

Postdoctoral position on temporal community dynamics and species invasions using metabarcoding data

The Centre for Advanced Studies of Blanes (CEAB, www.ceab.csic.es/en) is one of the >120 research centres of the Spanish Research Council (CSIC, www.csic.es/en), which is the leading research institution in Spain. CEAB's mission is to foster research excellence in aquatic ecology and has an excellent national and international reputation, addressing fundamental ecological questions to better understand our changing world. The CEAB is located at the scenic Costa Brava, a few tens of kilometres away to the nearby cities of Girona and Barcelona. In recent years, the CEAB has seen a massive renovation of its facilities and has acquired new equipment and laboratory spaces such as a clean DNA lab (suitable for amplicon-free work) and a computer cluster (largely used for bioinformatic analyses).

As part of the recently funded research grant entitled 'Towards understanding the temporal dimension of the invasion process: implications for restoration - TEMPOINVASIONS' (TED2021-132228B-C22), we are offering a **two year full-time postdoctoral position** that could start **as early as January 2023**. This project will use state-of-the-art molecular and palaeoecological techniques to reconstruct the spread and impacts of non-indigenous species at different time scales across differing levels of human impact. The proposed project will unravel the nature and temporal dynamics of biological communities and produce a database of temporal heatmaps of species introductions. The partners for this project include the CREAM (Spain), the Globe Institute - University of Copenhagen (Denmark), the University of Oxford (United Kingdom), the University of La Laguna (Spain) and the University of Southampton (United Kingdom).

The **expected tasks** include:

- Fieldwork along coastlines with different levels of human impacts.
- Laboratory work processing environmental samples, conducting DNA extraction and library preparation.
- Bioinformatic analyses of metabarcoding and metagenomic data.
- Pursuit own research questions that are related to community change and invasion science.
- Participate in training opportunities offered by the CSIC and other partner institutions.
- Presentation of findings in international conferences.
- Publishing the results in international peer-reviewed journals.

The **postdoc profile** is expected to have interests and experience in some (not necessarily all) of the following:

- General experience working in a molecular laboratory.
- Be able to generate and analyse metabarcoding and / or metagenomic data.
- Ability to lead the production and analysis of data, including troubleshooting problems.
- Programming skills to integrate ecological and historical data to gain new insights into temporal community dynamics and biodiversity change.
- Computational and statistical skills in R / Linux.
- Theoretical and / or experimental biodiversity research.
- Good knowledge of written and spoken English.

- Attention to detail, and able to track and manage diverse strands of work.
- Aptitude for working as part of a multi-institute collaborative project.
- Track record in publishing scientific research.
- Strong organisational and oral communication skills.

We offer:

- Excellent technical and laboratory facilities.
- Freedom to explore novel cutting-edge research questions.
- Work in an inter-disciplinary, multinational teams and excellent links with national and international research networks.
- Balance between family and professional life.
- A welcoming and inclusive research centre that values gender balance and staff from a wide variety of backgrounds.
- Interesting career opportunities and an extensive range of training and courses.
- Remuneration according to the public-sector pay including attractive social security and public health benefits.

To **apply**, please send to mrius@ceab.csic.es a single PDF with: CV; cover letter (2 pages maximum) that outlines how the candidate meets the qualifications; contact information of at least two scholars to be contacted for letters of recommendation; and relevant academic certificates. Review of applications will start in November 2022.

For more information, please contact:

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