UNIVERSITÉ LIBRE DE BRUXELLES

ULB

ACTE

Autisme en Contexte
Théorie et Expérience

CALL FOR A 4-YEAR DOCTORAL RESEARCHER AT THE ACTE RESEARCH CENTER, AT THE ULB
NEUROSCIENCE INSTITUTE
BRUSSELS, BELGIUM

Belgian Language in Autism Cohort : The role of statistical learning

PROJECT – Statistical learning plays an important role in language acquisition and can operate on the structural properties of the (linguistic) inputs independently of their potential socio-communicative function. Therefore, autistic children who experience difficulties in processing socio-communicative cues may still rely on statistical processes to access linguistic structures.

Even though no specific impairment in statistical learning has been found in autistic syndrome disorders (ASD), most of the studies focus on highly verbal children with ASD above the age of ten. Moreover, little is known regarding the developmental trajectory of statistical learning and the role of individual differences. The current literature may therefore miss individual differences across the autism spectrum, and thus obliterate the important role that statistical learning may play in mediating language trajectories in young autistic children. This project aims at measuring the potential role of statistical learning in language development in autism by tracking the developmental trajectory of these learning abilities and to relate it to the evolution of linguistic skills.

JOB DESCRIPTION – The successful candidate will be awarded a four-year PhD grant at the ULBabylab at the Université libre de Bruxelles. S·he will be writing a PhD dissertation under the supervision of **Prof. Arnaud Destrebecqz** on the link between statistical learning and language abilities in ASD. This PhD dissertation is part of **Belgian Language in Autism Cohort**, a large multicentric and multilingual longitudinal project on the linguistic trajectories in autism, led by ACTE, at Université libre de Bruxelles, LAURES, at KU Leuven, and RIDDL, at Gent University. The successful candidate's main tasks will be to set up the experimental paradigms in light of the most recent advances in the field, contribute to data collection, analyze and interpret the data, and draft the papers. All PhD students working within the project will have the opportunity to receive training in all the experimental tools used in the project (such as the administration of standardized cognitive, linguistic and autism-specific psychometric tools and questionnaires, EEG or measures of statistical learning), and to spend time in the other labs involved in the project. The monthly net salary is expected to be around 2100 € the first two years, and 2170 € the third and the fourth years.

CANDIDATE – Eligible applicants are currently enrolled in, or hold, a master's degree in Psychology, Neuroscience or Cognitive Sciences (no later than August 1st 2022). They show an excellent academic track and are willing to pursue a PhD. They will be native or native-like French speaker and will demonstrate excellent mastery of academic English. They will be prepared to collect data across Belgium with flexible working hours. Prior experience with electroencephalography (EEG), actimetry and other sleep measures or in autism or other neuro-developmental conditions, is particularly appreciated. Driving license, knowledge of Dutch, experience in quantitative data analysis and programming skills (Matlab, Python, or R), are a plus.

Application – The applications will be assessed on a rolling base until the position is filled, but no later than **August 10, 2022**. The application file should consist in a single pdf document, combining the following:
- A one-page motivation letter;
- The names and the contact details of two referees who can be contacted during the selection process;
- A CV;
- A copy of the relevant diplomas and grade records;
- A recent sample of academic writing in English or in French (e.g., articles or working papers, chapter of Master thesis).

Applications and inquiries about this position should be sent to Arnaud.Destrebecqz@ulb.be with the following object: *EOS PhD application – Statistical learning*. We specifically encourage applications from candidates who are neuro-diverse, disabled or come from ethnic groups underrepresented in academia. Ideal start date is October 1, 2022.