment Option? Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2009 DLIF/XLIF. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2009 Instrumentation in the aging spine. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2009 Osteoporosis and spine surgery. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2009 Cervical Spine and Spinal Cord Injury. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2009 Techniques for thoracolumbar pedicle screw placement: Is the free hand method safe and accurate? Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2010 Physical Examination of the Patient with Lumbar Spine Disease. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2010 Spondylolisthesis. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2010 Lumbar Disc Arthroplasty: A Panacea for Degenerative Low Back Pain? Blaustein Comprehensive Pain Management Grand Rounds, Johns Hopkins Univ SOM
- 2011 Spinal cord injury syndromes. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2011 Cervical spondylotic myelopathy: The Hopkins experience. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2011 Lumbar pseudoarthrosis. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2011 Enhancing lumbar spinal fusion using a rabbit model. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2012 Perioperative Pain Management for Spinal Surgery. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM

- 2013 Postoperative Spinal Infections: The Johns Hopkins Experience. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2013 Physical Examination of the Patient with Lumbar Spine Disease. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2014 Low Back Pain: Clinical and Laboratory Progress at Johns Hopkins. Neurology Grand Rounds, Johns Hopkins Univ SOM
- 2014 Low Back Pain: Clinical and Laboratory Progress at Johns Hopkins. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2015 Anterior Lumbar Interbody Fusion. Neurosurgery Grand Rounds, Johns Hopkins Univ SOM
- 2016 Sublaminar Decompression and Instrumentated Fusion for Degenerative Lumbar Spinal Pathologies. Neurosurgery Grand Rounds, Johns Hopkins Univ. SOM.

Oral Presentations at Scientific Meetings (Presenter in Bold)

International

- 1999 **Okada H**, Attanucci J, Villa L, Erff M, Fellows WK, Witham T, Chambers WH, Lotze MT, and Pollack IF. Effective combination therapy using a dendritic cell vaccine and local interleukin-4 gene delivery for gliomas. Proc 13th Internat Conf Brain Tumor Research Therapy, Sapporo, Japan
- 2006 **Witham TF**. Occipital-cervical (OC) fixation/fusion techniques and use of halo placement for physiologic neutral alignment. AO Spine N Am Fellows Forum, Banff, Alberta, Canada
- 2007 **Bydon A**, Gok B, Sciubba DM, Gokaslan ZL, Witham TF. Development of a systematic algorithm for the surgical treatment of cervical spondylotic myelopathy and review of patient outcomes. 5th Annual AOSpine N Am (AOSNA) Spine Fellows Forum. Banff, Alberta, Canada
- 2013 Bydon M, Xu R, Macki M, Sciubba DM, Wolinsky JP, Witham TF, Gokaslan ZL, **Bydon A**. Adjacent Segment Disease after ACDF: Incidence and clinical outcomes of patients requiring anterior versus posterior repeat cervical fusion. Society for Progress and Innovation in the Near East (SPINE) 2013 Annual Meeting. Beirut, Lebanon
- 2013 Bydon M, Xu R, Macki M, Sciubba DM, Wolinsky JP, Witham TF, Gokaslan ZL, **Bydon A**. Adjacent Segment Disease after ACDF: Development of adjacent segment disease is more likely to occur above the index ACDF level. World Assoc Lebanese Neurosurgeons Home Coming Meeting. Beirut, Lebanon
- 2013 Bydon M, Xu R, Macki M, Sciubba DM, Wolinsky JP, Witham TF, Gokaslan ZL, **Bydon A**. Adjacent Segment Disease after ACDF: Incidence and clinical outcomes of patients requiring anterior versus posterior repeat cervical fusion. World Assoc Lebanese Neurosurgeons Home Coming Meeting. Beirut, Lebanon
- 2013 **Bydon M**, Xu R, Macki M, Sciubba DM, Wolinsky JP, Witham TF, Gokaslan ZL, Bydon A. Adjacent Segment Disease after ACDF: Clinical outcomes after first repeat surgery versus second repeat surgery. World Assoc Lebanese Neurosurgeons Home Coming Meeting. Beirut, Lebanon
- 2013 **Bydon M**, Xu R, Papademetriou K, Macki M, Sciubba DM, Wolinsky JP, Witham TF, Gokaslan ZL, Jallo G, Bydon A. Safety and efficacy of an ultrasonic bone curette in reduction of intraoperative durotomies: Outcomes in 337 patients. World Assoc Lebanese Neurosurgeons Home Coming Meeting. Beirut, Lebanon
- 2013 **Bydon M**, Xu R, Amin AG, Macki M, Kaloostian P, Sciubba DM, Wolinsky JP, Gokaslan ZL, Bydon A, Witham TF. Safety and efficacy of pedicle screw placement using intraoperative computed tomography: Consecutive series of 1148 pedicle screws. World Assoc Lebanese Neurosurgeons Home Coming Meeting. Beirut, Lebanon
- 2013 Kaloostian PE, Kim JE, Hwang L, Santiago-Deppa D, Ye X, Gokaslan Z, Bydon A, Wolinsky JP, Sciubba DM, **Witham T**. A retrospective analysis of the epidemiology of C5 palsy in 1247 consecutive cervical surgeries at a single institution over a 10 year span. 15th World Congress of Neurosurgery, Seoul, South Korea
- 2015 **Holmes C**, Lina IA, Liauw JA, Lo SF, Mao A, Naumann M, Theodros D, Puvanesarajah V, Elder BD, Witham TF. Effects of Single vs. Hypofractionated Focused Radiation Therapy on Vertebral Structure and Biomechanical Integrity. Global Spine Congress, Buenos Aires, Argentina
- 2015 **Holmes C**, Lina IA, Liauw JA, Lo SF, Theodros D, Mao A, Elder BD, Witham TF. A quantitative study of the effects of high-dose PTH (1-34) and low-dose rhBMP-2 on posterolateral lumbar spine fusion in a rabbit model. Global Spine Congress, Buenos Aires, Argentina

2015 Lina IA, **Holmes C**, Liauw JA, Lo SF, Elder B, Theodros, Witham TF. Developing a Mouse Model to Study Mesenchymal Stem Cell Survival, Proliferation and Migration in Lumbar Posterolateral Spinal Fusion. Global Spine Congress, Buenos Aires, Argentina

National

- 1998 **Subach BR**, Witham TF, Kondziolka D, Lunsford LD, Bozik ME, Schiff D. Morbidity and survival after BCNU wafer implantation for recurrent glioblastoma: a retrospective case matched cohort series. 48th Annual Meeting Congress of Neurological Surgeons, Seattle, WA
- 2000 **Scarrow AM**, Kassam AB, Balzer JR, Patel A, Witham T, Horowitz M, Jannetta PJ. Effect of botulinum toxin on intraoperative lateral spread during microvascular decompression for hemifacial spasm. Annual Meeting N Am Skull Base Soc, Scottsdale AZ. Skull Base Surgery, ISSN 1052-1453, 2000;10(1):28
- 2000 **Witham TF**, Dworacki G, Okada H, Fellows W, Erff M, Chambers WH, Pollack I, DeLeo A. p53 Mutant peptide-pulsed dendritic cell vaccine in an intracranial protection model. 68th Annual Meeting Am Assoc Neurological Surgeons, San Francisco, CA
- 2000 **Witham TF**, Erff M, Okada H, Pollack I. UCN-01 induced apoptotic 9L glioma cells serve as an effective antigen source for dendritic cells in the rat 9L intracranial glioma model. 2000 AANS/CNS Section on Tumors: 4th Biennial Brain Tumor Satellite Symposium, San Francisco, CA
- 2000 **Witham TF**, Okada H, Fellows W, Hamilton RL, Flickinger JC, Chambers WH, Pollack IF, Kondziolka D. The characterization of tumor apoptosis after experimental radiosurgery. 10th International Mtg Leksell Gamma Knife Soc, Squaw Valley, CA
- 2000 **Witham TF**, Giezeman-Smits K, Villa L, Erff M, Pollack IF, Okada H, Chambers WH. Local secretion of a soluble TGF- β receptor reverses glioma-mediated inhibition of NK cells in the rat 9L glioma model. Am Coll Surgeons Clinical Congress, Chicago, IL
- 2000 **Witham TF**, Erff M, Okada H, Chambers WH, Pollack IF. UCN-01 induced apoptosis in 9L glioma cells provides an effective antigen source for dendritic cells that yields a potent therapeutic vaccine in the 9L glioma model. 50th Annual Meeting Congress of Neurological Surgeons, San Antonio, TX
- 2000 **Witham TF**, Okada H, Fellows W, Hamilton RL, Flickinger JC, Chambers WH, Pollack IF, Kondziolka D. The characterization of tumor apoptosis after experimental radiosurgery. 50th Annual Meeting Congress of Neurological Surgeons, San Antonio, TX
- 2000 Nakahara N, **Okada H**, Witham T, Attanucci J, Fellows W, Lotze M, Chambers W, Pollack I. Combination radiosurgery with cytokine gene transfected tumor cell vaccination: a new strategy against metastatic brain tumors. Proc 5th Annual Mtg Society for Neuro-Oncology, Chicago, IL
- 2001 **Witham TF**, Dworacki G, Hoffman T, Cicinnati V, Okada H, Chambers WH, Pollack IF, DeLeo A. Tumor apoptotic bodies represent an effective antigen source in an intracranial murine tumor model. Am Coll Surgeons Clinical Congress, New Orleans, LA
- 2005 Abel TB, Hobbs JK, Dubose JJ, Downey DM, **Witham TF**. Relationship of adult filum terminale diameter to elasticity: in vivo measurement. Annual Meeting Am Assoc Neurological Surgeons, New Orleans, LA
- 2006 **Witham TF**. Surgical approach to degenerative spine disease. Soc Interventional Radiology Multi-Modality Meeting, Washington, DC
- 2007 **McLoughlin G**, Sciubba DM, Wolinsky JP, Bydon A, Gokaslan ZL, Witham TF. Postoperative infection of the instrumented spine: a review of 1,351 procedures over 5 years. CNS Meeting. San Diego, CA
- 2007 **McGirt MJ**, Chaichana K, Atiba A, Witham T, Yao K, Bitan F, Epstein F, Jallo GI. Risk factors for progressive spinal deformity following surgical resection of intramedullary spinal cord tumors in children: Analysis of 164 consecutive cases. CNS Annual Meeting San Diego CA
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Epstein F, Jallo GI. A Proposed Grading System for Intramedullary Spinal Cord Tumors in Children: Predictive Value for Subsequent Progressive Spinal Deformity. CNS Annual Meeting San Diego, CA
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Bitan F, Epstein F, Jallo GI. Laminoplasty versus Laminectomy Is Associated with a Decreased Incidence of Spinal Deformity after Resection of Intramedullary Spinal Cord Tumors in Children. CNS Annual Meeting San Diego.

- 2007 **Woodworth G**, McGirt MJ, Gokaslan Z, Witham T, Jallo GI, Wolinski JP. Predictors of Ambulatory Function following Surgical Resection of Intramedullary Spinal Cord Tumors. CNS Annual Meeting San Diego, CA
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Bitan F, Epstein F, Jallo GI. Effect of Laminoplasty on the Incidence of Spinal Deformity after Resection of Intramedullary Spinal Cord Tumors in Children. AANS/CNS Section on Pediatric Neurological Surgery Annual Meeting.
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Epstein F, Jallo GI. A Proposed Grading System for Intramedullary Spinal Cord Tumors in Children: Predictive Value for Subsequent Progressive Spinal Deformity. AANS/CNS Section on Pediatric Neurological Surgery Annual Mtg
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Bitan F, Jallo GI. Value of laminoplasty for prevention of deformity after resection of pediatric spinal cord tumors. AANS/CNS Spine Section Annual Meeting.
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Bitan F, Jallo GI. Novel grading scale to predict deformity after resection of pediatric spinal cord tumors. AANS/CNS Spine Section Annual Meeting.
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Bitan F, Jallo GI. Increasing degree of resection is associated with prolonged survival in children with malignant spinal cord astrocytoma. AANS/CNS Spine Section Annual Meeting.
- 2007 **McGirt MJ**, Yao KC, Witham TF, Bydon A, Chaichana KL, Bitan F, Jallo GI. Long-term motor and sensory outcome after resection of pediatric intramedullary spinal cord tumors. AANS/CNS Spine Section Annual Meeting.
- 2007 **Woodworth GF**, McGirt MJ, Chaichana K, Sciubba DM, Suk I, Jallo GI, Gokaslan ZL, Wolinsky JP, Witham TF. Preoperative hyperglycemia is an independent risk factor for decreased neurological function after resection of intra-medullary spinal cord tumors. CNS Meeting. San Diego, CA
- 2008 **Witham TF**. Surgical approach to degenerative spine disease. Society for Interventional Radiology, Washington, DC
- 2008 **Sciubba DM**, Ayhan S, Nelson C, Noggle JC, Wolinsky JP, Witham TF, Bydon A, Gokaslan ZL. Transthoracic surgical treatment for centrally located thoracic disc herniations causing myelopathy: a five-year institutional experience. 24th Annual Meeting AANS/CNS Section on Disorders of Spine and Peripheral Nerves. Orlando, FL
- 2008 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, Orlando, FL
- 2009 **Bydon M**, McGirt MJ, Garces-Ambrossi GL, Sciubba DM, Witham TF, Wolinsky JP, Gokaslan ZL, Bydon A. Recurrent lumbar disc herniation after single-level lumbar discectomy: incidence and health care cost analysis. Annual Meeting Congress of Neurological Surgeons, New Orleans LA
- 2009 **Liauw J**, McGirt MJ, Garces-Ambrossi GL, Parker S, Bydon M, Bydon A, Wolinsky JP, Gokaslan ZL, Witham TF. Spinal deformity following laminoplasty versus laminectomy for resection of intradural spinal tumors: analysis of 238 patients. Annual Meeting Congress of Neurological Surgeons, New Orleans LA
- 2009 **Liauw J**, McGirt MJ, Xu R, Parker S, Bydon M, Wolinsky JP, Witham T, Gokaslan ZL, Bydon A. Surgical factors associated with recurrent back pain and cyst recurrence after surgical resection of spinal synovial cysts: analysis of 160 consecutive cases. Annual Meeting Congress of Neurological Surgeons, New Orleans LA
- 2009 **Parker S**, McGirt MJ, Garces-Ambrossi GL, Bydon M, Sciubba DM, Witham TF, Bydon A, Wolinsky JP, Jallo G, Gokaslan ZL. Factors associated with long-term neurological outcome and tumor progression after resection of intramedullary spinal cord tumors: analysis of 101 consecutive cases. Annual Meeting Congress of Neurological Surgeons, New Orleans LA
- 2009 **Parker S**, McGirt MJ, Mehta V, Bydon M, Sciubba DM, Bydon A, Witham TF, Gokaslan ZL, Wolinsky JP. Trans-laminar versus pedicle screw fixation of C2: comparison of surgical morbidity and analysis of 313 consecutive screws. Annual Meeting Congress of Neurological Surgeons, New Orleans LA
- 2009 **McGirt MJ**, Sutter E, Xu R, Sciubba DM, Witham T, Wolinsky JP, Gokaslan ZL, Bydon A. Biomechanical comparison of translaminar versus pedicle screws at T1 and T2 in long subaxial

- cervical constructs. N Am Spine Society Meeting, San Francisco CA
- 2009 **McGirt MJ**, Xu R, Parker SL, Bydon M, Wolinsky JP, Witham T, Gokaslan ZL, Bydon A. Surgical factors associated with recurrent back pain and cyst recurrence after surgical resection of spinal synovial cysts: analysis of 160 consecutive cases. N Am Spine Soc Meeting, San Francisco CA
- 2009 **McGirt MJ**, Parker SL, Garces-Ambrossi GL, Mehta V, Sciubba DM, Bydon A, Gokaslan ZL, Wolinsky JP, **Witham TF**. Trans-laminar versus pedicle screw fixation of C2: comparison of surgical morbidity and analysis of 313 consecutive screws. N Am Spine Soc Meeting, San Francisco CA
- 2009 **McGirt MJ**, Garces-Ambrossi GL, Parker SL, Sciubba DM, Bydon A, Wolinsky JP, Gokaslan ZL, **Witham TF**. Spinal deformity following laminoplasty versus laminectomy for resection of intradural spinal tumors: analysis of 238 patients. N Am Spine Soc Meeting, San Francisco CA
- 2009 **McGirt MJ**, Parker S, Wolinsky JP, Witham T, Bydon A, Gokaslan Z. Vertebroplasty and kyphoplasty for the treatment of vertebral compression fractures: an evidenced based review of the literature. N Am Spine Soc Meeting, San Francisco CA
- 2010 Parker SL, **McGirt MJ**, Farber H, 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. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 Parker SL, Amin AG, Farber H, **McGirt MJ**, Bydon A, Sciubba DM, Wolinsky JP, Gokaslan ZG, **Witham TF**. The ability of electromyographic monitoring to determine the presence of malpositioned pedicle screws in the lumbosacral spine: Analysis of 2450 consecutive cases. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 **Parker SL**, **McGirt MJ**, Xu R, Wolinsky JP, Witham TF, Gokaslan ZG, Bydon A. Surgical factors associated with recurrent back pain and cyst recurrence after surgical resection of spinal synovial cysts: Analysis of 160 consecutive cases. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 Richman J, Defontes K, Zaidi H, Flerlage T, Molina CA, Hsu W, Bydon A, Gokaslan ZL, Witham TF, Wolinsky JP, **Sciubba DM**. C5 Radiculopathy as a complication of cervical spine surgery. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 **Xu R**, **McGirt MJ**, Sutter EG, Parker SL, Sciubba DM, Wolinsky JP, Witham TF, Gokaslan ZG, Bydon A. Biomechanical comparison of C7 lateral mass vs pedicle screws in subaxial cervical constructs. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 **Molina CA**, Flerlage T, Richman J, Hsu W, Gregory A, Gokaslan ZL, Bydon A, Witham TF, Wolinsky JP, Sciubba DM. Evaluating the effects of rhBMP-2 on an intravertebral human breast adenocarcinoma rat model. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 **Molina CA**, Hsu W, Gregory A, Flerlage T, Richman J, Thurston J, Gorbounov M, Gokaslan ZL, Bydon A, Witham TF, Wolinsky JP, Sciubba DM. Development of a novel intravertebral human breast adenocarcinoma rat model for the study of intravertebral metastatic spine disease. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 Flerlage T, Richman J, Molina CA, Hsu W, Ford E, Lim M, Gokaslan ZL, Bydon A, Witham TF, Wolinsky JP, **Sciubba DM**. Treatment of intramedullary spinal cord tumors with stereotactic radiosurgery. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 **Parker SL**, **McGirt MJ**, Xu R, Witham TF, Gokaslan ZG, Bydon A. Long-term back pain after single level discectomy for radiculopathy: Incidence and healthcare cost analysis. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 Richman J, Hsu W, Ford E, Lim M, Flerlage T, Gorbounov M, Thurston J, Molina CA, Gokaslan ZL, Witham TF, Bydon A, **Sciubba DM**. Stereotactic radiation dose escalation for the treatment of metastatic tumors of the lumbar spine. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 Flerlage T, Solacoglu C, Gokaslan ZL, Wolinsky JP, Bydon A, Witham TF, **Sciubba DM**. Giant cell tumors of the spine: A series of nine cases. AANS/CNS Spine Section Meeting, Orlando, FL
- 2010 Parker SL, **McGirt MJ**, Farber H, 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. AANS Meeting, Philadelphia, PA
- 2010 Parker SL, Amin AG, Farber H, **McGirt MJ**, Bydon A, Sciubba DM, Wolinsky JP, Gokaslan ZG, **Witham TF**. The ability of electromyographic monitoring to determine the presence of malpositioned pedicle screws in the lumbosacral spine: Analysis of 2450 consecutive cases. AANS Meeting, Philadelphia, PA

- 2011 **Witham TF**, Zileli Mehmet. Complication Avoidance and Management with Sacral Insufficiency Fractures Following Lumbosacral Fusion, 27th Annual Meeting AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 **Witham TF**. Myelopathy and CT Junction, 27th Annual Meeting AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 **Molina C**, Gokaslan Ziya, Witham TF, Bydon Ali, Wolinsky JP, Sciubba D. The Impact of Surgeon Professional Fees to the National Cost of Healthcare, 27th Annual Meeting AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 **Witham TF**. Complication Avoidance and Management with Sacral Insufficiency Fractures Following LS Fusion – Introduction, 27th Annual Meeting AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 **Clarke M**, Sciubba D, McGirt M, Witham TF, Bydon A, Hsieh P, Gokaslan Z, Wolinsky JP. Clinical Outcomes Following En Bloc Sacrectomies via Posterior Approach, 27th Annual Meeting AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 Dasenbrock H, **Clarke M**, Bydon A, Witham TF, Sciubba D, Simmons O, Gokaslan Z, Wolinsky JP. Reconstruction of Extensive Defects from Posterior En Bloc Resection of Sacral Tumors Using Human Acellular Dermal Matrix and Gluteus Maximus Myocutaneous Flaps, 27th Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 **Parker S**, Anubhav A, Bydon A, Sciubba D, Wolinsky JP, Gokaslan Z, Witham TF. Incidence of Vascular Encroachment Resulting from Free Hand Placement of Pedicle Screws in the Thoracic and Lumbar Spine: Analysis of 6,816 Consecutive Screws, 27th Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 Dasenbrock H, Witham TF, Sciubba D, Gokaslan Z, **Bydon A**. The Impact of Weekend Hospital Admission on the Timing of Intervention and Outcomes after Surgery for Acute Spinal Cord Injury in the United States, 2005-2008, 27th Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2011 Dasenbrock H, Bydon M, Yenokyan G, Witham TF, Gokaslan Z, **Bydon A**. Long-term Outcomes of Patients with Multilevel Ossification of the Posterior Longitudinal Ligament After Laminectomy, Laminoplasty and Laminectomy & Fusion: A Meta-Analysis of Observational Studies, 27th Annual Meeting of the AANS/CNS Section on Disorders of Spine and Peripheral Nerves, Phoenix AZ
- 2011 **Sciubba D**, Molina C, Gokaslan Z, Chou D, Wolinsky JP, Witham TF, Bydon A, Ames C. En Bloc Resection of Cervical Chordomas: Series of 12 Patients and Clinical Outcomes, 27th Annual Meeting of AANS/CNS Section on Disorders of Spine and Peripheral Nerves, Phoenix AZ
- 2011 Dasenbrock H, Clarke M, Bydon A, Sciubba D, Witham TF, Gokaslan Z, **Wolinsky JP**. Endoscopic Image-Guided Transcervical Odontoidectomy: Long-Term Outcomes of 15 Patients with Basilar Invagination, 27th Annual Meeting of AANS/CNS Section on Disorders of Spine and Peripheral Nerves, Phoenix AZ
- 2011 Hsu W, Kretzer R, Amin A, Chiachana K, Dorsi M, Sciubba DM, Gokaslan Z, **Witham TF**. Extension of posterior cervical fixation constructs across the cervicothoracic junction does not decrease the risk of adjacent level disease. 2011 CSRS Meeting, Scottsdale AZ
- 2013 Ju D, Zadnik P, Groves ML, Sarabia-Estrada R, Witham TF, Bydon A, Wolinsky JP, Gokaslan ZL, **Sciubba DM**. Predictors of Survival Following Surgical Management of Breast Cancer Metastatic to the Spine. 29th Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
- 2013 Groves ML, Zadnik PL, Sui J, Ju D, Karami KJ, Kaloostian PE, Wolinsky JP, Bydon A, Gokaslan ZL, Witham TF, **Sciubba DM**. Survival Following Surgical Resection of Spinal Sarcoma: A Report of 25 Consecutive Cases. 29th Annual Meeting of AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, Phoenix AZ
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