



Jean-François Gheresi-Egea
«Fluids and barriers of the CNS » team.

Research Teams

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Pierre-Hervé Luppi
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TIGER

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TRAJECTOIRES

Laure Pisella
& Yves Rossetti

WAKING

Jian-Sheng Lin

A new position is available for a PhD thesis in the “Fluids and Barriers of the CNS- FLUID” team at the Lyon Neuroscience Research Center (CRNL), in collaboration with the “Biological analysis by mass spectrometry” laboratory at the Analytical Science Institute (ISA) in Lyon (France).

Despite recent advances based on the use of pluripotent stem cells to develop cellular models of the blood-brain barrier, prediction of cerebral drug delivery in human/non-human primate remains a challenge. The project, founded by a grant from the “Auvergne Rhône-Alpes Region”, aims at developing and characterizing a differentiated model of the primate blood-brain barrier based on primary cell culture. This is an applied science project. As a PhD student you will be in charge of optimizing the culture/coculture conditions, characterize the model for canonical barrier functions, responsiveness to pathological stresses, and for receptors that can be targeted for cerebral delivery of therapeutic proteins. You will be supervised by brain interface specialists. You will work at the BIP facility associated to the FLUID Team, with the help of an engineer, as well as at ISA for protein identification and quantification by mass spectrometry. You will interact with a private partner, the company CYNBIOSE specialized in primate neuropharmacological and pharmacokinetic studies. Within the team, you will help supervising undergraduate trainees. Within 3 years you will obtain a PhD degree from the renowned Neuroscience and Cognition NSCo Doctoral school of the Lyon University.

To qualify, you need an MsC diploma in life sciences, and communication skills in English. Experimental skills may include several of the following: protein biochemistry, molecular biology, cell culture, analytical chromatography and mass spectrometry. A neuroscience/blood-brain barrier background would be welcomed. We also expect a strong sense of team spirit and a strict respect of good laboratory practice.

Optimal starting date is January 1, 2022.

Applications are to be sent to Nathalie Strazielle (ns.brain.i@gmail.com), and to Jean-François Gheresi-Egea (jean-francois.ghersi-egea@inserm.fr) before November 15 2021, and need to include a motivation letter, a curriculum vitae, and the phone/e-mail contact of 2 scientists that acted as your supervisors in your previous laboratory trainings.



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