Postdoctoral position on auditory attention in children, Marseille, France.

This 2-year position is available in Marseille at the **Institute of System Neurosciences** (INS) **in the DCP Team** under the direction of Aurélie Bidet-Caulet, Ph.D.

About our institute

The DCP team has a long-standing expertise in auditory attention and developmental neuroscience. The INS is a multidisciplinary research institute offering a vibrant working atmosphere in an international environment with multiple opportunities for seminars, workshops, and methodological clubs. The INS is affiliated to the <u>Aix*Marseille University</u>, a large multi and inter disciplinary public research university in the south of France in Marseille.

About Marseille

Marseille is a cosmopolitan harbor city which combines lively urban life and proximity to nature under a radiant sun. Surrounded by hills, Marseille's seafront, famous for its <u>calanques</u>, overlooks a blue sea dotted with white islands.

About the position

In this project we will investigate the typical developmental trajectory of attention control. More specifically, we will dissociate the developmental trajectories of involuntary and voluntary auditory attention and characterize the influence of arousal on these attention processes, from early childhood to adulthood (4- to 25-year-old).

Newly developed innovative and well-established paradigms, adapted to the needs of children will be used, such as the Competitive Attention test and the oddball paradigms (e.g., Hoyer et al 2021; Wetzel et al 2006 2007 2009 2016). A combination of complementary psychophysiological measures (behavior, pupil dilation, skin conductance, heart rate, micro-saccades and EEG) will be recorded to link the maturation of brain markers of voluntary and involuntary attention with the activation of the Locus Coeruleus Norepinephrine (LC-NE) system, providing a comprehensive view of the brain mechanisms related to the development of attention control.

This project will be performed in tight collaboration with <u>Pr. Nicole Wetzel group</u> at the Leibniz-Institute for Neurobiology (Germany), which has strong expertise in neurocognitive development and pupillometry.

Duties of the position

The post-doctoral fellow will be involved in different aspects of this project, including the protocol design, data collection, data analysis and writing publications.

Required selection criteria

- Ph.D. in Psychology, Cognitive Neuroscience, or a related field
- Motivation to work with children
- Experience in pupillometry is a plus
- Experience in programming (Matlab or Python)
- Knowledge on attention, audition or cognitive development is a plus
- Ability to coordinate the projects
- Fluent enough in French to interact with kids
- Very good oral and written competences in English

Salary and conditions

The employment period is 2 years with an expected starting date between September and December 2021. The position is funded by the French National Agency for Research (ANR) and follows standard French salaries in public research, depending on research experience (gross income from 24 000 to 35 000 € / year). About the application

To apply, please send a CV, a letter of motivation, and recommendation letters from 2 referees. Early application is highly encouraged, as the applications will be processed upon reception.

Contact information: Aurélie Bidet-Caulet, <u>aurelie.bidet-caulet@inserm.fr</u> Informal inquiries are welcome.