



Candidate for PhD grant on zooplankton associated microbiome

The institute

The **Institute of Environmental Assessment and Water Research (IDAEA)** is an environmental science institute devoted to the study of the human footprint on the biosphere. Much of the research work at this institute is centred on two of the great environmental challenges of our time: cleanliness and availability of water and quality of air.

Founded in 2008 as a member of the **Spanish National Research Council (CSIC)**, the Institute brings together a wide range of expertise in environmental science. It is organized under two Departments (Environmental Chemistry and Geosciences), established with a strong record of publication in top scientific journals, leading international projects, membership on international committees, and adopting a high-profile contribution to the identification and remediation of environmental problems.

IDAEA has demonstrated strengths in the analysis of organic pollutants and their impact on ecosystems, the study and management of water resources, the development of multivariate resolution algorithms in chemometrics, and in the study of inhalable particulate matter and toxic gases.

IDAEA has been recently awarded with the distinctive **Centre of Excellence “Severo Ochoa”** (2020-2023), distinction that indicates the high-quality scientific leadership and global impact of the work developed at the centre.

We offer a diverse and inclusive environment where no discrimination against disability, gender, nationality, religion or sexual orientation will occur during the selection process.

The group

The research will be leaded by Dra Maria from the “Global Change and Genomic Biogeochemistry” group who focuses her research on the biogeochemistry of anthropogenic organic compounds, and the microbial-pollutant mutual interactions addressed through genomic and molecular approaches - <https://www.idaea.csic.es/research-group/global-change-and-biogeochemistry/>

And, Dr Carlos Barata, from the Environmental Toxicology groups who is an ecotoxicologist that now implement genomic tools to determine effects of pollutants in zooplankton species - <https://www.idaea.csic.es/research-group/environmental-toxicology/>

The role

To study the effects of environmental relevant concentrations of pollutants on marine environmental DNA (eDNA) and copepod-associated microbiome composition across a longitudinal and latitudinal oceanic transect.

The field work will be performed taking advantage of the trans-oceanic surveillance project recently given to Jordi Dachs aimed to study the concentrations, dynamics and effects of contaminants present in the upper ocean (atmosphere-surface water and plankton). The cruise represents the world first campaign exclusively devoted to the study of pollutants and their effects in the marine environment.

The campaign will start on November 2020 and will be divided in three legs: Cartagena (Murcia, Spain) to Rio de Janeiro, Brasil (November-December 2020), Rio to Ushuaia (15 December 2020-7 February 2021), and Ushuaia to Antarctica and return (February-March 2021).

What do we look for?



- **Qualifications**

High qualified students with a master degree on science (or equivalent) and outstanding academic records (high scores and an a degree compatible with Bologna-EU Universities).

- **Professional experience**

Previous experience is not need it but previous work on molecular and cell biology, systems biology and bioinformatics will be considered

- **Competences**

A background in molecular and cell biology, systems biology and bioinformatics will be considered (knowledge in Bioconductor/R environment and python software will be an asset).

Working conditions

The candidate will be presented to competitive calls, such as pre-doctoral contracts AGAUR-FI-2020/2021 (ajuts per a la contractació de Personal Investigador Novell, Generalitat de Catalunya), FPU (Foreign students that are eligible to apply to this call or foreign funding will also be considered).

How to apply?

Those interested may email their **CV** and **motivation letter** to **Maria Vila**, (mvcqam@cid.csic.es), or **Carlos Barata** (cbmqam@cid.csic.es), adding "PhD Copepobiome" to the email subject.

Deadline: 30 September 2020