

PhD position

in systems neurobiology of cognition

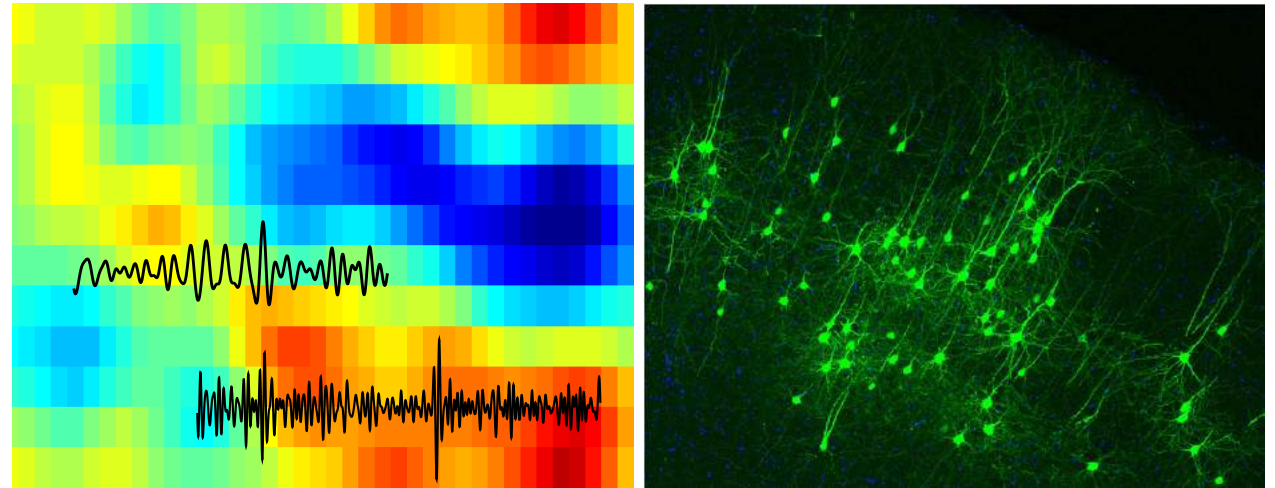
TUM

Technische Universität München



The **Jacob laboratory** at the Technical University of Munich (TUM) studies the mechanisms of cognitive functions at the level of individual neurons and their brain-wide networks.

In a **unique translational approach**, we use cutting-edge methods such as large-scale recordings with single-neuron resolution, genetic tools for circuit manipulation, fluorescent imaging and computational analysis in both animal models (mice) as well as in human subjects (neurosurgical patients).



We are seeking candidates with a strong **background in experimental neurophysiology** for an open PhD position funded by the European Research Council (ERC). The aim of the project is to characterize the mechanisms that govern the representation, transmission and storage of information in **working memory** with a particular focus on the interplay of sensory and cognitive brain regions. The project involves heavy use of modern electrophysiological, optogenetic, imaging and behavioral techniques in a rodent animal model to dissect the underlying neuronal circuits and probe the role of long-range, cross-regional neuronal communication in working memory.

Candidates with excellent quantitative skills, technical abilities and prior experience in any of the described methods are encouraged to apply.

TUM is one of the **leading academic institutions in Europe**. Munich offers a world-class international neuroscience environment and a superb quality of life. Contact Dr. Jacob for more information or email your application including a letter of motivation, a CV and the names of two referees.

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