Institut de Recerca
CONTRA LA LEUCÈMIA
Josep Carreras

Postdoc in leukemia epigenetics – role of histone variants

Research Description

Histone variants endow chromatin with unique properties and show a specific genomic distribution that is regulated by specific deposition and removal machineries. Alterations in the histone variant network promote or even drive cancer development through mechanisms that involve changes in epigenetic plasticity, genomic stability and by activating and sustaining cancer-promoting gene expression programmes.

Among the least understood histone variants are the macroH2As that are unique in having a tripartite structure existing of a histone-fold, a linker region and metabolite-binding domain. We are looking for postdoc who is interested in studying the role of the histone variant macroH2A in leukemia. A key challenge will be to understand how macroH2A's role in nuclear organization (Douet et al., 2017) is linked with cellular metabolism (Posavec, Hurtado et al., 2017, NSMB) and cellular plasticity.

In our approach, we will use genetic and pharmacologic manipulation of cell culture models to analyze local and global chromatin architecture by microscopy, epigenomics and chromosome conformation capture techniques. Key results will further be validated by association studies in primary patient samples and in vivo xenograft models.

Main Responsibilities:
You will develop your own research project but also tightly collaborate with a PhD student and other lab members. You will write fellowship applications and manuscripts together with the PI.

Requirements:

- A high level of motivation and interest.
- Experience in chromatin biology and/or leukemia.
- Competitive CV with a track record of publications.
- High level of collaborative and communicative skills.
- Good level of English speaking and writing skills (required). Spanish (helpful).
- International mobility will be considered a major plus.

What we offer

- Incorporation in a multinational and highly collaborative team.

- An exciting and innovative research project.
- Working in the mixed basic and clinical research environment of the Josep Carreras Leukaemia Research Institute.
- The international network of the Buschbeck lab.
- The stimulating environment of the Barcelona metropolitan area.
- Contract details will be negotiated and take into account the track record of the candidate.
- Flexible start date (as soon as suitable for you).

For more information:

Please also visit our group webpage:
http://www.carrerasresearch.org/en/Chromatin_Metabolism_and_Cell_Fate

How to apply:

Interested applicants should send their CV (incl. the contact details of three referees) and a motivation letter to: mbuschbeck@carrerasresearch.org

Deadline for applications: We will accept applications until the position is filled but recommend to send your application before May 1st 2018 to be included in the first evaluation round.