Detecting learning-induced modulation of oscillatory activities in olfactory memory network: a new functional imaging?

Odor perception, our capacity to recognize it and discriminate it from a very close one derives from everyday life olfactory experience. Our team is strongly involved in understanding how olfactory representations are built across experience and how they may in turn modulate olfactory perception and the memory of information associated to these experience.

During my talk I will first brought some evidence that tracking oscillatory activities in several brain regions in parallel through local field potentials multi-site recordings could be a useful approach to olfactory memory circuits in rodents and in a second time introduce a new line of project we are currently developing to address odor-trigged episodic memory.