



## POSTDOCTORAL CANDIDATE INTERESTED IN APPLYING FOR A BEATRIU DE PINOS IN NEUROSCIENCES

### Brain Health in Advanced age

Are you a postdoctoral researcher thinking about your next career move? Beatriu de Pinós grants ([BP](#)) are a great option if you are an experienced researcher looking to give your career a boost by working abroad.

[Institute of Neurosciences](#) of the [University of Barcelona](#) allows you to work in a first class research environment while benefitting from an attractive salary to cover living, travel and family costs.

### Group and project information

Applicants will be integrated into the research group “Barcelona Brain Stimulation Lab (<http://www.ub.edu/bbslab/>) – Neuropsychology Group”; (P.I. David Bartrés-Faz).

The BBSLab is a research group at the Faculty of Medicine and Health Sciences, University of Barcelona. The group activities include a combination of approaches such as cognitive and lifestyle assessments, neuroimaging (mainly MRI, including structural, fMRI, DTI and ASL) as well as non-invasive brain stimulation (transcranial magnetic stimulation and transcranial electric stimulation). The overarching group’s objectives are to characterize the factors and biological determinants (i.e. brain plasticity mechanisms) associated to the preservation of mental and brain health, in particularly in advanced age. The group has a strong focus in the study of cognitive reserve and brain resilience mechanisms as well in the study of the modulation of brain networks underlying these processes through non-invasive brain stimulation. The group is currently involved in several projects, including 1) the Barcelona Brain Health Initiative (BBHI, <https://bbhi.cat/en/>) a prospective population-based study cohort with over 5.000 participants (and were up to 1.000 are being followed up with complete Medical, psychological and neuroimaging assessments) focused on the study of the impact of lifestyles on brain Health; and 2) the LIFE BRAIN H2020 project (<https://www.lifebrain.uio.no/>), coordinated by the Oslo University, which includes health-related and neuroimaging (mainly MRI) data from longitudinal cohort studies of 12 European cohorts. The overarching objectives are to identify psychological, biological and lifestyle factors associated brain mechanisms explaining maintenance of brain and mental health across the lifespan.

### Functions and tasks

The candidate will be involved in multimodal data analyses (psychological, neuroimaging, medical, lifestyles, biomarkers) already acquired in the participating projects. Part of her/his activity will be also to contribute to new data collection for the studies conducted within the





laboratory. The candidate will have the possibility to propose her/his own areas of interest/projects/articles to develop within the general lines of research of the group.

### Requirements for candidates

#### *Skills/Qualifications:*

- A minimum of two (2) years' of post-doctoral experience outside Spain
- Proficiency (published track) in multimodal MRI: structural, DTI and fMRI (resting-state, task-related) analysis and processing, preferably within the field of mental or brain Health human studies.
- Expert mastery of computer software packages: FSL, FreeSurfer, SPM-Matlab, RStudio and good statistical/modelling knowledge.
- Background of non-invasive brain stimulation techniques and/or studies conducted within this field will be considered.

#### *Languages:*

English: Excellent

#### *Specific Requirements:*

- Not having resided or worked in Spain for more than 12 months over the last three (3) years prior to the deadline for submitting applications (11 March).
- Candidates must fulfilled eligibility Beatriu de Pinós [criteria](#).

### Working conditions

- Full time temporary contract
- Duration: 3 years
- The amount of the grant for the hiring of research staff is €132,300. This sum finances the cost of each contract over the course of the 3 years of the grant, and includes the remuneration to be received by the research staff and employer's social security contributions.
- Additionally, the grant also has a supplementary amount of €12,000

### How to apply

Please submit your CV to David Bartrés-Faz ([email@ub.edu](mailto:email@ub.edu)); Reference: Beatriu de Pinos Candidate)

**Deadline: 1 March 2021**

