

CALL FOR A RESEARCH FELLOWSHIP Fellowship Reference IMM/BII/19-2024

Instituto de Medicina Molecular João Lobo Antunes (iMM) opens a call for one research fellowship under the project "Sub-cellular Metabolic Compartmentalization during Oocyte Development" (FPJ001578), with funding support from the Chan Zuckerberg Initiative DAF.

Scientific Area(s): Metabolomics, Oogenesis, Cell Biology, Optical Imaging, Bio-image Analysis.

Fellowship recipients / Admission requirements: Any National, foreign and stateless candidate(s) that fulfil the necessary conditions to be enrolled in a PhD (in area related to the work plan) can apply.

Applicants must hold the following requirements:

- MSc degree holder in Development and Evolution Biology;
- Proficient in advanced optical microscopy imaging;
- Excellent bioimage informatics skills;
- Written and spoken English fluency;
- Publication track-record in related fields.

Desirable

- Experience in microfluidics workflows;
- Experience in quantitative data-mining of bioimage data;
- Experience in single-molecule localization microscopy;
- Experience in 3D Image Segmentation and Reconstruction;
- Experience with Deep Learning applications for Life Sciences and microscopy;
- Experience with image restoration and denoising;
- Experience with live imaging techniques;
- Good programming skills;
- Good managing skills;
- Forward thinking, can-do, pro-active attitude;
- International experience will be valued.

Work Plan and Objectives: The candidate will integrate a novel highly collaborative project that will be carried out between two laboratories with complementing expertise: the Organismal Physiology Laboratory with expertise in the areas of metabolism and animal physiology and the Optical Cell Biology Laboratory, focused on the establishment of novel technologies for microscopy image acquisition and analysis. The candidate will join the research project "Sub-cellular Metabolic Compartmentalization during Oocyte Development", funded by the Chan Zuckerberg Initiative DAF, that aims at investigating the sub-cellular distribution of metabolic functions using the oocyte of the the fruit fly Drosophila melanogaster to execute the following activities under the supervision of Dr. Zita Carvalho-Santos and Dr. Ricardo Henriques:

- Carryout microscopy imaging experiments exploiting super-resolution and DNA-PAINT technology;
- Design and deploy microfluidics workflows and optical imaging;
- Perform quantitative data-mining of bioimage data aimed at achieving spatial proteomics.

Legislation and Applicable Regulation: Estatuto do Bolseiro de Investigação (Lei n.º 40/2004, de 18 de Agosto, republished in attachment to Decreto-Lei n.º 202/2012, de 27 de Agosto, changed by **Decreto-Lei n.º**



123/2019, 28 de Agosto), current Regulation of Fellowships of iMM and iMM Career By-Law and Assessment regulations.

Predicted start date, duration and renewal conditions: The fellowship contract is expected to start on May 2024, for a period of twelve (12) months on an exclusive basis, eventually renewable until the maximum stipulated in applicable regulations, not exceeding the eligibility period of the project.

Work place and Scientific orientation: The research activities will be developed at the developed at Organismal Metabolic Physiology Lab of iMM, under the supervision of Dr. Zita Carvalho-Santos, and at the Optical Cell Biology Laboratory of IGC, under the supervision of Dr. Ricardo Henriques.

Non-discrimination and equal access policy: iMM undertakes to ensure compliance with the principles of non-discrimination and equality and, to that extent, provides that no candidate can be privileged, benefited, harmed or deprived of any right or exempted from any duty due in particular ancestry, age, gender, sexual

orientation, marital status, family status, economic status, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic disease, nationality, ethnic origin or race, place of origin, language, religion, political or ideological convictions and trade union membership.

International environment and experience: Diversity is a fundamental aspect of the essence of iMM, where researchers and non-researchers of different nationalities, backgrounds and areas of study work together, promoting the exchange of experiences and interactions, contributing to the personal and professional development of each person and to the existence of an international, inclusive and stimulating environment.

Research Fellows Support Centre: The Research Fellows Support Centre works on Tuesdays and Thursdays from o8:30AM to 6:00PM at the Human Resources Office.

Fellowship financial conditions: The fellow will benefit from a monthly stipend in the amount of 1600€. The amount will be paid by wire transfer at the end of each month. The fellow will also benefit from a personal accident insurance to execute the proposed research activities as well as the right to Social Security through Voluntary Social Insurance regimen, if wanted, under the terms of Código dos Regimes Contributivos do Sistema Previdencial de Segurança Social, and the contributions costs will be supported by the research project.

Application Documents: - Motivation Letter in English; - Detailed CV; - MSc certificate; - Contacts of 2 references. *The non-compliance with these requirements determines the immediate rejection of the application*. In case the applicant does not have yet the required degree certificate, a declaration of honor stating the conclusion of the necessary qualifications for the purposes of this process will be accepted and must be sent by the end date of the call.

Jury evaluation and selection: Applications will be evaluated by Dr. Zita Santos (iMM), Dr. Ricardo Henriques (IGC) and Dr. Jorge Carvalho (IGC).

Selection methods: Applications will be evaluated in accordance with the following methods:

- 1st Phase: Curriculum vitae: 50% and Motivation letter: 25%;



- 2nd Phase: Interview: 25%. A maximum of 3 candidates who score > 75% in 1st phase will be selected for an interview.

Deadlines and application process: The call will be open from 8th until 19th April 2024.

Applications should be submitted through iMM website, by clicking in the "Apply" button below the position job ad. The non-compliance with these requirements determines the immediate rejection of the application.

Notification of results: The evaluation results will be announced within 90 days after the termination of the applications submission deadline, by writing and publishing a jury meeting minute at iMM website at https://imm.medicina.ulisboa.pt/jobs/#results with all process of recruitment, evaluation and selection including a list of all excluded and admitted candidates and for these last ones, their classification. All admitted candidates will be notified by email.

Preliminary Hearing and Final Decision Deadline: After notification, all candidates have 10 working days to respond. Panel's final decisions are pronounced within a period of 90 days, from application deadline.

Fellowship contracting: The Fellowship is granted through the signature of a contract between iMM and the selected fellow and after the fellow send the following mandatory documents: copy of identification document (in case of non-European citizens is mandatory the work visa / valid resident permit), document proving the required academic degree and the document proving the enrollment in a PhD study cycle.

For each Fellowship period an an <u>Activity Report</u> must be prepared must be prepared by the fellow as well as the <u>Report</u> by the supervisor.

Lisbon, 5th April 2024

The Executive Director of iMM Professor Maria Manuel Dias da Mota



