

IBMC - Instituto de Biologia Molecular e Celular

Research fellowship (f/m)

Internal Code: Norte2020CANCER15

Project: NORTE-01-0145-FEDER-000029- Advanced cancer research: from basic knowledge to application

Title: Molecular determinants of age-associated chromosomal instability: new targets for anti-aging and cancer therapies

Group and PI: Aging and Aneuploidy, IBMC, Elsa Logarinho

IBMC/i3S is opening **1 (one) BIM Fellowship** to join its Research Program in *Novel therapeutic targets and models for cancer*

We are looking for a Fellow holding a MSc in Biology, Biochemistry or related fields with experience and autonomy in working in Molecular and Cellular Biology, Advanced Light Microscopy, Cell-based assays, Genomics, and data quantitative analysis. 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.

Work Plan:

In the next decades the elderly population will increase dramatically, leading to substantial burden on European health care system as ageing is the primary risk factor for major human pathologies including cancer. Therefore, research focus in the dynamics of biological processes during chronological ageing is urgently needed. One biological process largely unexplored in the ageing field is cell division/mitosis, and how its mis-regulation in aged cells might contribute to unbalanced genomes and age-associated diseases such as cancer remains unknown. Thus, we propose an innovative project that will: i) use state-of-the-art methodologies to accurately measure chromosomal instability and clearly ascertain its link with ageing; ii) analyze the thus far elusive mitotic behavior of proliferative old cells using advanced time-lapse microscopy; iii) use up-to-date assays for functional analysis of molecular determinants of mitotic fitness in naturally aged skin fibroblasts; iv) identify new genetic pathways that control the rate of ageing; and vi) explore aging pathways for efficient combination therapy against cancer.

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

The BIM Fellowship will be for 12 months, renewable up to 28 months, and it is expected to start in **January 1st 2017**.

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The fellowship amount is 980 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:

Elsa Logarinho, PhD

Sofia Pereira, PhD

Marta Inês Reis, PhD

Applications are open from December 12th to December 23rd, 2016.

To apply for the BIM Fellowship interested candidates must hold a MSc degree and submit the following documents a) Complete CV; b) Letter of Motivation; and c) Referee Letter, *via* the online application system:

<http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=Norte2020CANCER15>

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