



CALL FOR A POSTDOCTORAL RESEARCH FELLOWSHIP Fellowship Reference iMM/BIPD/22-2022

Instituto de Medicina Molecular João Lobo Antunes (iMM) opens a call for a Postdoctoral research fellowship with the funding support from "La Caixa" Banking Foundation under the project *Whole-organism vaccines* against *P. falciparum and P. vivax malaria with enhanced efficacy and scope*".

Scientific Area: Molecular Parasitology; Vaccinology.

Fellowship recipients / Admission requirements: Any National, foreign and stateless candidate(s) can apply. Applicants must hold the following requirements:

- PhD in Biology or related areas (obtained less than 3 (three) years);
- Research experience in malaria vaccination;
- Personal license for working with Laboratory Animals equivalent to FELASA (Federation for Laboratory Animal Science Associations) Category B (mandatory);
- Experience in expression of *Plasmodium falciparum* antigens;
- Experience in protocols of mouse immunization with malaria vaccine candidates;
- Experience in in vitro and in vivo infections with malaria parasites;
- Experience in cell culture of human cells;
- Expertise in flow cytometry, quantitative PCR and immunofluorescence microscopy;
- Knowledge of immunology and experience in immunological assays;
- Excellent knowledge of spoken and written English;
- Excellent communication skills, team spirit, and ability to work in a group;
- Excellent organizational skills and ability to keep detailed records of experiments;
- Critical mind and pro-activity;
- Ability to work in multidisciplinary teams.

NOTE: In accordance with the applicable regulation, only candidates that hold the PhD degree for less than 3 years are eligible for this call.

Work Plan and Objectives: The fellow will be responsible for the pre-clinical evaluation of genetically modified *Plasmodium berghei*-based candidates for whole-sporozoite vaccination against malaria. The activities to be developed are:

- In vitro (hepatoma cells and primary hepatocytes) and in vivo (rodent models, including humanized mice) infections with transgenic *P. berghei* parasites;
- Immunofluorescence microscopy analyses of infected cells and liver sections;
- Immunization of rodent models of *Plasmodium* infection and sample (blood, organs and cells) collections;
- -Aanalyses of immune responses by ELISA, IFAT and multi-parameter flow cytometry;
- Functional assays of inhibition of hepatic, blood and mosquito infection by *Plasmodium*; among others.

Law and 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 /October 2022, for a period of 12 (twelve) 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 Plasmodium Infection & Anti-malarial Interventions Lab coordinated by Miguel Prudêncio and under his supervision.

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.

Research Fellows Support Centre: The monitoring center works on Tuesdays and Thursdays from 9:00AM to 6:30PM at Human Resources Office.

Fellowship financial conditions: The fellow will benefit from a monthly stipend in the amount of 1930€ in accordance with the applicable regulation. 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 written in English; - Detailed CV; - PhD certificate; - Name and Contact of two references (email and telephone). *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 a jury composed by Miguel Prudêncio (iMM), Helena Nunes-Cabaço (iMM) and Luísa Figueiredo (iMM).

Selection methods: The admitted applications will be evaluated taking into account the expertise, quality, and relevance of the applicants' scientific path (scientific production and research experience), the detailed curriculum of each candidate, and the fit of the applicant's profile to the proposed work plan.

First phase: Curriculum Analysis (50%) and Motivation Letter (25%) - The Curriculum will be analyzed qualitatively in what concerns the relevance of the candidate's experience for the tasks to be performed, including executed and/or published scientific work, with special emphasis on areas related to the work plan (25%); research experience and relevant knowledge in the area of the proposed work plan as described in the candidate's profile (25%). The motivation and interest for the activities to be performed (10%), the fit



between the applicant's prior experiences/expertise/relevant knowledge and the work plan (10%) and the command of the English language (5%) will be analyzed based on the Motivation Letter.

Second phase: The jury will select for the interview (evaluation: 25%) the candidates who obtained a minimum of 50% in the first phase of the evaluation. In the event of a tie, the decision will be responsibility of the chairman of the jury.

Deadlines and application process: The call will be open from 12th of July until 25th of July 2022.

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.

Selection reserve list: Not applicable.

Fellowship contracting: The Fellowship is granted through the signature of a <u>contract</u> 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.

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

Lisbon, 11th of July 2022

The Executive Director of iMM Professor Maria Manuel Dias da Mota