

**MASTER 2 Neurosciences Fondamentales et Cliniques****Internship proposal 2021-2022**

(internship from January to end of May 2022)

Host laboratory: *Institut des Sciences Cognitives Marc Jeannerod, 67 Bd Pinel, Bron*

Host team : *Cognitive Neuropsychology and Development*

<http://www.isc.cnrs.fr/index.rvt?teamid=laboratory%5fof%5fcognitive%5fneuropsychology%5fand%5fdevelopment&team=research>

Internship supervisors : *Jean-Rémy Hochmann, CR, hochmann@isc.cnrs.fr*

Project title : **Development of the attentional blink in infancy**

Project summary : *approx 10 lines*

Understanding the normal development of attention is a crucial challenge to neurosciences, with impact on research related to education and developmental disorders. Recently, we have tackled the study of the attentional system in young infants, investigating the existence of an attentional blink in 5- and 8-month-olds. The attentional blink (AB) is a well-known phenomenon, in which the second of two target stimuli is not well detected if it appears in a specific time window following the first target stimulus. In adults, an AB is observed when the two targets are separated by about 300 ms. We designed an experimental paradigm to demonstrate, for the first time, an AB in infancy and evaluate its duration. Our preliminary results suggest that the AB lasts at least 900 ms in 5-month-olds. The project aims at 1) confirming these results, 2) develop novel experiment procedures to evaluate the AB duration in infants, 3) document the reduction of the AB in the course of development.

The project will involve testing young infants in the first year of life and young children, with eye-tracking and EEG techniques.

3-5 recent publications :

Hochmann, J-R., & Toro, J. M. (2021). Negative mental representations in infancy. *Cognition*, [10.1016/j.cognition.2021.104599](https://doi.org/10.1016/j.cognition.2021.104599)

Spriet, C., Abassi, E., Hochmann, J. R., & Papeo, L. (2020). Visual object categorization in infancy. *Journal of Vision*, 20(11), 1079-1079.

Quirins, M., Marois, C., Valente, M., Seassau, M., Weiss, N., El Karoui, I., Hochmann, J-R., & Naccache, L. (2018). Conscious processing of auditory regularities induces a pupil dilation. *Scientific Reports* 8, 14819 [link](#)

Please send your proposal to emiliano.macaluso@univ-lyon1.fr and marion.richard@univ-lyon1.fr for publication on the Master of Neuroscience website.