



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

### Developmental auditory cognitive neuroscience

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 **[Brainlab-Cognitive Neuroscience Research Group](#)**; (P.I. Carles Escera; research ID: A-8658-2010).

The *Brainlab* is an multidisciplinary research group that uses mainly EEG, but also MEG, fMRI and behavioral and neurogenetic analysis, to investigate the neural mechanisms of auditory cognition. Our research addresses the neural mechanisms by which the auditory system makes sense of sound, essentially by looking at sensory adaptation and prediction error and their interactions with motor and other cognitive systems at multiple hierarchical levels. A major current focus is on the encoding of speech sounds in the subcortical auditory system as revealed by the Frequency-Following Response (FFR), with a neurogenetic and neurodevelopmental approach.

The target project is on the development of the encoding of speech sounds and neural speech tracking during the first year of life *vis a vis* maturation of the auditory pathway and auditory cortex as revealed with diffusion and volumetric MRI, and on how fetal conditions during pregnancy (e.g., prematurity, low birth weight) may affect neural mechanisms of language acquisition. This project is part of our collaboration within the recently established Institut de Recerca Sant Joan de Déu, linked to the Sant Joan de Déu Children's Hospital (Barcelona).

### Functions and tasks

The position offers the possibility to collaborate in an exciting research opportunity at the frontiers of cognitive neuroscience and pediatric research. The candidate will have a solid background in cognitive neuroscience methods (EEG and MRI) as well as expertise in EEG signal analysis and eventually MRI analysis (diffusion tensor imaging skills will be plus). The post requires to be involved in experimental design, data collection (to a less extent), data





analysis and management, and in drafting and writing publications for peer-reviewed journals, to participate in scientific and lab meetings, seminar series, and to provide supervision for undergraduate and graduate students in the Brainlab. Outreach activities are also involved.

### Requirements for candidates:

#### *Skills/Qualifications:*

- PhD or equivalent (Recognised Researcher R2)
- Independent and creative thinking
- Strong analytical skills as demonstrated by the use of standard software packages (eg, EEGlab, Brainstorm, FreeSurfer, SPMxx, etc.) and programming languages (Matlab, Python, etc.), with an emphasis on signal analysis (time-frequency, neural speech tracking, etc.).
- Competitive writing skills (as demonstrated by first author publications).
- Ability to work in a competitive environment in collaboration with team members but also independently.
- Good oral communication skills

#### *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





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### How to apply

Please submit your CV, a motivation letter, three of your first-author papers, and the name of two-three person who could provide recommendation to: Carles Escera ([cescera@ub.edu](mailto:cescera@ub.edu));  
Reference: MSCA IF *yourname*)

**Deadline: 24/06/2019**



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