



PHD POSITION ON NEUROANATOMICAL AND FUNCTIONAL DETERMINANTS OF HEAD-DIRECTION FIRING ACTIVITY

The 'Spatial Cognition' group, headed by Francesca Sargolini, is looking for a PhD student to join us at the Laboratory of Cognitive Neuroscience CNRS-Aix-Marseille University (<https://lnc.univ-amu.fr/>). Our team uses rodent models to investigate the neural computations underlying space representation and navigation within cortical and subcortical brain networks. To do so, we use a variety of state-of-the-art, in vivo research tools, which include custom-designed behavioral assays for rodents, that are combined with methods for neuro-measurements (electrophysiology - single units and LFPs) and neuro-modulation (optogenetics, chemogenetics).

The primary focus of the successful applicant will be to investigate the vestibular circuits involved in the generation of the head-direction cells' functional properties, using behavioral, electrophysiological (i.e. neural recordings in behaving rats) and optogenetic tools. The position is funded by the collaborative ANR project 'InVest', in collaboration with the laboratories IBENS (<https://www.ibens.bio.ens.psl.eu/spip.php?rubrique53&lang=fr>) and INCC (<https://incc-paris.fr/spatial-orientation/>) in Paris.

Candidates should be highly motivated and eager to integrate a collaborative, enthusiastic team of scientists. Prior experience with rodents is required. Experience with in-vivo electrophysiology and/or optogenetics and/or computer programming (Matlab, Python, R) is desirable.

Applicants are encouraged to contact Francesca Sargolini (francesca.sargolini@univ-amu.fr). Your email should contain a CV/resume and motivation letter. The position is available starting in October 2023. The evaluation of candidates will continue until the position is filled.

The Laboratory of Cognitive Neuroscience is part of the Neuromarseille Institute (<http://neuro-marseille.org/>), that brings together 9 research laboratories and a graduate school in Neuroscience, providing a rich and multidisciplinary scientific environment. The candidate will have the opportunity to join the PhD Program, offering theoretical and practical training tailored to neuroscience students (<https://neuro-marseille.org/en/training/phd-program/>).