IBMC - Instituto de Biologia Molecular e Celular

BPD fellowship (f/m)

Internal Code: Norte2020NEURO82

Project: NORTE-01-0145-FEDER-000008 – Porto Neurosciences and Neurologic Disease Research Initiative at i3S

Title: Characterization of the mammalian peroxisomal matrix protein import pathway using an in vitro system

IBMC/i3S is opening **1 (one) BPD** to join its Research Program in **Dissecting the molecular mechanisms of peroxisomal biogenesis**

We are looking for a fellow with a PhD in Biomedical Sciences, Molecular Biology, Biochemistry or related fields with less than three years of post-doctoral experience. The candidate should have full autonomy in working in Molecular Biology and Biochemistry. Preference will be given to candidates with previous experience in recombinant protein production and purification, *in vitro* synthesis and characterization of radiolabeled proteins, protein trafficking and peroxisome isolation. Previous experience in the field of organelle structure/biochemistry/biogenesis will be valued. Applicants should be capable of establishing good inter-personal relationships in the context of a research team. The candidate should be available to join the team immediately.

Group: Organelle Biogenesis and Function (OBF)

PI: Jorge Azevedo

Work Plan: Peroxisomes are single membrane-bound organelles involved in many biochemical pathways. The vital importance of these organelles in human health and development is underscored by a group of genetic diseases - the peroxisomal biogenesis disorders (PBDs) - in which peroxisomes are partially or completely non-functional. PBDs are caused by mutations in genes encoding proteins involved in peroxisomal maintenance and inheritance, the so-called peroxins or PEX proteins.

From the 16 mammalian peroxins presently known, 10 are involved in the import of newly synthesized proteins into the matrix of the organelle. These include the shuttling receptor PEX5

and the ancillary factor PEX7, as well as several proteins of the peroxisomal membrane. In addition to these peroxins, the peroxisomal protein import machinery also comprises other components. These are mostly involved in ubiquitination/deubiquitination of PEX5. This project aims at characterizing in detail this protein sorting machinery. Several biochemical approaches will be used for this purpose, all of which are already implemented in the laboratory.
The work will be developed at Instituto de Investigação e Inovação em Saúde - i3S, Porto, Portugal.

Selection of candidates:
Using a scale ranging from 0 to 20, candidates will be ranked according to their curricular details (weight of 30%) and experience in the field (weight of 70%).

The Fellowship will be for 5 months, and it is expected to start in July 1st, 2019.
The fellowship amount is 1509.8 euros, paid by bank transfer, preferentially.
(http://alfa.fct.mctes.pt/apoios/bolsas/valores)
Fellowships are regulated by current laws relating to the Statute of Science Research Fellows, namely Law 40/2004 of August 18, amended and republished by Decree-Law No. 202/2012 of 27 August and the Regulation of Scientific Research Studentships of IBMC approved by Fundação para a Ciência e Tecnologia (http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2015.pdf)

Selection Committee: Jorge Azevedo, PhD, Tânia Francisco, PhD , Tony Rodrigues,PhD

Applications are open from June 5 to June 15 2019.

To apply for the Research Fellowship interested candidates must hold a PhD degree in Biomedical Sciences (or related areas) and submit a Complete CV, *via* the online application system:
http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=Norte2020NEURO82

The ranking list of candidates will be published at IBMC website, and the selected candidate will be notified by email.