

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

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*. We are performing pathway-to-function analyses to assess species-specificities of signaling pathways during brain development. Moreover, we are expanding this scientific validation by challenging the *in vitro* systems with compounds known to cause DNT. To take our research to the next level we want to use the novel technology of 3D bioprinting for the generation of brainslice-like structures for substance characterization by using our established cell systems.

We offer a very friendly and inspiring working atmosphere in an international team consisting of toxicologists, cell biologists and physicians. The successful candidate (f/m) 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 successful applicant (f/m) holds a PhD degree in biomedical engineering (emphasis in cell biology), cell biology, molecular medicine or a closely related field and should have a strong interest in biomedical research in general, and 3D tissue engineering in particular. You are a goal-oriented team player with excellent

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organizational and communication skills, including written and oral English. You have profound hands-on experience with 3D bioprinters, preferably using a Bioplotter from EnvisionTEC, bio inks and ideally with the development of novel methods of tissue generation and development of SOPs. Knowledge in the fields of neurobiology/neurotoxicology and first experiences in the culture of primary neuronal cells or hiPSC are advantageous but not mandatory.

The Position is funded for two years, starting **March 1st 2017**. Salary will be according to TV-L (E13, 100%). 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:

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