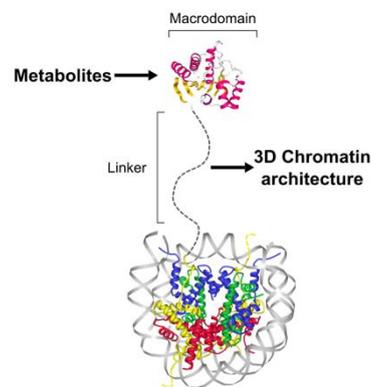


POSTDOCTORAL RESEARCHER – Function and regulation of histone variants in leukaemia (REF.: VAC_09_2023)

The team of **Marcus Buschbeck** at the headquarters of the **Josep Carreras Leukaemia Research Institute** (Badalona, Barcelona, Spain) is looking for a motivated researcher to work on a main research line of the lab aiming to understand the regulation and function of histone variants in leukaemia.

The nucleosome is the structural unit of chromatin and has a core of histone proteins. Replacement of canonical histones with histone variants continues to be one of the least understood modifications of the nucleosome and has roles in epigenetic regulation (Buschbeck and Hake, 2017, Nature Reviews MCB). Among all core histone variants, the group of macroH2A histone variants stand out because of having two additional domains. These are an unstructured linker domain and a globular macrodomain. From previous studies by us and others, we know that the linker mediates a still poorly understood role in higher order chromatin architecture and that macrodomains are metabolite binding domains (e.g. Corujo, 2022, Cell Reports; Guberovic, 2021, Nature Structure Molecular Biology).



We are looking for a postdoc who shares our excitement and interest and wishes to understand the molecular mechanism of macroH2A in chromatin structure, time-resolve downstream effects after its removal and to identify targeting strategies. This project will be a team effort and the candidate will need to tightly interact and collaborate with other postdocs and PhD students working on related aspects, having generated preliminary results and having developed essential tools. The contract will be covered in parts by the Fundació La Marató de TV3, through the grant entitled 'Explorant i explotant les variants d'histones com a dianas terapèutiques en la leucèmia mieloide aguda' (Ref. No. 201907-30-31) and through the grant entitled 'Enhancer regulation and nuclear metabolite sensing by histone variants' (Ref. number PID2021-126907NB-I00) funded by the Spanish National Research Agency AEI and FEDER, UE.

For more info about the lab please check out our websites:

<https://www.buschbecklab.org>

https://www.carrerasresearch.org/en/Chromatin_Metabolism_and_Cell_Fate

What we need

- A high level of motivation and interest.
- High-level of collaborative and communicative skills.
- Relevant expertise in chromatin biology or blood cancers.
- Technical expertise in cell culture methods, molecular biology and biochemistry,
- Competitive CV with a track record of publications that will allow us to apply for competitive fellowships such as MSCA, EMBO and FEBS.

f) PhD title.

g) Meeting the MSCA mobility criteria of not having lived in Spain for more than 12 months during the last 3 years.

h) 0-7 years of postdoc experience.

i) Good level of English speaking and writing skills (required). Spanish (helpful).

What we offer

- Incorporation in a multinational and highly collaborative team.
- An innovative and interdisciplinary research project.
- 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.
- Three-year contract with a salary considering the track-record of the candidate.
- Preferential start date: Anytime during the first half of 2023.
- *'The contract will be (partially) funded by the Fundació La Marató de TV3, through the project entitled 'Explorant i explotant les variants d'histones com a dianes terapèutiques en la leucèmia mieloide aguda', (Project reference No. 201907-30-31.), and by ('Regulación de potenciadores de la expresión génica y detección de metabolitos por parte de variantes de histonas' ref. PID2021-126907NB-I00/AEI/10.13039/501100011033/ FEDER, UE).*

How to apply

To apply for this opportunity, please submit your application by **01/04/2023**.

Who we are?

The **Josep Carreras Leukaemia Research Institute** (IJC) is a non-profit research institute based in Barcelona dedicated to advancing the understanding of leukemia and related disorders, in collaboration with the University of Barcelona and the Autonomous University of Barcelona. The IJC has laboratories in 5 clinical campuses: i) Hospital Clínic, ii) Hospital de Sant Pau and iii) Hospital Germans Trias Pujol iv) Hospital del Mar and v) Hospital Josep Trueta Girona. IJC serves as a collaborative center for basic researchers and physicians to work together on fundamental clinical and biological aspects of leukemia. The IJC offers an excellent work environment based on a multidisciplinary fusion of state-of-the-art ideas and facilities.

Our mission is to carry out research into the basic, epidemiological, preventive, clinical and translational aspects of leukemia and other hematologic malignancies.

The vision of the Josep Carreras Leukaemia Research Institute is that research will identify new therapeutic targets and enable us to develop more precise and less aggressive treatments. We aspire to understand the origin and development of leukemias and other malignant hematological pathologies to be able to prevent them. We will work for a future in which all leukemias will be curable. For further information, please, visit our webpage: <http://www.carrerasresearch.org/en> and the Josep Carreras nonprofit organization: <https://www.fcarreras.org/en>

The European Commission awarded the IJC the HR Excellence seal (HRS4R) in July 2019. The HRS4R has the main objective of ensuring that research centres of excellence implement and respect the requirements of the European Charter for Researchers and the Code of Conduct for hiring researchers within their human resources policies.



This EC initiative aims to promote training, professional development, and mobility for all European scientists. The IJC supports these values and principles, which will not only serve to strengthen its internal policies but will actively stimulate excellent research and firmly situate the organization as an institution with a stimulating working environment that favours the development of its scientists.

IJC is an equal opportunity employer. We evaluate qualified applicants without regard to race, color, religion, sex, national origin, disability, and other legally protected characteristics.