



IBMC - Instituto de Biologia Molecular e Celular

Research Fellowship - BIM (f/m)

Internal Code: Norte2020CANCER10

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

Title: Drosophila screen for modifiers of Myc gain-of-function

IBMC/i3S is opening 1 (one) BIM Fellowship to join its Research Program in Cell Growth and Differentiation

We are looking for a Fellow holding an MSc degree in Biology, Biochemistry, Bioengineering or related areas with a final score of at least 15. Preference will be given to candidates with experience in cell biology, molecular biology, confocal microscopy or Drosophila genetics.

Group and PI: Cell Growth and Differentiation, Paulo Pereira

Work Plan: Drosophila screen for modifiers of Myc gain-of-function

Myc is a bHLH transcription factor that is expressed at low levels in nearly all tissues that undergo cell proliferation. Myc is a global transcriptional regulator estimated to bind 10-15% of the promoters of protein coding genes, as well as non-coding RNA genes. These target genes are thought to be organised in modules involved in cellular acquisition of nutrients, metabolism, mitochondrial function, and biosynthesis required for cell growth and cell cycle progression. Furthermore, Myc also regulates rRNAs through RNA polymerase I and small RNAs through RNA polymerase III. Work from our lab showed that Drosophila Myc (dMyc) requires the function of Viriato/Nol12 for its full activity in stimulation of cell growth. Vito/Nol12 is also a regulator of TGFbeta signalling, and at the molecular level it functions as a nucleolar 5'-3' RNA exonuclease required for rRNA processing. Thus, together with results from several other labs, these results established that Myc is critically dependent on a coordinated stimulation of ribosome biogenesis for its full output. In this project we will identify and study novel modifier functions of Myc gain-of-function phenotypes induced by targeted overexpression to the developing retina and salivary glands.

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

The Research Fellowship will be for 12 months, not renewable, and it is expected to start in June 1st 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, INSTITUTO namely Law 40/2004 of August 18, amended and republished by Decree-Law No. 202/2012 of 27 EINOVAÇÃO

EM SAÚDE UNIVERSIDADE DO PORTO













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: Paulo Pereira, PhD Lígia Tavares, PhD Renata Freitas, PhD

Applications are open from May 1st until May 15th, 2016.

To apply for the Research Fellowship interested candidates must hold a Master 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=Norte2020CANCER10

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









