

RESEARCH ACTIVITIES**H-index (Harzing calculator, version 5.26.2.6249) as of 2/13/2017 = 39****Peer-reviewed Original Science Publications**

1. Brogan JM, Acciai J, **Gallia GL**, McCleskey FK, DelVecchio VG. Development of a DNA probe for *Ureaplasma Urealyticum*. *Mol Cell Probes* 1992;6:411-6.
2. Kerr D, Chang CF, Chen N, **Gallia G**, Raj G, Schwartz B, Khalili K. Transcription of a human neurotropic virus promoter in glial cells: effect of YB-1 on expression of the JC virus late gene. *J Virol* 1994;68:7637-43.
3. Chen NN, Chang CF, **Gallia GL**, Kerr DA, Johnson EM, Krachmarov CP, Barr SM, Frisque RJ, Bollag B, Khalili K. Cooperative action of cellular proteins YB-1 and Pur α with the tumor antigen of the human JC polyomavirus determines their interaction with the viral lytic control element. *Proc Natl Acad Sci USA* 1995;92:1087-91.
4. **Gallia GL**, Petroziello JM, Brogan JM, McCleskey FK, DelVecchio VG. Development of a diagnostic polymerase chain reaction assay for detection of *Mycoplasma hominis*. *Mol Cell Probes* 1995;9:415-21.
5. Chang CF, **Gallia GL**, Muralidharan V, Chen NN, Zoltick P, Johnson E, Khalili K. Evidence that DNA replication of human neurotropic JC virus DNA in glial cells is regulated by a sequence-specific single-stranded DNA-binding protein Pur-alpha. *J Virol* 1996;70:4150-6.
6. **Gallia GL**, Houff SA, Major EO, Khalili K. JCV infection of lymphocytes-revisited. *J Infect Dis* 1997;176:1603-9.
7. **Gallia GL**, Gordon J, Khalili K. Tumor pathogenesis of human neurotropic JC virus in the CNS. *J NeuroVirol* 1998;4:175-81.
8. **Gallia GL**, Khalili K. Evaluation of an autoregulatory tetracycline system. *Oncogene* 1998;16:1879-84.
9. Tretiakova A, **Gallia GL**, Shcherbik N, Jameson B, Johnson EM, Khalili K. Association of Pur α with RNAs homologous to 7 SL determines its binding ability to the myelin basic protein promoter DNA sequence. *J Biol Chem* 1998;35:22241-7.
10. Raj GV, **Gallia GL**, Chang CF, Khalili K. T-antigen-dependent transcriptional initiation and its role in the regulation of human neurotropic JC virus late gene expression. *J Gen Virol* 1998;79:2147-55.
11. Howard CM, Claudio PP, **Gallia GL**, Gordon J, Giordano GG, Hauck WH, Khalili K, Giordano A. Retinoblastoma-related protein pRb2/p130 and suppression of tumor growth in vivo. *J Natl Cancer Institute* 1998;90:1451-60.
12. **Gallia GL**, Safak M, Khalili K. Interaction of the single-stranded DNA-binding protein Pur α with the human polyomavirus JC virus early protein T-antigen. *J Biol Chem* 1998;273:32662-9.
13. Safak M, **Gallia GL**, Khalili K. Reciprocal interaction between two cellular proteins, Pur α and YB-1, modulates transcriptional activity of JCVcy in glial cells. *Mol Cell Biol* 1999;19:2712-23.
14. **Gallia GL**, Darbinian N, Johnson EM, Khalili K. Self-association of Pur α is mediated by RNA. *J Cell Biochem* 1999;74:334-48.
15. Dierov J, Prosniak M, **Gallia GL**, Gartenhaus RB. Increased G1 cyclin/cdk activity in cells overexpressing the candidate oncogene MCT-1. *J Cell Biochem* 1999;74:551-61.
16. Safak M, **Gallia GL**, Khalili K. A novel inducible element, 23 bpse, from human neurotropic JC virus is responsive to NF-kB subunits. *Virol* 1999;262:178-89.
17. Ansari SA, Safak M, **Gallia GL**, Sawaya B, Amini S, Khalili K. Interaction of YB-1 with human immunodeficiency virus type 1 Tat and TAR modulates viral promoter activity. *J Gen Virol* 1999;80:2629-38.
18. **Gallia GL**, Darbinian N, Tretiakova A, Ansari S, Rappaport J, Brady J, Wortman MJ, Johnson EM, Khalili K. Association of HIV-1 Tat with the cellular protein, Pur α , is mediated by RNA. *Proc Natl Acad Sci USA* 1999;96:11572-7.
19. Darbinian N, **Gallia GL**, Kundu M, Shcherbik N, Tretiakova A, Khalili K. Association of Pur α and E2F-1 suppresses transcriptional activity of E2F-1. *Oncogene* 1999;18:6398-402.
20. Safak M, **Gallia GL**, Ansari SA, Khalili. Physical and functional interaction between the Y-box binding protein YB-1 and the human polyomavirus JC virus large T-antigen. *J Virol* 1999;73:10146-57.
21. Wortman MJ, Krachmarov CP, Kim JH, Gordon RG, Chepenik LG, Brady JN, **Gallia GL**, Khalili K, Johnson EM. Interaction of HIV-1 Tat with Pur alpha in nuclei of human glial cells: characterization of RNA-mediated protein-protein binding. *J Cell Biochem* 2000;77:65-74.
22. Gordon J, **Gallia GL**, DelValle L, Amini S, Khalili K. Human polyomavirus JCV and expression of myelin genes. *J NeuroVirol* 2000;6:S92-7.
23. **Gallia GL**, Johnson EM, Khalili K. Pur α : a multifunctional single-stranded DNA- and RNA- binding protein. *Nuc Acids Res* 2000;28:3197-205.
24. Darbinian N, **Gallia GL**, Khalili K. Helix-destabilizing properties of the human single-stranded DNA- and RNA-binding protein Pur α . *J Cell Biochem* 2001;80:589-95.
25. Daniel DC, Wortman MJ, Schiller RJ, Liu H, Gan L, Mellen JS, Chang CF, **Gallia GL**, Rappaport J, Khalili K, Johnson EM. Coordinate effects of human immunodeficiency virus type 1 protein Tat and cellular protein Pur α on DNA replication initiated at the JC virus origin. *J Gen Virol* 2001;82:1543-53.

26. **Gallia GL**, DelValle L, Laine C, Curtis M, Khalili K. Concomitant progressive multifocal leukoencephalopathy and primary central nervous system lymphoma expressing JC virus oncogenic protein, large T-antigen. *Mol Pathol* 2001;54:354-59.
27. **Gallia GL**, Darbinian N, Jaffe N, Khalili K. Single-stranded nucleic acid-binding protein, Pur α , interacts with RNA homologous to 18S ribosomal RNA and inhibits translation in vitro. *J Cell Biochem* 2001;83:355-63.
28. Darbinian N, **Gallia GL**, King J, DelValle L, Johnson EM, Khalili K. Growth inhibition of glioblastoma cells by human Pur α . *J Cell Physiol* 2001;189:334-40.
29. **Gallia GL**, Weiss N, Campbell J, McCarthy EF, Tufaro AP, Gokaslan ZL. Synovial chondromatosis of the spine: report of two cases and review of the literature. *J Neurosurg: Spine* 2004;2:69-75.
30. Darbinian N, White MK, **Gallia GL**, Amini S, Rappaport J, Khalili K. Interaction between the Pur-alpha and E2F-1 transcription factors. *Anticancer Res* 2004;24:2585-94.
31. Mantha A, Legnani FG, Bagley CA, **Gallia GL**, Garonzik I, Pradilla G, Amundson E, Tyler BM, Brem H, Gokaslan ZL. A novel rat model for the study of intraosseous metastatic spine cancer. *J Neurosurg: Spine* 2005;3:303-7.
32. **Gallia GL**, Moore C, Jordan L, Gailloud P, Jallo G. Neonatal cavernous carotid artery aneurysm. *J Neurosurg: Pediatrics* 2005;102:332-7.
33. Fournay DR, Rhines LD, Hentschel SJ, Skibber JM, Wolinsky JP, Weber KL, Suki D, **Gallia GL**, Garonzik I, Gokaslan ZL. En bloc resection of primary sacral tumors: Classification of surgical approaches and outcome. *J Neurosurg: Spine* 2005;3:111-22.
34. **Gallia GL**, Brem S, Brem H. Local treatment of malignant brain tumors using implantable chemotherapeutic polymers. *J Natl Comp Cancer Center* 2005;3:721-8.
35. **Gallia GL**, Sciubba D, Hann CL, Raman SP, Westra WH, Tufaro AP, Olivi A. Synovial sarcoma of the frontal sinus. *J Neurosurg* 2005;103:1077-80.
36. **Gallia GL**, Haque R, Garonzik I, Witham TF, Khavkin YA, Wolinsky JP, Suk I, Gokaslan ZL. Spinal pelvic reconstruction after total sacrectomy for en bloc resection of a giant sacral chordoma. *J Neurosurg: Spine* 2005;3:21-2.
37. Witham TF, Khavkin YA, **Gallia GL**, Wolinsky JP, Gokaslan ZL. Current management of epidural spinal cord compression from metastatic spine disease. *Nature Clinical Practice Neurol* 2006;2:87-94.
38. **Gallia GL**, Burger PC, Suk I, Bagley CA, Wolinsky JP, Garonzik I, Gokaslan ZL. Concomitant conus medullaris ependymoma and filum terminale lipoma. *Neurosurg* 2006;58:E1214.
39. Sciubba DM, Garonzik IM, Suk I, **Gallia GL**, Tufaro A, Wolinsky JP, Taghva A, Gokaslan ZL. Frameless stereotaxy in a transmandibular, circumglossal, retropharyngeal cervical decompression in a klippel-feil patient: technical note. *Eur Spine J* 2006;15:1286-91.
40. Sciubba DM, **Gallia GL**, Recinos P, Garonzik IM, Clatterbuck RE. Intracranial aneurysm following radiation therapy during childhood for a pediatric brain tumor. Case report and review of the literature. *J Neurosurg: Pediatrics* 2006;105:134-9.
41. **Gallia GL**, Rigamonti D, Williams MA. The diagnosis and management of normal pressure hydrocephalus. *Nature Clinical Practice Neurol* 2006;2:375-81.
42. **Gallia GL**, Tamargo RJ. Leukocyte-endothelial cell interactions in chronic vasospasm after subarachnoid hemorrhage. *Neurol Res* 2006;28:750-8.
43. **Gallia GL**, Rand V, Siu IM, Eberhart CG, James CD, Marie SKN, Oba-Shinjo SM, Carlotti CG, Caballero OL, Simpson AJG, Brock MV, Massion PP, Carson BS, Riggins GJ. *PIK3CA* gene mutations in pediatric and adult glioblastoma multiforme. *Mol Cancer Res* 2006;4:709-14.
44. Lin LM, Sciubba DM, **Gallia GL**, Sosnowski J, Weingart JD. Diethylstilbestrol (DES) induced clear cell adenocarcinoma of the vagina metastasizing to the brain. *Gynec Oncol* 2007;105:273-6.
45. Sciubba DM, **Gallia GL**, McGirt MJ, Woodworth GF, Garonzik IM, Witham TF, Gokaslan ZL, Wolinsky JP. Thoracic kyphotic deformity reduction with a distractible titanium cage via an entirely posterior approach. *Neurosurgery* 2007;60:223-30.
46. **Gallia GL**, Sciubba DM, Suk I, Witham TF, Wolinsky JP, Gokaslan ZL. Total L-5 spondylectomy and reconstruction of the lumbo-sacral junction. *J Neurosurg: Spine* 2007;7:103-11.
47. **Gallia GL**, Teo C. Spontaneous third ventriculocisternostomy in an infant with obstructive hydrocephalus. *J Neurosurg: Pediatrics* 2008;1:477-80.
48. Siu IM, Bai R, **Gallia GL**, Edwards JB, Tyler BM, Eberhart CG, Riggins. Coexpression of neuronatin splice forms promotes medulloblastoma growth. *Neuro Oncol* 2008;10:716-24.
49. Parsons DW, Jones S, Zhang X, Lin JC, Leary RJ, Angenendt P, Mankoo P, Carter H, Siu IM, **Gallia GL**, Olivi A, McLendon R, Rasheed BA, Keir S, Nikolskaya T, Nikolsky Y, Busam DA, Tekleab H, Diaz LA Jr, Hartigan J, Smith DR, Strausberg RL, Marie SK, Shinjo SM, Yan H, Riggins GJ, Bigner DD, Karchin R, Papadopoulos N, Parmigiani G, Vogelstein B, Velculescu VE, Kinzler KW. An integrated genomic analysis of human glioblastoma multiforme. *Science* 2008;321:1807-12.
50. **Gallia GL**, Sobotta MH. Traumatic epidural hematoma. *N Engl J Med* 2009;360:615.

51. **Gallia GL**, Tyler BM, Hann CL, Siu IM, Giranda VL, Brem H, Riggins G. Inhibition of Akt inhibits growth of glioblastoma and glioblastoma stem-like cells. *Mol Cancer Ther* 2009;8:386-93.
52. De Almeida JPC, Petteys RJ, Sciubba DM, **Gallia GL**, Brem H. Regression of intracranial meningioma following intratumoral hemorrhage. *J Clin Neurosci* 2009;16:1246-9.
53. Loilome S, Joshi AD, Ap Rhys CMJ, Piccirillo S, Vescovi AL, **Gallia GL**, Riggins GJ. Glioblastoma cell growth is suppressed by disruption of fibroblast growth factor pathway signaling. *J Neurooncol* 2009;94:359-66.
54. Roda RH, **Gallia GL**, Eberhart CG, Weingart JD, Lattera J. Epilepsy and temporal lobe injury after skull base proton beam therapy. *J Clin Neurosci* 2009;16:1220-1.
55. **Gallia, GL**, Binder A, Schwarz J, Moriarity JL, Weingart JD. Skull base chondrosarcoma presenting with intratumoral, intraparenchymal and intraventricular hemorrhage. *Can J Neurol Sci.*2009;36:774-5.
56. Holdhoff M, Supko JG, **Gallia, GL**, Hann CL, Bonekamp D, Ye X, Cao B, Olivi A, Grossman SA. Intratumoral concentrations of imatinib after oral administration in patients with glioblastoma multiforme. *J Neurooncol* 2010; 97:241-5.
57. Sciubba DM, Petteys RJ, Kang S, Than KD, Gokaslan ZL, **Gallia GL**, Wolinsky JP. Solitary spinal metastasis of Hurthle cell thyroid carcinoma. *J Clin Neurosci* 2010;17:797-801.
58. Raza SM, Garzon-Muvdi T, Boeahene K, Olivi A, **Gallia G**, Lim M, Subramanian P, Quinones-Hinojosa A. The supraorbital craniotomy for access to the skull base and intraaxial lesions: a technique in evolution. *Minim Invasive Neurosurg* 2010;53:1-8.
59. **Gallia GL**, Ishii M. A simple and versatile tissue adhesive applicator for endonasal endoscopic skull base surgery. Technical note. *J Clin Neurosci* 2010;17:914-6.
60. Bai R, Siu IM, Tyler BM, Staedtke V, **Gallia GL**, Riggins GJ. Evaluation of retinoic acid therapy for OTX2-positive medulloblastomas. *Neuro Oncol* 2010;2010:655-63.
61. Reh DD, **Gallia GL**, Ramanathan M, Solomon D, Moghkar A, Ishii M, Lane AP. Perioperative continuous cerebrospinal fluid pressure monitoring in patients with spontaneous cerebrospinal fluid leaks: presentation of a novel technique. *Am J Rhinol Allergy* 2010;24:238-43.
62. Siu, IM, Tyler BM, Chen JX, Eberhart CG, Thomale UW, Olivi A, Jallo GI, Riggins GJ, **Gallia, GL**. Establishment of a human GBM stem-like brainstem rodent model. *J Neurosurg: Pediatrics* 2010;6:92-7.
63. **Gallia GL**, Suk I, Witham TF, Gearhart SL, Black JH, Redett RJ, Sciubba DM, Wolinsky JP, Gokaslan ZL. Lumbo-pelvic reconstruction after combined L5 spondylectomy and total sacrectomy for en bloc resection of a malignant fibrous histiocytoma. *Neurosurg* 2010;67:E498-502.
64. **Gallia GL**, Ramanathan M, Blitz AM, Reh DD. Expanded endonasal endoscopic approach for resection of a juvenile nasopharyngeal angiofibroma with skull base involvement. *J Clin Neurosci* 2010;17:1423-7.
65. Raza SM, **Gallia GL**, Brem H, Weingart JD, Long DM, Olivi A. Peri-operative and long term outcomes from the management of parasagittal meningiomas invading the superior sagittal sinus. *Neurosurg* 2010;67:885-93.
66. Ahmidi N, Hager GD, Ishii L, Fichtinger G, **Gallia GL**, Ishii M. Surgical task and skill classification from eye tracking and tool motion in minimally invasive surgery. *Medical Image Computing and Computer-Assisted Intervention (MICCAI)* 2010;13:295-302.
67. Ishii M, **Gallia GL**. Application of technology for minimally invasive neurosurgery. *Neurosurgery Clin of North America* 2010;21:585-94.
68. **Gallia GL**, Ishii M. Sphenoid sinus fungus ball with skull base erosion. *Archives of Neurology* 2010;67:1528-9.
69. Salmasi V, Blitz AM, Ishii M, **Gallia GL**. Expanded endonasal endoscopic approach for resection of a large skull base aneurysmal bone cyst in a pediatric patient with extensive cranial fibrous dysplasia. *Child's Nervous System* 2011;27:649-56.
70. Parsons DW, Li M, Zhang X, Jones S, Leary RJ, Lin JC, Boca SM, Carter H, Samayoa J, Bettegowda C, **Gallia GL**, Jallo GI, Binder ZA, Nikolsky Y, Hartigan J, Smith DR, Gerhard DS, Fuhs DW, Vandenberg S, Berger MS, Marie SK, Shinjo SM, Clara C, Phillips PC, Minturn JE, Biegel JA, Judkins AR, Resnick AC, Storm PB, Curran T, He Y, Rasheed BA, Friedman HS, Keir ST, McLendon R, Northcott PA, Taylor MD, Burger PC, Riggins GJ, Karchin R, Parmigiani G, Bigner DD, Yan H, Papadopoulos N, Vogelstein B, Kinzler KW, Velculescu VE. The genetic landscape of the childhood cancer medulloblastoma. *Science* 2011;331:435-39.
71. Binder ZA, Joshi A, Johnson M, Hann CL, Griffin C, Olivi A, Riggins GJ, **Gallia GL**. Glioblastoma multiforme in the Muir-Torre syndrome. *Clinical Neurology and Neurosurgery* 2011;113:411-5.
72. Uneri A, Schafer S, Mirota D, Nithiananthan S, Otake Y, Reaungamornrat S, Yoo J, Stayman JW, Reh D, **Gallia GL**, Khanna AJ, Hager D, Taylor RH, Kleinszig G, Siewerdsen JH. Architecture of a High-Performance Surgical Guidance System Based on C-Arm Cone-Beam CT: Software Platform for Technical Integration and Clinical Translation. *Proc SPIE* 2011;7964:796422.
73. Mirota D, Uneri A, Schager S, Nithiananthan S, Reh DD, **Gallia, GL**, Hager GD, Siewerdsen JH. High-accuracy 3D image-based registration of endoscopic video to C-arm cone-beam CT for image-guided skull-base surgery. *Proc SPIE* 2011;7964:79640J.

74. **Gallia GL**, Reh DD, Salmasi V, Koch W, Ishii M. Endonasal endoscopic resection of esthesioneuroblastoma: The Johns Hopkins experience and review of the literature. *Neurosurg Review* 2011;34:465-75.
75. Tyler B, Wadsworth S, Recinos V, Mehta V, Vellimana A, Li K, Tosenblatt J, Do H, **Gallia GL**, Siu MI, Brem H. Local delivery of rapamycin: a toxicity and efficacy study in an experimental malignant glioma model. *Neuro-Oncol* 2011;13:700-9.
76. Bai, RY, Staedtke V, apRhys CM, **Gallia GL**, Riggins GJ. Anti-parasitic mebendazole shows survival benefit in two pre-clinical models of glioblastoma multiforme. *Neuro Oncol* 2011;13:974-82.
77. McDowell KA, Riggins GJ, **Gallia GL**. Targeting the AKT pathway in glioblastoma. *Curr Pharm Des* 2011; 17:2411-20.
78. Gerber DE, **Gallia GL**, Tyler BM, Eberhart CG, Royer G, Grossman SA. A novel polymer gel for the delivery of local therapies to intracranial tumors: *in vivo* safety evaluation *J Biomed Mater Res A* 2011;479-84.
79. Pendleton C, Raza SM, **Gallia GL**, Quinones-Hinojosa A. Harvey Cushing's approaches to tumors in his early career: from the skull base to the cranial vault. *Skull Base* 2011; 21-271-6.
80. Hsieh PC, **Gallia, GL**, Sciubba DM, Bydon A, Marco RA, Rhines L, Wolinsky JP, Gokaslan ZL. En-bloc excision of chordomas in the cervical spine: Review of 5 consecutive cases with over 4-year follow-up. *Spine* 2011;36:E1581-7.
81. Weber GL, Parat MO, Binder ZA, **Gallia GL**, Riggins GJ. Abrogation of PIK3CA or PIK3R1 reduces proliferation, migration, and invasion in glioblastoma multiforme cells. *Oncotarget* 2011;2:833-49.
82. Uneri A, Schafer S, Mirota DJ, Nithianathan S, Otake Y, Taylor RH, **Gallia GL**, Khanna AJ, Lee S, Reh DD, Siewerdsen JH. TREK: an integrated system architecture for intraoperative cone-beam CT-guided surgery. *Int J CARS* 2012;7:159-73.
83. Salmasi V, Reh DD, Blitz AM, Argani P, Ishii M, **Gallia GL**. Expanded endonasal endoscopic approach for resection of a skull base low grade smooth muscle neoplasm. *Child's Nervous System* 2012;28:151-8.
84. Hsu W, Siu IM, Pradilla G, Gokaslan ZL, Jallo GI, **Gallia GL**. Animal model of intramedullary spinal cord glioma using human glioblastoma multiforme neurospheres. *J Neurosurg: Spine* 2012;16:315-9.
85. Siu, IM, Tyler BM, Chen JX, Eberhart CG, Thomale UW, Olivi A, Jallo GI, Riggins GJ, **Gallia, GL**. Establishment of a human GBM stem-like brainstem rodent model. *J Neurosurg: Pediatrics* 2010;6:92-7.
86. Mirota D, Wang H, Taylor RH, Ishii M, **Gallia GL**, Hager GD. A system for video-based navigation for endoscopic endonasal skull base surgery. *Trends in Medical Imaging* 2012;31:963-76.
87. Raza SM, Garzon-Muvdi T, **Gallia GL**, Tamargo RJ. Craniofacial resection of midline anterior skull base malignancies: a reassessment of outcomes in the modern era. *World Neurosurg* 2012;78:128-36.
88. Lee S, **Gallia GL**, Reh DD, Schafer S, Uneri A, Mirota DJ, Nithianathan S, Otake Y, Stayman JW, Zbijewski W, Siewerdsen JH. Intraoperative C-arm cone-beam CT: quantitative analysis of surgical performance in skull base surgery. *Laryngoscope* 2012;122:1925-32.
89. Nithianathan S, Schafer S, Mirota DJ, Stayman JW, Zbijewski W, Reh DD, **Gallia GL**, Siewerdsen JH. Extra-dimensional demons: a method for incorporating missing tissue in deformable image registration. *Med Phys* 2012;39:5718-31.
90. Xia X, Ramanathan M, Orr BA, Salmasi V, Salvatori R, Reh D, **Gallia GL**. Expanded endonasal endoscopic approach for resection of a growth hormone-secreting pituitary macroadenoma coexistent with a cavernous carotid artery aneurysm. *J Clin Neurosci* 2012;19:1437-41.
91. **Gallia GL**, Reh DD, Lane AP, Higgins TS, Koch W, Ishii M. Endoscopic resection of esthesioneuroblastoma. *J Clin Neurosci* 2012;19:1478-82.
92. Liu WP, Mirota DJ, Uneri A, Otake Y, Hager G, Reh DD, Ishii M, Gallia GL, Siewerdsen JH. A clinical pilot study of a modular video-CT augmentation system for image-guided skull base surgery. *Proc SPIE* 2012;8316:831633-1.
93. Chaichana KL, Jackson C, Patel A, Miller NR, Subramanian P, Lim M, **Gallia G**, Olivi A, Weingart H, Brem H, Quinones-Hinojosa A. Predictors of visual outcome following surgical resection of medical sphenoid wing meningiomas. *J Neurol Surg B* 2012;73:321-6.
94. Guaraldi F, Corazzini V, **Gallia GL**, Grottoli S, Grottoli S, Stals K, Dalantaeva N, Frohman LA, Korbonits M, Salvatori R. Genetic analysis in a patient presenting with meningioma and isolated familial somatotropinoma (IFS) reveals the selective involvement of R81X mutation of AIP in the pathogenesis of the pituitary tumor. *Pituitary* 2012;15 Suppl 1:61-7.
95. Ahmidi N, Ishii M, Flichtinger G, **Gallia GL**, Hager GD. An objective and automated method for assessing surgical skill for functional endoscopic sinus surgery using eye-tracking and tool-motion data. *Int Forum of Allergy Rhinol* 2012; 2:507-15.
96. Joshi AD, Loilome W, Siu IM, Tyler B, **Gallia GL**, Riggins GJ. Evaluation of tyrosine kinase inhibitor combinations for glioblastoma therapy. *PLoS One* 2012;7:e44372.
97. See AP, Han JE, Phallen J, Binder Z, **Gallia G**, Pan F, Jinasena D, Jackson C, Belcaid Z, Jeong SJ, Gottschalk C, Zeng J, Ruzevick J, Nicholas S, Kim Y, Albesiano E, Pardoll DM, Lim M. The role of STAT3 activation in modulating the immune microenvironment of GBM. *J Neurooncol* 2012;110:359-68.

98. Ahmidi N, Hager GD, Ishii L, **Gallia GL**, Ishii M. Robotic path planning for surgeon skill evaluation in minimally-invasive sinus surgery. *MICAI* 2012;15:471-8.
99. Chaichana KL, Zadnik K, Weingart JD, Olivi A, **Gallia GL**, Blakeley J, Lim M, Brem H, Quinones-Hinojosa A. Multiple surgical resections for patients with glioblastoma: prolonging survival. *J Neurosurg* 2013;118:812-20.
100. Chaichana KL, Pendleton C, Jackson C, Martinez-Gutierrez JC, Diaz-Stransky A, Aguayo J, Olivi A, Weingart JD, **Gallia G**, Lim M, Brem H, Quinones-Hinojosa A. Deep venous thrombosis and pulmonary embolisms in adult patients undergoing craniotomy for brain tumors. *Neurol Res* 2013;35:206-11.
101. Mirota DJ, Uneri A, Schafer S, Nithianathan S, Reh DD, **Gallia GL**, Ishii M, Taylor RH, Hager GD, Siewerdsen. Evaluation of a system for high-accuracy 3D image-based registration of endoscopic video to C-arm cone-beam CT for image-guided skull base surgery. *IEEE Trends in Medical Imaging* 2013; 32:1215-26.
102. Killela PJ, Reitman ZJ, Jiao Y, Bettegowda C, Agrawal N, Diaz LA Jr, Friedman AH, Friedman H, **Gallia GL**, Giovanella BC, Grollman AP, He TC, He Y, Hruban RH, Jallo GI, Mandahl N, Meeker AK, Mertens F, Netto GJ, Rasheed BA, Riggins GJ, Rosenquist TA, Schiffman M, Shih IM, Theodorescu D, Torbenson MS, Velculescu VE, Wang TL, Wentzensen N, Wood LD, Zhang M, McLendon RE, Bigner DD, Kinzler KW, Vogelstein B, Papadopoulos N, Yan H. TERT promoter mutations occur frequently in gliomas and a subset of tumors derived from cells with low rates of self-renewal. *Proc Natl Acad Sci USA* 2013; 110:6021-6.
103. Chaichana KL, Pendleton C, Zaidi H, Olivi A, Weingart JD, **Gallia GL**, Lim M, Brem H, Quinones-Hinojosa A. Seizure control for patients undergoing meningioma surgery. *World Neurosurg* 2013;79:515-24.
104. Chaichana KL, Martinez-Gutierrez JC, De la Garza-Ramos R, Weingart JD, Olivi A, **Gallia GL**, Lim M, Brem H, Quinones-Hinojosa A. Factors associated with survival for patients with glioblastoma with poor pre-operative functional status. *J Clin Neurosci* 2013;20:818-23.
105. Bettegowda C, Agrawal N, Jiao Y, Wang Y, Wood L, Rodriguez F, Hruban R, **Gallia GL**, Binder ZA, Riggins CJ, Salmasi V, Riggins GJ, Reitman ZA, Rasheed A, Keir S, Shinjo S, Marie S, McLendon R, Jallo G, Vogelstein B, Bigner D, Yan H, Kinzler K, Papadopoulos N. Exomic sequencing of four rare central nervous system tumor types. *Oncotarget* 2013;4:572-83.
106. Chaichana KL, Flores M, Acharya S, Sampognaro P, Bettegowda C, Rigamonti D, Weingart JD, Olivi A, **Gallia GL**, Brem H, Lim M, Quinones-Hinojosa A. Survival and recurrence for patients undergoing surgery of skull base intracranial metastasis. *J Neurol Surg B* 2013; 74:228-35.
107. Chaichana KL, Gadkaree S, Rao K, Link T, Rigamonti D, Purtell MJ, Browner IS, Weingart JD, Olivi A, **Gallia, GL**, Bettegowda C, Brem H, Lim M, Quinones-Hinojosa A. Patients undergoing surgery of intracranial metastases have different outcomes based on their primary pathology. *Neurol Res* 2013;35:1059-69.
108. Borodovsky A, Salmasi V, Turcan S, Fabius AW, Baia GS, Eberhart CG, Weingart JD, **Gallia GL**, Baylin SB, Chan TA, Riggins GJ. 5-azacytidine reduces methylation, promotes differentiation and induces tumor regression in a patient-derived IDH1 mutant glioma xenograft. *Oncotarget* 2013; 4:1737-47.
109. Binder ZA, Siu IM, Eberhart CG, ap Phys C, Bai RY, Staedtke V, Zhang H, Smoll NR, Piantadosi S, Piccirillo SG, DiMeco F, Weingart JD, Vescovi A, Olivi A, Riggins GJ, **Gallia GL**. Podocalyxin-like protein is a marker of undifferentiated GBM neurospheres. *PLoS One* 2013;8:e75945.
110. Baia GS, Caballero OL, Ho JSY, Zhao A, Cohen T, Binder ZA, Salmasi V, **Gallia GL**, Quinones-Hinojosa A, Olivi A, Brem H, Burger P, Strausberg RL, Simpson AJG, Eberhart C, Riggins GJ. NY-ESO-1 is expressed in meningioma and is a target for immunotherapeutic approaches. *Cancer Immunol Res* 2013;1:296-302.
111. Siu IM, Ruzevick J, Zhao Q, Connis N, Burger PC, Hann CL, **Gallia GL**. Erlotinib inhibits growth of a patient-derived chordoma xenograft. *Plos One* 2013;15:e78895.
112. Schafer S, Wang A, Otake Y, Stayman JW, Zbijewski W, Kleinszig G, Xia X, **Gallia GL**, Siewerdsen JH. Intraoperative imaging for patient safety and QA: detection of intracranial hemorrhage using C-arm cone-beam CT. *Proc SPIE* 2013;8671:86711X.
113. Orr BA, **Gallia GL**, Dogan A, Rodriguez FJ. IgA/kappa-restricted crystal storing histiocytosis involving the central nervous system. *Clin Neuropathol* 2014;33:23-28.
114. Leyngold I, Olivi A, Ishii M, Blitz A, Burger P, Subramanian PS, **Gallia GL**. Acute chiasmal abscess resulting from perineural extension of invasive sino-orbital Aspergillosis in an immunocompetent patient. *World Neurosurgery* 2014; 81:203.e1-6.
115. Blitz AM, Choudhri AF, Chonka ZA, Ilica AT, Madeco LM, Chhabra AF, **Gallia GL**, Aygun N. Anatomic considerations, nomenclature, and advanced cross sectional imaging techniques for visualization of the cranial nerve segments by MR imaging. *Neuroimaging Clin N Am* 2014;24:1-15.
116. Blitz AM, Macedo LM, Chonka ZA, Ilica AT, Choudhri AF, **Gallia GL**, Aygun N. High-resolution CISS MR imaging with and without contrast for evaluation of the upper cranial nerves: segmental anatomy and selected pathologic conditions of the cisternal through extra-foraminal segments. *Neuroimaging Clin N Am* 2014;24:17-34.
117. Chaichana KL, Rao K, Gadkaree S, Dangelmajer S, Bettegowda C, Rigamonti D, Weingart JD, Olivi A, **Gallia GL**, Brem H, Lim M, Quinones-Hinojosa A. Factors associated with survival and recurrence for patients undergoing surgery of cerebellar metastases. *Neurol Res* 2014;36:13-25.

118. Chaichana KL, Jusue-Torres I, Navarro-Ramirez R, Raza SM, Pascual-Gallego M, Ibrahim A, Hernandez-Hermann, Gomez L, Ye X, Weingart JD, Olivi A, Blakeley J, **Gallia GL**, Lim M, Brem H, Quinones-Hinojosa A. Establishing percent resection and residual volume thresholds affecting survival for patients with newly diagnosed intracranial glioblastoma. *Neurooncol* 2014;16:113-22.
119. Bettegowda C, Sausen M, Leary RJ, Kinde I, Wang Y, Agrawal N, Bartlett BR, Wang H, Luber B, Alani RM, Antonarakis ES, Azad NS, Bardelli A, Brem H, Cameron JL, Lee CC, Fecher LA, **Gallia GL**, Gibbs P, Le D, Giuntoli RL, Goggins M, Hogarty MD, Holdhoff M, Hong SM, Jiao Y, Juhl HH, Kim JJ, Siravegna G, Laheru DA, Lauricella C, Lim M, Lipson EJ, Marie SK, Netto GL, Oliner KS, Olivi A, Olsson L, Riggins GJ, Sartore-Bianchi A, Schmidt K, Shih IM, Oba-Shinjo SM, Siena S, Theodorescu D, Tie J, Hawkins TT, Veronese S, Wang TL, Weingart JD, Wolfgang CL, Wood LD, Xing D, Hruban RH, Wu J, Allen PJ, Schmidt CM, Choti MA, Velculescu CE, Kinzler KW, Vogelstein B, Papadopoulos N, Diaz LA Jr. Detection of circulating tumor DNA in early- and late-stage human malignancies. *Sci Transl Med* 2014;6:224ra24.
120. Wang AS, Stayman JW, Otake Y, Kleinszig G, Vogt S, **Gallia GL**, Khanna AJ, Siewerdsen JH. Soft-tissue imaging with C-arm cone-beam CT using statistical reconstruction. *Phys Med Biol* 2014;59:1005-26.
121. Tilson MP, **Gallia GL**, Bishop JA. Among sinonasal tumors, CDX-2 immunoexpression is not restricted to intestinal-type adenocarcinomas. *Head Neck Pathology* 2014;8:59-65.
122. Chaichana KL, Acharya S, Flores M, Wijesekera O, Rigamonti D, Weingart JD, Olivi A, Bettegowda C, **Gallia GL**, Brem H, Lim M, Quinones-Hinojosa A. Identifying better surgical candidates among recursive partitioning analysis class 2 patients who underwent surgery for intracranial metastasis. *World Neurosurg* 2014;82:e267-75.
123. Uneri A, Otake Y, Wang AS, Kleinszig G, Vogt S, **Gallia GL**, Rigamonti D, Wolinsky JP, Gokaslan ZL, Khanna AJ, Siewerdsen JH. Dual-projection 3D-2D registration for surgical guidance: preclinical evaluation of performance and minimum angular separation. *Proc SPIE* 2014;9036:90362E-1
124. Pendleton C, Raza SM, **Gallia GL**, Quinones-Hinojosa A. Harvey Cushing's early operative treatment of skull base fractures. *J Neurol Surg B Skull Base* 2014;75:27-34.
125. Kwacharoen R, Blitz AM, Tavares F, Caturegli P, **Gallia GL**, Salvatori R. Clinical features of sellar and suprasellar meningiomas. *Pituitary* 2014;17:342-8.
126. Hansen TM, Batra S, Lim M, **Gallia GL**, Burger PC, Salvatori R, Wand G, Quinones-Hinojosa A, Kleinberg L, Redmond KJ. Invasive adenomas and pituitary carcinomas: A SEER database analysis. *Neurosurg Rev* 2014;37:279-85.
127. Rodic N, Sharma R, Sharma R, Zampella J, Dai L, Taylor MS, Hruban RH, Iacobuzio-Donahue CA, Maitra A, Torbenson MS, Goggins M, Shih IM, Duffield AS, Montgomery EA, Gabrielson E, Netto GJ, Lotan TL, DeMarzo AM, Westra W, Binder, ZA, Orr BA, **Gallia GL**, Everhart CG, Boeke JD, Harris CR, Burns KH. Long Interspersed Element-1 protein expression is a hallmark of many human cancers. *Am J Pathol* 2014;184:1280-6.
128. Gardner EE, Connis N, Porier JT, Cope L, Dobromilskaya I. **Gallia GL**, Rudin CM, Hann CL. Rapamycin rescues ABT-737 efficacy in small cell lung cancer. *Cancer Res* 2014;15:2846-56.
129. Yamashita AS, Baia GS, Ho JS, Velarde E, Wong J, **Gallia GL**, Belzberg AJ, Kimura ET, Riggins GJ. Preclinical evaluation of the combination of mTOR and proteasome inhibitors with radiotherapy in malignant peripheral nerve sheath tumors. *J Neurooncol* 2014;118:83-92.
130. Wang AS, Stayman JW, Otake Y, Rogt S, Kleinszig G, Khanna AJ, **Gallia GL**, Siewerdsen JH. Low-dose preview for patient-specific, task-specific technique selection in cone-beam CT. *Med Phys* 2014;41:071915.
131. Herrmann A, Cherryholmes G, Schroeder A, Phallen J, Alizadeh D, Xin H, Wang T, Lee H, Lahtz C, Swiderski P, Armstrong B, Kowolik C, **Gallia GL**, Lim, M, Brown CE, Badie B, Forman SJ, Kortylewski M, Jove R, Yu H. TLR9 is critical for glioma stem cell maintenance and targeting. *Can Research* 2014;15:5218-28.
132. Uneri A, Wang AS, Otake Y, Kleinszig G, Vogt S, Khanna AJ, **Gallia GL**, Gokaslan ZL, Siewerdsen JH. Evaluation of low-dose limits in 3D-2D rigid registration for surgical guidance. *Phys Med Biol* 2014;22:5329-5345.
133. Zhang M, Wang Y, Jones S, Sausen M, McMahan K, Sharma R, Wang Q, Belzberg AJ, Chaichana K, **Gallia GL**, Gokaslan ZL, Riggins GJ, Wolinsky JP, Wood LD, Montgomery EA, Hruban RH, Kinzler KW, Papadopoulos N, Vogelstein B, Bettegowda C. Somatic Mutations of SUZ12 in Malignant Peripheral Nerve Sheath Tumors. *Nature Genetics* 2014;46:1170-2.
134. Borodovsky A, Meeker AK, Kirkness EF, Ahzo Q, Eberhart CG, **Gallia GL**, Riggins GJ. A model of a patient-derived IDH1 mutant anaplastic astrocytoma with alternative lengthening of telomeres. *J Neurooncol* 2015;121:479-87.
135. Xie YJ, Shargorodsky J, Lane AP, Ishii M, Solomon D, Moghekar A, **Gallia GL**, Reh DD. Perioperative continuous cerebrospinal fluid pressure monitoring in patients with spontaneous cerebrospinal fluid leaks. *Int Forum of Allergy and Rhinology* 2015;5:1-7.
136. Staedtke V, Bai RY, Sun W, Huang J, Kibler KK, Tyler BM, **Gallia GL**, Kinzler K, Vogelstein B, Zhou S, Riggins GJ. *Clostridium novyi*-NT can cause regression of orthotopically implanted glioblastoma in rats. *Oncotarget* 2015; 6: 5536-5546.
137. Salmasi V, Schiavi A, Binder ZA, Ruzevick J, Orr BA, Burger PC, Ball DW, Blitz AM, Koch WM, Ishii M, **Gallia GL**. Intraoperative hypertensive crisis due to a catecholamine-secreting esthesioneuroblastoma. *Head and Neck* 2015;37:E74-80.

138. Bai RY, Stadedtke V, Wanjiku T, Rudek MA, Joshi AD, **Gallia GL**, Riggins GJ. Brain penetration and efficacy of different mebendazole polymorphs in a mouse brain tumor model. *Clin Cancer Res* 2015;21:3463-70.
139. Chaichana KL, Kone L, Bettegowda C, Weingart JD, Olivi A, Lim M, Quinones-Hinojosa A, **Gallia GL**, Brem H. Risk of surgical site infection in 401 consecutive patients with glioblastoma with and without carmustine wafer implantation. *Neurol Res* 2015;37:717-26.
140. Otake Y, Leonard S, Reiter A, Tajan P, Siewerdsen JH, **Gallia GL**, Ishii M, Taylor RH, Hager GD. Rendering-based video-CT registration with physical constraints for image-guided endoscopic sinus surgery. *Proc SPIE Int Soc Opt Eng* 2015;21:9415.
141. Ward BK, Zee DS, Solomon D, **Gallia GL**, Reh DD. CSF leak: A complication from vomiting after magnetic vestibular stimulation. *Neurology* 2015;85:551-2.
142. Wang Y, Springer S, Zhang M, McMahon KW, Kinde I, Dobbyn L, Ptak J, Brem H, Chaichana K, **Gallia GL**, Gokaslan ZL, Groves ML, Jallo GI, Lim M, Olivi A, Quinones-Hinojosa A, Rigamonti D, Riggins GJ, Sciubba DM, Weingart JD, Wolinsky JP, Ye W, Oba-Shinjo SM, Marie SK, Holdhoff M, Agrawal N, Diaz LA Jr, Papadopoulos N, Kinzler KW, Vogelstein B, Bettegowda C. Detection of tumor-derived DNA in cerebrospinal fluid of patients with primary tumors of the brain and spinal cord. *Proc Natl Acad Sci USA* 2015;111:9704-9.
143. Grossman R, Burger Soudry E, Tyler B, Chaichana KL, Weingart J, Olivi A, **Gallia GL**, Sidransky D, Quinones-Hinojosa A, Ye W, Brem H. MGMT inactivation and clinical response in newly diagnosed GBM patients treated with Gliadel. *J Clin Neurosci* 2015;22:1938-42.
144. Kontzialis M, Choudhri AF, Patel VR, Subramanian PS, Ishii M, **Gallia GL**, Aygun N, Blitz AM. High-resolution 3D magnetic resonance imaging of the sixth cranial nerve: Anatomic and pathologic considerations by segment. *J Neuroophthalmol* 2015;35:412-25.
145. Roxbury CR, Ishii M, **Gallia GL**, Reh DD. Endoscopic management of esthesioneuroblastoma. *Otolaryngol Clin North Am* 2016;49:153-65.
146. Roxbury CR, Ishii M, Richmon JD, Blitz AM, Reh DD, **Gallia GL**. Endonasal endoscopic surgery in the management of sinonasal and anterior skull base malignancies. *Head Neck Pathol* 2016;10:13-22.
147. **Gallia GL**. In situ cranioplasty technique for immediate calvarial reconstruction to optimize cosmesis. *World Neurosurgery* 2016;89:535-9.
148. Binder ZA, Wilson KM, Salmasi V, Orr BA, Eberhart CG, Siu IM, Lim M, Weingart JD, Quinones-Hinojosa A, Bettegowda C, Lassam AB, Olivi A, Brem H, Riggins GJ, **Gallia GL**. Establishment and biological characterization of a panel of glioblastoma multiforme (GBM) and GBM variant oncosphere cell lines. *Plos One* 2016:e0150271.
149. MacDiarmid JA, Langova V, Bailey D, Pattison ST, Pattison SL, Christensen N, Armstrong LR, Brahmabhatt VN, Smolarczyk K, Harrison MR, Costa M, Mugridge NB, Sedliarou, Grimes NA, Kiss DL, Stillman B, Hann CL, **Gallia GL**, Graham RM, Brahmabhatt H. Targeted doxorubicin delivery to brain tumors via minicells: Proof of principle using dogs with spontaneously occurring tumors as a model. *Plos One* 2016;11:e0151832.
150. Radvany MG, Quinones-Hinojosa A, **Gallia GL**, Wand GS, Salvatori R. Venous sampling for Cushing disease: Comparison of internal jugular vein and interior petrosal sinus sampling. *Endocr Practice* 2016;22:1057-61.
151. Labib MA, Shah M, Kassam AB, Young R, Zucker L, Maioriello A, Britz G, Agbi C, Day JD, **Gallia G**, Kerr R, Pradilla G, Rovin R, Kulwin C, Bailes J. The safety and feasibility of image-guided BrainPath-mediated transsulcal hematoma evaluation: A multicenter study. *Neurosurgery* 2016 (epub ahead of print).
152. Salzberg SL, Breitwieser FP, Kuymar A, Hao H, Burger P, Rodriguez FJ, Lim M, Quinones-Hinojosa A, **Gallia GL**, Tornheim JA, Melia MR, Sears CL, Pardo CA. Next-generation sequencing in neuropathologic diagnosis of infections of the nervous system. *Neurol Neuroimmunol Neuroinflamm* 2016;3:e251.
153. Abou-Al-Shaar H, Blitz AM, Rodriguez FJ, Ishii M, **Gallia GL**. Expanded endonasal endoscopic approach for resection of an infrasellar craniopharyngioma. *World Neurosurg* 2016 (epub ahead of print)
154. Roxbury C, Saavedra T, Ramanathan M, Lim M, Ishii M, **Gallia GL**, Reh DD. Layered sellar reconstruction with avascular free grafts: Acceptable alternative to the nasoseptal flap for repair of low-volume intraoperative cerebrospinal fluid leak. *Am J Rhinol Allergy* 2016;30:367-71.
155. Achanta P, Steranka JP, Tang Z, Rodic N, Sharma R, Yang WR, Ma S, Grivainis M, Huang CR, Schneider AM, **Gallia GL**, Riggins GJ, Quinones-Hinojosa A, Fenyo D, Boeke JD, Burns KH. Somatic retrotransposition is infrequent in glioblastomas. *Mod DNA* 2016;11:7-22.
156. Blitz AM, Aygun N, Herzka DA, Ishii M, **Gallia GL**. High-resolution three-dimensional MR imaging approach to the skull base: compartments, boundaries, and critical structures. *Radiol Clin N Am* 2017;55:17-30.
157. Roxbury, CR, Ishii M, Blitz AM, Reh DD, **Gallia GL**. Expanded endonasal endoscopic approaches to the skull base for the radiologist. *Radiol Clin N Am* 2017;55:1-16.

Inventions, Patents, Copyrights

1. DelVecchio VG, Gallia GL, McCleskey FK. Detection and prevention of *M. hominis* infections. United States Patent. Awarded 1997, Patent No: 5,595,871.

- Johnson EM, Khalili K, Gallia GL. Cloning and expression of Pur protein. Patent pending from the United States Patent and Trademark Office (application #09/246311).

Extramural Sponsorship

Current Grants:

- 2/1/2012-current *In vivo* screening of potential chordoma chemotherapeutics
Chordoma Foundation
\$335,000.00
PI: Gallia, 10% no cost effort
- 01/01/2013- current Phase I Study of Mebendazole in Newly Diagnosed High-Grade Glioma Patients Receiving Temozolomide (Investigator initiated)
ABC²
\$174,304.00
PI: Riggins
Co-investigator: 5% effort
- 11/16/2016 – current A Phase 1 study to evaluate the safety, tolerability, and immunogenicity of EGFR-targeted EDVs containing doxorubicin in subjects with recurrent glioblastoma multiforme.
EnGeneIC
\$1,628,549
PI: Gallia: 5% effort

Previous Grants:

- 8/25/09-8/24/11 Evaluation of radiowave therapy in glioblastoma *in vivo*
Radiowave Therapy Research Institute
\$83,762.00
PI: Gallia, 5% effort
- 8/1/09-7/31/12 High performance cone beam CT guidance of Head and Neck Surgery
RO1CA127444
NIH
\$731,484.89
PI: Siewerdsen
Co-investigator, 5% effort
- 7/1/12-6/30/16 Enhanced navigation for endoscopic sinus surgery through video analysis
RO1EB015530
\$1,828,944.00
PI: Hager
Co-investigator, 5% effort

Research Program Building/Leadership

- 2008-present Director, Skull Base Laboratory, Johns Hopkins University School of Medicine. I serve as a mentor and advisor to medical students, residents, national and foreign neurosurgeons and otolaryngologists working on skull base anatomical dissections, animal models and therapeutic development for skull base malignancies.

EDUCATIONAL ACTIVITIES

Educational Publications

Book Chapters, Monograph

- Gallia GL**, Houff SA, Khalili K. JC virus and the molecular pathogenesis of progressive multifocal leukoencephalopathy. In: Gendelman HE, Lipton SA, Epstein L, Swindells S, eds. *The Neurology of AIDS*. New York: Chapman and Hall, 1997:212-26.

2. **Gallia GL.** Neurosurgery. In Makary M, ed. General Surgery Review. Washington: Lander-Drysdale, 2004:339-54.
3. **Gallia GL,** Pomper MG, Olivi A. Chordoid glioma of the third ventricle. In Berger MS, Keles GE, eds. Textbook of Neuro-Oncology. Philadelphia: Elsevier Saunders, 2005:218-21.
4. Bohan E, **Gallia GL,** Brem H. Brain tumors. In Barker E, ed. Neuroscience Nursing: A Spectrum of Care. Philadelphia: Elsevier Inc, 2006:215-43.
5. **Gallia GL.** Neurosurgery. In Makary M ed. General Surgery Review, 2nd ed. Washington: Lander-Drysdale, 2008:1-21.
6. **Gallia GL,** Jallo, GI. Intradural Extramedullary Spinal Tumors. In Kim DH, Betz RR, Huhn SL, Newton PO, eds. Surgery of the Pediatric Spine. New York: Thieme Medical Publishers, Inc, 2008:278-88.
7. **Gallia GL,** Bagley CA, Witham TF, Wolinsky JP, Gokaslan ZL. Total sacrectomy. Neurosurgery Operative Atlas 2007:273-9.
8. Conway JE, **Gallia GL.** Esthesioneuroblastoma. In eds: Connolly ES, McKhann GM, Huang J, Choudhri TF, Mocco J. Fundamentals of Operative Techniques in Neurosurgery, 2nd Edition. New York, Thieme Medical Publishers 2010:243-7.
9. Liauw J, **Gallia G,** Olivi A. Transcallosal Approach. In Jandial R, McCormick PC, Black PM, eds. Core Techniques in Operative Neurosurgery. Philadelphia: Elsevier Saunders, 2011:46-52.
10. **Gallia GL.** Neurosurgery. In Makary M ed. General Surgery Review, 3rd ed. (in production).
11. Chung CH, **Gallia GL,** Wenig B, Arrington J, Caudell JJ. Esthesioneuroblastoma. Textbook of Uncommon Cancers 2016 (in press).

Books, Textbooks

1. **Gallia GL,** Hann CL, Hewson WH. The Pharmacology Companion. La Jolla: Alert and Oriented Publishing. 1997. A 339 page board review book for second year medical students.
2. **Gallia GL.** Analysis of the human polyomavirus, JCV, and the cellular protein Puro α . Thomas Jefferson University, Philadelphia, PA. 1998:1-253.

Other media (films, videos, CD-ROMS, slide sets, etc)

1. Journal cover. J Neurosurgery Spine 2005;3:303-307. Color illustration of a novel rat intraosseous metastatic spine cancer model.
2. Journal cover. J Neurosurg: Spine 2005;3:111-122. Color illustration depicting classification of primary sacral tumors based on surgical approach and outcome.
3. Journal cover. J Neurosurg: Spine 2005;3:21-26. Color illustration of spinal pelvic reconstruction after total sacrectomy for en bloc resection of a giant sacral chordoma
4. Journal cover. J Neurosurg: Pediatrics 2006;105:134-139. 3-D CT reconstruction of an intracranial aneurysm following radiation therapy for a pediatric brain tumor.
5. Journal cover. J Neurosurg: Spine 2007;7:103-111. Color illustration of a total L-5 spondylectomy and reconstruction of the lumbo-sacral junction.
6. Journal cover. Neurosurgery 2010;67:E498-502. Color illustration of lumbo-pelvic reconstruction following combined L5 spondylectomy and total sacrectomy for en bloc resection of a malignant fibrous histiocytoma.
7. Journal cover. Cancer Research 2014;15:2846-56. Color illustration of rapamycin and ABT-737 effect in small cell lung cancer.

Teaching

Classroom instruction

Oct 2010 Computer Integrated Surgery, Course #600.445, Lecturer, Technological Advancements in Skull Base Surgery, Johns Hopkins University, Baltimore, MD

Clinical Instruction

CME instruction

Workshops/seminars

Sept 2007 Endoscopic and Minimally Invasive Approaches to the Brain and Cranial Base, Faculty, Oregon Health and Science University, Oregon

Nov 2007 Australian Advanced Neuroendoscopy Workshop, Faculty, University of Sydney, Sydney, Australia

Feb 2008 2nd Endonasal and Skull Base Key-Hole Surgery Course, Faculty, Anspach Bioskills Labs, Palm Beach Gardens, Florida

May 2008 Combined Approached to the Skull Base, Faculty, Vista Lab, Baltimore, Maryland

Sept 2008 Seventh Annual International Neuro-Oncology Updates, Faculty, Marriott Hotel, Baltimore, Maryland

Feb 2009 3rd Endonasal and Skull Base Key-Hole Surgery Course, Faculty, Anspach Bioskills Labs, Palm Beach Gardens, Florida

- Sept 2009 Combined Approaches to the Skull Base, Faculty, VISTA Labs, Baltimore, MD.
 Sept 2009 1st Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 July 2010 9th International Meeting: Updates in Neuro-Oncology, Brain Tumor Symposium, Faculty, Teatro Signorell, Cortona (AR), Italy
 August 2010 1st Neurosciences Symposium, Johns Hopkins Hospital – Fundacion Sante Fe de Bogota, Faculty, Bogota, Columbia, August 2010.
 Oct 2010 2nd Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 Dec 2010 Johns Hopkins 4th Annual Skull Base Course. Craniofacial Approaches to the Skull Base from Open to Endoscopic, Faculty, VISTA Labs, Baltimore, Maryland
 March 2011 3rd International Chordoma Research Workshop, Speaker, Bethesda, Maryland
 Oct 2011 3rd Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 Dec 2011 Johns Hopkins 5th Annual Skull Base Course. Approaches to the Skull Base and Craniocervical Junction: From Open to Endoscopic, Faculty, VISTA Labs, Baltimore, Maryland
 Oct 2012 4th Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 March 2013 4th International Chordoma Research Workshop, Speaker, Boston, Massachusetts
 Sept 2013 The 6 Pillar Approach for Comprehensive Management of Subcortical Lesions, Guest Faculty, Ottawa, Canada
 Sept 2013 5th Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 August 2014 1st Annual Subcortical Surgery Group Meeting, Faculty, Park City, Utah
 Sept 2014 6th Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 Sept 2015 7th Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center
 Sept 2016 8th Johns Hopkins Hospital Pituitary Patient's Day, Faculty, Mount Washington Convention Center

**Mentoring
Advisees**

- 2008-11 Zev Binder, MD, postdoctoral fellow, Johns Hopkins University School of Medicine. Graduated PhD 6/2014.
 2008-14 Lei-Mei Lin, MD, neurosurgery resident, Johns Hopkins University School of Medicine. Graduated 6/2014.
 2008 James Chen, medical student (MS-2), Johns Hopkins University School of Medicine, currently in residency
 2008 Aisha Harun, medical student (MS-2), Johns Hopkins University School of Medicine, currently in residency
 2008 Elizabeth Rosenblatt, medical student (MS-2), Johns Hopkins University School of Medicine, currently in residency
 2008 Christine Tran, medical student (MS-2), Johns Hopkins University School of Medicine, currently in residency
 2009-2014 Kelli McDowell, graduate student, Johns Hopkins University. Received PhD 6/2014.
 2009-11 Vafi Salmasi, MD, neurosurgery resident, Tehran University, Iran, currently in residency
 2009 Starane Shepard, medical student (MS-2) Howard University College of Medicine
 2009 Mandana Behbahani, medical student (MS-2) University of Arizona
 2009 Priyanka Bushana, University of Maryland, currently in college
 2010-11 Nicholas Smoll, medical student, Gippsland Medical School, Victoria Australia, currently in residency
 2010-11 Kyriakos Papadimitriou, MD, postdoctoral fellow, Johns Hopkins Hospital, currently in research
 2010-present Callen Riggins, undergraduate, currently in college
 2011-5/2013 Xuewei Xia, MD, PhD, visiting scholar, Guilin Medical College, China
 2014-present Adela Wu, medical student, Johns Hopkins University School of Medicine
 2014-present Rory Goodwin, neurosurgery resident, Johns Hopkins University School of Medicine
 2015-present Lydia Liang, medical student, Johns Hopkins University School of Medicine
 2015-present Anthony Asemota, postdoctoral fellow in the Johns Hopkins Center for Surgical Trials and Outcomes Research (CSTOR)
 2015-present Justin Caplan, MD, neurosurgery resident, Johns Hopkins University School of Medicine
 2015-present Raj Iyer, MD, neurosurgery resident, Johns Hopkins University School of Medicine
 2015-present Tianna Zhao, MD, PhD, postdoctoral fellow
 2017-present ChenChen Ji, MD/PhD student

Graduate school activities

- 2009-2014 Kelli McDowell, PhD thesis committee
 10/2010 Sasha Borodovsky, PhD qualifying examination committee

2014 Zev Binder, PhD thesis committee

Educational Program Building/Leadership

2008-present Neurosurgery Resident education committee

CLINICAL ACTIVITIES

Certification

2014 American Board of Neurological Surgery

Medical, other state/government licensure

2008-present Maryland State Medical License, 2008

Clinical Program Building/Leadership

2008-present Neurosurgery Skull Base Center. I am the Director of the Neurosurgery Skull Base Center and established the Endonasal Skull Base Program at Johns Hopkins Hospital. Over the past years, we have performed more than 800 endonasal endoscopic skull base procedures and are one of the largest and most experienced centers in the United States.

Clinical Trials

2013-present Phase I Study of Mebendazole in Newly Diagnosed High-Grade Glioma Patients Receiving Temozolomide
PI: Gallia/Riggins (investigator initiated)

2016-present Phase 1 study to evaluate the safety, tolerability, and immunogenicity of EGFR-targeted EDVs containing doxorubicin in subjects with recurrent glioblastoma multiforme.
PI: Gallia

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

System Innovation and Quality Improvement Publications

System Innovation and Quality Improvement efforts within JHM

2009-present Johns Hopkins Hospital, Department in the Neuroscience QA/QI committee

2009-present Johns Hopkins Hospital QA/QI committee

System Innovation and Quality Improvement efforts outside of JHM

Production of guidelines and/or protocols

System Innovation and Quality Improvement Program Building/Leadership

Extramural Funding

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

Editorial Activities

Advisory Committees, Review Groups/Study Sections

1/2014 BrainPathUser Group, Chicago IL

Professional Societies

2013-current Pituitary Network Association (PNA)

7/2014 Subcortical Surgery Society, co-founding member

Conference Organizer, Session Chair

Sept 2008 Session Co-Chair, Seventh Annual International Neuro-Oncology Updates, Marriott Hotel, Baltimore, MD

June 2009 Co-Director, Endonasal Endoscopic Sinus and Skull Base Course, Vista Labs, Baltimore, MD

June 2010 Co-Director, Endonasal Endoscopic Sinus and Skull Base Course, Vista Labs, Baltimore, MD

Feb 2011 Session Co-Chair, North American Skull Base Society. 20th Annual Meeting, Las Vegas, NV

- March 2013 Organizing committee, 4th International Chordoma Research Workshop
- May 2014 Session Co-Chair, Cerebrovascular and Skull Base Surgery: The Battle at Pinehurst. Clival Lesions – Endoscopic versus Lateral Approaches. Pinehurst, NC
- July 2015 Session Co-Chair, Endoscopy. 14th International Meeting: Updates in Neuro-Oncology. Brain Tumor Symposium, Cortona (AR), Italy.
- May 2016 Session Moderator, Middle Cranial Fossa/ICA, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain

Consultantships

- 2012 Abbott Laboratories
- 2012 Stryker Corporation
- 2012 Medtronic

RECOGNITION

Awards, Honors

- 1984-88 Scranton Preparatory High School academic scholarship, 1 of 14/587
- 1986 Paderewski Gold Medal, 1 of 76 pianists selected nationally for superior performance in 10 years of competition in National and International Piano Auditions
- 1987 PA Governor's School for the Performing Arts, 1 of 7/2,100 pianists from Pennsylvania selected for summer program at Bucknell University
- 1988-92 Guzey Scholarship, University of Scranton, academic scholarship, 1 of 7/995
- 1991 Alpha Sigma Nu Honor Society, 1 of 18/995, national Jesuit Honor Society for scholarship and University service
- 1992 Alpha Epsilon Delta Honor Society, pre-medical honor society
- 1992 All-American Scholar, national award for academic achievement
- 1992 Who's Who Among Students in American Universities and Colleges, 1 of 63/995
- 1992 National Collegiate Medical Professions Award Winner, selected by pre-medical advisor for academic excellence
- 1992 Cumulative GPA at graduation, University of Scranton: 3.99/4.0
- 1992-00 Gibbon Scholars MD/PhD Program, 1 of 3 students awarded full academic scholarship for medical and graduate schools
- 1992-93 Foerderer Fellowship, 1 of 12/132 first year graduate students selected by Graduate School Dean and faculty for academic achievement
- 1995-96 Corinna Borden Keen Research Fellow, 1/142 graduate students selected by Graduate School Dean and faculty for academic achievement
- 1995 Hobart Amory Hare Medical Honor Society, top 3rd of class in second year Introduction to Clinical Medicine course
- 1995 High-Honors in Pathology, 1 of 15/222 for outstanding performance (final course average, 100) and formal case presentation to Department
- 1995 Association of Pathology Chairmen National Pathology Honor Society, 1 of 15/222 for scholastic achievement, leadership potential, and personal excellence
- 1995 Honors Award in Medical Pharmacology, 1 of 15/222 for outstanding performance (>95th percentile)
- 1996 Lange Medical Publications Award for class rank of 1/222, 1st two years
- 1998-99 High honors in 3rd year clinical clerkships: family medicine, internal medicine, pediatrics, psychiatry and surgery
- 1999 Alpha Omega Alpha Honor Medical Society, 1 of 10/215 as third year medical student
- 1999-2000 High honors in 4th year clinical clerkships: plastic surgery, neurosurgery, general surgery, otorhinolaryngology, urology, orthopedic surgery, neurology, family medicine, anesthesiology, research and rehabilitation medicine
- 2000 Harold L. Stewart Prize in Pathology, 1/210 for academically excellent student who has completed a pathology research project
- 2000 Cumulative College of Graduate Studies GPA: 3.94/4.0
- 2000 College of Graduate Studies Alumni Thesis Award, 1/2 graduate students selected by Graduate School Dean and faculty for scientific excellence in graduate research
- 2000 Hyman Menduke Research Prize, 1/210 for a graduating senior who, as determined by the Committee on Research of the faculty, has demonstrated excellence in research while a student at Jefferson Medical School
- 2001 Outstanding Surgical Intern Award, Department of Surgery, Johns Hopkins Hospital
- 2001 Arnold M. Seligman Award, most outstanding surgical intern at Sinai Hospital of Baltimore

2006 Harvey Cushing Hunterian Research Award
 2012 Johns Hopkins Hospital Neurosurgery Chairman's Teaching Award

Invited talks – Local and National

- 03/2007 Identifying Targets for Brain Cancer, Temple University, Department of Biology, Center for Neurovirology and Cancer Biology, Philadelphia, PA, March 2007
- 03/2007 Targeting Glioblastoma Multiforme, MD Anderson Cancer Center, Neurosurgery Grand Rounds, Houston TX.
- 05/2007 Targeting Glioblastoma, University of Chicago, Neurosurgery Grand Rounds, Chicago, IL.
- 06/2007 Residency Experience, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 02/2008 Minimally Invasive and Endoscopic Neurosurgery, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 04/2008 Skull Base Reconstruction Following Endonasal Endoscopic Resections – Intraoperative and Postoperative Management, Neuroscience Nursing Staff, Johns Hopkins Hospital.
- 05/2008 Transnasal-Transsphenoidal Approach to the Sella, Combined Approaches to the Skull Base, Baltimore, MD.
- 09/2008 Akt Pathway, Seventh Annual International Neuro-Oncology Updates, Baltimore, MD.
- 01/2009 Endoscopic Surgical Approaches for Anterior Skull Base Pathologies, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 02/2009 Endonasal Endoscopic Pituitary Surgery, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 02/2009 Endonasal Endoscopic Resection of Clival Chordomas, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 02/2009 Endonasal Endoscopic Approaches for Ventral Skull Base Pathologies, Johns Hopkins Hospital, Neuroscience Critical Care Unit Grand Rounds, Baltimore, MD.
- 03/2009 Endonasal Endoscopic Approaches to Skull Base Pathologies: Perioperative and Intraoperative Considerations, Johns Hopkins Hospital Neurosurgery Operating Room Staff, Baltimore, MD.
- 04/2009 Advanced Clinical Topics in Neuroscience Nursing 2009: Minimally Invasive Skull Base Surgery, Johns Hopkins Hospital, Baltimore, MD.
- 04/2009 Endonasal Approaches to Skull Base Defects, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 06/2009 Endoscopic Sellar Anatomy, Endonasal Endoscopic Sinus and Skull Base Course, Vista Labs, Baltimore, MD.
- 06/2009 Endonasal Endoscopic Approaches to the Anterior Cranial Fossa and Clivus, Endonasal Endoscopic Sinus and Skull Base Course, Vista Labs, Baltimore, MD.
- 08/2009 Skull Fractures, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 09/2009 Updates on Endoscopic Skull Base Surgery, Johns Hopkins Hospital, Neurosurgery Grand Rounds, Baltimore, MD.
- 09/2009 Extended Transnasal-Transsphenoidal-Transplanum Approached to the Anterior Cranial Fossa, Combined Approaches to the Skull Base, VISTA Labs, Baltimore, MD.
- 09/2009 Transnasal Transsphenoidal Approach to the Sella, Combined Approaches to the Skull Base, VISTA Labs, Baltimore, MD.
- 09/2009 Case Presentations, Combined Approaches to the Skull Base, VISTA Labs, Baltimore, MD.
- 12/2009 Neurosurgery Grand Rounds, The Best of 2009, Johns Hopkins Hospital, Baltimore, MD.
- 04/2010 Advanced Clinical Topics in Neuroscience Nursing 2010: Minimally Invasive Skull Base Surgery Techniques, Johns Hopkins Hospital, Baltimore, MD.
- 05/2010 Johns Hopkins C-arm Research Focus Group Meeting, Broadway Research Building, Johns Hopkins University, Baltimore, MD.
- 06/2010 Endonasal Endoscopic Approaches to the Skull Base: Introduction, 2010 Endonasal Endoscopic Sinus and Skull Base Course, Vista Labs, Baltimore, MD.
- 06/2010 Endonasal Endoscopic Approaches to the Anterior Cranial Fossa and Clivus, 2010 Endonasal Endoscopic Sinus and Skull Base Course, Vista Labs, Baltimore, MD.
- 07/2010 Neurosurgery Grand Rounds, Skull Base Jeopardy, Johns Hopkins Hospital, Baltimore, MD.
- 07/2010 Ludwig Symposium, Advanced Cell Line and Xenograft Models of Brain Tumors, Johns Hopkins Hospital, Baltimore, MD.
- 09/2010 Neurosurgery Grand Rounds, Skull Base Jeopardy, Johns Hopkins Hospital, Baltimore, MD.
- 09/2010 Johns Hopkins Pituitary Patient Day, Surgery for Large Invasive Tumors, Mount Washington Conference Center, Baltimore, MD.
- 10/2010 Neurosurgery Grand Rounds, Endonasal Endoscopic Skull Base Surgery, Johns Hopkins Hospital, Baltimore, MD.

- 11/2010 Computer Integrated Surgery, Technological Advancements in Skull Base Surgery, Johns Hopkins University, Baltimore, MD.
- 12/2010 Skull Base Jeopardy, Johns Hopkins 4th Annual Skull Base Course: Craniofacial Approaches to the Skull Base from Open to Endoscopic, VISTA Labs, Baltimore, MD.
- 12/2010 Endoscopic Management of CSF Leaks. Johns Hopkins 4th Annual Skull Base Course: Craniofacial Approaches to the Skull Base from Open to Endoscopic, VISTA Labs, Baltimore, MD.
- 01/2011 Neurosurgery Grand Rounds, Endonasal Endoscopic Management of Skull Base CSF Leaks and Meningoencephaloceles. Johns Hopkins Hospital, Baltimore, MD.
- 02/2011 Analysis of the Literature Regarding Endoscopic Anterior Skull Base Procedures. North American Skull Base Society. 21st Annual Meeting, Scottsdale, AZ.
- 02/2011 Endonasal Endoscopic Resection of Esthesioneuroblastoma: The Johns Hopkins Hospital Experience. North American Skull Base Society. 21st Annual Meeting, Scottsdale, AZ.
- 03/2011 Establishment and Characterization of a Primary Human Chordoma Xenograft. 3rd Chordoma Research Conference, Bethesda, MD.
- 04/2011 Neurosurgery Grand Rounds, Skull Base Jeopardy, Johns Hopkins Hospital, Baltimore, MD.
- 08/2011 Neurosurgery Grand Rounds, Cushing's - 1, Johns Hopkins Hospital, Baltimore, MD.
- 08/2011 Neurosurgery Grand Rounds, Cushing's - 2, Johns Hopkins Hospital, Baltimore, MD.
- 09/2011 Endonasal Endoscopic Approaches to Cranial Base Pathologies. 10th Anniversary International Neuro-Oncology Update, Vanderbilt University, Memphis, TN.
- 09/2011 Johns Hopkins Pituitary Patient Day, Surgical to Large Invasive Tumors, Mount Washington Conference Center, Baltimore, MD.
- 10/2011 Abbott Laboratories Science Challenge, Local Delivery for Malignant Brain Tumors, Chicago, IL.
- 12/2011 Skull Base Jeopardy, Johns Hopkins 5th Annual Skull Base Course. Approaches to the Skull Base and Cranio-cervical Junction: From Open to Endoscopic, VISTA Labs, Baltimore, MD.
- 01/2012 Neurosurgery Grand Rounds, Pituitary Adenomas, Johns Hopkins Hospital, Baltimore, MD.
- 02/2012 Neurosurgery Grand Rounds, Endonasal Endoscopic Approaches for Anterior Cranial Fossa Pathologies, Johns Hopkins Hospital, Baltimore, MD.
- 05/2012 Neuroscience Grand Rounds, Neurosurgical Oncology Research: From the OR to the labORatory. Temple University, Philadelphia, PA.
- 09/2012 Surgical Treatment of Esthesioneuroblastoma. 11th Annual International Neuro-Oncology Updates, Four Seasons Hotel, Baltimore, MD.
- 09/2012 Johns Hopkins Pituitary Patient Day, Role of Surgery in Sellar and Parasellar Lesions, Mount Washington Conference Center, Baltimore, MD.
- 01/2013 Neurosurgery Grand Rounds, Cushing's Disease – The Essentials, Johns Hopkins Hospital, Baltimore, MD.
- 03/2013 In vivo testing in a patient derived chordoma xenograft model. 4th International Chordoma Research Workshop, Boston, MA.
- 03/2013 In vivo analysis of potential chemotherapeutics for chordoma. 4th International Chordoma Community Conference, Boston, MA.
- 05/2013 Secreting Pituitary Adenomas – The Essentials. Johns Hopkins Hospital, Department of Otolaryngology, Baltimore, MD.
- 09/2013 5th Annual Johns Hopkins Pituitary Patient Day, Surgery for Pituitary Tumors: From Very Small to Very Large, Mount Washington Conference Center, Baltimore, MD.
- 10/2013 Expanded endonasal endoscopic approaches to skull base pathologies: perioperative and intraoperative considerations. Johns Hopkins Hospital, Baltimore, MD.
- 12/2013 10 pearls of endonasal endoscopic skull base surgery. Grand Rounds, Johns Hopkins Hospital, Baltimore, MD.
- 2/2014 Brain trauma review. Grand Rounds, Johns Hopkins Hospital, Baltimore, MD.
- 4/2014 Contemporary Skull Base Approaches. Advanced Clinical Topics in Neuroscience Nursing Workshop. Johns Hopkins Hospital, Baltimore, MD.
- 5/2014 Endoscopic removal of subcortical lesions. Cerebrovascular and Skull Base Surgery: The Battle at Pinehurst. Pinehurst, NC.
- 5/2014 Supratentorial spontaneous ICH – Minimally Invasive removal of ICH. Cerebrovascular and Skull Base Surgery: The Battle at Pinehurst. Pinehurst, NC.
- 8/2014 Genomic and Biologic Complexities of Glioblastoma. 1st Annual Subcortical Surgery Group Meeting, Park City, UT.
- 9/2014 6th Annual Johns Hopkins Pituitary Patient Day, Surgery for Pituitary Tumors: From Very Small to Very Large, Mount Washington Conference Center, Baltimore, MD.
- 1/2015 Neurosurgery Grand Rounds. Endoscopic Approaches for Sellar and Parasellar Pathologies, Johns Hopkins Hospital, Baltimore, MD.

- 4/2015 Endoscopic Pituitary and Cavernous Sinus Surgery. The Foundation of the ASNR Symposium 2015: Skull Base: Bridging the Gap between Head and Spine. ASNR 53rd Annual Meeting, Chicago, IL.
- 9/2015 7th Annual Johns Hopkins Pituitary Patient Day, Surgery for pituitary tumors: Pictures from the operating room. Mount Washington Conference Center, Baltimore, MD.
- 7/2015 Expanded endonasal endoscopic approaches in the management of skull base pathologies. Grand Rounds, Johns Hopkins Hospital, Baltimore, MD.
- 1/2016 Skull Base Jeopardy. Grand Rounds. Johns Hopkins Hospital, Baltimore, MD.
- 5/2016 Middle Cranial Fossa/ICA, 7th World Congress for Endoscopic Surgery of the Skull Base and Brain. Chicago, IL.
- 7/2016 Surgical approaches to skull base pathologies. Montefiore Medical Center Grand Rounds, Bronx, NY.
- 9/2016 Brain and skull base tumor therapeutics. Johns Hopkins Oncology Center Grand Grounds. Baltimore, MD.
- 9/2016 8th Annual Johns Hopkins Pituitary Patient Day, Surgery for pituitary tumors: Pictures from the operating room treating acromegaly, Cushing and non-functioning masses. Mount Washington Conference Center, Baltimore, MD.
- 9/2016 Future of chordoma. One in a million benefit. Chicago, IL.

Invited talks – International

- 07/2010 Endoscopic Endonasal Skull Base Surgery: The Hopkins Experience. 9th International Meeting: Updates in Neuro-Oncology. Brain Tumor Symposium, Cortona (AR), Italy.
- 08/2010 Endonasal Endoscopic Surgery for Skull Base Pathologies. 1st Neurosciences Symposium, Johns Hopkins Hospital – Fundacion Sante Fe de Bogota. Bogota, Columbia.
- 08/2010 Tumor Stem Cells in the Pathogenesis of Glioblastoma. 1st Neurosciences Symposium, Johns Hopkins Hospital – Fundacion Sante Fe de Bogota. Bogota, Columbia.
- 03/2011 Endonasal Endoscopic Approaches to Lateral and Malignant Skull Base Tumors. 1st International Joint Symposium on the Advancements in Neurosurgery. Seoul, Korea.
- 03/2011 Glioblastoma Stem Cells and Implications for Therapy. 1st International Joint Symposium on the Advancements in Neurosurgery. Seoul, Korea.
- 07/2013 Molecular and Cellular Insights into Glioblastoma. The 6 Pillar Approach for Comprehensive Management of Subcortical Lesions, Ottawa, Canada.
- 09/2013 Molecular and Cellular Insights into Glioblastoma. The 6 Pillar Approach for Comprehensive Management of Subcortical Lesions, Ottawa, Canada.
- 3/2015 Endoscopic Approaches to Diverse Clival Pathologies. 8th International Milano Masterclass. Milan, Italy.
- 7/2015 Expanded endonasal endoscopic approaches in the management of skull base pathologies. 14th International Meeting: Updates in Neuro-Oncology. Brain Tumor Symposium, Cortona (AR), Italy.

OTHER PROFESSIONAL ACCOMPLISHMENTS

- 2009 Patient's Choice Award, Neurosurgery
- 2010 Patients' Choice Award, Neurosurgery
- 2011 Patients' Choice Award
- 2011 Most Compassionate Doctor Award
- 2012 Most Compassionate Doctor Award
- 2013 Most Compassionate Doctor Award
- 2013 Super Doctors Rising Stars
- 2014 10 Years of Service to the Patient Community; Vitals Years of Service Recognition
- 2014 Vitals Patients' Choice Award
- 2014 Vitals On-Time Doctor Recognition
- 2014 Vitals Top 10 Doctors
- 2014 Vitals Compassionate Doctor Award
- 2014 Vitals 10 Years of Service to the Patient Community Award
- 2016 American's Top Surgeons
- 2016 America's Most Honored Professionals