

## SensationaHL

### WP3- Neurobiology of sensitive periods for auditory processing: from adolescence to adulthood

**Project** – The main goal of SensationaHL is to investigate the development of complex auditory processing at adolescence. The overarching hypothesis of this project is that adolescence might present a second sensitive period for complex auditory processing. Indeed, most measures of auditory perception in noise indicate a protracted development until (the end of) adolescence. Work package 3 (WP3) is dedicated to identifying neurobiological factors that might contribute to closing a sensitive period for auditory processing at puberty offset. Neuroendocrine, neuroimaging, cognitive and auditory measures will be combined to tackle this challenging issue. This project is funded by the [European Research Council](#).

**Environment** – SensationaHL is conducted within the Center for Research in Cognition & Neurosciences ([CRCN](#)), Faculty of Psychology (ULB). The experimental work will take place at the Laboratoire de Neuroanatomie et Neuroimagerie Translationelles (LN<sup>2</sup>T), hôpital Erasme. The LN<sup>2</sup>T is a multimodal functional neuroimaging platform that contains MEG facility, OPM-MEG facility, a hybrid PET-MRI system (3T MRI, Signa GE healthcare) and an MRI-compatible high-density EEG system. The successful candidate will be working under the supervision of Prof Axelle Calcus, in collaboration with Prof Xavier De Tiège.

**Candidate** – The successful candidate will hold a PhD in Neurosciences, Cognitive Sciences, Developmental Psychology, Hearing Sciences or any related discipline at the start of the project. Candidates will have excellent signal processing and statistical analyses skills (MATLAB or Python, R). They will have a strong background in neuroimaging. Expertise in auditory development and psychophysics would be an asset. Candidates will demonstrate excellent communication skills (English is required; French is desirable), ability and willingness to work independently as well as in a larger team. The postdoc position is funded for 2 years. The net salary will be in line with the Belgian legislation (~2900€/month, full time) and includes social and medical benefits. Women and minorities are strongly encouraged to apply. Note that only people who have *not lived or worked in Belgium* for more than 24 months over the last 3 years immediately preceding the start of the contract, and have defended their PhD since no longer than 8 years before the start of the position, are eligible for application.

**Job description** – The successful candidate is expected to participate in research, publication and communication activities within SensationaHL. As such, they will design experiments, collect, analyze and interpret data, and disseminate results as appropriate regarding the project. They will closely collaborate with members of the research team. They will establish and maintain collaborations with international experts in the field, as well as local researchers.

**Application** – To apply for this position, please send a CV, and a cover letter (in English), as well as the names and contact information of 2 referees to Prof Axelle Calcus ([axelle.calcus@ulb.be](mailto:axelle.calcus@ulb.be)). The cover letter should clearly state the scientific motivation and interest for the research topic. Deadline to apply is **27<sup>th</sup> June 2024**. Interviews will be organized in July. Ideal start date is 1<sup>st</sup> October 2024, although flexibility can be allowed. Feel free to get in touch informally to discuss this position.