Postdoctoral position in super resolution imaging of chromatin function in the lab of Pia Cosma

The Institute

The Centre for Genomic Regulation (CRG), is an international biomedical research institute of excellence, based in Barcelona, Spain, whose mission is to discover and advance knowledge for the benefit of society, public health and economic prosperity.

The breadth of topics, approaches and technologies at the CRG permits a broad range of fundamental issues in life sciences and biomedicine to be addressed. Research at the CRG falls into four main areas: gene regulation, stem cells and cancer; cell and developmental biology; bioinformatics and genomics; and systems biology.

With more than 380 scientists from 42 countries, the CRG excellence is based on an interdisciplinary, motivated and creative scientific team that is supported by high-end and innovative technologies.

The centre's other main strategic goals are: to translate basic scientific findings into benefits for health and economic value for society; to provide advanced and excellent training to our scientists; and to communicate and establish a bilateral dialogue with society.

CRG has received the “HR Excellence in Research” award from the European Commission, which shows the commitment of the institute in conducting transparent and merit-based recruitment procedures and providing attractive working conditions in alignment with the European Charter and Code.

For further information: www.crg.eu

Mission of the role

Pia Cosma's group is focused on the study of the mechanisms that control somatic cell reprogramming and tissue regeneration, with a focus on dissecting out the function of the Wnt signaling pathway in these processes (http://piacosmalab.com/). Using super-resolution fluorescence microscopy (stochastic optical reconstruction microscopy; STORM) (Rust et al., Nature Methods, 2006) in collaboration with the group of Melike Lakadamyali (Institute of Photonic Sciences, Barcelona) we have dissected out the nanoscale organization of nucleosome assembly, with high molecular specificity and spatial resolution in a variety of somatic and stem/ reprogrammed cells. We have delineated a novel model of chromatin fiber assembly, and the relationship among the decoded structure and naive pluripotency (Ricci et al. Cell 2015).

Within an H2020 funded project, CellViewer, http://www.cellviewer.eu, we are currently studying the changes in chromatin structure and organization during somatic cell reprogramming and differentiation, to determine how chromatin fibers can be rearranged to overcome epigenetic barriers to gain pluripotency. The CellViewer consortium is composed of highly interactive academic and industrial partners with the mission to bring the comprehension on chromatin structure and function to the frontier of scientific knowledge using a highly interdisciplinary approach.

Requirements

Experience

- We are looking for a highly motivated research scientist with consolidated expertise in the area of super resolution microscopy (STORM, PALM). The successful candidate will work within the CellViewer project.

Studies:

- The ideal candidate must hold a PhD in biomedicine, physics or related disciplines
Technical skills required:
- The ideal candidate will have experience with cell culture and imaging methods
- Experience in CRISPR/Cas engineering methods will be considered an added value

Languages:
- Fluent level of English

Soft skills:
- A highly motivated and organized candidate
- Capable of working in a group, and with a high degree of work autonomy

The Offer
- Duration: a Postdoctoral position of 2 years (with potential continuation)
- Estimated annual gross salary: A competitive salary will be provided, which will be well matched relative to the cost of living in Barcelona, and adjusted according to experience
- Starting date: Immediate hiring.

We offer work in a highly stimulating environment with state-of-the-art infrastructures, providing the successful applicant with unique professional career opportunities.

CRG offers and promotes a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, nationality, race, religion or sexual orientation.

Application Procedure

All applications must include:
1. A presentation letter addressed to Dr. Pia Cosma.
2. A full CV including contact details.
3. Two - Three contacts for further references.

All applications must be addressed to Dr. Pia Cosma and be submitted by means of on-line application on the official website of the CRG - http://recruitment.crg.eu/.

Deadline: Please submit your application by 11 November 2016 (note that applications will be continually monitored)