# DIRECTOR OF CORE SCIENTIFIC ASSETS

for the Barcelonaβeta Brain Research Center

barcelonaβeta
BRAIN RESEARCH CENTER

HR EXCELLENCE IN RESEARCH

# WELCOME

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

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 global population, these diseases constitute a global challenge: for example, dementia could reach epidemic levels by 2050, with forecasts of more than 150 million cases, if a way to prevent its appearance and development is not found.

The Pasqual Maragall Foundation, the Pompeu Fabra University and "la Caixa" Foundation are permanent members of the BBRC Board. The centre is affiliated with the Pompeu Fabra University of Barcelona and is located in its Ciutadella Campus, in a building inaugurated in 2016. The BBRC headquarters have excellent technical facilities, including a 3TMR scanner used exclusively for research, and areas for conducting clinical trials, among other research programmes. State-of-the-art scientific facilities, effective management and continuous high-standard peer-review evaluation are the BBRC core procedures for ensuring world-class research results.

The BBRC is also part of the Barcelona Biomedical Research Park (PRBB), a large research facility that is home to several research institutions related to biomedical research, including the Center for Genomic Regulation (CRG), the Hospital del Mar Medical Research Institute (IMIM), the Department of Medicine and Life Sciences of the Pompeu Fabra University (MELIS-UPF), the Institute of Evolutionary Biology (IBE, CSIC-UPF), the Barcelona Institute of Global Health (ISGlobal) and the Barcelona branch of the European Molecular Biology Laboratory (EMBL), among others. The PRBB provides a multidisciplinary, collaborative and stimulating international environment in close contact with a clinical setting, thus facilitating translational research.

The BBRC has received the HR Excellence in Research award (HRS4R) granted by the European Commission, demonstrating its adherence to the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Research Staff. The centre offers a stimulating and favourable 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 the international level.

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

# OVERVIEW

## Core Scientific Assets: Research Foundations for Alzheimer's Prevention

The BBRC has established and sponsors a series of studies aimed at understanding the initial asymptomatic stages of the Alzheimer's continuum to understand the natural history of Alzheimer's and develop and implement novel biomarkers for early diagnosis, and design and implement disease prevention trials.

**The studies constitute the BBRC Core Scientific Assets (CSA)**, which currently include:

- **The ALFA (for Alzheimer and Families) parent cohort** consists of nearly 3,000 cognitively unimpaired participants aged between 45 and 75, most of them first-degree descendants of Alzheimer's disease patients. This cohort was established as a research platform to characterise preclinical Alzheimer's in asymptomatic individuals, aiming to untangle the natural history of the disease and model the preclinical stages to conduct successful trials and interventions to prevent the disease. The ALFA programme includes a number of nested studies, such as the ALFA+ cohort, consisting of 420 cognitively unimpaired participants, aged between 45 and 65 at the ALFA baseline visit, whose sociodemographic, clinical, lifestyle, cognitive, genetic and biomarker (both fluid and neuroimaging) data have been extensively characterised. Participants are followed every 3 years; to date, we have conducted the study baseline visit (V1; 2016-2019) and the first follow-up visit (V2; 2019-2022). The second follow-up visit (V3) started in May 2023 and includes recently developed digital biomarkers, along with the above-mentioned variables.
- **The Beta-AARC (Alzheimer's At Risk Cohort) study** consists of more than 230 participants (55-80 years), who have noticed a decline in their memory or other cognitive abilities (subjective cognitive decline, SCD). Its main goal is the early detection of blood and digital biomarkers that represent pathophysiological changes related to Alzheimer's disease in people with SCD (either cognitively unimpaired or with mild cognitive impairment). It is a longitudinal study with annual follow-up visits (magnetic resonance imaging and lumbar puncture are performed every 2 years). In this cohort, the baseline visit was completed in August 2024.
- In addition, the BBRC is participating in clinical trials with the pharmaceutical industry that test the preventive effect of experimental drugs, mostly in the preclinical stage of Alzheimer's disease.

## BBRC's Research Organization and Strategic Vision

Research by the BBRC is currently organised into four research groups:

- **Clinical and Risk Factors for Neurodegenerative Diseases Research Group**, which examines the clinical and biological processes that precede the onset of dementia, focusing on sleep disorders, vascular factors, subjective cognitive decline and objective subtle cognitive decline, and aims to establish prevention programmes.
- **Biomarkers in Fluids and Translational Neurology Research Group**, which focuses on identifying molecular mechanisms of age-related neurodegenerative diseases and developing biomarkers for early diagnosis and prognosis.

- **Neuroimaging Research Group**, which uses advanced imaging techniques (positron emission tomography, magnetic imaging resonance) to explore brain processes in the preclinical stages of Alzheimer's and healthy aging, and develops new neuroimaging tools.
- **Genomics Research Group**, which conducts research into the genomics of neurodegeneration and aging, focussing on pleiotropies and gene-environment interactions.

Additionally, three new research groups will be included in 2025. The three new groups are expected to begin their activity in 2025-2026, in the fields of:

- Brain disorders models
- Aging and senescence
- Population neuroscience of neurodevelopment and aging

In addition, two research facilities, the **Neuroimaging Platform** and the **Fluid Biomarker Platform**, are equipped with state-of-the-art technical units and provide services for the scientific institutional projects while also developing novel biomarkers and analyses. The BBRC envisions a long-term expansion encompassing both regional and global dimensions. This includes reinforcing its commitment to Alzheimer's disease, broadening its focus to other neurodegenerative diseases and promoting healthy longevity. The centre aims to establish local, regional and global partnerships with far-reaching impacts to leverage research grants and networks to advance brain health initiatives, as well as educational programmes and community engagement. This phase aligns with Barcelona's strategic plans for leadership in innovation, technology and research, also fostering projects involving artificial intelligence and health. Furthermore, the BBRC's actions, such as its participation in the Hub Alzheimer Barcelona (HUB and its co-leadership of the Barcelona Brain Health Center (BBHC), will contribute to the global agenda for precision brain health, reinforcing its position as a key player in promoting brain health worldwide.

# JOB DESCRIPTION

The BBRC is seeking to fill the full-time position of Director of the BBRC CSA. The appointed individual will report to the BBRC Director and become a member of the Management Committee. He/she will be **responsible for the development and management of the centre's CSA**, **a series of studies involving thousands of participants from across Spain.**

The selected candidate's role will be twofold:

- Acting as ambassador for the BBRC CSA.
- Overseeing management of a multidisciplinary team of approximately 30 people participating in observational research studies and non-pharmacological and pharmacological intervention studies (clinical trials).
- In addition, the CSA Director will collaborate with the research groups (Faculty) in fostering and developing new studies.

As a long-term goal, the CSA Director will play a critical role in shaping the next decade of the BBRC's growth and impact. This will be achieved through multicentre grant applications across transdisciplinary domains in which the BBRC research groups are involved. This role will enhance the BBRC's global partnerships with leading institutions in Europe, the US and strategic partners in Iberoamerica, fostering strategic alliances and expanding educational initiatives. By leveraging the centre's scientific infrastructure and expertise, the CSA Director will co-lead funding acquisition and international partnerships, helping to establish the BBRC as a global leader in brain health. He/she will expand the BBRC's scientific impact through multimodal, computational and translational neuroscience, promote cross-national research consortia and help integrate multimodal biomarkers for prevention and early detection. The selected candidate will capitalise on international funding opportunities and networks to forge strategic partnerships and advance a transdisciplinary approach with a focus on personalised medicine and precision brain health.

# KEY RESPONSIBILITIES

The CSA Director at the BBRC will play a pivotal role in fostering the institutional research projects and ensuring their strategic growth by bringing a global and strategic perspective to the future of neuroscience, brain health and the prevention of Alzheimer's disease. The CSA Director will strengthen the scientific assets, support the BBRC research groups and programmes, and facilitate national and international partnerships. The CSA Director does not lead a research group but works in collaboration with the BBRC Faculty to strengthen the BBRC groups' own research as well as the phenotyping and value of the BBRC core cohorts. Key responsibilities include:

**Contributing to the scientific development of the BBRC and leading its core assets:**

- **Overall scientific strategy:** helping the BBRC management develop a strategic agenda to enhance the centre's national, regional and global scientific leadership with partnerships in the US, Europe and Iberoamerica, as well as other areas as necessary.
- **Strategic planning:** designing and implementing long-term strategic plans to strengthen the BBRC core scientific infrastructure and its role in global neuroscience research by ensuring long-term sustainability of the research cohorts (e.g. participants' engagement, progression from preclinical to

symptomatic stages) and ensuring they are updated in the rapidly changing landscape of neurodegenerative disorders (e.g. incorporating new biomarkers, new disease-modifying therapies).

- **Strategic growth and funding:** facilitating large-scale funding acquisition from institutions such as NIH, the Alzheimer's Association, European agencies and philanthropic foundations to expand the BBRC scientific assets (cohorts) and research initiatives.
- **Scientific excellence:** liaising with the BBRC Faculty to find opportunities and strengthen the BBRC research as a whole as well as the state-of-the-art characterisation and value of the BBRC CSA.
- **Transdisciplinary integration:** leading and promoting transdisciplinary initiatives within the BBRC, integrating fields such as exposome research, -omics, computational modelling, machine learning and neuroinformatics.
- **Cross-sector and societal engagement:** assisting the BBRC and the FPM management in linking brain health research to broader societal initiatives, including policy development, public-private partnerships and interdisciplinary projects that broaden the centre's impact.

**Contributing to managerial and operational oversight of the BBRC:**

- **Executive supervision:** ensuring the scientific development of the BBRC core studies are aligned with the objectives of the other institutional stakeholders, including research and outreach activities.
- **Scientific oversight and quality assurance:** ensuring the legal integrity of the BBRC core studies, upholding the highest standards in clinical, observational and interventional research.
- **Operations and team management**: overseeing and optimising the clinical operations team responsible for conducting longitudinal cohort studies, observational research and non-pharmacological and pharmacological intervention studies and trials.
- **Data and samples governance**: participating as a key stakeholder in the strategic management of the BBRC core data and samples, ensuring compliance with legal and ethical regulations while facilitating efficient access for internal research and open science initiatives.
- **Open science**: promoting open science initiatives, ensuring broad yet secure access to multimodal datasets while adhering to ethical and legal standards.
- **Research impact and support:** enhancing visibility of BBRC research by supporting grant applications, optimising data sharing and improving the quality and impact of publications.

**Acting as an ambassador for the BBRC CSA:**

- **Institutional representation and collaboration**: representing the BBRC CSA at national and international conferences, building partnerships with research institutions, consortia and the industry.
- **Alliances with the private industry:** acting as an ambassador for the centre and its scientific resources to attract new clinical trials from the pharmaceutical industry that test the preventive effect of experimental drugs mostly in cognitively unimpaired participants with underlying Alzheimer's disease (preclinical disease stage, prevention trials).

## REQUIREMENTS

- A PhD or MD-PhD in Neuroscience, Neurology, Brain Health, or related fields, with a strong record of publications and funding in dementia and brain health research is required.
- Specialisation in brain health, dementia research and specific disciplines, and/or a Bachelor's degree in Medicine specialising in Neurology will be considered valuable.
- Established leadership in directing large-scale international programmes, particularly in consortium-building and global health initiatives, with global partners and private-public associations.
- Proven track-record in scientific mentorship with PhD students, postdoctoral researchers and ECRs, and in contributions to the development of research programmes in brain health, neuroscience and dementia research.
- Demonstrated experience in transdisciplinary settings that combine brain health research with broader societal impacts and policymaking.
- Demonstrated experience in acquiring and cultivating relationships with private industry (such as serving on pharmaceutical industry advisory boards for the design and development of clinical trials).
- Extensive experience in securing and managing high-impact grants from bodies such as the NIH, European programmes, the Alzheimer's Association and other global funding organisations.
- Experience in representing scientific assets (such as cohorts) to align them with multiple stakeholders and maximise the scientific and societal impact of these research infrastructures.
- Institutional representation skills, with a clear orientation towards establishing and nurturing relationships (networking), particularly with key stakeholders in the healthcare system and research ecosystem.
- Experience in clinical practice environments, clinical research, protocol design, and audits and inspections by pharmaceutical companies and regulatory agencies will be highly valued.
- Experience in cohort management: open access management protocols, linked publications, big data and open science, among other areas.
- Experience in budget preparation and quantifying the resources required to develop projects, such as equipment, personnel and spaces.
- Experience in managing multidisciplinary teams.
- Good technological skills, applied to clinical research.
- Excellent verbal and written skills in English.
- Willingness to travel nationally and internationally.

## KEY COMPETENCIES

- Collaborative and visionary leadership.
- Institutional sensitivity.
- Strategic thinking.
- Strong relationship, communication and relationship management skills.
- Organisational and analytical abilities.

## WORKING CONDITIONS

- Permanent contract.
- Excellent Company Agreement in relation to the Annual Calendar of effective hours: 1,618 hours full time
- Weekly working time: 38h/week
- Competitive salary proposal according to the Foundation reward Policy and Development Plan
- Hybrid working model (on-site + teleworking) and flexible working hours
- Holidays: 23 working days proportional to the date of hiring. Furthermore, other extra calendar days such as long weekends and days in March-April and December.
- Flexible Compensation plan (meal card, health insurance, kindergarten).
- We offer a very stimulating environment with unique opportunities for professional development


## HOW TO APPLY

Interested candidates should submit a single PDF file containing the following documents:

- **Cover Letter:** Highlighting your interests, experience, and motivation for joining the Foundation's mission.
- **Up-to-date Curriculum Vitae** (CV)
- **References**: Provide the names and contact details of up to three referees who can be contacted.

All documentation must be submitted confidentially and electronically to **talent@barcelonabeta.org** (please specify the position you are applying for in the subject line). Any inquiries prior to the selection process are welcome.

*We are committed to providing equal opportunities to all, regardless of background. We encourage candidates to apply regardless of gender, race, disability, age, sexual orientation, religion or beliefs, marital status, pregnancy, or maternity.*

Deadline for submitting applications: Applications will be accepted until the position is filled

# SELECTION PROCESS

## 1. Pre-selection

The selection committee, in collaboration with the People Department, will evaluate applications based on the qualifications, experience, and motivation expressed in the cover letter and CV. This process will be merit-based, resulting in a list of preselected candidates.

## 2. Interview Stage

The selection committee will assess each application, ensuring that every profile is evaluated according to internal selection policies, which are based on transparency and merit, in compliance with the HRS4R Excellence Award recognition.

Preselected candidates will participate in the following phases

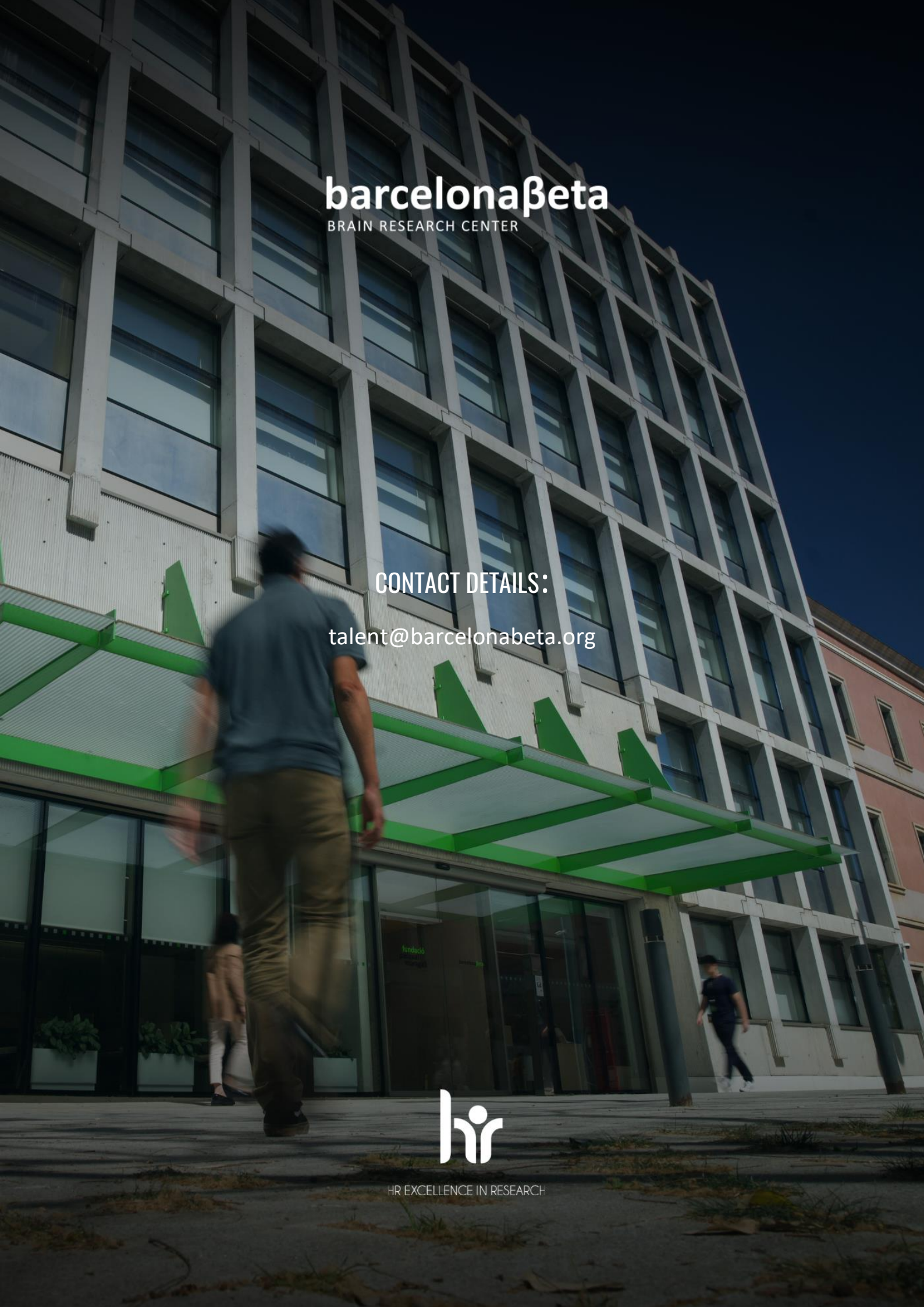
- **Vision Statement**: Candidates will be asked to develop and present a plan outlining their leadership style, approach to team management, and strategic vision for the future. This plan should align with the Foundation's strategic objectives and mission.
- **Visit**: Finalist candidates will have the opportunity to visit the Foundation's facilities. During this visit, they will meet the team and experience the working environment, gaining an overall view of the institutional culture.

## Comments and Suggestions

At the BBRC, we promote continuous improvement in our selection processes. If you have any questions, concerns, or suggestions, please contact us at **talent@barcelonabeta.org**

*We inform you that your personal data will be included in a file managed by the Pasqual Maragall Foundation and Barcelonaβeta Brain Research Center to process your job application. Once the process is complete, the data will be erased.*

*You have the right to exercise the rights of access, rectification, cancellation and opposition as recognised in Regulation (EU) 2016/679 (General Data Protection Regulation) by contacting the Pasqual Maragall Foundation and Barcelonaβeta Brain Research Center at Carrer de Wellington 30, 08005 Barcelona.*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