Pre-doctoral Training Program in Population Neuroscience of Aging & Alzheimer's Disease (PNA) for graduate students

The University of Pittsburgh offers a pre-doctoral training program in Population Neuroscience of Aging & Alzheimer's Disease. The PNA Program trains highly talented graduate students to pursue successful independent research in the etiology of Alzheimer's Disease and other age-related dementia (ADRD). The Program offers 3 positions, each one for up to 4 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 Writing in Population Neuroscience (summer, 2CR). Additional coursework in neuroscience, epidemiology, and data science will be matched to the students' background and research interests, in consultation with the academic advisor. Examples include: Biology of aging (summer, 1 CR); Neurobiology of aging (fall, 2CR); Population Neuroimaging (spring, 2CR). Upon completion of the coursework, trainees will have identified the dissertation topic and will have completed the first draft of the dissertation document.

Research rotations: Research rotations guide trainees to apply the concepts learnt in class with the goal to conduct original neuroepidemiological research. Each trainee is required to participate in three rotations: Data collection, Data Analysis, and Clinical Research rotation. 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;
Accepted in one of our affiliated Graduate Programs (Epidemiology, Neuroscience, Psychology, Health Related Sciences, Biostatistics, Information Science, Biomedical informatics);
Strong commitment to pursue research in ADRD, using epidemiological and neuroscience methods.

Preference is given to candidates with a background in neuroscience, psychology or population/data science. Previous research exposure in the above fields is desirable but not required.

How to apply: Email a one page personal statement to RosanoC@edc.pitt.edu (with email subject line "T32 Pre-doc Application") describing the following:
- Academic background (degree, major, list of relevant classes); Prior research experience, if applicable.
- Research interests and goals while in the program;
- Three references related to the applicant's academic work.