



## Technician position in the ERC Starting Grant project HeBe in the Barcelonaβeta Brain Research Center

### About the employer

The Barcelonaβeta Brain Research Center (BBRC) is a research center, constituted by the Pasqual Maragall Foundation and the Pompeu Fabra University. The goal of BBRC is to become an **internationally recognized centre of excellence in our understanding of age-related cognitive disability** in order to provide practical solutions to the global challenges posed by the **world's aging population**. Our goal will be achieved by **championing primary and secondary prevention programs for Alzheimer's disease and other related neurodegenerative disorders**, the study and promotion of healthy aging, and the research of the basic physiological mechanisms of cognitive functions affected by healthy or pathological aging. The vision of BBRC is to provide society with distinct and innovative solutions for age-related cognitive disability by leveraging complementary research programs to attain a multidisciplinary comprehension of the aging process and the pathophysiology of neurodegeneration.

Pasqual Maragall Foundation, Pompeu Fabra University and "La Caixa" Foundation are permanent members of the BBRC Board. International competitive recruitment, state-of-the-art scientific facilities, effective management and continuous high-standard peer-review evaluation are the BBRC core proceedings to ensure achieving world-class research results. BBRC is affiliated and located in the Campus Ciutadella of the Barcelona Pompeu Fabra University, the building contains excellent technical facilities, **including a research-dedicated 3T MR scanner, Clinical Trials facilities, EEG and Eye Tracker labs**.

**BBRC is also part of the Barcelona Biomedical Research Park (PRBB), a large research facility that hosts other seven different research institutions related to biomedical research**, including the Center for Genomic Regulation (CRG), the Hospital del Mar Medical Research Institute (IMIM), the Department of Experimental and Health Sciences of the Pompeu Fabra University (CEXS-UPF), the Institute of Evolutionary Biology (IBE CSIC-UPF), the Barcelona Institute of Global Health (ISGlobal) and the Barcelona site of the European Molecular Biology Laboratory (EMBL), among others, in a multidisciplinary, collaborative and stimulating international environment in close contact with a clinical setting, thus conducive to translational research.

BBRC endorses the Requirements and Principles of the **European Charter for Researchers**, the **Code of Conduct for the Recruitment of Researchers**, and Open, Transparent, Merit-based recruitment promoted by the European Commission and follows Equal Opportunities policies. On October 2020, BBRC Barcelona was awarded the '**HR Excellence in Research**' logo. This recognition reflects the commitment of the Institute to the continuous improvement of its human resources policies.

For more information see: [www.fparagall.org](http://www.fparagall.org) and [www.barcelonabeta.org](http://www.barcelonabeta.org)



## About the project

ALFA (for ALzheimer and FAMilies) is a prospective study that follow-ups a cohort of cognitively unimpaired participants, most of them first-degree descendants of AD patients. The ALFA parent cohort is composed of 2743 cognitively unimpaired participants representing the whole spectrum of risk of developing AD that will leverage with different projects.

Our institution has recently been awarded with the prestigious a **European Research Council (ERC) Starting Grant** project. The project is entitled "**Identification of age-related Human Blood factors as a therapeutic target for Alzheimer's disease (HeBe)**" (PI: Marc Suárez-Calvet). HeBe is an ambitious project aimed at discovering blood factors that have the capacity to rejuvenate the brain and can hence be used as therapeutic targets in age-related diseases like AD (<https://www.barcelonabeta.org/en/hebe>). Following ERC philosophy, this is a high-risk/high-gain project.

Moreover, a new **translational neurology and fluid biomarkers lab** is starting. Its main goal is the development, validation and implementation of novel fluid biomarkers that will improve the diagnosis of Alzheimer's disease in its earlier stages, detect subjects more susceptible to develop the disease, predict their prognosis, monitor disease progression and treatment effectiveness, or be used as surrogate markers in clinical trials. We will address the whole biomarkers development workflow, from identification of candidate biomarkers, assay development and finally clinical implementation, and collaborate with all relevant stakeholders in this process. Hereby, we envision to provide a better understanding of neurodegenerative disease but also provide biomarkers that are relevant for clinical purposes.

## About the job

In BBRC we look for candidates to apply for the the competitive program of the Spanish "*Agencia Estatal de Investigación*", in particular in "*Plan Estatal de Investigación Científica y Técnica y de Innovación 2017-2020 –Ayudas para personal técnico de apoyo*".

The laboratory technician will work in the new BBRC lab, which is located in the PRBB building. Under the supervision of Dr. Marc Suárez-Calvet, the technician will work in different tasks related to the HeBe project and the biomarkers lab. Routine techniques in the lab will include: sample (CSF, blood) aliquoting and preparation, protein determination, ELISA and Western blot. The technician will be trained in more advanced techniques (ultrasensitive assays, immunoprecipitations) and it is expected that they become autonomous in these techniques. Additional responsibilities will be the general managing of the lab and assist other lab members (PhD, postdocs) in their projects.

## Main Responsibilities

- Perform basic biochemistry techniques (e.g. ELISA, Western blot, protein determination).
- Perform routine biomarker analyses across multiple platforms.
- Human fluid (CSF, blood) samples handling, processing, aliquoting, storage and data-entry.
- The technician will also be trained, once hired, in more advanced biochemical techniques (Simoa and MSD ultrasensitive assays, immunoprecipitation).
- Ordering common laboratory reagents and general maintenance of the laboratory.
- Participates in upkeep of lab, performs basic maintenance on laboratory equipment and reports equipment requiring advanced repair.
- Organizes and accurately maintains written records of experimental procedures and data collection.
- Assists with the instructing and training of students, fellows, technicians and laboratory assistants as required.
- To participate in regular internal meetings and internal as well as external collaborations.

## Required qualifications, competences and technical skills

- You hold a Laboratory Technician Diploma (FPPII - Advanced Vocational Qualification), Grade in Biosciences or similar.
- You have previous experience in a biochemistry lab or similar.
- You perform sample handling and basic laboratory skills with precision and attention to detail.
- You are capable of working with computers and common software packages
- You have excellent communication and writing skills in English.
- You are able to work collaboratively and with a high degree of autonomy.
- You are a highly motivated and organised candidate.
- You have excellent knowledge and follow Good Laboratory Practices (GLPs).

## Desirable but not required/ Nice to have

- You knowledge of techniques including ELISA, Western blot, immunoprecipitation and other protein biochemistry techniques, and cell culture.
- You have experience in biomarker analyses.
- You have experience in human samples handling (e.g. plasma, serum, CSF).
- You have experience in laboratory management (lab safety, upkeep and troubleshooting of lab equipment, and other organizational functions).
- You have basic knowledge in statistics.

## We offer

- Starting date: Spring 2021 (starting date can be negotiated)
- The position is scheduled for 3 years
- Salary will depend on experience and according to BBRC's salary scales

We offer work in a highly stimulating team, and BBRC offers and promotes a diverse and inclusive environment welcomes applicants regardless of age, disability, gender, nationality, race, religion or sexual orientation.

In the foundation we also care about developing your professional career so you will participate in internal and specific training for your job, promotion opportunities and development of your professional career. We evaluate the potential of our team in order to develop those skills necessary to achieve a high level of professional performance

## Application process

To apply, please submit a single PDF file containing the following:

- 1) Cover letter describing research interests and relevant background;
- 2) CV
- 3) The names of up to three individuals who could provide reference letters. All files or inquiries should be submitted electronically to: [rh@barcelonabeta.org](mailto:rh@barcelonabeta.org)

**Subject: Technician HeBe project**

**Deadline: 21st January 2021**

We inform you that your personal data will be part of a file which Pasqual Maragall Foundation and Barcelonaβeta Brain Research Center is responsible for, in order to manage the job offer you have requested. Once the process is complete, the data processed will be erased.

You have the right to exercise the rights of access, rectification, cancellation and opposition recognized in Regulation (EU) 2016/679 (General Data Protection Regulation), to be addressed to the Pasqual Maragall Foundation and Barcelonaβeta Brain Research Center: Wellington Street 30, 08005 Barcelona.