

CURRICULUM VITAE

Name: Michael Bruce Horowitz, M.D.
Birth Date: 08/08/1962
Birthplace: New York, NY
Citizenship: USA
Email: horomb@gmail.com
Website: michaelhorowitzmd.com
Address: **UPON REQUEST**
Phone: 412-999-4166
Videos: michaelhorowitzmd.com
Licenses: Florida ME140930
Texas J7520
Georgia 87059 Expires 8/31/2022
NPI: 1881662716
CAQH: 12232608

EDUCATION AND TRAINING

Undergraduate:

1980-1984 **Williams College** B.A. Biology
Williamstown, MA
Cum Laude with Highest Honors
Honors Thesis: The Regeneration of Mauthner Axons in Goldfish

Graduate:

1984-1988 **University of Rochester School of Medicine** MD
Rochester, N.Y.

Post Graduate Surgical Training:

7/88-6/89 **University of Pittsburgh Medical Center** Program Director:
General Surgery Internship Richard Simmons, MD
Pittsburgh, PA

7/89-6/94

**University of Pittsburgh Medical Center
Neurological Surgery, Residency**
Pittsburgh, PA

Program Directors:
L. Dade Lunsford, MD
Peter Janetta, MD

Post Residency Surgical Fellowship Training:

7/94-6/95

**Neuroendovascular Surgery/Interventional
Exovascular Neurosurgery**
(COMBINED FELLOWSHIP)
UT Southwestern Medical Center
Dallas, TX

Program Directors:
Phillip Purdy, MD
Duke Samson, MD

RECOGNITION AWARDS:

Top Doctors Pittsburgh: Pittsburgh Magazine. Pittsburgh, Pennsylvania

2005-2016

Top Doctors Jacksonville: Jacksonville Magazine, Jacksonville, Florida

2022, 2023

Top Doctor's USA: Castle Connelly

2005-2022

EMPLOYMENT HISTORY

HCA Florida Neurosurgery
Jacksonville Multispecialty Services, LLC
Jacksonville, Florida

6/22/2020 - Present

HCA Florida Southeast Division
Medical Director Neurosciences

10/1/2022- Present

Neurological Surgeon and Clinical Director of Stroke
Lee Health System
Fort Myers, Florida

9/1/2019 - 5/22/2020

Pennsylvania Brain and Spine Institute
Butler Health System
Butler, Pennsylvania

4/1/2012 - 8/31/2019

University of Pittsburgh Department of Neurological Surgery
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

8/1/1999 - 11/30/2011

University of Texas Southwestern Department of Neurological Surgery
UT Southwestern Medical Center of Dallas
Dallas, Texas

7/1/1995 - 7/1/1999

CURRENT CORPORATE POSITIONS

Chief Science Officer (CSO)

Cerenetex, Inc.
California, USA

Founding Partner

Retriever Medical
Nevada, USA

US AND NON-US PATENTS

GRANTED US PATENTS

1. **Coated vaso-occlusive device for treatment of aneurysms**
Inventors- **Michael Horowitz, M.D.** and Christopher Bettinger, PhD
Patent number 9,655,999 granted May 2017
(ANCURE, LLC)
2. **Coated vaso-occlusive device for treatment of aneurysms**
Inventors-**Michael Horowitz, M.D.** and Christopher Bettinger, PhD
Patent number 10,034,966 granted July 31, 2018
(ANCURE, LLC)
3. **Coated Vaso-Occlusive Device and Methods for Treatment of Aneurysms**
Inventors-**Michael Horowitz, M.D.** and Christopher Bettinger, PhD
Patent number EP14779096A
(ANCURE, LLC)
4. **Catheter Based Retrieval Device with Proximal Body Having Axial Freedom of Movement**
Inventor-**Michael Bruce Horowitz, MD**
Patent number US 10,172,634 granted January 8, 2019
(RETRIEVER MEDICAL, LLC)
5. **Catheter Based Retrieval Device with Proximal Body Having Axial Freedom of Movement**
Inventor-**Michael Bruce Horowitz, MD**
Patent number US 10,258,357 B1 granted April 16, 2019
(RETRIEVER MEDICAL, LLC)
6. **Non-Invasive Systems and Methods for Improved Evaluation of patients Suffering From Undiagnosed Headaches.**
Inventors: Bobo, Shah, Chen, **Horowitz**, Hays
Patent number US 20/032218801 A1 granted April 9, 2021
(CERENETEX, INC)
7. **Clot Removal Methods and Devices with Multiple Independently Controllable Elements**
Inventor: **Michael Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD
Patent number US 11,382,643 granted July 12, 2022
(RETRIEVER MEDICAL, LLC)

- 8. Method to Remove a Thrombus**
Inventor: **Michael Bruce Horowitz, MD**
Patent number: US 10,898,215 granted January 26, 2021
(RETRIEVER MEDICAL, LLC)
- 9. Clot Removal Methods and Devices with Multiple Independently Controllable Elements**
Inventor: **Michael Bruce Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD
Patent number: **US 11,583,301** granted February 21, 2023.
(RETRIEVER MEDICAL, LLC)
- 10. Catheter Based Retrieval Device with Proximal Body Having Axial Freedom of Movement**
Inventor: **Michael Bruce Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD
Patent Number: US 11,589,881
(RETRIEVER MEDICAL, LLC)
- 11. Catheter Based Retrieval Device with Proximal Body Having Axial Freedom of Movement**
Inventor: **Michael Bruce Horowitz, MD**
Patent number: US 11,633,202 granted April 25, 2023
(RETRIEVER MEDICAL, LLC)
- 12. Clot Removal Methods and Devices with Multiple Independently Controllable Elements**
Inventor: **Michael Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD
Patent number: **US 11,957,367**, granted April 2024
(RETRIEVER MEDICAL, LLC)
- 13. Catheter Based Retrieval Device with Proximal Body Having Axial Freedom of Movement**
Inventor: **Michael B. Horowitz**
Patent Number: **AU 2018352118**, granted March 2024
(RETRIEVER MEDICAL, LLC)
- 14. Valve Systems for an Aspiration Catheter**
Inventor: **Michael B. Horowitz**, Benjamin W. Bobo, Brandon M. Repko, Hieu Le
Patent number: **China 220370037** granted January 1, 2024
(RETRIEVER MEDICAL, LLC)
- 15. Non-Invasive Systems and Methods for the Improved Evaluation of Patients Suffering From Undiagnosed Headaches.**
Inventor: BW Bobo, M Shah, J Chen, **M Horowitz**, T Hays
Patent Number: **US 12.004.846** granted June 11, 2024
- 16. Devices And Methods For Repairing A Pathological Connection Between Two Anatomical Structures**
Inventor: Horowitz MB, Bobo BW, Repko BM
Patent Number: **US 12,114,878 B2** granted October 15, 2024
(RETRIEVER MEDICAL, LLC)
- 17. Clot Removal Methods and Devices with Multiple Independently Controllable Elements**
Inventor: **Michael Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD
Patent number: **US 12,114,879 B2**, granted October 15, 2024
(RETRIEVER MEDICAL, LLC)

18. Clot Removal Methods and Devices with Multiple Independently Controllable Elements

Inventor: **Michael Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD

Patent number: US **12,114,877 B2** granted October 15, 2024

(RETRIEVER MEDICAL, LLC)

19. Clot Removal Methods and Devices with Multiple Independently Controllable Elements

Inventor: **Michael Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD

Patent number: US 12,201,315 granted January 1, 2025

20. Aspiration Catheters and Methods of Use Thereof

Inventor: **Michael Horowitz, MD**, Benjamin Bobo, Brandon Repko, MD, Jack Sattell

Patent number: US 12,193,692 B2 granted January 14, 2025

ACADEMIC APPOINTMENTS

06/07-08/09	Chief of Neurosurgery University of Pittsburgh Medical Center Pittsburgh, PA
2/07-11/12	Tenured Professor of Neurosurgery and Radiology University of Pittsburgh Medical Center Pittsburgh, PA
2004 – 2007	Associate Professor of Neurosurgery and Radiology with Tenure University of Pittsburgh Medical Center Pittsburgh, PA
2005 – 2012	Co-Director Neurovascular Surgery University of Pittsburgh Medical Center
1999 - 2012	Director Neuroendovascular Surgery University of Pittsburgh Medical Center
1999 - 2012	Associate Director Center for Cranial Nerve Disorders University of Pittsburgh Medical Center
1999 - 2012	Advisory Board Member Stroke Institute University of Pittsburgh Medical Center
2000 - 2004	Associate Professor of Neurosurgery and Radiology University of Pittsburgh Medical Center Pittsburgh, PA
1999 - 2000	Visiting Associate Professor Neurosurgery and Radiology University of Pittsburgh Medical Center Pittsburgh, PA
1996-1999	Assistant Professor of Neurosurgery and Radiology University of Texas Southwestern Medical Center Dallas, TX

1995 - 1996 **Instructor, Department of Neurosurgery and Radiology**
University of Texas Southwestern Medical Center
Dallas, TX

1994 - 1995 **Assistant Instructor Department of Neurosurgery and Radiology**
University of Texas Southwestern Medical Center
Dallas, TX

CERTIFICATION AND LICENSURE

Specialty Certification:

American Board of Neurological Surgery Oral Examination		1998
National Board of Medical Examiners		1989
American Board of Neurological Surgery Written Examination		1993
CAST NES (Neuroendovascular) Certification		2019

Medical Licensure:

Texas State Medical License	J7520	1995-Present
Florida State Medical License	ME140930	2019-Present
Georgia State Medical License		2020 – Present

PUBLICATIONS

ORCID #: 0000-0002-6261-6455

Refereed Articles:

1. **Horowitz MB**, Hall WA. Central nervous system germinomas: A review. Arch Neurol 1991; 48:652-657.
2. Pistoia F, Horton JA, Sekhar L, **Horowitz M**. Imaging of blood flow changes following angioplasty for treatment of vasospasm. AJNR May/June 1991; 12:446-448.
3. **Horowitz MB**, Pang D. Acute cerebellitis: A review of the literature and case report. Pediatric Neurosurgery 1991-1992; 17:142-145.
4. **Horowitz M**, Yonas H. The management of occipital neuralgia with selective intradural dorsal root sectioning. Cephalalgia 1993; 13:554-560.
5. **Horowitz M**, Yonas H. The management of a giant middle cerebral artery fusiform serpentine aneurysm with distal clipping and retrograde thrombosis. Surgical Neurology 1994; 41:221-225.

6. **Horowitz M**, Moossy JJ, Julian T, Ferson P. Video assisted thoroscopic resection of thoracic disks. *Spine* 1994; 19:1082-1086.
7. **Horowitz M**, Jungreis CA, Quisling RG, Pollack I. Vein of Galen aneurysms: Current management concepts. *AJNR* 1994; 15:1486-1496.
8. Barr J, **Horowitz M**, Yonas H, Jungreis C, Horton J. Intraoperative selective catheterization and instillation of urokinase following carotid endarterectomy-associated MCA embolic occlusion. *Neurosurgery* 1995; 36:606-611.
9. **Horowitz M**, Kondziolka D. Multiple familial cavernous malformations evaluated over three generations with magnetic resonance imaging. *AJNR* 1995;16:1352-1355.
10. **Horowitz M**, Purdy P, Unwin H, Carstens G, Greenlee R, Hise J, Kopitnik T, Batjer H, Rollins N, Samson D. Treatment of cerebral dural sinus thrombosis using selective transvenous catheterization and urokinase infusion. *Annals of Neurology* 1995; 38:58-67.
11. **Horowitz M**, Comey C, Hirsch W, Marion D, Griffith B, Martinez J. Acute disseminated encephalomyelitis (ADEM) or ADEM-like syndrome in a heart-lung transplant recipient: A case report. *Neuroradiology* 1995; 37:434-437.
12. **Horowitz M**, Yonas H, Albright AL, Jungreis C, Kanal E. Management of moyo-moya disease using stable Xenon blood flow. *Surgical Neurology* 1995; 44(3):251-262.
13. **Horowitz MB**, Miller G, Meyer Y, Carstens G, Purdy PD. Use of an intravascular stent in the treatment of internal carotid and extracranial vertebral artery pseudoaneurysms. *AJNR* 1996; 17:693-696.
14. Purdy PD, **Horowitz M**, Mathews D, Walker B, Carstens GJ, Batjer HH, Devous MD, White CL. Calcium-45 autoradiography and dual isotope SPECT imaging in a canine model of cerebral ischemia and middle cerebral artery occlusion. *AJNR* 1996; 17:1161-1170.
14. Carstens GJ, **Horowitz M**, Purdy PD, Pandaya A. Radiation dermatitis after spinal arteriovenous embolization: A case report. *Neuroradiology* 1996; 38:S160-S164.
15. **Horowitz M**, Fichtel F, Samson D. Intracavernous carotid artery aneurysms: The importance of angiographic dural waisting. *Surgical Neurology* 1996; 46:549-552.
16. **Horowitz M**, Samson D, Purdy P. Does acute electrothrombosis occur following Guglielmi Detachable Coil aneurysm embolization? Observations at surgery. *AJNR* 1997; 18:510-513.
17. **Horowitz M**, Purdy PD, Burns D, Bellotto D. Scanning electron microscopic findings in a successfully embolized human basilar tip aneurysm using the Guglielmi Detachable Coil system. *AJNR* 1997; 18:688-690.
18. D'Alise MD, Fichtel F, **Horowitz M**. Sagittal sinus thrombosis following minor head injury treated with continuous urokinase infusion. *Surgical Neurology* 1998;49:430-435.
19. **Horowitz MB**, Willet D, Keffer JH. The use of cardiac troponin-I (cTnI) to determine the incidence of myocardial ischemia and injury in patients with aneurysmal and presumed aneurysmal subarachnoid hemorrhage. *Acta Neurochirurgica*; 140:87-93, 1998.

20. **Horowitz MB**, Dutton K, Purdy PD. Assessment of complication types and rates related to diagnostic angiography and interventional neuroradiologic procedures: A 4-year review (1993-1996). *Interventional Neuroradiology*; 4:27-37, 1998.
21. **Horowitz MB**, Kopitnik TA, Landreneau F, Krumerman J, Thomas G, Batjer HH, Samson DS. Posterior inferior cerebellar artery aneurysms: Surgical results in 38 patients. *Neurosurgery*; 43:1026-1032, 1998.
22. **Horowitz MB**, Purdy PD, Kopitnik T. Subarachnoid hemorrhage during arteriovenous malformation embolization as a result of vessel wall "sandblasting". *Surgical Neurology* 50:403-7, 1998.
23. **Horowitz MB**, Kopitnik TA, Landreneau F, Ramnani DM, Rushing EJ, George G, Purdy PP, Samson DS. The multi disciplinary approach to traumatic intracranial aneurysms secondary to shotgun and handgun wounds. *Surgical Neurology* 51:31-42, 1999.
24. **Horowitz MB**, Purdy P, Kopitnik T, Dutton K, Samson D. Aneurysm re-treatment following Guglielmi detachable and non-detachable coil embolization: Report of nine cases and review of the literature. *Neurosurgery* 44:712-720, 1999.
25. **Horowitz MB**, Pride GL, Graybeal DF, Purdy PD. Percutaneous transluminal angioplasty and stenting of mid-basilar stenosis: Report of three cases and literature review. *Neurosurgery* 45(4):925-930, 1999.
26. Pride GK, **Horowitz MB**, Purdy PD. Endovascular problem solving with intravascular stents. *AJNR* 21(3):532-540, 2000.
27. White JA, **Horowitz MB**. Dural wasting as a sign of subarachnoid extension of cavernous carotid aneurysms: A follow-up case report. *Surgical Neurology* 52 (6):607-9, 1999.
28. **Horowitz MB**, Purdy PD. The use of stents in the management of neurovascular disease: A historical and present status review. *Neurosurgery* 46:1335-1343, 2000.
29. **Horowitz MB**, Purdy PD, Valentine J, Morrill K. Remote vascular catastrophes following interventional therapy in Type 4 Ehlers-Danlos Syndrome. *AJNR* 21:974-976, 2000.
30. Levy EI, **Horowitz MB**, Jungreis CC, Cahill AM. Lingual artery embolization for severe uncontrollable post-operative tonsillar bleeding: Case report. *Ear, Nose and Throat* 80:208-211, 2001.
31. **Horowitz MB**, Levy EI. Endovascular management of wide necked aneurysms. *Contemporary Neurosurgery* 23(8):1-9, April 2001.
32. Levy E, **Horowitz MB**, Jungreis C, Pride GL, Dutton K, Purdy PD. Transluminal stent assisted angioplasty of the intracranial vertebrobasilar system for medically refractory posterior circulation ischemia: early results. *Neurosurgery* 48(6):1215-1223, 2001.
33. **Horowitz MB**, Levy EI, Koebbe C, Jungreis CC. Transluminal stent -assisted coil embolization of a vertebral confluence aneurysm: Technique report. *Surgical Neurology* 55:291-296, 2001.
34. Levy E, Koebbe CJ, **Horowitz M**, Jungreis C, Pride GL, Dutton K, Kassam A, Purdy PD. Rupture of intracranial aneurysms during endovascular coiling: Management and outcomes. *Neurosurgery* 49:807-813, 2001.

35. **Horowitz MB**, Kassam A, Nemoto E, Arimoto J, Jungreis C. An endovascular primate model for the production of a middle cerebral artery ischemic infarction. *Interventional Neuroradiology* 7:223-228,2001.
36. **Horowitz MB**, Albright AL, Jungreis C, Levy EI, Stevenson K. Endovascular management of a basilar artery false aneurysm secondary to endoscopic third ventriculostomy. *Neurosurgery* 49:1461-1465, December, 2001.
37. Koebbe C, **Horowitz MB**, Levy EI, Adelson D, Kassam A, Jungreis C. Endovascular particulate and alcohol embolization for near fatal epistaxis from a skull base vascular malformation. *Pediatric Neurosurgery* 35:257-261, 2001.
38. **Horowitz MB**, Kassam AK, Levy E, Lunsford LD. Misinterpretation of parahippocampal herniation for a posterior fossa tumor: Imaging and intraoperative findings. *J of Neuroimaging* 12:78-79, January 2002.
39. Kassam A, Carrau R, **Horowitz M**, Snyderman C, Hirsch BE, Welch WC. The Role of Fibrin Sealants in Cranial-Base Surgery. *Medscape Neurology & Neurosurgery*; February 2002. Available at: <http://www.medscape.com/viewprogram/1280>.
40. Levy EI, **Horowitz MB**, Koebbe C, Jungreis CC. Target specific trimodal endovascular management of carotid blowout syndrome: Case report. *ENT Journal* 81:115-118, 2002.
41. AB Kassam, Tyler-Kabara EC, **MH Horowitz**, L Urgo, C Hadjipanayis, EI Levy, YF Chang. Comparison of the results of surgical management of typical and atypical trigeminal neuralgia: Predictors of outcome for microvascular decompression. *J Neurosurgery* 96:527-531, 2002.
42. Patel A, Kassam AB, **Horowitz M**, Chang YF. Microvascular decompression in the management of glossopharyngeal neuralgia: An analysis of 217 cases. *Neurosurgery*50:705-711, 2002.
43. **Horowitz MB**, Levy EI, Kassam AB, Purdy PD. Endovascular therapy for intracranial aneurysms: A historical and present status review. *Surgical Neurology* 57:147-159, 2002.
44. **Horowitz MB**, Carrau R, Kanal E, Crammond D. The Risks of Tumor Embolization in the Presence of an Unrecognized Patent Foramen Ovale: Case Report. *AJNR*23:982-984, 2002.
45. **Horowitz M**, Whisnant R, Jungreis C, Snyderman C, Kassam A, Levy EI. Pre-operative embolization of carotid body tumor using temporary balloon occlusion and ethanol injection: Case report and review of the literature. *ENT Journal* 81:536-547, 2002.
46. **Horowitz M**, Jungreis C, Genevro J. Delayed Rupture of a Previously Coiled Unruptured Anterior Communicating Artery Aneurysm: Case Report. *Neurosurgery* 51:804-806, 2002.
47. Koebbe CJ, **Horowitz MB**, Levy EI, Jungreis C, Purdy PP. Intraarterial thrombolysis for thromboemboli associated with endovascular aneurysm coiling: Report of five cases. *Interventional Neuroradiology* 8:151-158, 2002.
48. **Horowitz M**, Jovin T, Welch W, Kassam A. Bow hunter's syndrome in the setting of contralateral vertebral artery stenosis: Evaluation and treatment. *Spine* 27: E495-498, 2002.
49. **Horowitz M**, Bansal S, Dastur K. Aortic Arch Origin of the Left External Carotid Artery and Type II Proatlantal Fetal Anastomosis: Case Report. *AJNR* 24(3):323-325, March 2003.

50. Koebbe C, **Horowitz MB**, Pless M, Levy EI, Jungreis CJ. Alcohol embolization of Carotid-Cavernous Indirect Fistulae. *Neurosurgery* May 2003 52(5):1111-1116.
51. Kassam AB, **Horowitz M**, Carrau R, Snyderman C, Welch W, Hirsch B, Chang YF. The Use of Tisseel Fibrin Sealant in Neurosurgical Procedures: Incidence of Cerebrospinal Fluid Leak and Cost Benefit Analysis. *Neurosurgery*, May 2003 52(5): 1102-1105.
52. Park HK, **Horowitz MB**, Jungreis C, Kassam A, Koebbe C, Genevro J, Dutton K, Purdy P. Endovascular treatment of paraclinoid aneurysms: Experience with 73 cases. *Neurosurgery* July 2003 53(1): 14-24.
53. **Horowitz MB**, Ramzipoor K, Nair A, Miller S, Rappard G, Spiro R, Purdy P. Experimental third ventriculostomy performed using endovascular surgical techniques and their adaption to percutaneous intradural neuronavigation (PINS). *Neurosurgery* August 2003 53(2): 387-391.
54. Jungreis CA, Nemoto E, Boada F, **Horowitz MB**. Model of Reversible Cerebral Ischemia in a Monkey Model. *AJNR*, October 2003 24:1834-186.
55. **Horowitz MB**, Crammond D, Balzer J, Jungreis C, Kassam AB. Aneurysm Rupture During Endovascular Coiling: Effects on Cerebral Transit Time and Neurophysiologic Monitoring and the Benefits of Early Ventriculostomy. *Minimally Invasive Neurosurgery* October 2003 46(5):300-305.
56. Kapoor V, Rothfus WE, Grahovac SZ, Kassam A, **Horowitz MB**. Refractory occipital neuralgia- Pre-operative assessment with CT- guided nerve block prior to dorsal cervical rhizotomy. *AJNR, Am J Neurodiol*, November-December 2003 24 (10):2105-10.
57. Harris AE, Beckner ME, Barnes L, Kassam AB, **Horowitz MB**. Giant cell tumor of the skull. *Neurosurgery: A Case Report and Review of the Literature. Surg Neurol*, March 2004:274-277.
58. Koebbe C, **Horowitz MB**. A Rare Case of a Ruptured Middle Meningeal Aneurysm Causing Intracerebral Hematoma in a Patient with Moyamoya Disease. *AJNR*, April 2004:25; 574-576.
59. **Horowitz MB**, Jovin TG, Gebel JM. Therapeutic basilar artery occlusion for medically refractory basilar artery stenosis: Case Report. *Neurosurgery* 54:1253-1257, May 2004.
60. Kassam A, Nemoto EM, Balzar J, Rao GR, Welch WC, Boada F, Kuwabara H, **Horowitz M**. Assessment of the toxicology of Tisseel fibrin glue on the central nervous system of the non-human primate. *ENT*, April 2004;83(4); 246-256
61. Engh J, Kassam A, Burkhart L, **Horowitz M**. Early and Late Reoperation for Hemifacial Spasm: An Analysis of 41 Microvascular Decompressions.” *Skull Base: An Interdisciplinary Approach*, Vol. 14, Supplement 1, February 2004
62. Kassam AB ^{CA}, **Horowitz M**, Chang YF, Peters DG. Altered Arterial Homeostasis and Cerebral Aneurysms (Part I): A review of the literature and justification for a molecular biomarker search. *Neurosurgery* May 2004; 54(5): 1199-1212.
63. Kassam AB, **Horowitz M**, Chang Y, Peters DG. Altered Arterial Homeostasis and Cerebral Aneurysms (Part II): A preliminary molecular epidemiology study. *Neurosurgery* 54:1199-1212, June 2004.
64. Simental A, Johnson JT, **Horowitz M**. Management of carotid artery blow out with endovascular stenting in two cases of head and neck malignancy and cervical infection: delayed complications. *American Journal of Otolaryngology* 24:417-419, 2003.

65. **Horowitz MB**, Horowitz M, Ochs M, Carrau R, Kassam AB. Trigeminal Neuralgia and Glossopharyngeal Neuralgia. *JADA* 135: 1427-1433, 2004.
66. Crago E, Kerr M, Yuan Kong, Baldisseri M, **Horowitz M**, Yonas H, Kassam A. The impact of cardiac dysfunction on outcome in the SAH population. *Acta Neurologica* 110:248-253, 2004.
67. Capitano B, Niclau DP, Potoski BA, Byers K, **Horowitz M**, Venkataramanan R, Paterson DL. Meropenem administered as a prolonged infusion to treat gram-negative central nervous system infections. *Pharmacotherapy*, June 2004; 24 (6): 803-807.
68. Levy E, **Horowitz M**, Jovin T, Kassam A. Successful management of post tumor resection middle cerebral artery thrombosis with angioplasty/stenting and low dose intrarterial/intravenous IIb/IIIa inhibitor infusion: Case report. *Neurosurgery* 55 (3): E732-E737, September 2004
69. **Horowitz MB**, Levy E, Hathaway B, Jovin T, Hirsch B. Endovascular treatment of a petrous internal carotid artery aneurysm presenting with hemotympanum and epistaxis using a coronary stent and detachable platinum coils: Case report. *Archives of Otolaryngology- Head and Neck Surgery* 131; 61-63, January 2005.
70. Park HK, **Horowitz MB**, Jungreis C, Genevro J, Koebbe C, Levy E, Kassam AB. Periprocedural Morbidity and Mortality Associated with Endovascular Treatment of Intracranial Aneurysms. *AJNR* 26:506-514, 2005.
71. King JT, **Horowitz MB**, Kassam AB, Yonas H, J, Roberts M. Validity and Reliability of the SF-12 for the Measurement of Health Status in Patients with Cerebral Aneurysms. *J Neurosurg* 102:489-494, 2005
72. King JT, Yonas H, **Horowitz M**, Kassam AB, Roberts M. Failure of communication between patients with cerebral aneurysms and neurosurgeons. *Journal Neurology, Neurosurgery, and Psychiatry*: 76; 550-554, March 2005.
73. Chang WM, **HorowitzMB**, Stetten GD. Intuitive intra-operative ultrasound guidance using the Sonic Flashlight: A novel ultrasound display system. *Neurosurgery* 56/ONS-434-ONS-437, 2005.
74. Nemoto EM, Jungreis CA, Larnard D, Kuwabara H, **Horowitz M**, Kassam A: Hyperthermia and hypermetabolism in focal cerebral ischemia. *Adv. Exp. Med*, 566: 83-90, 2004.
75. **Horowitz M**, Levy E, Sharts M, Albright AL, Pollack I. Endovascular management of ventriculostomy induced anterior cerebral artery false aneurysm in a 3-week-old child with myelomeningocele. *Neurosurgery* 57:374, 2005.
76. **Horowitz MB**, Gupta R, Jovin T. The dual catheter technique for coiling wide necked cerebral aneurysms: An under reported method. *Interventional Neuroradiology* 11:155-160, 2005.
77. Engh JA, **Horowitz M**, Burkhart L, Chang YF, Kassam A. Repeat microvascular decompression for hemifacial spasm. *Journal of Neurology, Neurosurgery and Psychiatry* 76: 1574-1580; 2005
78. **Horowitz M**, Jovin T, Levy E, Anderson W. Emergent basilar artery and bilateral posterior cerebral artery angioplasty, urokinase/IIb/III inhibitor thrombolysis, and stenting for acute basilar artery occlusion secondary to diagnostic cardiac catheterization: Case report. *Journal of Neuroimaging* 15:315-318, 2005.

79. King JT, Kassam AB, **Horowitz MB**, Yonas H, Tsevat J, Roberts M. Mental Health, Anxiety, and Depression in Patients with Cerebral Aneurysms. *J. Neurosurg* 103:636-641, 2005.
80. Gupta R, **Horowitz MB**, Tayal A, Jovin T. De Novo Development of a remote Arteriovenous Fistula Following Cavernous Trans-Arterial Embolization of a Carotid Cavernous Fistula: Case Report and Review of the Literature. *AJNR* 26:2587-2590, 2005
81. Kassam A, **Horowitz MB**, Welch W, Sclabassi R, Carrau R, Snyderman C, Hirsch B. The role of endoscopic assisted microneurosurgery (Image Fusion technology) in the performance of neurosurgical procedures. *Minimally Invasive Neurosurgery* 48:1991-196, 2005
82. Tudor G, Gupta R, Uchino K, Jungreis CA, Wechsler LR, Hammer MD, Tayal A, **Horowitz MB**. Emergent stenting of extra-cranial carotid artery occlusion in acute stroke has a high revascularization rate. *Stroke* 36:2426-2430, 2005.
83. Gupta R, Yi HJ, Jovin TG, **Horowitz MB**. Three unusual arteriovenous fistulas presenting in young children successfully treated with trans-arterial endovascular embolization. *Pediatric Neurosurgery*. 2005; 41 (6):328-333.
84. Zimmer LA, Hirsch BE, Kassam A, **Horowitz M**, Snyderman CH. Resection of a recurrent glomus jugulare via an endoscopic, transnasal- transclival- transpetrous approach to the jugular fossa. *Otology and Neurotology* 27 (3): 398-402, April 2006.
85. **Horowitz M**, Levy E, Florio F, Bonaroti E. Cavernous carotid origin aneurysm rupture with intracerebral intraparenchymal hemorrhage 11 years following treatment of a traumatic Barrow Type A cavernous carotid artery fistula: Case report. *AJNR*; March 2006; 27:524-526
86. Gupta R, Jovin TG, **Horowitz MB**. Urgent stenting of the M2 (superior) division of the middle cerebral artery after systemic thrombolysis in acute stroke; Case report. *AJNR* March 2006; 27:521-523
87. **Horowitz M**, Levy E, Genevro J, Bonaroti G, Jovin T. Intra/extra-aneurysmal stent placement for management of a wide necked and complex bifurcation aneurysms: Eight cases using the waffle cone technique. *Neurosurgery* April 2006; 58: 258-262
88. Levy EI, Ecker RD, **Horowitz MB**, Gupta R, Hanel RA, Sauvageau E, Jovin TG, Guterman LR, Hopkins LN. Stent assisted intracranial recanalization for acute stroke: early results. *Neurosurgery* 2006; 58 (3):458-463.
89. Gupta R, **Horowitz M**, Gilman S. Neuroform stent assisted reconstruction and coil embolization of a ruptured A1 segment anterior cerebral artery aneurysms. *J Neuroimaging*; April 2006; 16 (2): 117-119.
90. Thomas A, Gupta R, Tayal A, **Horowitz M**, Jovin T. Stenting and Angioplasty of the Symptomatic Chronically Occluded Carotid Artery: Report of Two Cases. *AJNR* January 2007; 28: 168-171.
91. **Horowitz MB**, Gupta R, Gologorsky Y, Sandhu E. Jovin T, Yi HJ, Genevro J, Levy E, Kassam A. Clinical and anatomic outcomes following endovascular coiling of middle cerebral artery aneurysms: Report on 30 treated aneurysms and review of the literature. *Surgical Neurology*. July 2006 66:167-171.
92. Yi HJ, Gupta R, Jovin T, Tayal A, Genevro J, Gologorsky Y, **Horowitz M**. Initial Experience with the use of Intravenous Eptifibatide Bolus during Endovascular Treatment of Intracranial Aneurysms. *AJNR*. October 2006 27:1856-1860.

93. Gupta R, Vora NA, **Horowitz MB**, Tayal AH, Hammer MD, Uchino K, Wechsler LR, Jovin TG. Multimodal reperfusion therapy for acute ischemic stroke: factors predicting vessel recanalization. *Stroke*. 2006 37: 986-990.
94. Stippler M, Crago E, Levy EI, Kerr ME, Yonas H, **Horowitz MB**, Kassam A. Magnesium infusion for vasospasm prophylaxis after subarachnoid hemorrhage. *J of Neurosurgery* 105: 723-729 November 2006.
95. Gupta R, Firas A, Thomas AJ, **Horowitz MB**, Barrow T, Vora NA, Uchino K, Hammer MD, Wechsler LR, Jovin TG. Safety, feasibility, and short-term follow-up of drug eluting stent placement in the intra- and extracranial circulation. *Stroke*. September 2006; 37:2562-2566.
96. Kassam AB, Thomas A, Zimmer LA, Snyderman CH, Carrau RL, Mintz A, **Horowitz M**. Expanded Endonasal Approach: A Fully Endoscopic Completely Transnasal Resection of a Skull Base Arteriovenous Malformation. *Child Nervous System* 106:75-86 February 2007
97. King JT, **Horowitz MB**, Bissonette DJ, Tsevat J, Roberts MS. What Do Patients with Cerebral Aneurysms Know About Their Condition? *Neurosurgery* 58(5) 824-830 May 2006.
98. Gupta R, Yonas H, Gebel J, Goldstein S, **Horowitz MB**, Grahovac SZ, Wechsler LR, Hammer MD, Uchino K, Jovin T. Reduced Pretreatment Ipsilateral Middle Cerebral Artery Cerebral Blood Flow Is Predictive of Symptomatic Hemorrhage Post-Intra-Arterial Thrombolysis in Patients With Middle Cerebral Artery Occlusion. *Stroke* 37: 2526-2530 September 2006.
99. Jovin T, Gupta R, **Horowitz MB**. Management of Symptomatic Intracranial Atherosclerotic Disease. *Current Cardiology Reports*.2007
100. Vora NA, Gupta R, Thomas AJ, **Horowitz MB**, Tayal AH, Hammer MD, Uchino K, Wechsler LR, Jovin TG. Factors predicting hemorrhagic complications after multimodal reperfusion therapy for acute ischemic stroke. *AJNR* 28:1391-94 August 2007
101. Levy EI, Mehta R, Gupta R, Hanel RA, Chamczuk AJ, Fiorella D, Woo HH, Albuquerque FC, Jovin TG, **Horowitz MB**, Hopkins LN. Self-Expanding Stents for Recanalization of Acute Cerebrovascular Occlusions. *AJNR* 28: 816-822 May 2007.
102. Gupta R, Vora N, Thomas AJ, Crammond D, Roth R, Jovin T, **Horowitz M**. Symptomatic cerebral air embolism during neuro-angiographic procedures: Incidence and problem avoidance. *Neurocritical Care* (2007) 7:241-246
103. Vora N, Thomas A, Germanwala A, Jovin T, **Horowitz M**. Retrieval of a displaced detachable coil and intracranial stent with a L5 Merci Retriever during endovascular embolization of an intracranial aneurysm. *J of Neuroimaging* 18: 81-84 January 2008.
104. Gupta R, Thomas Aj, Masih A, **Horowitz MB**. Treatment of Extracranial Carotid Artery Pseudoaneurysms with Stent Grafts: Case Series. *Journal of Neuroimaging*; 18(2): 180-183, April 2008.
105. Germanwala A, Vora N, Thomas A, Jovin T, Gologorsky Y, **Horowitz MB**. EthyneVinylAlcohol Copolymer (onyx-18) used in Endovascular Treatment of Vein of Galen Aneurysmal Malformation. *Childs Nervous System*. (2008) 24:135-138.

106. Vora NA, Germanwala AV, Thomas AJ, **Horowitz MB**, Jovin TG. Endovascular Management of a Traumatic Ophthalmic Artery Aneurysm. *The Journal of Trauma Injury, Infection and Critical Care*. (192-194) July 2007.
107. Prevedello DM, Kassam AB, Snyderman C, Carrau RL, Mintz AH, Thomas A, Gardner P, **Horowitz M**. Endoscopic cranial surgery: ready for prime time? *Clinical Neurosurgery*. 2007 Oct;54:48-57.
108. Kassam AB, Gardner PA, Mintz A, Snyderman CH, Carrau RL, **Horowitz M**. Endoscopic endonasal clipping of an unsecured superior hypophyseal artery aneurysm. Technical note. *J Neurosurg*. 2007 Nov;107:1047-52.
109. Tomycz ND, Holm MB, **Horowitz MB**, Wechsler LR, Raina K, Gupta R, Jovin T. Extensive brainstem ischemia on neuroimaging does not preclude meaningful recovery from locked-in syndrome: two cases of endovascularly managed basilar thrombosis. *J. Neuroimaging*. 2008;18:15-17.
110. Jovin T, Vora N, Thomas AJ, **Horowitz M**. Retrograde back-coiling technique for a ruptured aneurysm of a double posterior inferior cerebellar artery. *Journal of Neuroimaging*. 2009; 19:65-67.
111. Tomycz N, Vora NA, Kanal E, **Horowitz, MB.**, Jovin TG. Intracranial Arterialized Venous Angioma: A Case of a Rare Mixed Vascular Malformation with New Insights from Functional MRI. *Diagnostic and Interventional Radiology*. D01.426/1305-3825.
112. Thomas AJ, Prevedello DM, Tomycz ND, Gardner P, Challinor S, Mintz A, **Horowitz MB**, Kassam A. Diagnosis, Perioperative Care, and Remission in Cushing Disease. *Neurosurgery Quarterly*. 18:3:153-158. 2008
113. Kassam AB, Thomas A, Zimmer LA, Snyderman CH, Carrau RL, Mintz A, **Horowitz M**. Expanded Endonasal Approach: A Fully Endoscopic Completely Transnasal Resection of a Skull Base Arteriovenous Malformation. *Childs Nervous System* 2007 23:491-498.
114. Jovin TG, Gupta R, **Horowitz MB**. Management of symptomatic intracranial atherosclerotic disease. *Current Cardiology Report* 2007 9:32-40.
115. Jankowitz BT, Vora N, Jovin T, **Horowitz MB**. Treatment of Pediatric Intracranial Vascular Malformations with Onyx 18. *Pediatric Journal of Neurosurgery* 2008 2:171-176.
116. Gupta, R., Crago, E., Gallek, M., Hoffman, L., **Horowitz, M.**, & Yonas, H. (2008). Reduced ipsilateral hemispheric cerebral blood flow at admission is predictive of vasospasm with infarction after aneurysmal subarachnoid hemorrhage. *NeuroCritical Care*. August 2008, 9 (1), 27-30.
117. Jahromi BS, Mocco J, Bang JA, Gologorsky Y, Siddiqui AH, **Horowitz MB**, Hopkins LN, Levy EI. Long-Term Clinical and Angiographic Outcome Following Endovascular Management of Giant Intracranial Aneurysms. *Neurosurgery*. 63 (4) 662-675.
118. Kim S, Vora N, Gupta R, Thomas A, Kassam A, Lee K, Gologorsky Y, Jankowitz B, Panapitiya N, Aleu A, Sandhu E, Crago E, Hricik A, Gallek M, **Horowitz M**. Anatomic Results and Complications of Stent-Assisted Coil Embolization of Intracranial Aneurysms. *Interventional Neuroradiology* 2008. 14: 267-284.
119. Thomas AJ, Germanwala AV, Vora N, Prevedello DM, Jovin T, Kassam A, **Horowitz MB**. Dual Origin Extracranial Vertebral Artery: Case Report and Embryology. *J Neuroimaging* 2008; 18:173-176.

120. Gallek MJ, Conley Y, Sherwood P, **Horowitz M**, Kassam A, Alexander S. APOE Genotype and functional Outcome Following Aneurysmal Subarachnoid Hemorrhage. *Biol Res Nurs*. November 2008.
121. Tanabe M, Crago EA, Suffoletto MS, Hravnak M, Frangiskakis JM, Kassam AB, **Horowitz MB**, Gorscan J 3rd. Relation of elevation in cardiac troponin I to clinical severity, cardiac dysfunction, and pulmonary congestion in patients with subarachnoid hemorrhage. *American Journal of Cardiology* 2008 Dec 1; 102 (11):1545-50.
122. Jankowitz BT, Vora N, Jovin T, **Horowitz M**. Ear Necrosis, Resulting from the Endovascular Onyx-18 Embolization of a Dural Arteriovenous Fistula Fed by the Posterior Auricular Artery. *Neuroimaging* 2008 October.
123. Alexander SA, Kerr ME, Balzer J, **Horowitz M**, Kassam A, Hoffman L, Conley YP. Cerebrospinal fluid apolipoprotein E, calcium and cerebral vasospasm after subarachnoid hemorrhage. *Biol Res Nurs*. 2008 October;10(2):102-12.
124. Barbato JE, Dillavou E, **Horowitz MB**, Jovin TG, Kanal E, David S, Makaroun MS. A Randomized Trial of Carotid Artery Stenting with and without Cerebral Protection. *Journal of Vascular Surgery*. 47(4): 760-765, April 2008.
125. Jankowitz BT, Thomas AJ, Vora N, Gupta R, Kim S, Levy E, Yamamoto J, Kassam A, Gologorsky Y, Sandhu E, Panapitiya N, Crago E, Hricik A, Lee K, Gallek M, Jovin T, **Horowitz M**. Risk of Hemorrhage and Stroke in Combined Neuroform Stenting and Coil Embolization of Acutely Ruptured Intracranial Aneurysms. *Interventional Radiology*. *Interventional Neuroradiology* 14: 385-396 2008.
126. Lin R, Vora N, Zaidi S, Aleu A, Jankowitz B, Thomas A, Gupta R, **Horowitz M**, Kim S, Reddy V, Hammer M, Uchino K, Weshsler LR, Jovin T. Mechanical Approaches Combined with Intra-arterial Pharmacological Therapy Are Superior to Either Intervention Alone in Revascularization of Acute Carotid Terminus Occlusion. *Stroke*. 2009 Jun;40(6):2092-7
127. Hussain MS, Lin R, Moskowitz S, Rasmussen PA, Masaryk TJ, **Horowitz MB**, Jovin T, Gupta R. Symptomatic Delayed Re-Occlusion after Initial Successful Revascularization in acute Ischemic Stroke *Journal of Stroke and Cerebrovascular Diseases*. *Stroke and Cerebrovascular Diseases*. 2010 Jan;19(1):36-9.
128. Ochalski PG, **Horowitz MB**, Mintz AH, Hughes SJ, Okonkwo DO, Kassam AB, et al: Minimal-access technique for distal catheter insertion during ventricular peritoneal shunt procedures: a review of 100 cases. *J Neurosurg*, 2009 Sep;111(3):623-7.
129. Jankowitz BT, Aleu A, Lin R, Kostov D, Thomas AJ, Gupta R, Vora N, Seong KR, Panapitiya N, Jovin T, **Horowitz M**. Endovascular Treatment of Atypical Posterior Circulation Aneurysms: Technical Results and Review of the Literature. *Neuroimaging*. *J Neuroimaging* 2011 Jan;21(1):56-61.
132. Monaco E, Jankowitz BT, Tyler-Kabara EC, **Horowitz MB**. Incidental Discovery of an Absent Right Common Carotid Artery Demonstrated by Digital Subtraction Angiography and Magnetic Resonance Angiography. *Clinical Neuroradiology* 2009 (3) 227-229.
133. Vora N, Thomas AJ, Gupta R, Gologorsky Y, Panapitiya N, Jovin T, Jankowitz B, Kassam A, **Horowitz M**. Endovascular Treatment of Distal Anterior Cerebral Artery Aneurysms: Technical Results and Review of the Literature. *J Neuroimaging*. 2010; 20:70-73.

134. Ochalski PG, Edinger JT, **Horowitz MB**, Stetler WR, Murdoch GH, Kassam AB, Engh JA. Intracranial angiomatoid fibrous histiocytoma presenting as recurrent multifocal intraparenchymal hemorrhage. *J Neurosurg.* 2010May;112(5):978-82.
135. Tormenti MJ, Lin R, Jankowitz BT, **Horowitz MB**. PICA Origin Aneurysm Diagnosed 27 Years after Microvascular Decompression of Cranial Nerve VII. *J Neuroimaging.* 2011 Jan;21;(1):83-6.
136. Lin R, Jankowitz B, Aleu A, Kostov D, Lee K, Jovin T, **Horowitz M**, Huen A, Gehris R. Sinus Pericranii: A Case Report and Literature Review. *Journal of Pediatric Neuroradiology*, vol. 1, no. 1, pp 49-53, 2012.
137. Yang HC, Kano H, Kondziolka D, Nirnajan A, Flickinger JC, Horowitz MB, Lunsford LD. Stereotactic radiosurgery with or without embolization for intracranial dural arteriovenous fistulas. *Neurosurgery.* 2010 Nov; 67(5):1276-83.
138. Lin, R, Aleu A, Jankowitz B, Kostov D, Kanaan H, **Horowitz M**, Jovin T. Endovascular Revascularization of Chronic Symptomatic Vertebrobasilar Occlusion. *J Neuroimaging.* 2012. Jan;22(1):74-9.
139. Kassam AB, Prevedello DM, Carrau RL, Snyderman CH, Thomas A, Gardner P, Zanation A, Duz, B, Stefko ST, Byers K, **Horowitz MB**. Endoscopic Endonasal Skull Base Surgery: Analysis of Complications in our initial 800 Patients and Literature Review. *J Neurosurgery.* 114:1544-1568, June 2011
140. Yang H, Kano H, Kondziolka D, Niranjana A, Flickinger JC, **Horowitz MB**, Lunsford LD. Stereotactic Radiosurgery with or Without Embolization for Intracranial Dural Arteriovenous Fistulas. *Neurosurgery* 67:1276-1285. November 2010.
141. Thirumala PD, Shah AC, Nikonow TN, Habeych ME, Balzer JR, Crammond DJ, Burkhart L, Chang Y, Gardner P, Kassam AB, **Horowitz MB**. Microvascular Decompression for Hemifacial Spasm: Evaluating Outcome Prognosticators Including the Value of Intraoperative Lateral Spread Response Monitoring and Clinical Characteristics in 293 Patients. *J Clinical Neurophysiology*, Volume 28 (1) February 2011.
142. Jankowitz B, Thomas A, Jovin T, **Horowitz M**. Y-stenting Using Kissing Stents for the Treatment of Bifurcation Aneurysms. *Journal of NeuroInterventional Surgery.* 2011 June doi:10.1136:1-6.
143. Hanaan H, Jankowitz B, Alei A, Kostov D, Lin r, Lee K, Panipitiya N, Gologorsky Y, Sandhu E, Rissman L, Crago E, Chang YF, Kim SR, Jovin T, **Horowitz M**. In-stent thrombosis and stenosis after neck remodeling device-assisted coil embolization of intracranial aneurysms. *Neurosurgery* 2010 Dec;67(6):1532-3.
144. Yousef K, Crago E, Kuo CW, **Horowitz M**, Hravnak M. Predictors of delayed cerebral ischemia after aneurysmal subarachnoid hemorrhage: a cardiac focus. *Neurocrit Care.* 2010 Dec;13(3):366-72.
145. Malik AM, Vora NA, Lin R, Zaidi SF, Aleu A, Jankowitz BT, Jumaa MA, Hammer MD, Wechsler LR, **Horowitz MB**, Jovin TG. Endovascular Treatment of Tandem Extracranial/Intracranial Anterior Circulation Occlusions: Preliminary Single-Center Experience. *Stroke.* 2011 Jun; 42(6):1652-7.
147. Habeych, ME, Shah AC, Nikonkow TN, Balzer JR, Crammond DJ, Thirumala PD, Kassam A, **Horowitz M**. Effect of Botulinum Neurotoxin Treatment in the Lateral Spread of Monitoring of Microvascular Decompression for Hemifacial Spasm. *Muscle & Nerve.* August 2011

148. Kostov D, Jankowitz B, Kanaan H, Engh J, Monaco EA, **Horowitz M**. Repair of Intracranial Vessel Perforation with Onyx-18 Using an Exovascular Retreating Catheter Technique. *Journal of Neurointerventional Surgery*. April 2011.
149. Grandhi R, Panczykowski D, Zwagerman NT, Gehris R, Villasenor-Park J, Ho Jonhan, Grandinetti L, **Horowitz M**. Facial necrosis after endovascular Onyx-18 embolization for epistaxis. *Surg Neurol Int*. 4:95. 2013
150. Jumma MA, Agheabrahim A, Zaidi SF, Jankowitz B, Jovin TG, **Horowitz MB**. Is Head CT necessary after uncomplicated coiling of unruptured Intracranial Aneurysms? *Journal of Neuroimaging*. 2013 Apr; 23(2):185-6.
151. Grandhi R, Kanaan H, Shah A, Harrison G, Bonfield C, Jovin T, Jankowitz B, **Horowitz M**. Safety and efficacy of percutaneous femoral artery access followed by Mynx closure in cerebral neurovascular procedures: a single center analysis. *J Neurointerv Surg* 2014; 6:445-450.
152. Shah A, **Horowitz M**. Persistent hemifacial spasm after microvascular decompression: a risk assessment model. *British Journal of Neurosurgery*. 2016 Dec 1:1-9.
153. **Horowitz MB**. Brainstem compression as a cause of neurogenic hypertension. *Dallas Medical Journal* 85(6):260-264, 1999.
154. **Horowitz MB**, Mickey B, Halliday A, Giller C. Clinical update in neurosurgery. *Dallas Medical Journal* 85(6):253-259, 1999.
155. **Horowitz MB**. Brainstem compression as a cause of neurogenic hypertension. *Current Hypertension Reports. Secondary Hypertension: Adrenal and Nervous System Mechanisms* 3:264-267, 1999.
156. **Horowitz M**, Spiro R, Purdy P, Jungreis C, Levy E, Kassam A. Meningioma Embolization. *Contemporary Neurosurgery* 23(21):1-6, 2001.
157. Levy EI, Boulos AS, Bendok BR, **Horowitz MB**, Kim SH, Qureshi AI, Guterman LR, Hopkins LN. Intracranial stenting for cerebrovascular pathology. *Contemporary Neurosurgery* 23:1-10, December 2001.
158. Koebbe C, **Horowitz MH**, Jungreis C, Dutton K, Park H, Purdy PD. Endovascular coiling of anterior communicating artery aneurysms: A review of clinical and angiographic outcomes. *Contemporary Neurosurgery*. 25:1-6, July 2003.
159. Gupta R, Jovin TG, **Horowitz MB**. Hemodynamic Instability After Carotid Artery Stenting: A Review of the Literature. *Neurosurgical Focus* 18(1)E6, January 2005.
160. Bolden J, **Horowitz MB**, Wanchick K. Ventriculoperitoneal tubing - appendiceal adhesions laparoscopically identified during shunt removal. The hidden dangers in simple procedures. *Journal of Biology and Today's World*. 2021, 11(5):1-2.
161. Grandhi R, Zwagerman NT, Linares G, Monaco JA, Jovin T, **Horowitz M**, Jankowitz B. Onyx embolization of infectious intracranial aneurysms. *J Neurointerv Surg* 00:1-4. doi:10.1111.1136/neurointsurg-2013-010755
162. **Horowitz, MB**. Endovascular treatment of an unruptured Posterior Inferior Cerebellar Artery incorporating fusiform Vertebral Artery aneurysm using simultaneous trans circulatory bilateral

- vertebral artery access and placement of kissing vertebral artery and PICA stents for native circulation reconstruction and aneurysm occlusion: Case Discussion and Literature Review. *Journal of Biology and Today's World*. 2021. 11(6):1-4.
163. Augustine E, Deng P, Mou C, Okakamura M, Woolley B, **Horowitz M**, Bettinger C. Control release and diffusion-reaction kinetics of genipin eluting fibers using an *in vitro* aneurysm flow model. *ACS Biomaterials Science and Engineering*. 7(11):5144-5153. 2021.
164. **Horowitz MB**, Repko B, Hieu L, Bulova J, Bobo B. Porcine testing of a second generation novel mechanical thrombectomy device to evaluate efficacy in performing experimental pulmonary embolus extraction along with effects on arterial and venous intima and vessel integrity. *Journal of Biology and Today's World*. 11(5): 1-4. 2022.
165. **Horowitz MB**, Pande R, Callander M, Al-Saghir Y. Segmental arterial mediolysis (SAM) of the common and internal carotid arteries following self-inflicted stab wound to the neck: Case report and topic review. *Journal of Trauma and Critical Care*. 6(6):126. 2022.
166. Chapman J, **Horowitz M**, Bond R, et al. (March 09, 2023) Acute Onset of Movement Disorders Accompanying Common Emergency Room Neurologic Disease Processes. *Cureus* 15(3): e35924. doi:10.7759/cureus.35924
167. **Horowitz M**, Bobo B, Le H, Repko B. Extra-corporeal Processing of Bovine, Porcine and Human Blood in Preparation for Autologous Re-Infusion Using a Disposable Filtration System: Initial Proof of Concept Study and Potential Applications for Human Autologous Blood Reinfusion in the Civilian and Combat Casualty Care Settings. *Journal of Biology and Today's World* 2023;Vol 12, Issue 06:001-006.
168. **Horowitz M**, Bobo B, Le H, Repko B. *In vitro* proof of concept evaluation of the radial force generated by a novel mechanical thrombectomy device that incorporates controlled, expandable wire spheres. *Cardiology and Cardiovascular Medicine* 2024; 8(1):43-47.
169. **Horowitz M**, Bobo B, Le H, Repko B Pande H. *In vitro* proof of concept evaluation of a gravity powered novel filtration device to effectively process a blood analogue/particle mixture to rapidly produce a clear filtrate. *Cardiology and Cardiovascular Medicine* 2024; 8(1):48-51.
170. **Horowitz M**, Bobo B, Repko B, Le H. *In Vitro* and *In Vivo* Performance Testing of a Novel 24F Aspiration/Guide Catheter. *Cardiology and Cardiovascular Medicine* 2024; 8:119-121. ISSN:2572-9292
171. **Horowitz M**, Youseff Al-Saghir, Ronnie Bond, Tarek Al-Saghir. Aphasia Following MR Guided Focused Ultrasound Thalamotomy (MRGFUST) Lesioning of The Ventral Intermediate Nucleus (Vim) in A Patient with Essential Tremor (ET): The Importance of Adhering to The Diagnosis of Exclusion Principle and Distinguishing Between Cortical and Thalamic Etiologies. *Cardiology and Cardiovascular Medicine*. 8 (2024): 195-201.

Published Abstracts regarding RO1 Grant:

Crago E, Hravnak M, Kong Y, Sherwood P, **Horowitz M.** (2005) Relationship of catecholamines on markers of myocardial ischemia in patients with subarachnoid hemorrhage. *Critical Care Medicine*, 23, [12 Suppl], A 102.

Tanabe M, **Horowitz MB**, Cannesson M, Hravnak M, Crago EA, Gorscan J. (2006). The relationship between regional left ventricular wall motion and troponin-I levels in patients with subarachnoid hemorrhage: *Journal of American College of Cardiology*, 47, 368A.

Hravnak M, Crago C, **Horowitz M.** (2006) Prevalence of electrocardiographic abnormalities in patients with subarachnoid hemorrhage. *American Journal of Critical Care*, 15, 324.

Hravnak M. Crago C, **Horowitz M.** (2006) Prolonged QT interval after aneurismal subarachnoid hemorrhage. *Critical Care Medicine*, 34 [12 Suppl]:A81

Tanabe M, Crago EA, Hravnak M, **Horowitz MB**, Gorscan J. (2007) Relationship of mild troponin-I elevations to cardiac function and pulmonary congestion in patients with subarachnoid hemorrhage. *Journal of American College of Cardiology*, 49 [Suppl. 1], 322A

Tanabe M, Crago EA, Hravnak M, **Horowitz MB**, Gorscan J. (2007) Relationship of Acute Cardiac Dysfunction with Clinical Severity of Subarachnoid Hemorrhage: Results from the SAHMII Study. *Journal of American College of Cardiology*, 49 [Suppl. 1], 338A.

Frangiskakis, JM, Tanabe M, Hravnak M, Crago EA, Gorscan J, **Horowitz MB**, London B. (2007) The MinK G38S polymorphism associates with atrial arrhythmias after subarachnoid hemorrhage. *Circulation*; 116, II-521.

Hravnak M, Crago, Miketic J, Chang Y, **Horowitz MB.** (2007) Admission Serum Glucose and Outcomes in Patients with Subarachnoid Hemorrhage. *Critical Care Medicine*, 35, Suppl A12.

Crago E, Sherwood P, Hricik A, Hravnak M, Bender C, Chang Y, **Horowitz M**, Kassam A. (2007) The relationship between myocardial dysfunction and 12 month neuropsychological outcomes in patients following aneurysmal subarachnoid hemorrhage. *Critical Care Medicine*, 35, Suppl A204.

Hravnak M, Frangiskakis M, Crago E, Gallek MJ, Chang Y, **Horowitz MB.** Elevated cardiac troponin I and electrocardiographic and echocardiographic abnormalities after aneurysmal subarachnoid hemorrhage. *Intensive Care Medicine*, Volume 34, Supplement 1/September, 2008; page S116. (Oral presentation at European Society Intensive Care Medicine, Lisbon, Portugal; Sept 2008)

Hravnak M, Frangiskakis JM, Crago E, Chang Y, Gorscan J, **Horowitz MB.** Relationship between left ventricular wall motion abnormalities and markers of neurocardiac injury in patients with aneurysmal subarachnoid hemorrhage. *2008 Critical Care Medicine*, 36(12 Supplement):A10. (oral presentation at Society of Critical Care Medicine 37th Congress, 2009, Nashville TN. Winter of 2009 Annual Scientific Award (top 10 scoring abstracts))

Hravnak M, Frangiskakis JM, Poloyac S, Yao J, Crago E, Thampatty P, Chang Y, Gorscan J, **Horowitz M.** Relationship between catecholamines and neurocardiac injury in patients with aneurysmal subarachnoid hemorrhage. *Critical Care Medicine*, 37(12 Supplement: Axx

Textbooks Authored or Edited:

1. **Horowitz M**, Levy E. (Editors) Progress in Neurological Surgery: Neuroendovascular Surgery. S. Karger AG, Switzerland, 2005.

Book Chapters:

2. **Horowitz M**, Jungreis C, Quisling RG, Pollack I. Vein of Galen Aneurysms. *In Cerebrovascular Disease*. H. Hunt Batjer (Editor). Raven Press. New York. 1996. pp 823-832.
3. **Horowitz M**, Greenlee R, Purdy P. Acute and Chronic Dural Sinus Thrombosis. *In Cerebrovascular Disease*. H. Hunt Batjer (Editor). Raven Press. New York. 1996. pp 559-572.
4. Kopitnik TA, **Horowitz M**, Samson DS. Management of Subarachnoid Hemorrhage. *In Neurological Emergencies. Second Edition*. Chapter 8. RAC Hughes (Editor). BMJ Publishing Group. London. pp. 188-224. 1997.
5. **Horowitz M**, Kopitnik TA,, Samson DS. Management of Subarachnoid Hemorrhage. *In Neurological Emergencies. Third Edition*. RAC Hughes (Editor). BMJ Publishing Group. London.
6. **Horowitz MB**, Kopitnik TA, Samson DS. Surgical Management of Brainstem Cavernomas. *In Neurosurgical Operative Color Atlas*. SS Rengachary (Editor). AANS/Williams and Wilkins, 1999
7. **Horowitz MB**, Samson DS, Kopitnik TA. Basilar Tip Aneurysms. *In Atlas of Neurosurgical Techniques*. L Sekhar and R. Fessler (Editors). Thieme, 1999.
8. Kopitnik TA, **Horowitz MB**, Samson DS. Surgical management of intraoperative aneurysmal rupture, in Schmideck HH, Sweet WH (eds): Operative Neurosurgical Techniques: Indications, Methods, and Results. W.B. Saunders Co., Philadelphia.
9. Kopitnik TA, **Horowitz M**, Samson DS. Reoperation for residual/recurrent aneurysms of the basilar apex, in Fisher WS (ed): Perspectives in Neurological Surgery, Thieme Medical Publishing, Inc, New York.
10. Kopitnik TA, **Horowitz M**, Samson DS. Surgical resection of AVMs of the posterior fossa, in Rengachary SS, Wilkins RH eds): Neurosurgical Operative Atlas, AANS, Park Ridge, Illinois.
11. Kassam AB, **Horowitz M**, Jannetta PJ. Microvascular Surgery for Cranial Nerves V, VII, and VIII. *In Atlas of Neurosurgical Techniques*
12. Kassam AB, **Horowitz M**, Jannetta PJ. Microvascular Surgery for Cranial Nerves IX, X, and XII. *In Atlas of Neurosurgical Techniques*
13. Kassam AB, **Horowitz M**. Posterior Fossa Surgery for Cranial Nerve Disorders Neurosurgical Pain Management
14. **Horowitz MB**, Kassam AB. Microvascular Compression- Diagnosis, Medical Management, and Surgical Management in Dizziness. *In Essentials of Otology and Neurotology*
15. Kassam AB, Peters D, **Horowitz M**. Molecular Pathogenesis of Cerebral Aneurysms: Current Concepts and Future Directions. *In*: Pinsky MR (ed.), Springer. Update in Intensive Care and Emergency Medicine, Vol. 37, Chapter 4, pp 26-41 (2002).

16. **Horowitz M**, Purdy, P. The Use Of Stents In The Management Of Neurovascular Disease: A Historical And Present Status Review. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S. Karger AG, Switzerland., 2005, 18-32
17. **Horowitz M**, Levy E, Kassam A, Purdy P. Endovascular Therapy for Intracranial Aneurysms: A Historical and Present Perspective. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S. Karger AG, Switzerland., 2005, 101-121.
18. **Horowitz M**, Levy E. Endovascular Management Of Wide-Necked Aneurysms. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S. Karger AG, Switzerland , 2005, 122-134
19. Levy E, Spiro R, **Horowitz M**. Tumor Embolization. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S. Karger AG, Switzerland, 2005, 180-193.
20. **Horowitz M**, Greenlee R, Purdy P. Acute And Chronic Venous Sinus Thrombosis. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S. Karger AG, Switzerland.,2005, 194-215.
21. **Horowitz M**, Jungreis C, Quisling R, Pollack I. Vein Of Galen Aneurysms: A Review and Current Perspective. Progress in Neurological Surgery: Neuroendovascular Surgery., Vol. 17 S. Karger AG, Switzerland. 2005, 216-231
22. **Horowitz M**, Levy E, Genevro J, Kassam AB, Burgura B. Petrosal Sinus Sampling For Cushing's Disease. Progress in Neurological Surgery: Neuroendovascular Surgery. Vol. 17, S Karger AG, Switzerland, 2005, 232-237
23. Yi HJ, **Horowitz, M**. Microsurgical and Endovascular Treatment of Giant Intracavernous Aneurysms. In Operative Nuances, Robert Spetzler (Editor) (In Press)
24. 23.Gologorsky Y, **Horowitz MB**, Jungreis CA, Quisling RG, Pollack I. Vein of Galen Aneurysms: A Review and Current Perspective. In Neurosurgical Operative Atlas 2E: Vascular Neurosurgery. R. Loch Macdonald (Editor). Thieme, 2008, 163-70.
25. Engh JA, Kassam AB, **Horowitz M**, Balzer J, Lee JYK. Microvascular decompression of the seventh cranial nerve. pp. 1385-1392. In Myers EN (ed): Operative Otolaryngology-Head and Neck Surgery, 2nd Edition. Elsevier, Philadelphia, 2008.
26. Tomycz ND, Horowitz MB. Inferior Petrosal Sinus Sampling in the Diagnosis of Sellar Neuropathology for Neurosurgery Clinics: Interventional Radiology

PROFESSIONAL ACTIVITIES

Presentations/Invited Lectures:

1. Survival of patient with brain aspergillosis following liver transplantation: A role for ABCD (Amphotericin B Colloidal Dispersion) and Excision. Segal R, **Horowitz MB**. The American Association of Neurological Surgeons Meeting, San Diego, CA, 1994.
2. Management of Moyamoya disease using stable Xenon-CT blood flow. **Horowitz MB**, Yonas H. Fourth International Workshop on Cerebrovascular Surgery, Chicago, IL, 1995.
3. The medical, surgical, and interventional neuroradiologic management of subarachnoid hemorrhage. **Horowitz MB**. Texas Association of Neurological Surgeons, Dallas, Texas, 1995.
4. Interesting neuroradiologic cases. **Horowitz MB**. Diagnostic Radiology Update, Dallas, Texas, 1995.
5. Complex conformational coils using nickel titanium alloy and possible application in interventional neuroradiology. Purdy P, **Horowitz MB**. 34th Annual Meeting of the American Society of Neuroradiology, Seattle, June 1996.
6. Neurovascular anatomy and interventional neuroradiology and its clinical applications. **Horowitz MB**. Micro Interventional Systems, Inc., Training Seminar, 1996.
7. Incidence of unsuspected blunt carotid artery injury. Panel discussant. AANS Annual Meeting, Denver, CO, 1997.
8. An aneurysm scoring index as a predictor of clinical outcome. Purdy P, **Horowitz M**, Kopitnik T, Batjer H, Thomas J, Clamp SJ, McIntire D, Samson D. American Society of Interventional and Therapeutic Neuroradiology Meeting, New York, NY, 1997.
9. GDC treatment of intracranial aneurysms and fistulas. American Association of Neuroscience Nurses. Dallas, Texas, May 1997.
10. Management of intracranial hemorrhage following thrombolytic therapy. American Academy of Neurology Acute Stroke Management Workshop. Dallas, Texas, June 1997.
11. Management of subarachnoid hemorrhage. American Academy of Neurology Acute Stroke Management Workshop. Dallas, Texas, June 1997.
12. Evaluation and management of subarachnoid hemorrhage. Continuing Medical Education Series. St. Paul Hospital. Dallas, Texas, June 1997.
13. Current Management of Cerebral Aneurysms. Coiling and clipping. One surgeon's view. University of Mississippi. Jackson, Mississippi, October 1997
14. Aneurysms and subarachnoid hemorrhage. Journey Through the Nervous System: A Look at Today's Neuroscience Nursing. UT Southwestern Medical School at Dallas, Dallas, TX, October 1997.
15. Endovascular management of intracranial aneurysms. University of Pittsburgh Medical Center, Pittsburgh, PA, February 1998.
16. Discussant for "Late Angiographic Follow-up of Surgically Treated Aneurysms: Recurrence, De Novo Formation, and the Fate of Residuals. AANS Annual Meeting, Philadelphia, April, 1998.

17. Panelist for Posterior Circulation Aneurysms. AANS Annual Meeting, Philadelphia, April 1998.
18. Management of Intracranial Aneurysms Secondary to Gunshot Wounds to the Head. Meeting of the Southern Neurosurgical Society, Hot Springs, WV, June 1998.
19. Moderator, Complications of Endovascular Aneurysm Treatment. 11th Annual Interventional Neuroradiology Peer Review Conference, Jackson Hole, Wyoming, July, 1998.
20. Visiting Professor Lecturer, Department of Neurosurgery University of Illinois, Chicago, Illinois, August 11-12, 1998.
21. Instructor for Practical Course on Interventional Techniques. CNS Annual Meeting, Seattle, October, 1998.
22. Current Surgical Management of Anterior Communicating Artery Aneurysms. Dexter M, **Horowitz M**, Kopitnik T, Samson D. CNS Annual Meeting, Seattle, October, 1998.
23. Radial Artery Interposition Grafts for Middle Cerebral Artery Reconstruction: A Series of Seven Cases. Samson D, Dexter M, **Horowitz M**, Kopitnik T. CNS Annual Meeting, October, 1998.
24. Endovascular Neurosurgery. Surgical Grand Rounds. UT Southwestern Medical Center, Dallas, Texas. February 3, 1999.
25. Cerebral Aneurysms: Advances in Surgical Management. Texas Academy of Physician Assistants 24th Annual Primary Care Conference. Dallas, Texas. March 13, 1999.
26. Instructor for Basic Endovascular Techniques. AANS Annual Meeting, New Orleans, April, 1999.
27. Large and Giant Aneurysms of the Vertebrobasilar System. Duke Samson, Thomas Kopitnik, **Michael Horowitz**. AANS Annual Meeting, New Orleans, April 1999.
28. Operation or Re-operation for Retained/Residual Arteriovenous Malformation. Duke Samson, Hunt Batjer, Thomas Kopitnik, **Michael Horowitz**. AANS Annual Meeting, New Orleans, April 1999.
29. Cervical and Intracranial Arterial Stenting. Neurosurgical Grand Rounds, University of Texas Southwestern Medical Center, Dallas, Texas, June 25, 1999.
30. Panel Speaker, Surgical Management of Partially Coiled or Recurrent Anterior Circulation Aneurysms. Congress of Neurological Surgeons Annual Meeting, Boston, October 1999.
31. Faculty Instructor, Practical Course on Posterior Circulation Aneurysms, Congress of Neurological Surgeons Annual Meeting, Boston, October 1999.
32. Faculty Instructor, Practical Course on Methylmethacrylate Vertebroplasty, Congress of Neurological Surgeons Annual Meeting, Boston, October 1999.
33. Neuroendovascular Therapies, Surgical Grand Rounds Lecture, University of Pittsburgh Medical Center, September 22, 1999.
34. Carotid, Vertebral and Intracranial Stenting, Neurology/Neurosurgery Grand Rounds, University of Pittsburgh Medical Center, October 6, 1999.

35. Carotid Stenting, Internal Medicine Grand Rounds Presentation, University of Pittsburgh Medical Center, September 24, 1999.
36. Speaker, An Overview of Trigeminal Neuralgia and Recent Advances in Microvascular Decompression Surgery, Trigeminal Neuralgia Association, Philadelphia, PA, November 20, 1999.
37. Trigeminal Neuralgia, Trigeminal Neuralgia Association, Connecticut, March 25, 2000.
38. Carotid, Vertebral and Intracranial Stenting.. Armstrong County Memorial Hospital, Kittaning, PA, January 6, 2000.
39. Effects of Botulinin Toxin on Clinical Outcome of Microvascular Decompression for Hemifacial Spasm, Scarrow AM, Kassam AB, Levy EI, **Horowitz MB**, Yonas H, Jannetta PJ. North American Skull Base Society, Phoenix, AZ, March 17, 2000.
40. Effects of Botulinin Toxin on Intraoperative Lateral Spread During Microvascular Decompression for Hemifacial Spasm, Scarrow AM, Kassam AB, Balzer JR, Patel A, Witham T, **Horowitz M**, Jannetta PJ. North American Skull Base Society, Phoenix, AZ, March 17, 2000.
41. Trigeminal Neuralgia: Anatomy, Etiology, and Treatment, Trigeminal Neuralgia Association, Pittsburgh, PA, March 18, 2000.
42. Carotid and Vertebral Artery Stenting, Citizens General Hospital, New Kensington, PA, April 11, 2000.
43. Endovascular Neurosurgery, Grand Rounds, Pittsburgh Eye and Ear Institute, May 3, 2000.
44. Trigeminal Neuralgia: Anatomy, Etiology, and Treatment, Trigeminal Neuralgia Association, Harrisburg, PA, May 22, 2000.
45. Endovascular Neurosurgery, Medical Grand Rounds, Shadyside Hospital, Pittsburgh, PA, June 1, 2000 .
46. Glossopharyngeal Neuralgia: A ten year experience in 200 patients, Kassam AB, Patel A, **Horowitz M**, Yonas H, Jannetta PJ. 2000 Congress of Neurological Surgeons Annual Meeting, Sept. 2000.
47. Management of Trigeminal Neuralgia: predictors of outcome for microvascular decompression, Tyler-Kabara E, Kassam AB, **Horowitz M**, Urgo L, Hadjipanayis C, Yonas H, Jannetta PJ. 2000 Congress of Neurological Surgeons Annual Meeting, Sept. 2000.
48. Impact of Lateral Spread Monitoring on Microvascular Decompression for Hemifacial Spasm. A prospective Analysis of 75 cases. Kassam AB, Scarrow A, **Horowitz M**, Balzer J, Patel A, Yonas H, Jannetta PJ. 2000 Congress of Neurological Surgeons Annual Meeting, Sept. 2000.
49. Correlation of Transcranial Doppler and Stable Xenon Computed Tomography Subarachnoid Hemorrhage. Kassam AB, Scarrow A, Yonas H, **Horowitz M**, Roach A, Roach E, Ashton C. 2000 Congress of Neurological Surgeons Annual Meeting, Sept. 2000.
50. Anterior Circulation Aneurysms: Treatment Options, Congress of Neurologic Surgeons Annual Meeting, San Antonio Texas, September 25, 2000.
51. Endovascular Neurosurgery: State of the Art AVMs, Congress of Neurologic Surgeons Annual Meeting, San Antonio Texas, September 26, 2000.

52. Posterior Circulation Aneurysms, Congress of Neurologic Surgeons Annual Meeting, San Antonio Texas, September 27, 2000.
53. Management of Trigeminal Neuralgia: Predictors of Outcome for Microvascular Decompression, Tyler-Kabara E, Kassam A, **Horowitz M**, Urgo L, Hadjipanayis C, Yonas H, Jannetta P. Congress of Neurologic Surgeons Annual Meeting, San Antonio Texas, September 27, 2000.
54. Management of Atypical Trigeminal Neuralgia: Predictors of Outcome for Microvascular Decompression, Tyler-Kabara E, Kassam A, **Horowitz M**, Urgo L, Hadjipanayis C, Yonas H, Jannetta P. Congress of Neurologic Surgeons Annual Meeting, San Antonio Texas, September 27, 2000.
55. Glossopharyngeal Neuralgia: A Ten-Year Experience in 200 Patients, Kassam A, Patel A, **Horowitz M**, Yonas H, Jannetta P. Congress of Neurologic Surgeons Annual Meeting, San Antonio Texas, September 27, 2000.
56. Carotid Stenting, Visiting Professor Lecture, Columbia University, New York, New York, October 5, 2000.
57. Intra-procedural Rupture of Intracranial Aneurysms During Coil Embolization: Management and Outcomes, **Horowitz M**, Levy EI. Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and ASITN, Waikoloa, Hawaii, February 10, 2001.
58. Transluminal Stent-Assisted Angioplasty of the Intracranial Vertebrobasilar System for Medically Refractory Posterior Circulation Ischemia. **Horowitz M**, Levy EI. Joint Meeting of the AANS/CNS Section on Cerebrovascular Surgery and ASITN, Waikoloa, Hawaii, February 10, 2001.
59. Impact of Botulinum Toxin on Subsequent Microvascular Decompression for the Treatment of Hemifacial Spasm. Kassam A, **Horowitz M**, Scarrow A, Balzer J, Pless M. Nanos Meeting, Rancho Mirage, CA, February 20, 2001.
60. Outcomes Following Microvascular Decompression for the Treatment of Hemifacial Spasm in Eight-Seven Consecutive Patients over an Eighteen Month Period. Kassam A, **Horowitz M**, Balzer J, Pless M, SoSo M, Nanos Meeting, Rancho Mirace, CA, February 20, 2001.
61. Image Fusion in 100 Skull Base, Vascular, and Microvascular Procedures: Preliminary Results. Kassam A, **Horowitz M**, Carrau R, Snyderman C, Hirsch B, Welch W, Seever, G, RN. Annual Meeting of North American Skull Base Society, Lake Buena Vista, Florida, March 3, 2001.
62. Cranial Neuropathies: Pitfalls in Diagnosis and Management. **Horowitz M**, Kassam AB, SoSo M, Pless M, Carrau R, Snyderman C, Hirch B, Ochs M, Burkhart L. 12th Annual Meeting of North American Skull Base Society, Lake Buena Vista, Florida, March 3, 2001.
63. Multimodality Neuromodality Neurophysiological Monitoring During Skull Base Surgery. Balzer JR, Kassam AB, Krieger D, Crammond D, Sclabassi RJ, **Horowitz MB**, Carrau R, Snyderman C, Hirsch. 12th Annual Meeting of North American Skull Base Society, Lake Buena Vista, Florida, March 3, 2001.
64. Occipital-Cervical Stabilization Techniques Following Craniocervical Surgery. Kassam A, Gerszten PC, Burke JP, Carrau R, Snyderman C, **Horowitz M**. 12th Annual Meeting of North American Skull Base Society, Lake Buena Vista, Florida, March 3, 2001.
65. Comparative Analysis of Quality of Life Outcome Scales in Cranial Base Tumor Population and the

Development of a new Disease Specific Instrument. Seever G, Kassam A, **Horowitz M**, Carrau R, Snyderman C, Welch W, Pless M. 12th Annual Meeting North American Skull Base Society, Lake Buena Vista, Florida, March 5, 2001.

66. Trigeminal Neuralgia. Kassam AB, **Horowitz MH**. Medical Grand Rounds. St. Margaret's Hospital, Pittsburgh, PA, April 5, 2001.
67. Neurosurgical Aspects of a Severe Closed Head Injury. Invited lecturer. Traumatic Brain Injuries Litigation Group, American Trial Lawyers Association Annual Convention, Montreal, Canada, July 15, 2001.
68. Poor Grade Aneurysm Patients: Management Options. Invited Lecture. Congress of Neurologic Surgeons 51st Annual Meeting. San Diego, CA, October 1, 2001.
69. GDC Embolization of Aneurysms, Thrombolysis, and Vasospasm. Invited Lecture. San Antonio, Texas, May 21, 2001.
70. Endovascular Management of Vascular Tumors. Advances in Cranial Base Surgery. Pittsburgh, PA, May 4-5, 2001.
71. Aneurysm Embolization. University of Pittsburgh School of Nurse Anesthesiologists. Pittsburgh, PA, June 2, 2001.
72. Angioplasty and Stent Placement (panelist). 14th Annual Interventional Neuroradiology Peer Review Conference. Jackson Hole, WY, August 2, 2001.
73. Carotid Stenting. South Hills/Southwest Medical Society. Pittsburgh, PA, September 25, 2001.
74. Vertebrobasilar Artery Stenting. Second Annual Stroke Management Conference. Pittsburgh, PA, October 2001.
75. Neurophysiological Monitoring in Microvascular Compression Syndromes. Functional Neurosurgery Meeting. Adelaide, Australia. September, 2001.
74. Microvascular Compression Syndromes. Interesting Observations. Functional Neurosurgery Meeting. Adelaide, Australia. September, 2001.
75. The INR Suite as a Critical Care Arena. AANS/CNS Section on Cerebrovascular Surgery. Dallas, Texas, February 14, 2002.
76. Neurophysiologic Monitoring During Endovascular Coiling of Intracranial Aneurysms. 37th Annual Meeting of the Rocky Mountain Neurosurgical Society and The American Association of Neurological Surgeons, Santa Ana Pueblo, New Mexico, June 17, 2002.
77. Endovascular Management of Anterior Communicating Aneurysms: Short Term Results in A Series of 53 Patients. 37th Annual Meeting of the Rocky Mountain Neurosurgical Society and The American Association of Neurological Surgeons, Santa Ana Pueblo, New Mexico, June 17, 2002.
78. Microvascular Decompression for Glossopharyngeal Neuralgia: 217 Cases. 37th Annual Meeting of the Rocky Mountain Neurosurgical Society and The American Association of Neurological Surgeons, Santa Ana Pueblo, New Mexico, June 17, 2002.
79. PINS 3rd Ventriculostomy. 37th Annual Meeting of the Rocky Mountain Neurosurgical Society and The

American Association of Neurological Surgeons, Santa Ana Pueblo, New Mexico, June 17, 2002.

80. PINS 3rd Ventriculostomy. Second Annual Pittsburgh Technology Roundtable Meeting. Pittsburgh, PA, July 2, 2002.
81. Endovascular Symposium. Panelist. Congress of Neurological Surgeons Annual Meeting. Philadelphia, PA, September 23, 2002
82. Endovascular Management of Carotid Artery Disease. AHA Operation Stroke: Medical Perspectives and Therapeutic Interventions. Boardman, Ohio, October 11, 2002.
83. Alcohol Treatment of Indirect Carotid Cavernous Fistulas. Joint Section Cerebrovascular Surgery Meeting, Pheonix, AZ, February 2003.
84. Endovascular Neurosurgery. Surgical Grand Rounds. Mercy Hospital, Pittsburgh, PA, March 26, 2003.
85. Hyperthermia and hypermetabolism in focal cerebral ischemia. International Society of Oxygen Transport to Tissue, Rochester, NY, August 16-20, 2003.
86. Thirty Day Procedure Related Morbidity Associated with Endovascular Treatment of Intracranial Aneurysms. American Academy of Neurological Surgery Meeting, Williamsburg, Virginia, October 30, 2003.
87. Neuroendovascular Surgery and its Role in Otolaryngology. UPMC ENT Oncology Grand Rounds, Pittsburgh, PA, January 21, 2004.
88. Chemotherapy for Head and Neck Cancer. Pittsburgh Cancer Institute Grand Rounds, Pittsburgh, PA, February 10, 2004.
89. Neuroendovascular Surgery. UPMC Anesthesia Grand Rounds, Pittsburgh, PA, February 26, 2004.
90. Minimally Invasive Endoscopic Surgery of the Cranial Base and Pituitary Fossa. Kassam AB, Snyderman C, Carrau R, Scwabassi R, Hirsch B, **Horowitz MB**. UPMC Presbyterian Hospital, Pittsburgh, Pennsylvania, January 23-24, 2004.
91. Intracranial Aneurysms: Coil or Clip? 54th Annual Meeting Congress of Neurological Surgeons, San Francisco, California, October 18, 2004.
92. **Horowitz MD**, Levy EI, Sauvageau E, Genevro J, Guterman LR, Hanel RA, Wehman JC, Gupta R, Jovin TG: Intra/extra-aneurysmal stent placement for management of wide-necked aneurysm: Waffle cone technique. *Joint annual meeting of the AANS/CNS cerebrovascular section and American Society of Interventional & Therapeutic Neurology*, Caribe Royale Orlando, Orlando FL, February 17-20, 2006. Poster Presentation.

93. Hravnak M, Crago E, Hricik A, **Horowitz MB**. Relationship between serum glucose and outcomes in patients with subarachnoid hemorrhage. 2007 American Journal of Critical Care; 16: 303.(AACN Research Abstract Award Winner 2007)
94. The Mink G385 Polymorphism Associates with Atrial Arrhythmias after Subarachnoid Hemorrhage Presentation. Abstract Oral Series. 2007 Stroke Council Award and Lecture Presentation.
95. Interventional Radiology, Grand Rounds, UPMC Passavant Hospital, November 13, 2007.
96. Emergent Management of Neurovascular Events, UPMC Shadyside Hospital, June 14, 2008.
97. Stent Assistance in SAH, 5th Annual SNIS meeting, Olympic Valley, CA, July 31, 2008.
98. Third Catholic International Neurosurgery Conference and Update, Seoul Korea, February 12-19, 200

FELLOWS TRAINED

Clinical Fellows:

2003-2005	Tudor Jovin, M.D., University of Pittsburgh Medical Center, Presbyterian University Hospital, Department of Neurology, 200 Lothrop Street, Suite 811, Pittsburgh, PA 15213
2004-2006	Rishi Gupta, M.D., University of Pittsburgh Medical Center, Department of Neurology, Kaufmann Building, Suite 811, Pittsburgh, PA 15213
2006-2008	Nirov Vora, M.D. University of Pittsburgh Medical Center, Department of Neurology, Kaufmann Building, Suite 811, Pittsburgh, PA 15213
2007-2009	Atzi Aleu, M.D. University of Pittsburgh Medical Center, Department of Neurology, Kaufmann Building, Suite 811, Pittsburgh, PA 15213
2008-2010	Brian Jankowitz, M.D. University of Pittsburgh Medical Center, Department of Neurosurgery, Presbyterian Hospital, Suite B 400, Pittsburgh PA 15213
2008-2010	Ridwan Lin, M.D. University of Pittsburgh Medical Center, Department of Neurology, Kaufmann Building, Suite 811, Pittsburgh, PA 15213
2008-2010	Dean Kostov, M.D. University of Pittsburgh Medical Center, Department of Neurosurgery, Presbyterian Hospital, Suite B 400, Pittsburgh, PA 15213
2008-2010	Hilal Kaanan, M.D. University of Pittsburgh Medical Center, Department of Neurosurgery, Presbyterian Hospital, Suite B 400, Pittsburgh, PA 15213
2010-2012	Mohammed Jumma, M.D. University of Pittsburgh Medical Center, Department of Neurosurgery, Presbyterian Hospital, Suite B 400, Pittsburgh, PA 15213
2010-2012	Syed Zaidi, M.D. University of Pittsburgh Medical Center, Department of

Neurosurgery, Presbyterian Hospital, Suite B 400, Pittsburgh, PA 15213

- 2022-2023 Ravi Pande, MD, HCA Orange Park Medical Center, Orange Park, Florida.
- 2021-2023 Youssef Al-Saghir, MD, HCA Orange Park Medical Center, Orange Park, Florida
- 3/1/02-2/28/04 Haw-Kwan Park, M.D., Department of Neurological Surgery, St. Mary's Hospital, The Catholic University of Korea, #62 Yoido-dong, Youngdungpo-gu, Seoul, 150-713 Korea
- 7/1/04-6/30/05 Hyeong-Joong Yi, MD, Department of Neurological Surgery, Hanyang University Medical Center #17, Haengdang-gingm Sungdong-gu, 133-792, Seoul Republic of Korea
- 1/07-1/09 Seong-Rim Kim, M.D. Department of Neurosurgery, Holy Family Hospital, The Catholic University of Korea, Sosa-Dong 2, Wonmi-gu, Bucheon, 420-717, Republic of Korea (South Korea)

RESEARCH FUNDING

National Institute of Health Funding:

Grant Number	Grant Title	Role & Percentage of Effort	Years	Amount	Source
1 R44 NS 107111-01	Drug Eluting Embolization Coils for Improved Treatment of Intracranial Aneurysms	CO-Investigator	9/1/2018-2/28/2021	\$1,725,000	National Institute of Health
R43 Small Business Innovation Research (Phase I)	Drug Eluting Coils for Improved Treatment of Brain Aneurysms	Co-Investigator	5/2015-10/2015	\$225,000	National Institute of Health
R01HL074316	Myocardial Ischemia and Vasospasm in Aneurysmal SAH	PI 25% effort	2004-2009	\$2,273,652	National Institute of Health R01
R01NR004339	Role of 20-HETE on Vasospasm-induced Ischemia after SAH	CO-Investigator 2% effort	2004-2014	\$3,470,058	National Institute of Health

Prior Grant Support:

Funding Source: Howmedica Leibinger
Name of Grant: Image Fusion Technology Systems
Dates: 9/1/01 - 8/31/02
Role on Project: Co-Investigator
% of effort: 5%
\$ Award: \$49,020.00

Funding Source: Target Therapeutics, Inc.
Name of Grant: Validation of Canine Venous Pouch Aneurysm Model by Comparison to Pathological Specimens of Humans
Dates: 7/1/01 - 12/31/02
Role on Project: Co-Investigator
% of effort: 5%
\$ Award: \$27,000

Closed Research Projects:

1995- Co-Investigator; A prospective clinical study to evaluate the safety and efficacy of the modified detachment zone and power supply for the Guglielmi Detachable Coil (GDC) (IRB #099126800)

1995- Co-Investigator; Embolization of the internal carotid artery (parent vessel occlusion) associated with cerebral aneurysms with ITC detachable silicone balloons (DSB)(IRB # 089626600)

1999- Co-investigator; Compare the use of N-butylcyanoacrylate-tantalum powder to conventional treatment of preoperative embolization of cerebral AVMs (IRB#049610800)

SERVICE

Hospital Committees

2019-2020	Clinical Director Lee Health System Stroke Service
2007- 2012	Malpractice Committee, University of Pittsburgh Medical Center, Pittsburgh, PA
1999- 2012	Associate Director, Center for Cranial Nerve Disorders, University of Pittsburgh Medical Center, Pittsburgh, PA
1999- 2012	Director, Center for Endovascular Neurosurgery, University of Pittsburgh Medical Center, Pittsburgh, PA
2001-2012	Member UPMC Innovative Practices Committee, University of Pittsburgh Medical Center, Pittsburgh, PA
2002-2012	Chair, UPMC Presbyterian Technology Assessment Committee, Neuro/ENT/Ophthalmology/Musculoskeletal Services (NEOMS) Committee
1998-1999	Co-medical director Zale-Lipshy University Hospital Intensive Care Unit

1995-1999 UT Southwestern Medical Center, Dallas, Texas
Surgical Case Review Committee

1995- 1999 UT Southwestern Medical Center, Dallas, Texas
Quality Assurance, Risk Management, Medical Records Committee

Academic Committees

1996-2001 Congress of Neurological Surgeons International Committee, Member of Executive Council

1995-1999 Editor, UTSW Department of Neurosurgery monthly vascular newsletter (Cerebrovascular Rounds)