**Post-Doctoral Position in Neuroimaging of Neurodegenerative Diseases**

**POSITION SUMMARY:** Applications are invited for a post-doctoral position in a vibrant Neurology/Radiology Laboratory that performs cutting edge research at Washington University in St. Louis. The laboratory studies neurodegenerative disease (Late Onset Alzheimer’s Disease and genetic causes of Alzheimer’s Disease – especially Down Syndrome). The laboratory performs multi-modal imaging of the human brain using structural (e.g., volumetric imaging and diffusion tensor imaging [DTI]) and functional (e.g., Blood oxygen level dependent [BOLD] imaging and arterial spin labeling [ASL]) MRI in conjunction with molecular imaging (e.g. amyloid, tau, inflammatory, and synaptic PET). The focus of the lab is to understand how disruption of brain organization mediate symptoms and disease progression. Results from these investigations will inform clinical trials designed to improve the treatment of these disorders.

This position is ideal for an individual interested in pursuing an independent research career in an academic setting. The applicant will be encouraged to pursue independent funding (e.g., NRSA fellowship, K Award). Opportunities are available for investigating personal research interests. *Opportunities exist for conducting research remotely during the pandemic.* Funding is guaranteed for at least 2 years with additional funding conditional upon satisfactory performance.

**PRIMARY DUTIES AND RESPONSIBILITIES (Essential Functions):** The primary responsibility of the applicant will be to conceive, design, and analyze studies pertaining to neuroimaging changes seen in neurodegenerative disease. Training will be under the supervision of a faculty mentor will include advancement in topics of experimental design, analytic strategies and statistics, and scientific writing and presentation. Anticipated activities will entail processing and implementing new analytic strategies to facilitate understanding of neurodegenerative diseases, integrating large active multi-modal neuroimaging datasets, and analyzing relationship between brain imaging markers and cognition, biofluids, or clinical status. The applicant will lead in writing manuscripts and assist in preparing NIH progress reports.

**PREFERRED EDUCATION/EXPERIENCE:** PhD in neuroscience, computer science, or psychology with previous experience with computational methods, scientific programming, and neuroimaging data. The lab primarily uses MATLAB, Python, SPSS, R, and Freesurfer for the analysis of imaging data. Competency in these languages/software-packages is preferred but not required. Experience with patient-oriented research is preferred but not required. A team science environment is a key component of the laboratory. The ability to work with undergraduate and graduate students is preferred.

**CRITICAL SKILLS AND EXPERTISE:** The applicant must be motivated, reliable, mature, able to multi-task and learn new tasks quickly, and have strong interpersonal, organizational, and communication skills (both verbal and written) to work with other lab members. The successful applicant should have a background in scientific computing and programming. The applicant should have experience designing or adopting statistical approaches to address key questions that will move the field forward. Preference will be given to applicants with a strong publication record or experience with grant applications.

The position is currently open. Review of applications will begin immediately and will continue until the position is filled. Only applicants considered for employment will be contacted. Salary is commensurate with NIH guidelines and the applicant’s experience.

To apply, please send a CV, statement of interest, relevant manuscripts, and names of three references to [bances@wustl.edu](mailto:bances@wustl.edu).

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