

R1 PreDoctoral candidate for applying to the competitive FPI 4-year pre-doctoral contract. Application October 2022-Contract start on September 2023. Topic Genetics, Iron Metabolism and Hereditary Haematological Diseases and RNA Biology- Reference 2022-MS-05-FPI candidate-ARETHA. One position.

Research Description

The *Universitat Internacional de Catalunya* (UIC) is a private, non-profit university that aims to provide a service to society through the implementation of teaching and research activities aimed at professional training and scientific, cultural and human education of the students.

Currently, the university covers eight faculties in addition to the Doctoral School. The academic programs offered by UIC Barcelona include a total of 20 undergraduate programs and more than 80 official master's degrees and post-graduate courses.

Of its two campuses, the Sant Cugat campus houses the Faculty of Medicine and Health Sciences and the Faculty of Dentistry. It is located within the premises of the General Hospital of Catalonia. Practical experience, particularly on this campus, forms the basis of successful learning. This campus also houses the University Institute of Patients, the Institute of Superior Studies of Bioethics and the Bioengineering Institute of Technology; what makes it as an ideal environment that promulgates the success in education and research.

The Biomedicine Laboratory in the Department of Basic Sciences, where the laboratory of Dr. Mayka Sanchez is located, has an area of approximately 340 m² that holds the research groups of the Department of Basic Sciences of the Faculty of Medicine and Health Sciences. It is a fully equipped space for UIC Barcelona research groups to work on the different lines they develop. It counts with a microscopy room, tissue culture rooms, flow cytometer and equipment for PCR, qPCR and other molecular biology techniques. www.uic.es; <https://researchgroups.uic.es/ironmetabolism/>

Dr. Mayka Sanchez is Professor of Genetics at UIC (<https://www.uic.es/ca/teacher/msanchezfe> <https://researchgroups.uic.es/ironmetabolism/team/cv-mayka/>) and Principal investigator. Dra Mayka Sanchez's group, **Iron Metabolism: Regulation and Diseases** of the UIC, focuses on the study of hereditary haematological diseases and iron metabolism diseases with important scientific contributions in this field at the bioinformatics, basic as well as the translational level (Luscieti et al., Blood 2017; Engert, et al Haematol 2016; Joshi R, et al., Mol Genet Gen Med 2015, FalcoL, Hum. Mutat 2014, Athiyarath R et al.Brit J Haematol 2013, Falco L et al., Haematol 2013 ; Luscieti S, et al., OJRD 2013; Campillos M, et al NAR 2010).

We are looking for a highly motivated pre-doctoral researcher who is interested in applying to **FPI 4 year pre-doctoral contract (Application in October 2022)** to join our dynamic laboratory that applies state-of-the-art technology in Genetics, Haematology and Iron Metabolism. This **FPI 4 year predoctoral contract** is associated to the research project Advances in diagnostic and therapy for rare hereditary haematological diseases (ARETHA, Advances in Rare hErediTary Hematological diseAses) ARETHA-PID2021-122436OB-I00. **Contract will start in September 2023.**

We are located at the Basic Science department at the *Universitat Internacional de Catalunya* (UIC) same building as Hospital General de Catalunya, **Sant Cugat del Vallés, Barcelona** (Train FGC: Hospital General). Our group is supported by competitive national and international grants <https://researchgroups.uic.es/ironmetabolism/publications-and-projects/>

We also have contacts with companies (BLOODGENETICS and WHOLE GENIX). Dr. M Sanchez is the co-founder of the spin-off BLOODGENETICS SL (www.bloodgenetics.com)

Compulsory and minimum Requirements- PLEASE do not apply if you do not fulfil the minimum requisites

We are seeking candidates who:

- **Is currently accepted/enrolled in a Master for course 2022-2023** in Biomedicine, Genetics or Translational Medicine or similar that finishes in June/July 2023 or a person who is enrolled in a PhD program for course 2022-2023.
- Good academic marks in the degree (above minimum of 7,5 over 10) and high motivation for research, **include in your CV your academic average marks over 10.**

- At least 6 months of work experience in Genetics, Iron Metabolism or Haematology.
- Good English level (internal seminars are in English)
- Excellent interpersonal skills and ability to work with other team members.
- Organized, hard-working person and proactive, self-motivated and enthusiastic.

Other Requirements

Following requisites will be a plus

- Proven experience in Molecular biology, Tissue culture, mouse animal work or zebrafish work, biochemistry, NGS, WES, WGS, CRISPR-Cas9 genome editing, Flow cytometry, MACS and FACS cell sorting and virus vector construction for gene therapy or similar
- International mobility.
- Publications in peer reviewed scientific journals.

Main Responsibilities

The selected person will work with tasks related to ARETHA-PID2021-122436OB-I00 project, including Genetic studies in hereditary haematological diseases and iron metabolism diseases (including WES and the characterization of new rare diseases) and/or Molecular studies in RNA Biology (IRP/IRE system).

What we offer

- Possibility of doing the Master lab practices/ bench work (TFM) with us next year 2023.
- Salary according to FPI predoctoral contract
- To work in an excellent environment at UIC campus Sant Cugat.
- **4-year contract**, starting date September 2023.

Evaluation process

- The posts may remain vacant if the minimum requirements are not met.
- Selected candidates will be contacted for a personal interview in October 2022.

For more information

Please visit:

<https://researchgroups.uic.es/ironmetabolism/>

Deadline for applications

The call will be open until 30/10/2022

How to apply

Interested applicants should send their CV **including the average marks in the degree** and if available marks in the master, motivation cover letter and email address of three referees able to assess the scientific potential and previous performance to Dr. Mayka Sanchez msanchezfe@uic.es

PLEASE MENTION the REFERENCE Reference 2022-MS-05-FPI candidate-ARETHA in the subject of the mail or your application may not reach the right person.