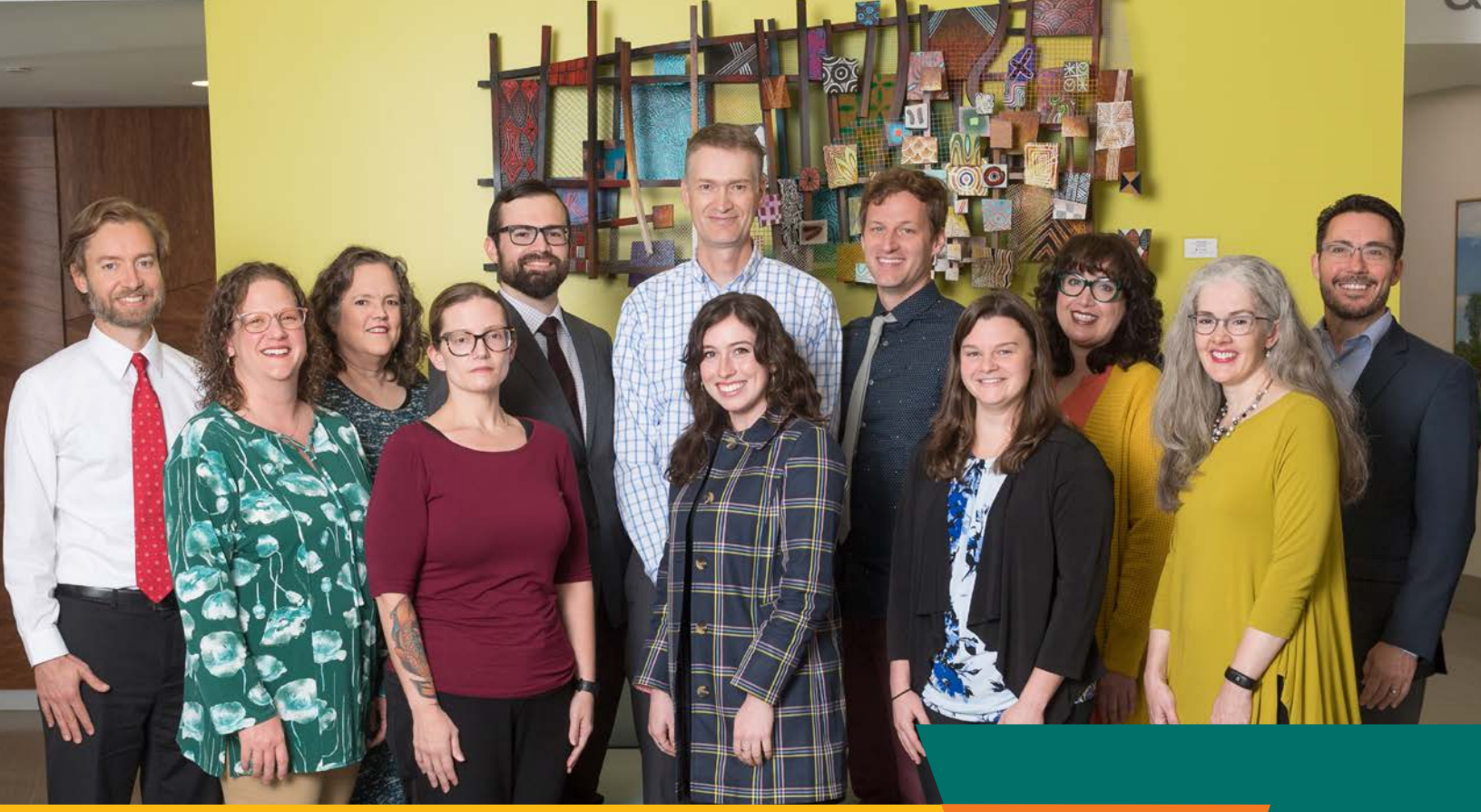


On the Move

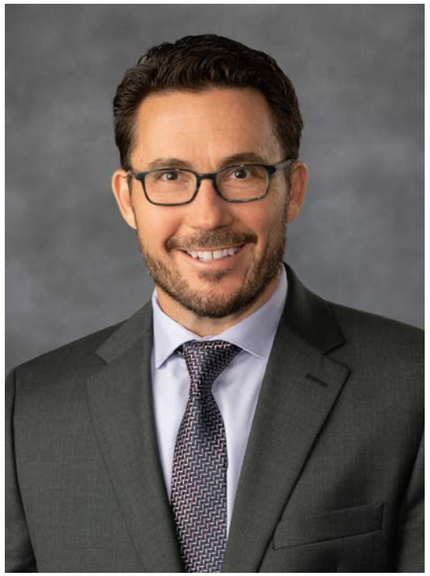
DECEMBER 2022

Parkinson's and Movement Disorders Center

VCU Health™

On track, on the move

The VCU Parkinson's and Movement Disorders Center has had many successes over the past year, and we have continued to gain recognition far and wide for our cutting-edge work.



Brian D. Berman, M.D., M.S.
Director, Parkinson's and Movement Disorders Center
Division Chair and Professor, VCU Department of Neurology

ON THE COVER:
The team at the VCU Parkinson's and Movement Disorders Center
Back row: Matthew Barrett, M.D.; Anonymous; Cameron Miller-Patterson, M.D.; Bruce Parkinson, Ph.D.; Chandler Moore; Leslie Cloud, M.D.; Brian Berman, M.D. Front row: Heather Ward; Annie Coy; Caileigh Dintino; Kara McHaney; Sarah Lageman, Ph.D. Not pictured: Mark Baron, M.D.; Gina Blackwell; Vondra Harrell; Kathryn Holloway, M.D.; Paul Koch, M.D.; Lauren Mahoney, M.D.

In 2022, the PMDC was named a Center of Excellence by the Parkinson's Foundation. We're the only place in Virginia to hold this esteemed designation, which honors centers providing comprehensive and specialized clinical care along with wide-ranging research, education and outreach opportunities for individuals with Parkinson's disease and their care partners.

The PMDC was also elevated to a "Level 2" Center of Excellence for Huntington's disease by the Huntington's Disease Society of America. And we continue to be recognized as a Center of Care by CurePSP — a nonprofit dedicated to the awareness, care and cure for the neurodegenerative diseases progressive supranuclear palsy (PSP), corticobasal degeneration (CBD) and multiple system atrophy (MSA).

These are just some examples of how PMDC's prominence has continued to grow since we launched in 2011. More than a decade later, our mission remains the same: to help people affected by movement disorders live better lives.

On behalf of the talented and accomplished team at the PMDC, it is an honor for me to share how we are fulfilling our mission through groundbreaking research, the highest quality patient-centered care, and the training of the next generation of movement disorders specialists.

Cutting-edge, collaborative research

When I first arrived in 2020, my vision was to expand interdepartmental research. That means bringing together skillful researchers from bioengineering, nursing, geriatrics, neurosurgery, and other disciplines across the VCU campus and beyond. This is about creating an environment where expert scientists work together to conquer the most difficult questions and advance our field.

With this goal in mind, we continued our PMDC Pilot Grants Program in 2022 and awarded four $50,000 grants aimed at creating the foundation for advances that will lead to long-lasting benefits for patients. You can read about those grants in this publication as well as updates on the three pilot grants awarded in 2021. We plan to offer even more grants in the future and also will begin hosting an annual symposium on movement disorder research at VCU.

Holistic clinical care

We're also expanding our collaborative approach to clinical care. Our multidisciplinary care teams bring comprehensive and extensive expertise to our clinics and include neurologists, neuropsychologists, social workers, genetic counselors, neurosurgeons, psychiatrists, and palliative care specialists, along with specialized speech, physical and occupational therapists.

At the PMDC, we're also working to help disadvantaged members of our community who are at risk for cognitive decline or suffering from Alzheimer's disease or related dementias access the care they need through the Richmond Brain Health Initiative.

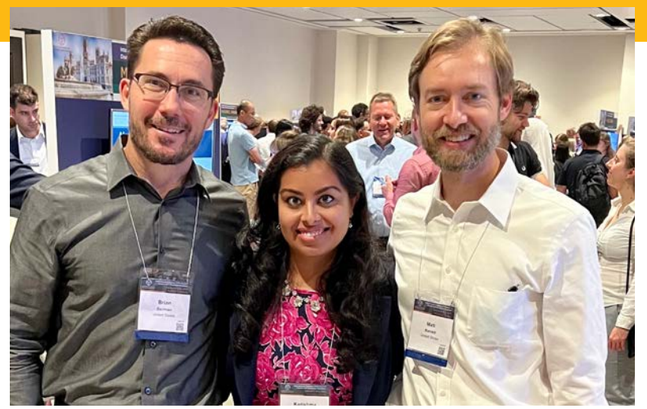
Community outreach and education

Staying true to the education core of our mission, we've continued to host educational webinars for the community and we're also educating and training the next generation of professionals. This year, we had two medical students present abstracts at the International Congress of Parkinson's Disease and Movement Disorders held in Spain. And two VCU neurology residents chose to pursue movement disorders as a career. We are also thrilled that we matched our first movement disorders clinical fellow who will join us in 2023.

The VCU PMDC continues to host a monthly education conference that covers a broad range of movement disorders topics and has brought in experts from around the country to give talks. One of my goals going forward is to begin hosting CME-accredited training seminars in movement disorders for regional neurologists and other physicians.

The need for our work is growing. An estimated 42 million people in the U.S. suffer from a movement disorder, and that number is expected to rise sharply in the future.

The VCU PMDC will be here to meet that need.



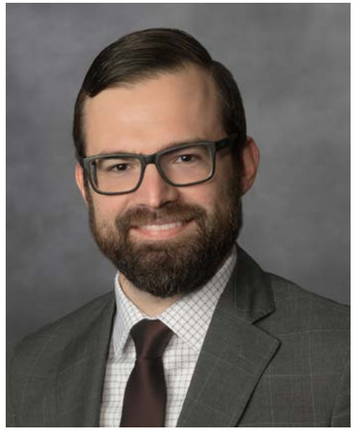
PMDC Director Brian D. Berman, alumna Karishma Popli, and Matthew Barrett, associate professor of neurology, at the 2022 International Congress of Parkinson's Disease and Movement Disorders in Madrid, Spain this fall.

Movement disorders, defined.

A group of neurological conditions that cause slowed, reduced, increased, or uncoordinated movements. Many of these conditions are neurodegenerative disorders and associated with psychiatric symptoms and dementia.

Introductions

PMDC Welcomes Dr. Cameron Miller-Patterson



Cameron Miller-Patterson, M.D., recently joined VCU as an assistant professor of neurology and is looking forward to conducting new research here looking into whether particular symptoms are associated with the progression of Parkinson's disease in certain patients.

Through his new role with the VCU Parkinson's and Movement Disorders Center, Miller-Patterson will care for patients and offer services including deep brain stimulation programming and botulinum toxin injections as he pursues his research.

"I think having collaboration is very important," Miller-Patterson says. "Beyond the fact that the faculty are doing research here, the PMDC and VCU at large also have a very good research infrastructure: a lot of internal funding with things like pilot grants, pilot funding within the PMDC itself, and grant training programs to help with preparing grant applications and building your research portfolio."

Miller-Patterson wants to continue pursuing research focusing on autonomic symptoms, including cardiovascular and gastrointestinal disorders, and how they might be associated with the progression of Parkinson's.

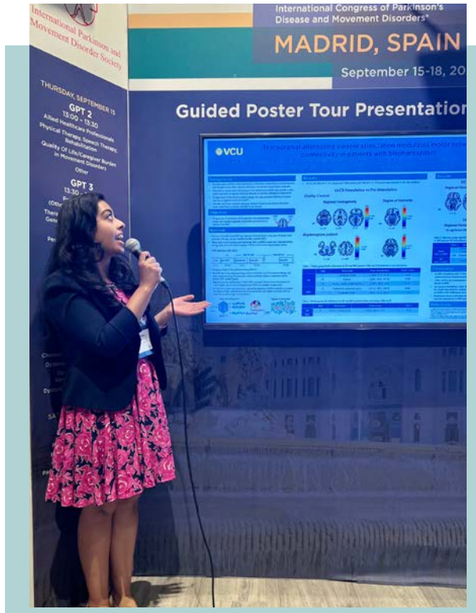
It's a growing area of Parkinson's research, Miller-Patterson explains. In prior studies, he used information that had already been collected in databases. Now he's hoping to take his research to a new level by working with colleagues such as Thomas Chelimsky, M.D., director of the VCU Autonomic Laboratory.

"What I want to do with coming to VCU and getting this additional autonomic training is to be able to do more prospective research, to recruit patients and do autonomic testing on these patients and then evaluate outcomes prospectively," Miller-Patterson says. "That tends to provide more reliable data."

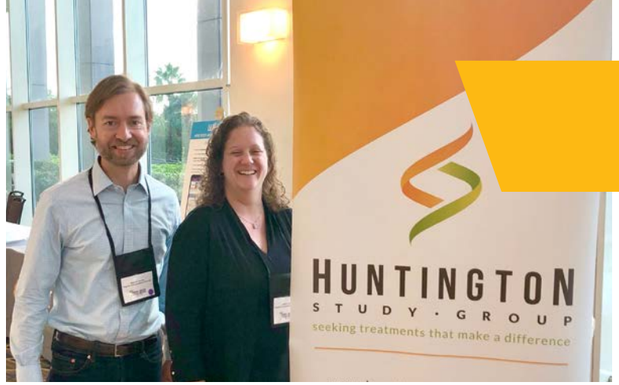
Miller-Patterson says the goal of that research is two-fold: to determine whether or not certain autonomic symptoms are associated with the progression of Parkinson's and to identify patients with those symptoms who might benefit from using medications to reduce or delay the cognitive and motor declines associated with Parkinson's, he says.

Miller-Patterson came to VCU from the University of Pennsylvania in Philadelphia, where he earned a master's degree in epidemiology while working as a neurologist at the Corporal Michael J. Crescenz VA Medical Center. He earned his medical degree at Stony Brook University where he found his calling in neurology.

"It was very clear to me that neurology was the field I wanted to go into," Miller-Patterson says. "There's a lot of long-term chronic care. We really build relationships with patients … For somebody with Parkinson's disease, you end up being their go-to person for a lot of issues."



VCU School of Medicine alumna Karishma Popli, now a neurology resident at Johns Hopkins University, presents a poster at the 2022 International Congress of Parkinson's Disease and Movement Disorders.



Matthew Barrett, M.D., associate professor in the Department of Neurology and Division of Movement Disorders, and research coordinator Heather Ward at the 29th Annual Meeting of the Huntington Study Group in Tampa in November 2022.

Chandler Moore has his eye on the PMDC's finances and its mission

As the research program manager at the Parkinson's and Movement Disorders Center, **Chandler Moore** wears a lot of hats.

While he's not doing the research himself, he does play an essential role in ensuring research studies happen at VCU's PMDC. Whether it's working on study budgets, with grantees, or connecting with research stakeholders, he smooths out the logistical bumps as PMDC investigators work to improve the lives of people with movement disorders.

"Throughout my working life, I feel like I've always done better when I can see the impact that I'm having," Moore says. "I've always felt this kind of drive to help where I can and how I can."

Moore says a key measure of success in his role is working to take some of the administrative duties from researchers and other staff, so they can focus more time on delivering care for patients.

"Clinical research is a complicated business, and there are a ton of moving parts that have to work together before a study visit can take place," Moore says.

Helping those moving parts function efficiently is part of Moore's goal at the PMDC.

"If I can take the administrative load off their shoulders wherever I can, then that allows them to deliver on the mission of the center, which is ultimately what I'm interested in."

Moore says. "I have family members for whom this type of disease profile is a reality of life, so there's a personal connection there for me."

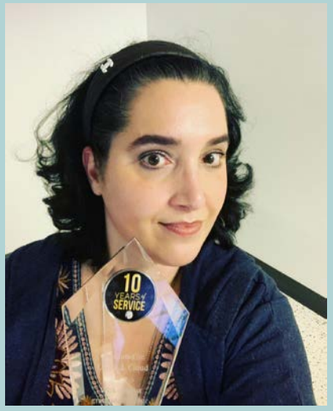
Right after graduating from the College of William & Mary with a psychology degree, Moore became a special education teacher at Henrico High School where he worked with students with cognitive and physical disabilities. He subsequently joined VCU as a coach for adults with disabilities.

In 2019, he expanded his skill set and became a research administrator for the VCU Department of Neurology before becoming a neurology-dedicated research administrator within the VCU School of Medicine. In those previous research grant-related roles, he learned the ins and outs of how research happens at an academic medical center.

Since starting with the PMDC in July 2022, he's been familiarizing himself with the center's research activities and laying the groundwork for an expansion in research activities as the PMDC adds new faculty. He's looking forward to volunteering, public outreach and playing an integral role in PMDC's growth and its success in its research pursuits.

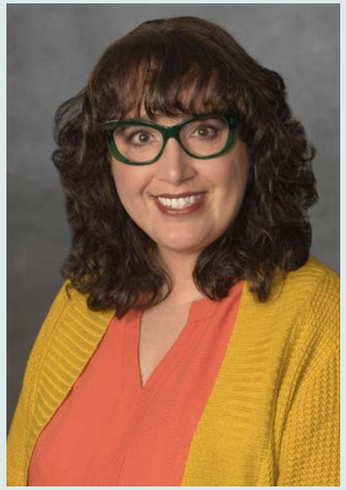
"I'm not in the exam rooms or anything like that. But if I can meet people and tell them about the research activities going on here, that's a hopeful thing," Moore says. "People enroll in research studies, I think, because they're hopeful. It feels good to be a part of that."

Chandler Moore, M.A., PMDC research program manager



Leslie Cloud, M.D., an associate professor of neurology and director of the Parkinson's Disease Program, celebrated 10 years at VCU in 2022.

Dr. Leslie Cloud outlines impact of PMDC "Center of Excellence" designation



Leslie Cloud, M.D., says being designated a "Center for Excellence" will bring numerous benefits to the VCU Parkinson's and Movement Disorders Center for years to come.

PMDC officials learned in July they had earned the Parkinson Foundation's prestigious five-year designation. It's given to centers that are recognized for providing the best clinical care and research opportunities in the field, Cloud notes.

"There are only about 35 Centers of Excellence in the country and about 50 internationally," says Cloud, director of the Parkinson's Disease Program at VCU. "It is not an easy designation to get."

PMDC is the only center in Virginia to have received the designation, which she says will bring about $50,000 annually to the center and fund a variety of initiatives.

"This grant will make a big difference in what we can do because it funds the things that are otherwise very difficult to get covered," Cloud says.

The money could help fund a regular free exercise program for Parkinson's patients who can't afford gym memberships or trainers to get the exercise that research suggests slows the disease's progression. The money could also be used for investing in new equipment as well as improving education and outreach, she says.

"It also puts us on the map," Cloud says of the designation. "Patients who are looking for state-of-the-art clinical care and opportunities to participate in research will often look for the nearest Center of Excellence for Parkinson's disease. A lot of people who wouldn't have otherwise found us will find us."

"They have grown so much in the last couple of years that we rely on them a lot to disseminate information about what we're doing at the center because they now have a huge network of their own," Cloud says .

Among those collaborations are educational webinars PMDC conducts quarterly for persons with PD.

"We cover a very broad, diverse array of topics to keep people up-to-date on all aspects of the disease," Cloud says.

The five-year designation is given to centers that are recognized for providing the best clinical care and research opportunities in the field.

Power Over Parkinson's

In partnership with the Power Over Parkinson's nonprofit group, PMDC has secured another grant from the Parkinson's Foundation supporting efforts to reach out to Hispanic and Latino patients coping with Parkinson's.

While roughly 6 percent of patients throughout the VCU Health System identify as Hispanic or Latino, only about 1 percent of PMDC patients are from that population. The outreach grant is seeking to address barriers to care among that group.

"We've put together a concerted effort to try to reach this population and educate them about resources that are available in the area, many of which are free of charge," Cloud says.

The joint grant project is part of an ongoing partnership that PMDC has with Power over Parkinson's, founded by patient and VCU supporter Gary Rogliano, to provide free wellness and educational resources for people with the disease in the Richmond region.

PMDC Funds Exercise Pilot Study

Cloud also recently secured a grant through PMDC to start a pilot program to conduct research on whether restricted blood flow exercise could help Parkinson's patients better maintain muscle strength.

Parkinson's patients' ability to take part in high intensity exercise wanes as the disease progresses, Cloud notes. So the pilot project is examining the impact of an approach that inflates a cuff around a muscle group while exercising it to determine if patients can improve muscle strength and function despite doing lower intensity work.

"Nobody has really looked at this approach in depth in Parkinson's disease patients," Cloud says. "The hope is this might offer an opportunity for people who couldn't get the benefits from very intense exercise protocols to instead get them from protocols that are not so intense."

Could VCU researchers help detect Lewy body dementia faster?

Creating a biomarker to identify characteristics of Lewy body dementia (LBD) could get patients the treatment they need faster — and improve their quality of life for longer.

To support earlier and accurate diagnosis of LBD, a team led by the Parkinson's and Movement Disorders Center's **Matthew Barrett, M.D.,** is developing a physiological biomarker that could identify LBD's distinct cognitive fluctuations. Such spontaneous periods of impaired attention and reduced arousal in people are signature signs of the disease.

LBD is the second most common cause of dementia, associated with unrelenting cognitive decline, profound caregiver burden, and higher healthcare costs compared to Alzheimer's disease.

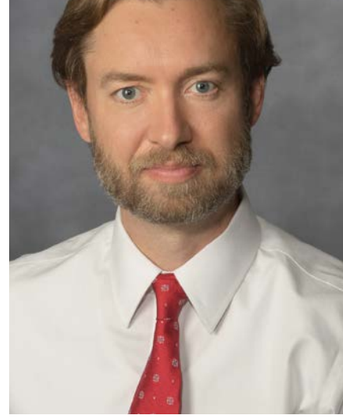
Despite its prevalence and worse prognosis among other causes of dementia, LBD patients suffer from misdiagnosis and delayed diagnosis. These factors can result in use of medications with increased morbidity and delays in appropriate clinical care. "Accurate and early diagnosis is a serious unmet need," says Barrett, an associate professor of neurology.

His work has been backed by a grant from the National Institutes of Health, which has a goal of creating such a biomarker to more quickly detect LBD.

Barrett's work centers on the use of electroencephalography (EEG), which measures electrical activity in the brain, to correlate signs of cognitive fluctuations to patients with possible LBD. For their research, they'll compare EEG scans of patients with LBD, Alzheimer's disease, and Parkinson's disease as well as those in healthy patients as a control.

"We anticipate the result is a clinically relevant physiological biomarker of clinical fluctuations in LBD patients that can be validated in a large-scale multi-center study," Barrett says. And the fact that EEG is non-invasive, relatively inexpensive, and widely available will support its adoption as a biomarker.

"The ability to diagnose LBD accurately and at an early stage will alleviate diagnostic uncertainty for patients and caregivers, facilitate appropriate care, and will be invaluable towards investigating and establishing novel therapies in the earliest stages of this disease," he says.



Matthew Barrett, M.D., associate professor of neurology

PMDC pilot grants launch discoveries in treating movement disorders

Over the last two years, the VCU Parkinson's and Movement Disorders Center has awarded nearly $350,000 in pilot grants to seven teams of VCU investigators who are looking to improve treatment options for people with Parkinson's disease, Alzheimer's disease and other related disorders. These grants were funded through financial support received from the Commonwealth of Virginia and the Johnson Family Fund for Essential Tremor Research.

The PMDC Pilot Grants program, now in its second year, seeks to bolster translational research initiatives that will transform the clinical care of patients with movement disorders by providing initial support for research projects that are collaborative, impactful and likely to attract future funding.

Here's a look at the 2022 grants, along with updates on the 2021 grants. Grants are announced in the late summer.

2022 PILOT GRANTS:

Blood flow restriction training for Parkinson's disease ($50,000)

Leslie J. Cloud, M.D., Associate Professor, Department of Neurology; Director, Parkinson's Disease Program

High intensity exercise has known benefits for older adults, but it's difficult for people with Parkinson's disease to get that kind of a workout. Blood flow restriction training may provide a solution by using low intensity exercise and pressurized cuffs to produce muscle strengthening results similar to high intensity training. Blood flow restriction training hasn't been rigorously examined in people with Parkinson's disease, and this study will develop protocols, train staff, and generate preliminary data on using that exercise approach.

Understanding the relationship between traumatic brain injury and neurodegenerative disease ($50,000)

Kirsty Dixon, Ph.D., Assistant Professor, Department of Surgery

Dixon will look at how traumatic brain injury and neuroinflammation affect brain signaling pathways and exacerbate neurodegeneration that can lead to disorders like Alzheimer's and Parkinson's. Data collected will support a larger grant application for research into lowering the risk that traumatic brain injury leads to neurodegenerative diseases.

PERCEPTion of FoG ($50,000)

Ingrid Pretzer-Aboff, Ph.D., R.N., Associate Professor, Department of Adult Health and Nursing Systems

Co-investigators: Leslie Cloud, M.D., Department of Neurology; Kathryn Holloway, M.D., Department of Neurosurgery; Gang Zhou, Ph.D., Department of Computer Science, William & Mary; Dean J. Krusienski, Ph.D., Department of Biomedical Engineering

There is no effective treatment for freezing of gait (FoG), a devastating symptom affecting 60% of Parkinson's disease patients. Researchers will analyze brain cell electrical signals recorded by deep brain stimulation electrodes in people experiencing FoG to determine if there is a detectable change in the brain's electrical activity with the onset and resolution of a freeze. This study aims to advance development of novel treatments for FoG.

The next step in essential tremor treatment: Local field potential optimization of deep brain stimulation ($50,000)

Josephine Wallner, M.D.-Ph.D. student, Department of Biomedical Engineering

Co-investigator: Kathryn Holloway, M.D., Department of Neurosurgery

Mentor: Dean Krusienski, Ph.D., Department of Biomedical Engineering

Deep brain stimulation can greatly benefit people with essential tremor, but some people undergoing DBS don't see many benefits or they experience adverse effects. Researchers will examine the relationship between local field potentials and tremor severity to find ways to improve tremor treatment effectiveness while reducing any adverse impacts.

2021 PILOT GRANT UPDATES:

Epigenetic histone acetylation in the expression and treatment of environmentally-induced Parkinson's disease using the rat rotenone model ($50,000)

Laxmikant Deshpande, Ph.D., Associate Professor, Department of Neurology

Co-investigator Joseph McClay, Ph.D., Department of Pharmacotherapy and Outcomes Science

Deshpande is leading a project exploring potential links between Parkinson's disease and prolonged exposure to certain pesticides. "Scientists have only recently begun to address environmental pesticide exposures and their interactions with genetic factors for Parkinson's risk," he says.

To explore the impact of pesticide exposures, researchers have used the pilot grant to create an experimental model that injects a neurotoxin used in pesticides into rats to induce Parkinson's-like motor symptoms. The animals exposed to the toxin showed progressively worse muscle rigidity and balance problems, the researcher said.

The VCU team detailed those findings at a VCU Medical Science Internship Program symposium. Investigators are now studying the brains of these rats as part of their study.

"This rat model would allow basic research into the mechanisms of Parkinson's disease and provide a drug screening tool for finding effective therapies for the disease," Deshpande says.

The research is continuing with the help of competitive funding from the Virginia Institute of Aging that the team was awarded based on their research conducted through this 2021 PMDC grant.

Long-term effects of stimulation-induced neurogenesis in dementia rats ($50,000)

Megan Rajagopal, M.D., Resident, Department of Neurosurgery

Co-investigators: Dong Sun, M.D., Ph.D., Department of Anatomy and Neurobiology; Laxmikant Deshpande, Ph.D., Department of Neurology; Deepak Kumbhare, Ph.D., Department of Neurosurgery

Mentor: Kathryn Holloway, M.D., Department of Neurosurgery

One project funded by the PMDC is expanding on research into the impact that deep brain stimulation (DBS) has on dementia.

A number of studies have examined the brain stimulation technique, including a 2017 paper that found the method was beneficial for two primates even after stimulation ended, the VCU researchers said in a synopsis of their work.

The VCU study looked at the long-term impact of DBS for 6 weeks after that method was performed on the rats using an electrode implanted in their brain. The VCU study focused on rats divided into three groups: healthy rats, rats with dementia that didn't undergo DBS, and rats with dementia that underwent deep brain stimulation for two weeks. The rats' capacity to learn was then tested by tracking their responses to audio cues.

The team found the rats with dementia that underwent DBS showed a learning improvement that greatly exceeded that seen in rats with dementia that didn't go through the procedure. Even after the stimulation, the rats with dementia that underwent the procedure returned to a learning improvement rate that matched healthy rats and a learning rate greater than the rats that didn't undergo DBS.

Researchers submitted an abstract summarizing their results to the American Association of Neurosurgeons for a meeting coming up in April, says Megan Rajagopal, M.D., the lead investigator who has been working in the lab full-time on the project. "We have completed all the implantations and behavioral testing, and we are now proceeding with histological analysis."

Quantifying trunk rigidity in Parkinson's disease: A potential market for disease progression and intervention efficacy ($49,704)

Originally awarded to Alexander Stamenkovic, Ph.D., formerly with Department of Physical Therapy

Led by James Thomas, Ph.D., Department of Physical Therapy, and Leslie Cloud, M.D., Department of Neurology

Co-investigator: Peter Pidcoe, D.P.T., Ph.D., Department of Physical Therapy

For people with Parkinson's disease, poor control over their torso and a lack of balance can signal the onset of worsening symptoms of the disease, according to a team of VCU researchers that's developed a way to measure just how rigid a patient's torso has become.

With the support of their 2021 PMDC pilot grant, the team created a prototype device that quickly shifts a patient's body while measuring their torso stiffness. Patients are partially seated in a harness in the device as cables pull their body forward very briefly, explains James Thomas, Ph.D, who runs the VCU Motor Control Lab.

"It moves you two inches in a 10th of a second," says Thomas, a VCU physical therapy professor. "It pulls you very quickly, and then it releases you."

The device could give clues on how far the disease has progressed in a patient while also providing a way to gauge how the person's body responds to Parkinson's treatments.

Thomas is overseeing the project after the lead investigator, Alexander Stamenkovic, Ph.D., took a job at Meta. Thomas says the research is being done in connection with other work VCU researchers have pursued that uses virtual reality to create immersive experiences to improve trunk control in Parkinson's disease patients.

Thomas says COVID-19 surge from the Omicron variant disrupted the testing of the new pulling device. But he said work is continuing again, and several patients have been taking part in trials on the device.

"We will continue to recruit and enroll participants in this study. We are also developing a collaborative grant application on trunk compliance in PD with colleagues at University of Minnesota based on these data," Thomas says.

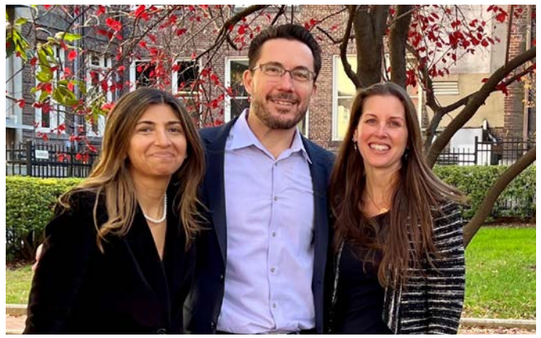
Richmond Brain Health Initiative

Expanding partnerships, reaching out to minorities

An estimated 300,000 Virginians over the age of 45 believe they are experiencing cognitive decline, and 150,000 people aged 65 and older are estimated to be suffering from Alzheimer's disease.

These statistics from the Alzheimer's Association highlight a large need for cognitive care in our state, but also a big opportunity to improve the quality of life for people with Alzheimer's disease and related dementias, many of whom don't know where to go to get the care they need.

A team at VCU is working to help address this tremendous need through the Richmond Brain Health Initiative, which offers cognitive screenings while connecting patients with local brain health providers and services, dementia lifestyle coaching, and caregiver support services.



Zanjani, Berman, and Sargent of the Richmond Brain Health Initiative

Now in its second year of a three-year, $1.2 million federal grant from the Administration for Community Living supporting its work, the co-directors of the RBHI— Brian Berman, M.D., director of the VCU Parkinson's and Movement Disorders Center, Lana Sargent, Ph.D., APRN, Assistant Dean of Practice and Community Engagement, and Faika Zanjani, Ph.D., associate professor in the Department of Gerontology—are looking to expand the number of people who take advantage of its services and to find additional funding sources to make it sustainable over the long term.

"There's a huge need for the services the RBHI provides," Berman says, noting many people who have cognitive decline are unable to get care due to poverty, isolation, and lack of insurance, among other reasons.

"The Brain Health Initiative is really meant to reach out to lower income or medically disadvantaged individuals who often don't have doctors," Berman says. "There's a large number of people with brain health care needs who don't interact with the medical community."

A 2022 report from the initiative notes racial minorities are at greater risk of developing Alzheimer's disease and related dementias, and the RBHI has focused much of its efforts on reaching members of Richmond's African American community.

The RBHI offers phone-based and in-person services at no cost to participants. These include health coaching on how to lower the risk of brain health impairments, care consultations for people with cognitive decline as well as their caregivers, and a care navigator to help patients find Alzheimer's disease healthcare providers for treatment and support services for improved quality of life.

The organizations taking part in the initiative include the VCU Parkinson's and Movement Disorders Center, the university's Departments of Gerontology and Nursing as well as the VCU Center for Inclusion, Inquiry, and Innovation (iCubed) Health Wellness and Aging Core.

Members of the RBHI said in their 2022 report that they plan to expand partnerships with local and statewide organizations, such as the Alzheimer's Association's Greater Richmond chapter and the Virginia Department for Aging and Rehabilitative Services, in order to create a Richmond-area network of brain care support services within the community for people with Alzheimer's and related dementias.

Berman says the RBHI is actively looking for additional federal dollars, state money, as well as foundation and donor support to help sustain the RBHI and maintain the level of services it provides for the community.

"Cognitive decline and dementia is a growing problem. It's going to be a considerable challenge to deliver care to the people who need it," Berman says. "With all the successes and relationships and referral patterns that are being developed, we'd hate to lose out on what's been achieved so far. We've got to continue and reach people who need this care."

PD patient 'making a difference in the world via VCU'

A lifelong educator, Gabie Frazier retired in 2017. Her license plate represents the three "3 R's" of education: Reading, 'Riting, and 'Rithmetic.

Gabie Frazier hasn't let Parkinson's disease slow her down. If anything, it's sped her up.

Before she retired in 2017, her colleagues at the Virginia Department of Education would periodically notice her left hand shaking. They encouraged her to seek medical attention; finally, she scheduled an appointment. After months of testing and observations, she was diagnosed with the mild stage 1 of Parkinson's disease in March 2017.

"The news was foreign and unbelievable, and I didn't want to share this diagnosis with anyone," she said. "Not knowing how family members, friends, and colleagues would react to the news, extreme caution was generated on my part. Would I be shunned, be labeled as contagious, or be greeted with opened arms?"

At a "young 77," Gabie stays busy with volunteerism for organizations around Richmond. She serves numerous nonprofits and has a passion for making floral arrangements. You may catch her zipping around town in her red Nissan Juke.

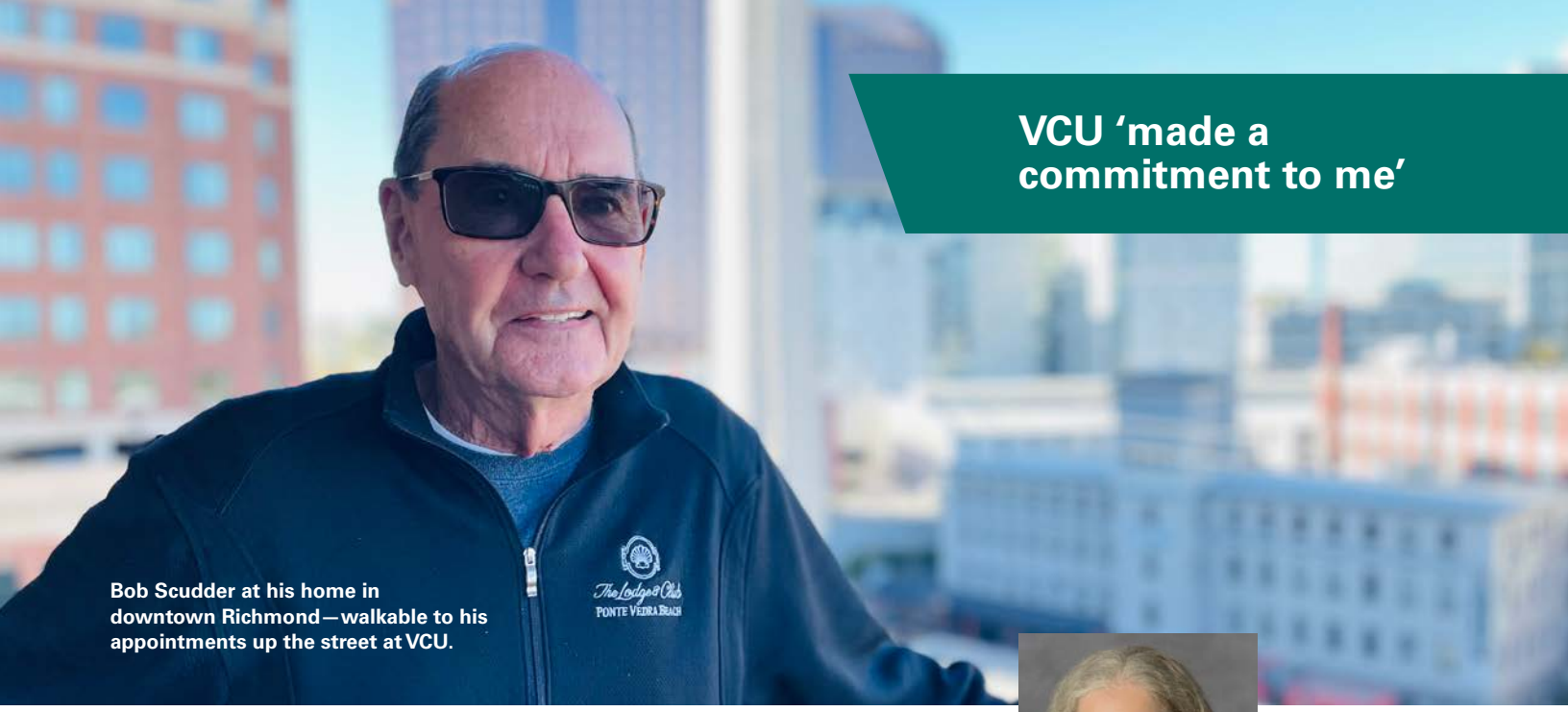
Gabie takes Carbidopa-Levodopa four times a day and additional medication at bedtime to control pain in her legs and tremors on the left side of her body. She has maintained PD's initial stage. Save a visible shake in her hand from time to time, one would never know she's living with an incurable, progressive disease. But the fact there's currently no cure is something she wants to change.

Through her relationship with VCU, she's directed her estate to the VCU Parkinson's and Movement Disorders Center to grow its research and training capabilities. "I am going to try to make a difference in the world through VCU," Gabie says. She feels a special bond to VCU as a patient of Leslie Cloud, M.D., and the entire team at VCU Neurology (Gabie is also a graduate of the former Richmond Professional Institute, which became VCU, and later earned a master's degree at VCU). "Whatever I have when 'It's curtains' is designated for VCU," she says, "even if it's only $1.95."

She also espouses the need for the patient-centered care she and other PD and movement disorder patients get at VCU. "Unless you have a relationship with a caring and compassionate medical individual that relates to the patient, the quality of care will be ineffective," she says. "As a patient, I'm placing my trust and faith in the specialist to provide a responsible plan of action aligned with the diagnosis. Without patient-centered care, neither the patient nor the specialist will win."

What does the future hold for Gabie? "Our growth and our survival depend upon our willingness to give to each other," she says. "I can truly say, my Parkinson's has embellished my passion for loving, growing, accepting, learning, empathizing, making a difference, and giving. Each day is celebrated in anticipation of tomorrow's cure."

VCU 'made a commitment to me'



Bob Scudder at his home in downtown Richmond—walkable to his appointments up the street at VCU.

Instead of looking at what Parkinson's disease takes away, Bob Scudder prefers to consider what the disease has given him: opportunity.

He was first diagnosed at VCU in early 2018 after his wife, Dougie, noticed his left arm wasn't moving normally and that he'd drift in the same direction while walking.

"I won't say I'm proud to have Parkinson's disease," says Bob, who turns 82 in February. "But I have it in such a way that it isn't compromising my ability to communicate or to interact with anyone."

From he and Dougie's riverfront condo in downtown Richmond, Bob walks to his appointments at VCU. And he's just a 10-minute drive to what has become a six-day-a-week passion, recommended by VCU neuropsychologist Sarah Lageman, Ph.D.: Rock Steady Boxing. The no-contact routine, with a space off Staples Mill Road, emphasizes range of motion, flexibility, posture, gait, and activities of daily living. Indeed, studies show exercise can slow disease progression.

Bob is passionate about his boxing classes led by Rock Steady Boxing co-founder Lindsay Nexsen — and the friends he's met there along the way.

"It has helped me immensely. I have no stiffness, no tremors," he says. "Parkinson's has given me the opportunity to get involved in an exercise program that I otherwise probably wouldn't have gotten involved in."

By all accounts, Bob's PD is mild—"I'm one of the fortunate ones"—and held at bay by a low-dose of levodopa four times a day, plus Rock Steady.

Lageman

Bob is a Navy veteran and clinically trained as a dentist, though he spent the majority of his career in and out of the military as a healthcare management consultant. He said he believes in the power of academic medicine, which is why he chose to get all his healthcare at VCU.

"VCU has made a commitment to me," says Bob, who made a significant gift to the Parkinson's and Movement Disorders Center to support research and clinical training. "So in return, we've made a commitment to them."

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