The Institute for Neurosciences

NEW YORK METHODIST HOSPITAL
The Institute for Neurosciences at New York Methodist Hospital brings together a unique team of specialists and medical services to offer diagnosis and treatment of a broad range of neurological conditions.

The Institute’s panel of physician specialists includes neurologists, neurosurgeons, psychiatrists, endocrinologists, radiation oncologists, physiatrists, and specialists in geriatric medicine. Psychologists and rehabilitation therapists may also be involved in patient care. Referrals to these specialists or to programs and services available at New York Methodist Hospital, can be made through an individual’s primary care physician or can be requested directly through the Institute’s referral service.

All diagnostic and therapeutic procedures are performed at New York Methodist Hospital or at individual physicians’ offices. State-of-the-art equipment to perform computerized tomography (CT) magnetic resonance imaging (MRI) and magnetic resonance angiography (MRA) is located in the Hospital’s Radiology Department. Positron emission tomography (PET) is also available at an affiliated site. In addition, equipment and specialists trained to perform neurological diagnostic tests, such as electroencephalography (EEG) and electromyography (EMG) and evoked potential examinations are available at New York Methodist.

Physicians and other health professionals affiliated with the Institute are also available to speak to community groups on a variety of topics related to the detection and treatment of neurological disorders. Other community outreach activities of the Institute include the distribution of informational materials, support groups and screening programs.
Physicians affiliated with the Institute treat numerous disorders and diseases, ranging from frequent headaches to syncope to multiple sclerosis. Special programs and services offered by the Institute include:

**PROGRAMS AND SERVICES**

- Parkinson's Disease and Movement Disorders Program
- Epilepsy Center
- Multiple Sclerosis Center
- Neuropathy and Neuromuscular Disease Program
- Pituitary Program
- Stroke Program
- Alzheimer's Disease/Memory Center
- Neurosurgery Service
- Neuro-Oncology Service
- Inpatient Psychiatry Unit
- Outpatient Psychiatry Program
- Rehabilitation Therapy
The Parkinson’s Disease Program at New York Methodist Hospital offers the only comprehensive diagnostic and treatment program for Parkinson’s and other movement disorders in Brooklyn. Parkinson’s disease is a disorder of the central nervous system, involving the degeneration and loss of nerve cells in the basal ganglia of the brain. With the loss of these cells an individual loses the ability to coordinate normal movement. The disease occurs in both men and women and, while symptoms may occur as early as age 40, they are usually not apparent until patients are in their 60s or 70s.

Parkinson’s is diagnosed through a clinical examination and medical history; there are no radiological or laboratory tests for the disease. Patients who exhibit symptoms of Parkinson’s disease or other tremor disorders receive a diagnostic examination, performed by a neurologist. Those who have already been diagnosed with Parkinson’s or a related tremor disorder may also use this service to get a second opinion.

There are many common symptoms of the disease, but there is no way of knowing which ones a patient will have, or in what order they will occur. The most characteristic feature of Parkinson’s disease (which was once called “shaking palsy”) is a slow and rhythmic tremor at rest. Usually the tremor begins in one hand and then later spreads to the other. Feet, legs, the lips and jaw may also shake.

Other common symptoms of Parkinson’s include rigidity in the limbs, neck or trunk, hypokinesia (slow movement which involves a decrease in both large and fine motor coordination), impaired gait, which may eventually result in slow, small, shuffling steps and balance problems, speech deficits, swallowing problems and impairment of posture, Parkinson’s most disabling symptoms, which generally occur late in the course of the disease.
Parkinson's is a chronic disease; that is, once symptoms appear, it can be treated, but it will not go away. It usually progresses slowly, but the rate of progression varies from one case to another and is unpredictable.

While there is currently no cure, there are many available treatments that can improve quality of life, sometimes to the point where the disease has little impact. In the earliest stages of Parkinson's, if quality of life is not significantly impacted, there may be no reason to use medication. When the disease symptoms result in a functional disability that interferes with everyday activities, it is usually time to begin medication.

Sometimes, over time, the medications stop providing significant relief of symptoms. When this happens, surgical interventions in the basal ganglia can sometimes be used to alleviate some of these symptoms, particularly tremor, rigidity and dystonic muscle pain and, to a lesser extent, hypokinesia. The procedures performed to alleviate Parkinson's disease involve the implantation of deep brain stimulators, which allow patients to control tremors with the touch of a small magnet.

Surgery for Parkinson's disease is performed stereotactically. This means that, under local anesthesia, the targeted areas of the brain are reached with the aid of a computerized guidance system through a small hole in the skull. This type of surgery takes less than two hours and the patient can usually go home the next day.

Rehabilitation is another treatment option for patients with Parkinson's disease or other movement disorders. The Institute offers an Inpatient Rehabilitation Program that gives patients the opportunity to participate in concentrated, individually tailored therapy during a brief stay at the Hospital. In addition, patients receive ongoing medical management and, if necessary, diagnostic testing. Patients are generally admitted to the program for a period of one to two weeks.
Other Movement Disorders

There are a number of related movement disorders, sometimes called Parkinson syndromes or atypical “Parkinsonisms,” as well as other unrelated movement disorders that are not considered Parkinsonisms.

The most common related Parkinson syndromes include essential tremor, which differs from Parkinson’s because shaking is induced by intentional action movements (in Parkinson’s patients experience shaking and stiffness while at rest), progressive supranuclear palsy, which may cause gait disorders, frequent falls, visual abnormalities, speech or swallowing problems and multiple systems atrophy, which is a lump term for several disorders that manifest with a slight tremor, gait and balance problems. Other involuntary movement disorders include hemifacial spasms, Huntington’s chorea, Tourette’s and other tic syndromes.

It is important to differentiate between these disorders and Parkinson’s in order to plan treatment appropriately. In some cases, the deep brain stimulation surgery used to treat Parkinson’s disease may be a viable treatment for these movement disorders as well.

EPILEPSY CENTER

Approximately 25 million people in the United States have epilepsy. One in four of these people experience the disease in a severe or intractable form. Epilepsy is produced by abnormal electrical discharges in the brain and is typically manifested by convulsive attacks, often resulting in a loss of consciousness.

The disease can be classified as either idiopathic or symptomatic. Idiopathic epilepsy has no known cause, and the patient has no other signs of neurological disease or mental deficiency. Symptomatic epilepsy results from a known condition such as stroke, head injury, tumors, congenital abnormality, etc. Other causes include brain tumors, stroke, or infection. In most cases the cause of the disease is unknown, but this does not preclude diagnosis and treatment.
The Epilepsy Program at New York Methodist Hospital provides both acute care and long-term treatment and supervision for the complex medical and social needs of patients with seizures. The program serves adults with intractable (hard-to-treat) seizures, as well as those with other epilepsy-related diagnostic and problems.

Seizures may vary in type and severity, but they are often frightening—for the patient, the family, and any onlookers. They may last anywhere from a few seconds to several minutes and may recur frequently (several times within a day) or infrequently (not for several weeks). Symptoms of seizures include confusion, behavior changes, an “aura” that provides a warning that a seizure is coming, convulsions, and a sudden loss of consciousness. There are two main categories of seizures: partial and generalized seizures. A partial seizure can evolve into a generalized seizure. There are several subtypes of each.

Patients should be evaluated thoroughly after their first seizure. A physician at our Center will obtain a complete patient history including details of birth, childhood, family history and a thorough medical history, including illnesses of the nervous system and medication regimen. A detailed description of the seizures is important to distinguish seizure types. Eyewitness accounts are very helpful.

**Electroencephalogram (EEG)**

EEG monitoring is the foundation of an epilepsy diagnosis. The EEG measures electrical activity on the surface of the brain through small electrodes that are placed on the scalp. An EEG recording can identify abnormal electrical activity in the brain, provide information about the type of seizure disorder, and locate the area of seizure focus. Some of the findings from an EEG are specific to particular disorders and subtypes of epilepsy. Activity during a seizure can be identified by a pattern on the recording. Correlating this type of data with clinical symptoms of seizures often helps make an accurate diagnosis. Additionally, the EEG recording between seizures is often abnormal in patients with epilepsy.

Routine EEGs can record between 30 minutes and a few hours of activity on an inpatient or outpatient basis. An ambulatory-EEG records activity over one to
three days in a patient’s home environment. A video-EEG consists of simultaneous continuous EEG and video recording. When the patient experiences a seizure, the clinician can compare the clinical manifestation recorded by video with the brain’s electrical activity recording. This process assists in characterizing and treating the seizure disorder. Video EEG monitoring can be performed on an inpatient or outpatient basis.

The results of these monitoring tests are supplemented by other diagnostic procedures, including magnetic resonance imaging (MRI), single photon emission computerized tomography (SPECT), neuropsychological tests, the Wada test, and positron emission tomography (PET). In addition to these services, the Epilepsy Center provides EEG monitoring in a variety of settings, for example, in the operating room or while undergoing procedures like interventional radiology.

Depending on the specific diagnosis, medical and/or treatments may be recommended for the treatment of epilepsy. Antiepileptic drugs (AEDs) can prevent seizure activity by altering neurotransmitter activity in nerve cells, but cannot correct the underlying condition. Approximately seventy percent of patients successfully control seizures with AEDs. Fifty percent of these require two drugs to be seizure free.

If medical treatment fails to control seizures, the patient may benefit from epilepsy surgery. In some patients, after extremely careful evaluation, it may be concluded that a small area of the brain can be resected without compromising any functions. This selective surgery can have an extremely successful outcome. Certain patients may benefit from insertion of a device called a vagal nerve stimulator (VNS). The VNS is a small device that is surgically inserted under the skin in the chest area. It can act as a generator of a small electrical current that can abort seizure activity. This simple and highly effective procedure is available at New York Methodist Hospital. It can enable patients to reduce the number of medications they take for epilepsy, while reducing the number and severity of seizures.
MULTIPLE SCLEROSIS CENTER

Approximately 400,000 Americans are living with multiple sclerosis (MS), and each week 200 additional individuals are diagnosed. This autoimmune disease most commonly affects young female adults in their late 20s and early 30s but children, older adults and men may also be affected. Diagnosing multiple sclerosis is often difficult because its symptoms can mimic other illnesses and tend to come and go. There is a wide range of symptoms, among them weakness, muscle spasms, tingling, numbness, double vision, blurred vision, fatigue, and urinary dysfunction. Fortunately advances in research have led to treatments and new techniques to aid diagnosis.

Multiple sclerosis is divided into three main subtypes. The most common is relapsing-remitting MS (RRMS), in which neurological dysfunction lasts for days to weeks and then resolves. Secondary progressive (SPMS) follows RRMS in many people; in these cases relapses decrease in frequency and instead there is a slow progression of the disease. The least common type of MS is primary progressive MS (PPMS), in which the disease progresses from the start.

The Multiple Sclerosis Center at New York Methodist Hospital is headed by a neurologist trained in the most advanced MS treatments and clinical research. The Center offers compassionate, multidisciplinary care with a team of specialists: a specialized nurse practitioner, a rehabilitation specialist, inpatient and outpatient physical and occupational therapists, speech-language pathologists, social workers and a team of physician specialists in the areas of urology, urogynecology, psychiatry and neuro-ophthalmology.

Treatment options vary depending on the type of MS diagnosed. After a complete evaluation, treatment is tailored for each individual patient, based on the type of MS, the symptoms, and the patient’s lifestyle. Treatments available at NYM
Millions of Americans suffer from some form of peripheral neuropathy or neuro-muscular diseases, yet awareness of these conditions is very low. The symptoms include weakness, poor balance, numbness, paresthesias (burning, pricking, tingling sensation/“pins and needles”), and pain in the legs, arms and feet. Some diseases can also cause dizziness, constipation, diarrhea, visual difficulty, and sexual dysfunction. Symptoms may appear suddenly or gradually over a period of years.

These conditions may represent a primary disorder of the muscle, nerve, or neuro-muscular junction (Lou Gherig’s, CICP, or myasthenia gravis). They may also be the first sign of a previously undiagnosed case of diabetes or infectious disease (AIDS, cancer, rheumatologic disease, lupus, and rheumatoid arthritis), or side effects of medication, or chemotherapy. Other causes include mechanical pressure resulting from repetitive motion or staying in one position, a tumor, direct trauma, or genetic abnormalities.

Clinical examinations and tests are used to evaluate and diagnose peripheral nerve disease. The results determine its severity and, often, the cause, and suggest the most promising course of treatment. The program at New York Methodist Hospital offers uniquely qualified physicians, specializing in the field of neuropathy, as well as the highly advanced technology needed for diagnosis. Following a

**NEUROPATHY AND NEUROMUSCULAR DISEASE PROGRAM**

Include inpatient and home infusions (steroids), immunomodulatory therapies (interferons, glatiramer acetate and natalizumab), chemotherapy (cyclophosphamide, mitoxantrone), spasticity management (oral and intrathecal baclofen, botox injections), and alternative therapies such as acupuncture, massage, qigong and yoga.
general examination and thorough medical history and depending on a patient’s specific symptoms and general medical condition, one or more of the following diagnostic techniques may be employed:

- electromyography (EMG): a test done in the office, that assesses the health of the muscles and the nerves controlling the muscles.
- laboratory testing: may be used to discover the nature of neuropathies associated with abnormal proteins.
- skin biopsy: can reveal a small fiber neuropathy that may not be evident on the EMG result.
- muscle and nerve biopsies: can be used to distinguish between nerve and muscle disorders and more specifically identify those which are neurogenic. These procedures must be performed by specialists trained to do them, so that the specimens can be accurately interpreted.

Therapy may involve treatment and control of the underlying condition, pain management, surgery, and immune modifying agents including steroids and intravenous immunoglobulin. Physical therapy, splinting, lifestyle changes, and gait and balance training may be part of the treatment. While recoveries are often slow, many patients recover partially or even fully without residual effects.
Pituitary tumors are abnormal growths found in the pituitary gland, a small organ that is located in the center of the brain. The pituitary gland produces hormones that affect growth and the functions of the other endocrine glands. Most pituitary tumors are not cancerous and they tend to grow slowly and do not spread to other parts of the body.

Pituitary tumors can make the pituitary gland produce too many hormones; when this is the case, they are called “functioning tumors” and they can cause problems in other parts of the body. They can cause Cushing’s disease, which causes fat to build up in the face back and chest while the arms and legs become very thin. Other examples of functioning tumors are those that lead to acromegaly, a condition which causes enlargement of the hands, feet and face, and those that cause the breasts to make milk, even though there has been no pregnancy. Pituitary tumors may also cause headaches, vision problems, nausea, vomiting, infertility or cessation of menstruation, abnormal growth, high blood pressure or heat or cold intolerance.

Especially when they are found and diagnosed early, pituitary tumors are often curable. Treatments most often involve surgical removal; they may also include radiation therapy and or medication.

The Institute’s Pituitary Program makes use of a team of specialists from various areas of medicine as well as state-of-the-art equipment that facilitates the minimally invasive surgery used to excise pituitary tumors.
A stroke occurs when a blood clot or ruptured vessel prevents oxygen-rich blood from reaching the brain. Just as the heart muscle is damaged when a clot causes a heart attack, so brain cells are destroyed during a “brain attack.” Half a million Americans suffer strokes each year.

As many as two-thirds of all strokes are fatal or cause a permanent disability. The remaining third have no long-term effects. Individuals with the best odds for a full recovery are those who recognize and respond to symptoms. Awareness of factors that increase the risk of having a stroke can be the key to survival.

Stroke doesn't happen only to the elderly—over 25 percent of all stroke victims are under 65. However, the risk of having a stroke increases with age and is higher for men and for those with a stroke family history. Therapies to prevent stroke are based on individual risk factors, but in general they include keeping blood pressure, cholesterol and weight at healthy levels through diet and exercise, taking medication for heart disease if directed to do so by a doctor, controlling diabetes, if it has been diagnosed, not smoking and, for patients who use estrogen oral contraceptives, discussing possible side effects with a doctor.

Individuals with risk factors may be referred for testing to determine whether there are blockages of the carotid arteries, the neck arteries which carry blood to the brain. New York Methodist Hospital’s Vascular Laboratory is fully equipped to provide these non-invasive studies. Advances in surgery and neuroradiology now offer highly effective treatments for blocked carotid arteries, that significantly reduce the risk of a stroke.
Strokes occur suddenly, but not without warning. Usually, one or more of the following symptoms will signal an impending stroke:

- Numbness, weakness or paralysis of the arm or leg on one side
- A sudden and severe decline in consciousness
- Difficulty understanding or speaking
- A sudden, severe headache for no apparent reason
- Blurred or decreased vision
- Loss of balance, dizziness and vomiting.

Many stroke victims have previous experience with these symptoms. Transient ischemic attacks (TIAs) are “ministrokes” and frequently precede major attacks. TIA symptoms subside quickly, but a full-blown stroke may soon follow. Initially, it is impossible to know whether stroke symptoms signal a TIA or a full-blown stroke.

In many cases, the use of clot-dissolving drugs may restore blood flow to the brain and minimize the damaging effects of a “brain attack.” New advanced surgery or neuroradiology may also be recommended to reduce the risk of future strokes. Treatment is most effective if it is initiated within hours of the start of symptoms. Therefore, if you have any actual symptoms of stroke, you should go to an emergency department immediately.

**Emergency Department Early Warning Program**

New York Methodist Hospital is a New York State certified Stroke Center. The Hospital’s Emergency Department is fully equipped to diagnose strokes quickly. Patients with stroke symptoms should let the triage nurse know about this immediately. Patients with stroke symptoms are quickly seen by physicians who are board certified in emergency medicine and trained in neurological emergencies. A state-of-the-art spiral CT scanner produces almost immediate images which provide physicians with information about whether a stroke has occurred and which course of treatment would be best.
Patients diagnosed with strokes are admitted to the Hospital’s dedicated Neurology Unit or to the Intensive Care Unit, depending on their condition. Additional diagnostic tests to determine the cause of the stroke and the extent of any brain damage are performed. Treatment plans are determined and begun as soon as patients have been stabilized and evaluated.

**Rehabilitation**

Rehabilitation under the direction of a full-time physiatrist (physician specializing in rehabilitation medicine) generally begins as soon as a patient’s vital signs are stable, usually within 48 hours. Rehabilitation therapy continues in the hospital or at a long-term care facility and may include physical, occupational and speech/language therapy. Follow-up care through a home care agency may also be provided.

**ALZHEIMER’S DISEASE/MEMORY CENTER**

More than 10 percent of American adults over the age of 65 display signs of dementia. Among those over the age of 85, the prevalence is approximately 50 percent. However, dementia is not considered a normal part of aging.

Many conditions can cause dementia. The leading cause (responsible for about half of all cases) is Alzheimer’s disease. Other causes include brain injury, vascular abnormalities, Parkinson’s disease numerous other disorders such as depression, thyroid disease, Creutzfeldt-Jakob disease, normal pressure hydrocephalus, Pick’s disease, Lewy body disease, Huntington’s disease and drug interactions. Some types of dementia are reversible if detected and treated at an early stage.

The Center offers multidisciplinary and comprehensive care for Alzheimer’s disease patients and patients with other forms of dementia. All patients are initially assessed and evaluated to diagnose dementia and to determine its cause.
The diagnostic procedures include:

- Determination of medical history (including mental and physical conditions of both the patient and the patient’s family members)
- Mental status examination/Formal cognitive testing
- Physical examination
- Neurological examination
- Laboratory tests
- Psychiatric, psychological and neuropsychological testing

Once the patient has been fully evaluated, a specific program of therapy will be prescribed. Depending on the cause of dementia, the treatment may include medication, psychotherapy, short-term stay in the Hospital’s dedicated geriatric psychiatry unit, rehabilitation therapy or, in some cases, a surgical procedure. In many cases, social services, day treatment centers, support groups for caregivers and/or home care may also be suggested. In cases where no definitive treatment has yet been discovered, the patient may still be provided with the opportunity to participate in medical research.

**NEUROSURGERY SERVICE**

Neurosurgery is the specialty concerned with the surgical treatment of disorders or injuries to the brain, spinal cord or peripheral nerves (such as nerves in the hands or feet). Recent advances in technology have made many advanced and minimally invasive neurosurgical procedures possible.
Minimally Invasive Spinal Surgery

Traditional spinal surgery for back pain and sciatica ranges from removal of herniated or slipped discs, to decompressing constricted nerves, to spinal fusion. The goal of surgical intervention is to take pressure off the nerves, and if necessary, stabilize and fuse the bones of the spine. This improves symptoms such as pain, numbness, and weakness.

Traditional surgical techniques often involve extensive muscle dissection, resulting in significant patient discomfort and prolonged recovery times. Minimally invasive spinal fusion is now possible, using small poke-hole incisions with minimal tissue dissection and live x-ray guidance, resulting in a faster recovery, less tissue damage, and less pain than traditional open spinal fusion surgery.

Deep Brain Stimulation

Patients with Parkinson’s disease, essential tremor, or multiple sclerosis, who can no longer be helped with medication, can often be treated for tremors with deep brain stimulation (DBS). This involves the implantation of electrodes that are placed in a small region of the brain that contributes to the symptoms. These electrodes are placed through a minimal opening in the skull. A computer-guided brain navigation system, along with microelectrode recording—a highly advanced brain mapping method—is used to maximize accuracy. The electrodes are then connected by wires to a type of pacemaker device (called a pulse generator) that is implanted under the skin of the chest, below the collarbone. Once activated, the device sends continuous electrical pulses to the target areas in the brain, blocking the impulses that cause tremors. The stimulation can be turned on or off by the patient, with a hand-held magnet or an access control device. When necessary, the stimulator can be adjusted by the physician via a “remote control” device which works painlessly through the skin, thereby maximizing the benefits while minimizing the side effects.
NEURO-ONCOLOGY

Neuro-oncology is a consultation service that offers a comprehensive interdisciplinary approach to the diagnosis and treatment of cancers of the nervous system, including the brain and the spinal cord. In addition to neurologists and neurosurgeons, specialists in neuroradiology, orthopedics, radiation oncology, medical oncology, rehabilitation medicine and pathology, review cases and develop the best management plan for each case. The objective is always to extinguish cancer, while maintaining the best possible quality of life.

New York Methodist has supported its neuro-oncology team with state-of-the-art equipment and technology. Several advanced approaches to cancers of the nervous system are available at the Hospital.

Brain Tumor Surgery
Tumors of the brain may arise from the brain tissue itself, or metastasize to the brain from a cancer in another part of the body. Common tumor types treated include: meningioma, glioma, ependymoma, vestibular schwannoma and pituitary tumor. The goal of surgery is to remove as much of the tumor as possible while minimizing risks to the patient. One of the ways risks are minimized is by using a computerized guidance system that allows for smaller openings and a more direct route to the tumor, thereby minimizing unnecessary brain manipulation — a “GPS” system for the brain. In addition, other techniques such as neurophysiologic monitoring, make the surgery safer. If surgery is not indicated, highly focused radiation, also called stereotactic radiosurgery, is available.

Stereotactic Radiosurgery and Radiotherapy
New York Methodist Hospital was one of the first in the New York area to offer the techniques of stereotactic radiosurgery and radiotherapy. The procedures,
which are sometimes referred to as “brain surgery without the knife,” utilize highly advanced technology for treating some kinds of brain tumors and vascular malformations of the brain. These lesions may be inaccessible or unsuitable for conventional neurosurgery. Stereotactic techniques can also be used to obtain stereotactic biopsies.

Stereotactic radiosurgery and radiotherapy use high energy, pencil-thin x-rays from a linear accelerator to destroy deep-seated brain tumors and other lesions. With the aid of a stereotactic frame, which is attached to the patient’s skull, the rays are rotated around a center with less than one millimeter of variation, so that lesions can be destroyed without the risk of an open-skull procedure and without general anesthesia. Surrounding healthy tissue is preserved.

Neurosurgeons work together with radiation oncologists and physicists from New York Methodist Hospital’s Regional Radiation Oncology Center to plan the procedures, which are usually performed in a single session (stereotactic radiosurgery) and in a series of sessions (stereotactic radiotherapy). Both stereotactic radiosurgery and stereotactic radiotherapy are usually performed as out-patient procedures.

**Intensity Modulated Radiation Therapy (IMRT)**

IMRT delivers radiation using a computer-driven sharp beam. The intensity is varied to either block or allow the passage of radiation. This technique allows for more specific targeting of the cancer, thus confining it to the target cancer cells and sparing normal cells from exposure.

**Bone Seeking Isotopes**

Sumarium-153 is an isotope that localizes to bone and can destroy local disease that a surgeon cannot safely remove. It can be embedded in a special cement and injected into the area of the spine in order to provide palliative and/or therapeutic results.
Mental illnesses are currently among the most common health-related conditions. It is estimated that one out of five American adults experiences some type of mental illness during any six-month period. Nearly all of these people can improve or recover if they get treatment.

In recognition of the frequent association between psychiatric and neurological disorders, psychiatry at New York Methodist Hospital is a division of the Department of Neurosciences. Patients with neurological disorders who suffer from depression and/or anxiety can benefit from psychiatric care that is closely coordinated with the treatment for their primary condition. The Division of Psychiatry brings together the best of contemporary biological psychiatry and the most effective psychotherapy strategies.

The psychiatric inpatient units at New York Methodist Hospital have been among the most highly regarded in Brooklyn for many years. The Division of Psychiatry includes a 25-bed inpatient adult unit and a 25-bed inpatient geriatric unit. Board certified psychiatrists and licensed clinical psychologists are joined by a specialized team of skilled psychiatric nurses, social workers, nutritionists, physical therapists and neurologists. The units are designed and staffed to create a sense of warmth and safety. In this comfortable environment, patients can focus on getting well. Patients can be admitted 24 hours a day.

**Adult Inpatient Services**

NYM's adult inpatient unit is a safe haven where the symptoms of psychiatric illness can be effectively managed. In combining the precision of contemporary psychiatry with respect for patients’ dignity, the aim is to be a reassuring presence...
in a time of crisis. Medications are selected only after a careful assessment of symptoms has taken place. Related medical problems are also addressed. In addition to medical treatment, the most effective state-of-the-art psychotherapeutic techniques, psychological testing, neuropsychological assessment, group psychotherapy and activity therapies are offered. An educational program about psychiatric illness is also an integral part of treatment.

**Geriatric Inpatient Services**
NYM’s geriatric inpatient unit was one of the first of its kind in New York. The unit meets the special needs for safety, comfort and familiarity that are required by elderly patients. The furniture and décor, daily activities and family-style meals are all designed to reflect a home-like atmosphere and facilitate continuity.

**OUTPATIENT PSYCHIATRY PROGRAM**
The Hospital’s Mental Health Clinic houses outpatient and consultation services. Psychiatrists and other physicians treating mental illnesses have a wide variety of treatments available to care for their patients. Usually psychiatrists work with their patients to develop a treatment plan that includes a psychiatric medication. The medication—combined with other treatments such as individual psychotherapy, group therapy, behavioral therapy or self-help groups—helps most people to continue, or return to, their everyday lives.
Many patients with neurological illnesses or injury need rehabilitation therapy. Patients who have suffered brain damage caused by traumatic injury or stroke benefit greatly from physical, occupational and speech, language and/or swallowing therapy that is started as soon as possible. Through education on how to use strong muscles in lieu of weak ones, patients learn to function with new challenges and move toward a normal lifestyle. Hospitalized patients receive therapy at bedside or at the dedicated rehabilitation unit’s acute care or rehabilitation gym. Patients who have recovered enough to focus primarily on rehabilitation may be admitted to the Hospital’s 25-bed rehabilitation therapy unit.

Occupational therapists help patients master daily activities, such as transfers to and in the bathroom, lower body dressing and fine motor control. Physical therapist help patients with strengthening, range of motion activities and learning to walk again following surgery or injury. Often physical therapy is begun during a hospital-stay and then continued on an out-patient basis in a long-term care facility, in the home or with visits to an outpatient physical therapy center. New York Methodist Hospital’s affiliate, Metro SportsMed, offers outpatient physical therapy on the Hospital campus.

Millions of persons are affected by acute or chronic swallowing disorders (dysphagia) annually. The causes of these disorders may include neurological conditions, such as stroke or Parkinson’s Disease or mechanical problems, such as those related to head/neck surgery. In children, the causes may be related to prematurity or developmental disorders.

**Center for Swallowing and Speech Language Pathology**

The Division of Rehabilitation Medicine at NYM houses a Center for Swallowing and Speech-Language Pathology. The Center’s staff provides evaluation and
treatment services to adult and pediatric inpatients and outpatients. The services include swallowing evaluation for the assessment of dysphagia, which may include a clinical examination followed by an instrumental exam, which may include a video fluoroscopy test (modified barium swallow) or endoscopy. Swallowing therapy is also available—direct neuromuscular treatments or compensatory strategies are implemented using state-of-the-art biofeedback techniques.

Speech-language evaluation for the assessment of language, motor speech and voice, as well as speech-language therapy to treat a variety of communication disorders are also available. Specialized services include augmentative communication devices, and use of the Lee Silverman Voice Treatment (LSVT) technique. Bilingual/multicultural staff are also available; English, Spanish and Russian are languages spoken by staff members. Because NYM is a teaching hospital, access to student clinicians who speak a variety of other languages may also be available.

The Center for Swallowing and Speech-Language Pathology at New York Methodist Hospital is the first in Brooklyn, and one of only a few in New York City to incorporate the expertise of professionals from a variety of disciplines to offer the latest available techniques for the evaluation and treatment of swallowing disorders. Specialists at the Center are drawn from the fields of speech-language pathology, neurology, gastroenterology, otolaryngology, clinical nutrition, radiology, nursing, respiratory therapy, occupational therapy and pulmonology.

REFERRAL

For referral to a physician affiliated with the Institute for Neurosciences or to schedule an appointment for a test procedure, please call (toll free) 866.DO.NEURO (866.366.3876).

For community support services (printed materials, community lectures, support group information), call 718.780.5367.
THE INSTITUTE FOR ADVANCED AND MINIMALLY INVASIVE SURGERY
866.DOCS.14U

The Institute for Asthma and Lung Diseases
866.ASK.LUNG (866.275.5864)

The Institute for Cancer Care
866.411.ONCO (866.844.3278)

The Institute for Cardiology and Cardiac Surgery
866.84.HEART (866.844.3278)

The Institute for Diabetes and Other Endocrine Disorders
866.4.GLAND.2 (866.445.2632)

The Institute for Digestive and Liver Disorders
866.DIGEST1 (866.344.3781)

The Institute for Family Care
866.432.CARE (866.432.2273)

The Institute for Orthopedic Medicine and Surgery
866.ORTHO.11 (866.678.4611)

The Institute for Neurosciences
866.DO.NEURO (866.366.3876)

The Institute for Vascular Medicine and Surgery
866.438.VEIN (866.366.8346)

The Institute for Women’s Health
877.41.WOMAN (877.419.6626)

OUR LOCATION

Directions: By Bus: #67 runs along Seventh Avenue. By Subway: Take the “F” to the Seventh Avenue station. Walk two blocks to the Hospital. You can transfer to the “F” from the “R” at the Fourth Avenue/Ninth Street station. Transfer from the “A” at the Jay Street Boro Hall station. For Cars: The parking garage entrance is on Sixth Street opposite the Hospital, between Seventh and Eighth Avenues.