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CALL FOR ONE POSTDOCTORAL RESEARCH FELLOWSHIP (BIPD) Reference of Fellowship iMM/BIPD/4-2021

Instituto de Medicina Molecular João Lobo Antunes (iMM) opens a call for one Postdoctoral Research Fellowship with the funding support from JANSSEN – CILAG FARMACÊUTICA, LDA., under the project "*Effect of Brodalumab on neutrophils in psoriasis*".

Work Plan and Goals: The successful candidate will conduct a workplan intended at elucidating the role of different subpopulations of neutrophils in human psoriasis, a frequent (2-3% prevalence worldwide) IL-17 and IL-23-driven autoimmune disorder affecting the skin. Neutrophils are short-lived myeloid cells that have recently emerged as playing a central role in psoriasis, namely through their participation in IL-17- and IL-23-dependent pathways. Moreover, neutrophils are known to comprise biologically diverse subpopulations with different inflammatory potential whose role in the pathogenesis of psoriasis remains to be clarified. This research aims at testing whether, in patients suffering from plaque-type psoriasis, blockade of the IL-17 pathway with therapeutic antibodies affects blood and skin-infiltrating neutrophils and their functions. Controls are provided by patients not undergoing therapy with biologicals. In neutrophils, the activation of the IL-17 and the IL-23-dependent pathways will be assessed (protein and mRNA level) as well as the production of ROS (reactive oxygen species) and NETs (Neutrophil Extracellular Traps), and respiratory burst. To do so, high-end methodologies for gene expression analysis will be performed at both single cell and cell population levels on laser micro-dissected skin-infiltrating neutrophils (skin biopsies) and flow-sorted blood neutrophils. This study shall provide insight on the response of different subpopulations of neutrophils to IL-17 pathway blockade, and deliver clinically useful correlates of therapeutic response. //Different subpops// Technologies//

Scientific Area: Molecular and Cellular Biology, Immunology, Dermatology

Candidate's Profile

- PhD degree holder (for a period shorter than 3 years) for a in Cell/Molecular Biology, Immunology, Biochemistry or related areas;
- Experience in basic cell and molecular biology technologies;
- Knowledge and experience in immunology (Desirable);
- Domain of English language.

Duration of Fellowship: 36 (thirty-six) months on an exclusive basis.

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.

The 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.

Predicted Start Date: April 2021

Workplace and Scientific Orientation: The work will be developed at Paulo Filipe Laboratory under the supervision of Professor Paulo ML Filipe.

Fellow Monitoring Centre: The monitoring centre works on Tuesdays and Thursdays from 9:00AM to 6:30PM at Human Resources Office.

Monthly Remuneration: 1755€, in accordance with the applicable regulations and project budget. The amount will be paid through bank transfer at the end of each month.

Necessary Documents for Applications: - Motivation letter; - Detailed CV; - PhD Degree certificate; - Contact of two references. *The non-compliance with these requirements determines the immediate rejection of the application.*

Evaluation: Applications will be evaluated by a jury composed by Doctors Paulo Filipe, João Ferreira and Miguel Alpalhão.

Selection Method: Curricular evaluation (50%) and Interview (50%).

Deadlines and Submission of Applications: The call will be open for 10 working days, starting on **19**th **February and ending on 4**th **March 2021.** Applications should be sent to iMM Human Resources through the email <u>imm-hr@medicina.ulisboa.pt</u>, indicating the reference of fellowship (mandatory). *The non-compliance with these requirements determines the immediate rejection of the application.*

Communication of Results: The results will be published at <u>https://imm.medicina.ulisboa.pt/jobs/#results</u> and posted at the entrance lobby of the Institute.

Lisbon, 4th February 2021

The Executive Director of iMM Maria Manuel Dias da Mota, PhD