POSTDOCTORAL FELLOW POSITION

BE THE BRIDGE BETWEEN BIOLOGY AND BIOPHYSICS

• MOON & WALTER LABS •
UNIVERSITY OF MICHIGAN
CZI NEURODEGENERATION CHALLENGE NETWORK COLLABORATIVE PAIRS

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Postdoctoral Research Fellow: Molecular Mechanisms of Neurodegeneration

Immediately available in the Moon and Walter labs in the Human Genetics and Chemistry departments of the University of Michigan is a joint postdoctoral fellow position in a highly collaborative, interdisciplinary project on the molecular mechanisms of neurodegeneration. Neurodegenerative diseases are a growing public health threat with few treatment options. This position is funded by a collaborative grant award from the Chan Zuckerberg Initiative (CZI) for an initial one year with potential to renew. In addition to being integrated within the resource-rich Chemistry and Human Genetics departments, the postdoctoral fellow will be immersed with an international group of scientists in the CZI Neurodegeneration Challenge Network, where they will have access to specialized workshops and training. We are seeking an enthusiastic, team-oriented and conscientious individual who will be expected to lead an interdisciplinary project by developing cell culture models of neurodegenerative disease and studying them using single molecule microscopy techniques. The postdoctoral fellow will learn how to work with inducible pluripotent stem cells and induced neurons, become proficient in CRISPR/Cas9-mediated gene editing, and detect and analyze single RNA and protein molecules using state-of-the-art fluorescence microscopy approaches. This project will identify molecular mechanisms of disease that could lead to novel therapeutic targets for a wide range of neurodegenerative conditions.

Responsibilities:

The postdoctoral fellow is expected to be an active member of the Moon and Walter labs, learn new skills, perform experiments, analyze data, work with core facilities including the Single Molecule Analysis in Real Time (SMART) Center, contribute to writing manuscripts, and present findings to the local and greater scientific communities. To apply please submit a cover letter including the word 'collaboration', CV, 1-2 page statement of research interests, and contact information for three references to Stephanie Moon at smslmoon@umich.edu and Nils Walter at nwalter@umich.edu.

Required Qualifications:

- ➔ Recently awarded Ph.D. in Biophysics, Biomedical Engineering, Biochemistry, Cellular and Molecular Biology, Chemistry, or related field.
- ➔ Working knowledge of, or strong personal motivation to learn one or more programming languages (ideally python, matlab, R, or c++)
- ➔ Excellent communication skills (this position serves as a bridge between the Moon and Walter labs and so excellent communication skills will be essential for success)
- ➔ Ability and strong desire to work with an interdisciplinary team of scientists