27.11.2018

IUF
LEIBNIZ-INSTITUT FÜR UMWELT-MEDIZINISCHE FORSCHUNG

The IUF – Leibniz Research Institute for Environmental Medicine investigates the molecular mechanisms through which particles, radiation and environmental chemicals harm human health. The main working areas are environmentally induced aging of the cardiopulmonar system and the skin as well as disturbances of the nervous and immune system. Through development of novel model systems the IUF contributes to the improvement of risk assessment and the identification of novel strategies for the prevention / therapy of environmentally induced health damage. The working group "Modern risk assessment and sphere biology" at the IUF - Leibniz Research Institute for Environmental Medicine in Düsseldorf is offering a

Post-Doc position (f/m/d).

The position is to be filled at IUF as of January 1st, 2019

For screening of compounds for hazard assessment on the developing nervous system methods are desired that allow testing in a time- and cost-efficient manner in models with high physiological relevance. Therefore, the Fritsche lab has developed several 3D methods for developmental neurotoxicity (DNT) testing based on primary human and rodent neural progenitor cells (NPC), as well as human induced pluripotent stem cell (hiPSC)-derived NPC. These neurosphere-based systems mimic early neurodevelopmental processes like NPC proliferation, migration, differentiation into neurons and glial cells as well as apoptosis *in vitro*. To take our research to the next level we want to develop a new testing strategy for developmental neurotoxicity to meet the regulatory as well as scientific and societal needs of improved hazard and risk assessment of endocrine disrupting chemicals. Within an EU-funded project we want to establish links between neurodevelopmental endpoints and physiological endocrine pathways to develop a battery of assays for hazard identification, addressing endpoints relevant for human neurodevelopment linked to a clearly defined and empirically validated endocrine mode of action. The goal is to develop strategies to integrate these methods into European and international chemical regulatory frameworks and support the goals defined in the EU and World Health Organisation (WHO) environment and health process.

The successful applicant (f/m/d) holds a PhD degree in cell biology, molecular medicine or a closely related field and should have a strong interest in biomedical research in general, and (developmental)neurotoxicity and endocrine disruption in particular. You are a goal-oriented team player with excellent organizational and communication skills, including written and oral English. You have profound hands-on experience with primary cell culture and ideally with the development of novel screening methods for toxicity testing and development of SOPs. Knowledge in the fields of neurobiology/neurotoxicology/endocrinology and first experiences in the culture of primary neuronal cells or hiPSC are advantageous but not mandatory.

We offer a very friendly and inspiring working atmosphere in an international team consisting of toxicologists, cell biologists, bioinformaticians and physicians. The successful candidate (f/m/d) will be invited to join the institute's postdoc program, which, besides the scientific training, will impart multiple skills necessary for the development of an independent research career.

The position is limited until December 31, 2023. The weekly working time totals 39 hours and 50 minutes. Remuneration is given in accordance with the provisions of the collective agreement for the employees of the states (TV-L). Salary will be according to TV-L (E13).

Females are especially encouraged to apply, and in the case of equal qualification, handicapped persons will be given preference. The IUF is committed to family-friendly working conditions and equal gender policy.

Please submit your application by e-mail as one pdf-file combining relevant documents (letter of motivation, CV, university certificates, and contact of two referees) to: bewerbung@iuf-duesseldorf.de

Prof. Dr. Ellen Fritsche
IUF – Leibniz-Institut für umweltmedizinische Forschung gGmbH
Auf'm Hennekamp 50
40225 Düsseldorf

Application documents submitted by post are not returned. Documents for applicants not considered are destroyed appropriately once the procedure is complete.