



# Research Assistant, Human Neuron Core

## Rosamund Stone Zander Translational Neuroscience Center Boston Children's Hospital

A research assistant position is available with a flexible start date between March and June 2024 within the Human Neuron Core at Boston Children's Hospital. The individual will join a fast-paced team that utilizes human induced pluripotent stem cells (iPSC)-derived neurons to model neurological disease. The research assistant will be trained on multiple techniques to support core projects, including culturing iPSCs, differentiating neurons, and characterizing the neurons using cutting-edge technologies. Example technologies used for characterizing neurons include multi-electrode array (MEA) recording and high content imaging. The scope of techniques trained will depend on the individual's aptitude. The individual is expected to work closely with other researchers at the Human Neuron Core to maintain and optimize quality control protocols with respect to induced pluripotent stem cells (iPSCs), iPSC-derived neuron differentiation and phenotyping. The candidate is expected to actively participate in core meeting discussions and presentations.

### **Duties & Responsibilities:**

- Tissue culture and quality control of fibroblasts, iPSC, and neuron differentiation.
- Complete phenotyping assays, including but not limited to: qPCR, MEA recording, immunocytochemistry, western blot, and imaging
- Data analysis, including MEA analysis
- Primary tissue processing with human blood and skin biopsies.
- Keeping good records and communicating effectively with the team.
- Assisting with laboratory maintenance, i.e. restocking and general upkeep

### **Qualifications:**

- A BA/BS degree in Biology/Molecular Biology/Biochemistry/Neurobiology or related field.
- Flexible working hours during weekdays AND weekends on rotating schedule.
- Experience with cell culture required; experience with iPSCs is a plus
- Past research experience in cell biology, molecular biology, genetics, or neuroscience at the undergraduate level or beyond, preferred.
- Excellent communication, organization, time management, ability to multi-task, and record-keeping skills a must.
- Experience with computational neuroscience, bioinformatics, or use of artificial intelligence for data analysis is a plus

This is a two-year, full-time, salaried position with competitive benefits package.

For questions or to submit your resume/CV and cover letter please contact:

Nina Makhortova, Instructor and Assistant Director @ [Nina.Makhortova@childrens.harvard.edu](mailto:Nina.Makhortova@childrens.harvard.edu).