When families come to Children’s Memorial Hermann Hospital, they expect to find the technological advances and healing expertise of a university-affiliated, academic hospital. What continues to surprise them is the special compassion and focus on families that distinguish us as one of the finest hospitals in the nation.

One of 11 hospitals in the Memorial Hermann system, Children’s Memorial Hermann Hospital was founded in 1986 and is affiliated with The University of Texas Medical School at Houston. We offer the latest advances in maternal-fetal medicine and neonatal critical care services, as well as renowned programs in pediatric trauma, neurosciences, pulmonology and cardiology. The doctors, nurses, therapists, Child Life Specialists and hundreds of other allied healthcare professionals at Children’s Memorial Hermann Hospital are focused on the specialized needs of children with an emphasis on quality, customer service and cutting-edge research.
At Children’s Memorial Hermann Hospital, we recognize that each child who comes to us for care has a unique set of needs. With this in mind, we provide individualized education and support services for families, from diagnosis through treatment and follow-up care, for a broad range of neurological disorders. Additionally, we maintain contact with referring physicians during treatment and return our patients to primary care as quickly as possible.

Our multidisciplinary team approach combines the expertise of pediatric neurologists, epileptologists, neurosurgeons, geneticists, neuroradiologists and neuropsychologists to ensure that your child receives the best care available. Care is delivered in a friendly, reassuring environment to promote wellbeing and the best possible outcomes.

Skilled medical professionals use the most advanced surgical, diagnostic and imaging equipment, such as diagnostic electroencephalography (EEG), video EEG monitoring, diagnostic electromyography (EMG), and diagnostic magnetoencephalography (MEG).
We are pioneers in the use of MEG and are a part of the only medical complex in the world with two state-of-the-art MEG systems.

**Our Healthcare Team**

Our young patients are cared for by a staff of affiliated physicians, nurses and therapists with specific training in the needs of children. Because parents are the real experts on their child’s personality, we consider them an essential part of the health-care team. Open communication among parents, physicians and each child’s primary nurse enhances each patient’s care.

**Affiliated Physicians**

Physicians listed are faculty members at The University of Texas Medical School at Houston

**James E. Baumgartner, M.D.**
Pediatric Neurosurgery – Epilepsy Surgery and Craniofacial Surgery

**Ian J. Butler, M.D.**
Pediatric Neurology – Movement Disorders

**Pauline A. Filipek, M.D.**
Pediatric Neurology - Autism

**Stephen A. Fletcher, D.O.**
Pediatric Neurosurgery – Chiari Malformation Surgery

**Timothy C. Foster, M.D.**
Pediatric Neurology – Neurodevelopmental Disorders

**Richard E. Frye, M.D., Ph.D.**
Pediatric Neurology – Autism, Neurodevelopmental and Neurobehavioral Disorders
Michael Gambello, M.D., Ph.D.
Medical Genetics

John M. Jones, M.D.
Pediatric Neurosurgery - Traumatic Brain Injury Surgery

Mary Kay Koenig, M.D.
Pediatric Neurology – Metabolic/Mitochondrial Disorders and Tuberous Sclerosis Complex

Pedro Mancias, M.D.
Pediatric Neurology – Neuromuscular Disorders

Hope Northrup, M.D.
Medical Genetics - Tuberous Sclerosis Complex

Gretchen Von Allmen, M.D.
Pediatric Neurology – Epilepsy

Pediatric Neurology

The pediatric neurologists and nurses at Children’s Memorial Hermann Hospital provide a broad range of diagnostic and treatment services for children with complex health problems, such as:

- Autism
- Brachial plexus disorders
- Brain malformations
- Brain tumors
- Cerebral palsy
- Congenital hydrocephalus
- Craniofacial disorders
- Developmental disorders
- Epilepsy
- Headache, chronic migraine
- Head trauma
- Learning disabilities
Pediatric Epilepsy Program

Our dedicated pediatric epilepsy program provides specialized care for intractable epilepsy. We offer comprehensive epilepsy treatment options, including video EEG monitoring, medical management, immunotherapy, and the ketogenic diet. Epilepsy surgery, including vagus nerve stimulation, is also available. Our epileptologists work closely with our affiliated pediatric epilepsy surgeon to ensure a free flow of information about each patient’s particular needs.

Our specialized eight-bed epilepsy monitoring unit provides compassionate care for infants, children and adolescents with seizure disorders. The unit offers the latest in diagnosis and treatment of epileptic conditions, from dietary and medical therapies to surgical intervention.
Medical Genetics

Many neurological disorders have a genetic basis. Understanding the genetic component is important for prognosis and management of the patient as well as for other family members. The medical geneticists at Children’s Memorial Hermann Hospital are highly trained specialists who provide diagnostic evaluation and genetic counseling for a wide spectrum of neurogenetic disorders. For children with genetic disorders of metabolism, we use a team approach that includes a physician, metabolic nurse specialist and a metabolic nutritionist to provide appropriate intervention with specialized diets and supplements. We offer diagnostic evaluations and follow-up for chromosomal abnormalities, single-gene conditions, mitochondrial diseases and multifactorial birth defects.

Children’s Learning Institute

The Children’s Learning Institute at The University of Texas Medical School at Houston combines data and studies from the fields of psychology, neurodevelopment, education, medicine and child development to provide proven learning solutions derived from, and supported by, documented research. Through the Dan L. Duncan Children’s Neurodevelopmental Clinic, our team provides continuing care for children
and young adult’s developmental, psychological, and educational needs. More than 100 specialists make up the Children’s Learning Institute faculty and staff. Through innovative research studies and clinical services, the Children’s Learning Institute provides a complete spectrum of expertise in setting standards and best practices for the educational needs of all children.

**Pediatric Neurosurgery**

Each year, approximately 2,000 American children are diagnosed with brain tumors. As a leader in the diagnosis and treatment of tumors, our goal at the Children’s Neuroscience Center is to provide outstanding care focused on the best possible outcome for each patient.

When conventional surgery is required, we use advanced brain-mapping techniques that minimize patient risk. Each surgery we perform is aided by advanced imaging technology, including MRI, CT and MEG. Our craniofacial team offers conventional as well as minimally invasive options for treatment of craniosynostosis.

We offer specialized pediatric neurosurgical expertise in:

- Congenital malformations, including Chiari malformation
- Craniofacial surgery
- Endoscopic neurosurgery
- Epilepsy
- Microsurgical nerve repair
- Pediatric stroke
- Spinal deformities
- Traumatic brain and spine injury
• Treatment of brain tumors
• Tuberous sclerosis complex

**Pediatric Neuroimaging**

From general pediatric radiology to neurovascular interventional procedures, the Children’s Neuroscience Center offers dedicated pediatric imaging services delivered efficiently in a professional environment. Films and reports are readily available.

Our state-of-the-art brain scanners are equipped with software that provides sophisticated computational analysis. Onsite sedation is available with care provided by specially trained pediatric anesthesiologists and pediatric nurses. We also pay special attention to finding efficient ways to manage patient data for physicians. In addition to MRI and CT, we use advanced noninvasive technology such as magnetoencephalography (MEG) to locate the source of epileptic seizures and map brain activity. This helps determine strategies to minimize risks for children with brain tumors. The Center for Clinical Neurosciences, a part of the Children’s Learning Institute at The University of Texas Health Science Center at Houston, is the only MEG lab in North America that has developed the capability to efficiently scan children.

Our services include:
• Arteriography
• Computed tomography (CT)
• Functional magnetic resonance imaging (fMRI)
• Magnetic resonance imaging (MRI) – 1.5 and 3.0 Tesla
• Magnetoencephalography (MEG)
• Myelography
• Neurovascular imaging
• Positron emission tomography (PET)
• Single photon emission computed tomography (SPECT)
• Special procedures including intracranial and spinal fluid pressure monitoring
• Ultrasound and Doppler evaluation

Contact Us

To make a contribution to the Children’s Neuroscience Center fund, contact our Foundation at 713.704.4265 or donate online at childrensmemorialhermann.org.

<table>
<thead>
<tr>
<th>Children’s Neuroscience Center General Information</th>
<th>713.704.7777</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s Learning Institute</td>
<td>713.500.3709</td>
</tr>
<tr>
<td>Medical Genetics</td>
<td>713.500.5760</td>
</tr>
<tr>
<td>Neurometabolic and Mitochondrial Clinic</td>
<td>713.500.7164</td>
</tr>
<tr>
<td>Pediatric Neurology</td>
<td>832.325.7151</td>
</tr>
<tr>
<td>Pediatric Neurosurgery UT Physicians</td>
<td>832.325.7242</td>
</tr>
<tr>
<td>Pediatric Neurosurgical Specialists</td>
<td>713.704.BRAIN</td>
</tr>
<tr>
<td>Pediatric Imaging</td>
<td>713.704.6500</td>
</tr>
<tr>
<td>Tuberous Sclerosis Complex Clinic</td>
<td>713.500.7032</td>
</tr>
</tbody>
</table>