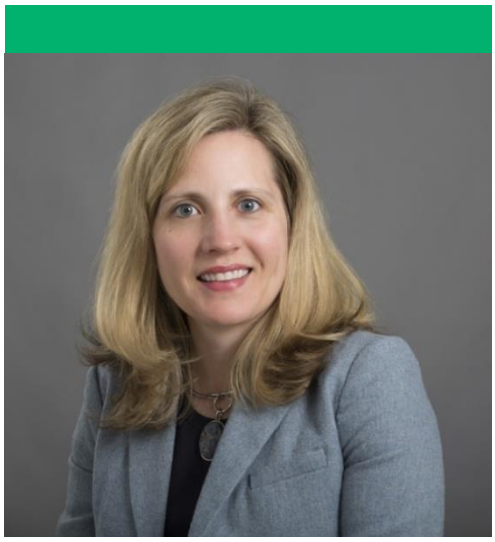
RUSH

Deborah A. Hall, MD, PhD

The Parkinson's Foundation Chair of Neurological Sciences



Advancement of Medicine

I continue to grow and manage the largest movement disorders practice in Chicago with 20 faculty members, including neurologists, psychiatrists, neuropsychologists and research scientists. On the downtown campus alone, we saw 13,000 patients in 2025, more than 5,000 of whom have Parkinson's disease. With this growth, we have expanded our Rush Movement Disorders Behavioral and Mental Health Program with four neuropsychologists and six students. We've moved them into a new space, one floor above us, to increase their availability. The team is starting group therapy for patients with Parkinson's disease and other disorders. We also hired the first board-certified neuropsychiatrist in Chicago, who joins a psychiatrist researcher already in the practice.

In 2025, the funds from this endowment were used for two major purposes: supporting the management of our large movement disorders practice and recruiting new faculty. I used a portion of the endowed funds to provide startup packages for movement disorders neurologists from Mayo Clinic and Penn Medicine and a neuropsychiatrist from Johns Hopkins Medicine.

Research

In 2025, I received two new National Institutes of Health, or NIH, grants focused on fragile X-associated tremor ataxia syndrome, or FXTAS. These grants will determine clinical outcome assessments and treatment-monitoring markers for FXTAS (PI, U01NS143225) and develop skin assays, similar to Parkinson's disease, for the disorder (P50HD118707). I also received funding for Year 4 of an NIH-funded Parkinson's disease-focused grant titled "Racial Disparities in Parkinson's disease – Clinical Phenotype, Management and Genetics" (R01NS125294). This project has been highly successful, recruiting more than 400 patients nationwide, the majority of whom are Black. As part of this study, we have contributed to the second gene discovery in Black Parkinson's disease

patients in the GBA gene. In 2025, I authored multiple papers on Parkinson's disease, particularly regarding underserved populations (see below). I spoke on behalf of the Huntington's disease gene therapy study by Uniqure at the International Movement Disorder Society meeting in 2025, with topline results showing a 75% slowing of disease progression. **This seminal result may be the first indicator that a compound can slow down this devastating neurodegenerative disease.**

Community Service

I continue to host a weekend support group for Chicago Parkinson's disease patients of African ancestry. This long-standing support group is live and serves as a resource for this underserved population in our practice.

Selected Talks and Presentations

- "Fragile X-associated Tremor Ataxia Syndrome", Ray Watts Lectureship, University of Alabama, 2025
- "Movement Disorder Video Cases", University of Alabama, 2025
- "Fragile X-associated Tremor Ataxia Syndrome", 63rd Western Intermountain Neurological Organization Conference 2025, Salt Lake City, Utah
- "Updates in Huntington's Disease", 63rd Western Intermountain Neurological Organization Conference 2025, Salt Lake City, Utah
- "Fragile X-associated Tremor/Ataxia Syndrome: Phenotype and Genotype", University of Miami, 2025
- "Phase I/II Gene Therapy Study of AMT-130 Slows Huntington's Disease Progression at 36 months", International Movement Disorder Society Meeting, Honolulu, 2025
- "Clinical Trials: Lessons Learned from the FXTAS Clinic", 5th International Conference on *FMR1* Premutation, Polignano Del Mare, 2025
- "Mentors and Sponsors", American Academy of Neurology Annual Meeting, San Diego, 2025
- "Management Essentials: Handling Conflict, Driving Performance, and Retaining Talent", American Academy of Neurology Annual Meeting, San Diego, 2025
- "Networking and Career Development", Michael J. Fox Career Development and Networking Series, virtual, 2025

RUSH

Publication Highlights — Abbreviated

- Akçimen F, Paquette K, Crea PW, … **Hall DA**, et al; Black and African American Connections to Parkinson's Disease Study (BLAAC PD); Nigeria Parkinson's Disease Research Network (NPDRN); Racial Disparities in Parkinson Disease (RaD-PD); Global Parkinson's Genetics Program (GP2); Okubadejo N, Bandres-Ciga S. Large-scale genetic characterization of Parkinson's disease in the African and African admixed populations. *medRxiv* [Preprint]. 2025 Jan 20.
- **Hall DA**, Rosenbaum M, Hawkins J, Ouyang B, Cooper C, Patel N. Randomized Trial of Telegenetic Counseling for Gene Testing in Huntington Disease. *Neurol Clin Pract*. 2025 Feb;15.
- Lange LM, Levine K, Fox SH, … Global Parkinson's Genetics Program (GP2). The LRRK2 p.L1795F variant causes Parkinson's disease in the European population. *NPJ Parkinsons Dis*. 2025 Mar 25;11(1):58.
- **Hall DA**, Shulman JM, Singleton A, Bandres Ciga S, Tosin MHS, Ouyang B, Shulman L. Racial Disparities in Parkinson Disease Clinical Phenotype, Management, and Genetics: Protocol for a Prospective Observational Study. *JMIR Res Protoc*. 2025 Apr 7;14.
- González DA, Tosin MHS, Warner-Rosen T, Afshari M, Barton B, Fleisher JE, **Hall DA**, Kirby AE, Kompoliti K, Mahajan A, Patel N, Swan C, Goetz CG. Loneliness in Parkinson's disease: Subjective experience overshadows objective motor impairment. *Parkinsonism Relat Disord*. 2025 Jul;136:107867. Epub 2025 May 10.
- Saffie-Awad P, Grant SM, Makarious MB, .. Global Parkinson's Genetics Program (GP2); Mata IF, Bandres-Ciga S. Insights into ancestral diversity in Parkinson's disease risk: a comparative assessment of polygenic risk scores. *NPJ Parkinsons Dis*. 2025 Jul 3;11(1):201.
- Hill EJ, Marcucci SB, DeLano K, Abanto J, Sawyer RP, Marsili L, Duque KR, Sun Q, Woo D, Langefeld CD, **Hall DA**, Skirpan D, Paredes NC, Spikes C, Bajaj DA, Gregor N, Stivers S, Mahajan A, Woo JG, Espay AJ. Community Disadvantage Is Associated With More Severe Motor Symptoms in Parkinson Disease. *Neurol Clin Pract*. 2025 Aug;15(4).
- Petrillo J, Sawant R, Rogers R, Cleanthous S, Cano S, Kumar R, Klapper J, Sierra LA, Bang J, Anderson KE, **Hall DA**, et al. Reliability and validity of the Huntington's Disease Everyday Functioning (Hi-DEF): A patient-reported measure of cognitive capacity on daily functioning in Huntington's disease. *J Huntingtons Dis*. 2025 Nov;14(4):369-381.
- Sun W, Schulte C, Gasser T, Tan M; Global Parkinson's Genetic Program (GP2). TMEM175, SCARB2 and CTSB associations with Parkinson's disease risk across populations. *NPJ Parkinsons Dis*. 2025 Dec 2;11(1):348.

- Rábano-Suárez P, Monje MHG, Vizcarra JA, Paul SS, Avión S, Morse M, Skorvanek M, Tosin MHS, Fuller RLM, Turner TH, Dekker MCJ, **Hall DA**, et al; MDSe-Diary Working Group. MDS PD e-Diary: A New Patient-Centered Digital Tool in Development for People with Parkinson's Disease. *Mov Disord Clin Pract*. 2025 Dec 12.
- Vanegas J, Weimer R, Krinickas N, **Hall DA**, Shulman LM; RaD-PD Study Group. Recruitment strategies for the racial disparities in Parkinson's disease study: Partnering with patients from the Black community. *Parkinsonism Relat Disord*. 2025 Dec 31;144.
- Purcell NL, Stuart S, Vitorio R, Timm EC, **Hall DA**, Cooper C, Ouyang B, O'Keefe JA. Cortical Correlates of Balance During Single and Dual Tasks in Huntington's Disease: A Preliminary fNIRS Study. *Neurorehabil Neural Repair*. 2026 Jan;40(1):25-36.

The Year Ahead: 2026 and Beyond

In the next year, I will start two new studies as principal investigator: a BlueRock Therapeutics stem cell transplant for Parkinson's disease and a Novartis gene therapy for Huntington's disease. I will continue working on the three NIH grants that I currently hold. I am mentoring two junior faculty who will submit NIH K awards focused on Parkinson's disease. I will finish a short historical book on the history of the Rush Movement Disorders Program with **Christopher Goetz, MD**. Clinically, we are considering expanding our practice to Northern Chicago and Northwest Indiana, potentially hiring at least one new neurologist in late 2026. I am also hoping to hire a social worker who can serve the entire practice. Lastly, I hope to grow translational sciences by hiring at least one mid-level scientist focused on Parkinsonism in the lab.

With Gratitude

I am incredibly grateful to the Parkinson's Foundation for its support of the Rush Movement Disorders Program. The Parkinson's Foundation has a longstanding relationship with Rush due to the organization's origins at our institution. The endowed funds allow us to sustain and expand our program, including by bringing on new faculty. As the largest and top-ranked Parkinson's disease program in Illinois, the Parkinson's Foundation's support has been pivotal over the years to help us maintain our program's excellence and volume.