

Postdoctoral Position for the Alzheimer Prevention Program, Barcelona, Spain

About the employer

The Barcelona β Brain Research Center (BBRC) is a new research center, constituted by the Pasqual Maragall Foundation. 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 such as memory, learning and decision-making, among others. The vision of BBRC is to provide the society with distinct and innovative solutions for age-related cognitive disability by leveraging these complementary research programs in order to attain a multidisciplinary comprehension of the aging process and the pathophysiology of neurodegeneration. At present BBRC deploys its research mission through two Research Programs, the Alzheimer's Prevention Program and the Memory Program.

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.

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

About the job

The ALFA (for ALzheimer and FAMilies) parent cohort, established by the BarcelonaBeta Brain Research Center, is composed by 2743 cognitively normal participants aged between 45 and 75. This cohort was established as a research platform to characterize preclinical AD in asymptomatic individuals. In brief, participants have a Clinical Dementia Rating (CDR) equal to 0 and are cognitively normal as determined by a neuropsychological test battery that included the Mini-Mental State Examination, the Memory Impairment Screen, the Time Orientation of The Barcelona Test II and

verbal semantic fluency. A subset of the ALFA parent cohort participants is taking part in a nested longitudinal long-term study, named the ALFA+ study, in which a more detailed phenotyping is being performed. On top of a similar characterization as in the ALFA parent cohort, it will entail the acquisition of both wet (CSF sample collection, blood) and imaging (MRI and PET) biomarkers.

EPAD is a European project to develop a sustainable, pan-European scientific, analytical and adaptive trial delivery machine specifically and uniquely developed with the singular aim of undertaking Proof-of-Concept trials for the prevention of Alzheimer's dementia. To achieve this, several needs have to be addressed: 1. Defining an accurate set of criteria for identifying Alzheimer's pathology early in the course of disease in people who have no or minimal associated symptoms. 2. Identifying these individuals from population and clinical cohorts or registers. 3. Developing a large longitudinal cohort study including these individuals with clinical, cognitive and biomarker assessments to ease identification for trial inclusion, provide trial run-in data and generate high quality data for updating these disease models, including defining risk for developing AD or evaluating efficacy. 4. Establishing a protocol and infrastructure for a standing, double-blind, adaptive, proof-of-concept clinical trial for secondary prevention of Alzheimer's dementia.

Alzheimer's disease is the most common cause of dementia in elderly people. Research into Alzheimer's disease therapy has been at least partly successful in terms of developing symptomatic treatments, but has also had a lot of failures in terms of developing disease-modifying therapies. These successes and failures have led to debate about the potential deficiencies in our understanding of the pathogenesis of Alzheimer's disease and potential pitfalls in diagnosis, choice of therapeutic targets, development of drug candidates, and design of clinical trials.

The BarcelonaBeta Brain Research Center invites applications for a full-time postdoctoral position within the context of the ALFA and EPAD projects, as part of its clinical research program.

Main Responsibilities

Regarding ALFA: The candidate will be managing and analysing the life-style data of the ALFA parent cohort and the ALFA+ study. The candidate, along with the rest of the clinical research team, will contribute to the analysis and interpretation of clinical, imaging and laboratory data obtained from the cohort, specially in relation with life-style, cognitive and brain resilience and resistance. The researcher will draft manuscripts and communicate the activities and results derived from the study, at national and international levels, in congresses and forums.

Furthermore, the candidate will contribute to risks factors and life habits data collection for the future ALFA study visits and follow-up. The candidate is expected to apply for public grants and have capacity of leading a future research group focused on life style and non-pharmacological intervention for the prevention of dementia.

Regarding EPAD: In collaboration with other EPAD partners, the responsibilities for this position includes:

- Creating and leading the lifestyle and non-pharmacological interventions Scientific Advisory Group
- Modelling clinical and epidemiological data in preclinical disease models with emphasis of the role of cognitive and brain resilience
- Participate in analysis and publication of results;
- Engage in the management of the project;
- Participate in regular meetings with our partners throughout Europe;

Required Qualifications:

- PhD in neuroscience or image analysis
- Excellent communication and writing skills
- Knowledge on lifestyle and non-pharmacological intervention
- Experience with MRI acquisition and analysis
- Affiliation with (or experience with) project management
- Ability to think independently and work collaboratively
- Capacity to generate your own research group

We offer

- Starting date: to be defined
- The postdoctoral position is scheduled initially for two years (open to renewal).
- Salary will depend on experience.

Application process:

To apply, please submit a single PDF file containing the following: 1) Cover letter describing research interests and relevant background; 2) CV with list of publications; 3) The names of three individuals who could provide reference letters. All files or inquiries should be submitted electronically to: rh@barcelonabeta.org

Subject: Postdoctoral Position

Deadline: December 10th 2018

We inform you that your personal data will be part of a file which Pasqual Maragall Foundation 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: Wellington Street 30, 08005 Barcelona