

profile

BARROW

Overview

Barrow Neurological Institute at St. Joseph's Hospital and Medical Center is an internationally renowned medical center that offers care for people with brain and spine diseases, disorders and injuries. Dr. Robert Spetzler, one of the world's leading neurosurgeons, is the director of the institute.

On March 19, 2006, St. Joseph's Hospital and Medical Center will celebrate its 111th anniversary by dedicating the new Barrow Patient Care Tower. The 430,000-square-foot building is currently under construction. When completed, it will house:

- 144 new patient beds (all of which will be devoted to acute or intensive care)
- 48 new emergency beds
- Six trauma bays
- 11 operating rooms
- Three MRIs (one surgical)

When the new tower opens, St. Joseph's will have approximately 700 patient beds, making it the largest hospital in Arizona.

The new building is part of a \$203-million expansion and improvement project that also includes renovating a portion of the hospital's existing 1.6 million square feet of patient-care space.

Mission

- Barrow's mission is to improve patient care and advance neuroscience knowledge. To fulfill this mission, Barrow focuses on excellence in patient care, medical education and research. *U.S. News and World Report* routinely ranks St. Joseph's among the best hospitals in the United States for neurology and neurosurgery.

Barrow has contributed much to neuroscience:

- Barrow scientists identified the gene that causes the inherited form of cerebral cavernous malformations and developed a blood test to identify people with the gene.
- Barrow surgeons and scientists helped pioneer the hypothermic circulatory arrest, a surgery now used worldwide in treating complex aneurysms. This, along with new skull base approaches, allows neurosurgeons to repair blood vessels in the brain with minimal risk of hemorrhage.
- The Muhammad Ali Parkinson Research Center is advancing our knowledge of Parkinson's disease through the Parkinson's Disease registry, a first-of-its-kind national database. The Registry will help researchers identify new avenues of research, develop better treatments and, hopefully, find a cure for PD.
- Scientists at Barrow have identified a specific neural pathway that carries the sensation of itch from peripheral nerve fibers up the spinal cord to the brain.

eral nerve fibers up the spinal cord to the brain. Their ground-breaking research could also explain how pain and other sensations are transmitted and processed by the brain.

- Barrow surgeons are developing new endovascular techniques that thread tiny catheters into brain vessels to correct problems too risky for traditional neurosurgery.
- Barrow spine surgeons have helped develop surgical techniques and instrumentation to restore function to patients with major spinal disorders, such as congenital abnormalities, tumors and traumatic injuries.

Centers, Clinics and Specialty Areas

Neurosurgery

- Acoustic Neuroma Center
- Craniofacial Center
- Functional and Stereotactic Neurosurgery
- Hypothalamic Hamartoma Center
- Normal Pressure Hydrocephalus Clinic
- Pediatric Neurosurgery
- Pituitary/Neuroendocrine Center
- Radiosurgery Center (Gamma Knife & Cyberknife)
- Skull Base Center
- Spine Center
- Vascular Center (Cerebrovascular & Endovascular Neurosurgery)

Neurology & Neuro-Rehabilitation

- A.B. & Anne Robbs Stroke Center
- Alzheimer's Center
- Balance Center
- Center for Transitional Neuro-Rehabilitation
- Epilepsy Center
- Ina Levine Brain Tumor Center
- MDA Clinic
- MS Center
- Muhammad Ali Parkinson Research Center
- Neuro Rehabilitation
- Pediatric Neurology and Neurogenetics

Neuroscience Research Laboratories

- Neurosurgery
- NeuroImmunoModulation
- Neuro-Oncology
- Neurobiology
- Neurochemistry
- Neurogenetics
- Pain Research
- Thermoregulation
- Epilepsy Research

Facts

Admissions each year9,500
 Neurosurgeries each year5,000

Dedicated neuro rooms:

Neuro Operating Rooms8
 Neuro Intensive Care Unit (ICU)16
 Stroke Telemetry Unit15
 Neuro Acute Care24
 Spine Acute Care10
 Epilepsy Monitoring Unit5
 Neuro-Rehab Inpatient Unit38
 Post-op Spinal Cord Unit8

Medical Education at Barrow

Post-Graduate Training

Neurosurgery Residents21
 Neurosurgery Fellows5
 Neurology Residents18
 Neurology Fellows6

Professional Conferences13

Neuroscience Publications Office

Publication of *Barrow Quarterly*
 200 peer-reviewed journal articles, books and chapters written by Barrow physicians and scientists

Historical Highlights

Barrow opened in 1962 as a result of a generous gift from Charles Barrow, whose wife, Julia, had received care from Dr. John Green, then a neurosurgeon at St. Joseph’s Hospital and Medical Center. Mr. Barrow’s gift, along with funds from the Sisters of Mercy, made possible the construction of Barrow on the St. Joseph’s campus.

- 1957 Dr. John Green, Arizona’s first neurosurgeon, moves to Phoenix.
- 1958 Charles Barrow donates \$500,000 to St. Joseph’s for construction of a neurosurgical center. The Sisters of Mercy provide \$500,000 in matching funds. Mr. Barrow later contributes another \$620,000.
- 1960 Construction begins on Barrow Neurological Institute on the St. Joseph’s campus.
 Barrow Neurological Foundation (BNF) is founded to raise funds for research, patient care and medical education at Barrow.
- 1961 The Barrow Neurosurgery Residency Program receives accreditation from the American Board of Neurosurgery.
- 1962 Barrow Neurological Institute opens its doors to patients. Dr. John Green serves as its first director.
- 1966 The BNF Women’s Board is established to fund high-priority research projects and equipment purchases.
- 1983 The Harber Chair of Neurosurgery is endowed by the J.N. Harber Foundation to further neurological research and teaching. Dr. Robert Spetzler joins Barrow as the first Harber Chair.
- 1986 Dr. John Green retires, and Dr. Robert Spetzler succeeds him as the director of Barrow.
- 1987 The Chair of Neurology is established through the generosi-

ty of Kemper and Ethel Marley.

- 1988 The Epilepsy Monitoring Unit opens at Barrow for the diagnosis of seizure disorders. It is the largest unit of its kind in Arizona.
- 1989 The Parkinson Disease and Information and Referral Center is established. In 1997, the center is renamed the Muhammad Ali Parkinson Research Center. The center provides clinical care, research and education for patients with movement disorders.
- 1997 Barrow opens the first Gamma Knife Center in Arizona. Today, only 60 neuroscience centers nationally and 120 internationally offer this non-invasive treatment for brain lesions.
- 1997 The 70,000-square-foot Neuroscience Research Center opens at Barrow.
- 1999 *U.S. News and World Report* recognizes Barrow as one of the country’s 10 best centers for neurosurgical and neurological care.
- 2003 The country’s first Hypothalamic Hamartoma (HH) Program for the surgical treatment of HH is established at Barrow.
- 2003 Barrow opens the Southwest’s first CyberKnife Center. CyberKnife is a non-invasive radiosurgery device that can remove previously unreachable tumors and other lesions.

Barrow Neurological Foundation

The Barrow Neurological Foundation was established in 1960 to support the Barrow Neurological Institute. Many advances at Barrow have been made possible by donations from individuals and organizations in support of ground-breaking research, cutting-edge technology, endowed chairs and innovative patient services.

The foundation accepts unrestricted contributions or designated (restricted) contributions for all areas of the Barrow Neurological Institute. The Foundation is a non-profit corporation as provided under Section 501C(3) of the Internal Revenue Code. Contributions are tax-deductible in accordance with state and federal regulations.

Barrow Neurological Foundation
 350 W. Thomas Road
 Phoenix, Arizona 85013
 602-406-3041

Barrow Neurological Institute
 350 W. Thomas Road
 Phoenix, Arizona 85013
 800-BARROW-1 (800-227-7691)
www.TheBarrow.com

