



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

### Neurodegeneration and synaptic dysfunction in Huntington's disease

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 "[Neurodegeneration and synaptic dysfunction in Huntington's disease](#)". P.I: [Silvia Gines](#)

Dr. Silvia Gines's research interest focuses in understanding the molecular mechanisms Huntington's disease (HD) pathology. HD is an autosomal-dominant inherited neurodegenerative disorder, classically characterized by progressive motor deficits and commonly associated to striatal neurodegeneration. However, decades of research have long-established that psychiatric alterations and cognitive function declines in the pre-manifest and early stages of HD, years before motor symptoms appear. Therefore, the "perfect" therapeutic strategy will be one in which by targeting a single molecule or a specific pathway, early memory and emotional disturbances could be ameliorated while motor progression slowed or prevented.

Our proposal call into the broadly assumed idea that cells, in particular neurons, recycle and degrade their own old or damaged organelles. By using a combination of advanced microscopy and molecular/cellular and biochemical techniques we aim to clarify whether astrocytes may act as regulators of neuronal homeostasis in HD not only by modulation of neurotransmitter release but also by taking up and degrade "unhealthy" neuronal mitochondria

### Functions and tasks

The work will focus on understanding the differences underlying the mechanisms regulating mitochondrial dynamics within astrocytes and neurons as well as the mitochondrial crosstalk between neurons and astrocytes in HD conditions. The final goal is to define new targets for pharmacological manipulation of mitochondrial disturbances that are responsible, at least in part, of the specific vulnerability of striatal neurons in HD. To this aim biochemistry approaches (electrophoresis and Western blot, immunoprecipitation, cellular fractionation), molecular and cellular techniques (immunocytochemistry/immunohistochemistry, confocal microscopy, FACS, electron microscopy) will be used.





## Requirements for candidates:

### *Skills/Qualifications:*

- PhD or equivalent (Recognised Researcher R2)
- We are looking for an enthusiastic candidate, who wants to work in a young and efficient team to address new and challenging aspects of neurodegenerative disease. The candidate must have a background in Cellular and Molecular Biology, Biochemistry and Neuroscience. He/she is expected to hold a PhD degree in Biomedical Science or similar.
- Competencies: communication skills, project planning and delivery, career management, analytical and critical thinking, ethics and integrity, leadership, information seeking and management

### *Languages:*

English: Excellent

### *Specific Requirements:*

- Candidates must fulfil 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: Silvia Gines ([silviagines@ub.edu](mailto:silviagines@ub.edu)); Reference: MSCA IF Candidate)

**Deadline: 24/06/2019**

