Postdoctoral Fellow in Stem Cell Biology and Pharmacogenomics

A postdoctoral fellow position is available in the laboratory of Dr. Paul Burridge in the Department of Pharmacology and the Center for Pharmacogenomics at Northwestern University Feinberg School of Medicine, Chicago, IL.

Successful candidates will participate in NIH- and AHA-funded projects to study the application of human induced pluripotent stem cells (hiPSC) in predictive medicine. Our goal is to develop the next generation of tools for predicting drug responses and validating SNPs to allow the use of genomic information in precision medicine and drug discovery. With these data, we will probe the mechanisms of action of a range of drugs to provide individualized treatment selections and regimens to improve drug efficacy and eliminate off-target toxicity.

We are looking for highly motivated and creative candidates with an interest in studying SNPs and molecular mechanisms involved in chemotherapy-induced toxicity (primarily cardiovascular) of tyrosine kinase inhibitors and monoclonal antibodies using patient-specific hiPSC-derived cells. Projects will utilize a wide range of state-of-the-art techniques such as genome editing, high-content imaging, high-throughput drug screening, electrophysiology, whole genome sequencing, RNA-seq, and eQTL. The Burridge Laboratory is stably supported by NIH, AHA, and institutional funding. More about the lab can be found here: http://burridgelab.com/

Qualifications: PhD or MD/PhD degree (either about to graduate or graduated within the last year) and a strong record of peer-reviewed publications including first author publications are essential. Expertise in several of the following areas is required: mechanisms of chemotherapy agents and toxicity, disease modeling, pharmacogenomics, WGS, RNA-seq, eQTL, GWAS, bioinformatics, CRISPR-based genome editing, high-throughput biology and drug screening, electrophysiology, hiPSC derivation, culture, and differentiation (cardiac/vascular smooth muscle/endothelial/blood/hepatic/renal/neural), direct reprogramming, engraftment, and developmental/cardiovascular biology. Good verbal and written communication skills in English are essential. The successful candidate will join a dynamic research environment in the Department of Pharmacology, which offers both basic science and clinical translational opportunities to explore fundamental questions in pharmacogenomics.

Salary will be per the NIH (NRSA) Scale and commensurate with experience.

This position is highly suitable for those interested in pursuing a career as an independent academic scientist. Those without experience in the above fields, those more than one year after graduating their PhD, and those who wish to pursue a career in the pharma/biotechnology industry are asked not to apply.

Northwestern University is an Equal Opportunity, Affirmative Action Employer of all protected classes, including veterans and individuals with disabilities. Women and minorities are encouraged to apply. Hiring is contingent upon eligibility to work in the United States.