

## **Postdoctoral position on the brain mechanisms of auditory attention using intracranial EEG in Human**

This position is available in Lyon, France  
at the **Lyon Neuroscience Research Center, DYCOG Team**,  
under the direction of Aurélie Bidet-Caulet, Ph.D.

The position is funded for two years (possibility for an extension) by the National Agency for Research (ANR). The position follows standard French salaries at INSERM.  
Expected starting date: March 2017, but applications will be considered until the position is filled.

The goal of the postdoctoral project is to investigate oscillatory mechanisms supporting auditory attention. This question will be answered using intracortical (SEEG) and ECoG data recorded in patients suffering from pharmaco-resistant epilepsy in Lyon (France), or in the USA (collaboration with Pr. R.T. Knight, University of California, Berkeley). The post-doctoral fellow will perform advanced analysis (time-frequency analysis, oscillatory coupling...) of existing SEEG and ECoG data sets of tasks measuring auditory selective attention or distractibility (around ten patients in each task). The fellow will participate in data analysis, result synthesis at the group level, and writing of scientific article.

The postdoctoral fellow will be part of the DYCOG team of the Lyon Neuroscience Research Center ([http://u821.lyon.inserm.fr/index\\_en.php](http://u821.lyon.inserm.fr/index_en.php)). The DYCOG team has a long-standing expertise in analysis of intracranial signals and oscillatory activities, as well as in the investigation of attention brain mechanisms in Human.

### **Required skills**

- [Mandatory] Ph.D. in Psychology, Cognitive Neuroscience, Engineering or a related field
- [Mandatory] Autonomy in programming in MATLAB, Python or C
- [Mandatory] Experience in analyzing oscillatory activities and coupling from electrophysiological signals
- [Desired] Knowledge on attention and audition
- Fluency and solid writing skills in English are expected. French is not a requirement

### **Please apply to Aurélie Bidet-Caulet with the following information:**

- CV
- Brief (1 page) summary of previous research
- Letter of motivation
- Recommendation letters from two referees

### **Contact information:**

Aurélie Bidet-Caulet  
[aurelie.bidet-caulet@inserm.fr](mailto:aurelie.bidet-caulet@inserm.fr)  
Tel : +33 (0) 4 72 13 89 31  
DYCOG team  
Lyon Neuroscience Research Center