



## TESI MAGISTRALE DISPONIBILE

**durata:** 10/12 mesi

**presso:** Laboratory of Developmental Neuroimmunobiology

**tutor:** Dr. Veronica Krenn

**titolo:** *Analysis of the functionality of microglia cells derived from human pluripotent stem cells through an organoid co-culture differentiation paradigm*

**descrizione:** We are a young and ambitious team that combines stem cells, human brain organoids, genetic tools and genomic approaches to gain a molecular comprehension of the processes underlying human brain development and their alterations in disease. For further reading please check out our website (<https://www.krennlab.com/>) and previous work (Krenn et al. 2021, Cell Stem Cell; Bajaj et al. 2021, EMBO Journal). We are looking for a master student to join our team and help with the characterization of a new differentiation paradigm of human stem cells into microglia cells through organoid co-culture. The project is embedded in the “Human Neuroimmunobiology” project framework supported by the Human Technopole Early Career Fellowship program. In particular, the objective of the master project is the evaluation of the degree of functionality of microglia cells obtained with this approach, including evaluation of phagocytic activity and modulatory activity of cytokine signaling pathways. The student will be able to learn to carry out assays to evaluate phagocytosis, cytokine production, and gene expression in response to immunogenic stimuli. The student will be able to learn these techniques from lab members as well as from a wide collaborative network.

Please send your CV and a motivation letter describing your research interest and experience (as single PDF document) to [veronica.krenn@unimib.it](mailto:veronica.krenn@unimib.it)

**application deadline:** 28th February 2024

**data presunta d'inizio:** March/April 2024

