

PhD STUDENT - (REF.: PhD_LM_57)

The Josep Carreras Leukemia Research Institute (IJC) is a nonprofit research institute based in Barcelona and dedicated to advancing our understanding about leukemia and related disorders, in partnership with the University of Barcelona and University Autònoma of 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 leukemia. The IJC offers an excellent work environment built around a multi-disciplinary fusion of ideas and state-of-the-art facilities.

For further information, please, visit our webpage: <http://www.carrerasresearch.org/en> and the Josep Carreras nonprofit organization: <https://www.fcarreras.org/en>.

The Josep Carreras Leukemia Research Institute is looking for a **PhD student** to provide scientific support to the T cell lymphoma group led by **Dr. Laura Mondragón**.

Research Description

T-cell lymphomas are a group of rare hematological diseases with a poor prognosis and a high incidence of relapse after treatment. This is the case of angioimmunoblastic T cell lymphoma. Availability of preclinical mouse models for rare cancers is a prerequisite for determining therapeutic pathways and targets from which to design and test new treatments. The main objective of the project will be to contribute to the characterization of a new mouse model for the study of AITL by developing thymocytes maturation and T cell activation studies in order to determine possible defects in these processes leading to AITL appearance. Then, we will study the molecular pathways implicated in this aberrant behavior with the objective to identify new therapeutic targets. We will validate these new therapeutic targets employing immunodeprived in vivo mouse models with the final aim to achieve a specific, and effective therapy for treating AITL.

For more information, please visit our group webpage:
https://www.carrerasresearch.org/en/t-cell-lymphoma_177482

What we need

- A person with a degree in Biology, Biochemistry, Biotechnology, Genetics or similar.
- Master's degree in the field of biomedicine or translational medicine will be considered.
- A person able to work with murine animal models.
- Previous experience in cell culture will be a plus.
- Previous experience in cytometry or qPCR techniques will be a plus.
- A person eager to learn quickly and being able to work independently at some points.



- High level of collaborative and communicative skills and able to adapt to different lab environments.
- Good level of English speaking and writing skills.

Main Responsibilities

- To characterize the phenotype of a preclinical mouse model for T cell lymphoma.
- Study of the molecular mechanisms leading to disease appearance in the context of T cell lymphoma.
- Thymocytes maturation primary cultures.
- Validation of new therapies based on free drugs or nanoparticles for treating lymphoma.

What we offer

- PhD contract 3-4 years starting in September/October 2022.
- Incorporation to a recently created research group.
- An exciting and innovative research project.
- Working in the mixed biology and chemistry research environment at the Josep Carreras Leukemia Research Institute and the Inorganic Nanoparticles laboratory at Catalan Institute of Nanoscience and Nanotechnology.
- To analyze and interpret data and to prepare presentations lab meetings, and for grant preparation and peer-reviewed publication.

How to apply

To apply for this opportunity, please send your resume and a cover letter and (incl. the contact details of two referees) to jobs@carrerasresearch.org including the reference: **PhD_LM_57**

Deadline for Applications

Please submit your application by **14/07/2022**.

Who we are?

Our mission is to carry out research into the basic, epidemiological, preventive, clinical and translational aspects of leukaemia 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 leukaemia and other malignant haematological pathologies in order to be able to prevent them. We will work for a future in which all leukaemias will be curable.

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HR EXCELLENCE IN RESEARCH

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 favors 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.