

Post-doctoral position in in vitro neurotoxicology

Position: Post-doctoral Position

Deadline: 15 November 2023

City: Lausanne

Country: Switzerland

Institution: University of Lausanne

Department: Department of Biomedical Sciences

Description:

We are seeking to recruit a highly motivated post-doctoral fellow to investigate glial cell toxicity using New Approach Methodologies (NAMs), and to develop and refine Adverse Outcome Pathways (AOPs) containing Key Events (KEs) relevant for glial cells. The work will be carried out in the *in vitro* neurotoxicology laboratory of the Department of Biomedical Sciences (DBS), University of Lausanne, led by Dr Marie-Gabrielle Zurich.

Hazardous chemicals in the environment may be contributing to the worldwide rise in neurodevelopmental disorders observed over the last decades. Regulatory risk assessment of developmental neurotoxic (DNT) chemicals relies exclusively on animal testing, but regulatory agencies are focusing efforts on developing New Approach Methodologies (NAMs) that will decrease time and cost in chemical hazard assessment. International efforts have led to the development of the DNT *In Vitro* Battery (DNT IVB). However, the extreme involvement of glia in key neurodevelopmental processes is not currently reflected in this battery of tests. In this project, involving four scientific teams, we aim to further expand, characterise and develop the DNT IVB NAMs containing glial cell types vital for normal brain development. In our laboratory in Lausanne, a special emphasis will be put on oligodendrocytes and microglial cells using the human iPSCs-derived 3D cultures called BrainSpheres, and on the development and refinement of AOPs containing KEs relevant for glial cells.

Qualifications/skills:

- The applicant should have a PhD in life sciences, neuroscience, toxicology or related discipline.
- Strong experience in human iPSCs cell cultures and/or toxicology experimentation.
- Experience in AOPs, as well as a demonstrated ability to generate publications, is an advantage.
- Other required skills include creativity, the capacity to maintain excellent documentation of the work and good social skills.

Applications will be accepted until the position is filled

Position opening: From December 2023 (to be discussed)

1-year contract, with the possibility of extension (up to a maximum of 4 years)

Please send your application containing a CV, a motivation letter and contact information of 2-3 references to Dr. Marie-Gabrielle Zurich (mzurich@unil.ch)

Contact Details

Name: Marie-Gabrielle Zurich

Email: mzurich@unil.ch

URL: <https://www.unil.ch/dsb/en/home.html>