

Clinical Psychology Training Programs at Brown: A Consortium of the Providence VA Medical Center, Lifespan, and Care New England Postdoctoral Fellowship Training Program Postdoctoral Fellowship Description: CLINICAL FOCUS

Title:	Postdoctoral Neuropsychology Fellowship in Alzheimer's Disease and Related Dementias
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Site:	Butler Hospital
Supervisor(s):	Louisa Thompson, Ph.D. (Primary Supervisor) Edward Huey, M.D. Meghan Riddle, M.D. Nicole McLaughlin, Ph.D. Athene Lee, Ph.D. Richard Jones, Sc.D.

Description of Site

This two-year fellowship at Butler Hospital is part of the Clinical Neuropsychology Specialty Program (CNSP) within the Postdoctoral Fellowship Training Program (PFTP) of Brown University's clinical psychology training Consortium. The fellow will spend 40% of their time in research at Butler Hospital with a focus on Alzheimer's disease and related dementias (ADRD). Additionally, the fellow will devote 50% of their time to clinical and clinical research activities. The final 10% of time will be devoted to didactics.

Founded in 1844, Butler Hospital is a private, nonprofit psychiatric hospital for adults, adolescents, children, and seniors. Butler is affiliated with the Alpert Medical School of Brown University. The fellow will work in the Butler Hospital Memory and Aging Program (MAP), directed by Drs. Edward Huey and Megan Riddle. The MAP is home to multiple investigator-initiated NIH/NIA-funded research studies and is a leading clinical trial center for Alzheimer's disease in the United States, with a strong commitment to accelerating drug and biomarker development and training young investigators for careers in ADRD research.

Outpatient Clinical Service

The MAP includes an outpatient clinic that evaluates approximately 200 new patients with cognitive impairment annually. Patients undergo extensive workups, including neurologic examination, neuropsychological testing, MRI scan, laboratory tests, and genotyping. Patients may undergo biomarker testing as well, such as CSF protein assay or amyloid PET scan. Thus, fellows are exposed to state-of-the-art diagnostic and treatment methods for ADRD.

Research Focus

Clinical research at MAP has a strong emphasis on disease phenotyping and minimally invasive methods for early detection, including neuropsychiatric symptom characterization, digital cognitive screening, retinal imaging, and blood-based biomarkers. The program is also conducting landmark multi-site clinical

studies including POINTER, ADNI, DIAN, LEADS, and ALLFTD. Fellows will have access to data collected via the Butler Hospital Alzheimer's Prevention Registry, a database of more than 5,000 older adults who are interested in participating in AD research and a repository for study participant data. The program also boasts a growing frontotemporal dementia (FTD) research initiative, with databases of over 1,000 patients with FTD-spectrum illnesses and ongoing NIH- and foundation- funded studies examining the neuroanatomical and physiological bases of neuropsychiatric symptoms in FTD and ADRD. We have also recently launched three new longitudinal validation studies focused on characterizing novel plasma and retinal imaging biomarkers for the early detection of AD and improving methods of cognitive screening in primary care, with a focus on community outreach in underrepresented populations.

Community Outreach & Engagement

Much of the MAP's success is attributed to our creative and dynamic Outreach Team. The Outreach Team hosts presentations with community groups including the RI/MA/NH Alzheimer's Associations, senior centers, health expos, primary care offices and other community organizations. In 2022 alone we attended approximately 165 community events in RI and MA. We formed the MAP Community Advisory Board in 2020 to guide our diversity outreach efforts especially in RI's Latino and African American communities. We also established a collaboration with the RI Ministers Alliance to promote a lifestyle intervention study within the faith-based community. These efforts have helped increase ADRD study participation from underrepresented populations and are a stepping stone to larger health conversations to promote healthier older adults, families and communities. Since 2020, MAP has been awarded 3 diversity grants to help engage with RI's socioeconomically and ethnoculturally diverse communities. Most recently we were selected to be a hubsite for ADNI-4's Engagement Core program. Together these grants have helped us establish a community brain health room and support a part time community liaison, hire a diversity outreach coordinator, implement cognitive screening pop-ups in community clinics and bring education and on-site plasma testing to community centers located in predominantly Spanish-speaking neighborhoods. All of these efforts have created a stronger foundation for bidirectional cultural learning and improved community collaboration when it comes to brain health.

Rhode Island's Research Network

Rhode Island is a dynamic center for AD research and the MAP is recognized as a leader in this area with collaborative ties to other ADRD researchers at Brown University, Rhode Island Hospital, and the University of Rhode Island. In 2021, Brown University established a new Center for Alzheimer's Disease Research with the aim of building a world-class research program focused on early detection and treatment of ADRD. The center integrates the expertise of the Robert J. and Nancy D. Carney Institute for Brain Science and the Division of Biology and Medicine. These research collaborations span a broad spectrum of activity including basic science, neuropathology, advanced brain imaging, and neuroscientific paradigms that probe the early neurocognitive and neurocircuitry changes in the disease.

Fellowship Aims

- To provide the fellow with expertise in the design, conduct, and management of NIH-funded clinical research studies for cognitive disorders in aging (both preventative and symptomatic).
- To provide the fellow with experience in design, execution, analysis and publication of an independent research project in the field or ADRD.
- To enable the fellow to continue to refine skills in neuropsychological assessment and to gain experience working with a multidisciplinary clinical team evaluating and treating patients with early cognitive impairment or dementia due to ADRD.

Fellowship Timeline

The duration of the fellowship is typically 2 years, contingent upon satisfactory progress. The anticipated start date is July-September. Consistent with Training Committee policy, the fellow and the mentor will notify each other in December whether the commitment will be made for a second year.

<u>Research Activity Plan</u> ("research time" = 40% of total time)

The fellow will provide support on investigator-initiated research studies and clinical trials of ADRD. Additional protected time will also be provided for the development of independent research projects and grant proposals. Individual supervision will be provided by Drs. Huey and Thompson.

- Contributing to Investigator-initiated MAP research projects (20% of research time):
 - a. Contributing to the preparation of NIH and/or foundation grants.
 - b. Performing study procedures and data analysis in collaboration with research faculty.
 - c. Drafting manuscripts for publication and preparing other modalities for dissemination of research results (e.g., conference presentations, media presentations).
 - d. Serving as a liaison with community groups, giving public education talks and engaging in participant recruitment (with a focus on minority recruitment).
- Independent research activities (20% of research time):
 - e. Conducting a review of the literature in an area of their choosing to form the basis for a grant application or manuscript.
 - f. Submitting F32, NIH Career Development Award, or foundation grants (optional).
 - g. Conducting studies using existing datasets or prospective data available through MAP (AD Prevention Registry) or national networks (e.g., ADNI, ALLFTD, NACC).
 - h. Communicating research findings at professional conferences, MAP academic research meetings, and Brown's Mind Brain Research Day.

<u>**Clinical Activity Plan**</u> ("clinical time" = 50% of total time)

Fellows will provide clinical research support and see patients through the Neuropsychology Program at Butler Hospital, with a training emphasis on developing expertise in assessment of cognition in aging, neurodegenerative disease and neuropsychiatric conditions. Individual supervision will be provided by Drs. McLaughlin and Lee.

- Conducting up to two outpatient neuropsychological evaluations (40%) per week on patients referred from the Neuropsychology service and MAP clinic, providing the opportunity for training in neuropsychological assessment and differential diagnosis.
- Providing clinical trials research support in the MAP (10%), in the form of clinical interviews, biomarker disclosures and counseling, neuropsychological assessments, or providing clinical oversight for eligibility questions in studies.
- Attending weekly multidisciplinary Diagnostic Consensus Conference, where staff will review history, neurologic exam, neuroimaging, neuropsychological and genetic workup and make diagnosis and treatment recommendations. These conferences are conducted as teaching rounds with trainees called upon to make judgments and defend their reasoning. (1 hour per week).
- Providing clinical supervision (tiered supervision) to neuropsychology residents or practicum students from regional clinical psychology graduate programs that are training in the MAP. This activity is contingent upon the availability of practicum students to supervise.
- For more clinically focused fellows, there is an option to conduct brief neuropsychological consultations in the inpatient and partial hospital units, and pre- and post-surgical evaluations of

patients undergoing surgery for treatment-resistant OCD. There may also be opportunities to see occasional child or adolescent outpatient cases with Dr. McLaughlin.

Path toward licensure: YES X NO

Path to licensure is dependent on the fellow completing at least 12.5% clinical time in both fellowship years.

Didactics and Trainings (10% time)

The trainee is required to attend:

Dept. of Psychiatry & Human Behavior (DPHB) Grand Rounds (monthly, Years 1&2) DPHB Postdoc Core Seminar (monthly, Year 1) DPHB T32 Core Seminars (1 per week, Butler Hospital, Year 1). MAP Academic Research Meeting (bi-weekly, Years 1 & 2) MAP Clinical Consensus Conference (weekly, Years 1 & 2) Department of Pathology Brain Cuttings (at least once in Years 1 or Year 2) Clinical Neuropsychology Specialty Program Seminar Series

The trainee may attend the following depending on scheduling and other commitments and with permission from the primary supervisor:

Department of Neurology Grand Rounds (weekly, attend when content is relevant) DPHB Research Rounds Brain cutting Department of Diagnostic Imaging Rounds DPHB Biostatistics Seminar (monthly, attend when content is relevant) DPHB grant writing workshops Advance-CTR training opportunities

Supervision and Evaluation

Supervision will be provided in the form of both daily individual supervision and weekly group supervision. Drs. Huey and Thompson will serve as the primary research supervisors. Drs. McLaughlin, Lee, and Riddle will supervise clinical activities. Dr. Rich Jones will provide supervision on study design and biostatistics. At a minimum, a full-time fellow will receive four hours structured learning activities per week, at least two hours of which will include individual, face-to-face supervision. Every 6 months for the duration of the fellowship, the fellow and the supervisors will provide formal evaluations, and evaluations of the program relative to the goals and learning objectives of the fellowship.

Please visit the **Brown Faculty** page to view supervisor profiles.

Resource Requirements

Fellow will be provided with the following resources:

- Access to space appropriate for clinical care
- Neuropsychological test materials
- A computer and project specific software
- Internet access
- Telephone
- Shared office space for personal use
- Testing rooms for evaluation of clinical trials participants and outpatients

Reporting and approval

This fellowship will be part of the Clinical Neuropsychology Specialty Program. The position has been previously discussed and approved by the Neuropsychology Track faculty in their monthly meeting.

Associate Director, Clinical Neuropsychology Specialty Program

Director, Clinical Neuropsychology Specialty Program

Director, Postdoctoral Fellowship Training Program