

MARK J. HORNYAK, MD

Office Address One Towne Park Plaza
Norwich, CT 06360
Office Telephone 860-889-9035

EDUCATION

MD 1996 - 2000
University of Maryland School of Medicine, Baltimore, Maryland

BS 1992 - 1996
Loyola College in Maryland, Baltimore, Maryland

POSTGRADUATE TRAINING

Intern, General Surgery 2000 - 2001
New York Medical College, Valhalla, New York

Resident, Neurosurgery 2001 - 2006
New York Medical College, Valhalla & New York, NY

Fellow, Skull Base Neurosurgery 2006 - 2007
University of Utah, Salt Lake City, Utah

RESEARCH EXPERIENCE

Clinical Trials

Spine Care Institute, Bassett Medical Center 2016-2019
Cooperstown, NY

- Co-investigator for the coflex COMMUNITY Study: an observational study of coflex interlaminar technology

Department of Neurosurgery
Detroit Medical Center, Detroit, MI 2013 - 2014

- Institutional co-investigator for MISTIE III multi-institutional intracerebral hemorrhage study

Department of Emergency Medicine 2012 - 2014
Detroit Medical Center, Detroit, Michigan

- Neurological Surgery support for ARCTIC spinal cord injury study

Department of Emergency Medicine 2010 - 2013
Detroit Medical Center, Detroit, Michigan

- Neurological Surgery support for PROTECT traumatic brain injury study

Laboratory Research

Department of Neurosurgery 2006 - 2007
University of Utah, Salt Lake City, Utah

- Designed and implemented protocol to evaluate novel, resorbable biomaterial for cranial fixation in rabbit model. Re-organized skull base dissection lab, qualitative study skull base approaches, and began skull base and microvascular didactic for resident training

Departments of Neurosurgery and Anatomy and Cell Biology 2004 - 2006
New York Medical College, Valhalla, New York

- Organized skull base dissection lab, reintroduced dissection into neurosurgical curriculum, and instructed medical students in neuroanatomy and neuroscience

Department of Physiology 2004 - 2006
New York Medical College, Valhalla, New York

- Basic physiology, pharmacology, and electrical properties of the subthalamic nucleus, and investigation of the role of voltage-gated potassium (Kv3) channels in repetitive firing of the STN using patch-clamp electrophysiological techniques in normal and knock-out mice

Department of Neurosurgery 1998 - 2000
University of Maryland, Baltimore, Maryland

- Initiated recombinant production of TRAIL for induction of in vitro and in vivo apoptosis in rodent gliomas

US Army Medical Research Institute of Chemical Defense 1994 - 1997
Pharmacology Division, Applied Pharmacology Branch, Aberdeen, Maryland

- Antibody production and stress gene induction experiments for neurotoxin defense

FACULTY APPOINTMENTS

Adjunct Faculty, Neurosurgery 2019- present
University of Connecticut School of Medicine, Farmington, CT

Adjunct Faculty, Neurosurgery 2014-2019
Columbia University, NY, NY

Assistant Professor, Neurosurgery 2007 –2014
Director of Neurosurgical Anatomy and Microsurgical Skills Laboratory
Wayne State University, Detroit, Michigan
Serving on following committees:
Clinical Competency Committee
Resident Education Curriculum Committee

Clinical Instructor, Neurosurgery 2006 - 2007
University of Utah School of Medicine, Salt Lake City, Utah

Instructor, Neurosurgery 2005 - 2006
New York Medical College, Valhalla, New York

HOSPITAL APPOINTMENTS

Attending Neurological Surgeon 2019- present
Hartford Healthcare: William Backus Hospital, Norwich, CT

Hartford Hospital, Hartford, CT

Chief of Neurosurgery Basset Healthcare Network, Cooperstown, NY	2014-2019
Chief of Neurosurgery Detroit Receiving Hospital, Detroit, Michigan	2009 - 2014
Attending Neurological Surgeon Henry Ford Hospital Macomb, Clinton Township, Michigan	2008 - 2014
Attending Neurological Surgeon Detroit Medical Center, Detroit, Michigan	2007 - 2014

ADMINISTRATIVE APPOINTMENTS

Acting Chief of Neurosurgery, East Region Hartford Healthcare, East Region	2019- present
Chief of Neurosurgery Bassett Healthcare Network, Cooperstown, NY Serving on the following committees: Dept. of Surgery Executive Committee	2014-2019
Neurosurgery Trauma Liaison	2014-present
Co-director, Spine Care Institute	2017-present
Chief of Neurosurgery, Detroit Receiving Hospital Serving on following committees: Medical Staff Operating Committee Leadership Process Improvement Coordinating Committee Clinical Excellence Committee Surgical Care Committee Trauma Systems Committee	2009 - 2014
Wayne State UPG EMR Committee	2013 - 2014
Surgeon champion for EMR, WSU Physician Group	2012 – 2014
Physician Coordinator for Think First Foundation Detroit Medical Center Chapter, Detroit, MI	2012 - 2014

MAJOR PROFESSIONAL SOCIETIES

- American Association of Neurological Surgeons (AANS)
- Congress of Neurological Surgeons (CNS)
- North American Skull Base Society (NASBS)
- American Medical Association
- Pituitary Network
- TNA The Facial Pain Association

LICENSURE AND BOARD CERTIFICATION

Board Certified – Certificate Number 32081 American Board of Neurological Surgery	2012
--	------

Medical Licensure

State of Connecticut	2019- present
State of New York	2014- present
State of Michigan	2007- present
State of Utah	2006 - 2008

USMLE Step III	2002
----------------	------

OTHER CERTIFICATIONS

ATLS	valid thru	5/2020
BLS		3/2019
NIH "Protecting human research participants"		3/2019

HONORS AND AWARDS

- Barry M. Goldwater Scholarship, Loyola College
- Carrel Biology Medal (highest biology department GPA), Loyola College
- Beta Beta Beta Biology Honor Society, Loyola College
- Alpha Kappa Delta Sociology Honor Society, Loyola College
- Freeman Scholarship, University of Maryland School of Medicine
- House Wright Scholarship, University of Maryland School of Medicine
- Milton Ginsberg Memorial Award, University of Maryland School of Medicine
- New York Neurosurgical Society Resident Research Award
- Phi Beta Kappa National Honor Society, Loyola College
- Presidential Scholarship, Loyola College

RECENT COURSES ATTENDED

Lateral Access Surgery Miami, FL	2020
Surgical Synergy Navigated Workflow Techniques Washington, DC	2016
Cervical Disc Arthroplasty Burlington, VT	2014
Decision Making for Early Career Surgeons Miami, Florida	2013
Concepts in Lateral Approach Surgery Chicago, Illinois	2010
New Perspectives on Spine Surgery Miami, Florida	2010
Minimally Invasive Spine Surgery: Advanced Techniques Miami, Florida	2009
International Congress on Meningioma & Cerebral Venous System Boston, Massachusetts	2008
International Congress on Cerebral Revascularization St. Louis, Missouri	2007
Gamma Knife Certification Pittsburgh, Pennsylvania	2007

PUBLICATIONS

Peer-Reviewed Publications

1. Maripudi N, Chamiraju P, Falatko S, **Hornyak M**, Guthikonda M, Narayanan S. Subarachnoid hemorrhage due to ruptured aneurysm of the artery of adamkiewicz. *Neurorad J*. Accepted pending revision.
2. Marupudi N, **Hornyak M**. Early recurrence of cerebral aneurysms in pediatric population. *J Neurosurg (Peds)*. In revision.
3. Asmaro K, **Hornyak M**. Pituitary tumor apoplexy resulting in internal carotid artery occlusion and stroke with recanalization after tumor resection: case report, review of the literature, and treatment rationale. *J Neurology Neurosurg: Vol 1, Issue 2, 2014*.
4. Dornbos D, **Hornyak M**. Symptomatic ossified ligamentum flavum secondary to hyperparathyroidism. *J Spine Neurosurg, 3:3, 2014*.
5. Raja G, **Hornyak M**: Intraoperative rupture of remote aneurysm during transsphenoidal resection of pituitary macroadenoma. *OJMN, 4:64-68, 2014*.
6. Schreckinger M, Walker B, Knepper J, **Hornyak M**, Hong D, Kim JM, Folbe A, Guthikonda M, Mittal S, Szerlip NJ: Post-operative diabetes insipidus after endoscopic transsphenoidal surgery. *Pituitary, 16(4): 445-51, 2013*.
7. **Hornyak M**, Couldwell WT: Multimodality treatment for invasive pituitary adenomas. *Postgraduate Medicine, 121(2): 168-176, 2009*
8. **Hornyak M**, Digre M, Couldwell KT: Neuro-ophthalmologic manifestations of benign anterior skull base lesions. *Postgraduate Medicine, 121(4): 103-114, 2009*
9. **Hornyak M**, Osborne AG, Couldwell WT: Hypertrophic olivary degeneration after surgical resection of cavernous malformations of the brain stem. *Acta Neurochirurgica 150(2):149-156, 2008*
10. **Hornyak M**, Weiss MH, Nelson DH, Couldwell WT: Nelson syndrome: historical perspectives and current concepts. *Neurosurgical Focus 23(3):E12, 2007*
11. Hunter C, Paccione D, **Hornyak M**, Murali R: Giant cell tumors of the cervical spine. *Neurosurgery 59(5):1142-1143, 2006*
12. Braca J, **Hornyak M**, Murali R: Hemifacial spasm occurring in a patient with Marfan syndrome and Chiari I malformation: Case report. *Journal of Neurosurgery 103(3):552-554, 2005*
13. **Hornyak M**, Hillard V, Nwagwu C, Zablow B, Murali R: Ruptured intrasellar superior hypophyseal artery aneurysm presenting with pure subdural hematoma. *Interventional Neuroradiology 10:55-58, 2004*
14. **Hornyak M**, Mogilner A, Benzil DL: Sympathectomy for chronic pain management. *Contemporary Neurosurgery 25(10), 2003*

Book Authorships, Editorships, and Chapters

1. **Hornyak M**: Decompression of the superior orbital fissure. In: Mathog RH: Atlas of Craniofacial Trauma (2nd Edition). Philadelphia: Lippincott Williams & Wilkins, 2012
2. **Hornyak M**: Decompression of the optic nerve. In: Mathog RH: Atlas of Craniofacial Trauma (2nd Edition). Philadelphia: Philadelphia: Lippincott Williams & Wilkins, 2012
3. **Hornyak M**: Repair of a cribiform plate cerebrospinal fluid leak. In: Mathog RH: Atlas of Craniofacial Trauma (2nd Edition). Philadelphia: Philadelphia: Lippincott Williams & Wilkins, 2012
4. **Hornyak M**: Alternative technique of repairing inferior wall fracture of frontal sinus. In: Mathog RH: Atlas of Craniofacial Trauma (2nd Edition). Philadelphia: Philadelphia: Lippincott Williams & Wilkins, 2012
5. **Hornyak M**, Couldwell WT: Pituitary tumors, In: Hanna, EY (ed): Comprehensive Management of Skull Base Tumors, New York: Francis and Taylor Books, 2006. Chapter 39, pp 557-572.

Posters

1. **Hornyak M**, Leonard CS: Role of voltage-gated potassium channels (Kv3) in repetitive firing in neurons of the murine subthalamic nucleus. Society for Neuroscience, Detroit, MI. 13 May 2013.
2. Hoeplich M, **Hornyak M**: A constitutional objection to the prohibition of physician collective bargaining. CNC, San Fransisco, CA. October 2010.
3. Cole C, **Hornyak M**, Duhon B, Burns G, Couldwell WT: Evaluation of a novel implant for temporal defect augmentation. CNS New Orleans, LA. October 2009.
4. Rayes M, Francis T, Mittal S, **Hornyak M**, Guthikonda M, Rengachary S: Hangman's fracture: a historical and biomechanical perspective. CNS New Orleans, LA. October 2009.
5. **Hornyak M**, Smith JS, Moorthy C, Benzil DL: Significant pain relief and few complications seen in initial experience with spine stereotactic radiosurgery. North American Spine Society 19th Annual Meeting, Chicago, IL. Oral poster presentation. October 2004
6. **Hornyak M**, Leonard C: The role of voltage-gated potassium channels in repetitive firing in neurons of the subthalamic nucleus. American Association of Neurological Surgeons Annual Meeting, San Francisco, CA. Poster presentation. April 2006

PRESENTATIONS

Oral Presentations

1. **Hornyak M**, Couldwell WT: Contemporary re-appraisal of Nelson syndrome. International Neurosurgery Winter Meeting, Zermatt, Switzerland. Oral presentation. January 2007
2. **Hornyak M**, Leonard C: The role of Kv3 channels in neurons of the subthalamic nucleus. New York Neurosurgical Society Meeting, New York, NY. Oral presentation. Research Award Winner. March 2005
3. **Hornyak M**, Rovit R, Simon A, Couldwell WT: Irving S. Cooper and the early surgical management of movement disorders. Oral presentation. CNS Annual Meeting, San Diego CA, 2001.
4. **Hornyak M**, Chin L: Radiosurgery for pituitary adenoma. AANS Annual Meeting, San Francisco, CA, 2000.

Invited Lectures and Grand Rounds

1. **Hornyak M.** Pituitary pathology and Surgery. Medical Grand Rounds. William Backus Hospital, Norwich, CT. 3 December 2019.
2. **Hornyak M.** Spinal trauma for the general surgeon. Trauma Conference - Bassett Medical Center, Cooperstown, NY. 14 March 2018.
3. **Hornyak M.** Surgical intervention for stroke. Columbia medical student didactics. Bassett Medical Center, Cooperstown, NY 6 Dec 2017.
4. **Hornyak M.** Traumatic injuries to the spine. Trauma conference, Bassett Medical Center, Cooperstown, NY. 22 February 2017.
5. **Hornyak M.** Spine Trauma. Didactic lecture to general surgery residents. Bassett Medical Center, Cooperstown, NY 17 October 2016.
6. **Hornyak M:** Surgical management of chronic pain. Bassett Surgical Didactics, Cooperstown, NY. 24 May 2016.
7. **Hornyak M:** Intracranial pressure. Bassett surgical grand rounds. Cooperstown, NY. 25 November 2015.
8. **Hornyak M.** Cervical disc replacement. Dinner lecture. Clinton, NY. January 2015.
9. **Hornyak M.** Surgical pathology of the pituitary gland. Bassett medical grand rounds. Cooperstown, NY. 5 Dec 2014.
10. **Hornyak M:** Surgical anatomy of the cervical vertebral artery and atlantoaxial segment. DMC Resident's Lab, DMC Surgical Hospital, Troy, MI. 18 Jan 2014
11. **Hornyak M:** Spine and Spinal Cord Injury, Visiting Professor Michigan State University School of Medicine Department of Orthopedic Surgery, Troy, MI, 8 Jan 2014.
12. **Hornyak M:** Neurosurgical Emergencies, Surgery Grand Rounds Visiting Professor, Bassett Hospital, Cooperstown, NY, 14 October 2013.
13. **Hornyak M:** Carotid endarterectomy – clinical considerations and cases. Neurosurgery Grand Rounds. Harper University Hospital. Detroit, MI. 17 July 2013.
14. **Hornyak M:** Surgical anatomy and technique of transsphenoidal pituitary surgery. Wayne State University Department of Otolaryngology Grand Rounds, Harper Hospital, Detroit, MI, 1 May 2013.
15. **Hornyak M:** Temporal Bone Pathology and Surgical Anatomy. Neurosurgery Grand Rounds. Harper University Hospital. Detroit, MI. October 17, 2012
16. **Hornyak M:** Surgical Management of Trigeminal Neuralgia and Hemifacial Spasm. Neurosurgery Grand Rounds. Harper University Hospital. Detroit, MI. September 19, 2012
17. **Hornyak M:** Venous anatomy of the posterior fossa. Neurosurgery Grand Rounds. Harper University Hospital. Detroit, MI. 1 Aug 2012
18. **Hornyak M:** Surgical anatomy of the cavernous sinus. Neurosurgery Grand Rounds, Harper Hospital. Detroit, MI. April, 2012.
19. **Hornyak M:** ICU Protocols and Standards of Care. Neurosurgery Grand Rounds. Harper University Hospital. Detroit, MI. February 29, 2012
20. **Hornyak M:** Surgery for cerebral aneurysms Part II. Neurosurgery Grand Rounds, Harper Hospital. Detroit, MI. February 2, 2012
21. **Hornyak M:** Neurofibromatosis: Surgical Cases and Discussion. Neurosurgery Grand Rounds. Harper University Hospital. Detroit, MI. January 4, 2012
22. **Hornyak M:** Neurosurgery Oral Boards: My Experience. Neurosurgery Grand Rounds. Harper Hospital, Detroit, MI December 14, 2011
23. **Hornyak M:** Introduction to Neurosurgery. WSU 1st, 2nd and 3rd Year WSU Medical Students. Neurosurgery Interest Group. Margherio Conference Center. Detroit, MI. September 16, 2011

24. **Hornyak M**, Lindstom C: Neuro-otologic investigations. Neurosurgery Grand Rounds, Harper Hospital. Detroit, MI. Aug 2011.
25. **Hornyak M**: General Neurosurgery Lecture. WSU Medical Students. Margherio Conference Center, Detroit, MI. May 25, 2011
26. **Hornyak M**: Neurosurgery Emergencies Lecture. WSU Medical Students. Margherio Conference Center, Detroit, MI. April 4, 2011
27. **Hornyak M**: Dalton B: Sawbones Workshop: Spondylolisthesis. Neurosurgery Grand Rounds, Harper Hospital, Detroit, MI. March 16, 2011
28. **Hornyak M**: Retrosigmoid Approach. St. John Providence Hospital / Neurosurgery Cranial Cadaver Lab. Southfield, MI. February 12, 2011
29. **Hornyak M**: General Neurosurgery Lecture. WSU Medical Students. Margherio Conference Center, Detroit, MI. February 2, 2011
30. **Hornyak M**: Surgery for cerebral aneurysms Part I. Neurosurgery Grand Rounds, Harper Hospital. Detroit, MI. Oct 2011.
31. **Hornyak M**: Neurosurgical Emergencies. Grand rounds, visiting professor. Departments of Emergency Medicine, Neurology, and Internal Medicine. Henry Ford Hospital, Clinton Township, MI. April 2010
32. **Hornyak M**: Spinal Trauma. Grand rounds, visiting professor. Physical Medicine and Rehabilitation, DMC Rehab Institute of Michigan, Detroit, MI. March 2009
33. **Hornyak M**: The thalamus- surgical anatomy and considerations. Neurosurgery Grand Rounds, Harper Hospital. Detroit, MI. Dec 2007.
34. **Hornyak M**: Skull base meningioma. Grand rounds, visiting professor. UMDNJ, Newark, NJ. Oral presentation. April 2007

PRESENTATIONS

Didactic Dissection Lab

1. **Hornyak, M**: The Orbitozygomatic approach. WSU – Michigan State skull base dissection. Providence Hospital, Feb 8-9 2014.
2. Folbe A, **Hornyak M**: Endoscopic sinus and anterior skull base anatomy and surgical technique. WSU Dept of Otolaryngology dissection lab, Lande Building, Detroit, MI. 14 December 2013.
3. **Hornyak M**: Anterior clinoidectomy. WSU Skull base laboratory, Elliman Research Building, Detroit MI, 17 August 2013.
4. **Hornyak M**: Microsuturing techniques. WSU Skull base Laboratory; Elliman Research Building Rm 133, Detroit, MI. 18 May 2013.
5. **Hornyak, M**: The Orbitozygomatic approach. WSU – Michigan State skull base dissection. Providence Hospital, Feb 2013.
6. **Hornyak M**: Transbasal anterior cranial fossa approaches. WSU Skull Base Laboratory. Elliman Research Building Rm 133, Detroit, MI. 5 January 2013.
7. **Hornyak M**, Monsell E: Temporal bone dissection. WSU Skull Base Laboratory, Elliman Research Building Rm 133, Detroit, MI. 20 October 2012.
8. **Hornyak, M**: The Orbitozygomatic approach. WSU – Michigan State skull base dissection. Providence Hospital, Feb 2012.
9. **Hornyak, M**: The Retrosigmoid and far lateral approaches. WSU – Michigan State skull base dissection. Providence Hospital, Feb 2011.

OTHER SERVICE

1. New Visions preceptor; Cooperstown School District & Bassett Medical Center, Cooperstown, NY
2017 - 2019

2. Wayne State Univ. School of Medicine Mentoring Program 2008 – 2014
Mentor medical students
Including: CV workshop, mock interview night
3. WSU Dept of Neurosurgery Mentoring Program 2013 - 2014
Mentor neurosurgery residents

OTHER BUSINESS

1. CHM1, LLC. 2018-present
Founding Partner. Manufacturing.
2. Buckzarn, LLC. 2017-present
Sole proprietor. Manufacturing equipment leasing.
3. Consultant 2010-present
Providing expert legal opinion.