WINTER 2025-2026

On the Move

Parkinson's and Movement Disorders Center

VCU Health™

FROM THE DIRECTOR

With a deep focus on dementia, PMDC continues to care for families while advancing the science that supports them

Brian D. Berman, M.D., M.S.
PMDC Director and Movement Disorders Division Chief and Professor with the VCU Department of Neurology

As we welcome 2026, I am reflecting on how far the VCU Parkinson's and Movement Disorders Center has come in support of its mission — one that is made possible every day by our tireless care teams, all of whom are committed to providing outstanding care and pressing to reimagine the future for the patients we serve.

This edition of our newsletter highlights one of the most pressing challenges of our field: Alzheimer's disease and related dementias. Dementia now touches countless families in some way, and our team is working across the full spectrum of care and discovery. You will read about our growing dementia program, including the arrival of James "Trey" Bateman, M.D., M.P.H., and the clinic he leads for patients with Alzheimer's disease, Lewy body dementia, frontotemporal dementia and other conditions affecting cognition. His work builds on our designation as a Lewy Body Dementia Association Research Center of Excellence and extends our expertise into a space where the need for answers and targeted therapies grows every year.

At the same time, we are strengthening the systems that surround patients and caregivers. The new GUIDE program at VCU Health, supported by Medicare, is helping families navigate the dementia journey with a dedicated navigator, 24-hour access to support and respite resources that can make the difference between burnout and sustainability.

Our research portfolio reflects this same focus on cognition and care. Matthew Barrett, M.D., and his colleagues are leading a new NIH-funded study that asks why some individuals with dementia experience dramatic swings in alertness and attention over the course of a day and whether changes in acetylcholine pathways and brain activity can help explain those fluctuations. What's more, through our ongoing Pilot Grants program, PMDC-funded researchers are investigating neurodegeneration of vision following a traumatic brain injury and the economic and social barriers of Parkinson's disease care in Virginia.

"Our vision is a future in which people with Parkinson's disease and other movement disorders, as well as Alzheimer's disease and related dementias, have access to timely diagnosis, effective treatments and a community that supports their care journey."

Of course, our work extends beyond dementia. This issue features studies that seek to reduce disabling symptoms for people with movement disorders, including research on light sensitivity in blepharospasm and investigations into how brain signals related to balance can inform safer and more precise deep brain stimulation. Our online continuing medical education course on neuro rehabilitation for Parkinson's disease — developed with the Parkinson's Foundation — is now reaching providers beyond Richmond and equipping them with practical tools to bring back to their own clinics. Also, our annual research symposium continues to bring investigators from across VCU together, a gathering we hope inspires discovery.

Most importantly, this issue highlights the experience of one patient living with multiple system atrophy. It shows how coordinated care can make a meaningful difference when a rare disease reshapes daily life. Linda Kaiser's story serves as a reminder of our purpose: helping people live as safely, independently and meaningfully as possible.

ON THE COVER:
Linda Kaiser (on the right) out on a walk with her daughter, Erika, and her daughter's dog, Jackson. Kaiser says exercise is a key source of strength while living the daily challenges caused by multiple system atrophy (MSA).

None of this work happens in isolation. The numbers in our year in review reflect thousands of clinic visits, procedures, education sessions and support group meetings. Behind each of those metrics stands a network that believes in what this center can do. Philanthropic support, combined with federal and other funding, has allowed us to launch new programs, seed promising ideas and respond quickly when patients and caregivers identify unmet needs.

As you move through this newsletter, I hope you will see what we accomplished this year and where we are headed. Our vision is a future in which people with Parkinson's disease and other movement disorders, including Alzheimer's disease and related dementias, have access to timely diagnosis, effective treatments and a community that supports their care journey. Thank you for your trust, your partnership and your support as we continue that work together. ■

PMDC research seeks insights on preventing falls among Parkinson's patients

By Sean Gorman

Nico Druck

Researchers at the VCU Parkinson's and Movement Disorders Center (PMDC) are seeking insights that they hope can one day lessen the risk of falls and injuries among Parkinson's disease patients.

Falling can be a significant danger for patients with Parkinson's, which causes loss of balance.

"There's still a lot of work that needs to be done to understand how their brain is perceiving a fall and doing computations to prevent risk, to prevent falling," says Nico Druck, an M.D. and Ph.D. student in VCU's Department of Biomedical Engineering.

Druck and fellow researchers received a 2025-2026 PMDC Pilot Grant to analyze brain activity in Parkinson's patients as they perceive they're about to fall.

Patients with implanted Deep Brain Stimulation systems will walk on a bi-directional treadmill that can shift side-to-side to mimic the sensation of losing balance while respective brain signals are captured through their DBS system at the time of that perceived loss unsteadiness. A trained spotter behind the patient will ensure they don't fall, and the treadmill has handrails the patient can hold on to, Druck says.

"We believe this is the safest way to induce the perception of falling while minimizing the risk of actually falling," Druck adds.

He says brain signal data collected could be used to help perfect the next generation of DBS systems to better detect when a fall is about to happen — and then send a corrective electric charge to prevent it. That could help address a key concern about current DBS systems — that they overtreat patients with continuous electrical stimulation instead of providing targeted stimulation when it's needed most.

"There are so many different avenues that this type of information can go in," Druck says. "That's what makes a lot of this very exciting. A lot of the Parkinson's research going on — both here and at other institutions — is so focused on creating this sort of library of all these data and signals to improve next-generation DBS devices."

Druck says the idea for the research project started amid a conversation with Leslie Cloud, M.D., director of the PMDC's Parkinson's Disease Program, and Dean Krusienski, Ph.D., his research advisor and graduate program director at VCU's Department of Biomedical Engineering. They discussed undertaking a research project using the bi-directional treadmill — which the PMDC recently acquired for rehabilitation care services for Parkinson's patients.

The project is getting a major boost from the $75,000 PMDC grant. Now, Druck is seeking the state research approvals needed to get the project underway.

"Knowing that an organization like the PMDC also views this work as something that could yield very powerful results, that's very reassuring," Druck says. ■

PMDC's online CME course expands access to expert Parkinson's rehabilitation training

By John Battiston

Each year, the VCU Parkinson's and Movement Disorders Center (PMDC) offers a continuing medical education (CME) course for clinicians treating Parkinson's disease. But in 2025, the center took a leap beyond its traditional in-person format, partnering with the Parkinson's Foundation to deliver the course fully online.

Leslie Cloud, M.D., director of the Parkinson's Disease Program at the PMDC, saw the online format as a way to share VCU's expertise with a global community of health care providers. "We had put together a really nice course that was potentially of interest to people everywhere," she says. "Instead of doing a live event that would

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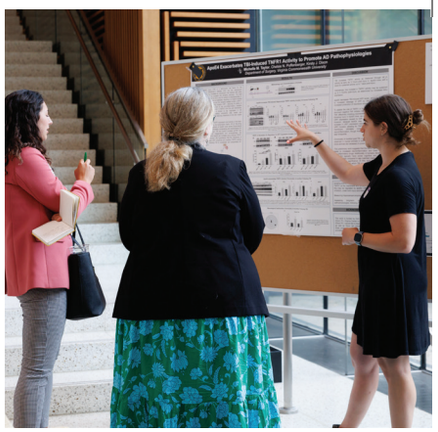


PMDC 3rd Annual Research Symposium: Opportunity to learn, network and collaborate

By Sean Gorman

The VCU Parkinson's and Movement Disorders Center's (PMDC) 2025 Annual Research Symposium offered the VCU community a window into some of the center's latest efforts to find better treatments and cures for people living with movement disorders.

The June 13 gathering brought together faculty, fellows, residents and students among others to the VCU College of Health Professions building in downtown Richmond, where researchers presented a half-dozen "TED-style" talks featuring 10-minute presentations followed by question-and-answer sessions.

"It was a chance for everyone who's interested in movement disorders research from any angle to bring their studies to all of us and for folks with other areas of expertise to weigh in, to workshop," says Chandler Moore, PMDC's research program manager. "We structured it to get people talking and get people together who may not otherwise collaborate."

PMDC Director Brian Berman, M.D., started the event with a presentation that highlighted the need for further research in the field. Berman noted how an estimated 42 million people are living with a movement disorder in the U.S. He added that the fastest growing neurodegenerative disorder is Parkinson's disease, which has been increasing in prevalence overall and among younger patients who are 30 to 50 years old.

Most of the presenters at the event — the center's third annual symposium — have received pilot grants that the PMDC awards each year for studies that generate findings that can be used to unlock additional funding for further research.

Among those who presented was Eyuphan Bulut, Ph.D., with the VCU Department of Computer Science, who discussed a PMDC Pilot Grant project he's working on to develop a Wi-Fi system that tracks the progression of movement-related symptoms in Parkinson's patients.

"We structured it to get people talking and get people together who may not otherwise collaborate."

— Chandler Moore, PMDC research program manager

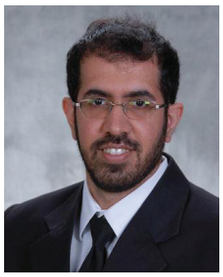
Dean Krusienski, Ph.D., with VCU's Department of Biomedical Engineering briefed attendees about his PMDC Pilot Grant project that seeks insights on how to better predict freezing of gait in Parkinson's patients — a particularly disruptive symptom where a patient is unable to walk forward.

Other researchers who presented included Rohil Hameed, Ph.D., and Santiago Lima, Ph.D., from the VCU Department of Biology; Michelle M. Taylor, a neuroscience Ph.D. candidate with the VCU Department of Surgery; and Ahmed Negida, Ph.D., a postdoctoral fellow at the PMDC.

Following the presentations, attendees stopped by 13 posters set up in the building's lobby for more informal discussions with researchers who took part in those additional studies.

Berman says that in addition to delving into a wide range of research studies, the symposium also provided an opportunity for networking and future collaborations.

"It really was a success in terms of showcasing the research that's going on in the field of movement disorders all across the VCU campus," Berman says. "And it helped bring researchers together to formulate new ideas and grant proposals." ■



Haripreet Mayo, M.D.

Recently trained neurologist deepens clinical and research expertise through PMDC fellowship

A fascination with brain function has guided Haripreet Mayo, M.D., throughout his academic career, from studying linguistics at the University of Maryland, College Park through his neurology residency at VCU Health. The latter gave him a close look at Parkinson's disease and the cognitive changes that often accompany it.

Now, Mayo is nearing the end of his first fellowship year at the VCU Parkinson's and Movement Disorders Center (PMDC). Since joining in January 2025, he has immersed himself in the PMDC's clinical environment while contributing to ongoing research efforts. His current projects include neurodegenerative disease mechanisms and cognitive fluctuations in Lewy body dementia.

Mayo will soon enter the second year of his fellowship and is enthusiastic about the future of the field. "We're trying to look into potential disease-modifying therapies for either Parkinson's or other neurodegenerative conditions, which definitely excites me," he says.

In the clinic, Mayo's patient-care philosophy is grounded in presence and conversation. He emphasizes the importance of "listening to the patient, not going in with a set expectation." Meeting people where they are is more important than simply telling them what they need to know or ought to do, he says.

Mayo's linguistic background also enhances his diagnostic and patient-care abilities. He is natively proficient in English, Hindi, Punjabi and Urdu and has studied Spanish, Latin and Greek. "There have been situations where the patient didn't speak English well, and there wasn't an interpreter available," he says. This knowledge also helps him observe and identify language disorders stemming from stroke or rarer neurodegenerative conditions.

With another full year ahead at the PMDC, Mayo looks forward to leaning into advanced clinical techniques and research-driven care. "I want more experience with areas I've become more interested in in the last year, including deep brain stimulation and cognitive disorders that overlap with movement disorders," he says. ■

Razan Hallak, M.D.

Hallak brings global perspective to PMDC fellowship

For Razan Hallak, M.D., joining the VCU Parkinson's and Movement Disorders Center (PMDC) as a fellow this July represents the continuation of a journey that began nearly 6,000 miles away.

Born and raised in Lebanon, Hallak says her "fascination with the human brain and how it functions" first drew her to medicine. She spent 11 years studying at the American University of Beirut, earning her bachelor of science in biology and her medical degree — both with distinction — followed by a neurology residency. "Throughout my residency, I encountered a wide range of neurological disorders," she says. "But it was the field of movement disorders that truly captivated me."

Having witnessed her grandmother's struggle with Parkinson's disease further drove Hallak's passion: "I really want to make a difference in the lives of those similar to my grandmother."

Because she sees a need for more movement disorder specialists in Lebanon, Hallak sought opportunities to expand her training abroad. In 2023, she completed an observership at the Cleveland Clinic, where she was exposed to new cases and approaches. These experiences inspired her to pursue fellowship training in the U.S. — and ultimately led her to VCU.

Hallak enjoys both the diversity of her clinical experiences and the collaborative spirit of the PMDC. "I'm getting exposed to this multidisciplinary approach, getting to see patients with various types of movement disorders, and it's further solidifying my knowledge and passion for movement disorders," she says.

Hallak's weekly schedule includes dedicated clinics for Parkinson's disease, Huntington's disease, multiple system atrophy and other conditions, along with time for research and educational activities. "Fridays are usually dedicated to education and didactics from the attendings, where they give us lectures and new information," she says.

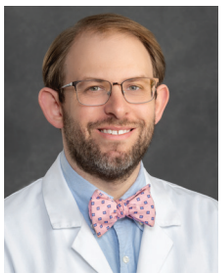
Soon after arriving at VCU, Hallak attended the prestigious Aspen Course, an immersive annual event hosted by the International Parkinson's and Movement Disorder Society in Aspen, Colorado. There, she learned about emerging treatments and therapies, explored complex case studies and networked with fellow movement disorder specialists.

"It was an eye-opening experience for me," Hallak says. She was particularly struck by how many of the cutting-edge clinical trials and treatment guidelines discussed there "are actually being conducted right here at VCU by the amazing faculty."

Looking ahead, Hallak hopes to both increase her clinical skills and advocate for patients living with movement disorders. "I'd like this fellowship to prepare me to become not only a specialist, but also someone who contributes meaningfully to the field," she says. ■

New neurologist joins PMDC's efforts to address growing need for dementia care

By Sean Gorman



James "Trey" Bateman, M.D.

James "Trey" Bateman, M.D., M.P.H., works to provide dementia patients a long-sought diagnosis on what specific disorder is causing their life-changing symptoms.

Although difficult to hear, a diagnosis can provide clarity and guide care.

This past fall, Bateman started leading a clinic affiliated with the VCU Parkinson's and Movement Disorders Center (PMDC) to treat patients with Alzheimer's disease, Lewy body dementia, frontotemporal dementia such as primary progressive aphasia, and other disorders.

"These disorders are leading to changes in either themselves or someone they love — their personality, their behavior, their ability to interact with the world," Bateman says. "Being able to help people understand what is happening is something I find very rewarding."

Bateman came to VCU Health from Atrium Health Wake Forest Baptist Medical Center in Winston-Salem, N.C., where he was a behavioral neurologist working with the Alzheimer's Disease Research Center.

PMDC Director Brian Berman, M.D., says Bateman brings valuable dementia care experience that complements the work of the center's movement disorders specialists.

"We're working together to address a massive need in the dementia space that continues to grow in prevalence, and that includes all neurodegenerative diseases," Berman says. "Parkinson's, like Alzheimer's, is increasingly more common. Not only is the population aging, but the incidence rate in younger individuals is growing."

At VCU Health, the PMDC director adds, Bateman is building upon the work of a clinic started in 2023 to help Alzheimer's patients access FDA-approved monoclonal antibody treatments.

PMDC has undertaken other initiatives to support dementia patients. The center helped providers in the VCU Department of Gerontology and School of Nursing formally launch GUIDE — a Medicare-funded program helping patients navigate care. The Lewy Body Dementia Association, meanwhile, has recognized the PMDC as a Research Center of Excellence for the center's efforts studying that disease.

The dementia clinic's staff includes Kate Tyre, FNP-C, RN, a newly hired nurse practitioner who is going to work alongside Bateman and see patients with neurological disorders affecting cognition. Brittany Gibson is the clinic's nurse navigator, and there are plans to hire a social worker dedicated to helping care for dementia patients.

Bateman says the clinic addresses a lack of sub-specialty dementia care in the Richmond area. While dementia care often focuses on challenges impacting daily life, like behavioral and sleep symptoms, Bateman notes new therapies can modestly impact the course of Alzheimer's disease.

"Patients and their families will leave far better informed about what the diagnosis is and what to expect," Bateman says about the clinic's work. "They will have a treatment plan in place that's realistic and grounded in science, that informs the likelihood of genetic risk. It informs the medications we use. That specificity of diagnosis is often something that people don't get with these conditions." ■

MSA Patient Education Day empowers participants through connection and knowledge

By John Battiston

Hannah Keith, DPT, presenting

On October 19, the VCU Parkinson's and Movement Disorders Center (PMDC) held its second annual MSA Patient Education Day, a free, daylong hybrid event for patients with multiple system atrophy (MSA) and their caregivers.

Neurologists, physical and speech therapists and a neuropsychologist shared their knowledge about the rare neurodegenerative disorder, which affects the body's motor and autonomic functions.

While movement disorders like Parkinson's disease are better known, MSA awareness and education are lacking. Whether in person or online, attendees came away with the information, tools and community to help them navigate life with MSA.

"When you can find community and know that you're not alone, it just has a huge impact and positively affects these patients' lives," says Bonnie Mahl, senior community engagement and outreach coordinator for the PMDC. ■

Study explores the role of light sensitivity in blepharospasm

By John Battiston

Light sensitivity, or photophobia, affects most people living with blepharospasm, a neurological disorder that causes involuntary contractions of the muscles around the eyes. But while as many as 94% of patients report sensitivity to light, researchers still don't fully understand why.

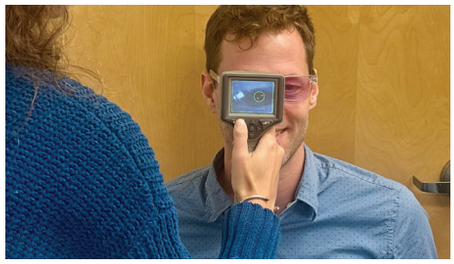
Now, a new study led by Brian Berman, M.D., director of the VCU Parkinson's and Movement Disorders Center (PMDC), aims to shed light — literally — on the relationship between certain retinal cells and photophobia. The study, funded by a research grant from the nonprofit Benign Essential Blepharospasm Research Foundation (BEBRF), seeks to identify how specific wavelengths of light trigger discomfort and spasms.

Based in Beaumont, Texas, the BEBRF is committed to finding a cause and cure for blepharospasm and similar disorders. "Blepharospasm overall is an uncommon disorder, but it is very disabling," Berman says. "The BEBRF is always seeking to find research that's dedicated to finding out what causes blepharospasm and to help develop better treatments and, eventually, a cure for the condition."

At the heart of the study is a set of retinal cells called melanopsin-containing intrinsically photosensitive retinal ganglion cells, or mRGCs. These light-sensitive cells do not participate in visual imagery, but rather detect the intensity of light.

mRGCs help regulate circadian rhythms and control the pupillary reflex — how the eye adjusts to changing brightness. "They also let the brain know when the light is so intense that you need to close or avert your eyes," Berman says.

These cells are most reactive to light at a wavelength of 480 nanometers, a blue light close to the sun's peak wavelength. By filtering out that specific wavelength and measuring participants' responses, the team hopes to better understand the mechanism behind photophobia and its connection to blinking and eyelid spasms.



The PMDC's new advanced pupilometer in action

Project coordinator Jaclyn Raper oversees the study's day-to-day operations. "We wanted to see if blocking specific wavelengths helped reduce the activity of melanopsin cells, and perhaps this in turn could help reduce symptoms," she says.

The study involves participants with blepharospasm and healthy controls, each fitted with four sets of randomized lenses: three that block out distinct wavelengths of light and one that doesn't block any at all. The participants are placed in a dark room so their retinal cells return to their baseline. After five minutes, they put on the lenses, and Berman and Raper start measuring their pupils with a recently acquired pupillometer.

This pupil measurement continues as the participants are exposed to a bright light. Berman and Raper also observe participants' blink rate and the severity of their spasms before asking them how

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Matthew Barrett, M.D.

NIH grant funds study into why dementia symptoms fluctuate

By John Battiston

A new, federally funded VCU Parkinson's and Movement Disorders Center (PMDC) research project is exploring why some patients with dementia experience dramatic shifts in cognition throughout the day — and how understanding those swings could open the door to better treatment.

VCU neurology professor Matthew Barrett, M.D., recently secured a five-year R01 grant from the National Institute on Aging, part of the National Institutes of Health. The grant will fund a study of cognitive fluctuations in patients with dementia with Lewy bodies and Parkinson's disease dementia.

"These are fluctuations in alertness, attention and cognition that vary widely over the course of the day, sometimes minute to minute," Barrett says. "What causes them? If patients have the capacity to be more lucid and engaged some of the time, why can't we keep them there more often?"

Barrett's research focuses on the overlap between motor and cognitive decline. He has spent years examining how degeneration in neurons that produce acetylcholine — a chemical crucial to focus and attention — may underlie cognitive impairment in Parkinson's and related diseases.

The new project brings those studies together with recent findings from electroencephalogram (EEG) studies showing that patients with Lewy body dementia have distinct patterns of brain activity that appear to correlate with their moment-to-moment lucidity. "We're going to look at the part of the brain that produces acetylcholine and how that impacts dementia, then link it to the EEG changes that seem to be related to cognitive fluctuations," Barrett says.

The study will focus on patients with mild cognitive impairment, Parkinson's disease and Lewy body dementia. Participants will undergo brain MRI scans, biomarker testing and EEG and cognitive monitoring to track how their alertness and brain activity change over time.

Some patients will return for annual follow-ups, and others will receive a standard acetylcholine-boosting medication to observe its effects on fluctuations. Barrett and his team hope the results will help hone future drug intervention studies. ■

PMDC 2025 STATS

NOVEMBER 1, 2024 - OCTOBER 31, 2025

$383,626
TOTAL PHILANTHROPIC FUNDS COMMITTED

171 DONOR HOUSEHOLDS

6 MULTIDISCIPLINARY CLINICS

- **Alzheimer's Disease and Related Dementias**
- **Ataxia**
- **Complex Parkinson's Disease**
- **Huntington's Disease**
- **Multiple System Atrophy and Autonomic Disorders**
- **Progressive Supranuclear Palsy and Corticobasal Syndrome**

OUTREACH

6 Support Groups *(38 total meetings)*

- CurePSP Support Group *(5 meetings)*
- Dystonia Support Group *(5 meetings)*
- Lewy Body Dementia (LBD) Caregivers Support Group *(10 meetings)*
- Multiple System Atrophy (MSA) Support Group *(3 meetings)*
- Huntington's Disease Support Group *(9 meetings)*
- Women and Parkinson's Disease Support Group *(6 meetings)*

CLINICAL IMPACT

6,037 Outpatient visits

- 966 new patient visits
- 5,071 return patient visits

Number of patients by diagnosis

- 1,707 Parkinson's Disease
- 359 Dystonia
- 289 Essential Tremor
- 98 Alzheimer's Disease
- 90 Restless Legs Syndrome
- 81 Ataxia
- 77 Dementia with Lewy Bodies
- 75 Huntington's Disease
- 47 Hemifacial Spasm
- 45 Progressive Supranuclear Palsy
- 42 Multiple System Atrophy
- 33 Tourette Syndrome

Number of botulinum toxin injections

- 884 procedures
- 298 individual patients

Neuropsychology

- 521 cognitive tests
- 490 therapy sessions

145 Autonomic tests

29 Deep Brain Stimulation (DBS) procedures and patients

- 16 Parkinson's Disease
- 7 Essential Tremor
- 6 Dystonia

13 Focused Ultrasound (FUS) procedures

EDUCATION & TRAINING

Patient Education

- Parkinson's Disease Education and Empowerment Day
- MSA Patient Education Day

Provider Education

- 3rd Annual PMDC Research Symposium

Fellows and Post Docs

- 3 Clincial Fellows: Diana Hancock, M.D., Haripreet Mayo, M.D., and Razan Hallak, M.D.
- 1 Post-doctoral Fellow: Ahmed Negida, M.D., Ph.D.

18 Patient Education Sessions

- **Alzheimer's and Related Dementias Talks:** *Diagnosis & Treatment of Alzheimer's, Vascular Dementia & Mixed Dementias; Lewy Body Dementia: Causes and Treatments; Facing Dementia: A Doctor's Perspective; and Lewy Body Dementia: Diagnosis, Management, and Current Research*
- **Care Partners and Caregiving:** *Bridging the Gap: Tackling Apathy and Enhancing Communication for Care Partners*
- **Dystonia:** *Deep Brain Stimulation for the Treatment of Dystonia; and Physical Therapy Benefits for Dystonia*
- **Huntington's Disease Disability:** *Applying for Social Security Disability*
- **Multiple Symptom Atrophy Talks:** *An Overview of Motor Dysfunction; An Overview of MSA and Autonomic Dysfunction; and The Role of Physical Therapy in MSA*
- **Parkinson's Disease Talks:** *A Journey Through Parkinson's Disease: Past, Present, & Future; Step by Step: Understanding Gait in Parkinson's; Your Guide to Good Education and Information on PD; Parkinson's Sleep 101; An Overview of Parkinson's Disease; and Walk Off Parkinson's Q & A Event*

EDUCATION & TRAINING, continued

Continuing Medical Education (CME) activities for providers

PMDC Education Conference Series

- *Predictors of Cognitive and Physical Decline: A Program of Translational Science* - Lana Sargent, Ph.D., RN, FNP-C, GNP-BC
- *Predicting Cognitive Decline in Parkinson's Disease: Is There a Role for Alpha-synuclein Strains?* - Rosenthal, M.D., Ph.D.
- *Deep Brain Stimulation in Early-Stage Parkinson's Disease: Is Connectivity the Key to Disease Modification?* - Mallory Hacker, Ph.D., MSCI
- *Diagnostic Criteria for Alzheimer's Disease in 2025* - Bateman, M.D., M.P.H.

Alzheimer's and Related Dementias

- *The Age of Disease Modification in Alzheimer's Disease: A Grand Rounds Series on the Practical Implementation of Amyloid Targeting Therapies into Clinical Practice* - Bateman, M.D., M.P.H.
- *What's in a Name? Diagnosis of Alzheimer's Disease in 2025* - Bateman, M.D., M.P.H.

Dystonia

- *Non-invasive Neuro-stimulation for Dystonia* - Berman, M.D.

Parkinson's Disease

- *Parkinson's Disease: Assessment and Management* - Barrett, M.D.
- *Benefits of Exercise Parkinson's Disease* - Barrett, M.D.
- *Updates in Neuro-Rehabilitation for Parkinson's Disease* - Drs. Corcos, Duppen, Hand, and Manago

RESEARCH

5 Foundation-sponsored Center of Excellence (COE) designations

- Progressive Supranuclear Palsy Center of Care
- Huntington's Disease Society of America COE
- Parkinson's Foundation COE
- Muscular System Atrophy COE
- Lewy Body Dementia Research COE

30 active studies (at time of publication)

- 14 industry-sponsored clinical trials
- 16 investigator-initiated studies

$9,254,947 total funds across currently active research studies

Number of PMDC pilot grants (2025-2026 cycle)

- 14 applications, 4 funded

Total funding for pilot grants awarded

- $299,544 awarded (2025-2026 cycle)
- $1,041,749 since inception of pilot program (2021)

MSA patients grateful for PMDC's collaborative care

By Sean Gorman

Linda Kaiser

For years, there were hints a rare neurological disorder was impacting Linda Kaiser's daily life.

When reaching for an object, she would instinctively extend her hand beyond it. She also developed speech and coordination problems.

In 2023, a neurologist in Virginia Beach where she lives diagnosed Kaiser with multiple system atrophy (MSA), a neurodegenerative disorder that causes movement-related challenges like rigidity and tremors and autonomic symptoms, including low blood pressure and bladder control problems.

There are only an estimated 13,000 cases of MSA in the U.S., according to the CurePSP nonprofit that raises money for Progressive Supranuclear Palsy and MSA research. Kaiser was initially in disbelief following her MSA diagnosis.

"I thought, 'this can't be right,'" Kaiser says.

Kaiser and her daughter sought specialized support to manage Kaiser's symptoms, a search that led to the VCU Parkinson's and Movement Disorders Center (PMDC). A key reason Kaiser turned to the PMDC is its designation as a Center of Excellence by the Mission MSA nonprofit organization.

"They know more about MSA than anybody I know," says Kaiser, who is 74. "And this is a rare disease."

Kaiser contacted the PMDC and enrolled in a clinical trial testing a drug to treat MSA.

Cameron Miller-Patterson, M.D., a PMDC neurologist involved in that study, says it's exploring whether the drug ONO-2808 can slow the disease's progression and lessen symptoms. The PMDC is among 35 sites in the U.S. and Japan conducting that study.

In addition to Miller-Patterson, Kaiser sees neurologist Thomas Chelimsky, M.D., an autonomic neurologist who treats patients with nervous system-related symptoms stemming from their disorder — like blood pressure spikes and perspiration issues. She also sees PMDC neuropsychologist Sarah K. Lageman, Ph.D., who treats cognitive and mental health issues.

"All my doctors are there at the PMDC. I go there all the time because they do listen," Kaiser says. "I know they have my best interests at heart."

Kaiser says YouTube exercise videos developed by the Power Over Parkinson's nonprofit group have also been helpful in managing the disease.

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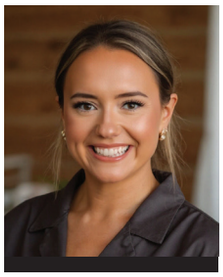

Kate Tyre

Pediatric care leads nurse practitioner to new role helping patients with dementia

By Sean Gorman

Kate Tyre says the years she spent working as a pediatric care nurse provided valuable training for her new role as a nurse practitioner helping dementia patients at the VCU Parkinson's and Movement Disorders Center (PMDC).

"You're really providing caregiver and family support, offering assurance," Tyre says. "I'm very familiar with that kind of work."

Tyre started working in October with James "Trey" Bateman, M.D., M.P.H., who oversees the PMDC-affiliated clinic that offers care for people with Alzheimer's disease and other dementias.

The nurse practitioner job opening at the clinic caught Tyre's attention largely because of her own family's experience with neurological disorders — including a grandfather who experienced a progressive neurodegenerative decline as he aged, as well as other family members who have dystonia and epilepsy.

Discussing the clinic's mission in a job interview with Bateman is what really sold her on joining the dementia program, she says.

"He has a vision for this program," Tyre says. "He really wants to try some cutting-edge research techniques and infusions that can address memory loss in Alzheimer's patients. Those typically aren't offered at a lot of places around here."

Tyre got the phone call offering her the job right as she was getting ready to travel abroad for her wedding.

"It was kind of a full circle moment, like this is where I'm supposed to be," Tyre says.

"[Dr. Bateman] really wants to try some cutting-edge research techniques and infusions that can address memory loss in Alzheimer's patients."

— Kate Tyre, nurse practitioner

The dementia clinic is Tyre's latest role with VCU Health. After earning her nursing degree from James Madison University, she worked as a registered nurse at the Children's Hospital of Richmond at VCU (CHoR) and then as a nurse navigator with the health system. She also worked with adult patients as an emergency room nurse at VCU Medical Center.

After earning her master's degree in nursing from the University of Cincinnati, she became a nurse practitioner with KidMed Pediatric Urgent Care just outside Richmond.

Bateman says he was impressed with Tyre's background because it matches well with the clinic's work.

"Kate has great experience in pediatric care coordination. There's a ton of similarity between what is necessary to care for adults with cognitive impairment and what is necessary to care for kids with chronic illnesses as far as the wraparound services of the medical system," Bateman says.

"She knows the importance and value of care coordination and helping patients."

Tyre says she's looking forward to continuing to offer that kind of care and support at the clinic for those living with dementia.

"It's a one-of-a-kind clinic here in central Virginia, and I'm really excited about it," she says. ■

PMDC's online CME course, continued from page 3

be attended by a small number of people, we could make it accessible all over the world."

The resulting program, "Updates in Neuro-Rehabilitation for Parkinson's Disease," features four modules taught by national experts. Together, they cover the most current, evidence-based approaches to exercise prescription, freezing of gait management, maintenance physical therapy and emerging therapies such as blood flow restriction.

Cloud noted that physicians have long been the primary audience for the PMDC's CME efforts, especially those who care for patients with Parkinson's disease. This year, she and her team wanted to target physical therapists, aligning with one of the course's central messages: Exercise remains the single most powerful intervention for slowing disease progression.

The course also explores practical ways to overcome barriers that often hinder ongoing rehabilitation, especially insurance coverage. "PTs often only get a few weeks with a patient before insurance stops paying for it," Cloud says. "If they know how to document the patient's need for continued coverage in a way that is appropriate and compliant, we can hopefully eliminate that barrier."

While the material is designed with physical therapists in mind, the lessons extend to "all clinicians who take care of Parkinson's patients," Cloud says. Ultimately, she hopes the program will help reshape how Parkinson's care is delivered — not just in specialized centers, but in community clinics around the world.

"Updates in Neuro-Rehabilitation for Parkinson's Disease" is free of charge thanks to the PMDC's partnership with the Parkinson's Foundation. It is available until August 19, 2026. ■

A better road map for dementia care with new GUIDE program

By Jeff Kelley

Lana Sargent, Ph.D.

Getting a dementia diagnosis often feels like being dropped into unfamiliar territory without a map.

Now, thanks to a Medicare-funded initiative, patients and caregivers at VCU Health don't have to navigate it alone.

VCU Health's Division of Geriatric Medicine and the affiliated Parkinson's and Movement Disorders Center (PMDC) officially launched the VCU GUIDE (Guiding an Improved Dementia Experience) model on July 1. Backed by the Centers for Medicare and Medicaid Services (CMS), the program helps patients and caregivers navigate the challenging diagnosis and journey ahead — and pay for services via Medicare. Since launch, it has enrolled over 20 patients and caregivers.

Under VCU's GUIDE model, patients with a formal dementia diagnosis gain access to a care navigator, along with 24/7 support, medication reviews, caregiver education and a personalized care plan. In addition, enrolled caregivers who support patients with moderate to severe dementia are eligible for a $2,500 annual respite voucher to help pay for temporary relief services, from in-home care to adult day programs.

But dementia care is nothing new to VCU.

Originally seeded through a grant from the federal Administration for Community Living, VCU began training dementia care navigators three years ago to help patients and families manage the complex needs associated with the disorders. Training was developed by a team co-led by VCU Department of Gerontology associate dean for research Faika Zanjani, Ph.D., nurse practitioner Lana Sargent, Ph.D., and PMDC director Brian Berman, M.D.

"Having this training in place already made us uniquely prepared to scale up with GUIDE and move toward a truly health system-wide approach," says Sargent, a co-director of VCU's GUIDE program who also serves as associate dean in the Office of Practice and Community Engagement at the School of Nursing.

GUIDE expands VCU's navigator model, offering a suite of services aimed at improving quality of life, reducing caregiver strain and cutting avoidable health care costs. VCU is one of 11 GUIDE programs in the state, offered by both health systems and smaller providers.

Over the past year, Sargent and team have worked to ensure the infrastructure was in place to support system-wide dementia care — developing intake systems, configuring electronic medical records and coordinating across departments like geriatrics, neurology, billing and IT. "It takes a lot to get a program like this started. You have to build everything from the ground up," she says.

Peter A. Boling, M.D., division chief in the Division of Geriatric Medicine, worked with the GUIDE team to bring the CMS program into the health system.

GUIDE is designed to work across departments and specialties as multidisciplinary care is key for patients with complex needs. "The goal is to ensure the program is accessible to patients no matter where they enter the health system, reflecting the reality that patients don't exist in one space — they exist across them and need a health system that follows them," Sargent says.

> **"...patients don't exist in one space — they exist across them and need a health system that follows them."**
> **— Lana Sargent, Ph.D., GUIDE Program Co-Director**

Two certified dementia practitioners lead the initiative. Each practitioner will ultimately manage a caseload of about 75 participants, with additional hires planned as demand increases.

Early participants are starting to use the program's Medicare-funded respite vouchers, and VCU is finalizing contracts to make in-home and adult day services available across its service area. The GUIDE team is also collaborating with The Span Center — an Area Agency on Aging serving greater Richmond — to train additional certified dementia practitioners and broaden community support.

Looking ahead, the GUIDE team is expanding its reach through caregiver education programs and partnerships with community organizations. New initiatives such as a "Walk and Talk" club give patients and caregivers a chance to learn, connect and stay active together.

"Before GUIDE, families were left to figure it out on their own," Sargent says. "Now, they have a roadmap — and someone taking that path with them. ■

MSA patients grateful for PMDC's collaborative care, continued from page 9

"You can live with the illness, but you have to stay mobile and not let the depression get you down," she says. "You just have to go with it and stay limber and exercise as much as you can."

Nightmares, then Hope

Paul Gibson

Paul Gibson is also grateful his MSA care journey brought him to the PMDC.

"It was sheer luck and perhaps a divine power that eventually led me to the right location," Gibson says.

Several years ago, Gibson started experiencing REM behavior disorder where he would kick and punch while dreaming. He also had bowel and bladder issues and eventually sought care at the PMDC, where Miller-Patterson diagnosed him with MSA in 2024.

Gibson continues to rely on the PMDC even though the Richmond-based center is about 90 minutes away from his home in rural Mathews County.

The trip is well worth it, he says.

"The entire team there is just incredible," Gibson says of the PMDC. "They're so compassionate and very professional, and I see them for a myriad of issues. They're really innovative in how they treat patients. They listen to the patient's needs."

He gets Botox injections at the PMDC to loosen his fingers and hands. He also receives those injections in his calves and feet to treat painful body spasms.

Gibson particularly appreciates interdisciplinary meetings he has with different VCU Health and PMDC specialists on a given day.

"My team of neurologists, my gastroenterologist, my urologist — they're all working in lockstep to provide the best possible care for me," he says.

Miller-Patterson says that collaborative interdisciplinary approach among providers unlocks key insights on treating a patient.

"It's more of a holistic approach because we're potentially picking up on things the other provider might be missing," Miller-Patterson explains.

Gibson says the PMDC is a crucial source of support while living with an "unforgiving" and "constantly evolving" disease.

"I want people to know how important VCU Health and the PMDC are for me personally," Gibson says. "Through them, I've been able to connect with other MSA patients, which I think is an absolute gift to know that there are others who are at a similar stage that I am at, and that we can collaborate and lift each other up and work with one another." ■

Blepharospasm study, continued from page 7

bad and controllable their photophobia symptoms were.

The pupillometer, funded through the BEBRF grant, has been key to capturing precise data. "It gives us a lot of information down to the millisecond on how the pupil is acting," Raper says.

While data collection is ongoing, both Berman and Raper believe the findings could have immediate, real-world implications. If they find blocking specific frequencies makes a significant difference, it could lead to the design of specialized glasses that are highly effective for treating blepharospasm patients. For patients who often give up driving or daily activities because of uncontrollable eye spasms, that could be life-changing.

"Our hope is to get a lens that gives patients back a little bit more freedom," Raper says. ■

Support the PMDC

Find all the ways you can support our work to transform current treatment models for movement disorders.

Philanthropy plays an important role in bolstering our multidisciplinary clinical team, funding innovative research and supporting our training and outreach efforts. For information about how you can support the VCU PMDC, please contact Bernadette O'Shea, senior director of development for the Neurosciences, at osheab@vcu.edu.

www.parkinsons.vcu.edu/support-our-work/

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