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# DEPARTMENT OF NEUROSURGERY

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Neurosurgery is a discipline that provides the operative and nonoperative management of disorders that affect the central, peripheral, and autonomic nervous systems, including their supporting structures and vascular supply, and the operative and nonoperative management of pain. Neurosurgery encompasses the modern treatment of disorders of the brain, meninges, and skull and their blood supply, including the extracranial carotid and vertebral arteries; disorders of the pituitary gland; disorders of the spinal cord and spine; disorders of the cranial and spinal nerves throughout their distributions; and disorders of the autonomic nervous system.

Procedures performed include tumor resection or biopsy of both the brain and spinal cord; surgery for aneurysms and vascular malformations; diagnostic and therapeutic surgery for intractable epilepsy; operations for injuries of the brain, spinal cord, and peripheral nerves; as well as laminectomies for the removal of herniated intervertebral discs and decompression of the spinal cord or the nerve roots within the spinal canal. Intracranial stereotactic procedures are performed for biopsy and/or implantation for radiation therapy, as well as stereotactic radiosurgery. The Department of Neurosurgery is organized along subspecialty lines, including cerebrovascular, spinal, brain tumors, movement disorders, and pediatric neurosurgery.

A four-week elective in neurosurgery is offered for senior medical students, and the fourth-year students taking the neurology clerkship have the option of spending the period on the neurosurgical service.

Research opportunities are offered for residents within the Department, which maintains an active basic research laboratory. In addition, research projects are conducted in conjunction with other departments, such as the Departments of Anatomy and Neurobiology, Emergency Medicine, Neurology, and Radiology, and the Division of Neuroendocrinology. The neurosurgery residency is a six-year program and must be preceded by at least one postgraduate year in general surgery. The six-year program includes at least one full year of research, as well as rotations in neurology, neuropathology, and neuroradiology. Residents may also elect time in pediatric neurology or neuro-ophthalmology. No fellowships are offered.

## Faculty of the Department of Neurosurgery

**Richard J. Burton** . . . *Dean's Professor and Acting Chair*. B.A. Amherst, 1958; M.D. Harvard, 1962; General Surgery, Strong Memorial Hospital, 1962–64; Combined Harvard Orthopedic Residency, 1966–70; Fellowship in Surgery of the Hand, Roosevelt Hospital, New York City, 1970–71; Wehle Professor and Chair of Department of Orthopedics, University of Rochester School of Medicine and Dentistry, 1985–2000.

### Professors

**Joseph V. McDonald**, Emeritus. A.B. Holy Cross, 1945; M.D. Pittsburgh, 1949.

**Yuji Namaguchi**, and *Radiology*, and *Neurology*. M.D. Nagasaki (Japan), 1966; Ph.D. Kyushu (Japan), 1978.

**Shige-Hisa Okawara**, Emeritus. B.S. Eighth National (Japan), 1950; M.D. Igakushi (Japan), 1954; Ph.D. 1959.

**Frank P. Smith**, Emeritus. B.S. Hobart, 1936; M.D. Rochester, 1941.

### Associate Professors

**Shirley A. Joseph**. B.S. Edgecliffe, 1961; Ph.D. Rochester, 1967.

**Webster H. Pilcher**, and *Neurology*. A.B. Colgate, 1972; M.D. Columbia, 1977; Ph.D. Rochester, 1983.

### Clinical Associate Professors

**Robert S. Bakos**. B.S. Ohio, 1964; M.D. St. Louis, 1968.

**Curtis N. Nelson**. B.S.E. Princeton, 1963; Ph.D. Rochester, 1970; M.D. 1972.

**Thomas G. Rodenhouse**. B.S. LeMoyné, 1962; M.D. Louvain (Belgium), 1968.

### Assistant Professors

**Cargill H. Alleyne, Jr.** B.S. George Washington, 1986; M.D. Yale, 1991.

**Calvin R. Maurer, Jr.**, and *Biomedical Engineering*. B.S.E. Princeton, 1980; M.S. Vanderbilt, 1991; Ph.D. 1996.

**Howard J. Silberstein**. B.S. George Washington, 1981; M.D. Vermont, 1985.

**Seth M. Zeidman**. B.S. Duke, 1984; M.D. 1988.

### Clinical Assistant Professors

**William W. Cotanch**. B.S. Wisconsin, 1955; M.D. 1958.

**James T. Maxwell**. B.S. Georgetown, 1971; M.D. Columbia, 1975.

### Clinical Instructor

**Richard A. Stea**. A.B. University of Southern California, 1980; M.D. 1988.