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ULB

ACTE
Autisme en Contexte
Théorie et Expérience

CALL FOR A 3-YEAR POSTDOCTORAL RESEARCHER AT THE ACTE RESEARCH CENTER, AT THE ULB NEUROSCIENCE INSTITUTE BRUSSELS, BELGIUM

Learning from entropy: The effect of input variability on language acquisition across the autism spectrum

PROJECT – Learning novel words is a complex task which requires to extract consistent phonetic percepts and semantic information from a highly variable acoustic signal, and to do so across variable contexts. Autism Spectrum Disorder (ASD) is characterized by a high prevalence of language delays and a striking heterogeneity of language profiles that are still not fully understood. To date, how ASD children accommodate acoustic and contextual variability to learn words remains an unresolved research question. The two main goals of this project are, first, to test whether children across the autism spectrum benefit from acoustic and contextual variability to learn new words and second, to determine whether individual differences in abilities to learn from entropy are related to children's vocabulary skills. An additional objective is to test whether invariant detection skills in word learning may be predicted by repetitive behaviors, restricted interests, and sensory profile and mediated by sleep. Overall, this project will improve our understanding of the role of entropy in language acquisition in typically and atypically developing children.

ENVIRONMENT – This project will be conducted within the interfaculty research group ACTE (Autism in Context: Theory and Experiment), within the Faculty of Psychology at ULB. ACTE brings together a team of 19 linguists, clinical psychologists, speech therapists, and neuropsychologists, whose work meshes linguistics with methodological and theoretical approaches borrowed from cognitive and clinical psychology.

JOB DESCRIPTION – The successful candidate is expected to conduct and publish high-quality research within the framework of the project. S·he will closely collaborate with members of the research team, in particular with a PhD student also recruited on this project. S·he will establish and maintain collaborations with international experts in the field, as well as local clinicians. The position is funded for 3 years. The net salary will be in line with the Belgian legislation (~2500€/month) and includes social and medical benefits.

CANDIDATE – The post-doctoral researcher will hold a PhD in Psychology, Neuroscience, Cognitive Science, or any related discipline at the start of the project for no more than 8 years before the start of the contract, and cannot have worked or resided in Belgium for more than 24 months within the last 3 years prior to the starting date. This does not include short stays for holidays or conference participation. Eligible applicants 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 actimetry and other sleep measures or in autism or other neuro-developmental conditions, is particularly appreciated. Driving license, 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 **December 20, 2024**. The application file should consist in a single pdf document, combining the following:

- A one-page motivation letter (in English);
- 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 (e.g., articles or working papers, chapter of thesis).

Applications and inquiries about this position should be sent to Gaetane.Deliens@ulb.be with the following object: *ARC Postdoc application*. We specifically encourage applications from candidates who are neuro-diverse, disabled or come from ethnic groups underrepresented in academia. Ideal start date is January 1, 2025.