





Post-doctoral Position in Pre-clinical Neuroimaging Center for Magnetic Resonance in Biology and Medicine (CRMBM) CNRS, Aix-Marseille University, Marseille, France

A post-doctoral position in pre-clinical neuroimaging is currently available at the Center for Magnetic Resonance in Biology and Medicine (CRMBM, Director Monique Bernard). The CRMBM is located on the Campus of the Medical School in Marseille (France), adjacent to the University Hospital of La Timone, the largest medical facility in Southern Europe. The position, starting as soon as possible, is funded for 3 years by the National Agency for Research (ANR). We are looking for a highly motivated post-doctoral scientist with significant experience in pre-clinical DTI and functional MRI. The successful candidate will join the team headed by Dr Angele Viola and will take part in a collaborative project on mouse in brain connectome led by Dr Christophe Bernard (Aix-Marseille University) an expert in connectome-based modelling ("The Virtual Brain" TVBM project).

Research project:

The purpose of the research project funded by ANR is to demonstrate the causal links between structural and functional connectome alterations by using DTI and rs-fMRI in mouse models of connectome alteration or stimulation. The structural and functional connectome metrics generated for each individual will be used to perform computational modeling of brain connectome using TVBM, in order to generate predictions on the functional consequences of these alterations and to examine them *in vivo*.

Required qualifications:

The ideal applicant should hold a Ph.D in a field related to MRI (Physics, Biophysics, Biomedical Engineering, or Biology), have a strong background in advanced MRI methods and brain anatomy, and experience in animal studies. A significant hands-on experience with pre-clinical DTI and fMRI (acquisition and post-processing) is required. An experience of preclinical rs-fMRI would be an advantage.

Contact info and applications:

Applicants should send their CV and cover letter to Dr Angele Viola (angele.viola@univ-amu.fr). The cover letter should include a statement of career goals and research interests, and contact information of 3 references.