

CALL FOR A RESEARCH FELLOWSHIP
Fellowship Reference IMM/BII/14-2023

Instituto de Medicina Molecular João Lobo Antunes (iMM) opens a call for one research fellowship under the project *“The impact of germline metabolic reprogramming on reproduction and physiology”* with the funding support from *“European Union (ERC Stg, SweetEggs – 101043068)”*.

Scientific Area(s): Animal physiology, Nutrition, Reproductive biology

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

Applicants must hold the following requirements:

- BSc degree holder in Biochemistry;
- Enrolled in MSc with a curricular component in Development, Molecular Biology and Molecular Methods;
- Experience working in experimental lab;
- Hands-on technical experience in *Drosophila* husbandry and genetics, cell biology and molecular techniques and data analysis;
- Motivation and interest for science;
- Collaborative and good communication skills;
- Meticulousness;
- Autonomy;
- English fluency.

Work Plan and Objectives:

Inter-organ communication is at the core of most aspects of physiology. Female fertility has emerged as a highly relevant paradigm to study the integration of metabolism, inter-organ communication, and dietary nutrient availability. Because it is critical for animal fitness, the function of the germline needs to be tightly regulated, ensuring the reliable and timely production of high-quality oocytes. Furthermore, the production of oocytes by the germline requires a high and balanced nutrient provision. Which molecular processes in the germline impact animal physiology, what are the signaling molecules underlying the communication between the germline and other tissues, and how these are modulated by nutrient availability, are key questions that our lab will approach in this project. To address these questions, in this project we will use the *Drosophila* model organism to:

- Perform tissue-specific gene knockdowns using RNAi for a list of candidate genes for roles in inter-organ communication and regulation of nutrient appetite;
- Monitor ovary tissue morphology by immunostaining and analysis by confocal microscopy;
- Monitor female fertility by measuring egg number and viability;
- Monitor animal nutrient appetites using state of the art feeding behavior setups;
- The candidate peptides showing the strongest effects in nutrient appetite will be dissected further for their functions in regulating inter-organ communication.

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 predicted to start in September 2023, for a period of 12 months on an exclusive basis, eventually renewable until the maximum stipulated in applicable regulations, not exceeding the eligibility period of the project (predicted to end on 31st December 2027).

Work place and Scientific orientation: The research activities will be developed at the Organismal Metabolic Physiology Lab of IMM, under the supervision of Doctor Zita Carvalho-Santos.

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 9:00AM to 6:00PM at Human Resources Office.

Fellowship financial conditions: The fellow will benefit from a monthly stipend in the amount of 930,98€. 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 in English;
- BSc certificate (please check the *“NOTE” in Fellowship recipients*);
- Contacts of 2 references;
- Candidate’s declaration of honor indicating previous fellowships, if any, its typology and duration.

The non-compliance with these requirements determines the immediate rejection of the application.

NOTE: 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: Dr. Zita Carvalho-Santos (iMM), Dr. Patrícia Francisco (iMM), Dr. Catarina Pereira (Champalimaud Foundation).

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

- 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 17th July 2023 until 28th July 2023

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 MSc course.

For each Fellowship period an [Activity Report](#) must be prepared by the fellow as well as the [Report](#) by the supervisor.

Lisbon, 14th July 2023



The Executive Director of iMM
Professor Maria Manuel Dias da Mota