

## Research Fellowship BIM (M/F)

**Title of the project:** IMI-PainCare – “Improving the care of patients suffering from acute or chronic pain”

**Internal Reference:** PR421901

We are recruiting a highly motivated pre-doctoral student to join the Gene Regulation research group at the IBMC/i3S. The work will involve, among other tasks, working with animal model of stress – water avoidance stress; performing pain behavior tests, cystometries, tissue harvesting (fresh and fixed), sampling for HPLC and proteomic analyses, immunocytochemistry, among others.

**Requirements:** The candidate must possess an M.Sc. degree in Biomedical Sciences, Biological science, or related areas. We are looking for a highly motivated candidate, with experience with animal experimentation and with laboratory techniques such as immunohistochemistry and western blot. The applicant must be willing to work as part of an interdisciplinary team.

**Work plan:** The successful applicant will be working within the European IMI-PainCare project that brings together a multidisciplinary team of researchers from different EU Member States. The overall aim is to use back-translational approach to identify new targets for treatment of chronic pelvic pain and biomarkers for diagnosis (please see Abstract).

**Legislation and Salary:** The fellowship is regulated by current laws relating to the Statute of Science Research Fellows, namely Law 40/2004 of August 18, and the Regulation of Scientific Research Studentships of the IBMC ([www.ibmc.up.pt/fellowships.php](http://www.ibmc.up.pt/fellowships.php)) approved by FCT. The monthly allowance is 989,70 € (net and tax free, <http://alfa.fct.mctes.pt/apoios/bolsas/valores>).

**Location:** The work will be developed at the Departamento de Biomedicina – Unidade de Biologia Experimental, Centro de Investigação Médica – Faculdade de Medicina da Universidade do Porto, Rua Dr. Plácido da Costa, under the supervision of Ana Charrua.

**Duration:** 22 months, to start on May 1<sup>nd</sup>, 2019.

**Selection method:** The candidates will be listed according to their CV, experience in the field of the project, motivation letter and the requirements of the call. If necessary, the pre-selected top candidates will be interviewed (interview 75% and CV 25%).

**Jury:**

President: Francisco Cruz (Prof., PhD, MD);

Members: Ana Charrua (PhD) and Célia D. Cruz (PhD).

Substitute: António Avelino (PhD).

**Application deadline and submission forms:** The call will be open from 15-30 March 2019. Proposals must include CV, motivation letter and indication of two referees. Applications must be done by online submission:

<http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=PR421901>

**Form of notification of results:** The final results of the evaluation will be publicized in the IBMC Web site, through a list sorted by final score, and the selected applicant will be notified by email.

### **Abstract**

Chronic pelvic pain represents a puzzling medical, social, and economic problem that may affect 0.5% of the adult population. No effective treatment is available. Furthermore, predictive assessments of treatment success are needed to advance in the management of pain control and support decision making in clinical practice.

The pathophysiology of chronic pelvic pain indications is poorly understood and no adequate preclinical models are available, precluding focused preclinical research and leaving affected patients with little hope of relief. We have used the water avoidance stress (WAS) test to explore the effect of intense stress as the cause of bladder pain and of bladder histopathologic changes that mimic human BPS/IC [1].

In this study we will use the WAS model to investigate proteomic/metabolomics changes occurring in the bladder and the urine, and we will compare these findings with those obtained from urine samples from BPS/IC patients.

[1] Matos et al. Naunyn-Schmiedeberg's Arch Pharmacol (2017) 390:839–844