

Postdoctoral Fellowship on Vascular Neuroimaging and Alzheimer's Disease

Where? University of Wisconsin-Madison, Departments of Radiology, Madison, WI, USA

Position Type: Full-time, Postdoctoral Fellowship

Position Summary

We are seeking a highly motivated and collaborative **Postdoctoral Research Fellow** to join our multidisciplinary team investigating the interplay between Alzheimer's disease, cerebrovascular disease, and brain aging with neuroimaging. The Fellow will contribute to innovative projects leveraging **multi-modal neuroimaging (MRI, PET), biofluid markers, and cognitive assessments** to better understand disease mechanisms, develop imaging biomarkers, and identify predictors of cognitive decline in aging and dementia.

Key Responsibilities

- Develop and apply advanced image reconstruction, processing, and quantitative analysis methods for **MRI-based markers of cerebrovascular health**.
- Lead and support analyses integrating **structural and vascular MRI with PET, biofluid (CSF, plasma) and cognitive data** from large longitudinal aging cohorts.
- Collaborate with an interdisciplinary team of imaging scientists, radiologists, neuroscientists, biostatisticians and others.
- Prepare manuscripts, present findings at national/international conferences, and contribute to writing of grant proposals.

Preferred Qualifications

- Ph.D. in **Medical Physics, Biomedical Engineering, Neuroscience, Data Science, or a related field**.
- Demonstrated experience in neuroimaging and **MRI acquisition, reconstruction, and analysis**.
- Familiarity with **multi-modal data integration** (imaging, biofluids, cognitive/clinical data).
- Strong programming skills in **Python, MATLAB, R, or similar**.
- Excellent written and oral communication skills.
- Interest in Alzheimer's disease, cerebrovascular disease, and translational neuroimaging.

Why Join Us?

- Engage with a leading research center focused on aging and dementia (**Wisconsin ADRC**).
- Access to **state-of-the-art MRI infrastructure** (e.g. Signa MAGNUS GE) and rich, well-characterized longitudinal data sets.
- Opportunities for professional development, mentorship, and leadership within multidisciplinary projects.
- Vibrant, collaborative research in a college town environment. Madison is a wonderful place to live. It has all the amenities of a big city but the ease of living of a small town.

Interested? For further information contact Dr. Leonardo Rivera-Rivera (larivera@wisc.edu). Please include a CV and contact information for 2-3 letters of support including your most recent supervisor.

