



The Vall d'Hebron Research Institute (VHIR) is a public sector institution that promotes and develops the research, innovation and biosanitary teaching of the Vall d'Hebron University Hospital. Through the excellence of our research, we identify and apply new solutions to the health problems of society and we contribute to spread them around the world.



In April 2015, the **Vall d'Hebron Research Institute (VHIR)** obtained the recognition of the European Commission **HR Excellence**. This recognition proves that VHIR endorses the general principles of the **European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers (Charter & Code)**. Thus, there are no restrictions of gender, national origin, race, religion, sexual orientation or age and **candidates with disabilities are strongly encouraged to apply.**

PhD position. Cardiovascular Diseases Research Group

VHIR offers vacancy/vacant position for a PhD position within the Cardiovascular Diseases Group

JOB DESCRIPTION

Education and qualifications:

Required:

- Bachelor's degree in Biology or Biotechnology. Minimum grade 7.5.
- A Master's degree and a minimum of 3 years' laboratory experience are required.

Experience and knowledge:

Required:

- Previous specialization in basic research projects in the field of Cardiology. The following knowledge is required:
 - Consolidated experience in the techniques of generating models of heart failure by myocardial infarction, aortic constriction, and subcutaneous pump in mice.
 - Previous experience in exercise models in mice.
 - Experience in the management, genotyping and maintenance of transgenic colonies.
 - Previous experience in the isolation of myocytes and fibroblasts from murine hearts.
 - Previous experience in cultures with established cell lines (HL1 and H9c2) and primary cultures of cardiac myocytes and fibroblasts.
 - Knowledge of intracellular calcium dynamics studies by confocal microscopy.
 - Consolidated knowledge of molecular biology techniques (PCR, WB,...), histology and immunofluorescence.
- It will also be valued:
 - To have completed the Master's Degree in Translational Medicine.
 - Knowledge of statistical concepts and management of specific programs (Graph Pad, SPSS, Expression Suite).
 - High level of written and spoken English.

Main responsibilities and duties:

- The contracted person will be responsible for:
 - Maintaining a colony of transgenic mice already initiated, performing the genotypes and choosing the crosses.
 - Making several models on this colony, including myocardial infarction, aortic constriction, subcutaneous pump and exercise.
 - Performing post-mortem studies, including: molecular biology (RNA and protein extraction, RT-PCR, WB), IF, histological cut analysis, isolation of cardiomyocytes and fibroblasts with Langendorff system, culture generation, intracellular calcium studies by confocal microscopy.
 - Collecting research data and analyze results.
 - Elaborating abstracts for presentations in congresses, and scientific articles..

Labour conditions:

- Full-time /part position
- Start: Immediately
- Length of the contract: One year
- Gross annual salary: 16.490,46 euros.

How to apply:

Applicants should submit a full Curriculum Vitae and a cover letter with the reference CV's PCardio to the following email addresses: begona.benito@vhir.org and (seleccio@vhir.org) .