

## POSTDOCTORAL / EXPERIENCED RESEARCHER

### FUNCTIONAL CYTOMICS GROUP

(REF.: MSCA\_JP2020)

The Josep Carreras Leukaemia Research Institute (IJC) is a non-profit research institute based in Barcelona and dedicated to advancing our understanding about leukaemia and related disorders, in partnership with the University of Barcelona and University Autònoma de Barcelona. The IJC has laboratories in three clinical campuses: i) Clinic Hospital, ii) Sant Pau Hospital and iii) Germans Trias i Pujol Hospital. IJC serves as a collaborative hub for basic investigators and physicians to work together on fundamental biological and clinical aspects of leukaemia. The IJC offers an excellent work environment built around a multi-disciplinary fusion of ideas and state-of-the-art facilities.

### Research Description

We welcome applications from outstanding researchers eager to study Functional Cytomics at Research Group of **Dr. Jordi Petriz** for the **Marie Skłodowska-Curie** Actions Individual **Fellowships Call**.

Our lab utilises cutting-edge cellular-based research tools on a new view of the characterization of cells and subcellular compartments, involving the use of fluorescent tracers coupled with measurements for detecting antigens or markers, a particular nucleic acid sequence, enzymatic activities, the regulation of protein function through conformational modulation, or the role of multidrug resistance transporters as epigenetic interplayers. Functional cytomics enables discovery and characterization of novel cell subsets, mechanisms of resistance to immunotherapy and chemotherapy, and multiplexed measurements of cells for detecting the presence or absence of malignant clones at a single-cell level. We are mainly focused on the cellular and molecular mechanisms controlling the proliferation and differentiation of leukaemic stem cells. We are particularly interested in how these mechanisms operate at different disease refractory processes within haematological malignancies. The group focuses on interdisciplinary projects that cover basic biology through to practical biomedical applications through the measurement of human cancer cells. Our ongoing research projects cover innovative approaches to study the expression of primitive stem cell markers during origin, progression, maintenance of cancer and its management; the quality and safety assessment of haematopoietic blood progenitor and stem cell grafts; the role of myeloid derived suppressor cells in immunotherapy and targeted therapy for clinical decision-making; new cytomic strategies for whole blood and marrow immunostaining; the use of natural compounds for cancer treatment; and the accurate detection and significance of minimal residual disease in acute leukaemia. We are currently evaluating evidence of mechanisms by which ABC transporters differentially activates low- or high-level transduction cell signalling and their potential role as epigenetic interplayers to protect and mitigate the stem cell compartment from therapeutic damage.

Please also visit our group webpage:

[https://www.carrerasresearch.org/en/Functional\\_Cytomics](https://www.carrerasresearch.org/en/Functional_Cytomics)

## What we need?

Applicants must have a compelling track record appropriate to their career stage of peer-reviewed publication(s) in internationally recognized outlets, conference invitations or other indicators of success and must meet the Scheme's eligibility requirements, outlined below:

- Be in the possession of a **doctoral degree** or have at least four years of full-time equivalent research experience at the time of the call deadline.
- Comply with the **mobility rule**: you cannot apply for a fellowship in our institution if you do not meet the call mobility rule -> might change depending on the type of MSCA IF.

## What we offer?

We offer the opportunity to contribute to cutting-edge research projects in a competitive and dynamic international environment, in one of the leading Epigenetics labs in the world.

The MSCA-IF grant provides living allowance covering one to two years' salary, a mobility allowance, as well as research, training and networking costs, which translates in a very competitive salary conditions to the average cost of living in Barcelona, which is a dynamic, vibrant and multi-cultural European capital city.

For more information about the financial aspects, you can check the [Guide for applicants](#).

Please note, that a labour contract with IJC includes automatically your registration in the Spanish Social Security System, covering you in term of medical assistance. Consequently, you will pay social security contributions and Personal taxes, deducted directly from the gross salary. For more information, please visit [Tax Agency](#).

## How to apply?

If you are ready to take the next step in your research career send your expression of interest and if the Scientific Supervisor accepts your candidature, you will jointly submit an Individual Fellowship proposal to the open European Commission call. Therefore, you must be available to work in the MSCA-IF proposal application **between June and the first week of September 2020, considering that the call deadline is 09/09/2020**.

Candidates must send an updated two-page CV with the contact details of 2 referees, a motivation letter and a one-page research project outline to [jobs@carrerasresearch.org](mailto:jobs@carrerasresearch.org) indicating in the subject of the message: **MSCA\_JP2020 candidate**.

## Deadline for Applications:

### **Deadline expression of interest: may 25<sup>th</sup> 2020**

The candidates will be informed of the pre-selection results no more than two weeks after the expression of interest deadline.

### **Deadline MSCA-IF call: September 9<sup>th</sup> 2020**

Decisions will be announced in February 2021, after which the selected candidates can start their fellowship. An attractive feature of MSCA-IF is the flexibility of the European Commission (EC) in fixing the start date of funded projects. If necessary, this date could be delayed up to 18 months after the signing of the Grant Agreement. In the current call (2019), it would mean that projects could delay until mid-2021. The fellows be able to optimize the end date of other research contracts through this possibility.

## Additional Information

More information can be obtained by consulting the [MSCA-IF call page in the Funding and Tenders Portal](#) and the [Horizon 2020 Work Programme 2018-2020 / Section 3. Marie Skłodowska-Curie actions](#).

NOTE: Exceptional situations or career breaks can be taken into consideration, if a justification is provided.

## Who we are?

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 haematological pathologies in order 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 non-profit organization: <https://www.fcarreras.org/en>

The Josep Carreras Institute is member of the Research Centers of Excellence of Catalonia (CERCA, Catalan Government), also accredited by the Spanish Ministry of Health as Health Research Centre of Excellence (ISCIII) and by the Spanish Association Against Cancer (Asociación Española contra el Cáncer, AECC). The institute also holds the HR Excellence in Research recognition awarded by the European Commission.



The European Commission awarded the IJC the HR Excellence seal in July 2019. The IJC continues to work to maintain its policies in line with the Charter and Code principles.

The HRS4R has the main objective of ensuring that research centers of excellence implement and respect the requirements of the European Charter for Researchers and the Code of Conduct for hiring researchers (from here on referred to as the Charter and Code) 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, colour, religion, sex, national origin, disability, and other legally protected characteristics.**