



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

### Functional Genomics of Neurodegenerative diseases

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 "[Functional Genomics of Neurodegenerative diseases](#)"; (P.I. [Eulàlia Martí](#)).

Different classes of RNA molecules that do not encode for proteins (non-coding RNAs or ncRNAs) modulate gene expression through diverse mechanisms and constitute a crucial layer of biological regulation. ncRNAs are specially enriched in the nervous system, where their highly specific and dynamic expression is essential in developmental processes and the correct function of the adult brain. The ncRNA repertoire is fundamental for neuron-specific functions and its perturbation is mechanistically related with neuropathological processes.

The main research interest in our group is to identify ncRNA mechanisms contributing to the onset and progression of age-related neurodegenerative disorders. We aim at understanding disease-driven deregulation of ncRNAs and their role in neuronal dysfunction. Our final purpose is to discover ncRNA-gene expression networks underlying neuro-pathogenic processes with the aim to understand disease mechanisms and identifying pathways for therapeutic intervention.

We use RNA-seq approaches to identify deregulated species with neuropathogenic potential. We use data mining strategies and develop statistical methods to uncover relevant RNA classes. Functional validations and therapeutic approaches are performed in vivo, in model organisms and cell culture, using molecular biology and biochemistry strategies and behavioural phenotyping.

#### Functions and tasks

- Identify RNA-based diagnosis and prognosis biomarkers in biofluids in neurological/neurodegenerative diseases.
- Uncover non-coding RNA cell pathway perturbations in neurological/neurodegeneration paradigms





## Requirements for candidates:

### *Skills/Qualifications:*

- PhD or equivalent (Recognised Researcher R2)
- The following skills will be valued: strong expertise in molecular biology (RNA and DNA isolation, qPCR, CRISPR, RIP etc) and cell culture (specially primary neuronal and glial cell culture)

### *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: Eulàlia Martí ([eulalia.marti@ub.edu](mailto:eulalia.marti@ub.edu)); Reference: MSCA IF Candidate)

**Deadline: 24/06/2019**

