Call for a Postdoctoral Fellowship

UID/Multi/04555/2019

A call is open for a Postdoctoral Fellowship (BPD) for PhD holder under the R&D Unit with reference ‘Instituto Gulbenkian de Ciência UID/Multi/04555/2019’ at the IGC - Instituto Gulbenkian de Ciência, Oeiras, Portugal, funded by national funds through FCT/MCTES (PIDDAC), as follows:

Scientific Areas: Cell and Developmental Biology.

Admission: Requisites:

We are looking for a highly motivated postdoc to work on a cross-disciplinary project, to investigate the morphogenesis of the optic cup at the cellular and tissue level.

Admission requirements include:
- A PhD in Biology or related field.
- Experience in zebrafish handling including transgenesis, general injection methods, immuno-staining and imaging.
- Expertise in high end microscopy, including confocal, spinning disk and light sheet microscopy, laser ablation and photoconversion.
- Experience in image analysis of 4D data (including Multiview reconstruction) and quantification preferably using open source software.
- Willingness to work with costume made image analysis programs.
- Interest to work in a cross-disciplinary environment.
- Capacity to work independently and within a collaborative team.
- Strong communication skills in English (written and spoken).
- High troubleshooting capacity.

Work plan:

The selected candidate will join the Norden lab at the Instituto Gulbenkian Ciência in Oeiras. The project will focus on investigating the morphogenesis of the optic cup in zebrafish and beyond. Results will be generated by dissecting the interplay between single cell behaviour and epithelial sheet rearrangements. Activities for this project include: 1) creation of zebrafish transgenic lines; 2) Imaging of optic cup formation (OCF) using light sheet microscopy for live studies and high end confocal microscopes for fixed specimen; 3) Segmentation and quantification of morphological changes over time in single cells during OCF 4) laser ablation of defined regions 5) creation of a theoretical model of OCF, in collaboration with theoretical physicist; 6) training and guidance of master and doctoral students.

Legislation and Applicable Regulation: Statute of the Scientific Research Fellow, Research Fellowship Regulations of the Foundation for Science and Technology I.P. in force; and the Research Fellowship Regulations from Instituto Gulbenkian de Ciência (IGC), Oeiras, Portugal. To
know more about the changes introduced on the Statute of the Scientific Research Fellow by the Law Decree nº 123/2019 please consult the link https://dre.pt/web/guest/home/-/dre/124256707/details/maximized?res=pt#resumo-claro

Please note that according to the Law Decree nº 123/2019 the Postdoctoral Fellowships can only have a maximum duration of three years and can only be assigned to persons that obtained the PhD degree less than three years ago.

**Working place:** The work will be developed at IGC (Instituto Gulbenkian de Ciência, Oeiras, Portugal), in the Cell Biology of morphogenesis Group under the scientific supervision of Doctor Caren Norden.

**Fellowship Duration:** The postdoctoral fellowship will be for a period up to a maximum of 36 months, which can be renewed, in agreement with the project-allocated budget for human resources.

**Monthly Allowance:** The present fellowship corresponds to € 1.509,80 (PhD) + Social Security, according to the Portuguese guidelines directly defined by FCT (Fundação para a Ciência e a Tecnologia, I.P) (https://www.fct.pt/apoios/bolsas/valores.phtml.pt) and the Research Fellowship Regulations from the Instituto Gulbenkian de Ciência (IGC), Oeiras, Portugal. Payment will be made by bank transfer.

**Selection Methods:**

The selection criteria will be the application evaluation (50%) and the interview (50%). A pre-selection for interview will be performed based on the application evaluation, and the two candidates with the highest score will be selected for interview. After the interview, the candidate with the highest final score will be selected. The selection for interview will be dependent on the fulfilment of the mandatory criteria (20%), and in such case, assessment of the preferential (20%) and presentation letter (10%). Candidates that do not fulfil the mandatory criteria will not be considered for interview and application effects.

**Jury Composition:**

Dr. Norden, Dr. Oliveira, and Dr. Telley and Substitute members (optative) Dr. Bettencourt-Dias, Dr. Sucena

**Announcement and Communication of Results:** The assessment results will be sent to all candidates by email and to FCT by registered surface mail.

**Application structure and deadline:** The present call is open between 20.09.2019 and 03.10.2019.

The applications should be sent to cnorden@igc.gulbenkian.pt, with the title: “Application BPD-IGC, UID/Multi/04555/2019 – Candidate’s Surname”. The documents should be sent in english as single Portable Document Format (PDF) and include: Proof of Degree (Degree Certificate), updated Curriculum Vitae, motivation letter and names and contacts of two references.