Postdoctoral Fellow – Translational Brain Tumor Research

The Department of Neurological Surgery at Northwestern University Feinberg School of Medicine is seeking an outstanding Postdoctoral Fellow to join the R01-funded lab of Dr. Craig Horbinski, in order to study the significance of mutations in *isocitrate dehydrogenase 1* on glioma behavior.

Mutant IDH1 is a powerful prognostic marker in gliomas, but the reasons for this are incompletely understood. Current research in the Horbinski laboratory focuses on the effects of mutant IDH1, and its D-2-hydroxyglutarate (D2HG) product, on the tumor microenvironment. This includes the role of D2HG in promoting seizure activity, as well as its role in reducing thrombosis, necrosis, and stemlike behavior in gliomas.

The Horbinski laboratory uses a wide variety of *in vitro* and *in vivo* techniques, including assays to test malignancy and blood clotting, metabolomics, next-generation sequencing, methylation profiling, patient-derived intracerebral xenografts, RCAS/tva models of gliomas, neuronal firing, and seizure activity in mice. 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-cytometry and microscopy (http://www.feinberg.northwestern.edu/Research/cores/cores-list.html). Since Dr. Horbinski also directs the Northwestern Nervous System Tumor bank, his laboratory has excellent access to high-quality, patient-derived biospecimens for impactful research.

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.

**Minimum Qualifications:** Ph.D. in a field related to cancer and/or neuroscience

**Required Competencies:**
- Basic cell culture techniques
- Experience working with small animal models
- Ability to design and conduct experiments, maintain accurate laboratory notebooks, 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:**
- Molecular biology
- Developing primary neuronal cell cultures
- Cancer cell biology
- Bioinformatics tools

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 Craig Horbinski, MD, PhD at craig.horbinski@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.*