



IBMC - Instituto de Biologia Molecular e Celular

Postdoctoral fellowship (f/m)

Internal Code: Norte2020HOST04

Project: NORTE-01-0145-FEDER-000012, Structured Programme on Bioengineering therapies for infectious diseases and tissue regeneration

Title: Molecular dissection of the mycobacterial methylglucose lipopolysaccharide pathway

IBMC/i3S is opening 1 (one) Postdoctoral Fellowship to join its Research Program in Nav therapies for infectious diseases

We are looking for a Fellow holding a PhD in Biochemistry, Biophysics, Biology or related field. A good command of spoken and written English, and good inter-personal relationships in the context of a multidisciplinary research team are essential attributes. Previous experience in Microbiology and/or Structural Biology will be valued positively.

Group and PI: Biomolecular Structure Group / Pedro J. B. Pereira

Work Plan:

The rising prevalence of tuberculosis worldwide (nearly 2 million deaths every year and estimates of 1/3 of the world population infected with *Mycobacterium tuberculosis*) and the emergence of resistant mycobacterial strains prompt for the discovery of novel biological functions that can be used for therapeutic intervention. This project aims at characterizing biochemically and structurally the essential enzymes belonging to the unique mycobacterial MGLP biosynthesis pathway as a starting point for the rational design of new inhibitors with potential application as anti-infectives. With this aim, the project has the following specific objectives:

- 1. Identify and produce recombinantly enzymes involved in MGLP biosynthesis;
- 2. Determine their 3D structures using X-ray crystallography;
- 3. Design and characterize functional mutants;
- 4. Perform a targeted screen for drug leads.

The work will be developed at Instituto de Investigação e Inovação em Saúde - i3S, Porto, Portugal.

The Postdoctoral Fellowship will be for 12 months, renewable up to 24 months, and it is expected to start in May 1st 2016.

The fellowship amount is 1495 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: Pedro J. B. Pereira, PhD Sandra de Macedo Ribeiro, PhD Ana do Vale, PhD

Applications are open from March 15th to March 31st, 2016.

To apply for the Postdoctoral Fellowship interested candidates must hold a PhD degree and submit the following documents a) Complete CV; b) Letter of Motivation; and c) Reference Letter, via the online application

system: http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=Norte2020HOST04

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









