



DR. RANDY SCHILSKY
MOVEMENT DISORDERS FELLOWS

DEPARTMENT OF NEUROLOGY

AT THE DUKE UNIVERSITY
SCHOOL OF MEDICINE

MARCH 2025

MOVE MORE

Comprehensive Parkinson's Disease
& Movement Disorder Center

MOVE MORE - Today, Tomorrow, and Forever

FUNCTIONALLY today through a comprehensive interdisciplinary care approach that draws upon the best in lifestyle, medical, physical and surgical therapies.

TRAINEES to be tomorrow's leaders in Movement Disorder care.

RESEARCH EFFORTS to get rid of the burden of neurological diseases, forever.

Dr. Randy M. Schilsky Movement Disorders Fellowship

The Schilsky Fellowship has supported four fellows since its inception in 2022. The Fellowship is critical to allow an immersive research experience during Year 2. Schilsky Fellows contribute to solving major unmet needs and learn cutting-edge concepts and methodologies through Duke faculty mentorship.

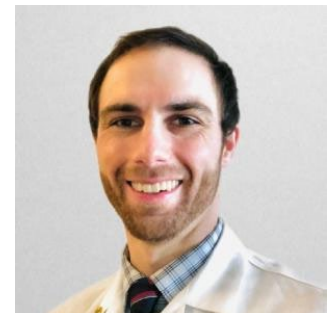
In addition to this pivotal research experience, all of our Fellows receive extensive specialty training in Movement Disorders through direct mentored clinical care, teaching didactics, and national specialty training conferences. Each fellow is board-certified and involved in resident education. Additionally, several have completed the Medical Education Leadership Track to improve their teaching skills.

In the short time since program inception, already we have bolstered our capacity to train more Fellows, successfully retained them in the region to make access to care better now, and made research advances that promise to improve current treatments. Because of the generosity of Dr. Randy Schilsky and the RMS Family Foundation, there are now 3 more movement disorder providers here in the Triangle. These are Drs. Dahlben and D'Aguiar Rosa at Duke Health and Dr. Wegener at Raleigh Neurology.

Schilsky Fellow Highlights, 2022- 2025

Brian Dahlben, MD MSc – Fellowship Alumnus

- Started clinical practice at Duke in 2024 as the first Duke Health Movement Disorders provider in Raleigh. This has improved access to Deep Brain Stimulation (DBS) both at Duke Hospital and Duke Raleigh Hospital.
- Completed 2nd year research project investigating wearable technologies for refined capture of movement disorders to test new therapies and improve therapeutic outcome measurement.
- Multiple research presentations at national/international conferences with several manuscripts in preparation.
- Primary and sub-primary investigator in multiple clinical trials including three potential PD-modifying medications and several DBS studies.
- Led community-centered initiatives.
- Actively engaged in fellow, resident, and medical student education.



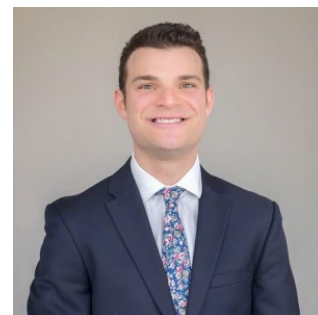
Talita D Aguiar Rosa, MD, MS – Senior Fellow

- Accepted an offer to join the faculty of Movement Disorders at Duke in August of 2025.
- Year 2 research project with Drs. Mitchell and McIntyre using neural connectomics to guide DBS programming for specific axonal pathways aiming at better tremor control while avoiding common side effects.
- Research with the Duke Department of Population Health Sciences studying disparities in Parkinson’s disease and dementia care.
- Co-investigator in a Parkinson’s Foundation-funded project, “Parkinson’s Disease in Hispanics: Neurocognitive Impairment and Cardiovascular Risk.”
- Two book chapters in publication: “Fatigue in Parkinson’s Disease” with Dr. Mantri in *The Scientific Basis of Fatigue* (Elsevier) and “Mood Disorders in Parkinson’s Disease” with Dr. Moore in *Neurorehabilitation in Parkinson’s Disease* (Springer).
- Four papers submitted for publication in major journals.
- Completing the 2024-2025 Medical Education Leadership Track; completed the 2023-2024 Health Disparity Research Curriculum at Duke University.



Curtis Wegener, MD – Junior Fellow

- Accepted an offer to join Raleigh Neurology as a movement disorders specialist in August 2025.
- Multiple educational presentations including at Tyler’s Hope for a Dystonia Cure Conference and Duke Neurology Department grand rounds.
- Attended the International Parkinson and Movement Disorder Society’s Comprehensive Movement Disorder Course in Aspen and the Medtronic DBS Graduating Fellows Program in Minneapolis.



Tanziyah Muqeem, MD, PhD – Junior Fellow

- Awarded a clinical fellowship from the Dystonia Medical Research Foundation to gain movement disorder clinical training and to investigate how the thalamus contributes to dystonia using mouse models and in vivo imaging with optogenetics.
- Mentored translational research experience aims to develop expertise in thalamic circuitry and its involvement in movement disorders in order to find ways to modulate this circuitry to more effectively treat movement disorders.
- Clinical research project with Drs. Mitchell and McIntyre evaluating the integration of DBS connectomics data and wearable devices to improve our understanding of programming subthalamic nucleus DBS for Parkinson’s Disease.
- Presented human DBS connectomics research at the American Academy of Neurology 2024 annual meeting; publication pending.
- Multiple educational presentations include several PD101 and resident presentations.
- Attended the International Parkinson and Movement Disorder Society’s Comprehensive Movement Disorder Course in Aspen



Dr. Randy M. Schilsky Movement Disorders Fellowship 2025 Spring Luncheon Attendee Biographies

FACULTY

Kathryn P. L. Moore, MD, MSc

Assistant Professor of Neurology
Associate Director, Neurology Residency Program
Director, Movement Disorders Fellowship Program

Dr. Kathryn Moore is a board-certified neurologist, who specializes in seeing patients with movement disorders. She completed a two-year fellowship training under the mentorship of Dr. Michael Okun and Dr. Christopher Hess at the Norman Fixel Institute for Neurological Diseases at the University of Florida. Prior to this, she completed neurology residency at UNC Health and the University of North Carolina Chapel Hill, where she also served as chief resident. She is an award-winning clinician and educator.



Dr. Moore's research focus includes improving medical education and the pipeline of trainees into neurology and movement disorders. She has master's level training in medical education. Currently at Duke, she is the associate program director of the neurology residency and fellowship director of the Movement Disorders fellowship.

Furthermore, she chairs a successful international lecture series for trainees interested in Movement Disorders. Her other research interests include clinical trials in movement disorders, particularly Parkinson's disease and Huntington's disease. She is committed to supportive care of her patients.

Nicole Calakos, MD, PhD

Lincoln Financial Group Distinguished Professor of Neurology and Neurobiology
Division Chief, Parkinson's and Movement Disorders
Co-Director, Tyler's Hope for a Dystonia Cure Center of Excellence

Dr. Calakos cares for patients with Movement Disorders and leads a laboratory research program that studies the normal mechanisms of learning through synaptic plasticity and how these processes are disrupted in disease. Her team focuses on plasticity processes within the basal ganglia circuitry to understand its role in normal adaptive behavior, such as habit formation, and disorders such as compulsive behavior, dystonia and Tourette's syndrome. Her research program has been continuously supported by the NIH and additionally supported by private foundations and the Department of Defense (DOD).



Dr. Calakos received her bachelor's degree from the University of California at Berkeley, her MD and PhD degrees from Stanford University, and residency training in Neurology at the University of California at San Francisco.

Dr. Calakos is a member of the National Academy of Medicine, fellow of the American Association for the Advancement of Sciences, and 2023 recipient of the Korsmeyer research award from the American Society of Clinical Investigation. Dr. Calakos advocates for basic and translational neuroscience through activities that have included: American Neurological Association, Duke Institute for Brain Sciences, NIH study sections, and scientific advisory boards for Tourette's Syndrome and dystonia foundations.

FELLOWS AND ALUMNI

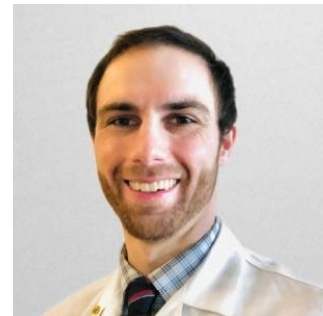
Brian A. Dahlben, MD, MSC

RMS Family Fellowship Alumnus

Movement Disorders Fellowship 2022-2024

Position: Duke University, PD and Movements Disorders Assistant Professor

Dr. Dahlben was recruited to join our faculty as Assistant Professor of Neurology in 2024. Originally from Boston, he attended Jefferson Medical College in Philadelphia and completed neurology residency at Albany Medical Center where he served as chief resident before completing his fellowship in Movement Disorders at Duke.



Supported by the RMS Family Fellowship, he conducted research under guidance of Dr. Noreen Bukhari-Parlakturk in his second year of fellowship, using wearable sensors to better assess movement disorders and their response to treatments. He has particular interest in academic education, from medical students and residents to patient advocacy, as well as neuromodulation with focus on Deep Brain Stimulation advancements for Parkinson's disease and essential tremor. Active as a clinical research investigator, Dr. Dahlben is able to offer his patients involvement in various clinical research trials, including for Parkinson's Disease, Progressive Supranuclear Palsy, Multiple System Atrophy, and dystonia.

Talita D'Aguiar Rosa, MD, MS

RMS Family Fellowship recipient

Year 2 Movement Disorders Fellow, 2023 -2025

Dr. Rosa is a board-certified neurologist and a current movement disorders fellow at Duke University. She recently accepted an offer to join our faculty at Duke. She was the chief resident during neurology residency training and was awarded the Resident Award for Continuity Care for providing quality of care to her patients. She brings experience in global health through a master's degree, followed by a research fellowship at the University of California, San Francisco. Her research interests focus on leveraging the use of technology for the improvement of access to health services.



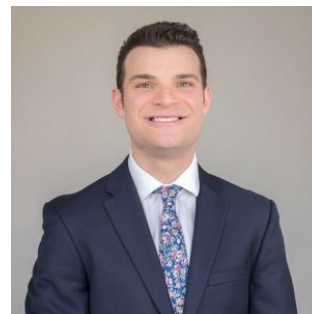
In her first year of fellowship, Dr. Rosa was selected as a participant in the Health Equity Care Program offered by AAN and completed Duke's 2023-2024 Health Disparity Research Curriculum. She has worked with the Department of Population Health Sciences to use Medicare beneficiary data to study the disparities in Parkinson's disease care with respect to gender, race and ethnicity.

During her second year of fellowship, Dr. Rosa has developed a project under the mentorship of Dr. Kyle Mitchell that builds on her previous work focused on technology and access to care and aims at using wearable technology and connectomic modeling of brain imaging to increase the efficiency of deep brain stimulation programming for patients with Parkinson's disease. Participant recruitment is underway. Dr. Rosa is also working with Dr. Maria Marquine as a co-investigator in a project funded by the Parkinson's Foundation called "Parkinson's Disease in Hispanics: Neurocognitive Impairment and Cardiovascular Risk."

Curtis Wegener, MD

RMS Family Fellowship support
Movement Disorders Fellow, Year 1

Dr. Curtis Wegener is a board-certified neurologist and a current movement disorders fellow at Duke University. He completed residency at Mass General Brigham at Harvard Medical School, where he was recognized as Senior Resident Teacher of the Year and completed the certificate program in Diversity, Equity, and Inclusion. Dr. Wegener earned his MD from Tulane University School of Medicine and was a member of both Alpha Omega Alpha and Gold Humanism honor societies. He received his bachelor's degree from Vanderbilt University, summa cum laude.



Beyond movement disorders, Dr. Wegener has been recognized for his advocacy and leadership for LGBTQ+ care within neurology. He has delivered grand rounds presentations of his work at both Duke University School of Medicine and Harvard Medical School, as well as at the 2023 American Academy of Neurology Annual Meeting. At Duke, he has been involved with inter-divisional education, receiving additional training in procedural neurology and participating in the Memory Disorders division's recent conference session regarding anti-amyloid therapies in Alzheimer's disease.

Upon completion of his fellowship in June 2025, Dr. Wegener will join Raleigh Neurology Associates as a full-time staff physician, specializing in Movement Disorders. There he will focus on expanding regional access to movement disorder care and procedural neurology offerings.

Tanziyah Muqem, MD, PhD

RMS Family Fellowship support
Movement Disorders Fellow, Year 1

Dr. Muqem is a first-year movement disorders fellow. Prior to this, she completed her neurology residency at Duke and was chief resident of quality improvement. She received her MD and PhD degrees from Thomas Jefferson University, where she studied the role of voltage-gated potassium channels in the neuromodulation of pain signaling. She received her bachelor's degrees in biomedical engineering as well as in applied mathematics from Johns Hopkins University. During residency at Duke, she received a Resident Research Scholarship, as well as a Futures in Neurologic Research Scholarship from the American Academy of Neurology (AAN) that has allowed her to develop her research interests in movement disorders.



In her fellowship training, Dr. Muqem plans to bridge foundational scientific understanding of circuit mechanisms of movement disorders in preclinical models to uncover novel and improved circuit targeting strategies for brain modulation to treat patients with various movement disorders. Dr. Muqem is mentored by Dr. Nicole Calakos. She has been awarded a highly competitive two-year fellowship from the Dystonia Medical Research Foundation for her training.

STAFF

Allison Allen, MSW, LCSW

Centers of Excellence Coordinator and Clinical Social Worker
Duke Movement Disorders Clinic

Allison Allen is a Licensed Clinical Social Worker and Center of Excellence Coordinator at the Duke Movement Disorders Center, a Parkinson's Foundation Center of Excellence. Since joining the team in 2016, her clinical and research interests are centered around improving quality of life for people living with movement disorders and their families and include mental health and non-motor PD symptoms, Mindfulness Based Stress Reduction (MBSR), providing support for people living navigating parenting, working, and caring while living with a chronic illness, and understanding and mitigating barriers to care. She has an additional focus on team-based, interdisciplinary care, exhibited in her role in designing and coordinating Duke's PD THRIVE Clinics and training the next generation of Movement Disorders providers.



To compliment this work in the Duke PF COE, Allison creates and co-facilitates frequent community outreach and education programs, including four local ongoing support groups, PD 101s, "Creating Your Care Team" presentations, and more. She recently co-hosted a PD Art Gallery, creating a dedicated space for artists living with PD to share their work. Allison works

closely with the Parkinson’s Foundation on a variety of projects, including the creation of an Expert Briefing “YOPD: Not What I Planned For.” She is a member of the Parkinson’s Outcomes Project Mental Health workgroup and the World Parkinson’s Congress Carepartner Lounge planning committee, having facilitated programs at both WPC 2019 in Kyoto and WPC 2023 in Barcelona.

Before joining the Duke Movement Disorders team, Allison worked for six years as an emergency department LCSW at Duke University Medical Center. Allison graduated from North Carolina State University with a Bachelor’s Degree in Social Work in 2009 and from the University of North Carolina with a Master’s Degree in Social Work in 2010. In 2020, Allison was awarded the Brandy McDaniel Clinical Social Worker of the year award at Duke University Medical Center.

Emily Espenshade, Ed.M.

Director of Development, Neurosciences and Behavioral Health

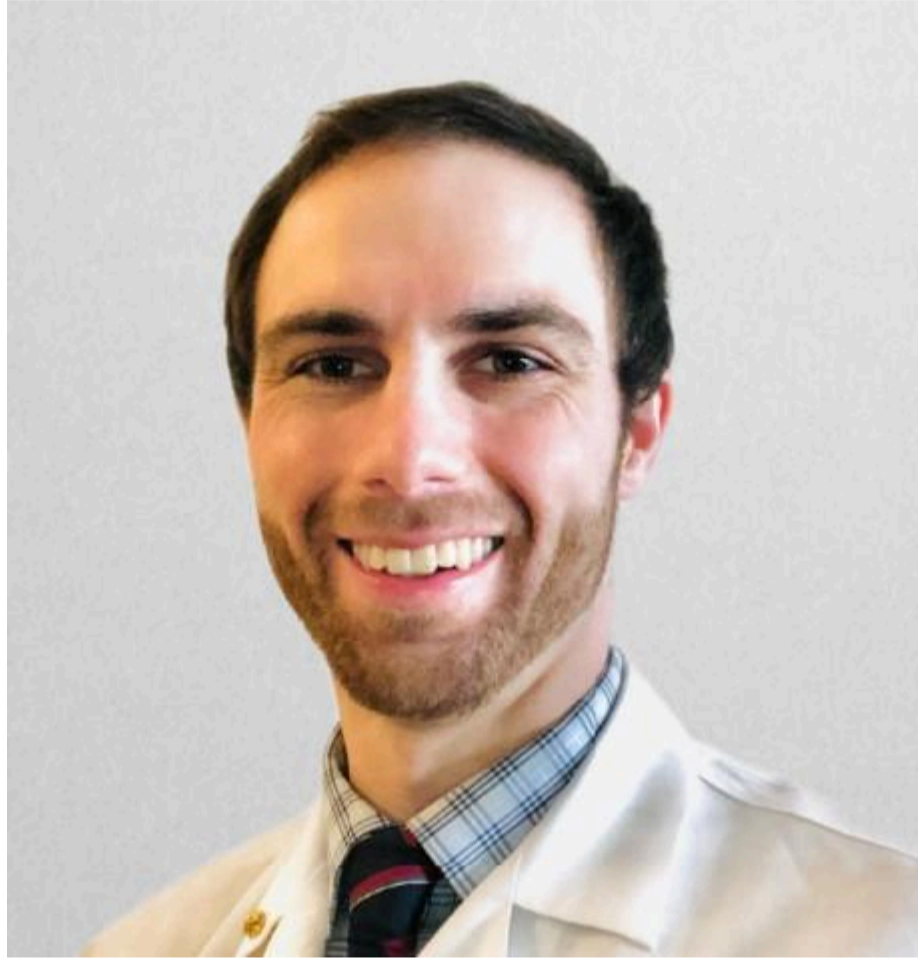
As Director of Development, Emily partners with faculty from Neurology, Neurobiology, and Psychiatry & Behavioral Sciences to secure philanthropic support for the departments’ research, education and patient care priorities.

Prior to coming to Duke, Emily served as Chief of Staff to the president at Bryn Mawr College and held various leadership roles in education and cultural fundraising in Washington, DC and the Philadelphia metro area. Emily earned her Ed.M. from Harvard University and her BA from Wellesley College.



Fellow Spotlight: Brian Dahlben, MD, MSc

October 4, 2023 | By William Alexander



Brian Dahlben, MD, MSc, first became interested in neuroscience in high school after he read about phantom limb pain. He decided to pursue neurology and then movement disorders with the goal of developing close relationships with his patients and helping them live their best lives, and came to Duke as the first member of our [newly expanded Movement Disorder Fellowship program](#).

For this week's Spotlight interview, the second-year fellow talks to us about the research he's conducting to help improve care for people living with dystonia. He also shares how the relationships he developed with two patients during his training shaped his perspective. Finally, Dahlben talks about his plans for a future in academic medicine (or professional ice-cream tasting) and an early research project he conducted on the effects of concussion among Canadian hockey players.

What are your current responsibilities as a Schilsky Movement Disorders Fellow? What does a typical day look like for you?

It's exciting as a second-year fellow at Duke to have a high degree of autonomy. I see clinic patients once weekly, including common conditions like Parkinson's disease and essential tremor, as well as much rarer conditions like Huntington's, various forms of dystonia, and ataxia. A key element of treatment for many of our patients includes deep brain stimulation, and I have been lucky to receive excellent training in the intra-operative and outpatient management of DBS. The remainder of my time is dedicated to research initiatives in dystonia, specifically working to understand the neural underpinnings of cervical dystonia and writer's cramp.

How and when did you get interested in neurology? How did you decide to focus on movement disorders in particular?

I remember reading in high school about phantom limb pain and being utterly fascinated by human perception and neuroscience. I spent time volunteering with the Alzheimer's Association and developed a deeper appreciation of how neurologic diseases can threaten one's sense of self. In medical school, I discovered that movement disorders is a really innovative space within neurology. I love that the physical exam remains the key to diagnosis, and that we can offer therapies to help patients live their best lives. Being a movement specialist enables a close relationship with my patients, who need regular follow-up and whose needs change over time.

In addition to your medical degree you also have a master's in neuroscience. How do those two degrees complement each other and inform your work?

That's a good question. Completing my master's thesis (which focused on the human stress response), and then immersing myself full-time in research at Brigham and Women's Hospital (using MRI to investigate the effects of traumatic brain injury in veterans and professional athletes) taught me about problem-solving, professionalism, and communication. As a physician, these are skills that I continue to build on daily, to make my patients feel heard and confident in their individualized treatment plan.

You're currently in your second, research-focused year of your fellowship. What's the focus of this research, and how will it help us better understand or treat movement disorders?

I am working closely this year with Dr. Noreen Bukhari-Parlakturk, a dystonia expert. We have an ongoing prospective study of cervical dystonia, using a system with wearable sensors and 3D video capture to develop a quantitative tool to measure CD severity. In a retrospective analysis of focal hand dystonia (aka writer's cramp), I am using diffusion tensor imaging to gain insight into white matter changes unique to this disorder. A better understanding of dystonia, for which the underlying brain mechanisms are admittedly not well defined, is an important step toward developing better and more targeted therapies.

What's one experience from your time as a fellow that's stood out as especially helpful or memorable to you?

Two patients jump to mind. One is a gentleman with Parkinson's, who leads a very active lifestyle and works as a lawyer, but was not receiving adequate symptom relief with just medications. Over the course of a year, we decided to pursue DBS, I accompanied him in the OR for the surgery, and completed his initial and subsequent DBS programming sessions. It has been so rewarding to see his quality of life improve, and to have been there each step of the way.

The second patient is a young man who presented with sudden onset of a bothersome hand tremor. In the physical exam his tremor was distractible and could be entrained by tapping his fingers in a sequence, leading to the tremor disappearing. We discussed the nature of his diagnosis, a functional (psychogenic) tremor, and how it can respond to such maneuvers. Despite the reality that most neurologic conditions we see are progressive, it was gratifying to see that functional movement disorders like his can and often do improve, sometimes in a single visit.

What plans do you have for after you complete your fellowship? If you could have any job in the world, what would it be?

Fellowship at Duke has shown me the value of a large academic practice in connecting patients with resources, providing adequate physician support, and fostering the cycle of lifelong learning and teaching by staying engaged with residents and students. I plan to put my fellowship training to good use as a movement specialist within the academic sphere. And if that doesn't work out, then I'd pursue a career in professional ice cream tasting.

You contributed to a [Journal of Neurosurgery article](#) discussing the white matter microstructure in ice hockey players with a history of concussion. What were the most interesting takeaways from that project?

As part of the Hockey Concussion Education Project in 2015, we had access to MRI scans of Canadian hockey players during a collegiate season. Using DTI measures, we found that those with concussion (either a history of concussion, or one was sustained during that season) had detectable differences in several white matter connections. More and more research over the past decade has revealed that traumatic brain injury, including repetitive subconcussive head blows, are associated with white matter changes in athletes if not florid clinical symptoms. These findings have already had meaningful implications for public policy and the true impact of head trauma.

What other passions or hobbies do you have outside of the Department?

My main passions are playing ultimate or enjoying the outside on a hike or trail run! North Carolina is such a beautiful place to explore, from the mountains in Asheville to the beaches in Wilmington.