



MASSACHUSETTS
alzheimer's disease
research center



MADRC RESEARCH EDUCATION COMPONENT 2022-2023 PROGRAM

The Research Education Component (REC) of the Massachusetts Alzheimer's Disease Research Center (MADRC) is designed for fellows and junior faculty as a complement to a post-doctoral or clinical fellowship or K award, or for investigators at any stage who are new to Alzheimer's disease and related disorder (ADRD) research.

Mentors: Each REC trainee is assigned a primary mentor—typically in the trainee's own field-- and secondary mentor—typically in a complementary field. Trainees meet with their mentors regularly, at least monthly for the primary mentor and quarterly for the secondary mentor.

Core lecture series and other didactics. Each core lecture involves a 1-hour presentation followed by a virtual social hour including program faculty. We begin in July with an Alzheimer "boot camp," and then move on to more advanced academic topics through the year. REC Trainees are also invited to the Memory Disorders Unit Monday noon conferences and other ADRC events. (*Core lectures are currently held on zoom, 2-3 Wednesdays per month, from 4-6 pm.*)

Immersive experiences. We feel that each REC participant should be exposed to a range of core clinical and research activities to better understand our common purpose. Most of the following activities must be scheduled in advance, and may require confidentiality documents or other paperwork (*Trainees can arrange with the ADRC Administrator*).

Attend Memory Division Clinic. Ten or more physicians hold busy clinics on Wang 8 every Monday afternoon and some Tuesdays (*1-2 trainees can be accommodated at a time, but on hold due to COVID*).

Observe an ADRC longitudinal cohort participant physician visit or neuropsychological testing. With permission of the participant, trainees can attend these visits in person or online and review with study team. (*Currently virtual, but at least some expected to transition back to in person.*)

Attend the longitudinal cohort consensus conference. See the complexities of reaching a diagnosis in complex cases. (*Currently virtual, most Fridays at 11:30, with unlimited space, but requires confidentiality documents and may require advance scheduling if we return to in person.*)

Attend the longitudinal cohort clinicopathological conference. See how well clinical diagnosis stacks up against autopsy and review the most interesting recent neuropathologic cases. (*Virtual, typically on the 1st Friday of the month at 12:30, with no space constraints.*)

Attend Virtual brain cutting. This is clinical neuropathological teaching conference for the Neuropathology program as a whole. REC trainees are added to mailing list, and we let them know whenever the case is of particular interest. (*Most Fridays at 10, remote with unlimited capacity.*)

Visit the ADRC brain bank. Located in CNY Building 114, interested trainees can arrange to visit the brain bank in addition to or instead of brain cutting. (*Limited access due to COVID, but still available.*)

Visit an MGH lab or neuroimaging group outside your own research area. There are several major labs in CNY Building 114, plus several neuroimaging research groups in CNY Building 149. You can watch

animal behavioral experiments, staining and visualization of brain tissue, or neuroimaging analysis, to name a few. *(Limited access due to COVID, but still available.)*

Attend an Outreach Core event. These typically occur on weekends and evenings, and vary widely. Trainees can join a recruiting session, or when they are ready, can give a talk at a community event or at one of our ADRC-sponsored support groups for family members; trainees who can give talks in Spanish and other languages spoken in the local community are especially sought after. *(Most events are still virtual, but this may change.)*

Research rotations. In addition to your primary research work, talk to your mentors about organizing specific research training activities to bring your research to the next level. This might include arranging courses through the Harvard CATALYST, HSPH, the Martinos Center, etc. It might also include stints in other MGH or Boston research groups, or if travel funds and COVID restrictions permit, visits to other research groups near and far to gain additional techniques and skills—we have a specific exchange relationship with the UCSF and NYC ADRCs, and wide connections elsewhere as well. Your mentor and other ADRC faculty can help you find opportunities to meet your specific needs. *Note: If you want to do research at MGH and do not have an appointment here, you may need additional paperwork to have access to research materials or sites here, and again there are additional restrictions with COVID. (Some events virtual, and some in person).*

Leadership Course. You will have the opportunity to participate in a forward-thinking leadership development training led by accomplished, future-focused leader and management consultant Deborah Westphal of Toffler Associates. The program will give you an understanding of how core concepts developed by Heidi and Alvin Toffler apply to strategy and decision making relative to your position and career direction. *(Likely to be four virtual 2-hour sessions during the second half of the year in lieu of didactics and social hour).*

Career development activities. Each trainee should plan to give at least one professional talk, submit one manuscript, attend one conference, and plan (or submit) one grant application during their year with us. Start early with your mentor to plan for these, along with other key issues specific to your needs and your field. Depending on your level of experience, it may make sense to take a grant writing class through the CATALYST or MGH Clinical Research Program. The Admin Core staff is also available to work with you on budgeting issues. *(Contact the ADRC administrator to arrange for budget supervision).*

Speaking opportunities. We offer opportunities for REC trainees to speak and present their work at the Memory Division Monday noon conference as well as at joint REC events with NYU and UCSF. And as noted above, program mentors also encourage trainees to plan poster and platform presentations at conferences. In addition, we hope to provide guidance and opportunities to speak to lay audiences.

Education in the Responsible Conduct of Research (RCR). All trainees are required to attend formal programs in RCR. We have included RCR talks embedded in our Core Lecture series, we can refer you to specific MGH and Harvard CATALYST programs, and of course your work with your mentors will include a focus on rigor and ethics.

Social events. REC trainees are included in ADRC social events, as well as REC events. We're also working on a contact list for current and former REC Trainees. *(Most in person events are on hold due to COVID aside from the social hour after didactics, but we are hoping to resume these activities soon).*