

# Movement Disorders

UVA has a long tradition of providing comprehensive care for patients with disorders that involve symptoms of involuntary movement and impaired motor control. These are often complex neurological conditions, requiring the expertise of physicians and therapists in several subspecialties.

To provide the best possible care for these patients, a multidisciplinary approach is at the core of the movement disorders program at UVA. Our team includes neurologists, neurosurgeons, neuropsychologists, genetic counselors, neuroradiologists, nurse practitioners and physical, occupational and speech therapists — all working collaboratively, from diagnosis through advanced therapeutics. Moreover, as we develop an individualized plan of care for each patient, we maintain our partnership with the patient's referring provider, which helps ensure continuity of care over time.

Another hallmark of our approach to care is our use of the latest technology, like magnetic resonance imaging (MRI)-guided deep brain stimulation. These advanced therapeutics offer patients new avenues for care and symptom management. In addition, our robust research program includes investigator-initiated and multisite clinical trials of promising novel therapeutics, like focused ultrasound.

The result is exemplary movement disorder care for patients from across Virginia and beyond.

## Conditions Treated

We provide care for patients with a range of diseases and disorders that impair their movement and impact their lives. Our treatment approach is tailored to the specific needs of each patient to provide an individualized plan of care.

### Parkinson's Disease

Our comprehensive care for patients with Parkinson's disease begins the first day they are seen in our Parkinson's Disease and Movement Disorders Clinic, when a neurologist specializing in the treatment of movement disorders assesses the patient's individual disease process and symptoms to create a plan of care. A multidisciplinary team including neurologists, neurosurgeons, neuropsychologists and physical, occupational and speech therapists is available to provide care throughout the course of the illness.

We offer evidence-based therapies for patients at all stages of disease. When advanced therapies are appropriate, our team offers leading-edge treatments including novel mechanisms for medication delivery and deep brain stimulation, which is available using both MRI-guided and electrophysiological mapping techniques. We also offer stereotactic lesioning for complex cases.

Our clinical trials program has a long history of offering innovative new therapies for patients. Our commitment to advancing treatment for Parkinson's disease has earned us recognition by the American Parkinson's Disease Association as a Center for Advanced Research.

In addition, our patients with Parkinson's disease benefit not only from therapies that target their physical symptoms, but from psychological care as well, aimed at easing the burden of cognitive, sleep and mood disorders that may also be affecting their day-to-day lives.

## Huntington's Disease

Our Huntington's Disease Clinic, founded in 1994, was the first in Virginia. It was also one of the first in the country to receive recognition as a Center of Excellence by the Huntington's Disease Society of America for its multidisciplinary approach to patient care. Our HD program director, Dr. Madaline Harrison, was awarded the inaugural award for excellence in clinical care for HD by HDSA in 2016. Our established program provides care tailored to the individual, including management of physical and mood symptoms, as well as genetic testing and counseling for families through our established genetic testing program.

We also provide telemedicine care for patients in remote locations, ensuring that geography is not a barrier for patients and families that need access to expert Huntington's care.

## Tremor Disorders

We are proud to offer patients an individualized plan of care for management of tremor disorders, with therapeutic options including pharmacological treatment and an active chemodeneration program when appropriate. Procedural treatments for tremor disorders include deep brain stimulation, occasional stereotactic lesioning and focused ultrasound for essential tremor, in which we recently completed a phase III clinical trial that led to FDA approval.

In addition, our tremor disorders care includes a partnership with vocal disorders specialists in the UVA Department of Otolaryngology. This collaboration helps support the needs of our patients with vocal tremors.

## Dystonia

Dystonia disorders may be genetic or acquired, and as such can affect both pediatric and adult patients. We treat the full spectrum of patients with dystonia, including all ages and all degrees of the disorder, from focal to generalized. Individualized therapies also span a wide range, from medical interventions including pharmacologic treatment and chemodeneration to procedural treatments such as deep brain stimulation.

An additional feature of our dystonia care is our neurogenetics program, which assists with diagnostic evaluation for dystonia disorders. Our dystonia program also benefits from our close partnership with vocal disorders specialists in the UVA Department of Otolaryngology.

Additional conditions we treat include:

- Ataxia and cerebellar disorders
- Tourette syndrome
- Hemifacial spasm
- Myoclonus
- Gait and balance disorders

## Our Team

Our team is one of the most important elements we bring to the table. Our neurologists are fellowship-trained in movement disorders and advanced and experimental therapeutics, while our neurosurgeon specializes in the leading-edge procedural treatments that are changing the lives of these patients and their families.

We also draw on a deep bench of neuropsychologists, genetic counselors, neuroradiologists and physical, occupational and speech therapists to supplement the care we provide our patients.

**Matthew J. Barrett, MD, MSc**

Neurology

**W. Jeffrey Elias, MD**

Neurological Surgery

**Kathleen L. Fuchs, PhD**

Neuropsychology

**Madaline B. Harrison, MD**

Neurology

**Carol Manning, PhD**

Neuropsychology

**Bridget L. Moss, RN, ACNPC**

Neurology

**Binit B. Shah, MD**

Neurology

**Scott Sperling, PsyD**

Neuropsychology

**G. Frederick Wooten Jr., MD**

Neurology

## Research

We view our robust research efforts as an integral part of our commitment to providing exceptional care for patients with movement disorders.

We have a long-standing research program that seeks to advance medical and surgical therapeutics for Parkinson's disease. The depth of this program earned us distinction as a Center for Advanced Research by the American Parkinson's Disease Association. In addition, we participate in the Parkinson's Study Group (PSG), which was co-founded by an emeritus member of our team several decades ago and is a model for multicenter clinical trial leadership. We are the longest-tenured PSG site in Virginia. Additionally, we have been an active site in the Huntington's Disease Study Group since 1995 and in clinical trials to develop effective treatments for HD.

One major research focus at UVA is the use of image-guided neurosurgery for interventional treatment of movement disorders, including focused ultrasound, laser ablation and deep brain stimulation. These efforts will lead to surgical procedures that are more precise and less invasive.

Another facet of our research is the neurogenetics and genetic epidemiology of movement disorders, specifically the outcomes related to certain genetic factors. This important field may help us provide even better care for future patients and their families.

### UVA Parkinson's Disease and Movement Disorders Clinic

Primary Care Center

1221 Lee St.

Charlottesville, VA 22903

Refer a patient: **800.552.3723**

Transfer a patient: **844.XFERUVA (933.7882)**

Learn more about the UVA Neurosciences and Behavioral Health Center:

[neurosciences.uvahealth.com](https://neurosciences.uvahealth.com)