Early Stage Researcher (PhD Student) position

The RECETOX Centre of Masaryk University (www.recetox.muni.cz) in Brno, the Czech Republic, is focused on the research and education in cross-cutting area of Environment and Health. RECETOX operates a state-of-the-art research infrastructure (including environmental monitoring networks, population cohorts, accredited laboratories, databases and information portals) openly accessible the international research community, and develops an interdisciplinary expertise in multiple international research teams.

The Bioanalytical Toxicology group of RECETOX and the Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN) project “Best chemical risk assessment professionals for maximum Ecosystem Services benefit (PRORISK)” offer an Early Stage Researcher (PhD Student) position “ESR8 - Linking retinoid and thyroid hormone signaling disruption with adverse effects on early development”.

PRORISK (www.prorisk-itan.eu) is a European Training Network funded by the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 859891. The consortium comprises of 18 universities, research institutions, enterprises and partner organisations in 9 European countries and Canada creating a novel platform for training a network of Early Stage Researchers (ESRs) in the field of advanced Environmental Risk Assessment (ERA). Research and training provided through PhD study, PRORISK training programme and secondments in international multidisciplinary intersectoral teams in academia, industry and regulatory bodies will enable ESRs to address exposure, ecotoxicology, ecosystem services, as well as assessment and modelling of risks and socio-economic impacts. The ESRs within PRORISK will gain synthetic skills allowing them to develop and implement innovative ERA concepts and tools to link the effects of chemicals at different levels of biological organization to ecosystem services and to determine the socio-economic values of related environmental impacts.

Individual research project description

This PhD project will focus on (1) characterization of the relation of endocrine disruption via interference with retinoid and thyroid hormone signaling with adverse effects of pollutants on early development (developmental and embryonal toxicity, altered growth or behavior in fish embryo model); (2) exploring the role of selected nuclear receptors signaling in the relevant adverse outcome pathways of prioritized environmental toxicants and mixtures by in vitro and omics-based approaches. The ESR will be employed and enrolled in the doctoral programme of Environmental Health at Masaryk University, Czech Republic. International collaborations and secondments are foreseen namely with Vrije Universiteit Amsterdam (VUA), Netherlands and DuPont Nutrition& Biosciences, Denmark.

For further information about the scientific content please contact the principle supervisor: Assoc. Prof. Klara Hilscherova (klara.hilscherova@recetox.muni.cz).
MSCA eligibility criteria
1) At the date of recruitment the applicants for the MSCA fellowship must have no PhD and less than 4 years of full-time equivalent research experience from the award of the degree that entitles them to undertake a doctorate (either in the country in which the degree was obtained or in the country in which the applicant is to be recruited).
2) The applicants must not have resided or carried out their main activity (work, studies, etc.) in the Czech Republic for more than 12 months in the 3 years immediately before the recruitment date. Short stays, such as holidays, are not taken into account. These eligibility requirements are non-negotiable and ineligible applicants will not be considered. Eligible applicants can be of any nationality.

Requirements and qualifications
The applicants must have a Master degree in biology, toxicology, environmental health, biochemistry, molecular biology, (environmental) chemistry, medicine or other relevant field with knowledge and experience in experimental biological/chemical laboratory research. An advantage is previous experience with any of the following methodologies: in vitro approaches, molecular biology techniques, omics or LC-MS/MS analyses. Fluency in English (working language) is a requirement.

What we offer
The ESR will receive a contract of employment as a full-time researcher for the relevant period of their appointment, which will include applicable benefits in the host country. They will complete a comprehensive personalized career development programme, with targeted training measures and participate in a range of network events. The ESR will benefit from interdisciplinary cooperation and interaction within the network, providing them with the best preparation for a successful career in either academia or industry.
MSCA fellowships for ESRs provide salaries in line with H2020-MSCA-ITN-2019 call. Additional allowances for mobility and family (if applicable) are also provided. Further information is available on www.prorisk-itn.eu.
RECETOX will provide access to the state-of-the-art research infrastructure, a substantial re-location package and full support of the administrative and Expat office in the stimulating and diverse work environment. In addition, Brno where RECETOX is located represents a safe and family-friendly historical university town.

Contract duration
The period of appointment for the ESR is 36 months, starting 1st July 2020 or as soon as possible thereafter.

Applications and selection process
Applications must be submitted via electronic application system:
Applicants should provide the following information in their application in English:

1. Cover Letter, stating which PhD project you are applying for and detailing your motivation and background for applying for the specific PhD project. Please indicate if you have applied
for other PRORISK PhD fellowships (possible to apply up to three positions; indicate the preferences).

2. A detailed CV including technical and analytical skills and publications if applicable.

3. All academic level certificates (BSc and MSc) including university grades itemized by each course. Foreign documents should be sent as certified English translations.

4. A synopsis (abstract) of the BSc and MSc thesis if applicable, or any previous research project.

5. At least two professional referees (Name, address, telephone & email).

Deadline for applications is on 15 March 2020. A review of applications will run continuously as they are received. The short-listed applicants complying with the requirements will be invited for personal or Skype interviews foreseen in February-March 2020.

Please apply via e-Application:


RECETOX as a valuable part of the Faculty of Science MU, a proud holder of the HR Excellence in Research Award, is committed to employment equality (esp. European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers) and welcomes applications from all qualified candidates fulfilling the requirements specified in this announcement.