Postdoctoral Fellow – Translational Brain Tumor Research

The Department of Neurological Surgery at Northwestern University Feinberg School of Medicine is seeking a self-motivated postdoctoral scientist to join our team in the lab of Dr. Atique Ahmed to contribute to basic and translational studies of cancer stem cell biology and epigenetic regulation of cellular plasticity in brain tumor. We are located on the Northwestern Downtown Campus in the Chicago Streeterville neighborhood. This campus has state-of-the-art core facilities in the areas of genomics, metabolomics, proteomics, flow-cytometer and microscopy (http://www.feinberg.northwestern.edu/Research/cores/cores-list.html).

Current research in our lab focuses on understanding the evaluation of therapeutic resistance and disease recurrence in brain cancer, including investigating the role of cellular and epigenetic plasticity in brain tumor recurrence, advancing understanding of the Cancer Stem Cell Theory, and developing effective targeted therapy for brain tumor recurrence. We use a combination of stem and cancer cell biology, advance molecular biology techniques such as DNA chip technology, Next-Gen Sequencing, Chip-seq analysis, transgenic animal models and patient derived orthotopic brain tumor animal models, as well as advance in vivo imaging techniques to understand the molecular mechanism of therapeutic resistance and disease recurrence in brain tumor.

The postdoctoral fellow will be expected to: conduct independent bench research; analyze, interpret and present data; prepare manuscripts and build a publication record including submissions to leading cancer biology journals; supervise rotating undergraduate, graduate and medical students; apply for internal and/or extramural funding; and attend national meetings that will help to build an international reputation. This position will use microarray and next generation sequencing technology (ChIP-Seq, RNA-Seq) to profile genome-wide changes in brain and brain tumor with different treatments. Functional validation of results using standard molecular biology techniques will be performed in vitro and in vivo using patient derived xenograft line (PDX), primary samples and murine models.

Minimum Qualifications: Ph.D. in neuroscience or related field

Required Competencies:
- Epigenetic regulation
- Genome-wide DNA/RNA, ChIP-Seq analysis
- Ability to design and conduct experiments, maintain accurate GLP style recordkeeping, and collaborate effectively within a team environment
- Strong verbal and written communication skills
- Ability to prepare and present research at meetings and write scientific manuscripts in fluent English

Preferred Competencies:
- Cancer or stem cell biology
- Bioinformatics tools
- Molecular genetics
- Working with small animal models

Interested applicants must send a current curriculum vitae with publications listed, a cover letter containing a short summary of research experience and aspirations, and names and contact information for at least three professional references to Atique Ahmed, PhD at atique.ahmed@northwestern.edu.

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