iMM is recruiting a <u>Postdoctoral Researcher</u> under an Employment Contract - <u>Reference IMM/CT/15-2023</u>

The iMM – Instituto de Medicina Molecular João Lobo Antunes is a leading Portuguese private non-profit research institute that offers a vibrant scientific environment, aiming to nurture innovative ideas in basic, clinical and translational Biomedical Research. Created in 2002, iMM Lisboa has established itself as a leading national and internationally competitive biomedical institute. Its strategy has been defined by promotion of excellence, leveraged by high-quality human resources, increasing expenditure in infrastructures and knowledge transfer to the society.

The Lymphocyte Regulation laboratory (Host), led by Luís Graca, has a recognized expertise in the study of immune regulation and the role of specialized populations of regulatory T cells (Maceiras et al _Nature Comms_ 2017, Fonseca et al _Science Immunol_ 2017). The lab focuses on investigating various regulatory mechanisms in immune biology, with particular interest in the regulation of the germinal centre (GC) responses, key for antibody production following infection, vaccination, and autoimmunity (Deng et al _Nature Rev Rheumat_ 2019; Fonseca et al _Immunol Rev_ 2019). The group has developed sophisticated methods and protocols that allow detailed investigation of GCs in mice and humans, while making use of single-cell -omics technologies and various statistical, machine learning and computational methods to examine the detailed profile of GC cells and propose new models of regulation (Kumar et al _Science Immunol_ 2021). Our expertise in computational and mathematical approaches has been used to address problems ranging from cell biology (Kumar et al _bioRxiv_ 2022) to human populations (Malato et al _N Engl J Med_ 2022; Malato et al _Lancet Infect Dis_ 2023).

What iMM seeks: **The Lymphocyte Regulation laboratory opens a postdoctoral position** under the prestigious "la Caixa" Foundation funds within the project "**_Single cell and spatial transcriptomics to elucidate the regulation of antibody production in vaccination and autoimmunity_**" (GCvax)**.**

The project is directed towards the elucidation of the biology Tfh and T follicular regulatory (Tfr) subsets and their mechanism in regulating germinal centre responses following vaccination. The postdoctoral fellow will uncover the relationship between different Tfh subsets and their spatial location within the secondary lymphoid tissues for the regulation of antibody production. The selected candidate will be responsible for the computational biology studies combining spatial and single-cell transcriptomics. The research will make use of single-cell and spatial transcriptomics technologies to investigate lymphoid tissue obtained following vaccination. In parallel, equivalent datasets from biopsies of autoimmune patients will provide an opportunity to explore the immune dysregulation leading to autoimmunity.

Profile of Candidate:
- ✓ Highly motivated PhD in biological or computational disciplines, with a background in computational biology;
- ✓ Expertise in R/python, bash, and intermediate statistics (mandatory);
- ✓ Experience in single-cell omics data analysis (preferential);
- ✓ Previous knowledge of immunology will be a plus;
- ✓ Fluency in written and spoken English (mandatory).

What iMM offers: iMM will offer outstanding working conditions in this area in Portugal, including a full-time contract, starting predictably in April 2023.

Working Conditions: - Unfixed term contract; Gross monthly remuneration will be defined based in the merit and experience of the candidate in accordance with the budget defined in the project plus meal allowance for each working day in the daily amount of 5,20€. Also, to the candidate will be paid Holidays and Christmas allowances. The indicated amount will be subject to the mandatory taxes accordingly to Portuguese Labor Law.

How to apply: Please submit **1) Motivation letter, 2) Detailed CV, 3) Contact details of two supervisors who can provide reference letters upon request** and **4) PhD and University degrees certificates** through iMM website by clicking in the "**Apply**" button below the position job ad**, 16th of February 2023 until 29th March 2023.**
Candidates who incorrectly formalize their application or do not submit the documents proving the compliance with the requirements indicated in the call will be excluded. The jury has the right to require to any candidate, in case of doubt, to present documents proving their statements.

Non-discrimination and equal access policy: iMM promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and 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.

Pursuant to Decree-Law nr 29/2001 of 3rd February, disabled candidates shall be preferred in a situation of equal classification, 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.

Evaluation Criteria: Applications will be analyzed by Luis Graça, Margarida Gama Carvalho and Bruno Silva Santos, based on the following criteria:
- ✓ 1st Phase: Curricular evaluation: 25% and Motivation Letter: 25%;
- ✓ 2nd Phase: Interview: 50% (only candidates that score in the 1st phase a minimum of 40% will be selected for an Interview).

Results: Both admitted and excluded candidates list and final classification list shall be posted at iMM website at https://imm.medicina.ulisboa.pt/jobs/#results and 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.

The present call is exclusively aimed at filling the indicated vacancy and may be terminated until the homologation of the final candidates' ranking list and expires with the respective occupation of the position on offer.

Lisbon, 15th of February 2023