



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

### Neuropharmacology in Aging and Neurodegeneration

Are you a postdoctoral researcher thinking about your next career move? The Marie Sklodowska-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 "[NEUROPHARMACOLOGY IN AGING AND NEURODEGENERATION](#)"; (P.I. [Mercè Pallàs](#)).

The main objective of the research group is focused in the discovery of new drugs, which act in new targets, to face one of the challenges of current biomedicine, which is the cognitive deterioration, linked to aging and neurodegenerative processes, such as Alzheimer's disease. All recent attempts to develop new drugs for the treatment of cognitive impairment have failed, mainly because of the inadequacy of the molecular objectives. The therapeutic strategies on the amyloid protein have not given positive results in clinical trials, and at present the in-depth study of the inflammatory processes, the oxidative stress and the homeostatic mechanisms of the cells to eliminate the aggregates of proteins open novel therapeutic avenues in human cognitive decline approach. The group research project focus on the study of new chemical entities (developed by the consolidated Chemical and Pharmacology Group of Drugs against Neurodegenerative Diseases (CHEMPHARNEURO, 2017SGR106, AGAUR, Catalunya).

The research project to be developed must identify and validate the pharmacological target, improve the hit, which the group already has, to lead through selectivity and safety studies and carry out additional in vivo studies to demonstrate unequivocally that the beneficial effects observed are due to its action on the target (Target validation). The final objective is to demonstrate the reliability of the new ligands to transfer it to the productive sector, thus improving the possibilities of a real impact on society. The group is also actively implicated in transference processes and a future deal will be to create a spinoff, then entrepreneurship activities will be included.

#### Functions and tasks

The researcher should have extensive experience in animal and cell models and in study techniques that include behavioural tests, histology, molecular / cell biology with the ultimate goal of developing new drugs, validating therapeutic targets and transferring new diagnostic and therapeutic strategies to the pharmaceutical industry. As mentioned the group is also





actively implicated in transference processes and a future deal will be to create a spinoff, then entrepreneurship skills will be also appreciated.

### Requirements for candidates:

#### *Skills/Qualifications:*

- PhD or equivalent (Recognised Researcher R2)
- Behaviour test (mice and rat)
- Immunohistochemistry, image data analysis
- Gene expression determination
- Epigenetic mechanisms knowledge
- Target engagement methods

#### *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: Mercè Pallàs ([pallas@ub.edu](mailto:pallas@ub.edu)); Reference: MSCA IF Candidate)

**Deadline: 24/06/2019**

