



**Universitat de les  
Illes Balears**

## **Pre- and Post-doctoral positions: Cognitive Neuroscience of Executive Functions**

The Clinical Neuropsychology group at the [University of Illes Balears, Mallorca \(www.neuropsicologiaclinica.es\)](http://www.neuropsicologiaclinica.es) is hiring one PhD student and one Postdoctoral research fellow to join an ongoing project on the Cognitive neuroscience of executive control aimed to assess functional and effective connectivity (e.g., Dynamic Causal Modelling) in EEG/MEG data sets from healthy controls and brain injured patients.

The project is inspired on modern theories of prefrontal function and aims to develop state-of-the-art neuropsychological tools for a more valid and cost-effective evaluation of dysexecutive symptoms in elderly adults and patients with frontal lobe lesions (e.g., Barceló & Knight, *Cereb. Cortex*, 2007; Nyhus & Barceló, *Brain & Cognition*, 2009).

Successful pre/postdoctoral candidates will hold a MSc/PhD in Psychology, Biology, Cognitive Neuroscience, Physics, or related fields, and will play a key role in designing, conducting, analyzing and reporting EEG & MEG studies, with a focus on event-related potentials, oscillatory neural activity and synchrony. Candidates will be fluent in English (knowledge of Spanish is not required), and will prove good interpersonal and communication skills, including writing to a high standard. Candidates will work closely with the grant holder as part of a highly motivated multidisciplinary team.

**Requirements for the PhD student position:** **1)** EU citizenship; **2)** a Master degree and excellent academic marks; **3)** Programming skills (eg., Matlab will be a plus); and **4)** Demonstrated ability and high motivation to conduct high-quality research publishable in quality international peer-reviewed journals.

**Requirements for the Postdoc position:** **1)** Strong background publishing EEG and/or MEG studies; **2)** Advanced programming skills (eg., Matlab, C, Python); **3)** Excellent command of EEG/MEG data analysis software (EEGLAB, SPM8, Brainstorm, etc); and **4)** demonstrate creative and independent work.

### **We offer:**

- Full-time dedication to research activities.
- Access to clinical samples from associated hospitals.
- Integration in an friendly and enthusiastic multidisciplinary group.
- Full access to our onsite facilities (EEG/ERP, eye tracking, neuropsych. tools).
- A gross salary commensurate to experience, starting from 16.000€ (PhD) or 21.500€ (postdoc). Both positions are funded by the Spanish Government (MINECO's grant PSI2013-44760-R), as well as other local research agencies.

Please send an updated CV in pdf format, a letter of motivation, and the names and emails of two referees to: Francisco Barceló ([f.barcelo@uib.es](mailto:f.barcelo@uib.es)). The PhD studentship is for 3 years, and the postdoc position is for one year, with the possibility of renewal. Starting date October 1<sup>st</sup> 2014, or until the positions are filled. Informal inquires are welcomed. For more information visit: [www.mcst.es](http://www.mcst.es), or [www.neuropsicologiaclinica.es](http://www.neuropsicologiaclinica.es).