



Join us for a PhD in Neuroscience

4-year Predoctoral position in Barcelona

Systems Neuropharmacology Group

Mapping the ventromedial prefrontal cortex-raphe nuclei network underlying mood disorders in Parkinson's disease to identify novel therapeutic circuits (MoodPD)

A four-year PhD contract (contrato FPI) is available in our group at the Instituto de Investigaciones Biomédicas in Barcelona (IIBB-CSIC) to identify novel therapeutic brain circuits and mechanisms underlying depression in Parkinson's disease (PD).

MoodPD project will attempt to obtain new evidence from postmortem human brain samples and mouse models of α -synucleinopathy to better understand how (dys)connectivity of brain circuits controlling emotional functions may be a causal factor in PD. The results from this project will lay the groundwork for new drugs and therapies that target the specific circuits identified. To achieve this we will use transcriptomics, neuroimaging, and Ephy plus optogenetic.

The candidate will join our research group while completing his/her studies towards obtaining a PhD degree in Neuroscience form University of Barcelona.

Interested candidates, who have completed and Official Master's degree in Biology, Biotechnology, Biochemistry, or other related fields, can submitted their academic transcripts, CV, and a cover letter to the email address: <u>analia.bortolozzi@iibb.csic.es</u>. The application period is expected to begin in October 2023. Similarly, the contract is expected to start on January 1st, 2024.

Some recent publications:

- Tristán-Noguero A, Fernández-Carasa I et al., EMBO Mol Med. 2023; 15(3):e15847

- Miquel-Rio L, Alarcón-Aris D et al., *Transl Psychiatry. 2022; 12(1):79.*

- Calero M, Moleiro LH et al., Front Mol Biosci. 2022; 9:887678.

- Alarcón-Aris D, Pavia-Collado et al., *EBioMedicine. 2021; 74:103731.*

- Alarcón-Aris D, Recansens A *et al., Mol Ther. 2018; 26(2):550-567.*



For more information of our group, see https://www.iibb.csic.es/es/research/54