

# Inova Parkinson's and Movement Disorders Center

Inova Neurosciences



## Specialty Care for Parkinson's, Essential Tremor, Dystonia and Other Movement Disorders

Whether it's Parkinson's, essential tremor, dystonia or another movement disorder, the Inova Parkinson's and Movement Disorders Center provides comprehensive care that can help. These conditions can take a toll on every aspect of your life, impacting not only movement, but also mood, cognition and other cognitive changes. Because each individual is unique, every person facing Parkinson's, essential tremor, dystonia, Huntington's disease or tic disorder requires an individualized treatment plan. If you are living with one of these conditions, it is important for you to be followed by a team of movement disorders specialists.

With specially trained neurologists and neurosurgeons offering leading-edge medications, technology and therapies, the team of experts at the Inova Parkinson's and Movement Disorders Center will work with you to restore the quality of life you deserve. We rely on our in-depth understanding of available treatments to find the right therapeutic combination to meet your specific needs. And if medications are not sufficient, the team at Inova is uniquely qualified to use deep brain stimulation (DBS), dopamine intestinal gel and targeted botulinum injections to help revitalize your quality of life.

### *Leading-Edge Research, Close to Home*

Be it new therapeutic options, novel treatments or new imaging tests, the Inova Parkinson's and Movement Disorders Center is a respected clinical research institution. This is part of our dedication to providing the highest level of multifaceted and comprehensive care. Through this center, you have the opportunity to participate in new drug and imaging trials. Our specialized team of neurological researchers is actively enrolling patients in multiple clinical trials that span everything from industry-driven new drug trials to more focused, investigator-initiated trials.

Through your partnership and participation, combined with our center's extensive research studies, we can advance this field and improve lives, now and into the future.

*Karen Troutman had an essential tremor for more than 20 years. As a result of her DBS treatment, Karen can now sew, and her quality of life has significantly, and permanently, improved.*

***Watch Karen's story at [inova.org/move](https://www.inova.org/move)***

“During surgery, I felt completely in control. I knew exactly what was happening.”

– Karen Troutman



## Treating the Whole Patient

From your first moments within the Inova Parkinson's and Movement Disorders Center, you will understand the team's dedication to individualized care. We will develop a treatment plan to address your unique symptoms and concerns. Inova's multidisciplinary team of neurologists, neurosurgeons, neuropsychiatrists and neurophysiologists, as well as physical, occupational and speech therapists, have dedicated their careers to understanding and treating the following conditions:

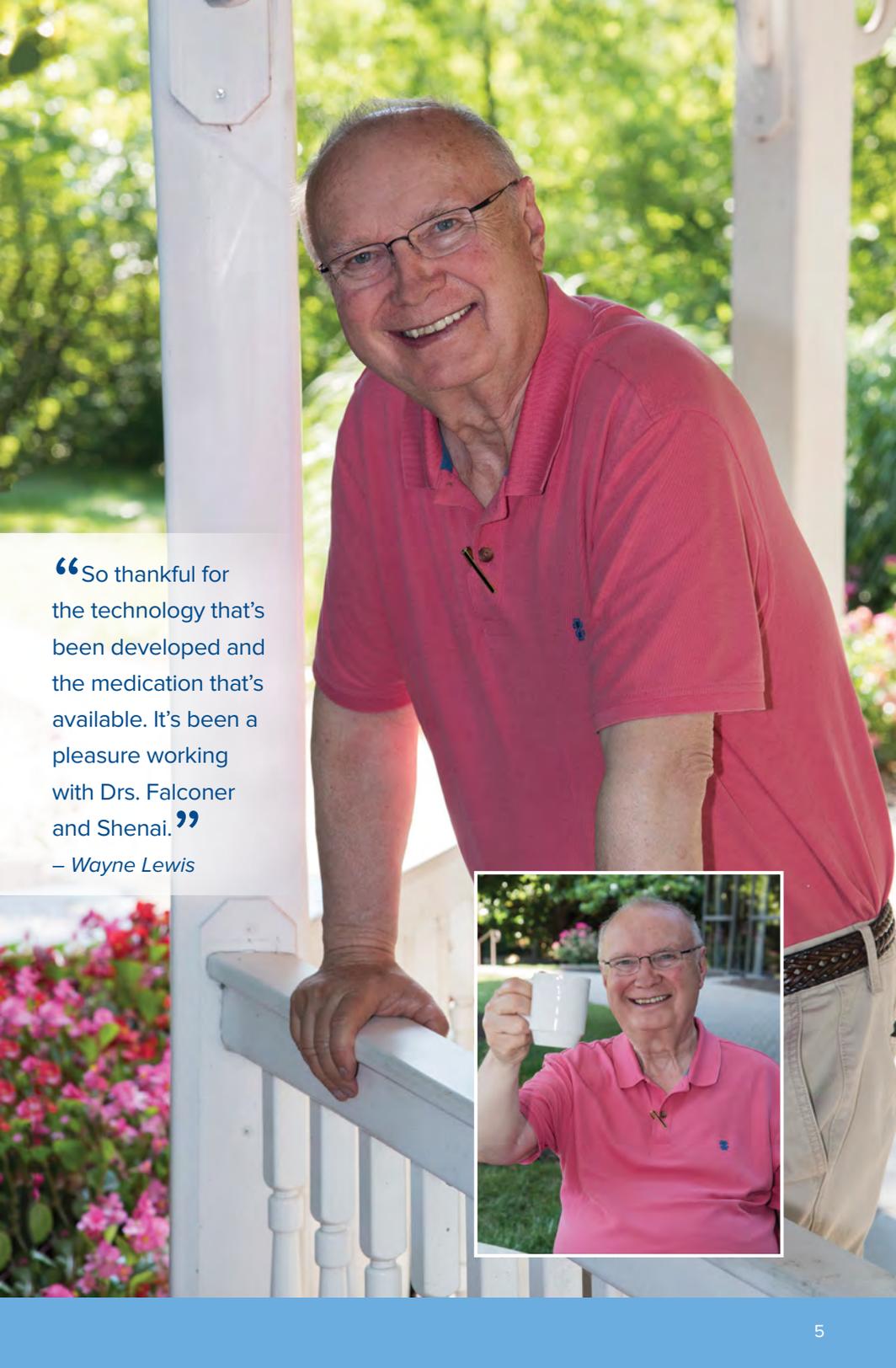
- Parkinson's and parkinsonisms, including multisystem atrophy (commonly known as MSA), progressive supranuclear palsy (also known as PSP) and corticobasal degeneration (also known as CBD)
- Lewy body dementia and Parkinson's dementia syndromes
- Essential tremor and other tremors
- Dystonia, spasticity, blepharospasm, writer's cramp and other tone issues, including those resulting from multiple sclerosis, stroke or neurological injury
- Excessive salivation
- Tic disorders
- Huntington's and other hyperkinetic movement disorders
- Other movement disorders

Along with a review of your medical history, you will be given a thorough medical examination, neuroimaging and review of your medications to ensure optimal therapy and a comprehensive treatment plan. We share the same goal as our patients – to end symptoms of your disease.

We accomplish this goal through the latest targeted medications to improve your natural neurochemistry. We also prescribe disease-specific physical, occupational and speech therapy to improve walking, fine motor movements, balance, speech and more. Our team has access to leading-edge neuroimaging and advanced technology, including DBS and dopamine intestinal gel, as well as specialized EMG-guided botulinum toxin injections. We also educate on, and encourage the inclusion of, lifestyle changes.

The result of this team-based approach ensures you will have access to the best possible treatments for your specific condition.

*Wayne Lewis has a strong faith and plays an active role in his community. After completing DBS, he looks forward to playing with his grandchildren, without the limitations of Parkinson's. **Watch Wayne's story at [inova.org/move](https://www.inova.org/move)***

A large photograph of an elderly man with glasses, wearing a pink polo shirt, leaning on a white porch railing. He is smiling warmly at the camera. The background shows lush green foliage and a white pillar of the porch.

“So thankful for the technology that’s been developed and the medication that’s available. It’s been a pleasure working with Drs. Falconer and Shenai.”

– Wayne Lewis



## Deep Brain Stimulation (DBS)

Essentially a pacemaker for the brain, DBS is an invaluable tool to improve the symptoms of Parkinson's. Implanted by our highly specialized neurosurgeons and programmed by our movement disorders specialists, this technology goes directly to the source and delivers a carefully controlled stimulation of electricity to targeted areas, interrupting the brain's faulty signals.

With proper screening, programming and medication adjustments, DBS offers the following exceptional results, on average:

### Parkinson's Disease<sup>1</sup>

- **80 – 90%** patient satisfaction with symptom control
- **60%** reduction in medications
- **60%** reduction in dyskinesias
- **80%** improvement in “off” periods
- **10%** improvement in “on” periods

Improvement in periods of good mobility from 27% to 74% of the day<sup>2</sup>

### Essential Tremor

- **80%** improvement in tremor
- **70%** improvement in handwriting
- **Significant reduction** in medications

Up to 30% of patients with Parkinson's disease are good candidates for DBS.<sup>3</sup> In essential tremor, this percentage is significantly higher.

DBS is also indicated as a treatment for some forms of dystonia.

### *Why Choose Inova for DBS?*

- State-of-the-art operating room designed for DBS
- Ability to perform MRI-guided DBS, in which the procedure is performed “asleep” under anesthesia
- Medtronic, Boston Scientific and Abbott Directional devices available
- Complete multidisciplinary team care under one team
- Home to nationally recognized DBS programming specialists who train other physicians in DBS
- Option for remote DBS programming through telehealth



*Dr. Mahesh Shenai performs DBS surgery.*

As your disease changes over time, the device can be adjusted to better address new or worsening symptoms. DBS is completed in three stages: implanting the electrodes in our state-of-the-art surgical suite, implanting the neurostimulator and programming by our specialists. The process usually occurs over six weeks.

DBS provides superior improvements in quality of life and motor symptoms, compared to medications alone.

With the Neurosphere™ Virtual Clinic, DBS programming and adjustments can be made remotely through secure telehealth, extending the option of virtual clinical visits for patients with DBS devices.

Our movement disorders team uses the latest in revolutionary treatment to truly impact your life.

- 1) Krack et al. Five-year follow-up of bilateral stimulation of the subthalamic nucleus in advanced Parkinson's disease. *N Engl J Med.* 2003 Nov 13; 349(20):1925-34.
- 2) The Deep-Brain Stimulation for Parkinson's Disease Study Group, *N Engl J Med* 2001; 345:956-963, 2001.
- 3) Gross et al. Deep Brain Stimulation in Parkinson's Disease, *Ther Adv Neurol Disord.* 2009 Nov; 2(6): 20–28.



“I have been fantastic since the surgery. I have been a totally different person. I move better, I write better, I think better.”

– *Bachir Flih*

## Botulinum Injections

Inova's movement disorders specialists are trained in the art of botulinum injections, including Botox®, Myobloc®, Xeomin® and Dysport®. We have experience dosing, mixing and administering this therapy, ensuring that you will quickly experience the benefits of this treatment, without the risk of side effects present with oral medication.

Utilizing EMG technology to ensure accurate placement, injections can significantly improve the pain, tightness and disfiguring muscle contractions of:

- Cervical dystonia
- Segmental dystonia of arms, legs, neck and trunk
- Writer's cramp
- Blepharospasm, hemifacial spasm and Meige syndrome
- Tremor
- All forms of spasticity, including post-stroke spasticity

Botulinum injections are also extremely effective in the treatment of excessive saliva, drooling or sweating.

## Duopa™ Intestinal Gel Pump

Duopa is not a pill – it's a suspension form of carbidopa and levodopa that is delivered continuously into the intestine over 16 hours through a tube. Duopa is delivered by a small portable pump, which you carry or wear as you go about your day.

Our specialists utilize this device because of its ability to:

- Increase "on" time by four hours on average
- Decrease "off" time by four hours on average
- Give consistent dosing for 16 hours, fully replacing oral medications during the day
- Deliver an exact dose of medication

*Bachir Flih, also featured on the cover, lived with Parkinson's disease for 11 years before pursuing treatment options. After surgery, he felt significant relief from his symptoms. He now lives a confident and happy life. [Watch Bachir's story at inova.org/move](http://inova.org/move)*

## Inova Parkinson's and Movement Disorders Center Team



*L to R: Hannah Walters, MD, neurologist; Sonia Gow, Program and Community Care Manager; Ramsey (“Drew”) Falconer, MD, neurologist and Medical Director, Inova Parkinson and Movement Disorders Center; Mahesh Shenai, MD, MSE, MBA, neurosurgeon; David Whitney, MD, neurologist; and Sean Rogers, MD, PhD, neurologist and Medical Director, Memory Disorders.*

Ramsey “Drew” Falconer, MD, is Medical Director of the Inova Parkinson’s and Movement Disorders Center. He is joined by Sean Rogers, MD, PhD, who serves as Medical Director of the Inova Memory Disorders program. Dr. Falconer, Dr. Rogers, Dr. Walters and Dr. Whitney are neurologists and fellowship-trained specialists in movement disorders.

Mahesh Bhaskar Shenai, MD, MSE, MBA, FAANS, is System Section Chief, Functional Surgery and Medical Director, Analytics, Inova Neurosciences. He also serves as an affiliate professor of biomedical engineering at George Mason University. He is board certified in neurosurgery and fellowship trained in DBS.

Sonia Gow, Program and Community Manager, comes to the Inova Parkinson’s and Movement Disorders Center with years of community experience. She has volunteered in numerous roles within the Parkinson’s community in Northern Virginia and is connected with resources and services whose focus is to help people with Parkinson’s to live their best life.

***For an appointment, please call 703.845.1500.***

***For program and community care resources and support, please call 703.375.9987, or email [sonia.gow@inova.org](mailto:sonia.gow@inova.org).***

## ***A Trusted Partner Caring for Our Community***

We pride ourselves on being a nationally recognized Parkinson's and Movement Disorders Center, anchored in the community in which we live. As part of our approach to individualized care and accessible support for our community, we are expanding our offerings in order to provide you with resources, support and encouragement to help you live the life you deserve.

### **Get Involved!**

Join our newsletter to keep up with the free offerings of our center including:

- World-class education
- Exercise programs
- Wellness initiatives
- And more



For more information, please contact our Program and Community Care Manager, Sonia Gow, at [sonia.gow@inova.org](mailto:sonia.gow@inova.org), or call **703.375.9987**.

## ***Giving Back Through Philanthropy***

Every day, our healthcare team provides exceptional care, giving hope to patients and their families. Your gift of gratitude to the Inova Parkinson's and Movement Disorders Center has the power to directly support our programs, including groundbreaking research, patient education, direct patient and caregiver support, and expansion of our current support groups, along with wellness initiatives such as Parkinson's specific movement/voice/cognition classes and an eating well program, all offered at little to no cost to our community.

You can request memorial donations be made to the center in memory of a loved one. These are also a meaningful way to honor someone whose life has been affected by Parkinson's.

Please visit [inova.gives/parkinsonsandmovementdisorders](https://inova.gives/parkinsonsandmovementdisorders) to make a contribution. For questions about donating, including arranging your personal fundraising campaign, please contact Janet Filip, Executive Director of Philanthropy, at [janet.filip@inova.org](mailto:janet.filip@inova.org) or **703-776-3328**.

## Locations

### Inova Neurology – Alexandria

1500 N. Beauregard St., Suite 300  
Alexandria, VA 22311  
**703.845.1500**

### Inova Neurology – Fairfax

8081 Innovation Park Dr., Suite 900  
Fairfax, VA 22031  
**571.472.4200**

### Inova Neurology – Fair Oaks

3580 Joseph Siewick Dr., Suite 206  
Fairfax, VA 22033  
**703.391.4500**

### Inova Neurology – Gainesville

7051 Heathcote Village Way, Suite 230  
Gainesville, VA 20155  
**703.391.4500**

## Appointments and Information

For either an in-person or telehealth appointment,  
please call: **703.845.1500**

For information, visit: *inova.org/move*

For program and community care resources and support, please call:  
**703.375.9987** or email *sonia.gow@inova.org*