

# James E. Conway, M.D., Ph.D.

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General surgery intern, Johns Hopkins University School of Medicine, Baltimore, MD
Neurosurgery resident, Johns Hopkins University School of Medicine, Baltimore, MD
Chief resident, Department of Neurosurgery, Johns Hopkins Universtiy School of Medicine, Baltimore, MD
St. Joseph's University, Philadelphia, PA; B.S., Chemistry; summa cum laude; May, 1990
Johns Hopkins University School of Medicine, Baltimore, MD M.D., Ph.D.; May 24, 2001.
NIH sponsored Neuro-Oncology Fellowship, Johns Hopkins Universtiy School of Medicine, Baltimore, MD
Synthes Spine Fellowship.

## Certification

Board certified by the American Board of Neurological Surgery

## **Previous Employment**

1990-1991 High school biology and physics teacher. Instituto de Notre Dame, Honduras, Central America.



Board of Directors Scholarship, St. Joseph's University. Full tuition merit

1992-1993 Analytical chemist. Drug development. Wyeth-Ayerst Research. Princeton, NJ.

Honors and Awards

1986

	scholarship.
1990	Dean's Award, St. Joseph's University. Awarded for highest academic achievement.
	Student Association Award, St. Joseph's University. Awarded by the student body for academic achievement.
	American Chemical Society Award, St. Joseph's University. Awarded for highest GPA in chemistry
	Loughlin Theology Award, St. Joseph's University. Awarded for highest GPA in theology.
1993	Drug Development Research Award, Wyeth-Ayerst Research
1995	Pfeiffer Foundation Research Scholarship, Department of Pharmacology, Johns Hopkins Medical Institution. Equivalent to NIH MSTP scholarship for research in the Department of Pharmacology and Molecular Sciences.

1998 Salisbury Foundation Neurovascular Research Fellowship. Division of Cerebrovascular Neurosurgery, Johns Hopkins Medical Institution

Alpha Omega Alpha. Elected to the honor medical society, Johns Hopkins University School of Medicine.

Phi Beta Kappa. Elected to the honor society, John Hopkins University.

Hunterian Neurosurgical Research Award for medical students, Department of Neurosurgery, Johns Hopkins University School of Medicine.

2005 Sherman Travel Fellowship. Awarded fellowship to travel to anatomy conference to expand knowledge of intracranial anatomy and complex surgical approaches.



2007	Walter Dandy Clinical Research Award. Annual award given to neurosurgery resident for excellence in clinical research. Department of Neurosurgery, Johns Hopkins University School of Medicine.				
2012 Elected Fellow of the American Association of Neurological Surgeons <i>Instructor positions</i>					
2005-2006	Director, Johns Hopkins Department of Neurosurgery, Resident neuroanatomy dissection course.				
Spring, 2006	Teaching assistant, Johns Hopkins University School of Medicine, neuroscience laboratory				
April, 2006	Invited faculty. "AO Operating Room Personnel Course, Spine." Montreal, Canada.				
June, 2006	Co-director, Baltimore Neurosurgery and Spine Center's "Spine anatomy and instrumentation course."				
2006-2007	Co-director, Johns Hopkins Department of Neurosurgery, Resident Skull Base Lecture Course				
Nov, 2006	Co-director, Stryker and Johns Hopkins Department of Neurosurgery 1 <sup>st</sup> Minimally Invasive Spine Instrumentation and Cadaver Course				
Feb, 2007	Co-director, 1 <sup>st</sup> Annual Johns Hopkins Department of Neurosurgery, Neuro-endoscopy Resident course.				
Spring, 2007	Teaching assistant, Johns Hopkins University School of Medicine, neuroscience laboratory				
April, 2007	Invited faculty. "AO Operating Room Personnel Course, Spine." Baltimore, MD.				
June, 2007	Co-director, Baltimore Neurosurgery and Spine Center's 2 <sup>nd</sup> Annual "Spine anatomy and instrumentation course."				
May, 2008	Invited faculty. Covidian "Combined Approaches to the Skull Base." Baltimore, MD.				
June, 2008	Co-director, Baltimore Neurosurgery and Spine Center's 3rd Annual "Spine anatomy and instrumentation course."				
June, 2009	Co-director, Baltimore Neurosurgery and Spine Center's 4th Annual "Spine anatomy and instrumentation course."				



Sept, 2009 Invited faculty. Covidian "Combined Approaches to the Skull Base." Baltimore, MD.

June, 2010 Co-director, Baltimore Neurosurgery and Spine Center's 5th Annual "Spine anatomy and instrumentation course."

December, 2010 Invited faculty. Covidian "Combined Approaches to the Skull Base." Baltimore, MD.

### **Certifications**

May, 2008 Kyphoplasty. Medtronics. Bethesda, MD.

#### **Book Editor**

1) Eds: George Jallo, MD, James E. Conway, MD, and László Bognár, MD. Neuroendoscopy of the Central Nervous System. San Diego. Plural Publishing. 2008.

#### **Publications**

- 1) Conway JE, Zolotukhin S, Muzyczka N, Hayward GS, Byrne BJ. *Recombinant adeno-associated virus type 2 replication and packaging is entirely supported by a herpes simplex virus type 1 amplicon expressing Rep and Cap*. Journal of Virology. 1997 Nov;71(11):8780-9
- 2) Conway JE, Rhys CM, Zolotukhin I, Zolotukhin S, Muzyczka N, Hayward GS, Byrne BJ. *High-titer recombinant adeno-associated virus production utilizing a recombinant herpes simplex virus type I vector expressing AAV-2 Rep and Cap*. Gene Therapy. 1999 Jun;6(6):986-93
- 3) Conway JE, Hutchins GM, Tamargo RJ. *Marfan syndrome is not associated with intracranial aneurysms*. Stroke. 1999 Aug;30(8):1632-6
- 4) Conway JE, Chow D, Clatterbuck RE, Brem H, Long DM, Rigamonti D. *Hemangioblastomas of the central nervous system in von Hippel-Lindau and sporadic disease*. Neurosurgery. 2001 Jan;48(1):55-62.
- 5) Hendrix CW, Hammond JMJ, Swoboda SM, Merz WG, Harrington SM, Perl TM, Dick JD, Borschel DM, Halczenko PW, Pelz RK, Rocco LE, Conway JE, Brower RG, Lipsett PA. Screening Strategies for Vancomycin-Resistant Enterococcal (VRE) Colonization and Infection in Critically Ill Patients. Ann Surg. 2001 Feb;233(2):259-65



- 6) Dunaief JL, Conway J, Rigamonti D, Goldberg MF. *Retinal venous telangiectasia* and anastomoses with cerebellar venous and cavernous malformation. Retina. 2001;21(3):262-265
- 7) Conway JE, Tamargo RJ. Cocaine use is an independent risk factor for cerebral vasospasm after aneurysmal subarachnoid hemorrhage. Stroke. 2001 Oct;32(10):2338-43
- 8) Conway JE, Hutchins GM, Tamargo RJ. Lack of evidence for an association between neurofibromatosis type I and intracranial aneurysms: autopsy study and review of the literature. Stroke. 2001 Nov;32(11):2481-5
- 9) Beaty RM, Edwards JB, Boon K, Siu IM, Conway JE, Riggins GJ. *PLXDC1 (TEM7) is identified in a genome-wide expression screen of glioblastoma endothelium.* J Neurooncol. 2007 Feb;81(3):241-8.
- 10) Kharkar S, Shuck J, Conway JE, Rigamonti D. *The natural history of conservatively managed symptomatic intramedullary spinal cord cavernomas*. Neurosurgery. 2007 May;60(5):865-72; discussion 865-72.
- 11) Sciubba DM, Lin LM, Conway JE, Bydon A, Gokaslan ZL, Kebaish K. Development of scoliosis following intrathecally placed opioid pump for chronic low back pain. Spine. 2007 Nov 15;32(24):E718-22.
- 12) Sciubba DM, Noggle JC, Vellimana AK, Conway JE, Kretzer RM, Long DM, Garonzik IM. *Laminar screw fixation of the axis*. J Neurosurg Spine. 2008 Apr;8(4):327-34.
- 13) Anderson WS, Kiyofuji S, Conway JE, Busch C, North RB, Garonzik IM. *Dysphagia and neuropathic facial pain treated with motor cortex stimulation: case report.* Neurosurgery. 2009 Sep;65(3):E626; discussion E626.
- 14) Baird CJ, Conway JE, Sciubba DM, Prevedello DM, Quiñones-Hinojosa A, Kassam AB. Radiographic and anatomic basis of endoscopic anterior craniocervical decompression: a comparison of endonasal, transoral, and transcervical approaches. Neurosurgery. 2009 Dec;65(6 Suppl):158-63; discussion 63-4.
- 15) Raza SM, Conway JE, Li KW, Attenello F, Boahene K, Subramanian P, Quinones-Hinojosa A. *A modified frontal-nasal-orbital approach to midline lesions of the anterior cranial fossa and skull base: technical note with case illustrations.* Neurosurg Rev. 2010 Jan;33(1):63-70. Epub 2009 Sep 2.



- 16) Hsu W, Pradilla G, Garonzik IM, Conway JE. *Pretruncal nonaneurysmal subarachnoid hemorrhage causing basilar artery vasospasm.* Neurocrit Care. 2010 Oct;13(2):256-60.
- 17) Conway JE, Raza SM, Li K, McDermott MW, Quiñones-Hinojosa A. *A surgical modification for performing orbitozygomatic osteotomies: technical note.* Neurosurg Rev. 2010 Oct;33(4):491-500. Epub 2010 Jul 27.

#### Chapters and Reviews

- 1) Conway JE, Zolotukhin I, Rhys CM, Muzyczka N, Zolotukhin S, Byrne BJ. Production and purification systems for recombinant adeno-associated virus type 2 vectors. In: eds: Cid-Arregui A, Carrancá AG, Viral Vectors: Basic Science and Gene Therapy. Natick MA, BioTechniques Books, Eaton Publishing. 2000: 59-73
- Conway JE and Rigamonti D. Osler-Weber-Rendu Syndrome. In: eds: Aminoff MJ, Daroff RB, Encyclopedia of Neurological Sciences. San Diego, Academic Press, 2003: 707-708
- 3) Conway JE and Rigamonti D. *Hemangiomas*. In: eds: Aminoff MJ, Daroff RB, Encyclopedia of Neurological Sciences. San Diego, Academic Press, 2003: 533-534
- 4) Conway JE and Rigamonti D. *Cavernous Malformations: A Review and Current Controversies*. Neurosurg Q. 2006 Mar,(16):15-23
- 5) Conway J and Tamargo R. Should patients surviving subarachnoid hemorrhage from a ruptured aneurysm be given follow-up screening? Nature Clinical Practice Neurology. (2006) 2, 184-185
- 6) Wong C, Conway JE, Jallo GI. *Complications Following Treatment of Intramedullary Spinal Cord Tumors*. Neurosurg Q, Volume 17, Number 2, June 2007: 113-119.
- 7) Conway JE and Jallo G. *Intramedullary and Extramedullary Spinal Cord Tumors*. In eds: Lee JY, Lim MR, and Albert TJ: Challenges in Cervical Spine Surgery. New York, Thieme Medical Publishers, 2007.
- 8) Conway JE, Baird CJ, Li KW, Garonzik IM, Jallo GI. Ventricular Anatomy. In Eds: George Jallo, MD, James E. Conway, MD, and László Bognár, MD: Neuroendoscopy of the Central Nervous System. San Diego. Plural Publishing. 2008: 23-36.
- 9) Conway JE, Baird CJ, Li KW, Garonzik IM, Jallo GI. *Surgical approaches for Neuroendoscopic Procedures*. In Eds: George Jallo, MD, James E. Conway, MD, and



László Bognár, MD: Neuroendoscopy of the Central Nervous System. San Diego. Plural Publishing. 2008: 37-43.

- 10) Li KW, Baird CJ, Conway JE, Noggle JC, Jallo GI. *Aqueductoplasty*. In Eds: George Jallo, MD, James E. Conway, MD, and László Bognár, MD: Neuroendoscopy of the Central Nervous System. San Diego. Plural Publishing. 2008: 61-66.
- 11) Conway JE, Quinones-Hinojosa A. *Spenoid Wing Meningiomas*. In eds: Connolly ES, McKhann GM, Huang J, Choudhri TF, and Mocco J: Fundamentals of Operative Techniques in Neurosurgery, 2<sup>nd</sup> Edition. New York, Thieme Medical Publishers. 2010: 189-195.
- 12) Conway JE, Quinones-Hinojosa A. *Tuberculum Sellae and Olfactory Groove Meningiomas*. In eds: Connolly ES, McKhann GM, Huang J, Choudhri TF, and Mocco J: Fundamentals of Operative Techniques in Neurosurgery, 2<sup>nd</sup> Edition. New York, Thieme Medical Publishers.2010:195-200.
- 13) Conway JE, Gallia G. *Esthesioneuroblastoma*. In eds: Connolly ES, McKhann GM, Huang J, Choudhri TF, and Mocco J: Fundamentals of Operative Techniques in Neurosurgery, 2<sup>nd</sup> Edition. New York, Thieme Medical Publishers. 2010:243-247.

#### Letters to the Editor

- 1) Tamargo RJ, Conway JE, Hutchins GM. *Marfan syndrome and intracranial aneurysm, Response.* Stroke. 1999 Dec;30(12):2767-8.
- 2) Tamargo RJ, Rigamonti D, Murphy K, Gailloud P, Conway JE, Clatterbuck RE. *Treatment of intracranial aneurysms: surgical clipping or endovascular coiling?* Ann Neurol. 2001 May; 49(5):682-4
- 3) Conway JE, and Tamargo RJ. *Vascular Complications of Cocaine Use, Response*. Stroke. 2002 33: 1747-1748

#### Abstracts

### **Oral Presentations**

- 1) Conway JE, Oshiro EM, Piantadosi S, Tamargo RJ. *Intraventricular hemorrhage on the admission CT scan is a strong, independent predictor of poor clinical outcome after aneurysmal subarachnoid hemorrhage*. American Association of Neurological Surgeons Annual Meeting. April 1998.
- 2) Conway JE, Zolotukhin I, Rhys CM, Muzyczka N, Zolotukhin S, Byrne BJ. Production and purification systems for recombinant adeno-associated virus type 2 vectors. American Society of Gene Therapy Annual Meeting. May 2000.



#### **Posters**

- 1) Conway JE, Byrne BJ, Hayward GS. *GFP as a marker of transduction in an HSV-1 amplicon gene transfer system*. 21<sup>st</sup> Herpesvirus Workshop. July 1996.
- 2) Conway JE, Byrne BJ, Hayward GS. *Recombinant adeno-associated virus replication and packaging is supported by an HSV amplicon expressing rep and cap*. Keystone Symposia, Molecular and Cellular Biology of Gene Therapy. April 1997.
- 3) Conway JE, Oshiro EM, Piantadosi S, Tamargo RJ. *Ventricular blood on the admission CT is a strong predictor of poor clinical outcome after ruptured aneurysmal subarachnoid hemorrhage*. 23<sup>rd</sup> International Joint Conference on Stroke and Cerebral Circulation. Feb, 1998.
- 4) Conway JE, Oshiro EM, Byrne BJ, Tamargo RJ. *The extent of cellular proliferation in the arterial wall in a rat model of vasospams*. American Association of Neurological Surgeons Annual Meeting. April 1998.
- 5) Conway JE, Rhys CM, Zolotukhin I, Zolotukhin S, Muzyczka N, Hayward GS, Byrne BJ. *High-titer recombinant adeno-associated virus production utilizing a recombinant herpes simplex virus type I vector expressing AAV-2 Rep and Cap*. Cold Spring Harbor Gene Therapy Meeting. Sept 1998.
- 6) Conway JE, Tamargo RJ. *Marfan syndrome is not associated with intracranial aneurysms*. American Association of Neurological Surgeons Annual Meeting. April 1999.
- 7) Conway JE, Tamargo RJ. *Marfan syndrome is not associated with intracranial aneurysms*. AANS/CNS Section, Cerebrovascular Surgery & American Society of Interventional and Therapeutic Neuroradiology Annual Meeting. Feb 1999.
- 8) Chou D, Conway JE, Clatterbuck RE, Brem H, Long DM, Rigamonti D. *Spinal hemangioblastomas and von Hippel-Lindau syndrome*. Congress of Neurological Surgeons Annual Meeting. Oct 1999.
- 9) Conway JE, Chou D, Clatterbuck RE, Brem H, Long DM, Rigamonti D. *CNS hemangioblastomas: a review*. American Neurological Association Annual Meeting. Oct 1999.
- 10) Conway JE, Chou D, Clatterbuck RE, Brem H, Long DM, Rigamonti D. *CNS hemangioblastomas: a review*. Congress of Neurological Surgeons Annual Meeting. Oct 1999.



- 11) Conway JE, Hutchins GM, Tamargo RJ. *Neurofibromatosis Type I is not associated with intracranial aneurysms*. American Association of Neurological Surgeons Annual Meeting. April 2000.
- 12) Conway JE, Tamargo RJ. Acute cocaine use is an independent predictor of vasospasm after aneurysmal subarachnoid hemorrhage. American Association of Neurological Surgeons Annual Meeting. April 2001.

<b>Courses</b> 1) 2005	Operative Techniques with the Masters. Center for Anatomical Science and Education. Saint Louis University School of Medicine, St. Louis, MO.
2) 2005	Skull Base Society of North America neuroanatomy course for senior residents. The Medical Education & Research Institute (MERI). Memphis, TN.
3) 2005	Synthes Florida skull base course. University of Florida and Synthes, Gainesville, FL.
4) 2005	AO spine tumor course. Baltimore, MD.
5) 2006	AO spine course for residents. Philadelphia, PA
6) 2006	Synthes Florida skull base course. University of Florida and Synthes, Gainesville, FL.
8) 2006	Aesculap Academy, Endoscopy Techniques in Neurosurgery. Baltimore, MD
9) 2006	Cyberknife certification course. Sinai Hospital. Baltimore, MD.
10) 2006	Stryker minimally invasive spine instrumentation course. Las Vegas, NV
11) 2006	Surgical approaches to the skull base. Cornell University, NY
11) 2007	Bethesda cervical and thoracic spine course. Betheda, MD.

#### **Patents**

1) Byrne BJ, Conway JE, Muzyczka N, Hayward GS, High-titer recombinant adenoassociated virus production utilizing a recombinant herpes simplex virus type I vector expressing AAV-2 Rep and Cap. US and world patents.