Candidate for PhD Grant

We are seeking a pre-doctoral student to work in the area of Environmental Toxicology. One of the goals of our current research is to study the effects of Endocrine Disrupting Chemicals (EDCs) in aquatic organisms at different molecular levels using Systems Biology approaches. This will allow us to better understand the mode of action of EDCs assessing the environmental stress and risks induced by chemical pollutants in both the environment and human health.

In the recent years, it has been proven that exposures to contaminants in the aquatic environment, such as Endocrine Disruptors (EDCs), are able to cause not only long-lasting adverse effects, but also to affect subsequent generations. Our current hypothesis is these long-lasting effects of EDCs exposures could be mediated by changes in the epigenome. In this context, this project will aim to evaluate common epigenetic markers as mediators of the induced transmission of the observed effects. The successful candidate will be involved in a research project that include a wide array of molecular biology and bioinformatics tools, including different techniques for the analysis of epigenetic markers (DNA methylation and miRNAs) gene expression analysis (RNA-sequencing) and the study of the metabolome (Nuclear Magnetic Resonance), among others. The student will be expected to work with zebrafish embryos as a main model. The ultimate goal will be to develop a set of tools that will allow us to integrate "omic" analysis at different levels (epigenomics, transcriptomics and metabolomics). This allow to identify molecular biomarkers that can be used as as a tool to identify previous exposures and long-term effects to pollutants as well as models that will predict phenotypic traits and outcomes.

This project will be mainly carried out at IDAEA (Barcelona, Spain), a reference CSIC institute for environmental risk assessment and water research. It offers a nice multidisciplinary environment in which Toxicologists and Chemists team up to solve pollutant-related issues, mainly related to the atmosphere and to water bodies.

REQUIREMENTS

Master degree on science (or equivalent) and outstanding academic records. A background in molecular biology, systems biology and bioinformatics will be considered (knowledge in Bioconductor/R environment and matlab software will be an asset).

CONDITIONS

The candidate will be presented to competitive calls, such as the pre-doctoral contracts AGAUR-FI-DGR (ajuts per a la contractació de Personal Investigador Novell 2020) or FPU Ayudas para la formación de profesorado universitario). Foreign students that are eligible to apply to this call or foreign funding will also be considered.

See previous calls:
http://www.educacionyfp.gob.es/servicios-al-ciudadano/catalogo/general/99/998758/ficha/998758-informacion-comun.html
http://agaur.gencat.cat/ca/beques-i-ajuts/convocatories-per-temes/Ajuts-per-a-la-formacio-i-contractacio-de-personal-investigador-novell-FI-2019

APPLICATIONS

Applications should include a **letter of motivation and interests, complete CV and academic record**. Enquiries and applications should be sent to **Dr. Benjamí Piña** (bpcbmc@cid.csic.es) and **Dra. Laia Navarro-Martin** (laia.navarro@idaea.csic.es) indicating PRE-DOC in the subject of the email. **DEADLINE: 31st August 2019.**