



POSTDOCTORAL CANDIDATE INTERESTED IN APPLYING FOR A MSCA-IF IN NEUROSCIENCES

NEUROPSYCHOLOGY – OBESITY AND NEUROIMAGING

Are you a postdoctoral researcher thinking about your next career move? The Marie Skłodowska-Curie Individual Fellowships ([MSCA-IF](#)) are a great option if you are an experienced researcher looking to give your career a boost by working abroad.

[Institut 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
NEUROPSYCHOLOGY – OBESITY AND NEUROIMAGING

PI: María Ángeles Jurado Luque

<http://www.neurociencies.ub.edu/maria-angeles-jurado-luque/>

<https://publons.com/researcher/1730320/maria-angeles-jurado/metrics/>

In the obesogenic environment of modern societies, every individual responds differently to the excessive availability of calories. Differences in central nervous system function between normal-weight and obese people can be investigated to understand how central nervous system processes are specifically associated with overeating. An improved understanding of neural vulnerability factors that predict future weight gain should provide valuable information for the design of more effective treatments.

Project: Inflammation, stress and microbiota as mediators between obesity and brain functioning during adolescence.

PSI2017-86536-C2-1-R. Ministry of Economy and Competitiveness. State Program of R & D Oriented towards the Challenges of Society

Summary of the project.

Obesity is a health problem with a high prevalence in industrialized societies. Previous neuroimaging and behavioral studies suggest that participants with obesity exhibit lower cortical thickness in prefrontal regions along with lower outcomes in executive functions. These differences seem to be present in children and adolescents, highlighting the need to develop preventive measures targeting those ages. However, the exact physiopathological mechanisms that underlie the relationship between obesity and behavioral and brain





changes remain largely elusive. The present project is aimed at characterizing the role of the gut microbiota in obesity and in the neurobehavioral differences associated with obesity and also seeks to clarify the possible mediating role that inflammatory processes and stress might play in the relationship between obesity and changes in brain function. We will recruit 75 participants with obesity and 75 normal-weight participants (12-19 years old, 50% females). We will collect clinical data, cognitive and personality variables and biological samples for the characterization of the microbiome profile, inflammatory-related values and physiological stress-related values. We will perform multiple mediator analyses to test whether gut microbiota, inflammation and stress can act as mediating factors in the relationship between obesity and neurobehavioral changes. The results of the project will be applied in public health politics and in clinical strategies seeking to prevent negative consequences associated with obesity.

Functions and tasks

The postdoctoral researcher will be expected to contribute in data management, analysis and publication of the results in peer reviewed scientific journals, to participate in scientific meetings, seminar series and other appropriate professional activities, provide guidance to undergraduate and graduate students in the laboratory.

Requirements for candidates:

Skills/Qualifications:

- PhD or equivalent (Recognised Researcher R2)
- Interest in Neuropsychology and Neuroimaging

Languages:

English: Excellent

Specific Requirements:

- Candidates must fulfilled eligibility MSCA criteria described in the [Guide for Applicants](#)

Working conditions:

- Full time temporary contract
- Gross salary of about € 50,000
- Duration: ranging from 12 to 36 months depending on the typology of the fellow
- Starting date: flexible from beginning of May 2020

Support for candidates





The [Institute of Neurosciences](#) and the [International Research Projects Office](#) at the University of Barcelona could offer you:

- A travel grant to work on your proposal with your future supervisor
- One day course on "How to work a successful MSCA IF"
- Personalized support on the application
- Support on other national calls such as [Beatriu de Pinós](#) and [Junior Leader](#)
- Mentoring

How to apply

Please submit your CV (if you are interested in further documents mention them here) to: María Ángeles Jurado (majurado@ub.edu); Reference: MSCA IF Candidate)

Deadline: 24/06/2019

