



## MASTER 2 Fundamental and Clinical Neurosciences

### Internship proposal 2023-2024

(internship from January to June 2024)

**Host laboratory:** *Name + address*

Lyon Neuroscience Research Center (CRNL)

Cophy team, Bat. 452, CH Le Vinatier, 95 Boulevard Pinel, 69500 Bron, France

**Host team :** *team name + website*

Cophy and Impact teams

<https://www.crnl.fr/fr/equipe/cophy> / <https://www.crnl.fr/fr/equipe/impact>

**Internship supervisors :** *name + position + email*

Anne Kösem, Ph.D., Chargée de Recherche INSERM / [anne.kosem@inserm.fr](mailto:anne.kosem@inserm.fr)

Marine Vernet, Ph.D., Chargée de Recherche CNRS / [marine.vernet@inserm.fr](mailto:marine.vernet@inserm.fr)

**Project title :**

Is French writing gender-biased? An EEG study

**Project summary :** *approx 10 lines*

The equal representation of women and men in French writing is a current issue of debate. At the heart of the controversy, lies a cognitive science issue: on the one hand, more inclusive writing could make texts more cumbersome and limit their comprehensibility, and on the other hand, gender inclusiveness could reduce cognitive and societal biases related to gender. However, few studies have directly addressed these issues. During the internship, the trainee will record EEG in a group of participants reading sentences using male and female forms in order to examine if the “neutral masculine” is interpreted as truly neutral or as masculine. For this, EEG data will be analyzed to see if evoked potentials that have been associated to grammatical surprisal are detected when a female form follows a masculine neutral form. If so, this would demonstrate that gender norms bias the processing of supposedly gender-neutral forms in French.

**3-5 recent publications:**

- Terporten, R., Huizeling, E., Heidlmayr, K., Hagoort, P., & **Kösem, A.** (2022). The Interaction of Context Constraints and Predictive Validity during Sentence Reading. *BioRxiv.*: 2022.09.21.508808 [Open Access Link](#)
- Dai, B., McQueen, J. M., Terporten, R., Hagoort, P., & **Kösem, A.** (2022). Distracting linguistic information impairs neural tracking of attended speech. *Current Research in Neurobiology*, 3, 100043. [Open Access Link](#)
- Terporten, R., Schoffelen, J. M., Dai, B., Hagoort, P., & **Kösem, A.** (2019). The relation between alpha/beta oscillations and the encoding of sentence induced contextual information. *Scientific Reports*, 9(1), 1-12. [Open Access Link](#)
- Misersky, J., Majid, A., & Snijders, T. M. (2018). Grammatical gender in German influences how role-nouns are interpreted: Evidence from ERPs. *Discourse Processes*, 1-12. [Pdf Link](#)