Research Fellowship – 1 Vacancy

Within the project - IMAGINE

Project Refº: HORIZON-INFRA-2022-TECH-01-101094250

Ref. ª: CCMAR/BINCGAM/17/2026

The Centro de Ciências do Mar do Algarve (CCMAR) opens one (01) Research Fellowship for a person with a Master Degree (Bolsa de Investigação não conducente à obtenção de grau académico para mestre) in the scientific area of **Bioimaging** or related area, eligible to candidates of any nationality, including stateless persons and beneficiaries of the political refugee status, within the scope of the research project HORIZON-INFRA-2022-TECH-01-101094250, designated by **IMAGINE** - *"Next generation imaging technologies to probe structure and function of biological specimen across scales in their natural context"* funded by the European Commission, through HORIZON-RIA program, under the following conditions:

1.Host and Contracting Institution: CCMAR

This fellowship is intended for master's degree holders that are enrolled in a non-academic degree course, integrated in the educational project of a higher education institution, and developed in association or cooperation with one or more R&D units at the starting date of the fellowship, with the costs associated with the course being fully covered by the project.

2.Work Plan, Tasks and Objectives:

This research project aims to develop and evaluate the next generation of low-cost, open-source optical imaging tools for high-resolution, 3D whole-body imaging of (living) mesoscopic samples. By making these technologies more accessible, the project seeks to broaden research capabilities and foster innovation in biological imaging**.**

Specifically, the fellowship holder will:

- Design and build an improved version of QBI's open-source, low-cost 3D optical imaging system, including optical projection tomography and lightsheet microscopy modules;
- Prototype components using 3D printing;
- Develop advanced illumination and detection strategies to reduce scattering effects;
- Accelerate scans and automate image analysis by integrating AI methods in collaboration with QBI team members.

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- Integrate the developed methods into user-friendly plugins for Napari and/or ImageJ, ensuring open-source availability and community adoption;
- Test the system using phantom, live developing/adult zebrafish, and marine organisms;
- Disseminate results via high-impact publications, open-source code releases and presentations at international conferences;
- Develop outreach activities and participate in science-communication activities, helping to promote open science and public education in microscopy and marine biology;
- Collaborate with other groups at CCMAR, UAlg and beyond (e.g. EMBL).

3.Scientific Supervisor:

Doctor Teresa Matias Correia, Project coordinator, Group Leader and Principal Researcher at CCMAR.

4.Workplace:

The place of work is at CCMAR (Campus de Gambelas, Universidade do Algarve, Faro, Portugal) and other places necessary for the competition of the work plan.

5.Requirements for the application:

The Candidates must meet the following conditions:

1. Bachelor's degree in Physics, Engineering, Biomedical Engineering, or a related discipline;
2. Master's degree in Physics, Engineering, Biomedical Engineering, or a related discipline;

Non-compliance justifies exclusion from the procedure.

6.Evaluation Criteria:

Through the analysis of the application documents the evaluation criteria for the applications and their relative weight for ranking are as follows:

1. Hands-on experience with optical imaging systems, including developing, assembling, or contributing to a custom experimental setup from individual components (e.g. optical alignment, mechanical assembly, camera or detector interfacing, light source integration), beyond the operation of commercial platforms. This experience may have been acquired during the degree, final-year project, thesis, internship, or research position - 35%;

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2. Technical experience document: quality and relevance of the submitted description of an optical system the candidate personally designed, assembled, or contributed to, including any instrument control software developed as part of this work, specifying their individual role, degree of autonomy, and context of the work. Supporting evidence is encouraged (e.g. GitHub/GitLab repositories, open-source hardware contributions, thesis, technical reports, conference contributions, peer-reviewed publications, or participation in recognised optical instrumentation workshops) - 35%;
3. Experience with programming or software development for data acquisition or instrument control (Python or C++ preferred; experience with LabVIEW, ImSwitch, Micro-Manager, or optical design software such as Zemax is valued) - 15%;
4. Experience in biological imaging and sample preparation - 10%;
5. Experience with image processing or analysis (Python/PyTorch or Napari preferred) - 5%;

It is considered an advantage if the candidate has:

1. Experience with optical projection tomography (LSFM), lightsheet fluorescence microscopy (LSFM) or other advanced 3D optical imaging systems;
2. Experience with tissue clearing, immunostaining, and live/fixed sample mounting.
3. Experience with AI-based image analysis (e.g. training deep learning models);
4. Willingness and availability to embark on a doctoral program within the next 12-18 months in this field of science.

The selection committee reserves the right to contact and interview candidates if additional information or clarification of any curricular aspect is necessary. In case it takes place, the interview aims to evaluate in more detail the curricular items used to grade the candidate according to the list above.

In the event that no applicant has the necessary profile, the selection committee reserves the right to close the call without any recruitment. In the event that the selected person does not take up the position because of failure to comply with documentary requirements or any other reason, or later during the contract if they resign, the jury reserves the right, upon convenience and opportunity, to assign the post to the next applicant in accordance with the ranking positions based on the selectable reservation list that can be used up to 12 months of the date of the present announcement.

7.Fellowship conditions: The fellowship will have an initial duration of 06 months, expected to start from 04 of January of 2027 and eventually renewed for additional periods until the end of the project and never

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exceeding a maximum of 12 months. The fellowship must be carried out under an exclusivity regimen, according to the CCMAR fellowship regulations (see here), and the FCT fellowship regulation based on the Portuguese law 40/2004, of 18 of August (Scientific Research Fellowship holder statutes) amended by the Decree-Law 123/2019 of 28 of August. A maintenance allowance of €1359.64 will be paid monthly, through bank transfer, and will be updated as stipulated by the Foundation for Science and Technology (see here).

8.Application period: from 04th of November of 2026 to 18th of November of 2026 at 23:59 (Lisbon time, Portugal).

9.Application process and mandatory documents:

Only complete applications submitted directly and obligatorily on the CCMAR website, https://ccmar.ualg.pt/en/career-opportunities, are accepted and must include the documents below indicated under penalty of exclusion:

1. A motivation letter (in English);
2. A detailed Curriculum Vitae (in English);
3. A copy of the Bachelor's Degree Certificate;
4. A copy of the Master's Degree Certificate;
5. The email contact of up to 3 referees;
6. Brief technical description (maximum 1 page) of optical imaging system(s) the candidate personally designed, assembled, or contributed to, including any instrument control software developed as part of this work. The description must clearly specify the candidate's individual role and contribution within the work. This experience may have been acquired in the context of a degree module, final-year project, thesis, internship, or research position.

The submission of an application without the documents/information required above determines the immediate rejection of the application.

10.Results and Prior Hearing: Notification of admission and ranking results will be communicated by email to candidates within 90 working days after the deadline for submitting applications. After said notification, the candidates have 10 working days to comment/challenge the preliminary decision.

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11.Selection Committee:

Doctor Teresa Correia, Project coordinator, Group leader and Principal Researcher at CCMAR (President of the jury); Professor Rui Guerra, Associate Professor at University of Algarve (Member of jury); Doctor Gabriel Martins, Researcher and Bioimaging Platform Manager at Gulbenkian Institute for Molecular Medicine (Member of jury); Professor João Cardoso, Assistant Professor at Algarve University and researcher at CCMAR (substitute member); Professor Deborah Power, Full Professor at Algarve University and Group leader at CCMAR (substitute member).

12.Notes:

Hiring Documents

After the candidate is selected and for the hiring purpose the following documentation/information will be requested:

- Proof of the enrollment (Certidão de inscrição/matrícula) from the Academic Services in a non-academic degree course (in accordance with the declaration on honour);
- Copy of the bachelor's degree;
- Copy of the master's degree;
- Declaration of commitment stating the exclusivity regime;
- Declaration of Honour;
- Civil, fiscal and social security Identification (if applicable);
- Account Number – IBAN;
- Ciência ID: https://www.ciencia-id.pt/CienciaID/HomePage.aspx

-If applicable, a declaration by the candidate stating that, upon completion of the present research fellowship contract, they will not have exceeded a cumulative period of two years under this type of fellowship, whether consecutive or not.

13.Fellowship Agreement model:

After the candidate selection and all information is received, it will be signed a fellowship agreement in accordance with the model here.

14.Fellowship holder Assessment:

The activity developed by the fellowship holder will be evaluated by the supervisor, by applying the following criteria, in accordance with the model below.

Criteria 1. Compliance with the activity plan and assiduity (30%);

Criteria 2. Technical and scientific performance (30%);

Criteria 3. Development of scientific documents, activity reports and participation in knowledge transfer activities (20%);

Criteria 4. Capacity to work independently whenever necessary, as well as part of a collaborative and interdisciplinary research team, including with other team members and CCMAR researchers (20%).

15.Supervisor report model: here.

16.Fellowship holder report:

By the end of each fellowship period (if applicable) the fellowship holder must present a report. You can find the fellowship holder final report model here

17. Notes:

17.1 The board of Directors reserves the right, due to a change in circumstances at the date of the present announcement, to cancel the present call without any recruitment.

17.2 Disabled candidates shall be preferred in a situation of equal ranking, and said preference supersedes any legal preferences. Candidates must declare, on their honour, their respective disability degree, type of disability and communication / expression means to be used during selection period on their application form, under the regulations above.

17.3 CCMAR encourages applications from individuals with disabilities, including those with a disability degree of ≥ 60%.

17.4 CCMAR endorses the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (Charter and Code).

17.5 CCMAR's non-discrimination and equal access opportunities policy – No candidate can be privileged, benefited, jeopardised or be deprived of any right or exempt of any claim in regards to descendent, age, gender, sexual orientation, marital status, economic situation, origin, social economy, genetic heritage,

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disability, chronic disease, nationality, ethnicity, territory of origin, language, religion, politics, ideology or union membership.

Faro, 30th of October 2026



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