THE OHIO STATE UNIVERSITY
WEXNER MEDICAL CENTER

Happy Holidays from the Center for Cognitive and Memory Disorders-2025

2025 has been another successful year for the Center for Cognitive and Memory Disorders. We have recruited two new cognitive providers for our patients and have started several innovative research trials designed to test new treatments and diagnostics to help patients afflicted with cognitive disorders. We are collaborating across the OSU campus and the nation on impactful research projects.

The mission of the Center for Cognitive and Memory Disorders at the Ohio State University Wexner Medical Center is to conduct research to improve the diagnosis, treatment, and eventual cure of Alzheimer's disease, dementia, and other related memory disorders. We want to take the holiday season to sincerely thank all of you who help us in working towards that mission, either through monetary donation or through volunteering your time to participate in research trials.

Below are some of our 2025 accomplishments and research highlights for which we are most proud.

Selected Publications and Posters
Sweeney N, Kim TY, Morrison CT, Li L, Acosta D, Liang J, Datla NV, Fitzgerald JA, Huang H, Liu X, Tan GH, Wu M, Karelina K, Bray CE, Weil ZM, **Scharre DW**, Serrano GE, Saito T, Saido TC, Beach TG, Kokiko-Cochran ON, Godbout JP, Johnson GVW, Fu H. Neuronal BAG3 attenuates tau hyperphosphorylation, synaptic dysfunction, and cognitive deficits induced by traumatic brain injury via the regulation of autophagy-lysosome pathway. *Acta Neuropathol*. 2024 Oct 11;148(1):52. doi: 10.1007/s00401-024-02810-1. PMID: 39394356; PMCID: PMC11469979.
Prakash RS, McKenna MR, Gbadeyan O, Shankar AR, Pugh EA, Teng J, Andridge R, Berry A, **Scharre DW**. A whole-brain functional connectivity model of Alzheimer's disease pathology. *Alzheimers Dement.* 2025 Jan;21(1):e14349. doi: 10.1002/alz.14349. Epub 2024 Dec 23. PMID: 39711458; PMCID: PMC11781256.
McKenna MR, Gbadeyan O, Andridge R, Schroeder MW, Pugh EA, **Scharre DW**, Prakash RS. p-Tau/Aβ42 ratio associates with cognitive decline in Alzheimer's disease, mild cognitive impairment, and cognitively unimpaired older adults. *Neuropsychology*. 2025 Feb;39(2):137-151. doi: 10.1037/neu0000987. PMID: 39946634.
Acosta Ingram D, Turkes E, Kim TY, Vo S, Sweeney N, Bonte MA, Rutherford R, Julian DL, Pan M, Marsh J, Argouarch AR, Wu M, **Scharre DW**, Bell EH, Honig LS, Vonsattel JP, Serrano GE, Beach TG, Karch CM, Kao AW, Hester ME, Han X, Fu H. GRAMD1B is a regulator of lipid homeostasis, autophagic flux and phosphorylated tau. *Nat Commun*. 2025 Apr 9;16(1):3312. doi: 10.1038/s41467-025-58585-w. PMID: 40204713; PMCID: PMC11982250.
Tate JA, Mion LC, Migovich M, Ghosh R, Khan N, Kilpatrick A, **Scharre DW**, Newhouse PA, Maxwell CA, Tan A, Sarkar N. A multi-site randomized clinical trial of socially assistive robots on engaging older adults with cognitive impairment residing in long-term care settings: A protocol paper. *Contemp Clin Trials*. 2025 Jun 6;155:107980. doi: 10.1016/j.cct.2025.107980. Epub ahead of print. PMID: 40482961.
Bouchachi S, Scharre DW. A Practical Approach to Triaging Symptomatic Amyloid-Related Imaging Abnormalities. *Practical Neurol* 2025;24(4):38-41,51.
Pommy J, Sawney M, Bouchachi S, and Scharre DW. Clinical correlates of FDG PET and DATScan factors in heterogenous clinical setting. Presented at the AAIC conference, July 2025
Scharre DW, Truelove J, Kovesci R, Ramamurthy A, Thurin K, Middleton A, Bouchachi S. Anti-Amyloid Prescribing in Alzheimer's disease: Ohio State University Clinical Guidelines for Patient Selection, Assessments, and Management. Presented at the AAIC Conference, July 29th, 2025
Bankiewicz K, Elder B, Lonser R, Leger G, **Scharre D**, Tuszynski M. A phase 1 clinical trial of AAV2-BDNF gene therapy for Alzheimer's disease. Poster presentation at the 28th Annual meeting of ASGCT, New Orleans, Louisiana, May, 2025
Scharre DW. Tau in Alzheimer's Disease: Shaping the Future Patient Journey. Platform presentation at the Alzheimer's Disease International Conference (AAIC) 2025 in-person, Toronto, Canada, July 27-31, 2025
Our team of experts co-authored a Clinical Practice Guideline for the Ohio State University Wexner Medical Center: **Soumya Bouchachi, Renee Kovesci, Ashley Middleton, Arun Ramamurthy, Douglas Scharre, Kristina Thurin and Jessica Truelove**. Anti-Amyloid Monoclonal Antibody Prescribing in Patients with Alzheimer's. October 2024.

Continued on Reverse

Clinical Trials and Accomplishments
Dr. Ramamurthy and Renee Kovesci and Jessica Truelove expanded our Tele-Cog initiative, providing dementia expertise through virtual appointments to under-served rural communities.
Dr. Ramamurthy, Renee Kovesci, Kerri Wilkinson, and Victoria Klee spearhead our multidisciplinary early onset clinic for individuals under the age of 60 experience memory loss and dementia.
Jessica Truelove and Renee Kovesci lead our anti-amyloid and lumbar puncture clinics to find appropriate patients for anti-amyloid therapies and to manage their treatments
Dr. Kostyk, Dr. Laganiere, Kerri Wilkinson, and Victoria Klee lead and contribute to our multidisciplinary Huntington's Disease Clinic
Our research center was selected again to be a funded site both by the Lewy Body Dementia Association as a Research Center of Excellence (LBDA RCOE) and as a Huntington's Disease Society of America (HDSA) Center of Excellence
BDNF in early Alzheimer's disease and Mild Cognitive Impairment. BDNF (brain derived neurotrophic factor) gene therapy phase I, **first in human** clinical trial AAV2 vector-mediated delivery to entorhinal cortex for MCI due to AD or mild AD dementia: 3 subjects completed surgery
NIH grant to Drs. Ning (Biomedical Informatics) and **Scharre** (Neurology): Integrating eSAGE (BrainTest) with electronic medical record data using machine learning for the early detection and monitoring of cognitive impairment in individuals including those underserved
Pre-clinical trials (cognitive normal participants) to prevent AD using anti-amyloid and anti-tau monoclonal antibodies
ADNI4: The purpose of the study is to investigate biomarkers for early diagnosis and management considerations in participants with Mild Cognitive Impairment and early Alzheimer's disease
New drug discovery using a small-molecule with therapeutic potential for AD enhance tripartite glutamatergic synapse, phase 1, **first in human** trial
Trials for those with behavioral variant frontotemporal dementia and non-fluent primary progressive aphasia
Our OSU Memory Disorders Research Center through a foundation grant is studying those with Lewy body disease to discover novel imaging and sleep characteristics that will help with early diagnosis of these conditions.
Several recruiting clinical trials are focused on reducing inflammation and oxidative stress in the brain
Trials to improve psychotic behavioral symptoms in individuals with Alzheimer's dementia and dementia with Lewy bodies

Researchers and team members include:

Douglas W. Scharre, MD	*Megan Heagerty, CNP*	*Nicole Vrettos, MS, CCRP*	*Cassie Heslin, CRC*
Arun Ramamurthy, MD	*Rebecca Reneker, CNP*	*Kristina Rawson, CRC*	*Jasmine Mada, CRA*
Soumya Bouchachi, MD	*Christopher Nguyen, PhD*	*Emily Poland, CRC*	*Nic Spencer, CRC*
Sandra Kostyk, MD, PhD	*Jessica Pommy, PhD*	*Sydney Harmon, CRC*	*Tegan Lucas, CRC*
Kristina Thurin, MD	*Rochelle O'Neil, PhD*	*Kalleigh Clevenger, CRC*	*Emma Eckstein, CRA*
Renee Kovesci, CNP	*Kerri Wilkinson, MSW*	*Seanna Johnson, CRC*	*Elijah Poston, CRA*
Jessica Truelove, CNP	*Ashely Middleton, RN*	*Sarah Smith, CRA*	*Amilia Warkentine, CRA*
Oscar Harari, MD	*Jennifer Icenhour, CCRC*	*Victoria Klee, MS, CGC*	*Qania Yousef, CRA*
Haikady Nagaraja, PhD	*Erica Dawson, PhD*	*Veronica Thornton PhD*	*Lindsay Kwasniak*
Simon Laganiere, MD	*Shari Duarte, MD*		

To learn more information regarding any of the studies above, please call 614-293-6882 or email at *cogntive@osumc.edu*.

A research fund has been set up to provide an opportunity for individuals, families, and organizations to become a part of the cure by donating funds to help facilitate and support the research efforts of the Memory Disorders Research Center. This money is used directly for research conducted at Ohio State. The research has provided substantial benefits to the local Ohio patients and families that have participated in the studies and has contributed important knowledge regarding Alzheimer's disease and other dementing conditions to the research community and the world.

For donation information, please call Jennifer Lamb at (614) 625-8931. Make checks out to the OSU Foundation and place the fund number or name in the memo section. **The account number for the Alzheimer's disease Research Fund in Neurology is 302185.** Checks can be mailed to: The Ohio State University Foundation 14 E. 15th Ave, Columbus, Ohio 43201 Attention Jennifer Lamb.

We are grateful for your time and commitments to our research projects and thank you for your continued generosity, and we wish you and yours a wonderful holiday season!