



POSTDOCTORAL RESEARCHER - CANCER GENETICS (REF.: PDR_MS_45)

The Josep Carreras Leukaemia Research Institute (IJC) is a nonprofit 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 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 leukaemia. The IJC offers an excellent work environment built around a multi-disciplinary fusion of ideas and state-of-the-art facilities.

Research Description

The Laboratory of Genetics of Cancer, led by **Dr Montse Sanchez-Cespedes**, within the Josep Carreras Leukaemia Cancer Institute (IJC) (https://www.carrerasresearch.org/en/cancer-genetics_124455), seeks a highly talented and motivated **postdoctoral researcher** in biomedicine.

The postdoctoral researcher will join a renowned international institution in close contact with a major hospital in the area. The laboratory of Dr Sanchez-Cespedes laboratory is devoted to the genetic and molecular study of the mechanisms that drive cancer development. The group is internationally recognized for its contribution to the study of the molecular biology of lung cancer. Our research uses the latest high throughput sequencing technologies to create profiles and catalogues of the recurrently altered genes in cancer. We are also deeply interested in understanding the mechanisms by which the abnormal function of these genes contributes to cancer development. Ultimately, our purpose is to implement the clinical management of cancer patients and to design novel therapeutic strategies.

Group description and selected publications from our group

The Cancer Genetics group has eight members including postdoctoral researchers, PhD students and technicians and periodically also allocate master students from different Universities. Our team is multidisciplinary, working in close contact with clinicians and pathologists.

-Discovery of MAX inactivation in small cell lung cancer that disrupts the MYC-SWI/SNF programs and is synthetic lethal with BRG1. Romero OA, (...) Sanchez-Cespedes M. Cancer Discovery (2014) PMID: 24362264. IF: 29.5.

-The SWI/SNF genetic blockade: effects in cell differentiation, cancer and developmental diseases. Romero OA, Sanchez-Cespedes M. Oncogene (2014) PMID: 23752187. IF: 7.9



- Genomic profiling of patient-derived xenografts for lung cancer identifies B2M inactivation impairing immunorecognition. Pereira C, (...) Sanchez-Cespedes M. Clin Cancer Res (2017) PMID: 28302866. IF: 10.1.
- MET-oncogenic and JAK2-inactivating alterations are independent factors that affect regulation of PD-L1 expression in lung cancer. Saigi M, Alburquerque-Bejar JJ, (...) Brambilla E, Sanchez-Cespedes M. Clin Cancer Res (2018) PMID: 29898990. IF: 10.1.
- Determinants of immunological evasion and immuncheckpoint inhibition response in non-small cell lung cancer: the genetic front. Saigi M, Alburquerque-Bejar JJ and Sanchez-Cespedes M. Oncogene (2019) PMID: 31253869. IF: 7.9
- Genome-wide profiling of nonsmoking-related lung cancer cells reveal common RB1 rearrangements associated with histopathologic transformation in EGFR-mutant tumors. Pros E, (...) Sanchez-Cespedes M. Ann Oncol. (2020) PMID: 31959344. IF: 32.
- MAX mutant small-cell lung cancers exhibit impaired activities of MGA-dependent noncanonical polycomb repressive complex. Llabata P, Torres-Diz M, Gomez A, (...) Zhang X, Sanchez-Cespedes M. Proc Natl Acad Sci U S A. 2021;118(37). IF: 11.2
- SMARCA4 deficient tumours are vulnerable to KDM6A/UTX and KDM6B/JMJD3 blockade. Romero OA, Vilarrubi A, (...) Sanchez-Cespedes M. Nat Commun. 2021;12(1):431. IF: 15.

What we need

- PhD degree in Biomedicine or similar with strong expertise in a wide variety of molecular & cell biology and genetic techniques.
- Genuine interest and a strong commitment for scientific research demonstrable by publications in main peer reviewed journals. At least one publication as a first author in a D1 journal.
- Independence and capability to handle varying workloads.
- Good level of English speaking and writing skills (required).
- Bioinformatics skills (R, Bioconductor, etc.) will be positively evaluated

What we offer

- Temporary position (1 year, with possibility of renewal) and starting in September 2022.
- An exciting and innovative research project.
- Incorporation in a first level team.
- Working in the mixed basic and clinical research environment of the IJC.

Main Responsibilities

- The candidates will be in charge of a main project in the lab aiming to understand the mechanisms that drive tumor's evasion from the immune system and will seek for markers that determine response or resistance to immune-therapeutics.
- The candidates will supervise students and support grant applications.

How to apply

To apply for this opportunity, please send your resume and a cover letter (incl. the contact details of two referees) to jobs@carrerasresearch.org, including the reference REF.: **PDR_MS_45**.

Deadline for Applications

Please submit your application by **June 30th, 2022**.

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 hematological 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 nonprofit organization: <https://www.fcarreras.org/en>.



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.