



CURRICULUM VITAE

Nicholas B. Levine, M.D.

EDUCATION Degree-Granting Education

University of California at Los Angeles, Los Angeles, CA, BS, 1996, Neuroscience

University of Michigan Medical School, Ann Arbor, MI, MD, 2000, Medicine

Postgraduate Training

Residency, Neurosurgery, University of Cincinnati, College of Medicine, Department of Neurosurgery, Cincinnati, OH, 7/2000-7/2007

Fellowship, Cerebrovascular, University of Cincinnati, College of Medicine, Department of Neurosurgery, Cincinnati, OH, 1/2005-12/2005

Fellowship, Skull Base/Cerebrovascular, University of South Florida, Department of Neurosurgery, Tampa, FL, 7/2007-7/2008

CREDENTIALS Board Certification

American Board of Neurological Surgery, 11/2012

Licensures Active

Idaho Medical License, M-17459

California Medical License, C143668

DEA License, FL0830605

State of California Fluoroscopy License, RHC00202754

Texas Medical License, N0211 (Inactive)

Florida Medical License, ME 122167 (Inactive)

HONORS AND AWARDS

Cum Laude, BS Neuroscience, University of California at Los Angeles, 1996

EXPERIENCE/SERVICE Appointments

Assistant Professor, Department of Neurosurgery, Division of Surgery, The University of Texas MD Anderson Cancer Center, Houston, TX, 7/2008-12/2014

Assistant Professor, Department of Neurosurgery, Division of Surgery, Baylor College of Medicine, Houston, TX, 12/2008-12/2014

Director, Department of Neurosurgery, Nicholson Microsurgical and Endoscopic Center for Clinical Applications Laboratory, Division of Surgery, The University of Texas MD Anderson Cancer Center and Baylor College of Medicine, Houston, TX, 1/2012-12/2014

Co-Director of Education, MINTOS (Minimally Invasive and New Technology in Oncologic Surgery), Division of Surgery, The University of Texas MD Anderson Cancer Center, Houston, TX, 2013-2014

Director, Skull Base Surgery, Marcus Neuroscience Institute, Boca Raton Regional Hospital, Boca Raton, FL, 1/2015-12/2015

Health Science Associate Clinical Professor, Department of Neurological Surgery, UCSF Fresno, Fresno, CA, 2016-2020

Attending Neurosurgeon, Central California Faculty Medical Group, Fresno, CA, 2016-2020

Director of Undergraduate Program, Department of Neurological Surgery, UCSF Fresno, Fresno, CA 2019-2020

Director of Skull Base Surgery, Department of Neurological Surgery, UCSF Fresno, Fresno, CA, 2016-2020

Neurosurgeon, Community Health Partners, Community Neurosciences Institute, Community Regional Medical Center, Fresno, CA, 2021-2022

Sabbatical to spend time with daughters post Covid and to assess career goals; applied, accepted and declined to proceed with Executive MBA at UCLA Anderson School of Management, 2022-2023

Expert witness for medicolegal review, 2022–present

Founder of neurosurgery service line, staff neurosurgeon and medical director of Gritman Neurosurgery at Gritman Medical Center, Moscow, ID Dec 2023-Sept 2024

Administrative Appointments/Responsibilities

Member, Committee for the planning of The 4th Annual Kempfer Functional Brain Anatomy Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 2009-2010

Member, Committee for the planning of The 5th Annual Kempfer Functional Brain Anatomy Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 2010-2011

Member, Committee for the planning of The 6th Annual Kempfer Functional Brain Anatomy Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 2011-2012

Member, Committee for the planning of The 7th Annual Kempfer Functional Brain Anatomy Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 2012-2013

Member, Committee for the planning of The 8th Annual Kempfer Functional Brain Anatomy Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 2013-2014

Member, Task Force for Adult Cardiac Monitoring Admission and Discharge Policy, The University of Texas MD Anderson Cancer Center, Houston, TX July 2012

Alternate, Acute & Critical Care Services Subcommittee, The University of Texas MD Anderson Cancer Center, Houston, TX, 7/2013-1/2014

Member, Baylor College of Medicine Simulation Center Board of Directors, Baylor College of Medicine, Houston, TX, 2013-2014

Community Regional Medical Center Neurosciences Steering Committee, Neurosurgery Representative, Fresno, CA, 2016

Community Regional Medical Center Champion for Practicing Excellence Physician

Effectiveness, Fresno, CA, 2017-2018

Community Physician Group surgical representative for Community Health Partners Insurance, QI and Credentialing, Fresno, CA 2022

Speaker at Valley Children's Scotch Tasting for Inaugural Neuroscience Nursing Scholarship in the Central Valley, Fresno, CA 2022

RESEARCH Grants and Contracts Funded

Co-Principal Investigator, 5%, 2013-14 Neurosurgery Research & Education Foundation Fellowship and the CNS Tumor Fellowship, 11047, DePuy Synthes CMF, 7/1/2013-6/30/2014, \$20,000 (\$20,000/year)

Principal Investigator, 5%, Surgical Cervical Spine Approaches, Synthes USA Products, LLC, 7/2012-7/2013, \$66,500 (\$66,500/year)

Principal Investigator, 5%, First Annual Nicholson Lecture on Surgical Neuroanatomy and Research, Synthes, 5/2012, \$17,000 (\$17,000/year) Principal Investigator, 5%, Second Annual Nicholson Lecture on Surgical Neuroanatomy and Research, Synthes, 4/2013, \$9,500 (\$9,500/year)

Principal Investigator, 5%, Second Annual Nicholson Lecture on Surgical Neuroanatomy and Research, Stryker, 4/2013, \$10,000 (\$10,000/year)

Principal Investigator, UT MD Anderson Skull Base Lab, 1002-2013, Karl Storz EndoscopyAmerica, 12/20/2013, \$33,400 (\$33,400/year)

Principal Investigator, UT MD Anderson Skull Base Lab, BCS #22546 13, Medtronic Surgical Technologies, 12/20/2013, \$19,222 (\$19,222/year)

Principal Investigator, Third Annual Nicholson Lecture on Surgical Neuroanatomy and Research, DePuy Synthes, 4/2014, \$9,500 (\$9,500/year)

Principal Investigator, Third Annual Nicholson Lecture on Surgical Neuroanatomy and Research, Stryker, 4/2014, \$10,000 (\$10,000/year)

Unfunded

Collaborator, Isolation and characterization of neural stem cells from human brain tumors, LAB04-001, PI - Frederick Lang, 2004-2014

Collaborator, Collection and storage of tissue and blood samples and assessment of tumor markers from patients undergoing neurosurgical procedures for the management of central nervous system diseases, LAB06-0008, PI - John De groot, 2006-2014

Collaborator, Efficacy of post-surgical stereotactic radiosurgery for metastatic brain disease: a randomized trial, 2009-0381, PI - Anita Mahajan, MD, 2009-2014

Principal Investigator, Orbital exenteration: indications, surgical techniques and outcomes, PA11-0836, 2011

Collaborator, A prospective Phase III randomized trial to compare stereotactic radiosurgery vs. whole brain radiation therapy for >3 newly diagnosed non-melanoma brain metastases, 20110884, PI - Jing Li, 2012-2014

Collaborator, A prospective randomized Phase III trial to compare local control and neurocognitive preservation after initial treatment with stereotactic radiosurgery (SRS) vs. whole brain radiation therapy (WBRT) for patients with >3 brain metastases from melanoma, 2011-0875, PI - Erik Sulman, 2012-2014

Collaborator, Radiologic pathologic correlation of advanced MR imaging to guide the biopsy of cerebral malignancies, 2011-0370, PI - Dawid Schellingerhout, 2012-2014

Collaborator, Retrospective analysis of treatment outcomes and prognostic factors for patients treated with Gamma Knife stereotactic radiosurgery, PA12-0371, PI - Paul Brown, 2012-2014

Collaborator, A multi-center collaborative study to determine the sensitivity and specificity of plasma and cerebrospinal fluid exosome EGFRvIII detection compared to tissue EGFRvIII detection by qPCR assay of exosomal RNA, PA12-0674, PI - Frederick Lang, MD, 2013-2014

Collaborator, A prospective Phase II randomized trial to compare intensity modulated proton radiotherapy (IMPT) vs. Intensity modulated radiotherapy (IMRT) for newly diagnosed glioblastoma (WHO Grade IV), 2013-0097, PI - Paul Brown, 2013-2014

Collaborator, Phase II study of high dose high dose beam scanning proton radiation treatment

+/- surgical resection of sarcomas of the spine, sacrum, and base of skull, 2011-0172, PI -

Paul Brown, MD, 2013-2014

Collaborator, Pilot study to assess accuracy of time-resolved FLT PET and advanced MR techniques in determining treatment-related necrosis from recurrent glioma, 2013-0283, PI -

Eric Rohren, 2013-2014

Collaborator, Storage of data from patients enrolled on protocols from the Department of Neurosurgery, PA13-0162, PI - Raymond Sawaya, MD, 2013-2014

Collaborator, Use of navigated transcranial magnetic stimulation (NTMS) in generated motor and language mapping to evaluate brain recovery and plasticity following brain tumor surgery in/or adjacent to eloquent cortex, 2013-0711, PI - Sujit Prabhu, 2014-2014

PUBLICATIONS Peer-Reviewed Original Research Articles

1. **Levine NB**, Kurokawa R, Fichtenbaum CJ, Howington JA, Kuntz C. An immunocompetent patient with primary *Scedosporium apiospermum* vertebral osteomyelitis. *J Spinal Disord Tech* 15(5):425-30, 10/2002.
2. **Levine NB**, Tanaka T, Jones BV, Crone KR. Minimally invasive management of a traumatic artery aneurysm resulting from shaken baby syndrome. *Pediatr Neurosurg* 40(3):128-31, May-Jun, 5/2004.
3. Kuntz C, Maher PC, **Levine NB**, Kurokawa R. Prospective evaluation of thoracic pedicle screw placement using fluoroscopic imaging. *J Spinal Disord Tech* 17(3):206-14, 6/2004.
4. **Levine NB**, Collins J, Franz DN, Crone KR. Gradual formation of an operative corridor by balloon dilation for resection of subependymal giant cell astrocytomas in children with tuberous sclerosis: specialized minimal access technique of balloon dilation. *Minim Invasive Neurosurg* 49(5):317-20, 10/2006.
5. Froelich SC, Aziz KM, **Levine NB**, Theodosopoulos PV, van Loveren HR, Keller JT. Refinement of the extradural anterior clinoidectomy: surgical anatomy of the orbitotemporal periosteal fold. *Neurosurgery* 61(5 Suppl 2):179-85; discussion 185-6, 11/2007.
6. **Levine NB**, Miller MN, Crone KR. Endoscopic resection of colloid cysts: indications, technique, and results during a 13-year period. *Minim Invasive Neurosurg* 50(6):313-7, 12/2007.
7. Froelich SC, Aziz KM, **Levine NB**, Pensak ML, Theodosopoulos PV, Keller JT. Exposure of the distal cervical segment of the internal carotid artery using the trans-spinosum corridor: cadaveric study of surgical anatomy. *Neurosurgery* 62(ONS Suppl 2):ONS354-ONS362, 5/2008.
8. Froelich SC, Aziz KA, **Levine NB**, Tew JM, Keller JT, Theodosopoulos PV. Extension of the one-piece orbitozygomatic frontotemporal approach to the glenoid fossa: cadaveric study. *Neurosurgery* 62(ONS Suppl 2):ONS312-ONS317, 5/2008.
9. Prabhu SS, **Levine NB**, Rao G, Shah K, Weinberg J. Report of Negative Diffusion-Weighted MR Imaging during Tumor Resections Using Intraoperative MRI. *Stereotact Funct Neurosurg* 87(5):304-308, 7/2009.
10. Ringer AJ, Matern E, Parikh S, **Levine NB**. Screening for blunt cerebrovascular injury: selection criteria for use of angiography. *J Neurosurg*, 7/2009.
11. Hanna E, DeMonte F, Ibrahim S, Roberts D, **Levine N**, Kupferman M. Endoscopic resection of sinonasal cancers with and without craniotomy: oncologic results. *Arch Otolaryngol Head Neck Surg* 135(12):1219-24, 12/2009.
12. Hassaneen W, Cahill DP, Fuller GN, **Levine NB**. Immunohistochemical detection of somatostatin receptor subtype 5 (SSTR-5) in cushing adenoma. *J Neurooncol* 98(1):151-2, 5/2010.
13. **Levine NB**, Demonte F. Functional outcome in the neurosurgical patient and its impact on quality of life. *Skull Base* 20(1):19-22, 1/2010. PMID: PMC2853064.
14. Giliberti FM, Shinder R, Bell D, Savar AM, Sacks JM, **Levine NB**, Esmali B. Malignant mixed tumor of the lacrimal gland in a teenager. *J Pediatr Ophthalmol Strabismus*:1-3. e-Pub 2/2010.

15. Uribe JS, Ramos E, Youssef AS, **Levine N**, Turner AW, Johnson WM, Vale FL. Craniocervical fixation with occipital condyle screws: biomechanical analysis of a novel technique. *Spine (Phila Pa 1976)* 35(9):931-8, 4/2010.
16. Hassaneen W, Suki D, Salaskar AL, **Levine NB**, DeMonte F, Lang FF, McCutcheon IE, Dorai Z, Feiz-Erfan I, Wildrick DM, Sawaya R. Immediate morbidity and mortality associated with transcallosal resection of tumors of the third ventricle. *J Clin Neurosci* 17(7):830-6, 7/2010.
17. Hassaneen W, **Levine NB**, Suki D, Salaskar AL, de Moura Lima A, McCutcheon IE, Prabhu SS, Lang FF, DeMonte F, Rao G, Weinberg JS, Wildrick DM, Aldape KD, Sawaya R. Multiple craniotomies in the management of multifocal and multicentric glioblastoma. *J Neurosurg* 114(3):576-84, 3/2011.
18. Kupferman ME, Demonte F, **Levine N**, Hanna E. Feasibility of a robotic surgical approach to reconstruct the skull base. *Skull Base* 21(2):79-82, 3/2011. PMID: PMC3312597.
19. Bell D, Gidley P, Levine N, Fuller GN. Endolymphatic sac tumor (aggressive papillary tumor of middle ear and temporal bone): sine qua non radiology-pathology and the University of Texas MD Anderson Cancer Center experience. *Ann Diagn Pathol* 15(2):117-23, 4/2011.
20. Dziurzynski K, Wei J, Qiao W, Hatiboglu MA, Kong LY, Wu A, Wang Y, Cahill D, **Levine N**, Prabhu S, Rao G, Sawaya R, Heimberger AB. Glioma-associated cytomegalovirus mediates subversion of the monocyte lineage to a tumor propagating phenotype. *Clin Cancer Res* 17(14):4642-9, 7/2011. e-Pub 4/2011. PMID: PMC3139801.
21. Khan MI, Habra MA, McCutcheon IE, Noguerras-González GM, Devin JK, Busaidy NL, **Levine NB**, Lindstrom W, Kagan D, Jimenez C, Waguespack SG. Random postoperative day 3 cortisol as a predictor of hypothalamic-pituitary-adrenal axis integrity after transsphenoidal surgery. *Endocr Pract* 17(5):1-25, 9/2011. e-Pub 3/2011.
22. Dziurzynski K, Blas-Boria D, Suki D, Cahill DP, Prabhu SS, Puduvalli V, **Levine N**. Butterfly glioblastomas: a retrospective review and qualitative assessment of outcomes. *J Neurooncol* 109(3):555-63, 9/2012. e-Pub 7/2012.
23. Mitchell EH, Diaz A, Yilmaz T, Roberts D, **Levine N**, DeMonte F, Hanna EY, Kupferman ME. Multimodality treatment for sinonasal neuroendocrine carcinoma. *Head Neck* 34(10):1372-6, 10/2012. e-Pub 11/2011.
24. Wei J, Wang F, Kong LY, Xu S, Doucette T, Ferguson SD, Yang Y, McEneaney K, Jethwa K, Gjyshi O, Qiao W, **Levine NB**, Lang FF, Rao G, Fuller GN, Calin GA, Heimberger AB. miR124 Inhibits STAT3 Signaling to Enhance T Cell-Mediated Immune Clearance of Glioma. *Cancer Res* 73(13):3913-26, 7/2013. e-Pub 5/2013. PMID: PMC3780786.
25. Bhayani MK, Yilmaz T, Sweeney A, Calzada G, Roberts DB, **Levine NB**, DeMonte F, Hanna EY, Kupferman ME. Sinonasal adenocarcinoma: A 16-year experience at a single institution. *Head Neck* 36(10):1490-6, 10/2014. e-Pub 1/2014.
26. Ow TJ, Hanna EY, Roberts DB, **Levine NB**, El-Naggar AK, Rosenthal DI, DeMonte F, Kupferman ME. Optimization of long-term outcomes for patients with esthesioneuroblastoma. *Head Neck* 36(4):524-30, 4/2014. e-Pub 6/2013.
27. Su SY, Kupferman ME, DeMonte F, **Levine NB**, Raza SM, Hanna EY. Endoscopic resection of sinonasal cancers. *Curr Oncol Rep* 16(2):369, 2/2014.
28. Farnia B, Allen PK, Brown PD, Khatua S, **Levine NB**, Li J, Penas-Prado M, Mahajan A, Ghia AJ. Clinical Outcomes and Patterns of Failure in Pineoblastoma: A 30-year Single Institution Retrospective Review. *World Neurosurg*. e-Pub 7/2014.
29. Maldaun MV, Khawja SN, **Levine NB**, Rao G, Lang FF, Weinberg JS, Tummala S, Cowles CE, Ferson D, Nguyen AT, Sawaya R, Suki D, Prabhu SS. Awake craniotomy for gliomas in a high-field intraoperative magnetic resonance imaging suite: analysis of 42 cases. *J Neurosurg* 121(4):810-817, 10/2014. e-Pub 8/2014.
30. Alves MV, Roberts D, **Levine NB**, DeMonte F, Hanna EY, Kupferman ME. Impact of Chemoradiotherapy on CSF Leak Repair after Skull Base Surgery. *J Neurol Surg B Skull Base* 75(5):354-7, 10/2014. e-Pub 6/2014. PMID: PMC4176540.
31. Kong LY, Wei J, Haider AS, Liebelt BD, Ling X, Conrad CA, Fuller GN, **Levine NB**, Priebe W, Sawaya R, Heimberger AB. Therapeutic targets in subependymoma. *J Neuroimmunol* 277(12):168-175. e-Pub 10/2014.
32. Andersson U, et al. Germline rearrangements in families with strong family history of glioma and malignant melanoma, colon and breast cancer. *Neuro-Oncol*. 2014 oct; 16(10):1333-40. Collaborators (1 of 187)

33. Froelich SC, Aziz KM, **Levine NB**, Maillot C, Theodosopoulos PV, van Loveren HR, Keller JT. The lateral sellar orbital region. *Neurosurgery*. Submitted.
34. McPherson C, Hertzler D, **Levine NB**, Smith J. Cardiac sarcoma presenting with multiple brain metastases: case report of robotic-assisted endoscopic resection of the cardiac tumor. *J Neurosurgery*. Submitted.
35. Jing L, Edson MA, Fuller GN, Allen PK, **Levine NB**, Ghia AJ, Mahajan A, Brown PD, DeMonte F. Outcomes after surgery and radiotherapy for papillary tumor of the pineal region. *World Neurosurgery*. 2015 Jul;84(1):76-81. doi: 10.1016/j.wneu.2015.02.031. Epub 2015 Mar 5.
36. Yari N, Morgan ML, Barros AE, **Levine NB**, Lee AG. Metastatic papillary thyroid carcinoma presenting as abducens palsy complicated by ocular neuromyotonia. *Journal of NeuroOphthalmology*. 40: 97-101. Epub 2016 Feb 22.
37. Ferguson, SD, **Levine NB**, Suki D, Tsung AJ, Lang FF, Sawaya R, Weinberg J, McCutcheon I. The surgical treatment of tumors of the fourth ventricle; a single-institution experience. *J Neurosurg*. 2017 Apr 14 1-13. Doi: 10.3171/2016.11.JNS.161167
38. Mahajan A, Ahmed S, McAleer MF, Weinberg JS, Li J, Brown P, Settle S, Prabhu SS, Lang FF, **Levine NB**, McGovern S, Sulman E, McCutcheon IE, Azeem S, Cahill D, Tatsui C, Heimberger AB, Ferguson S, Ghia A, Demonte F, Raza S, Yang J, Sawaya R, Hess K, Rao G. Prospective Randomized Trial of Post-operative Stereotactic Radiosurgery versus Observation for Completely Resected Brain Metastases. *Lancet Oncol*. 2017 Aug.
39. Santos-Pinheiro F, Park M, Liu D, Kwong LN, Cruz S, **Levine NB**, O'Brien B, Chen M; Seizure burden pre- and postresection of low-grade gliomas as a predictor of tumor progression in low-grade gliomas. *Neuro-Oncology Practice*. 2019-05-07.
40. Yassi A, Al-Mistarehi A, Tremont-Lukats I, El-Salem K, Shawagfeh A, Al-Hafez B, **Levine NB**. Acute diffuse cerebral vasospasm as a complication of endoscopic resection of a colloid cyst: a care report. *Brit Journal Neurosurgery*. Vol. 37, 2023-Issue 5.

Editorials

1. **Levine NB**, Sawaya R. Comments on Raza S, Quinones-Hinojosa A: The extended retrosigmoid approach for neoplastic lesions in the posterior fossa: technique modification. *Neurosurg Rev*, <http://www.ncbi.nlm.nih.gov/pubmed/20838839>, 9/2010. e-Pub 9/2010. **Other Articles**

1. Zuccarello M, **Levine NB**. Thrombolytic therapy for acute stroke. *J Neurosurg* 104:630-1, 2006.

Abstracts

1. **Levine NB**, Geer CP, Keep R. Age dependent effects of hyperglycemia on ischemic brain damage in Fischer 344 rats. *Cardiovascular Research Forum*, 1998.
2. Anduluz N, **Levine NB**, Zuccarello M. Fenestration of the lamina terminalis reduces the incidence of hydrocephalus after subarachnoid hemorrhage from ruptured anterior communicating artery aneurysms. *J Neurosurg*, 4/2003.
3. Aziz KM, **Levine NB**, Chaalaa C, van Loveren HR, Keller JT, Zuccarello M. Predictive parameters for approaches to basilar apex aneurysms. *Skull Base*, 2/2006.
4. **Levine NB**, Kuntz C, Bohinski RJ. Posteromedian extracavitary approach to the thoracolumbar spine: a single incision approach for circumferential decompression, reconstruction and arthrodesis. *J Neurosurg*, 3/2006.
5. Froelich SC, **Levine NB**, Chaalala C, Zuccarello M, Keller JT. New concept of the first vertebral foramen: demystifying the third segment of the vertebral artery. *J Neurosurg*, 4/2006.
6. Froelich SF, Aziz KM, **Levine NB**, Pensak ML, Theodosopoulos PV, Keller JT. Exposure of the distal cervical ICA using the trans-spinosum corridor: surgical anatomy and technical note. *Neurosurgery*, 10/2006.
7. **Levine NB**, Miller MN, Crone KR. Endoscopic resection of colloid cysts: indications, technique, and results during a 13-year experience. *J Neurosurg* 104:A642, 2006.
8. Froelich SF, Aziz KA, **Levine NB**, Tew JM, Keller JT. Extension of the one-piece orbitozygomatic frontotemporal approach to the glenoid fossa. *Skull Base* 17, 5/2007.
9. Froelich SF, **Levine NB**, Aziz KA, Pensak ML, Theodosopoulos PV, Keller JT. The transspinousum corridor: surgical anatomy and technical notes. *Skull Base* 17, 5/2007.
10. Kupferman ME, DeMonte F, **Levine N**, Hanna E. Feasibility of a robotic surgical approach to reconstruct the skull base. *Skull Base* 21(2):79-82, 5/2011.

11. Khan MI, McCutcheon IE, Nogueras-Gonzalez GM, Munsell MF, Devin JK, Jimenez C, Habra MA, **Levine NB**, Waguespack SG. Post-operative day 3 cortisol as a predictor of HPA axis integrity after transsphenoidal surgery/115. *Endocr Pract* 17(5):1-25, 9/2011.
12. Rotta R, **Levine NB**, Prabhu SS. Awake craniotomy with multimodality monitoring in a highfield (1.5 T) intraoperative MRI. , 10/2011.
13. Dziurzynski K, Blas-Boria D, Suki D, Cahill DP, Prabhu SS, Puduvalli V, **Levine N**. Butterfly glioblastomas: a retrospective review and qualitative assessment of outcomes. *J Neurooncol* 109(3):555-563, 9/2012.
14. Ortega Alves M, **Levine NB**, DeMonte F, Hanna E, Kupferman M. Impact of chemotherapy and radiotherapy on the success of cerebrospinal fluid leak repair after trans-nasal endoscopic resection of skull bases tumors. *Skull Base* 73, 2012.
15. Al Shamy G, Gressot L, Suki D, Sawaya R, DeMonte F, **Levine NB**. Meningiomas involving the dural venous sinuses: Surgical Outcomes in 118 patients. *Skull Base* 73, 2012.
16. Ow TJ, Hanna EY, Roberts DB, **Levine NB**, El-Naggar AK, Rosenthal D, DeMonte F. Multimodality therapy optimizes outcomes in esthesioneuroblastoma. 8th International Conference on Head & Neck Cancer, Toronto, Ontario, Canada, 2012.
17. Ow TJ, Hanna EY, Roberts DB, **Levine NB**, El-Naggar AK, Rosenthal DI, DeMonte F, Kupferman ME. Optimization of long-term outcomes for patients with esthesioneuroblastoma. *Head Neck*. e-Pub 2013.
18. Effendi ST, Suki D, **Levine NB**, Lang FF. Stryker neuro-oncology award 199 insular glioma resection: the MD anderson experience. *Neurosurgery* 61 Suppl 1:226, 8/2014.
19. Farnia B, Allen PK, Brown P, Khatua S, **Levine NB**, Li J, Penas-Prado M, Mahajan A. Clinical outcomes and patterns of failure in pineoblastoma: a 30-year single institution experience. , 2014.
20. Wang F, Wei J, Xu S, Ling X, Yaghi N, Ling-yuan K, Doucette T, Weinberg JS, DeMonte F, **Levine NB**, Lang FF, Prabhu SS, Heimberger AB. Glioblastoma exosomes induce immune suppressive M2 Macrophages by Direct Nuclear Transfer of STAT3.
21. Rotta R, **Levine NB**, Rao G, Tummala S, Tilley CE, Sawaya R, Prabhu SS. Preoperative nTMS generated motor maps correlate well with Direct Cortical Stimulation - initial experience with 11 patients.
22. Rotta R, **Levine NB**, Rao G, Tummala S, Vitela CE, Sawaya R, Prabhu SS. Preoperative nTMS generated motor maps correlate well with Direct cortical stimulation-initial experience with 14 patients.

Book Chapters

1. **Levine NB**, Agazzi S, van Loveren HR. Choroid Plexus Tumors. In: *Neurosurgery Tricks of the Trade*.
2. Lee I, Sawaya R, **Levine N**. Intraoperative Non-Hematologic Adjuvant Methods For Preventing Blood Loss. In: *Handbook of Bleeding and Coagulation for Neurosurgeons*. Ed(s) Hamilton M, Couldwell W, Pineo G, Golfinos J. Thieme: New York.
3. Fox B, **Levine N**. Post Surgical Care of the Critically Ill Cancer Patient - Neurosurgery. In: *Cancer Critical Care*.

INSTRUCTION

Direct Supervision Undergraduate and Allied Health Students

Mentor, Summer Student Program, The University of Texas MD Anderson Cancer Center, Houston, TX, Andrea Fragoso, 2013

Mentor, Summer Student Program, The University of Texas MD Anderson Cancer Center, Houston, TX, Britney Lovell, 2013

Mentor, UCSF Fresno Latino Center for Medical Education and Research, Doctors Academy (6 week program with clinical, hospital and research exposure for high school students), Fresno, CA, Summer 2018 and 2019

Medical Students

Research Mentor, Ali Alam, Alternative therapeutic options for subependymoma: A noninvasive approach, 2013

Postdoctoral Research Fellows

Research Mentor, Wael Hassaneen, MD, Immunohistochemical detection of somatostatin receptor subtype 5 (SSTR-5) in Cushing adenoma, 2010-2011

Research Mentor, Kristine Dziurzynski, MD, Butterfly glioblastomas: a retrospective review and qualitative assessment of outcomes, 2011-2012

Clinical Residents and Fellows

Mentor, Ashwin Viswanathan, MD, 2008-2009

Mentor, David Rosen, MD, 2008-2009

Mentor, Eric St. Clair, MD, 2008-2009

Mentor, Joseph Martinez, MD, 2008-2009

Mentor, Adam Wu, MD, 2008-2010

Mentor, Gareth Adams, MD, PhD, 2008-2010 Mentor, Krishna Satyan, MD, 2008-2010

Mentor, Benjamin Fox, MD, 2008-2011

Mentor, Daniel Fahim, MD, 2008-2011

Mentor, Roukoz Chamoun, MD, 2008-2011

Mentor, Baraa Al-Hafez, MD, 2008-2012

Mentor, Ryan Kitagawa, MD, 2008-2012 Mentor, Tarek Abuelem, MD, 2008-2012

Mentor, William Hemphries, MD, 2008-2012

Mentor, Akash Patel, MD, 2008-2013

Mentor, Deshdeepak Sahni, MD, 2008-2013

Research Mentor, George Al-Shamy, MD, Meningiomas involving the dural venous sinuses: Surgical Outcome in 118 patients, 2008-2013

Mentor, Bartley Mitchell, MD, 2008-2014

Mentor, Jonathan Thomas, MD, 2008-2014

Mentor, Vikas Rao, MD, 2008-2014

Research Mentor, Andrew Tsung, MD, Fourth ventricular tumor surgery: Operative outcomes in a modern-day series of 52 cases, 2009-2010

Mentor, Jaime Gasco-Tamarit, MD, 2009-2010

Mentor, Magdalena Banasiak, MD, 2009-2010

Mentor, Timothy Siu, MD, 2009-2010

Mentor, Ali Jalali, MD, 2009-2015

Mentor, G. Duemani Reddy, MD, PhD, 2009-2015

Mentor, Jared Fridley, MD, 2009-2015

Mentor, Aziz Hatiboglu, MD, 2010-2011

Mentor, Danny Liang, MD, 2010-2011

Research Mentor, Ian Lee, MD, Intraoperative Non-Hematologic Adjuvant Methods For Preventing Blood Loss, 2010-2011

Mentor, Jason Beiko, MD, PhD, 2010-2011

Research Mentor, MI Khan, MD, Post-operative day 3 cortisol as a predictor of HPA axis integrity after transsphenoidal surgery, 2010-2011

Mentor, Jonathan Sellin, MD, 2010-2017

Mentor, Loyola Gressot, MD, 2010-2017

Mentor, Betty Kim, MD, PhD, 2011-2012

Mentor, David Paulson, 2011-2012

Mentor, Fassil Mesfin, MD, PhD, 2011-2012
Mentor, Lana Christiano, MD, 2011-2012
Mentor, Paul Kongkham, MD, PhD, 2011-2012
Mentor, Sherise Ferguson, MD, 2011-2012
Mentor, Tal Shahar, MD, 2011-2013
Mentor, Anish Sen, MD, 2011-2018
Mentor, Jacob Cherian, MD, 2011-2018
Mentor, Zheng Lan, MD, 2011-2018
Mentor, Adrian Harvey, MD, 2012-2013
Research Mentor, M Alves Ortega, MD, Impact of chemotherapy and radiotherapy on the success of cerebrospinal fluid leak repair after trans-nasal endoscopic resection of skull bases tumors, 2012-2013
Mentor, Mateo Ziu, MD, 2012-2013
Mentor, Nicholas Marko, MD, 2012-2013
Research Mentor, T Ow, MD, Multimodality therapy optimizes long-term outcome in patients with esthesioneuroblastoma, 2012-2013
Mentor, Eric Momin, MD, 2012-2019
Mentor, Pascal Zinn, MD, PhD, 2012-2019
Mentor, Rory Mayer, MD, 2012-2019
Mentor, Michael Dirks, MD, 2013-2014
Mentor, Rohan Ramakrishna, MD, 2013-2014
Mentor, Shaan Raza, MD, 2013-2014
Mentor, Yan Li, MD, PhD, 2013-2014

Other Supervisory Teaching

Research Mentor, University of South Florida, AA Baaj, Simulation-based and tiered curriculum protocol for resident training in cerebral revascularization, 2008
Research Mentor, Roger Rotta, MD, Preoperative nTMS generated motor maps correlate well with Direct Cortical Stimulation, Visiting Professor, 2013
Research Mentor, Baylor College of Medicine, Sabih Effendi, MD, The Transsylvian and Transcortical Approaches for Insular Glioma Resection: Microsurgical Anatomy and an Anatomical and Outcome Comparison, 2013-2014

Didactics and Training Programs

Instructor, Surgical Strategies: Surgical Approaches to Basilar Aneurysms/Didactic Lecture Series/Department of Neurosurgery, Baylor College of Medicine, Houston, TX, 11/2008

Instructor, Endoscopic and robotic approaches to the pituitary/Pan American Robotic Oncology Symposium, The University of Texas MD Anderson Cancer Center, Houston, TX 2/2009

Instructor, Endoscopic Assisted Microsurgical Resection of Skull Base Meningiomas: Semantics: how language is used to achieve a desired effect/Didactic Lecture Series/Department of Neurosurgery, Baylor College of Medicine, Houston, TX, 4/2009

Instructor, Cranial anatomy - Meningiomas/Oncology Nurse Specialists Educational Meeting, The University of Texas MD Anderson Cancer Center, Houston, TX 6/2009

Instructor and Organizer, Neuroanatomy Lab/Annual Kempfer Functional Brain Anatomy Seminar, The University of Texas MD Anderson Cancer Center, Houston, TX, 1/2010 and 1/2011

Instructor, Minimally Invasive Cranial Neurosurgery/Annual MINTOS Education &

Laboratory Session, The University of Texas MD Anderson Cancer Center, Houston, TX
7/2010 and 9/2011

Instructor, Far Lateral Approach for Dummies/Didactic Lecture Series/Department of
Neurosurgery, Baylor College of Medicine, Houston, TX, 12/2010

Instructor, Skull Base Tumors/The 5th Annual Kempfer Functional Brain Anatomy, The
University of Texas MD Anderson Cancer Center, Houston, TX, 1/2011

Instructor, Bedside Neurosurgical Procedures and Craniotomy Skills/Society of
Neurological Surgeons Boot Camp, Baylor College of Medicine, Houston, TX, 7/2011 and
7/2012

Director, Neuroanatomy Lab/Annual Kempfer Functional Brain Anatomy, Nicholson
Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College
of Medicine, Houston, TX 1/2012 and 1/2013

Instructor, Field of Dreams: Building a Microsurgical Laboratory/Didactic Lecture
Series/Department of Neurosurgery, Baylor College of Medicine, Houston, TX, 4/2012

Director, First Annual Nicholson Lecture in Surgical Neuroanatomy and Research with Dr.
Albert Rhoton, Jr, Nicholson Microsurgical and Endoscopic Center for Clinical
Applications Laboratory/Baylor College of Medicine, Houston, TX, 5/2012

Lab Director, Bedside Neurosurgical Procedures and Craniotomy Skills/Society of
Neurological Surgeons Boot Camp, Nicholson Microsurgical and Endoscopic Center for
Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 7/2012 and
7/2013

Director and Instructor, Surgical Spine Approaches Course I of IV, Nicholson
Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College
of Medicine, Houston, TX, 7/2012

Director, Annual Congress of Neurological Surgeons 3-D Surgical Anatomy Course for
Senior Residents, Nicholson Microsurgical and Endoscopic Center for Clinical
Applications Laboratory/Baylor College of Medicine, Houston, TX, 8/2012 and 8/2013

Director and Instructor, First Annual MDACC Endoscopic Skull Base Course, Nicholson
Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College
of Medicine, Houston, TX, 8/2012

Director, Flap Dissection Course, Training of Plastic Surgery Residents, Plastic Surgery,
UT MD Anderson Cancer Center, Nicholson Microsurgical and Endoscopic Center for
Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 9/2012

Fields of Dreams: Build It and Surgeons Will Come/Division of Surgery Town Hall, The
University of Texas MD Anderson Cancer Center, Houston, TX, 9/2012 Director and
Instructor, Surgical Spine Approaches Course II of IV, Nicholson Microsurgical and
Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine,
Houston, TX, 11/2012

Director, Synthes Rib Training Lab, Nicholson Microsurgical and Endoscopic Center for
Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 12/2012

Lecturer, Field of Dreams: Build It and Surgeons Will Come/MINTOS (Minimally Invasive
and New Technology in Oncologic Surgery) Meet & Greet, The University of Texas MD
Anderson Cancer Center, Houston, TX, 2/2013

Director, Head & Neck Surgical Approaches/Head & Neck, UT MD Anderson Cancer
Center, Nicholson Microsurgical and Endoscopic Center for Clinical Applications
Laboratory/Baylor College of Medicine, Houston, TX 3/2013 and 6/2014 Director and
Instructor, Surgical Spine Approaches Course III of IV, Nicholson Microsurgical and
Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine,
Houston, TX, 3/2013

Director, MINTOS Cadaver Course, Division of Surgery Fellows Course, UT
MD Anderson Cancer Center, Nicholson Microsurgical and Endoscopic Center for Clinical
Applications Laboratory/Baylor College of Medicine, Houston, TX 4/2013 and 5/2014

Director, Second Annual Nicholson Lecture in Surgical Neuroanatomy and Research with Dr. Jon H. Robertson, Nicholson Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 4/2013
Lab Director, 24th Annual George J. Ehni MD, Workshop with Dr. Ugur Ture, Nicholson Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 5/2013

Instructor, Field of Dreams: Building a Microsurgical Laboratory/Grand Rounds/Department of Neurosurgery, Methodist Hospital, Houston, TX 8/2013

Director, Third Annual Nicholson Lecture in Surgical Neuroanatomy and Research with Dr. William Couldwell, Nicholson Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 4/2014

Lab Director, 25th Annual George J. Ehni MD, Workshop with Dr. Robert Spinner, Nicholson Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 6/2014

Lab Director, Temporal Bone Dissection Course, Nicholson Microsurgical and Endoscopic Center for Clinical Applications Laboratory/Baylor College of Medicine, Houston, TX, 6/2014

Instructor, Neurosurgery 101/Language Assistant Department, The University of Texas MD Anderson Cancer Center, Houston, TX 6/2014

CONFERENCES AND SYMPOSIA Organization of Conferences/Symposia (Include chairing session)

The Future of Skull Base Surgery Symposium, AANS/CNS Tumor II Section Session, 81st Annual American Association of Neurological Surgeons Meeting, New Orleans, LA, CoModerator, 4/2013

Proffered Paper IV: Pituitary Tumors, NASBS 24th Annual Meeting, North American Skull Base Society, San Diego, CA, Co-Moderator, 2/2014

Presentations at National or International Conferences Invited

Blunt cerebrovascular injury: evaluation and management/Ringer AJ, Levine NB, Mayfield Winter Neuroscience Symposium, Snowmass, CO, 2/2002

Team approach to the operative management of the spinal surgery patient, AO ASIF: Spine Course for Operating Room Personnel, Hilton Cincinnati Netherland Plaza, Cincinnati, OH, 10/2002

Selection criteria for blunt cerebrovascular injury screening (Poster)/Ringer AJ, Maher PC, Levine NB, Matern E, CV/ASITIN Meeting, San Diego, CA, 2/2004

Posteromedian extracavitary approach to the thoracolumbar spine: a single incision approach for circumferential decompression, reconstruction, and arthrodesis/Bohinski RJ, Levine NB, Mayfield Winter Neuroscience Symposium, Snowmass, CO, 2/2005

Posteromedian extracavitary approach to the thoracolumbar spine: a single incision approach for circumferential decompression, reconstruction, and arthrodesis (Poster)/Levine NB, Kuntz C, Bohinski RJ, AO ASIF Spine Tumor Symposium, Baltimore, MD, 10/2005

Treatment options: metastatic tumors of the spine (Poster)/Kuntz C, Bohinski RJ, Breneman JC, Ringer AJ, Levine NB, 3rd Annual International Course on Spinal Focus, New York, NY, 12/2005

Endoscopic colloid cyst resection/Crone KR, Levine NB, The Winter Clinics for Cranial and Spinal Surgery, Snowmass, CO, 2/2006

Multilevel ACDF with BMP/Bohinski RJ, Levine NB, The Winter Clinics for Cranial and Spinal Surgery, Snowmass, CO, 2/2006

Treatment of metastatic spine tumors/Bohinski RJ, Levine NB, The Winter Clinics for Cranial and Spinal Surgery, Snowmass, CO, 2/2006

Simulation-based and tiered curriculum protocol for resident training in cerebral revascularization (Digital Poster)/Baaj AA, Levine NB, Choutka OJ, Agazzi S, Keller JT, Zuccarello M, van Loveren HR, Southern Neurosurgical Society Annual Meeting, Las Croabas, Puerto Rico, 2/2008

Skull base surgery: my worst complication and what I learned from the experience/Galenic venous system: implications of vein of Galen sacrifice., The Winter Clinics for Cranial and Spinal Surgery, Snowmass, CO, 2/2008

Endoscopic assisted microsurgical resection of skull base meningiomas semantics: how language is used to achieve a desired effect, AANS/CNS Section on Tumors I, An Expert Panel Discussion on Suprasellar Meningiomas: Thoughts and Strategies for Microscopic Versus Endoscopic Surgical Resection/van Loveren HR, Levine NB, American Association of Neurosurgical Annual Meeting, Chicago, IL, 4/2008

Practical Exercise: FTOZ and Cavernous Sinus, Approaches to the Skull Base Workshop, USF/Midas Rex Institute Workshop, Fort Worth, TX, 6/2008

Surgical Strategies: Surgical approaches to basilar aneurysms, Approaches to the Skull Base Workshop, USF/Midas Rex Institute Workshop, Fort Worth, TX, 6/2008

Mastoidectomy, landmarks and technique. Skull Base Surgery Workshop for Senior Neurosurgical Residents and Head & Neck Fellows, NASBS Summer Course, New Orleans, LA, 7/2014

Mastoidectomy, landmarks and technique. Skull Base Surgery Workshop for Senior Neurosurgical Residents and Head & Neck Fellows, NASBS Summer Course, New Orleans, LA, 7/2015

Scientific Exhibitions

Post-operative day 3 cortisol as a predictor of HPA axis integrity after transsphenoidal surgery (Poster)/Khan MI, McCutcheon IE, Noguera-Gonzalez GM, Munsell MF, Devin JK, Jimenez C, Habra MA, Levine NB, Waguespack SG, ENDO, San Diego, CA, 6/2010

Fourth ventricular tumor surgery: Operative outcomes in a modern-day series of 52 cases (Poster)/Tsung AJ, Suki D, Hassaneen W, Sawaya R, Levine NB, Congress of Neurological Surgeons 2010 Annual Meeting, San Francisco, CA, 10/2010

A Qualitative Assessment of Outcomes in Patients with Butterfly Glioblastoma (Poster)/Dziurzynski K, Blas-Boria D, Cahill D, Prabhu S, Suki D, Puduvali V, Levine N, 2011 SNO Scientific Meeting and Education Day, Orange County, CA, Orange County, CA, 11/2011
Impact of chemotherapy and radiotherapy on the success of cerebrospinal fluid leak repair after trans-nasal endoscopic resection of skull base tumors (Poster)/Ortega Alves M, Levine NB, DeMonte F, Hanna E, Kupferman M, 22nd Annual North American Skull Base Society, Las Vegas, NV, 2/2012

Meningiomas involving the dural venous sinuses: Surgical Outcome in 118 patients (Oral Presentation)/Al Shamy G, Gressot L, Suki D, Sawaya R, DeMonte F, Levine NB, 22nd Annual North American Skull Base Society, Las Vegas, NV, 2/2012

Multimodality therapy optimizes long-term outcome in patients with esthesioneuroblastoma (Poster)/Ow T, Hanna E, Roberts D, Levine NB, El-Naggar A, Rosenthal D, DeMonte F, Kupferman M, 8th International Conference on Head & Neck Cancer, Toronto, Ontario, Canada, 7/2012

Alternative therapeutic options for subependymoma: A noninvasive approach (Poster)/Alam A, Wei J, Kong LY, Conrad C, Fuller G, Levine NB, Priebe W, Sawaya R, Heimberger AB, American Association of Neurological Surgeons Annual Meeting, New Orleans, LA, 4/2013

Clinical outcomes and patterns of failure in pineoblastoma: a 30-year single institution experience, Oral Presentation: Farnia B, Allen PK, Brown P, Khatua S, Levine NB, Li J, Penas-Prado M, Mahajan A, ASTRO's 56th Annual Meeting, San Francisco, CA, 9/2014

Insular glioma resection: The MD Anderson Experience, (Oral Presentation) Effendi ST, Levine NB, Lang FF, Section on Tumors, Congress of Neurological Surgeons 2014 Annual Meeting, Boston, MA, 10/2014

Speech Maps generated by nTMS and Correlation with Direct Intraoperative Electrical Stimulation, Poster: Rotta R, Tummala S, Levine N, Rao G, Lang F, Weinberg J, Sawaya R, Suki D, Prabhu SS, The 19th Annual Scientific Meeting and Education Day of the Society for Neuro-Oncology, Miami, FL, 11/2014

Seminar Invitations from Other Institutions

First annual minimalist approach to ordinary and extraordinary intracranial surgery, Goodyear Microsurgery Laboratory, University of Cincinnati Medical Center, Cincinnati, OH, 6/2005

Second annual minimalistic approach to ordinary and extraordinary surgery, Goodyear Microsurgery Laboratory, University of Cincinnati Medical Center, Cincinnati, OH, 7/2006
How to perform a third ventriculostomy, Microscopic and Endoscopic Approaches for the Skull Base, Allegheny General Hospital, Pittsburgh, PA, 10/2007
Variations of the transcondylar approach/van Loveren HR, Levine NB, Microscopic and Endoscopic Approaches for the Skull Base, Allegheny General Hospital, Pittsburgh, PA, 10/2007
Endoscopic third ventriculostomy, Skull Base Course, University of South Florida, Tampa, FL, 2/2008
How to perform a third ventriculostomy, Microscopic and Endoscopic Approaches for the Skull Base, Allegheny General Hospital, Neurosurgery, Pittsburgh, PA, 10/2008
Everything you always wanted to know about endoscopic third ventriculostomy but were afraid to ask, 7th Annual Masters Course in Skull Base Surgery, University of South Florida, Neurosurgery, Tampa, FL, 2/2009
Transcondylar Approach: How I do it in the lab, Microscopic and Endoscopic Approaches for the Skull Base, Allegheny General Hospital, Neurosurgery, Pittsburgh, PA, 10/2009
Approaches to the pineal region, Microscopic and Endoscopic Approaches for the Skull Base, Allegheny General Hospital, Neurosurgery, Pittsburgh, PA, 10/2011

Lectureships and Visiting Professorships

Tour of MECCA (Microsurgical and Endoscopic Center for Clinical Applications) Laboratory, Baylor President's Circle, Baylor College of Medicine, Office of Development and Advancement, Houston, TX, 1/2014

Other Presentations at State and Local Conferences

Age-dependent effects of hyperglycemia on ischemic brain damage in Fischer 344 Rats (Poster)/Levine NB, Geer CP, Keep R, 43rd Annual Student Biomedical Research Forum, American Medical Association, MI, 1997
Age-dependent effects of hyperglycemia on ischemic brain damage in Fischer 344 Rats/Levine NB, Geer CP, Cardiovascular Research Forum, American Heart Association, MI, 1998
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 7/2002
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 11/2002
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 3/2003
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 7/2003
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 11/2003
Vertebroplasty and kyphoplasty in the treatment of vertebral compression fractures., 10th Annual Neuroscience Symposium, TriHealth, Cincinnati, OH, 11/2003
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 4/2004
Spine 101, Mayfield Clinic, Cincinnati, OH, 6/2004
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 7/2004
Cranial 101, Mayfield Clinic, Cincinnati, OH, 11/2004
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 11/2004
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 3/2005
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 7/2005
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 11/2005
Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory, Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 11/2005

Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 7/2006

Spine 101, Mayfield Clinic Associate Grand Rounds, Cincinnati, OH, 1/2007

Neurosurgery 101: a training program for Codman sales personnel, Goodyear Laboratory,

Codman, Inc., University of Cincinnati Medical Center, Cincinnati, OH, 3/2007

Cranial Stabilization, Roundtable Meeting, Integra, Cincinnati, OH, 3/12/2011

Neuro-Oncology: An interactive Discussion with our Physicians; Skull base: A frame of mind.

Lynn Cancer Institute, Harvey and Phyllis Sandler Pavilion, Boca Raton, FL, 2/26/2015

It's Raining CSF: Marcus Neuroscience Institute Nursing Lecture. Marcus Neuroscience Institute, Boca Raton, FL 11/5/2015

It's Raining CSF: Marcus Neuroscience Institute Nursing Lecture. Marcus Neuroscience Institute, Boca Raton, FL 11/6/2015

Everything You Ever Wanted to Know about Wounds but were Afraid to Ask: Marcus Neuroscience Institute Nursing Lecture. Marcus Neuroscience Institute, Boca Raton, FL 11/17/2015

My Life as a Neurosurgeon: Florida Atlantic University Medical School Neuroscience Interest Group. Florida Atlantic University Medical School, Boca Raton, FL 11/30/15

Everything You Ever Wanted to Know about Meningiomas, but were Afraid to Ask: UCSF Fresno Neurosurgery Physician Assistant Boot Camp. UCSF Fresno, Fresno, CA 2/21/2018, 2/28/2018.

Skull Base: A Frame of Mind: UCSF Fresno Neurosurgery Physician Assistant Boot Camp. UCSF Fresno, Fresno, CA 2/21/2018, 2/28/2018.

Skull Base: A Frame of Mind: CMC Brain Tumor Support Group. California Cancer Center, Community Medical Centers, Fresno, CA 3/1/2018

UCSF Fresno- Symposium, Endocrine and Diabetes for Primary Care Providers: A Primary Care Providers Primer Evaluation of Pituitary Lesions, Fresno, CA, 2019

PROFESSIONAL MEMBERSHIPS/ACTIVITIES Professional Society Activities, with Offices Held National and International

American Medical Student Association, 1996-2007

American Medical Association, 1996-2008

American Association of Neurological Surgeons, 2000-present

Congress of Neurological Surgeons, 2000-present

AANS/CNS Section on Tumors, 2000-present

Skull Base Representative to Executive Committee 6/2011-6/2013

Matrix Committee Member, 2011

Abstract Reviewer for Annual Meeting, 2012

AANS/CNS Section on Disorders of the Spine and Peripheral Nerves, 2006-present

Society of Neuro-Oncology, 2008-present

American Society of Clinical Oncology, 2008-2016

North American Skull Base Society, 2008-present

Pituitary Network Association, 2008-2016

Pituitary Society, 2008-2016

Local/State

Harris County Medical Society, Houston, TX, 2008-2014

Houston Neurological Society, Houston, TX, 2008-2014

Texas Association of Neurological Surgeons, Austin, TX, 2008-2014

Florida Neurosurgical Society, Norcross, GA, 2015-2016

DATE OF LAST CV UPDATE

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