PhD in Genetics/Epigenetics of Auditory Cognitive Neuroscience

The Brainlab-Cognitive Neuroscience Research Group [www.ub.edu/brainlab] looks for candidates for a 3-year contract (FI/FPU) starting in Fall 2019.

Principal Investigator: Dr. Marc Via

The PhD project focuses on the genetic and epigenetic modulators of brain processing of acoustic stimuli of different nature (music, tones, language, ...) and is funded by the Spanish Ministry of Science (project GEPLEM – PGC2018-099013-A-I00).

The project departs from our recent discovery that genetic variation in the serotonin transporter gene is involved in the accurate encoding of speech sounds in the subcortical auditory pathway (Selinger et al., 2016, Journal of Neuroscience, 36, 10782-10790; see Figure). The study took advantage of the Frequency-Following Response (FFR), an auditory brain potential derived from the EEG.

The PhD project aims at characterizing genomic and epigenetic variants involved in auditory processing and the functional consequences of this efficient encoding (sound, speech and music perception and production), as well as the underlying neurocognitive mechanisms. The project will collect genetic and epigenetic data of participants together with EEG recordings and behavioral assessments. It also relates to a broader project in our Brainlab that uses MEG, fMRI and the study of newborns to investigate the neural mechanisms of perception.

Candidates should have a strong degree in any field related to the Neurosciences (Psychology, Biology, Biomedicine, Computer Sciences, Biomedical Engineering, or a related field)

The successful candidate will join the PhD Program though a competitive FPU or FI fellowship.

Requirements: [1] EU citizenship, [2] the highest academic marks, [3] computer skills (e.g., Matlab, Python, R, ...). A completed Master degree is not mandatory, but it will be considered a plus.

Applicants should send [1] a letter of motivation, [2] CV, and [3] an official transcript of grades (in ECTS format) by email to Dr. Marc Via at mvia@ub.edu [subject: PhD – Via]

Recommendation letters are also welcome
Applications will be processed until the position is filled [post data: June 25th, 2019]