

Postdoctoral Fellow in Precision Medicine for Alzheimer's Disease

We are currently seeking candidates for a postdoctoral fellow to join the Richman Family Precision Medicine Center for Alzheimer's Disease in the Department of Psychiatry and Behavioral Sciences at Johns Hopkins University. The goal of this position will be to develop statistical machine learning methods for analyzing electronic health record (EHR) data and to apply these methods to understand and predict the progression of Alzheimer's disease and related dementias.

Under the mentorship of Dr. Roy Adams, the postdoctoral fellow will gain experience working with real-world EHR data including unstructured clinical notes and brain imaging to identify disease subtypes, study the impact of existing medications on disease progression, and predict which patients are at highest risk for cognitive decline. Methodological areas of interest include measurement error, observational causal inference, dataset shift, and latent variable modeling, including clustering and dimensionality reduction. The postdoctoral fellow will work as part of the Richman Family Precision Medicine Center of Excellence in Alzheimer's Disease, a multidisciplinary center comprising psychiatrists, geriatricians, biologists, statisticians, medical imaging specialists, and data scientists.

Qualifications: Applicants must have trained with a strong emphasis on machine learning or data science using Python and/or R programming. Preference will be given to individuals with expertise in large-scale data analysis or electronic health records and those with an interest in healthcare, psychiatry, or dementia research. The position is open to graduating Ph.D., M.D. or M.D./Ph.D. students in computer science, bioinformatics, health informatics, statistics, engineering or a related discipline.