

GROUP LEADER in NEUROIMAGING Alzheimer's & other Neurodegenerative Diseases at the Barcelonaβeta Brain Research Center

The Barcelonaβeta Brain Research Center (BBRC) is actively seeking a talented **neuroimaging researcher to assume the role of Neuroimaging Group Leader**, contributing to our ongoing research endeavors focused on Alzheimer's and other neurodegenerative diseases. We are particularly interested in individuals with neuroimaging expertise in aging, age-related cognitive disorders, and dementia, with a specific focus on the prevention and early detection of Alzheimer's disease (AD). The ideal candidate will **demonstrate advanced proficiency in both Brain MRI and Brain PET acquisition and analysis techniques**, along with a proven track record of successfully securing competitive grants.

Candidates will be considered at **both, mid-to-senior levels**, considering their career trajectories. The chosen candidate will **assume leadership of the current Neuroimaging Research Group** composed of a multi-disciplinary team expert on data acquisition, processing, and analysis of complex neuroimaging data. The center is open to considering **both full-time and part-time positions and is receptive to non-exclusive collaborations**. We highly value candidates with robust connections to international research groups, active engagement with the pharma-industry, and a proven expertise in both team and budget management.

The Neuroimaging Research Group at BBRC is dedicated to investigating Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET) images to reveal brain characteristics associated with healthy aging and AD risk factors, providing insights into potential novel preventive strategies. With this purpose in mind, neuroimaging data is analyzed together with cognitive, genetics, biomarker and other clinical, environmental and lifestyle factors data to detect their impact on the brain at the structural, functional, and molecular levels. Neuroimaging techniques, like MRI and PET, allow us to **characterize brain alterations in the preclinical stage of AD** enhancing our understanding of the physiological processes involved in the response to the onset of early cerebral pathological changes.

The current research lines of the neuroimaging group, which should be maintained by the future neuroimaging Group Leader, but are not limited to, can be found on the BBRC webpage: <https://www.barcelonabeta.org/en/research/groups-and-lines-research/neuroimaging-research-group>

Who are we?

The BBRC, research center of the Pasqual Maragall Foundation, **pioneers research on Alzheimer's disease prevention and its early detection**. Its mission is to develop preventive measures for the disease, advance knowledge on healthy ageing, and investigate neuro-physiological and neuro-psychological aspects of cognitive functions, with a focus on age-related neurodegenerative diseases. BBRC aims to provide **effective solutions to the global challenges**

posed by the world's ageing population and a comprehensive understanding of the ageing process and neurodegeneration.

The Pasqual Maragall Foundation, Pompeu Fabra University and "La Caixa" Foundation are permanent members of the Board of the BBRC, which is located at the **Ciutadella Campus of the Pompeu Fabra University of Barcelona**. This building provides excellent technical facilities, such as a **3TMR scanner fully dedicated to research activities, Clinical Trials facilities and a wet laboratory for fluid biomarker research**. The BBRC's core proceedings for attaining world-class research results involve *state-of-the-art* scientific facilities, proficient project management, a consistent high-standard *peer-reviewed* evaluation and a very close connection with the Hospital del Mar.

BBRC is also part of the **Barcelona Biomedical Research Park (PRBB), a large research facility that hosts seven research institutions dedicated to biomedical research** and located on the seafront in Barcelona. This puts BBRC in the middle of a **biomedical hub in the city**, in a multidisciplinary, collaborative, and stimulating international environment in close contact with a clinical setting, 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**; with Open, Transparent, Merit-based recruitment promoted by the European Commission and follows Equal Opportunities policies.

In October 2020, BBRC Barcelona received the '**HR Excellence in Research award (HRS4R)**' granted by the European Commission. The institution promotes a **diverse and inclusive environment**, and **welcome applicants regardless of age, disability, gender, nationality, ethnicity, religion, sexual orientation, or gender identity**. BBRC has developed an Equality Plan with the aim of guaranteeing gender equality in regard to selection, training, promotion, conciliation, occupational health, communication, and remuneration. Women candidates are especially encouraged to apply for this position.

At BBRC, group leaders enjoy the following benefits:

- A nurturing, international and collaborative environment.
- An attractive annual core-funding package to establish and sustain their groups.
- Access to state-of-the-art core facilities, including cohort's data and testing, 3T MRI, fluid biomarkers laboratory, data center, research management support.
- A wide network of international and interdisciplinary collaborations.
- Leadership training and mentorship.
- Tailored support in grant scouting and in securing competitive funds.

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

About the cornerstone of our project: The Alfa cohort

The research carried out in the BBRC is mostly based on the data obtained in the [Alfa Study](#) a **pioneering research infrastructure made up of nearly 3,000 cognitively unimpaired people**, between 45 and 75 years old, most of them descendants of AD patients. The Alfa study allows

researchers to develop biomarkers for the early detection of Alzheimer's disease and design prevention strategies for dementia.

In a subset of the Alfa cohort, the **Alfa+ study**, deep detailed phenotyping involving **fluid (CSF and blood sample collection) and imaging (MRI and PET) biomarkers** is performed as a **longitudinal long-term study**. The Alfa+ study, which includes 400 individuals, will serve to untangle the natural history of the disease and to model the preclinical stages to develop successful trials. A complementary cohort, Beta-AARC (Alzheimer's At-Risk Cohort), is constituted by a subgroup of 200 participants, 50-80 years, with subjective cognitive decline (SCD). This cohort includes deep phenotyping (clinical, cognition, life habits, fluid sampling, MRI, and Amyloid PET), is followed yearly and is expected to provide a complement to the Alfa study with a more clinical population.

Selection process

Qualified researchers interested in this position are encouraged to reach out to us at talent@barcelonabeta.org to explore their potential application. Candidates identified by our internal scientific committee as pre-selected will be invited for an interview at BBRC.

An official offer letter will be issued in writing to the selected candidate.

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 talent@barcelonabeta.org

Subject: Neuroimaging Group Leader

Application deadline: Open until position is filled

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 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: c/ Wellington 30, 08005 Barcelona.