Fully-funded PhD position in Neuroscience of Social Cognition

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🕐 **3 years** 📅 **Academic years 2021-2024** 📍 **Paris** 📚 **Master's Program** or **Engineering school**

Keywords: Systems neuroscience, social cognition, primate societies, fMRI, neurophysiology

The socio-cultural brain and its neuronal mechanisms. Primates' brains are specifically tuned toward social information. The abilities to learn about others and to learn from others through observation are essential to primates, yet our understanding of how they are implemented in the brain is incomplete. We are investigating the neural and neuronal mechanisms that enable transformation of social percepts into social knowledge. We use a combination of ethological tests, neuroimaging, neurophysiology and large datasets analyses to pursue these questions (www.sliwalab.org). Recent advances in neuroscience and in primate ethology can get us closer to understand which brain networks are involved in social cognition on the one hand (Sliwa & Freiwald, 2017) and how cultural habits are spread across primate societies in the other hand (Van de Waal, Borgeaud, Whiten, 2013).

Mission: In this project, the highly motivated student will bridge these novel approaches to examine brain networks and neuronal mechanisms at play during socio-cultural learning, by using a combination of ethological tests and neuroimaging in primates, electrophysiological recording of neurons, and large datasets analyses. The student will investigate how learning by observation is instantiated, what the mechanisms in the brain are that guide learning by observation, and how the sociodemographic characteristics of the demonstrator makes him/her more are less prone to be imitated. This approach would be a first step to begin understanding the neural mechanisms underpinning the creation of cultures.

Profile: The project lies at the intersection between neuroscience, comparative ethology and large data sets analysis. It will be perfectly fitted for an outstanding and highly motivated student (f/m) curious about neuroscience, data science and primate societies. Basic knowledge in Matlab, Python, or a similar language would be a big plus. Some experience with *in vivo* neurophysiology or with functional magnetic imaging would be interesting. Candidates should send their CV to: Julia Sliwa, julia.sliwa@icm-institute.org

Funding: The position is fully-funded for 3 years by ANR (project NeuroSocio, PI: Sliwa). The applicant is welcome to apply for a personal competitive fellowship from the French Ministry of Research, Fondation pour la Recherche Medicale, Boerhinger Ingelheim Foundation.

See you soon,
The Sliwa Group