Institut de Neurosciences des Systèmes





Hôpitaux Universitaires de Marseille

## OPEN POSITION: POSTDOCTORAL FELLOW, NEUROSCIENCE

Institut de Neuroscience des Systèmes, Aix-Marseille University, Marseille, France

Human electrophysiology, Vestibular system, Body representations, Multisensory processing

A postdoctoral fellow position in Neuroscience is immediately available in the DYNAMAP team (lead by Dr Christian Bénar) at the Institut de Neurosciences des Systèmes (<u>https://ins-amu.fr</u>) to work on the ANR-funded VESTISELF Project focused on the vestibular and multisensory contributions to self and own-body perceptions. The DYNAMAP team is housed in the Epileptology Department from Timone Hospital and is part of the research institute of INSERM and Aix-Marseille University, Marseille, France. The project is conducted in collaboration with the Laboratory of Cognitive Neuroscience (French National Center for Scientific Research, CNRS: <u>https://lnc.univ-amu.fr/en</u>).

The successful candidate will join a multidisciplinary team of neurologists (specialized in epilepsy), neuroscientists, computational neuroscientists and engineers in neuroimaging, that uses stereo-electroencephalography (SEEG) in epileptic patients, electroencephalography (EEG), magnetoencephalography (MEG), vestibular neurophysiology and behavioral approaches. The fellow will receive mentoring from Prof. Fabrice Bartolomei, neurologist and head of the Clinical Neurophysiology and Epileptology Department at La Timone Hospital (http://fr.ap-hm.fr/service/epileptologieet-rythmologie-cerebrale-hopital-timone), from Dr Christian Bénar, Head of the Dynamap Team (https://ins-amu.fr/dynamap), in collaboration with Dr Christophe Lopez, vestibular neuroscientist from the CNRS, who coordinates this ANR-funded VESTISELF Project (https://lnc.univ-amu.fr/en/profile/lopez-christophe). Opportunities are also available to collaborate closely with Prof Bigna Lenggenhager, from the University of partner Zurich, international of the VESTISELF Project (https://www.psychology.uzh.ch/en/areas/nec/kogneuro/team/bignalenggenhager.html).

The fellow, together with a multidisciplinary team, will launch electrophysiological recordings in epileptic patients (SEEG, MEG) and/or in healthy participants (EEG, MEG) to characterize spatiotemporal dynamics of vestibular information processing in the human brain during vestibular stimulation. For example, local field potentials will be analyzed in epileptic patients under various self-motion profiles and various conditions of visuo-vestibular congruency. Other aspects of the project include retrospective analyses of SEEG data in epileptic patients and analysis of the effects of direct electrical brain stimulation in epileptic patients.

Previous expertise in human electrophysiology, especially with EEG and/or SEEG, and programming skills in Matlab/Python are requested, as well as a PhD in neuroscience or related discipline is required.

The position is immediately available (starting date can be adapted) and is funded for a period of 2 years. Payment is according to the guidelines of Aix-Marseille University.

Interested and productive candidates should send a letter of motivation (with a short summary of research accomplishments, career goals, research interests), a curriculum vitae (with detailed technical and programming expertise), Master certificates (including a list of classes taken during Bachelor and Master studies), letters of references and contact information for 3 references. Applications should be submitted in a single PDF file to the email addresses below. All information or questions regarding the position should be submitted electronically to fabrice.bartolomei@ap-hm.fr and christian.benar@univ-amu.fr and christophe.lopez@univ-amu.fr with the subject line "Postdoctoral Position 1: VESTISELF PROJECT".

