

**IBMC - Instituto de Biologia Molecular e Celular**

**Postdoctoral fellowship (f/m)**

**Internal Code:** Norte2020HOST07

**Project:** NORTE-01-0145-FEDER-000012, Structured Programme on Bioengineering Therapies for Infectious Diseases and Tissue Regeneration

**Title:** Molecular Mechanisms of Anemia of Infection

IBMC/i3S is opening **1 (one) Postdoctoral Fellowship** to join its Research Line in Molecular biology of host interactions and responses

We are looking for a Fellow holding a PhD in Microbiology, Biology, Biochemistry or related fields with experience and full autonomy in working in mouse models of infection, hematopoiesis and immune response, cytometry, molecular and cell biology and different microscopy techniques. English language, both spoken and written, and good inter-personal relationships in the context of a multidisciplinary research team are essential attributes. Preference will be given to candidates with these characteristics.

**Group and PI:** Iron and Innate Immunity, Pedro Rodrigues

**Work Plan:**

The specific objective of this project is to characterize the impact of chronic infection in the host's iron metabolism and erythropoiesis.

Previous work of the group has demonstrated that the “iron status” of the host has a marked impact on host-pathogen interaction. In models of iron overload, there is a clear increase in the host susceptibility to infection, while iron depletion improves the host's capacity to control infection. On the other hand, it is known that some of the host's innate mechanisms of resistance to infection are based on pathogen iron deprivation and, by limiting the host's iron availability, these can result in anemia. A deeper knowledge of the molecular details of the host-pathogen interaction in what concerns iron metabolism is needed in order to allow the development of therapeutic strategies aimed at the iron-deprivation of the pathogens, concomitant with the maintenance of adequate iron supplies for the host needs, namely for erythropoiesis.

In this project, we will investigate those molecular details, focusing on the impact of mycobacterial infection on iron distribution in different tissues and cell types and also on the expression of iron-related genes.

The work will involve mouse in vivo models of infection with mycobacteria, as well as in vitro macrophage cultures and erythropoiesis assays.

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 Rodrigues, PhD

Salomé Gomes, PhD

Margarida Saraiva, 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) The names of two referees, *via* the online application system:

<http://www.ibmc.up.pt/gestao Candidaturas/index.php?codigo=Norte2020HOST07>

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