

James Hall, PhD  
Family Medicine and Osteopathic Manipulative Medicine  
Institute for Translational Research  
Texas College of Osteopathic Medicine  
**Email:** James.Hall@unthsc.edu



## Area of Expertise

The focus of my research over the past few years has been on Alzheimer's disease and the identification of blood-based biomarkers that can be used in the early diagnosis of the disease. I have focused on investigating risk factors for cognitive decline and dementia in the Mexican-American elderly. I have also investigated the occurrence and identification of factors leading to neuropsychiatric symptoms of Alzheimer's such as depression, anxiety, and inappropriate behavior. Alzheimer's is a major public health concern, and developing accessible means to predict the disease and potentially allow for intervention to prevent or slow the disease is of upmost importance. Additionally, being able to identify those with the disease who are most likely to develop neuropsychiatric symptoms (the primary cause of caregiver stress and nursing home placement) can lead to early intervention and provide the groundwork for understanding the pathophysiology of neuropsychiatric symptoms of dementia. Developing treatment approaches for the pre-clinical stage of Alzheimer's disease to reduce the risk of developing neurodegenerative diseases is crucial to our aging population.

## Qualifications

BA in History, University of Iowa

PhD in Clinical Psychology, University of Nevada, Reno

## Recent Publications

### **Evaluation of Neighborhood-Level Disadvantage and Cognition in Mexican American and Non-Hispanic White Adults 50 Years and Older in the US**

HABS-HD Study Team, 1 Aug 2023, In: JAMA Network Open. 6, 8, p. e2325325

### **Plasma Biomarkers of Alzheimer's Disease Are Associated with Physical Functioning Outcomes Among Cognitively Normal Adults in the Multiethnic HABS-HD Cohort**

HABS-HD Study Team, 26 Jan 2023, In: Journals of Gerontology - Series A Biological Sciences and Medical Sciences. 78, 1, p. 9-15 7 p.

### **Medical comorbidities and ethnicity impact plasma Alzheimer's disease biomarkers: Important considerations for clinical trials and practice**

for the HABS-HD Study Team, Jan 2023, In: Alzheimer's and Dementia. 19, 1, p. 36-43 8 p.

### **Combination of Serum and Plasma Biomarkers Could Improve Prediction Performance for Alzheimer's Disease**

Zhang, F., Petersen, M., Johnson, L., Hall, J. & O'Bryant, S. E., Oct 2022, In: Genes. 13, 10, 1738.

### **Depression is differentially related to cognitive and biomarker outcomes among Mexican Americans**

The HABS-HD Study Team, 23 Aug 2022, In: Frontiers in Psychiatry. 13, 901403.

### **Characterizing Plasma Biomarkers of Alzheimer's in a Diverse Community-Based Cohort: A Cross-Sectional Study of the HABS-HD Cohort**

The Health and Aging Brain Study (HABS-HD) Study Team, 18 Aug 2022, In: Frontiers in Neurology. 13, 871947.

### **Hyperparameter Tuning with High Performance Computing Machine Learning for Imbalanced Alzheimer's Disease Data**

Zhang, F., Petersen, M., Johnson, L., Hall, J. & O'bryant, S. E., 1 Jul 2022, In: Applied Sciences (Switzerland). 12, 13, 6670.

### **APOEε4 Genotype Is Related to Brain Amyloid Among Mexican Americans in the HABS-HD Study**

The HABS-HD Study Team, 15 Jun 2022, In: Frontiers in Neurology. 13, 834685.

**New insights into the genetic etiology of Alzheimer's disease and related dementias**

EADB, GR@ACE, DEGESCO, EADI, GERAD, Demgene, FinnGen, ADGC & CHARGE, 1 Apr 2022, In: Nature Genetics. 54, 4, p. 412-436 25 p.

**The Link between APOE4 Presence and Neuropsychological Test Performance among Mexican Americans and Non-Hispanic Whites of the Multiethnic Health & Aging Brain Study - Health Disparities Cohort**

O'Bryant, S. E., Barber, R. C., Philips, N., Johnson, L. A., Hall, J. R., Subasinghe, K., Petersen, M., Toga, A. W., Yaffe, K. & Rissman, R. A., 1 Apr 2022, In: Dementia and Geriatric Cognitive Disorders. 51, 1, p. 26-31 6 p.