

**WALTER GRAND, M.D.**  
**CLINICAL PROFESSOR OF NEUROSURGERY,**  
**CLINICAL PROFESSOR OF PATHOLOGY AND ANATOMICAL SERVICES**  
**UNIVERSITY AT BUFFALO, STATE UNIVERSITY OF NEW YORK**

**Office Address**

University at Buffalo Neurosurgery  
3 Gates Circle  
Buffalo, NY 14209

**Education**

1962-1966            M.D. – Albert Einstein College of Medicine  
1958-1962            B.A., Phi Beta Kappa – University of Vermont

**Post Graduate Training**

1968-1972            Residency-Neurosurgery – University at Buffalo, State University of  
New York  
1967-1968            Residency-Neurology – Western Reserve, Cleveland, Ohio  
1966-1967            Internship-Surgery – St. Vincent’s Hospital of New York, NYC

**Military**

1972-1974            USAF Hospital, Clark Air Force Base, Philippines.  
Rank: Major, USAF  
Position: Neurosurgeon

**Medical Licensure**

June 1968            State of New York  
September 1978    State of Florida

**Board Certification**

January 1976        American Board of Neurological Surgery

**Academic Positions**

- 1992 – Present      Clinical Professor of Neurosurgery, University at Buffalo School of Medicine and Biological Sciences, State University of New York, Buffalo, NY
- 2000 – Present      Director – Louis Bakay Neuroscience Laboratory
- 2002 – Present      Clinical Professor of Pathology and Anatomical Sciences, University at Buffalo School of Medicine and Biological Sciences, State University of New York, Buffalo, NY

**Hospital Affiliations**

- 1992 – Present      Buffalo General Hospital (Kaleida Health Care System)
- 1992 – Present      Millard Fillmore Hospitals (Kaleida Health Care System)
- 1992 – Present      Children’s Hospital of Buffalo (Kaleida Health Care System)
- 1992 – July, 1997   Erie County Medical Center
- 2003 – Present      Erie County Medical Center (Courtesy Staff)
- 1994 – Present      Roswell Cancer Institute (Courtesy Staff)
- 1995 – June, 2001   Lakeshore Health Care Center (Consulting Staff)
- 2005 – Present      Lakeshore Health Care Center (Consulting Staff)
- 1995 – Present      Kenmore Mercy Hospital (Courtesy Staff)
- 1997 – Present      Sisters of Charity Hospital (Courtesy Staff)\_
- 1997 – Present      DeGraff Memorial Hospital (Kaleida Health Care System)

**Hospital Service**

- 1998 – Present      Gamma Knife Committee / Roswell Park Cancer Institute
- 1998 – 1999          CGF Oncology Task Force
- 3/98 – 2000          OR Committee – DeGraff Memorial Hospital
- 1996 – 2000          University Practice Group, Buffalo General Hospital
- 1995 – 2001          Clinical Director, Department of Neurosurgery, BGH
- 1995 – 2000          Medical Executive Committee, BGH
- 1995 – 2000          Medical Administrative Committee, BGH
- 1993 – 1995          OR Committee, BGH

**University Service**

- 1997 – 1998          Faculty Appointments, Promotions, Tenure and Privileges Committee
- 1996 – 1997          Subcommittee of Faculty Council: Appointments, Promotions, Tenure and Privileges Committee
- 1994 – 1995          Subcommittee of Faculty Council: Economic Affairs Committee

**Other Committee Service**

- 3/98 – 8/03          IPA – IHA Credentialing Sub Committee

## **Memberships**

North American Skull Base Society  
American Association of Neurological Surgeons  
American Medical Association  
Buffalo Council on World Affairs  
Congress of Neurological Surgeons  
Erie County Medical Society  
New York State Medical Society  
Phi Beta Kappa, University of Vermont  
Roswell Park Medical Club

## **Studies**

Chief Investigator for the International Cooperative Study of Extracranial/Intracranial Bypass in Cerebrovascular Disease. July 1, 1977 – June 30, 1979

## **Organizer and Director of Seminars**

**March 12-14, 2009:** The 6<sup>th</sup> Annual Neurosurgical Forum – Ponte Vedra Inn and Club; Ponte Vedra Beach, Florida

**August 2, 2008:** “Brain Neuroendoscopy – Day Seminar” – Millard Fillmore Gates Hospital, Department of Neurosurgery. Buffalo, NY.

**March 6-8, 2008:** “The 5<sup>th</sup> Annual Neurosurgical Forum” – Ponte Vedra Inn and Club; Ponte Vedra Beach, Florida.

**August 4, 2007:** “Brain Neuroendoscopy – Day Seminar” – Millard Fillmore Gates Hospital, Department of Neurosurgery. Buffalo, NY.

**March 15-17, 2007:** “The 4<sup>th</sup> Annual Neurosurgical Forum” – Ponte Vedra Inn and Club; Ponte Vedra Beach, Florida

**March 16-18, 2006:** “The 3<sup>rd</sup> Annual Neurosurgical Forum” -Ponte Vedra Inn and Club; Ponte Vedra Beach, Florida

**March 16-19, 2005:** “The 2<sup>nd</sup> Annual Neurosurgical Forum” -Ponte Vedra Inn and Club; Ponte Vedra Beach, Florida

**March 17-20, 2004:** “Neurosurgical Forum” -Ponte Vedra Inn and Club; Ponte Vedra Beach, Florida

**September 12-13, 1998**

“Cerebral Small Artery Disease: Clinical Applications for Neurologists and Neurosurgeons. Sheraton Inn; Buffalo, New York.

**May 3-4, 1997**

“The Brain Microvasculature: Clinical Applications for Neurologists and Neurosurgeons. Hyatt Regency, Buffalo, New York.

**June 10-11, 1978**

“The Aneurysm Patient: Preoperative and Postoperative Care” under the auspices of the Subcommittee of Continuing Education in Neurosurgery of the Congress of Neurological Surgeons and the American Association of Neurological Surgeons, Buffalo, New York.

**Abstracts and Presentations**

1. Grand W, Kinkel WR: Computerized axial tomography in the postoperative craniotomy patient. Presented: The Congress of Neurological Surgeons, New Orleans, Louisiana. October 28, 1976.
2. Director of Course: The Aneurysm Patient. Sponsored by The State University of New York at Buffalo. June 10-11, 1978.
3. Grand W: Preoperative Blood Pressure Control in the Aneurysm Patient. Presented: The Aneurysm Patient. Niagara Falls, New York. June 12-14, 1980
4. Hopkins LN, Grand W, Budny JL: Transient Ischemic Attack Resulting From Temporary Embolic Occlusion of the Internal Carotid Artery. Presented: Fifth International Symposium on Microsurgical Anastomoses for Cerebral Ischemia. Vienna, Austria. September 14-17, 1980
5. Grand W, Hopkins LN: The Treatment of Paroxysmal High Blood Pressure after Subarachnoid Hemorrhage.
6. Grand W: Giant Encephalitic Tumor-like Demyelinating Lesions of the Brain. Poster presented at the 6<sup>th</sup> Canadian Neuro-Oncology Meeting, Lake Louise, Alberta. May 19-21, 1994.
7. Grand W, Hopkins LN, Varnavas G: Neuroendovascular Application of Variations of the Posterior Cerebral Artery. Poster presentation at The 10<sup>th</sup> European Congress of Neurosurgery, Berlin. May 7-12, 1995.
8. Grand W: Variables in Vascular Anatomies of the Brain. Presented at “1996 Neurosurgery in Jackson Hole”. Jackson Hole, Wyoming. March 11, 1996.
9. Grand W: Anatomy of the Internal Carotid Artery in the Skull Base: Entry Point to Emergence at the Distal Ring. Second International Skull Base Congress, Seventh Annual Meeting of the North American Skull Base Society. San Diego, California. July 3, 1996.
10. Grand W: Clinical Anatomy of the Lateral Plenum Sphenoidale. Second International Skull Base Congress, Seventh Annual Meeting of

- the North American Skull Base Society. San Diego, California. July 3, 1996.
11. Grand W: In and Around Meckel's Cave. Neurosurgery at Jackson Hole. Jackson Hole, Wyoming. February 22-26, 1997.
  12. Grand W: Anatomy of the Internal Carotid Artery at the Skull Base Entry Zone. The North American Skull Base Society, 8<sup>th</sup> Annual Meeting. Little Rock, Arkansas. March 21-25, 1997.
  13. Grand W: The Arterial Supply to the Dura Mater at the Skull Base. 3<sup>rd</sup> European Skull Base Congress. London, England. April 9-11, 1997
  14. Grand W: The Retrogasserian Internal Carotid Artery in the Skull Base. 3<sup>rd</sup> European Skull Base Congress. London, England. April 9-11, 1997.
  15. Grand W: External to Internal Carotid Microanastomoses: Clinical Significance. The Brain Microvasculature: Clinical Applications for Neurologists and Neurosurgeons. Buffalo, NY. May 3-4, 1997.
  16. Grand W: Microanatomical Variations in Stroke. The Brain Microvasculature: Clinical Applications for Neurosurgeons and Neurologists. Buffalo, NY. May 3-4, 1997.
  17. Grand W: Invasive Pituitary Adenomas and the Anatomical Compartment of the Cavernous Sinus. International Interdisciplinary Congress on Craniofacial and Skull Base Surgery. Cancun, Mexico. January 20-24, 1998.
  18. Grand W: Vertebral Artery Anatomy. Presented at "Cerebral Small Artery Disease: Clinical Applications for Neurologists and Neurosurgeons. Sheraton Inn, Buffalo, NY. September 12, 1998.
  19. Grand W: Small Artery Ischemia Following Aneurismal Hemorrhage. Presented at "Cerebral Small Artery Disease: Clinical Applications for Neurologists and Neurosurgeons. Sheraton Inn, Buffalo, NY. September 13, 1998.
  20. Grand W: Laboratory Testing and Development of New Instrumentation: Anatomical Constructs. Health Care Venture/Equity Forum. Hyatt Regency Hotel, Buffalo, NY. March 3-4, 1999.
  21. Grand W: Correlative Microvascular Anatomy as a Guide to Better Surgery. American Association of Neurological Surgeons. New Orleans. April 1999.
  22. Grand W: Eyebrow Incision Supraorbital Microcraniotomy: A Critical Appraisal. North American Skull Base Society. Chicago Marriott Downtown, Chicago, Illinois. May 28-31, 1999
  23. Grand W: Individuality of Intracranial Anatomy with Special Reference to Vascular Variations. Key-Hole Concept in Neurosurgery, University at Mainz, Mainz and Tuttlingen, Germany. June 20-26, 2001
  24. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Allentown, PA. September 27-28, 2002.
  25. Grand, W: Keyhole Concepts in Neurosurgery. Barrow Neurological Institute, Phoenix, Arizona. January 24-25, 2003.

26. Grand, W: "New Technology in Neurosurgery". Montana Tech, The University of Montana. Butte, Montana. February 7, 2003.
27. Grand, W: "Neuroendoscopy-Outcome Assessment". Neurosurgery at Jacksonhole, Wyoming. March 11-15, 2003.
28. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Allentown, PA. April 4-5, 2003.
29. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Stanford, CA. July 25-26, 2003.
30. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Phoenix, AZ. January 30-31, 2004.
31. Grand, W: "Third Ventriculostomy in Adults: Point and Counterpoint". Neurosurgical Forum; Ponte Vedra Beach, FL. March 18-20, 2004.
32. Grand, W: "Medical-Legal Topics in Neurosurgery". Neurosurgical Forum; Ponte Vedra Beach, FL. March 18-20, 2004.
33. Grand, W: "Variations in Transorbital Skull Base Windows". Neurosurgical Forum; Ponte Vedra Beach, FL. March 18-20, 2004.
34. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Las Vegas, NV. April 16-17, 2004.
35. Grand, W: "Anatomic and Vascular Variations in Keyhole Approaches". University @ Mainz, Mainz and Tuttlingen, Germany. July 7-13, 2004.
36. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Indianapolis, IN. July 16-17, 2004.
37. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Phoenix, AZ. January 21-22, 2005.
38. Grand, W: "Oligodendroglioma: Some thoughts over nine years". The 2<sup>nd</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 17-19, 2005.
39. Grand, W: "Endoscopic Removal of Colloid Cysts of the Third Ventricle". The 2<sup>nd</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 17-19, 2005.
40. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Phoenix, AZ. July 15-16, 2005.
41. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts". Endoscopic Techniques in Neurosurgery, Phoenix, AZ. January 20-21, 2006.
42. Grand, W: "Neuroendoscopic Case Reports". The 3<sup>rd</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 16-18, 2006.
43. Grand, W: "Cranial Keyhole Approach Revisited". The 3<sup>rd</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 16-18, 2006.

44. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts." Endoscopic Techniques in Neurosurgery, Baltimore, MD. July 14-15, 2006.
45. Grand, W: "Endoscopic Techniques in Neurosurgery: Keyhole Concepts." Endoscopic Techniques in Neurosurgery, Phoenix, AZ. January 18-20, 2007.
46. Grand, W: "Current Status of Minimally Invasive Brain Surgery". The 4<sup>th</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 15-17, 2007.
47. Grand, W: "Medical-Legal Overview of WNY in Neurosurgery". The 4<sup>th</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 15-17, 2007.
48. Fabiano AJ, Doyle K, Grand W: General Interest Poster: Endoscopic Third Ventriculostomy for Normal Pressure Hydrocephalus. AANS, Washington D.C.; April 14-19, 2007.
49. Grand, W: "Keyhole Concepts in Neurosurgery". Endoscopic Techniques I Neurosurgery, St. Louis, MO. June 21-23, 2007.
50. Grand, W: "Keyhole Concepts in Neurosurgery". Endoscopic Techniques in Neurosurgery, Phoenix, AZ. January 17-19, 2008.
51. Grand W: "Lesion of the 10<sup>th</sup> Nerve". The 5<sup>th</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 6-8, 2008.
52. Grand W: "Late Closure after Endoscopic 3<sup>rd</sup> Ventriculostomy". The 5<sup>th</sup> Annual Neurosurgical Forum. Ponte Vedra Beach, FL. March 6-8, 2008.
53. Fabiano AJ, Grand W: General Interest Poster: Vascular Presentations in the Stoma with Endoscopic Ventriculostomy. AANS, Chicago, IL; April 26-May 1, 2008.
54. Grand W: "Variations in Anatomy for Endoscopic Third Ventriculostomy and ETV for NPH". Endoscopic Techniques in Neurosurgery. Seattle, Washington. July 18-19, 2008. .
55. Grand W: "Keyhole Concepts in Neurosurgery". Endoscopic Techniques in Neurosurgery. Seattle, Washington. July 18-19, 2008.
56. Leonardo J, Grand W: Delayed Arousal in Endoscopic Procedures: Possible Contributing Factors. Leonardo J, Grand W: Episode of Electrical Silence Serendipitously Recorded by EEG during Endoscopic Resection of Colloid Cyst.

## **Publications**

1. Grand W: Positional Nystagmus: An early sign in medulloblastoma. Neurol. Bol. 21, No. 11, pp. 1157-1159. 1971
2. Grand W: Laryngeal palsy, occipital encephalocels and hydrocephalus. Developmental Medicine and Child Neurology. Vol. 14, No. 4, pp. 492-495. 1972

3. Grand W: The significance of post traumatic status epilepticus in childhood. Journal of Neurology, Neurosurgery and Psychiatry. Vol. XXXVII, No. 2, pp. 178-180. 1974.
4. Grand W, Bakay L: Posterior Fossa Meningiomas: A report of 30 Cases. Acta Neurochirurgica. Vol. 32, Fasc. 3-4, pp. 219-233. 1975.
5. Glasauer FE, Grand W: Chronic petrous pyramid abscess presenting as a cerebellopontine angle mass. J Neurosurg. Vol. 44, No. 1, pp. 116-118. 1976.
6. Grand W, Hopkins LN: The Microsurgical Anatomy of the Basilar Artery Bifurcation. Neurosurgery. Vol. 1, No. 2, pp. 128-131. 1977.
7. Hopkins LN, Bakay L, Kinkel WR, Grand W: Demonstration of Transventricular CSF Absorption by Computerized Tomography. Acta Neurochirurgica. 39:151-159. 1977.
8. Bakay L, Glasauer F, Grand W: Unusual Intracranial Foreign Bodies. Acta Neurochirurgica. 39:219-231. 1977.
9. Grand W, Kinkel WR, Hopkins LN, Glasauer FE: Ring Formation on Computerized Tomography in the Postoperative Patient. Neurosurgery. 2:107-109. 1978
10. Cares HL, Roberson GH, Grand W, Hopkins LN: A Safe Technique for the Precise Localization of Carotid-Cavernous Fistula during Balloon Obliteration. J Neurosurg. 49:146-149. 1978.
11. Hopkins LN, Grand W: Extracranial-Intracranial Arterial Bypass in the Treatment of Aneurysms of the Carotid and Middle Cerebral Arteries. Neurosurgery. Vol 5, No. 1, PP. 21-31. 1979.
12. Grand W: Preoperative Blood Pressure in the Aneurysm Patient. Clinical Management of Intracranial Aneurysms. Edited by L.N. Hopkins and Donlin M. Long. Raven Press, New York. Copyright date 1982.
13. Grand W: The Microsurgical Anatomy of the Proximal Middle Cerebral Artery and Internal Carotid Bifurcation. Neurosurgery. Vol. 7, No. 3. Pp.215-218. 1980.
14. Grand W, Budny J, Gibbons K, Sternau L, Hopkins LN: Microvascular Surgical Anatomy of the Vertebrobasilar Junction. Neurosurgery. Vol. 40, No. 6, pp. 1219-1225. June 1997.
15. Stiles JD, Ostrow PT, Balos L, Greenberg SJ, Plunkett RJ, Grand W, Heffner RR, Jr.: Endothelin-1 and Transforming Growth Factor in Human Glioma; Correlation of Endothelin-1 and Transforming Growth Factor B1 with Malignancy and Vascularity in Human Gliomas. J Neuropathology and Experimental Neurology. 1996.
16. Vasculature of the Brain and Cranial Base: Variations in Clinical Anatomy, Volume 1, by Walter Grand, M.D. and L.N. Hopkins, M.D.. Thieme Medical Publishing. New York, New York. September 1998.
17. Grand W, Glasauer FE, Hopkins: Neurosurgery at The State University of New York at Buffalo. Neurosurgery. January 1999.
18. Grand W: In Memoriam: Louis Bakay, June 1917- September 1998. Neurosurgery. January 1999.

19. Wingate J, Grand W, Wax M, Varnavas G: Mucocele of the Crista Galli. Otolaryngology-Head and Neck Surgery. Vol. 119, No. 2, p. 195. August 1998.
20. Wingate J, Grand W, Wax M, Janecka I, Fletcher C: Pituitary Carcinoma. Otolaryngology-Head and Neck Surgery. Vol. 119, No. 2, p. 195. August 1998.
21. Varnavas G, Grand W: The Insular Cortex: Morphological and Vascular Anatomic Characteristics. Neurosurgery. Vol. 44, No. 1, pp. 127-138. January 1999.
22. Plunkett R, Allison RR, Grand W: Stereotactice Neurosurgical Biopsy is an Underutilized Modality. Neurosurgery Rev. No. 22, pp. 117-120. 1999.
23. Grand W: The Anatomy of the Brain, by Thomas Willis. Neurosurgery, Vol.45, No. 5, pp.1234-1237. November 1999.
24. Dare AO, Datta RV, Loree T, Hicks WL Jr, Grand W: Sinonasal Non-Hodgkin's Lymphoma with Skull Base Involvement. Skull Base: An Interdisciplinary Approach. Vol. 11, No. 2, pp. 129-135. 2001.
25. Dare A, Balos L, Grand W: Olfaction Preservation in Anterior Cranial Base Approaches: An Anatomic Study. Neurosurgery. Vol 48, No. 5, pp. 1142- . May 2001.
26. Dare AO, Landi MK, Lopes D, Grand W: Eyebrow Incision for Combined Orbital Osteotomy and Supraorbital Minicraniotomy: Application to Aneurysms of the Anterior Circulation. J Neurosurgery 95:714-718, 2001.
27. Dare, AO, Balos L, Grand W: Neural-Dural Transition at the Medial Anterior Cranial Base. J. Neurosurgery 99:362-365, 2003.
28. Fabiano AJ, Grand W: Vascular Presentations in the Stoma with Endoscopic Third Ventriculostomy (Eposter 1131, General Interest Third Place. 2008 AANS 76<sup>th</sup> Annual Meeting, April 26-May 1, 2008, Chicago IL) J Neurosurgery 109:A374, August 2008.

### **Peer Reviewed Publications**

1. Leonardo J, Grand W: Enlarged Thalamostriate Vein Causing Unilateral Monro Foramen Obstruction. Case report. *J Neurosurg Pediatrics* 3:507-510, June 2009
2. Fabiano AJ, Leonardo J, Grand W: Posterior Cerebral Artery P1 Segment at the Stoma during Endoscopic Third Ventriculostomy in Adults. *J Neurol Neurosurg Psychiatry* (epub September 2, 2009; doi:10.1136/jnnp.2009.177360).
3. Leonardo J, Hanel RA, Grand W: Endoscopic Tracking of a Ventricular Catheter for Entry into the Lateral Ventricle: Technical Note. *Minim Invasive Neurosurg* (in press).

### **Accepted for Publication**

1. Chamczuk AJ, Grand W: Endoscopic Cauterization of a Symptomatic Choroid Plexus Cyst at the Foramen of Monro. Accepted for publication in *Neurosurgery* on November 27, 2009.

### **Lectures**

1. "Headaches, Neck Pain and Major Neurosurgical Disorders" by Walter Grand, M.D.: DeGraff Memorial Hospital. August 14, 1998.
2. "Neurosurgical Emergencies" by Walter Grand, M.D.: Brooks Memorial Hospital Grand Rounds. June 15, 1998
3. "Acoustic Neuromas and Skull Base Surgery" by Walter Grand, M.D.: State University of Buffalo at New York, Department of Otolaryngology Grand Rounds. December 3, 1999.
4. "Individuality of Intracranial Anatomy with Special Reference to Vascular Variations" by Walter Grand, M.D.: Keyhole Concept in Neurosurgery, University at Mainz, Mainz and Tuttlingen, GERMANY. June 20-26, 2001. "Brain Endoscopy: A minimally invasive brain surgery technique" by Walter Grand, M.D.: Webster Hall, Millard Fillmore Gates Hospital. February 12, 2008.
5. "Surgical Approaches to the Ventricular System": Scientific Program of the 2008 Annual Meeting of the Congress of Neurological Surgeons. Orange County Convention Center, Orlando, Florida; September 21, 2008.
6. "New Techniques in Imaging in Neuroendoscopy" by Walter Grand, M.D.: (NFSRT) Webster Hall, Millard Fillmore Gates Hospital. March 28, 2009.
7. "Spontaneous Intracranial Hemorrhage" by Walter Grand, M.D.; Erie County Medical Center. July 29, 2009.
8. "Endoscopic Approach to the Brain" by Walter Grand, M.D.; Physician Assistant Group of Western New York. Buffalo, NY. November 4, 2009.

### **Advisory Board**

Minimally Invasive Neurosurgery, Vol.46: October 2003. Thieme Medical Publishers, NY, NY

Minimally Invasive Neurosurgery, Vol. 52: February 2009. Thieme Medical Publishers, New York, NY.

**Other Meetings:** Attended "Conference on New York Medical Malpractice Crisis" presented by The New York State Neurosurgical Society. September 20, 2004. New York, NY.

*Updated 12/1/09*