

# **NEUROLOGY** Children's National Hospital

## THE HIGHLY TRAINED SPECIALISTS AT CHILDREN'S NATIONAL treat a

full range of neurological conditions, from routine to the most complex cases. At Children's National, cutting-edge research and highly specialized clinical care is combined to provide one of the most comprehensive pediatric neuroscience programs in the world.



# FEATURES

Patients have access to the **best** available genetic testing and advanced imaging techniques, providing each child the most accurate diagnosis.

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As a national leader in the diagnosis and treatment of epilepsy in children, Children's National has more than 8,000 epilepsy-related patient visits each year.

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Children's performs **epilepsy surgery on 40-50 cases annually** and has earned a reputation for excellent surgical outcomes.



#### The Gilbert Family

Neurofibromatosis Institute is **a designated Neurofibromatosis Center of Excellence** by the Childhood Tumor Foundation, and is **one of the largest of its kind in the world.** 

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### The Safe Concussion Outcomes Recovery and Education (SCORE) Program is a nationally recognized, comprehensive

concussion management program and has collaborated with the CDC to **pioneer the development of clinical tools used to diagnose and treat concussions.** 

#### The Neuro-Immunology

**Program** offers collaborative, exceptionally-coordinated care and advanced immunephenotyping through a special partnership with the National Institutes of Health.

# COMPREHENSIVE PEDIATRIC EPILEPSY PROGRAM

The innovative, multidisciplinary clinical and research programs at Children's National evaluate and care for children from the onset of seizures, through novel therapeutic interventions, medication trails and surgery for children with chronic epilepsy. Children's National has the largest new onset epilepsy program in the country, treating over 1,500 children with newly diagnosed seizures each year. Epilepsy treatment includes strong cognitive, behavioral and psychiatric evaluation and support. Treatment not only addresses the problems of difficultto-control epilepsy, but also the concurrent social, educational and emotional issues faced by children and their families.

# **MOVEMENT DISORDERS PROGRAM**

Children's National offers the best available care for children with abnormalities affecting motion, muscle tone and the ability to carry out purposeful movement. Our team works to find lasting symptom relief and make movements less painful and disruptive. With three neurologists trained in movement disorders, and a neurology nurse practitioner providing Comprehensive Behavioral Intervention for Tics (CBIT) we are one of the largest movement programs in the country. We specialize in primary movement disorders and those that develop in the course of other neurologic disease (e.g., mitochondrial disorders, brain tumors). The team offers a complex range of treatments including medication management, neurosurgical procedures such as deep brain stimulation or intrathecal, Botox® injections, rehabilitative therapy and orthopaedic procedures. The team works tirelessly with families to help them adjust and meet each child's changing needs.

### **NEUROINTENSIVE CARE UNIT**

The Neurointensive Care Unit (ICU) is the only pediatric NeuroICU in the region with a dedicated team of critical care physicians, neurologists, neurosurgeons, nurses, pharmacists, respiratory and physical therapists, nutritionists, case managers and other personnel. The team co-rounds throughout the day on patients with conditions like superrefractory status epilepticus, severe traumatic brain injury, acute arterial ischemic stroke, intracranial hemorrhage and other cerebrovascular disorders, encephalitis and brain tumors. The team also cares for patients with acute or chronic neurological issues which require intensive care for other conditions. Care is both cutting-edge and family-centered. The faculty are nationally known academic leaders, particularly in pediatric stroke, critical care EEG monitoring and traumatic brain injury.

#### **HEADACHE PROGRAM**

Helping children and adolescents with headaches that are chronic or not responding to standard therapies is our focus in the comprehensive headache program. Our team includes neurologists, pain focused cognitive behavioral therapists, physical therapists, anesthesiologists, neurosurgeons, physician medicine and rehabilitation to offer a holistic approach to manage pain and reduce disability. Our cuttingedge research program offers clinical trials for medications and devices related to headache, and procedures including Botox®, nerve blocks and infusions to relieve pain in our patients. Patients who have a reduced quality of life due to their pain, missed school and extracurricular activities and who fail to respond to basics of lifestyle modification and standard preventative medications are ideal candidates for our program.

## NEONATAL NEUROLOGY AND NEONATAL NEUROCRITICAL CARE PROGRAM (NEUROPROTECTION PROGRAM)

The Neonatal Neurology and Neonatal Neurocritical Care Program is one of the oldest and largest dedicated neonatal neurology program in the world with six neonatal neurologists, of whom four are also experienced or trained in fetal/prenatal neurology. Our neonatal neurocritical care (NNCC) service provides daily individualized care to a 70+ bed Level IV tertiary neonatal ICU, is consulted on onethird of all NICU admissions. The program provides neonates in our NICU access to the most advanced neurodiagnostic tools (remote continuous video EEG recordings, 3 Tesla MRI scanners, cerebral near infrared resonance spectroscopy (NIRS), portable CT scanner and MRI-compatible incubator) and latest neurotherapies (brain cooling, clinical trials, functional embolization, SMA) with neonatalspecific protocols and care pathways. The program has established a neonatal EEG repository, neonatal epilepsy team, perinatal infection team, inborn errors of metabolism group and hydrocephalus group to provide and advance care for the fetus or newborn. Robust research initiatives complement our clinical programs in the broadening field of prenatal and neonatal neurology.

### NEONATAL AND CHILDHOOD STROKE PROGRAM

Our comprehensive pediatric stroke team includes specialists skilled in the diagnosis of stroke and its various causes as well as appropriate interventions including treatment with antithrombotic medications, exchange transfusion, surgery (e.g. EDAS), neuro-interventional therapies including intra-arterial administration of pharmacologic agents and other transcatheter interventions. Rehabilitation care is a key component of post-stroke care, and the Children's National stroke program has a dedicated team of physical medicine and rehabilitation physicians available for both inpatient and outpatient rehabilitative services.

## NEURO-IMMUNOLOGY AND NEURO-INFLAMMATORY DISORDERS PROGRAM

The Neuro-Immunology Program and Neuro-Inflammatory Disorders Program at Children's National is one of a few programs in the nation bringing a highlycoordinated and research-informed focus to children with neuroinflammatory disease. The multidisciplinary clinic includes neurology, rheumatology, infectious disease, physical medicine and rehabilitation, neuropsychology and psychiatry to collaboratively assist complex patients. Children's National specialists serve on national and international committees in order to research and cure conditions like autoimmune encephalitis, febrile-infection related epilepsy syndrome, demyelinating disorders, paraneoplastic syndromes and acute flaccid myelitis. The program offers research studies and advanced immunophenotyping through a special partnership with the National Institute of Allergy and Infectious Diseases, to better understand the molecular mechanisms and therapeutic targets for disease during and between disease flares.

# THE GILBERT FAMILY NEUROFIBROMATOSIS INSTITUTE

The Gilbert Family Neurofibromatosis Institute is leading the medical field in the diagnosis, evaluation and treatment of children and adults with the full range of conditions that are associated with NF type 1 and type 2. A leader in NF research, the institute was chosen as one of the initial eight programs in the country to participate in the Neurofibromatosis Clinical Trials Consortium and also is coordinating and participating in several pediatric clinical trials offering patients unparalleled access to care.

# LOCATIONS



Children's National Hospital 111 Michigan Ave. NW Washington, DC 20010



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• Frederick 5285 Westview Drive, #103 Frederick, MD 21703



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# CONSULTATIONS & REFERRALS For more information or to make an appointment, call

# 202-476-2021

For more information, visit ChildrensNational.org/Neurology



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