

## Post-Doctoral Training Program in Population Neuroscience of Alzheimer's Disease and Age-related Dementia (PNA)

The University of Pittsburgh offers a postdoctoral training program in Population Neuroscience of Aging & Alzheimer's Disease. The PNA Training Program will train highly talented individuals to pursue successful independent research in the etiology of Alzheimer's Disease and other age-related dementia (ADRD). The Program offers 2 positions, each one for up to 3 years.

**Our Vision:** To understand the causes and mechanisms of ADRD, population neuroscientists of the future must be able to link environmental exposures, lifestyles, comorbidities, and genomics with knowledge of modern technology of neurosciences and measurements of brain disease and data science. Our PNA curriculum addresses this need by providing:

- a) foundational knowledge in population science and neuroscience of aging;
- b) availability of multi-center and international databases;
- c) enhanced training in cutting-edge multimodal methodologies to measure brain changes with age, including neuropsychological assessment, neuroimaging, and post-mortem assessments;
- d) hands-on experiences on recruitment and data collection, including internet-based study designs;
- f) opportunity to network with high-caliber scientists locally, nationally and internationally;
- g) training in the responsible conduct of research.

**Our Curriculum.** The Population Neuroscience of Aging curriculum offers targeted coursework and selected research rotations, tailored to each individual's background and research objectives.

**Coursework:** PNA trainees must demonstrate a strong commitment to expand their knowledge of study design and population neuroscience of aging. Required coursework includes: Population Neuroscience (fall, 1CR) and Neuroepidemiology (spring, 2CR). Additional coursework in neuroscience, epidemiology, and data science will be tailored for each trainee's background and research interests, in consultation with the mentor. Examples include: multimodal neuroimaging (summer, 2 CR); Biology of aging (summer, 1 CR); Neurobiology of aging (fall, 2CR).

**Research Practicum:** Through the practicum, trainees will learn the foundations of carrying out original neuroepidemiological research. The practicum includes rotations in: Data collection, Data Analysis, and Clinical Research. Each rotation is overseen by the primary mentor and/or a member of the mentoring team with expertise in that specific area. Through these rotations, trainees will: a) learn practical aspects of conducting research, including how to work within a multidisciplinary team; b) complete at least one original scientific manuscript for submission to a peer-reviewed journal; and c) complete the first draft of a new grant research proposal reflecting the trainee's independent thinking.

### Eligibility criteria:

- US citizen or US Permanent Resident;
- MD, PhD, DrPh or equivalent doctoral degree in: Epidemiology, Neuroscience, Psychology, Health Related Sciences (nursing, rehabilitation science), Biostatistics, Information Science, Biomedical informatics;
- Strong commitment to pursue research in ADRD, using epidemiological and neuroscience methods.
- Prior research experience and publications.

**How to apply:** provide the following documents (submit by email to [stc15@pitt.edu](mailto:stc15@pitt.edu)):

- NIH biosketch or CV (include list of relevant coursework)
- One page personal statement that briefly describe background, research interests, and goals while in the program;
- Three references related to the applicant's academic work.