



Penn State Hershey Medical Center specialists prepare a patient for treatment in the latest model Gamma Knife®.



Robert Harbaugh, M.D., F.A.C.S., has led the resurgence of neurosurgery at Penn State Hershey Medical Center.



The brains behind brain surgery's resurgence

In four short years, neurosurgery at Penn State Milton S. Hershey Medical Center and Penn State College of Medicine has gone from a subspecialty in the Department of Surgery to its own department with its own reputation for world-class patient care, academic excellence, and leading-edge biomedical research.

Central Pennsylvanians don't need to travel to distant cities for the most advanced care for brain tumors, stroke, Parkinson's disease, and other brain and nerve disorders. Some of the nation's top physicians in these areas are working in Hershey.

Robert Harbaugh, M.D., F.A.C.S., is one of these doctors and the man largely responsible for the renaissance in neurosurgery at Penn State. A 1978 graduate of Penn State College of Medicine, Harbaugh returned to his alma mater in 2003 to head up the newly created Department of Neurosurgery.

"I felt we had an opportunity to accomplish something special," recalls Harbaugh. The accomplishments keep piling up for him and his department. In 2006, for the fourth year in a row, Harbaugh was included in America's Top Doctors®, a health care consumer guide to help patients find the nation's leading medical specialists.

Also last year, the department was recognized as being among the nation's top neuroscience programs. According to the 2006 Neuroscience Center of Excellence Survey, co-sponsored by NeuroSource, Inc., Chicago, and HealthTech, San Francisco, Penn State Hershey Medical Center was designated as a Neuroscience Center of Excellence. Harbaugh has been invited to speak around the world on the topic of developing such centers of excellence.

ADVANCED PROCEDURES

"We have everything here that you can get at [Johns] Hopkins in Baltimore, or in Philadelphia, or in Pittsburgh," Harbaugh stresses. He is particularly proud of the Medical Center's capabilities using its Gamma Knife®, a machine that enables skilled neurosurgeons to eliminate tumors deep within the brain without ever picking up a scalpel.

"Using highly focused beams of radiation, the Gamma Knife can treat a variety of malignant and benign tumors, as well as other brain disorders, pain, and seizures," explains Harbaugh. The non-invasive

Gamma Knife procedures began last year with the opening of the Medical Center's new South Annex, a facility that offers a unique combination of radiation oncology and neurosurgery expertise.

TEAM APPROACH

Harbaugh leads a team of highly skilled physicians with advanced training in all neurosurgical disciplines. "There is no procedure that they don't do, and do very well. We are a full-service department," remarks Harbaugh, whose own specialties include cerebrovascular and brain tumor surgery.

The Medical Center's collaborative approach to stroke care achieved significant recognition last year. The Penn State Stroke Center became the first facility in the capital region to earn the Gold Seal of Approval™ from the Joint Commission on Accreditation of Healthcare Organizations for its exceptional ability to treat stroke patients. Harbaugh notes, "We combine specially trained neurologists, neurosurgeons, and nurses who work in dedicated neuroscience units to offer the most comprehensive stroke care available."

Harbaugh's vision for a team approach to the treatment and study of the whole spectrum of neurological conditions has led to the development of the Penn State Clinical Neuroscience Center of Excellence. The center fosters greater collaboration between the departments of Neurosurgery, Neurology, Neural and Behavioral Sciences and Psychiatry. This collaboration holds great potential for advancements in patient care, brain research, and the training of the next generation of neuroscientists.