PhD Proposal: Paleoenvironmental Reconstruction of Alpine Peatlands – HOLOPEAT Project

Are you interested in researching how high-mountain ecosystems have responded to climate change and human activity over thousands of years? Would you like to train in paleoenvironmental reconstruction techniques within a multidisciplinary team? The **HOLOPEAT** project offers a PhD opportunity focused on the study of high-mountain peatlands in the Central Pyrenees as exceptional natural archives of Holocene environmental history. The aim of the project is to develop paleoenvironmental reconstructions from four representative sites covering the main types of Pyrenean peatlands. This approach will allow us to understand how Pyrenean peatland ecosystems have responded to Holocene climate changes and to the onset of human influence in high-mountain areas, providing new insights into the vulnerability and resilience of these systems in the face of current global change. We offer the possibility of undertaking **TWO PHD PROJECTS** —between which synergies may be established— within the framework of the HOLOPEAT Project, recently funded through a national Spanish call.

HOLOPEAT PhD (Biological Indicators)	**HOLOPEAT PhD (Geochemical Indicators)**
PhD project focused on reconstructing local and regional vegetation through the study of macrofossils and pollen. Relationship between vegetation types and carbon accumulation potential. Identification of sedimentary charcoal and reconstruction of fire evidence. Interpretation and correlation with paleoclimatic records.	PhD project focused on the use of biogeochemical indicators: characterization of organic compounds in peatlands and their implications for the global carbon cycle. Analysis of mineral fractions to study detrital inputs, impacts of historical mining, and long-term geochemical processes. Interpretation and correlation with paleoclimatic records.

Both PhD projects will be carried out at the University of Barcelona (UB) under the supervision of Dr. Olga Margalef (UB), Aaron Pérez Haase (UB) and Antonio Martínez Cortizas (University of Santiago de Compostela), and will be integrated into the work of a multidisciplinary research team. The selected candidate will apply, with support and guidance from the project staff, to one of the existing public predoctoral funding schemes (FI, FPU or Predoc-UB or others) to obtain a predoctoral fellowship. The average gross annual salary associated with these grants ranges between **€21,800 and €25,100**, depending on the fellowship and the year of the PhD.

Requirements:
Candidates must be motivated by the study of paleoenvironmental and climatic reconstruction from high-mountain records. Applicants should have a Bachelor's degree with a GPA above 7/10 and hold a Master's degree (or obtain it before the end of 2026) in related disciplines. Fluency in English will be considered an asset. Candidates must also be willing to carry out fieldwork in high-mountain environments. Experience in field and laboratory techniques, as well as data analysis, will be valued.

Interested applicants should contact Dr. Olga Margalef (olga.margalef@ub.edu) before **February 3rd 2026 at 12:00 pm**, and share their academic CV. Further details about the project and timeline will be provided. Selected candidates will subsequently be invited to an interview process