

**George J. Dohrmann, M.D., Ph.D.**  
**Neurosurgeon**  
**University of Chicago**

**Surgery training:** Massachusetts General Hospital  
Harvard Medical School  
Boston, Massachusetts

**Neurology training:** Institute of Neurology  
The National Hospital  
Queen Square  
London, England

**Neurosurgery training:** Yale-New Haven Hospital  
Yale University School of Medicine  
New Haven, Connecticut

**Faculty positions:** Yale University School of Medicine  
University of Chicago School of Medicine

**Academic:** Section of Neurosurgery (with tenure)  
University of Chicago



**Selected awards:**

- Beta Beta Beta Biological Honor Society
- Pi Kappa Epsilon Medical Honorary
- Alpha Omega Alpha Medical Research Award
- Recognition Award, World Federation of Neurosurgical Societies
- Bucy Award (“for outstanding contributions to neurosurgical education”)
- The Lincoln Academy of Illinois (the honorary of the State of Illinois)
- Career Achievement Award (“for exceptional expertise, knowledge, dedication, and recognition in the field of neurosurgery and neurological research”)
- Professor Ramani Lifetime Achievement Award, Neuro Spinal Surgeons Association

**International responsibilities:**

Chairman (8 years), Neurotraumatology Committee, World Federation of Neurosurgical Societies  
Vice Chairman (6 years), Spine Committee, World Federation of Neurosurgical Societies

**Editorial responsibilities:**

Served on the editorial boards of the following journals:

SURGICAL NEUROLOGY (the international neurosurgical journal)  
ADVANCES IN NEUROTRAUMATOLOGY  
PARAPLEGIA  
CRITICAL REVIEWS IN NEUROSURGERY  
JOURNAL OF NEURO-ONCOLOGY  
SPINAL CORD  
NEUROLOGICAL RESEARCH  
JOURNAL OF SPINAL SURGERY

**Teaching:**

- Massachusetts General Hospital, Harvard Medical School
- Institute of Neurology, University of London, London, England
- Yale University School of Medicine
- University of Chicago School of Medicine

- Co-Preceptor, Ph.D. Program in Experimental Pathology (Neuropathology), University of Chicago

**Board certification:**

American Board of Neurological Surgery

**Awarded fellow status:**

- American College of Surgeons
- American Association of Neurological Surgeons
- American College of Spine Physicians

**Highlights:**

- First to describe the electron microscopic structure of the human choroid plexus (Dohrmann and Bucy)
- Description of the histological and electron microscopic changes and the biomechanics of experimental spinal cord trauma.
- Published one of the largest population-based studies of brain and spinal cord tumors in children.
- First (with J.M. Farwell) to describe the relationship between SV40 virus-contaminated polio vaccine given to pregnant mothers and the subsequent development of brain tumors in their infants.
- First (with J.M. Rubin) to develop intraoperative real-time ultrasound imaging in neurosurgery for localization, characterization and instrumentation of lesions, such as cysts, tumors, foreign bodies and hematomas, in the brain and later in the spinal cord.
- Largest long-term follow up studies of operations for cervical disc herniation and for lumbar disc herniation (45,048 patients) (Dohrmann and Hsieh, Dohrmann and Mansour).

**Publications: Published well-over 200 articles, books and chapters**

Selected spine/spinal cord articles:

- Dohrmann GJ, Mansour N: Long-term results of various operations for lumbar disc herniation: analysis of over 39,000 patients. *Med Princ Pract* 24:285-290, 2015.
- Dohrmann GJ, Hsieh JC: Long-term results of anterior vs posterior operations for herniated cervical discs: analysis of 6,000 patients. *Med Princ Pract* 23:70-73, 2014.
- Hobbs J, Bina R, Dohrmann G, Roitberg B: What's new in spine surgery. *Med Princ Pract* 22:101-102, 2013.
- Dohrmann GJ, Byrne RW: Advances in neurovascular and spine surgery, epilepsy, surgery of movement disorders and intraoperative imaging *Med Princ Pract* 19: 328-329, 2010.
- Citow JS, Dohrmann GJ, Batzdorf U: Syringomyelia. *Neurosurg Quarterly* 10:159-168, 2001.
- Dohrmann GJ, Rubin JM: History of intraoperative ultrasound in neurosurgery. *Neurosurg Clin North Am* 12:155-166, 2001.
- Dohrmann, GJ, Rubin JM: Cervical spondylosis and syringomyelia: suboptimal results, incomplete treatment and the role of intraoperative ultrasound. *Clin Neurosurg* 34:3780389, 1987.
- Rubin JM, Dohrmann GJ, Chandler WF: Intraoperative spinal ultrasonography. *Clin Neurosurg* 34:282-313, 1987.
- Rubin JM, Dohrmann, GJ: Intraoperative spinal ultrasonography. *J Belge Radiol* 69:9-27, 1986.
- Dohrmann GJ, Rubin JM: Dynamic intraoperative imaging and instrumentation of brain and spinal cord using ultrasound. *Neurol Clin* 3:425-437, 1985.
- Arce CA, Dohrmann GJ,: Herniated thoracic discs. *Neuro Clin* 3:383-392, 1985.
- article. *Semin Ultrasound CT MR*, 6:48-67, 1985
- Rubin JM, Dohrmann GJ: The spine and spinal cord during neurosurgical operations: real-time ultrasonography. *Radiol* 155: 197-200, 1985.

- Rubin JM, Dohrmann GJ: Intraoperative sonography of the spine and spinal cord. *Semin Ultrasound CT MR*, 6: 48-67, 1985.
- Arce CA, Dohrmann GJ: Thoracic disc herniation: improved diagnosis with computed tomographic scanning and a review of the literature. *Surg Neurol* 23:356-361, 1985.
- St Amour TE, Rubin JM, Dohrmann GJ: Ultrasonic identification of the central canal of the spinal cord. *Radiol* 152:767-769, 1984.
- Jokich PM, Rubin JM, Dohrmann GJ: Intraoperative ultrasonic assessment of spinal cord motion. *J Neurosurg* 60:707-711, 1984.
- Dohrmann GJ, Rubin JM: Intraoperative ultrasound imaging of the spinal cord: syringomyelia, cysts and tumors. A preliminary report. *Surg Neurol* 18:395-399, 1982.
- Brodner RA, Dohrmann GJ, Roth RH, Rubin RA: Correlation of cerebrospinal fluid serotonin and altered spinal cord blood flow in experimental trauma. *Surg Neurol* 13:337-343, 1980.
- Reed JE, Allen WE III, Dohrmann GJ: Effect of mannitol on traumatized spinal cord: microangiography, blood flow patterns and electrophysiology. *Spine* 4:391-397, 1979.
- Dohrmann GJ, Panjabi MM, Banks D: Biomechanics of experimental spinal cord trauma. *J Neurosurg* 48:993-1001, 1978.
- Wagner FC Jr, VanGilder JC, Dohrmann GJ: Pathological changes from acute to chronic in experimental spinal cord trauma. *J Neurosurg* 48:92-98, 1978.
- Panjabi MM, Dicker DB, Dohrmann GJ: Biomechanical quantification of experimental spinal cord trauma. *J Biomech* 10:681-687, 1977.
- Farwell JR, Dohrmann GJ: Intraspinal neoplasms in children. *Paraplegia* 15:262-273, 1977.
- Dohrmann GJ, Panjabi MM, Dicker DB: Biomechanics of the thoracic spinal cord and thorax in experimentally produced trauma. *Surg Forum* 28:448-450, 1977.
- Brodner RA, Dohrmann GJ: Norepinephrine, dopamine and serotonin in experimental spinal cord trauma: current status. *Paraplegia* 15:166-171, 1977.
- Wagner FC Jr, VanGilder JC, Dohrmann GJ: The development of intramedullary cavitation following spinal cord injury: an experimental pathological study. *Paraplegia* 14:245-250, 1977.
- Koenig G, Dohrmann GJ: Histopathological variability in "standardized" spinal cord trauma. *J Neurol Neurosurg Psychiat* 40:1203-1210, 1977.
- Brodner RA, Dohrmann GJ, Roth RH, Rubin RA: Elevated cerebrospinal fluid levels of 5-hydroxytryptamine following experimental spinal cord trauma. *Brain Res* 118:348-351, 1976.
- Dohrmann GJ, Panjabi MM: "Standardized" spinal cord trauma: biomechanical parameters and lesion volume. *Surg Neurol* 6:263-267, 1976.
- Dohrmann GJ, Panjabi MM: Spinal cord deformation velocity, impulse and energy related to lesion volume in "standardized" trauma. *Surg Forum* 27:466-468, 1976.
- Brodner RA, Dohrmann GJ, Roth RH: Spinal cord blood flow correlated with serotonin alterations in experimental traumatic myelopathy. *Clin Res* 24:611A, 1976.
- Scoville WB, Dohrmann GJ, Corkill G: Late results of cervical disc surgery. *J Neurosurg* 45:203-210, 1976.
- Dohrmann GJ, Panjabi MM, Wagner FC Jr: An apparatus for quantitating experimental spinal cord trauma. *Surg Neurol* 5:315-318, 1976.
- Troll GF, Dohrmann GJ: Anaesthesia of the spinal cord-injured patient: cardiovascular problems and their management. *Paraplegia* 13:162-171, 1975.
- Dohrmann GJ, Wagner FC Jr: Combination of electron microscopy and the thioflavine S technique in studies of the spinal cord microvasculature. *Microvasc Res* 10:228-233, 1975.
- Wagner FC Jr, Dohrmann GJ: Alterations in nerve cells and myelinated fibers in spinal cord injury. *Surg Neurol* 3:125-131, 1975.

- Dohrmann GJ, Allen WE III: Microcirculation of traumatized spinal cord. A correlation microangiography and blood flow patterns in transitory and permanent paraplegia. *J Trauma* 15:1002-1013, 1975.
- Zielonka JS, Wagner FC Jr, Dohrmann GJ: Alterations in spinal cord blood flow during local hypothermia. *Surg Forum* 25:434-436, 1974.
- Dohrmann GJ, Wick KM: Intramedullary blood flow patterns in transitory traumatic paraplegia. *Surg Neurol* 1:209-215, 1973.
- Dohrmann GJ, Wick KM, Bucy PC: Spinal cord blood flow patterns in experimental traumatic paraplegia. *J Neurosurg* 38:52-58, 1973.
- Dohrmann GJ: Experimental spinal cord trauma. A historical review. *Arch Neurol* 27:468-473, 1972.
- Dohrmann GJ, Wick KM, Bucy PC: Blood flow patterns in the intrinsic vessels of the spinal cord following contusion: an experimental study. *Trans Am Neurol Assoc* 97:189-192, 1972.
- Dohrmann GJ: Cervical spinal cord in experimental hydrocephalus. *J Neurosurg* 37:538-542, 1972.
- Dohrmann GJ, Wagner FC Jr, Bucy PC: Transitory traumatic paraplegia: electron microscopy of early alterations in myelinated nerve fibers. *J Neurosurg* 36:407-415, 1972.
- Dohrmann GJ, Wagner FC Jr, Bucy PC: The microvasculature in transitory traumatic paraplegia. An electron microscopic study in the monkey. *J Neurosurg* 35:263-271, 1971.
- Wagner FC Jr, Dohrmann GJ, Bucy PC: Histopathology of transitory traumatic paraplegia in the monkey. *J Neurosurg* 35:272-276, 1971.
- Dohrmann GJ, Wick KM: Demonstration of the microvasculature of the spinal cord by intravenous injection of the fluorescent dye, thioflavine S. *Biotechnic Histochem* 46:321-322, 1971.

#### **Books**

- Kranzler LI, Penn RD, Dohrmann GJ: *NEUROSURGERY*, Philadelphia, Saunders, 1985.
- Ramani PS, Shoda M, Zileli M, Dohrmann GJ: *SURGICAL MANAGEMENT OF CERVICAL DISC HERNIATION*. Jaypee Med Publishers, 2012.