Instituto de Medicina Molecular | João Lobo Antunes

Fixed-Term Employment Contract

Reference IMM/CT/41-2019

We are seeking for one junior postdoctoral researcher to join AXIAL.EC funded by the European Research Council (ERC) in the group of Claudio Franco at Instituto de Medicina Molecular João Lobo Antunes (iMM João Lobo Antunes) in Lisbon, Portugal.

Work Place: The work will be developed at CFRANCO Lab of iMM João Lobo Antunes under the supervision of Claudio Franco, PhD.

Project: ***AXIAL.EC: Principles of Axial Polarity-Driven Vascular Patterning.*** (ERC Starting Grant, GA 679368).

Scientific Area: Cell and Molecular Biology, Vascular Biology, Cancer Biology, Vascular Disease, Intracellular Trafficking

Project Summary: The formation of a functional patterned vascular network is essential for development, tissue growth and organ physiology. Several human vascular disorders arise from the mis-patterning of blood vessels, such as arteriovenous malformations, aneurysms and diabetic retinopathy. Although blood flow is recognised as a stimulus for vascular patterning, very little is known about the molecular mechanisms that regulate endothelial cell behaviour in response to flow and promote vascular patterning.
Recently, we uncovered that endothelial cell front-rear polarisation and migration against blood flow direction is essential for vascular patterning. Yet, very little is known about the molecular mechanisms that regulate endothelial cell behaviour and promote vascular patterning. Given the functional aspects of cell migration and cell polarity of endothelial cells in vessel homeostasis and function, we want to study the relationship between cell polarity and flow direction in vivo and in vitro.

Activities: The candidate will be involved in the analysis of several genetic mouse models to understand how cell polarity and cell migration is regulated by blood flow.

Experience, Knowledge, Skills
- PhD in the field of Cell Biology, Molecular Biology and Developmental Biology (not restricted to).
- Enthusiasm for science, scientific rigor, critical thinking, proactivity and resilience.
- Proven experience in Molecular Biology techniques and Confocal (Spinning and Point-Scanning) Microscopy
- Proven experience in Gateway cloning and mouse Genetic Engineering
- Prior experience in at least one of these research fields: - vascular biology; - cancer biology;
- Prior experience with at least two of the following techniques: - endothelial cell culture; - work with mouse models (FELASA accreditation).
- Good teamwork and interpersonal skills.
- Excellent communication and writing skills.
- Excellent command of the English language.

Predicted Start Date and workplace: The contract is expected to start in January 2020 for a period of 7 months.

Working Conditions: **Gross monthly Remuneration is 2.128,34€,** subject to the mandatory taxes according to the Portuguese Labor. The selected candidate will also receive a meal allowance in the amount of 4,77€/ per working day and other allowances under the contract (Holiday and Christmas allowances) also subject to the legal mandatory taxes.

How to apply and Selection Process: The call is **NOW** open and will end on **24th December 2019. Applications for the above opening should include:** - Motivation letter; - Detailed CV; - Letter and Contact information of two references; - PhD certificate. *The non-compliance with these requirements determines the immediate rejection of the application.*
Applications should be sent to imm-hr@medicina.ulisboa.pt with the Reference IMM/CT/41-2019.

Selection process

- **Pre-selection**: Will be based on CV, motivation letter and research experience.
- **Interviews**: Short-listed candidates will be interviewed.
- **Job offer**: Will be sent to the successful candidate after the interview.

Communication of Results: The results will be published at https://imm.medicina.ulisboa.pt/en/job-opportunities/results/ and posted at the entrance lobby of the Institute.

Lisbon, 10th December 2019