

# Postdoctoral Contract at Fundación HM Hospitales

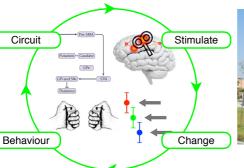
## **Cognitive Control & Habit Lab**

# https://www.controlandhabit.com/

We are seeking for highly motivated post-doctoral researcher in the field of Cognitive Neuroscience to develop a project in the neural basis of cognitive control and impulsivity. We offer incorporation to our team via <a href="Postdoctoral Junior Leader Retaining Fellowship">Postdoctoral Junior Leader Retaining Fellowship</a>.

The hosting group is a growing multidisciplinary international and very competitive team in the field of cognitive and clinical neuroscience. We are embedded within Hospitales Madrid-Puerta del Sur (<a href="www.somoshmcinac.com/en/">www.somoshmcinac.com/en/</a>). The candidate will work in a young and vibrant atmosphere with experts in other inter-related disciplines in neuroscience (neurology, engineers, animal models, psychiatry, neurosurgery...). Specifically, the focus of our team lies in 3 inter-related research lines in human cognition: investigating the prefrontal-striatal interactions during cognitive control, understanding the mechanisms behind excessive behaviours associated to dopamine and exploring habits in everyday-life and laboratory settings.

Lab Research Strategy



<u>HM-CINAC</u>



## **Requirements:**

- Candidates should have earned their doctoral degree two to seven years prior to the deadline of the call for applications.
- Candidates must have resided or have carried out their main activity (work, studies, etc.) in Spain for more than 12 months in the 3 years immediately prior to the closing date of the call.
- Candidates must have a PhD in neuroscience, biomedical engineering, psychiatry, neuropsychology or related field.
- Fluent in English (written and spoken); Spanish is not required.
- Scripting languages (e.g. Matlab, Python, R or similar).
- Previous experience in neuroimaging tools (SPM, FSL, fmriPrep, ANTs, etc).
- Help mentor graduate students in the lab.
- Attend and present in weekly lab meetings.
- Present research findings at international conferences.



## **Project:**

The Project aims to discover neural changes associated to excessive behaviours in impulse control disorders (ICD) in PD. Specifically, we aim to decipher the neurocognitive changes associated to reward-learning and cognitive control as well as excessive use of habitual actions in patients with ICD. The studies will involve behavioural and psycho-physiological measures combined with imaging and brain stimulation to define the critical hubs responsible for ICD and trying to restore them.

### Offered:

- 3-year full-time contract.
- Access to state-of-the-art neuroscience techniques in neuroimaging (3T PET-MRI Siemens), brain stimulation (magnetic, electrical, ultrasound), cognition (behavioural tests, neuropsychology clinic, eye-tracking, psycho-physiology) and clinical procedures (brain lesions, pharmacotherapy) as well as analytic tools and know-how.
- Training programme (face-to-face and online) on transversal skills, innovation and leadership.
- Fellows will be required to pursue a mandatory international and/or intersectoral secondment (3-6 months) within their research projects in an institution freely proposed by the fellows themselves.
- Extensive training possibilities in complementary skills including computational methods, brain connectivity models and brain stimulation tools.

**Starting date:** Between 2nd May and 30th September 2022

If you are interested, send your CV and contact details of 2 previous references to <a href="mailto:iobeso.hmcinac@hmhospitales.com">iobeso.hmcinac@hmhospitales.com</a> no later than **September 17th 2021** indicating in the subject: **Postdoc Retaining**