



## PREDOCTORAL CONTRACT 4 YEARS (PIF2024) associated with a knowledge generation project PID2023

HIGH MOUNTAIN LAKE BIODIVERSITY RESILIENCE TO GLOBAL CHANGE: A PALEOECOLOGICAL APPROACH FOR THEIR FUTURE CONSERVATION

We are seeking a candidate for a predoctoral contract (<u>PIF2024</u>) under the call <u>Proyectos de Generación de Conocimiento 2023</u>. The project at CEAB (Center for Advanced Studies of Blanes) 'High mountain lake biodiversity resilience to global change: a paleoecological approach for their future conservation' (PALEODIVERSITY) (PID2023-149616OB-I00) (PI: <u>Teresa Buchaca Estany/Marc Ventura Oller</u>) has been assigned one of these predoctoral contracts with the aim of carrying out a doctoral thesis.

This project aims to investigate biodiversity resilience by analyzing changes in lake community composition over approximately 2,000 years in four Pyrenean lakes, each with a distinct history of stressors. We will specifically focus on anthropogenic influences, including nonnative fish stocking, livestock grazing, and climate change, examining the types of biological responses these factors have elicited—whether gradual or abrupt. Check the <u>published offer in BDEI</u> for a full summary of the Project.

The hired person would join a doctoral program with opportunities for international collaborations and stays within an interdisciplinary group that has several ongoing research projects. The candidate will also benefit from interacting with PALEODIVERSITY team members, who have a strong experience on a wide range of topics in the field of ecology, limnology and paleolimnology and directly related to the project such as chemotaxonomical biomarkers (organic pigments), macroinvertebrate taxonomy, pollen and chironomid sediment analyses, molecular techniques (metabarcoding and sedaDNA), bioinformatics and temperature modelling. The group has coordinated two EC projects (LIFE LIMNOPIRINEUS and LIFE RESQUE ALPYR) and is participating in a Biodiversa+ project (FISHME) which has set up a network of different European collaborations.

Centre for Advanced Studies of Blanes (CEAB-CSIC) holds both field and lab infrastructures/equipment that ensure an adequate development of research. The most important infrastructures needed for the present project include: (1) a laboratory of molecular biology and genetics, (2) a laboratory for the identification and sorting of biological samples; (3) a laboratory of microscopy and microscopic digital photo; (4) laboratory for analyses of algal pigments with UHPLC and (5) a supercomputing facility CBLab that has all the software needed for state-of-the-art bioinformatics.

**Candidate Requirements:** A degree in Biology, Genetics, or Biotechnology, along with a completed Master's degree (preferably in Ecology or Genetics). Proficiency in English is essential, as well as strong teamwork skills, experience in report writing, and a motivation to learn.





**Offered Contract:** A full-time PIF position starting after February 1, 2025, for a duration of four years. The position will be based at the Centre for Advanced Studies of Blanes (CEAB-CSIC) in Blanes (Girona), with occasional travel to project sites located in the Pyrenees. The project includes a comprehensive training program for the selected candidate.

Submission dead-line CONVOCA: 10 December 2024.

Contact Information: Principal supervisor of the doctoral thesis: Teresa Buchaca Estany (buch@ceab.csic.es). Co-supervisor: Marc Ventura Oller. Interested candidates are encouraged to send a motivation letter via email, along with their CV and a copy of their academic transcript, as soon as possible.

https://www.csic.es/sites/default/files/662566.pdf

Teresa Buchaca Estany CEAB-CSIC