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CALL FOR ONE RESEARCH FELLOWSHIP (BI)
Reference of Fellowship IMM/BI/17-2020

Instituto de Medicina Molecular João Lobo Antunes (iMM) opens a call for a Research Fellowship for a Master Student with the funding support from FCT/MCTES through national funds (PIDDAC) under the project *“Using computational and experimental methods to provide a global characterization of viral fusion peptides” (PTDC/CCI-BIO/28200/2017)*.

Work Plan and Goals: The main goal of this project is to study the mechanisms by which fusion peptides from different viruses promote fusion. Both simulations and experimental studies will be used, in order to provide a detailed description of these systems. In the first phase of the project, molecular dynamics simulation studies of fusion peptides will be carried out in the presence of lipid membranes to analyse the molecular details of the interaction of the peptides with the membrane and predict the effect of mutations. Then, in the second phase of the project, the peptides will be synthesized using solid-phase peptide synthesis. Biophysical techniques such as fluorescence and circular dichroism will be used to investigate the secondary structure of the peptides, and their effect on membranes using model membrane systems.

Scientific Area: Biochemistry and Molecular Biophysics

Candidate's Profile

- Bachelor degree in Biochemistry, Biophysics or related areas, with an average score of 16/20 or higher, enrolled in a Master study cycle;
- Demonstrated experience in the study of molecular dynamics of peptides;
- Demonstrated experience in the study of proteins and/or peptides;
- Demonstrated experience in peptide and/or protein expression, purification, and structural and functional characterization;
- Demonstrated experience in biophysical techniques;
- Good organizational and team work skills;
- Fluency in spoken and written English;

Duration of Fellowships: 6 (six) months on an exclusive basis, eventually renewable not exceeding the eligibility period of the project.

Law and Regulation: Estatuto do Bolseiro de Investigação approved by Law nr 40/2004, from 18th August in its current form (altered by Decree Law nr 123/2019, 28th August) and current Regulation of Fellowships of Fundação para a Ciência e a Tecnologia (approved by Regulation nr 950/2019, from 16th December).

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: January 2021

Workplace and Scientific Orientation: The experimental work will be developed at MCASTANHO Laboratory under the supervision of Professor Ana Salomé Veiga. The work on molecular dynamics will be developed at Instituto de Tecnologia Química e Biológica under the supervision of Dr. Diana Lousa.

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

Monthly Remuneration: 805,98€, according to FCT Regulation Fellowship (https://www.fct.pt/apoios/bolsas/docs/Tabela_Valores_SMM_LOE_2020.pdf). The amount will be paid through bank transfer at the end of each month.

Necessary Documents for Applications: - Motivation letter; - Detailed CV; - Bachelor Degree certificate; - Contact of two references; - Document proving the enrollment in the Master study cycle. ***The non-compliance with these requirements determines the immediate rejection of the application.***

Evaluation: Applications will be evaluated by a jury composed by Doctors Ana Salomé Veiga, Miguel Castanho and Diana Lousa.

Selection Method: Curricular evaluation based on the experience in the field (50%) and motivation letter (20%). Second stage: Interview (30%) - Only the three candidates with the best scores with a minimum classification of 50% on first stage will be selected for the interview.

Deadlines and Submission of Applications: The call will be open for 10 working days, starting on 11th December and ending on 24th December 2020. Applications should be sent to iMM Human Resources through the email imm-hr@medicina.ulisboa.pt, 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 <https://imm.medicina.ulisboa.pt/jobs/#results> and posted at the entrance lobby of the Institute.

Lisbon, 24th November 2020

The Executive Director of iMM

Maria Manuel Dias da Mota, PhD