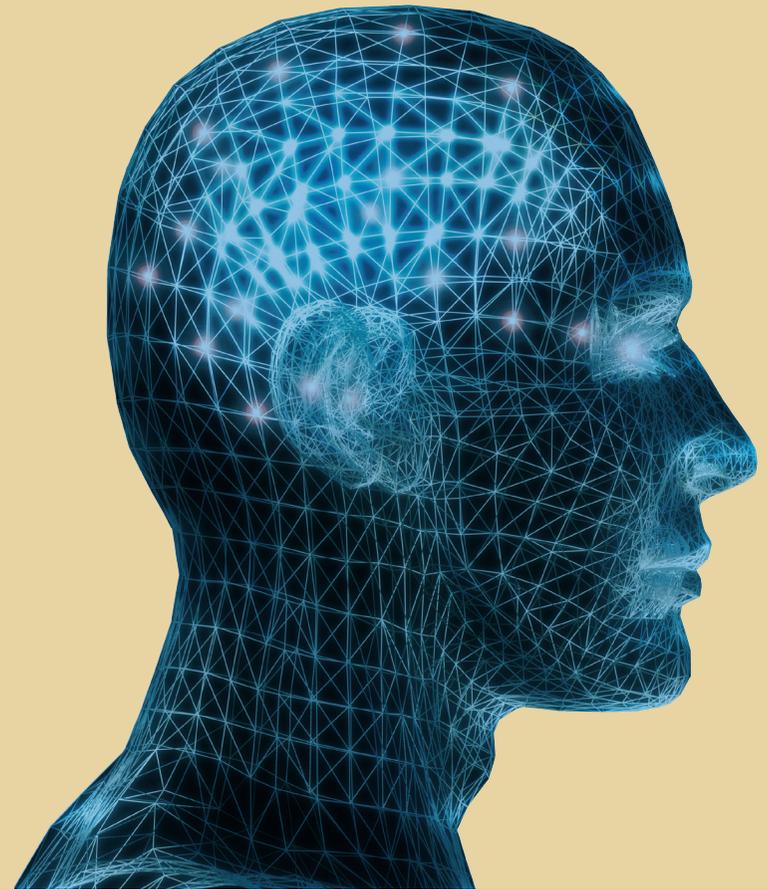
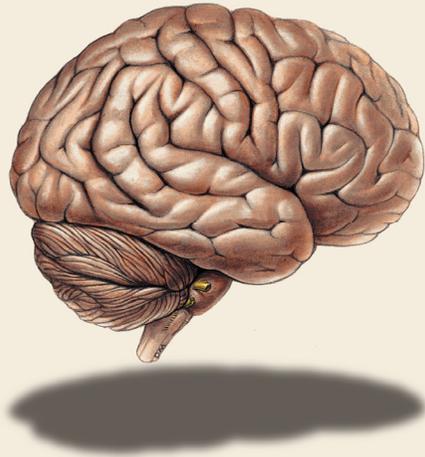


INSTITUTE
of
NEUROSCIENCES





A teenager suffers traumatic spine injuries in a car accident.

A mother of three has a stroke at home.

Doctors diagnose a grandfather with brain cancer.

A schoolteacher lives with constant back pain.

Seizures strike a college student in his sleep.

BRAIN, SPINAL CORD, AND NERVE DISORDERS affect millions of Americans each year. If you or a loved one needs care for one of these serious -- and often life-threatening -- medical conditions, the Southside Hospital Institute of Neurosciences is ready to help. Our specially trained team provides expert evaluation, diagnosis, treatment, and rehabilitative care for people with illnesses and injuries affecting the brain and nervous system. At the Southside Hospital Institute of Neurosciences, you don't have to travel far to find all the medical and supportive care you need.

A COORDINATED TEAM APPROACH

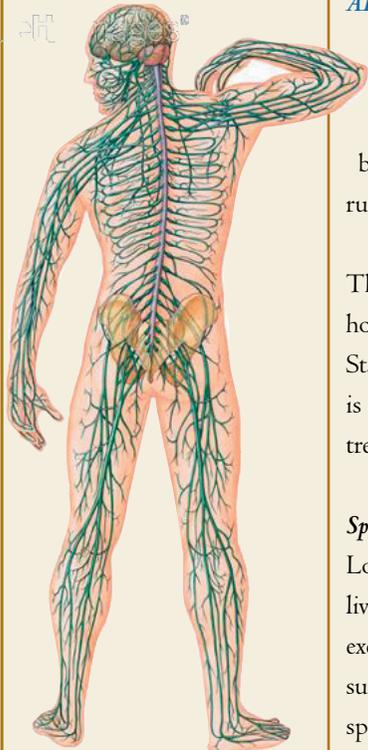
The Southside Hospital Institute of Neurosciences provides some of the region's most advanced neurological care. Our multidisciplinary healthcare team includes board-certified neurologists, neurosurgeons, oncologists, and rehabilitation specialists; specially trained registered nurses and medical technologists; and licensed social workers.

Working together, we carefully coordinate every detail of our patients' care, from triage in our Emergency Department through admission, inpatient care, rehabilitation, and discharge. Our goal is to lessen or prevent disabling long-term complications, while ensuring the best possible outcomes for patients, maintaining their independence and mobility, and reducing the length of hospitalization.



**HARVEY
CUSHING**
institutes of
neuroscience

The Southside Hospital Institute of Neurosciences is a member of the Harvey Cushing Institutes of Neuroscience, a landmark initiative of the North Shore-Long Island Jewish Health System. Through this relationship, our patients have access to the latest advances in treatment and technology for neurological conditions.



The nervous system acts as the body's information gatherer, storage center and control system. The nervous system uses electrical impulses, which travel along the length of the cells (neurons). The cells process information from the sensory nerves and can initiate a response within milliseconds.

AREAS OF EXPERTISE

Stroke

Stroke is a type of cardiovascular disease that affects the brain rather than the heart. Stroke is caused by the sudden loss of blood flow to part of the brain, due to either a blood clot or a ruptured blood vessel. Stroke can strike anyone, at any age.

The Stroke Center at Southside Hospital was the first community hospital on Long Island to earn a designation from the New York State Department of Health. Our rapid-response stroke team is prepared around the clock to provide urgent evaluation and treatment of stroke symptoms.

Spine care

Lower back pain often results from the wear and tear of daily living, but the condition is highly treatable. If medication and exercise have failed to relieve your pain and you are considering surgery, you may benefit from a consultation with one of the spine specialists at the Southside Hospital Institute of Neurosciences. In addition to treating spinal-cord injuries and diseases, our board-certified surgeons perform minimally invasive spine surgery, which helps reduce blood loss, scarring, post-operative pain, and overall recovery time.

Epilepsy

Epilepsy is a chronic neurological condition that produces sudden disturbances in the normal electrical function of the brain. This causes seizures that affect an individual's awareness, movement, sensations, or behavior. The renowned epilepsy program at the Southside Hospital Institute of Neurosciences provides a full range of outpatient and inpatient services for children and adults with seizure disorders. Our goal is to control your seizures and help you enjoy a more fulfilling and productive life.

AREAS OF EXPERTISE

Neurodegenerative diseases

Alzheimer's disease, Huntington's disease, and Parkinson's disease are known as neurodegenerative disorders because they result from gradual deterioration and death of cells in the brain. As these diseases progress, they affect areas of the brain that control movement, memory, thoughts, and perceptions. Multiple Sclerosis is another neurodegenerative disease, which affects both the brain and spinal cord. The Southside Hospital Institute of Neurosciences provides both inpatient and outpatient rehabilitation to help people with neurodegenerative disorders manage their symptoms and attain the highest levels of function and independence.

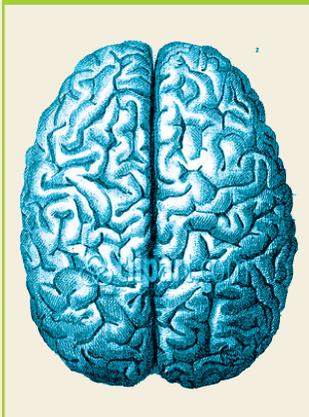
The human brain is the top part of the central nervous system and controls involuntary actions such as heartbeat, respiration and digestion. The brain is also responsible for conscious activities such as thought, reasoning and abstraction.

Tumors

According to the American Cancer Society, primary brain and spinal cord tumors account for about 1.3 percent of all cancers. At the Southside Hospital Institute of Neurosciences, doctors personalize each patient's treatment plan based on the type, stage, and size of the tumor, as well as his or her ability to tolerate certain medications or surgery. With all brain and spine cancers, the goal of treatment is to preserve healthy tissue while destroying tumors at their point of origin. In some cases, treatment also targets cancer cells that may have spread to other areas of the body.

Pain Management

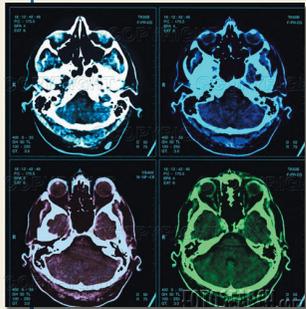
Chronic pain can make it difficult to perform daily activities, enjoy hobbies, or even earn a living. If you have long-lasting pain that is not responding to medication, exercise or lifestyle changes, a consultation with one of our pain-management specialists may help. Our pain-management program is designed to relieve your pain symptoms and assist you in resuming the activities you enjoy.



ADVANCED DIAGNOSTIC TECHNOLOGIES

For stroke, traumatic head or spinal-cord injuries, and other neurological conditions, successful treatment depends on an accurate, prompt diagnosis. At the Southside Hospital Institute of Neurosciences, specialists use some of the most sophisticated medical imaging technologies to diagnose diseases and determine the severity of internal injuries:

CT scanning – Computed tomography (CT) scanning is a sophisticated x-ray technology. The multi-slice CT scanner at Southside Hospital uses a high-speed computer to produce digital images of the brain, spine, organs, and bones.



MRI – Southside Hospital’s MRI (magnetic resonance imaging) system is a powerful, non-invasive imaging tool. MRI provides high-resolution images of the nervous and vascular systems. The technology uses magnetic fields and radio waves (rather than x-rays) to capture images inside the body.

EEG monitoring – The specialists at Southside Hospital Institute of Neurosciences use electroencephalogram (EEG) monitoring to diagnose seizure disorders such as epilepsy.

CLINICAL RESEARCH

Working in cooperation with such prominent health organizations as the National Cancer Institute and major pharmaceutical and medical-device companies, the North Shore-LIJ Health System offers patients the opportunity to participate in clinical studies of new treatments for a wide range of neurological disorders.

Currently, a variety of clinical trials are underway in the areas of Alzheimer’s disease, chronic pain, migraines, Huntington’s disease, and epilepsy.

REHABILITATION AND SUPPORTIVE CARE

At Southside Hospital, people recovering from brain tumors, stroke, traumatic brain injuries, and other neurological disorders receive inpatient therapy in our 21-bed Regional Center for Brain Injury Rehabilitation.

Under the guidance of a board-certified physiatrist (a physician with specialized training in physical medicine and rehabilitation), our team of licensed rehabilitation professionals works individually with patients and their families. The goal of rehabilitation – which may include speech, physical, and occupational therapy -- is to improve patients’ physical and mental capabilities, help them adapt to any limitations, and regain as much independence as possible.

SUPPORT GROUPS

Meet other families who share your experiences at any of the following support group meetings. Rehabilitation patients and their caregivers are welcome to attend.

- Stroke support group
- Multiple sclerosis support group
- Brain injury family
- Significant other support group
- Amputee support group

PERSONALIZED PATIENT CARE

All of our board-certified specialists emphasize a team approach, working closely with your primary physician and our skilled nursing and technical staff. We provide a high level of personal attention to every patient, explaining what to expect during diagnosis and treatment, answering questions, and offering caring support.



Known as the father of American neurosurgery, Harvey Cushing (1869-1939) is widely recognized as the greatest neurosurgeon of the 20th century. Many of the surgical techniques and procedures he developed during his life are still in use today.

Once you or your loved one's medical condition is diagnosed, our treatment team works together to develop a comprehensive plan of care. In addition to advanced diagnostic capabilities, the Southside Hospital Institute of Neurosciences offers some of the latest treatment breakthroughs:

Tissue plasminogen activator (t-PA) is a clot-dissolving medication that, if received by patients within the first three hours after experiencing stroke symptoms, reverses the effects of a stroke.

Anti-seizure medications help people with epilepsy regain their quality of life.

Minimally invasive and blood-conserving neurosurgical techniques are used for certain conditions that require surgery.

Intensity modulated radiation therapy (IMRT) is a highly precise type of external-beam radiography for brain and spine cancers.

"No other local hospital has the inpatient brain and spinal rehabilitation capabilities that Southside has. Our rehab expertise combined with the hospital's minimally invasive surgical intervention capabilities make Southside a pre-eminent choice among community hospitals for neurological care," says Dr. Kevin J. Mullins.

WHAT YOU CAN EXPECT FROM THE SOUTHSIDE HOSPITAL INSTITUTE OF NEUROSCIENCES

Access to the latest advances in care for neurological conditions through our affiliation with the Harvey Cushing Institutes of Neuroscience, a landmark initiative of the North Shore-Long Island Jewish Health System

24-hour critical-care services supported by Southside Hospital's Level II trauma center and New York State Department of Health-designated Stroke Center

A rapid-response stroke team prepared to provide urgent evaluation and treatment of stroke symptoms at any time, day or night

Minimally invasive neurosurgical options

Inpatient and outpatient physical, occupational, and speech therapy

Advanced CT scanning, MRI, and laboratory testing

"Bloodless" medical care for people who wish to avoid exposure to donated blood or blood products

Personalized treatment planning and pain management

Social services, including discharge planning, arrangements for home healthcare, or transfer to a long-term rehabilitation or skilled-care facility

Hospital-wide commitment to service quality and patient satisfaction

OUR DISTINGUISHED LEADERSHIP TEAM

Some of the region's most accomplished medical specialists are affiliated with the Southside Hospital Institute of Neurosciences. Kevin J. Mullins, MD, is the Director and Clinical Chief of the Southside Hospital Institute of Neurosciences and Medical Director of Neurosurgery. Dr. Mullins is a board-certified neurosurgeon with special expertise in stereotactic radiosurgery, minimally invasive spine surgery, complex spine surgery, skull base surgery and traumatic brain and spinal cord injury.

In addition to Dr. Mullins, our leadership team includes:
 Salvatore Palumbo, MD, Director of the Spine Center
 Craig Rosenberg, MD, Director of Rehabilitation Medicine
 Steven Rosen, MD, Medical Director of the Stroke Unit
 Edward Mullen, MD, Medical Director and Chief of the Division of Radiation Oncology
 Luis Fandos, MD, Medical Director, Pain Management

BUILDING A REPUTATION FOR EXCELLENCE

After passing out at his home, a previously healthy 32-year-old patient is rushed to the Southside Hospital Emergency Room. Almost at the point of clinical brain death, his pupils fixed and dilated, the patient is diagnosed with an intracranial hemorrhage. He undergoes an emergency hemi-craniotomy – a procedure not attempted at many community hospitals — and a large part of his skull is removed so that the increased pressure in his brain can be relieved. He is a man with a young family and an eight-month-old son. After the successful surgery, his long road back to health requires him to undergo physical rehabilitation on both an inpatient and outpatient basis. Just like the successful surgery, he receives his full-continuum of rehabilitative care from the specialists at Southside Hospital.

“This man came to us and he was nearly brain dead,” said Kevin Mullins, MD, director and clinical chief of Southside Hospital Institute of Neurosciences. “We brought him back and not only saved his life, but also got him to the point where he is independently functioning and home with his family. Perhaps, most importantly, his son had his dad there for his first birthday party.”

Dr. Mullins explained that this particular patient success story illustrates the many strengths to be found in Southside’s Neuroscience program. “It’s really an all-in-one place for brain injury and neurological care from board-certified specialists with the added benefit of high quality rehabilitation care.”

“The story of the young man with the brain hemorrhage is an example of the hospital’s extensive capabilities,” Dr. Mullins said. “However, we most commonly deal with degenerative conditions of the spine and people with neck and back problems. Our patients range in age from their 20s to their 80s with a wide spectrum of disorders.”

FOR MORE INFORMATION

For a personal evaluation by one of our specialists, please call 631.968.3310 or visit our Web site, www.southsidehospital.org.

CONTACT US

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