

## **Post-doctoral position in benthic macrofauna and biodiversity research – University of Cádiz (Spain).**

We are looking for a scientist to be part of a growing team of researchers exploring the role of benthic macrofauna in the functioning of coastal systems in the estuaries of Cádiz bay. Coastal systems provide multiple functions critical for humans such as the provision of food, carbon sequestration, as well as protection against climatic events. Much of this contribution of coastal systems to human well-being is assumed to be due to the high levels of diversity that its harbours, both in the number of species and in the ecological functions they perform. However, for many systems, these relationships have never been explored. In the estuaries of Cádiz bay, food of high nutritional quality such as fish is obtained in a traditional way. Furthermore, this extensive aquaculture activity is currently complemented by oyster farming. This economic activity has been recently affected by changes in the quality of the waters and the increasing phenomena of exotic species, some with a demonstrated invasive character such as the Atlantic blue crab, however, the degree of threat of these changes to the biodiversity and functioning of these systems remains unclear.

The postdoc candidate will be part of a large interdisciplinary team working on a project that combines ecology, complex systems, and nutrition. The main objective of this project (funded by the Spanish Ministry of Science and Innovation) is to understand how the food web structure connecting primary productivity compartments (phytoplankton) with zooplankton and macroinvertebrates (crabs, decapods, polychaetes, etc.) influences the quantity and nutritional quality (fatty acids and micronutrients) of the fish and oysters obtained in the estuaries.

The postdoctoral candidate will participate mainly, but not exclusively, in the following tasks:

1. Intensive field sampling (monthly) in estuarine channels of Cádiz bay (esteros).
2. Temporal estimations of macroinvertebrates, fish abundances, and oyster growth.
3. Macrofauna identification and estimation of abundances and biomass (AFDM) in the lab.
5. Estimation of the Atlantic blue crab abundance (invasive species).
4. Help to assess the food web structure from species' temporal changes
6. Assessing water quality through measurements of pH, turbidity, salinity, DO, POM, total carbon and nitrogen (organic and inorganic), and chlorophyll a.

The ideal applicants would have PhD's in Marine Ecology, Ecosystems ecology, or related disciplines, have strong publication records commensurate with experience. Experience in handling macroinvertebrates and strong taxonomic skills are highly required. The successful candidates will be expected to be active in research and publication, advise graduate and master students, and engage in interdisciplinary research and public outreach.

This is a full-time research position for a 2-year period at the University of Cádiz.

**Estimated salary:** 43.915,89 (gross) euros per year

**Deadlines for applications:** 21/12/2022

**Starting time:** February-2023

### **For further information and applications:**

Please submit your application as one single pdf file, including your CV, list of publications, and a personal statement describing research interests (1–2 paragraphs), research experience (1–2 paragraphs), and career goals (1–2 paragraphs). Please include the contact details of two referees.

Contacts:

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