

IBMC - Instituto de Biologia Molecular e Celular

Research fellowship Master (f/m)

Internal Code: Norte2020CANCER14

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

Title: Exploring the aging cell molecular signature in the sensitivity to anti-mitotic chemotherapy

IBMC/i3S is opening **1 (one) BI Master Fellowship** to join the Aging and Aneuploidy Group

PI: Elsa Logarinho

Requisites: Candidates should hold a MSc in Cell Biology or related fields with experience in molecular and cell biology. Excellent oral and written communication skills in English and high commitment and motivation are essential attributes. Preference will be given to candidates with previous experience with tissue culture cells and advanced light microscopy.

Work Plan: One group of chemotherapeutic agents, the anti-mitotics, stops proliferation by interfering with mitotic spindle action. Despite extensive research to understand how anti-mitotics kill cancer cells, the molecular pathways dictating cell response remain largely unknown, with systematic comparative analyses between cancer cells and untransformed cell counterparts often missing. In addition, implications of cellular ageing have not been considered in basic research of drug action, even though an increased risk of drug toxicity is assumed for elderly patients. Interestingly, we observed increased sensitivity to spindle poisons in elderly vs young primary human fibroblasts. Based in these findings we now aim to further dissect the molecular mechanisms by which cellular aging modulates cell response to anti-mitotics and to explore this molecular signature as a means to improve the efficacy of spindle poisons against cancer cells.

The fellowship is initially for 6 months, eventually renewable to 10 months, depending on the performance of the selected candidate. The expected starting date is 1st October 2016.

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>)

Applications are open from 20 until 27 September, 2016.

To apply for the Research Fellowship interested candidates must hold a master degree and submit mandatorily the following three documents a) Complete CV; b) Letter of Motivation; and c) Two names as a reference, **via** the online application system:

<http://www.ibmc.up.pt/gestao candidaturas/index.php?codigo=Norte2020CANCER14>

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

Selection Committee:

Elsa Logarinho, PhD

Carla Sofia Lopes, PhD

Marta Inês Reis, PhD