# Position Offered: POSTDOCTORAL RESEARCHER

Project: Biological invasions accross time and space: delimiting the invasion stages at different aquatic ecosystems

**Technological and scientific fields:** Climate change and biodiversity, Computational biology, High performance computing

**Location:** Blanes (Girona), Catalonia, Center for Advanced Studies of Blanes (<u>www.ceab.csic.es</u>)

Research Group / PI: Integrative Freshwater Ecology Group, IP: Marc Ventura (<a href="https://www.ceab.csic.es/en/personal/marc-ventura-oller/">https://www.ceab.csic.es/en/personal/marc-ventura-oller/</a>); Molecular Ecology of Benthos Group, IP: Marc Rius (<a href="https://www.ceab.csic.es/en/personal/rius-viladomiu-marc/">https://www.ceab.csic.es/en/personal/rius-viladomiu-marc/</a>)

### PROJECT SUMMARY

Non-native species (NNS) are currently being accidentally/intentionally introduced as a result of human activities at an unprecedented rate. Despite a sharp increase in invasion science research in recent years, most knowledge generated to date comes from a limited number of well-studied NNS. This project will analyse DNA metabarcoding data from water and sediment samples to study a large number of NNS from different aquatic ecosystems (from high mountain lakes to coastal marine ecosystems). This approach will provide an unprecedented opportunity to analyse large amounts of comparable information on historical bioinvasion patterns (e.g. detection of recent introductions of NNS, 'boom and burst' population dynamics, lag period, etc.) and bioinvasion stages (i.e. introduction, establishment, naturalisation and invasion).

### PROFESSIONAL PROFILE

# Minimum requirements:

- Doctorate in biology, ecology or genetics
- Proficiency in English
- Experience in bioinformatics and programming (e.g. R, Phyton)

# Merits to be considered:

- Proficiency in metabarcoding and bioinformatic analyses and / or invasive species from aquatic ecosystems
- Experience in laboratory genetic analyses
- Multidisciplinary experience (e.g. marine ecology, genetics, limnology and biogeography)
- Basic knowledge of Catalan or Spanish

### WHAT IS OFFERED

The post-doc will spend an important part of her / his time analysing already generated metabarcoding data and writing scientific papers. In addition, there will be opportunities to visit field sites and collect environmental samples. We have a training plan (150 ECTs) that will include attendance of high throughput sequencing courses, participating in specialized bioinformatics training, and presenting international conferences and research stays at different research intensive institutions.

#### Contract conditions:

Indefinite contract for a Postdoctoral Researcher associated to the Momentum Project of 4 years' duration according to Spanish science law. Gross annual salary (41.000 € - 52.000 €).

Start of contract: before 31 December 2024

# PRINCIPAL INVESTIGATOR CONTACT

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