

Leigh Johnson, PhD
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Institute for Translational Research
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Area of Expertise

My area of expertise is in translational aging research. I am the Co-I of Health & Aging Brain among Latino Elders (HABLE) study (R01AG054073) and the Director of the Clinical and Outreach cores for this study. I have spent a great deal of time studying factors related to cognitive loss among Mexican-Americans with a specific emphasis on the link between depression and cognition. I have developed and cross-validated a depressive endophenotype (DepE) of cognitive aging across multiple national and international cohorts. This work has been translated into a proof of concept clinical trial (The DEMO trial). The DEMO trial utilizes a precision medicine approach to identify those individuals more likely to benefit from antidepressant treatment for prevention of memory loss and potentially Alzheimer's disease.

Qualifications

BSW in Psychology, Louisiana State University
MSW, Louisiana State University
PhD in Social Work, University of Texas at Arlington

Recent Publications

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.

Type 2 diabetes and cortical thickness in older Mexican Americans and non-Hispanic Whites

Braskie, M. N., Hazra, N., Kothapalli, D., Cho, H. J., Lester, J., Rogers, J. N., Palmer, R. F., Vintimilla, R., Johnson, L. A., Yaffe, K., Toga, A. W. & O'Bryant, S. E., Dec 2022, In: Alzheimer's and Dementia. 18, S5, e065815.

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 HAB-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.

APOE ϵ 4 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

CHARGE, EADB, GR@ACE, DEGESCO, EADI, GERAD, Demgene, FinnGen & ADGC, 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.

Characterizing plasma NFL in a community-dwelling multi-ethnic cohort: Results from the HABLE study

for the HABLE Study Team, Feb 2022, In: Alzheimer's and Dementia. 18, 2, p. 240-250 11 p.

Sponsored Projects

A Blood Test for Screening into Alzheimer's Prevention Trials

O'Bryant, S., Hall, J. & Johnson, L.

NIA: National Institute on Aging

15/09/17 → 30/06/22

Amyloid Burden among Mexican Americans

O'Bryant, S., Hall, J., Johnson, L. & Nandy, R.

NIA: National Institute on Aging

30/09/18 → 31/08/19

Amyloid Burden among Mexican Americans

RISSMAN, R., TOGA, A., RISSMAN, R., TOGA, A., Johnson, L., O'Bryant, S., O'BRYANT, S., O'Bryant, S., JOHNSON, L., O'BRYANT, S., JOHNSON, L., RISSMAN, R. & TOGA, A.

National Institute on Aging

30/09/18 → 30/04/22

An Alzheimer's Blood Test for Primary Care

O'Bryant, S., Hall, J., Johnson, L. & Nandy, R.

NIA: National Institute on Aging

1/06/18 → 31/05/21

A Pro-Inflammatory Endophenotype to Predict Treatment Response to NSAID Therapy in AD

O'Bryant, S., Hall, J. & Johnson, L.

NIA: National Institute on Aging

1/09/16 → 31/03/21

Community-Based Primary Care for the Elderly

Mason, D., Knebl, J., Johnson, L., Bugnariu, N. & O'Bryant, S.

Centers for Medicare & Medicaid Services

28/05/13 → 31/12/17

Development and Validation of the Cumulative Environmental Exposure Index for Arsenic: A Novel Environmental Public Health Indicator

O'Bryant, S. & Johnson, L.

Environmental Protection Agency (EPA)

1/03/12 → 28/02/14

Genetic and Biomarker Study of Alzheimer's Disease - Recruitment of Mexican Americans into the Texas Alzheimer's Research Consortium (TARC)

O'Bryant, S., Hall, J., Johnson, L. & Large, S.

Alzheimer's Disease Program

1/09/16 → 31/08/17

Genetic and Biomarker Study of Alzheimer's Disease - Recruitment of Mexican Americans into the Texas Alzheimer's Research Consortium (TARC)

O'Bryant, S. & Johnson, L.

Alzheimer's Disease Program

1/03/12 → 31/08/15

Genetic and Biomarker Study of Alzheimer's Disease - Recruitment of Mexican Americans into the Texas Alzheimer's Research Consortium (TARC)

O'Bryant, S. & Johnson, L.
Alzheimer's Disease Program
1/09/15 → 31/08/17

Genetic Architecture of Alzheimer's disease Proteinopathies

Johnson, L., CRUCHAGA, C., CRUCHAGA, C. & KAMBOH, I.
15/04/21 → 28/02/23

Health and Aging Brain among Latino Elders (HABLE-AT(N)) Study

RISSMAN, R., TOGA, A., RISSMAN, R., O'BRYANT, S., JOHNSON, L., JOHNSON, L., O'Bryant, S. & Johnson, L.
National Institute on Aging
1/08/20 → 30/04/23

Health Disparities in Alzheimer's Disease among Mexican Americans

O'Bryant, S. & Johnson, L.
NIA: National Institute on Aging
1/09/16 → 31/08/17

Health Disparities in Alzheimer's Disease and Mild Cognitive Impairment among Mexican Americans

O'Bryant, S., Hall, J. & Johnson, L.
NIA: National Institute on Aging
1/09/17 → 31/05/22

Inflammation as a Pathway for the Depression-cognition Link

Johnson, L. & O'Bryant, S.
National Alzheimer's Association
1/10/16 → 30/09/18

Structural Neuroimaging Biomarkers of a Depressive Endophenotype of MCI among Mexican Americans

Johnson, L.
Intramural Research(UNTHSC)
1/10/13 → 31/08/15

The Health & Aging Brain Study - Health Disparities (HABS-HD)

O'Bryant, S., Johnson, L., TOGA, A., YAFFE, K. & RISSMAN, R.
National Institute on Aging
30/09/22 → 31/08/23

Therapeutic Effects of Exercise in Adults with Amnesic Mild Cognitive Impairment

O'Bryant, S. & Johnson, L.
University of California, San Diego
15/03/16 → 28/02/19

The Role of Depression on Cognition in the Elderly (For: Menaka Yadav)

Johnson, L.
Intramural Research(UNTHSC)
15/10/15 → 28/02/17

Understanding Depression-Related Memory Loss among the Elderly

Johnson, L. & O'Bryant, S.
Pfeiffer Research Foundation
1/06/14 → 31/08/16

Understanding Depression-Related Memory Loss among the Elderly "Proof of Concept"

Johnson, L.

J. E. S. Edwards Foundation

1/09/16 → 31/08/18

Understanding the Influence of Depression on Diabetes in Mexican Americans

Johnson, L.

The Hogg Foundation for Mental Health

1/06/12 → 31/05/13