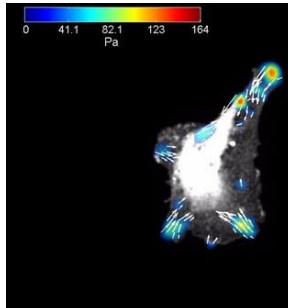


POSTDOCTORAL POSITION IN BIOINFORMATICS AND ENDOTHELIAL CELL MECHANOTRANSDUCTION

A position is available for a strongly motivated postdoc in the Centre for Molecular and Vascular Biology in the Cardiovascular Sciences department at KU Leuven, Belgium. The main focus of the lab is on vascular biology, with a focus on vascular remodelling, arterial-venous differentiation, angiogenesis and vascular regression.

Project

Mechanical signals, such as those arising from blood flow, are essential for normal endothelial cell physiology. Paramount to how these cells are sensed is an endothelial cells attachment to its matrix. The force felt by the cell is not the same if it is attached to a soft-jelly substance, where the matrix itself can deform with the flow as it is for cells attached to a hard surface like glass. The aim of this project is to understand the interplay of matrix stiffness and shear stress on endothelial cells. This will be done using RNA-Seq and require bioinformatics to compare gene expression profiles to in vitro and in vivo gene expression by endothelial cells.

Responsibilities

- You will have your own dedicated research project studying mechanotransduction in different tissue specific environments. You will work with biomedical engineers and experts on endothelial cell heterogeneity.
- You will be responsible for administration and execution of the project. You are expected to have strong bioinformatics skills. More specifically, skills in analysing and comparing large dataset of gene expression is required for this project.
- The project involves mostly in vitro cell culture work, but may also involve some validation in animal models.
- You will be expected to present the work at conferences, lab meeting, and departmental meetings.

Profile

- The candidate must have a PhD in a relevant discipline (Molecular Biology, Genetics, Bioinformatics).
- Candidates must have experience in gene expression analysis on sequencing data sets. Experience in vascular biology and/or mechanotransduction is a benefit.
- Strong interest in pursuing a career in research.
- A good publication record, with at least one paper in a high-impact journal.
- The candidate must be a highly motivated, enthusiastic and efficient researcher.

Offer:

The current position is for 2 year, and you will be expected to apply for fellowships during the first year. The position can be extended, based on satisfactory progress.

Interested?

For more information please contact Prof. Elizabeth Jones, mail: liz.jones@kuleuven.be. Applications should be sent by email and include a CV and references' contact information relevant to your research or training.

