

## **Offre de Stage MASTER 2 pour Projet BRAIN-RF**

MASTER 2 Internship: Projet BRAIN-RF

### **Title: Effects of exposure to radiofrequency electromagnetic fields on cerebral electrical activity**

Unité Toxicologie Expérimentale, Thématique : champs électromagnétiques

#### Descriptif :

In the current context of questioning about the possible effects of electromagnetic fields in humans, Ineris is conducting a study on the effects of radiofrequency (RF) electromagnetic fields (EMF) on resting state EEG. An exposure protocol with mobile phones was set up to study the effects of EMC-RF on wakeful EEG in healthy volunteers.

The goal of this internship is to better understand the alteration of the alpha band and cortical structures involved in these changes, due to RF exposure in healthy volunteers. We study the effect of GSM exposure, with a radiofrequency of 900 MHz, on the electrical activity of the waking and resting brain. This is examined by EEG and MEG recordings under controlled experimental conditions. EEG and MEG recordings combined with anatomical MRI allow us to study in high resolution, deep structures and cortical brain neuroimaging and analyze the entire brain signal dynamics after RF exposure

The candidate will have to process the data recorded in our database, she/he will be trained and supervised by a collaborator at the ICM (Lydia Yahia Cherif) on the use of data processing software (Matlab, MNE-Python, ...)

#### Profil recherché :

Formation Master 2

Compétences : Machine learning, statistics, Neurosciences

Dates / duration : 6 months (starting January 2020)

Place : l'ICM de l'hôpital Pitié-Salpêtrière

Tuteurs : Brahim Selmaoui (INERIS) & Lydia Yahia Cherif (ICM, Pitié Salpêtrière)

Please, send your CV and your cover letter to [lydia.yahia-cherif@upmc.fr](mailto:lydia.yahia-cherif@upmc.fr)

