

PostDoc position available:

Where: Baltimore, MD USA

Johns Hopkins University, Bloomberg School of Public Health

Offering: Competitive Salary and excellent benefits

Area: Developmental Neurotoxicology (autism), 3D organoid models, high-content imaging, CRISPR/Cas9 gene editing

Center for Alternatives to Animal Testing (CAAT) at Johns Hopkins University, Bloomberg School of Public Health, Baltimore, USA, is looking for a Postdoctoral fellow. Three-year full-time PostDoc position at one of the top universities and excellent international working environment.

We are looking for a highly motivated, hard-working, communicative researcher with PhD in molecular or cell biology, preferably with neuroscience background. Training in toxicology is desired but not required. The project's focus is on the development of a New Approach Methodology (NAM) for Developmental Neurotoxicity Testing based on iPSC-derived 3D organotypic brain model. Our group was one of pioneers of such mini-brain development for substance testing (Pamies et al., ALTEX 2017).

The candidate will be responsible for designing several CRISPR/Cas9-modified iPS cell lines, generate 3D brain organoids from them and perform screening of chemicals using high-content imaging. Thus, the candidate should ideally demonstrate extensive knowledge in gene-editing using CRISPR/Cas9 technology and have experience with iPS/ES and neuronal cell cultures. In addition, the candidate will collaborate with a bioengineering group in developing electrophysiology recording platform. Bioengineering knowledge is not required. Post-doc will be encouraged to lead the project independently, resulting in high-impact publications, present at conferences and prepare for long-term career in academia or industry. Competitive salary and excellent benefits and work environment are offered.

The intellectual environment at Johns Hopkins is extremely rich. As the first independent, degree-granting school of public health in the world, the Bloomberg School has the largest public health training facility in the U.S. Within the Bloomberg School, the Department of Environmental Health and Engineering (EHE) has established outstanding research programs on molecular and translational toxicology and provides an extremely supportive environment for research and professional development. The EHE Department has established extensive track records in conducting top-notch research and in training pre-doctoral and post-doctoral trainees, as well as mentoring junior faculty members, in environmental health sciences. CAAT is for 38 years the leading think tank for new approaches in safety sciences in the US. Translational activities include workshops (transatlantic think tank for toxicology) and the world-wide secretariat of the Evidence-based Toxicology Collaboration, the Good Cell Culture Practice Collaboration, the Green Toxicology Collaboration and the Industry Refinement Working Group. Our center's research activities are mainly focused on developmental neurotoxicology and gene environmental interactions in neurodevelopmental disorders by using *in vitro* and computational tools. We are collaborating with several groups within Hopkins University but also nation- and world-wide on a variety of projects. You can find more information about CAAT under following link: <http://caat.jhsph.edu>

All interested in the position please send your CV and your motivation letter to Dr. Lena Smirnova, lena.smirnova@jhu.edu