

Research Fellowship (m/f)

Project title: “Spatiotemporal control of epithelial architecture during cell division”

(financiado pelo OE, no âmbito do PIDDAC - e através da Fundação para a Ciência e a Tecnologia), nas seguintes condições:

Reference: PTDC/BEX-BCM/0432/2014

Internal Reference: PR041901

Candidate profile:

The candidate must hold a Master degree in Biochemistry, Biology or related area with a final score ≥ 18 . Experience in *Drosophila* genetics, cell culture and confocal microscopy is highly valued.

Background and work plan:

Epithelial tissues are of fundamental importance in biology, forming a mechanical barrier that isolates the internal organ environment from the exterior. This relies on the ability of epithelial cells to establish molecular and functional asymmetries along an apical-basal axis. Apical-basal polarity is an evolutionary conserved trait, and accordingly, disruption of this organization is a serious threat to normal development and also to human health. This project aims to elucidate how epithelial polarity is coordinated with the dynamic process of cell division to ensure the correct organization of proliferating tissues. This research fellow will combine fluorescence recovery after photobleaching, spinning disk microscopy of intact *Drosophila* tissue and S2 cells and immunoprecipitation experiments to: 1) define how phospho-modulation controls the subcellular localization and function of the core basolateral polarity determinant and tumor suppressor Lgl; 2) characterize the molecular connection between adherens junctions and the contractile ring during epithelial cytokinesis

The work will be developed at the *Epithelial Polarity and Cell Division* group of i3S under the supervision of Eurico Morais-de-Sá.

Application procedure:

Applications should include a detailed CV, the degree's certificate and a motivation letter and should be submitted between 8th March 2019 and 21st March 2019 on the IBMC webpage:

<http://www.ibmc.up.pt/gestaocandidaturas/index.php?codigo=PR041901>

Legislation and applicable laws: Employment at the IBMC is regulated by current laws relating to the Statute of Science Research Fellows of Fundação para a Ciência e Tecnologia, I.P. - 2015, 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 the IBMC approved by Fundação para a Ciência e Tecnologia (www.ibmc.up.pt/fellowships.php).

Evaluation of applications:

The candidates with the required profile will be evaluated based on the written documentation (CV (90%) and motivation letter (10%).

Jury:

President: Eurico Morais de Sá (PhD);

Ordinary members: Carlos Conde (PhD), Claudio Sunkel (PhD)

Grant conditions:

The fellowship is due to start in April 1st 2019. The grant will be awarded for 8 months and is not renewable. The monthly amount of the fellowship is € 989.70 (<http://alfa.fct.mctes.pt/apoios/bolsas/valores>) paid by bank transfer.