

POSTDOCTORAL RESEARCHER - CANCER EPIGENETICS (REF.: PDR_ME_28)

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 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

We, the team of **Manel Esteller** at the Josep Carreras Leukaemia Research Institute (IJC), are seeking for a motivated **Postdoctoral Researcher**.

The group continues the wide-ranging work on epigenetics that Manel Esteller, has carried out during his career, devoted to the establishment of the epigenome and epitranscriptome maps for normal and transformed cells. His laboratory pioneered the observation that epigenetic disruption of mRNA transcription, related to DNA methylation and histone modification patterns, contributed to cancer (Esteller, NEJM 2008; Heyn and Esteller, Nat Rev Genet 2012). His lab characterized the first ncRNAs undergoing specific cancer-methylation associated silencing (Cancer Res 2007; PNAS 2008; Oncogene 2012, Oncogene 2010; NSMB 2012; Mol Cell 2014; PNAS 2016, Genome Biol 2016; Oncogene 2017; Leukaemia 2019).

The lab has also a strong interest in the establishment of new epigenomic platforms to elaborate comprehensive DNA methylome maps (Epigenetics 2011; Epigenomics 2016). The use of these approaches has made several breakthroughs in lung cancer (JCO 2010), Cancer of Unknown Primary (CUP) (Lancet Oncology 2016); and anti-PD1 immunotherapy (Lancet Respiratory Medicine 2018).

Interestingly, the “repertoire” of epigenetic modifications of DNA is fairly limited, (Heyn and Esteller, Cell 2015). In sharp contrast, more than one hundred post-transcriptional modifications occur in RNA (Esteller and Pandolfi, Cancer Discov 2017; Cell 2018). In this field, the group has shown aberrant RNA modifications and epitranscriptomes in different tumour types (Oncogene 2016; Leukaemia 2017; Acta Neuropathol 2019; Oncogene 2019).

Finally, the group has a long-standing interest in translating the epigenetic knowledge gained to clinical outcome and therapy response prediction (Nature Comm, 2014; JNCI, 2014; Oncotarget 2015; JCI Insight 2019) and to assay new epigenetic drugs (Oncogene 2012; Oncotarget 2017; Haematologica 2018) to reverse the distorted cancer landscape (Berdasco and Esteller, Nat Rev Genet 2019).

Please also visit our group webpage:

http://www.carrerasresearch.org/en/cancer-epigenetics_124284

What we need

- PhD background in biology.
- Bioinformatics knowledge.
- A high level of motivation and interest.
- Proficient in writing and speaking in English.
- Ability to handle varying workloads and aptitude for teamwork.
- Organized, proactive, self-motivated, and enthusiastic.
- Capacity for analysis and supervision.

What we offer

- Incorporation in a multinational and highly collaborative team.
- The international network of the Esteller lab.
- An exciting and innovative research project.
- Contract details will take into account the track record of the candidate.
- Temporary position.
- Working in the mixed basic and clinical research environment of the Josep Carreras Leukaemia Research Institute.
- The stimulating environment of the Barcelona metropolitan area.

Main Responsibilities

Develop bioinformatics algorithms to assess response to immunotherapy and innovative therapies.

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

Deadline for Applications

Please submit your application by June 26th, 2020.

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.

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 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.