College of Human Medicine
Department of Translational Science and Molecular Medicine
Research Associate - Off-Campus/Non-Union
Job Description

**Required Education/Experience/Skills**: This position requires a doctoral degree in biological sciences, molecular neuroscience is preferable; at least four years of experience working in a basic science laboratory; and at minimum an understanding of standard molecular biology, biochemistry, mass spectrometry-based proteomics and rodent animal model techniques. Skills needed are experience with data generation and handling, data interpretation, writing up laboratory procedures and results, the ability to supervise students, and the use of standard computer software. Good command of written and spoken English is required.

**Desired Education/Experience/Skills**: Knowledge and/or experience with cloning, gene expression, recombinant protein production, protein analyses (e.g. western blotting and ELISAs), tandem mass spectrometry analysis, tissue culture (both cell lines and primary neurons), and viral vector-based gene therapy. Knowledge of tau protein biology, neuroanatomy, tissue sectioning, and neuroproteomics are highly desired. Experience with animal handling, tissue extraction, survival surgery, and behavioral testing for mice are also desirable. The successful applicant should be proficient with basic statistical analyses as would normally be expected for biomedical research.

**Job Summary**: A postdoctoral fellow is being sought for participation in a research aimed at identifying and characterize proteome changes induced/mediated by the pathogenic role of tau protein in neuronal dysfunction and degeneration. This highly interdisciplinary project will involve studies that will help to better understand proteome changes in specific brain regions due to the present or transmission of pathological tau species. A multitude of experimental approaches that includes protein biochemistry, proteomics, in vitro cell culture, and in vivo animal modeling will be used to better understand the proteome dynamics associated with tau's role in tauopathies including, but not limited to, Alzheimer's disease. Training will be provided in techniques as needed. The fellow will also be trained and participate in collaborative experimental design and execution, analysis of data and scholarly communication of results for publication in peer-reviewed journals and scientific conferences. In addition, training will include instruction and participation in laboratory management. This position is located at 333 Bostwick Ave NE, Grand Rapids, MI.

**Application:**
To apply for this position, please do go to:
https://jobs.msu.edu/applicants/jsp/shared/frameset/Frameset.jsp?time=1410880724734;
posting number: 0104.


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