Pg. Marítim de la Barceloneta, 37-49
08003 Barcelona
+34 932 309 500
www.icm.csic.es

Job Offer

PhD Studentship in Deep-Sea Macroecology

The Institut de Ciències del Mar (ICM) of the Spanish National Research Council (CSIC) is the most multidisciplinary research institute on marine science in Spain, and the leading scientific organization in Southern Europe. It is also the first marine science research centre to be accredited as a **Severo Ochoa Centre of Excellence**, a recognition to the institution's leadership in the field of marine research in Spain and to its commitment to create social impact.

Our goal is to develop **research of excellence** to inspire a society in harmony with the blue planet, in line with the values of the **United Nations Decade of Ocean Science for Sustainable Development (2021-2030)**.

For further information, please visit the our website.

The role and the team

We invite applications for a fully funded PhD position in abyssal benthic ecology as part of the MacroHolos PIE Project, led by Dr. Erik Simon-Lledó. The project aims to disentangle large-scale patterns in abyssal seascape biodiversity and community assembly, and their resilience to climate change and other human impacts, like seabed mining. The project will initially focus on holothurian communities of the northeast Pacific abyss (Clarion Clipperton Zone), but with possibility of expanding a part of the work to a global scale (by collaboration with other deep-sea research institutes). The student will work with extensive seabed imagery to generate species occurrence, biomass, taxonomy and functional trait databases. Using this data, the candidate will adapt and apply state-of-the-art landscape ecological modelling frameworks to investigate the mechanisms regulating species assembly across environmental gradients and anthropogenic disturbance in abyssal seascapes.

The candidate will join the Functioning and Vulnerability of Marine Ecosystems group at ICM-CSIC: https://www.icm.csic.es/en/research-group/functioning-and-vulnerability-marine-ecosystems.The project includes opportunities for short placements in leading European deep-sea research centres, participation in seagoing expeditions and collaboration with industry, government agencies and international marine conservation stakeholders.

Pg. Marítim de la Barceloneta, 37-49
08032 Barcelona
+34 932 309 500
www.icm.csic.es

Job description

The successful candidate will be involved in:

- Detection, processing and taxonomic classification of abyssal seascape megafauna specimen occurrences, particularly holothurians, from high-resolution seabed imagery
- Georeferencing and database construction of abyssal benthic biodiversity and species traits, with particular focus on holothurian megafauna
- Application of complex macroecological computing frameworks (e.g. species-abundance and functional trait distribution modelling, beta-diversity partitioning, or joint community modelling) to capture biodiversity-environment-disturbance relationships.
- Translating scientific results into ecosystem-based conservation management strategies and marine policy recommendations
- Presentation of findings in scientific conferences and peer-reviewed publications

Requirements

Professional experience

- A Master's degree (MSc or equivalent) in marine biology, deep-sea ecology, or related field
- An academic transcript average grade, on a 0–10 scale, equal to or greater than 6.5
- Strong interest in statistical analysis and ecological modelling
- Knowledge on deep-sea benthic invertebrate taxonomy, particularly echinoderms
- Experience or demonstrated potential in computational analysis (preferably in R)
- Familiarity with image analysis and GIS tools is an asset

Languages

Fluent in English (written and spoken). Catalan or Spanish is an asset

Competences and skills

- Excellent analytical and problem-solving skills
- Strong organizational and documentation abilities
- Willingness to collaborate in an interdisciplinary, international environment
- Capacity to work independently and meet deadlines

Pg. Marítim de la Barceloneta, 37-49
08032 Barcelona
+34 932 309 500
www.icm.csic.es

The offer

We are offering a contract with the following conditions:

- **Estimated annual gross salary**: Salary will range between 23.000€ and 25.000€ commensurate with qualifications and experience, and consistent with CSIC PhD studentship pay scales.
- **Working time:** Full-time contract with flexible working hours and possibility of teleworking up to 3 days a week. Read more about work-life balance here.
- **Target starting date**: September – October 2025
- **Duration**: 3–4 years, fully-funded

The CSIC and all its research centers were awarded with the "HR Excellence in Research" seal in 2021. This recognition reflects our commitment to continuously improve our human resources policies in line with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

Recruitment at ICM is open, transparent and merit-based, and all applicants compete on the same terms.

Interested candidates please contact (for queries) or send a cover letter (2 pages max) and a CV to:

esimon@icm.csic.es

Candidatures will be reviewed upon reception, and a first round of interviews will take place in July 2025

MINISTERIO
DE CIENCIA, INNOVACIÓN
Y UNIVERSIDADES

CSIC
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

EXCELENCIA
SEVERO
OCHOA