



HR EXCELLENCE IN RESEARCH

barcelonaβeta
BRAIN RESEARCH CENTER

C/Wellington 30
08005 Barcelona
T +34 93 316 09 90
info@fparagall.org
www.barcelonabeta.org
www.fparagall.org

Technician position in the Genomics Group In the Barcelonaβeta Brain Research Center

About the employer

The Barcelonaβeta Brain Research Center (BBRC) is a research center dedicated to the prevention of Alzheimer's disease and the study of cognitive functions affected in healthy and pathological aging. It was created in 2012 by the Pasqual Maragall Foundation, with the support of the Pompeu Fabra University.

The mission of the BBRC is to provide innovative solutions to decipher and prevent biological changes and cognitive dysfunction associated with neurodegenerative diseases. Due to the aging of the world population, these diseases constitute a global challenge, since for example, dementia can reach epidemic levels in 2050, with a forecast of more than 150 million people affected, if is not found a way to prevent its appearance and development.

The BBRC received the HR Excellence in Research award (HRS4R) granted by the European Commission; a recognition that shows its adherence to the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Research Staff. The center offers a **stimulating and favorable working environment** in accordance with the Charter and Code, which describe the rights and responsibilities of researchers and their employers, and contributes to the **creation of a transparent, attractive and open ecosystem** at international level.

Pasqual Maragall Foundation, Pompeu Fabra University and "la Caixa" Foundation are permanent members of the BBRC Board. The center is affiliated and located in the Ciutadella Campus of the Pompeu Fabra University of Barcelona, in a building inaugurated in 2016. The BBRC headquarters has excellent technical facilities, including a 3TMR scanner dedicated to research, and spaces for conducting Clinical Trials and EEG. 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 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.

For more information see: www.fparagall.org and www.barcelonabeta.org



About the project

The BBRC has recently opened a Genomics lab, led by Professor Arcadi Navarro. The group focuses on the genomic architecture of age-related disease –including neurodegenerative disease– and on the analysis of full genomes, epigenomes and transcriptomes to ascertain the processes, variants and molecular features that underlie human ageing patterns. Amongst other projects, the group plans to undertake functional analysis on the effects of particular mutations in a number of experimental models, ranging from cell lines to brain organoids. These projects will be carried-out in collaboration with Dr. Sandra Acosta's Lab at the University of Barcelona (UB).

Prof. Navarro is Professor of Genetics at the UPF, ICREA Research Professor, the Director of the European Genome-phenome Archive at the CRG and the Director of the BBRC and the FPM. He regularly participates in projects funded by the European Commission such as the H2020 projects ELIXIR-ACCELERATE, EUCANIMAGE, HEALTHYCLOUD, etc. In addition, his group at the CRG participates in major Spanish initiatives in Personalized Medicine such as ones within the IMPaCT initiative.

Dr. Acosta is tenure-track Serra-Hunter Assistant Professor at University of Barcelona Medical School. Her research focuses in modeling the functional events regulating the human brain functions in health and disease. The lab gold-standard functional model is iPSC-derived brain organoids derived from patients and/or genetically engineered analyzed through mesoscopy and microscopy and functional epigenomics. She leads and participates in a number of national and international projects, including La Marató, CaixaImpulse and Foundation Lejeune.

About the job

Amongst others, the immediate aim of the project is analyzing the phenotype of AD brain organoids with different degrees of genetic risks. The main activities of the being held in this position comprise the reprogramming of BBRC volunteers blood samples into iPSC and the generation of brain organoids, mainly cortical and minibrain, and their phenotypic characterization using a wide-range of technologies including advanced microscopy and molecular techniques.

Additional responsibilities involving career development activities, mainly contributing to general managing of the lab.

Main Responsibilities

The responsibilities for this position include:

- iPSCs reprogramming from peripheral blood mononuclear cell (PBMCs) and maintenance
- Immunofluorescence, western blot and gene expression analysis
- Ordering common laboratory reagents and general maintenance of the laboratory.
- Lab's upkeep, basic maintenance on laboratory equipment and reports equipment requiring advanced repair.
- Organization and maintenance of written records of experimental procedures and data collection.
- Development of Standard Operating Procedures and maintenance of quality standards according to international guidelines for biomarker measurements.



HR EXCELLENCE IN RESEARCH

barcelonaβeta
BRAIN RESEARCH CENTER

C/Wellington 30
08005 Barcelona
T +34 93 316 09 90
info@fparagall.org
www.barcelonabeta.org
www.fparagall.org

- Assist with the instructing and training of students, fellows, technicians and laboratory assistants as required.
- Participation in regular internal meetings as well as external collaborations.

Required qualifications, competences and technical skills

Must have

- Laboratory Technician Diploma (FPPII - Advanced Vocational Qualification), Grade in Biosciences or similar.
- Strong background in cell culture techniques
- Previous experience in a biochemistry lab or similar.
- Sample handling and basic laboratory skills with precision and attention to detail.
- Capable to work with computers and common software packages
- Ability to work collaboratively and with a high degree of autonomy.
- High organisation skills.
- Excellent knowledge and follow Good Laboratory Practices (GLPs).

Highly desirable

- Experience with experience in iPSC and derived neural differentiations.
- Experience in microscopy.
- Working level in English.
- You have basic knowledge in statistics.

We offer

- Starting date: ASSAP 2023
- Full- time position, 38 hours weekly. Applicants who aim for a part-time position (minimum 50%) will also be considered.
- The position is initially scheduled for 1 years and maybe renewed thereafter until 2
- Salary will depend on experience and will be in accordance to BBRC's salary scales
- The Foundation offers an extended vacation period and the possibility of benefit from flexible working hours.
- We offer a unique research opportunity in a highly innovative project in a multidisciplinary institution.

We offer and promote a diverse and inclusive environment and welcomes applicants regardless of age, disability, gender, nationality, ethnicity, religion, sexual orientation or gender identity.

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.



HR EXCELLENCE IN RESEARCH

barcelonaβeta
BRAIN RESEARCH CENTER

C/Wellington 30
08005 Barcelona
T +34 93 316 09 90
info@fparagall.org
www.barcelonabeta.org
www.fparagall.org

Application process

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

- 1) Cover letter addressed 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: talent@barcelonabeta.org

Subject: Technician position in the Genomics Group

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.