

Post-doctoral research grant (BIPD) in deep-sea ecology – 3 vacancies

Reference: 2025_011_BIPD_TD

A competition is open for the attribution of **3 post-doctoral research grants** in deep-sea ecology within the R&D Institution CIIMAR (Interdisciplinary Centre of Marine and Environmental Research).

The selected candidates will be based at CIIMAR (www.ciimar.up.pt), a leading marine and environmental research and advanced training institution in Portugal, working at the frontier of knowledge and innovation. CIIMAR has a vibrant and international environment, and provides excellent support to incoming students and researchers, namely in advanced training, career planning and development, and leadership.

The three postdoctoral fellows will be part of a unique cohort of early-stage researchers that will consolidate CIIMAR's expertise on deep-sea biodiversity, ecology, and conservation. In scope of the positions, the postdoctoral researchers will have the opportunity to make ample (inter)national networking including research and training stays (for up to 4 months) at other research institutes, which are part of CIIMAR's wide network of collaborations in these fields, for instance at the Royal Institute for Sea Research (NIOZ, The Netherlands), the Institute of Marine Research (IMR, Norway), and the Alfred Wegener Institute (AWI, Germany), to develop and consolidate skills and competences across the various fields. The postdoctoral fellows will participate in several high-profile projects funded at national, regional and European levels. Selected candidates will be supported in developing applications for subsequent positions for continued career development at CIIMAR.

1. Scientific area: Biological Sciences

2. Admission requirements: The candidate must hold a PhD* in Biology or Ecology, or similar areas, and have demonstrated experience in:

- numerical ecology; modelling marine organisms or ecosystems; marine ecology; data analysis **for position DEEP1 – deep-sea ecological modelling;**
- marine biology fieldwork, molecular biology, environmental DNA, NGS sequencing data analysis **for position DEEP2 – deep-sea genomics;**
- physiology of deep-sea organisms; stress responses in deep-sea organisms, physiological biomarkers; data analysis of transcriptomes **for position DEEP3 – ecophysiology of deep-sea organisms;**
- production of scientific papers, technical reports, or project deliverables **(all positions);**
- communication of scientific results to specialist and non-specialist audiences through public talks, workshops, or media interactions **(all positions);**
- supervision/mentoring of (under)graduate students in research projects, fostering a supportive learning environment **(all positions);**
- fluency in English both written and oral communication **(all positions).**

*BIPD can only be granted if the following are cumulatively verified requirements:

- a) The doctoral degree was obtained in the three years prior to the date of submission of the scholarship application;
- b) Post-doctoral research is carried out in a host entity distinct from the entity where the research work that led to the award of the doctorate degree was carried out;
- c) Research activities do not require post-doctoral experience;
- d) Research activities have a development and execution period equal to or less than three years;

e) The scholarship holder does not exceed, with the conclusion of the scholarship contract in question, including the possible renewals, an accumulated period of three years in this type of scholarship, consecutive or interpolated.

Academic degrees awarded by a foreign higher education institution must comply with the provisions of Decree-Law no. 66/2018 of 16th August, which approves the legal regime of recognition of academic degrees and diplomas of Higher Education, attributed by foreign higher education institutions, being any formalities established therein fulfilled only by the date of the contracting act.

3. Work plan: the selected candidate will accomplish the following activities:

- building and managing datasets of deep-sea organisms' biological traits; developing food web models of deep-sea ecosystems; developing bioenergetic models of deep-sea organisms; conducting sensitivity and uncertainty analysis of model simulations (**in position DEEP1 – deep-sea ecological modelling**)
- collect and process environmental DNA (eDNA) samples for metabarcoding and metagenomics analysis to investigate community diversity; develop eDNA protocols to enhance accuracy in detecting target species; analyze sequencing data generated through next-generation sequencing (NGS) using bioinformatic tools (**in position DEEP2 – deep-sea genomics**);
- maintenance of deep-sea organisms under controlled conditions; development of aquaria experiments; assessment of physiological and stress biomarkers using transcriptomic approaches (**in position DEEP3 – ecophysiology of deep-sea organisms**);
- data processing and analysis (all positions)
- production of reports and scientific papers (all positions)
- engagement with stakeholders (all positions)
- development of communication and outreach activities (all positions)
- supervision and advanced training of (under)graduate students (all positions)

4. Legislation and official rules: Law n^o.40/2004, 18th August (Research Fellowship Holder Statute) in its current version; Regulations for Studentships and Fellowships of the Fundação para a Ciência e a Tecnologia, I.P. and CIIMAR Grants Regulation.

5. Work place: The work will be carried out at CIIMAR – Interdisciplinary Centre of Marine and Environmental Research, Av. General Norton de Matos s/n, 4450-208 Matosinhos (Portugal), integrated in the Marine Ecosystem Modelling team under the coordination of Dr. Irene Martins (position DEEP1), Microbiome Ecology and Biogeochemistry team under the coordination of Dr. Catarina Magalhães (position DEEP2), Endocrine Disruptors and Emerging Contaminants team under the coordination of Dr. Miguel Santos (position DEEP3), as well as in the Deep-Sea Biodiversity and Conservation research team under the coordination of Dr. Joana Xavier (all positions).

6. Duration of the contract: Duration of 18 months, starting in March 2025, under the regime of exclusive dedication.

7. Monthly salary: The monthly maintenance allowance is € 1.801,00 (when in Portugal) and € 2.612,03 (when abroad) in agreement with the monthly maintenance stipend table of the grants directly attributed by FCT, I.P. within the country https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf, by bank transfer payment. In addition to this allowance, the grantee(s) will be covered by a personal accident insurance.

8. Selection methods:

The ranking of candidates will be performed by a global evaluation (GE) of the applicant's Academic Performance (AP), Professional Experience in the Field of Study (PE) and Motivation Letter (ML) performed according to the following criteria:

$$GE1 = (AP*0.2) + (PE*0.6) + (ML*0.2)$$

- AP: Academic performance relevant for the scientific area, taking into account the University-level degrees, their appropriateness to the position as well as the performance of the candidate in each of such degrees, ranked from 0 to 10.
- PE: Professional experience in the field of study, including scientific production, ranked from 0 to 10.
- ML: A global appreciation of the motivation of the candidate and interest in the field of research, taking into account the motivation letter, and any other element in the CV or transcripts that can help in this regard, ranked from 0 to 10.

In the case of a tie between the scores of the top candidates, and provided that such scores are higher than 7 values, a Personal Interview (PI), ranked from 0 to 10, will be done to the three top candidates, after which a final ranking will be performed as following:

$$GE2 = (GE1*0.8) + (PI*0.2)$$

9. Composition of the jury selection:

President of the jury: Dr. Joana Xavier
Vogal: Dr. Irene Martins
Vogal: Dr. Catarina Magalhães
Vogal: Dr. Miguel Santos

10. Form of advertising/notification of results:

The final results of the evaluation will be published through a list sorting the candidates according to their attributed mark, on the CIIMAR website and by e-mail; After the announcement of the results, candidates are considered automatically notified to, if they wish to do so, comment on the results on a preliminary hearing period within 10 working days after that date, as provided for in the *Código do Procedimento Administrativo*. The jury reserves the right to not assign the grant depending on the quality of the applications.

In case of resignation or withdrawal of the selected candidate, the next candidate with the highest evaluation score will be notified immediately.

11. Deadline for application and presentation of applications: The competition is open from **24/02/2024 until 14/03/2025**. The applications cannot exceed 20 MB and must be formalized, compulsorily, by sending the following documents:

- detailed *Curriculum vitae*;
- copy of the eligibility certificates;
- motivation letter;
- indication of the reference of the competition (as indicated in the selection criteria)
- contact e-mail address and phone number;
- contact of two references

The applications must be sent by e-mail to: rh@ciimar.up.pt, and igregorio@ciimar.up.pt with the reference **2025_011_BIPD_TD DEEP1 or DEEP2 or DEEP3** in the subject line. If you are applying to more than one of the positions you must submit separate applications. The applications that **do not include all** the elements previously indicated **will not be considered**.

12. Non-discrimination and equal access policy: CIIMAR actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership. Pursuant to Decree-Law no. 29/2001 of 3 February, disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honor, their respective disability degree, type of disability and communication/expression means to be used during the selection period on their application form, under the regulations above.