

Candidate for PhD grant

We are seeking a pre-doctoral student to work in the area of Reproductive Endocrinology. One of the goals of our current research is to study the regulation of the initial stages of gametogenesis and 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 effects on fish reproduction and the risks induced in both the environment and human health.

The successful candidate will be involved in a research project that will develop an array of molecular and cell biology tools, including different techniques for gene and protein expression analysis (qPCR, RNA-sequencing, *in situ* hybridisation, and immunohistochemistry), cell and organ cultures, and the analysis of epigenetic markers among others. The student will work with fish as a main model although other aquatic species may be considered. The ultimate goal will be to develop a set of tools that will allow to integrate “omic” analysis at several levels (epigenomics and transcriptomics). This will allow to discover molecular biomarkers that can be used to identify germ cells at initial stages (before the onset of meiosis) and evaluate the effects of the exposure to pollutants on their reproductive success, focusing on the prediction of phenotypic traits and outcomes.

The project will be carried out at Institute of Marine Sciences (ICM) a reference CSIC institute in Barcelona for research in marine biology. It offers a nice multidisciplinary environment with students of several nationalities working in different research areas of Physiology and Endocrinology in which Biologists and Ecotoxicologists team up in the study of pollutant-related issues, and their interaction with wildlife welfare. We also have ongoing collaborations with the Institute of Environmental Assessment and Water Research (IDAEA), a CSIC institute in Barcelona devoted to study the natural and anthropogenic changes occurring in the ecosystems due to environmental pollution.

REQUIREMENTS

Master degree on science (or equivalent) and outstanding academic records. A background in molecular and cell 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 pre-doctoral contracts AGAUR-FI-2019 (ajuts per a la contractació de Personal Investigador Novell, Generalitat de Catalunya), FPI or FPU (Foreign students that are eligible to apply to this call or foreign funding will also be considered).

APPLICATIONS

Applications should include a **letter of motivation and interests, complete CV and academic record**. Enquiries and applications should be sent to **Dr. Mercedes Blázquez** (blazquez@icm.csic.es) indicating PRE-DOC in the subject of the email. **DEADLINE: September 20th 2019.**