

CALL FOR A RESEARCH FELLOWSHIP
Fellowship Reference IMM/BII/21-2021

Instituto de Medicina Molecular João Lobo Antunes (iMM) opens a call for one research fellowship with the funding support from “La Caixa” Banking Foundation under the project “**IL7R_LungCan**”.

Scientific Area(a) Health Sciences - Oncobiology

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 an MSc degree course (in area related to the work plan) can apply.

Applicants must hold the following requirements:

- Bachelor in the field of Health or Life Sciences;
- Experience with *in vivo* mouse work will be highly valued
- High organization skills and work capacity are essential.

Work Plan and Objectives: Lung cancer is the leading cause of cancer-related deaths worldwide. Non-small-cell lung cancer (NSCLC) is the major lung cancer subtype, accounting for 85% of all cases. Immunotherapy based on PD-1 axis blockade transformed the therapeutic landscape of advanced NSCLC in recent years. However, resistance can emerge and constitutes a significant challenge. Another clinical hurdle stems from >50% primary tumors metastasizing. Interleukin (IL)-7 and its receptor (IL-7R) are critical for T-cell development, survival of naïve T-cells, and generation and maintenance of memory T-cells, being essential for efficient immune anti-tumor responses. However, they can be subverted to promote cancer progression: IL-7 accelerates leukemia development and IL7R is a bona fide lymphoid oncogene. There is also evidence that IL-7R can be aberrantly expressed in solid tumors and contribute to tumor expansion and resistance to therapy. In this project, we propose to: 1) Dissect the role of IL-7/IL-7R in NSCLC development and metastasis; 2) Confirm whether IL-7R is a biomarker of resistance to anti-PD-1 axis therapy and explore the mechanisms by which IL-7R may mediate resistance to immune checkpoint inhibition; 3) Develop novel antibody-based approaches to target IL-7R expression specifically in tumor cells, decrease tumor burden and prevent resistance to immunotherapy. The successful candidate will be a highly organized, sociable, pro-active person who will be involved in the management of this multi-institutional project (which involves also CNIO and Hospital 12 de Octubre in Madrid, Spain), maintaining proper lab organization; inventory and reagent database management; ordering and interaction with suppliers; secretariat support to the PI; preparation of specific broad-use lab solutions; mouse genotyping (DNA extraction and PCR) and some experimental mouse work.

Law and Regulation: 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 October 2021, for a period of 12 (twelve) months on an exclusive, full-time basis, eventually renewable until the maximum stipulated in applicable regulations, not exceeding the eligibility period of the project (predicted to end on 30/09/2024).

Work place and Scientific orientation: The research activities will be developed at João Barata's Lab of iMM, under the supervision of Doctor João Barata.

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.

Fellow Monitoring Centre: The monitoring centre 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 **1064€** 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 with a short description of your previous research experience with relevance to the project, your main scientific achievements, and why you believe you have the profile and qualities to become our lab manager; - Detailed CV; - BSc certificate; - Two reference letters and/or reference contacts; - Candidate's declaration of honor indicating previous fellowships, if any, their typology and duration. ***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. All documents must be in PDF format.

Jury evaluation and selection: João Taborda Barata (FMUL/ IMM), Rita Cascão (IMM) and Rita Fragoso (IMM).

Selection methods: Curricular evaluation (60%), Motivation Letter (40%).

Deadlines and application process: The call will be open from **28th of September 2021 until 12th of October 2021.**

Applications should be addressed to Human resources through the email imm-hr@medicina.ulisboa.pt, by indicating the reference of the fellowship. ***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: Pursuant to article 121 of the Administrative Procedure Code, after notified, 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 study cycle. For each Fellowship period an [Activity Report](#) must be prepared by the fellow as well as the [Report](#) by the supervisor.

Lisbon, 27th September 2021

The Executive Director of IMM
Professor Maria Manuel Dias da Mota