



Life Sciences Seminar

Methods for probing functional neural circuits in behavior

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Host:

Identifying the neural circuits that control behavior is one of the ongoing goals of Systems Neuroscience. In the past decade, there has been an accelerated growth in the development of neural recording and modulation technologies, genetic tools for targeting cell-specific pathways and computational as well as statistical methods for decoding brain function. In order to take full advantage of these advances, it is important to carefully design and implement multiple behavioral assays that capture the neural circuit being studied and the accurate quantification and subsequent analysis of behavior. The present talk will describe the application of in vivo methods such as neuropharmacology, extracellular electrophysiology and optogenetics in rodent behavioral assays that explored the role of the dorsal striatum in memory modulation and decision making, the neurophysiological basis of visuospatial orientation and the midbrain circuits that regulate fear states. Special emphasis will be placed on experimental design, data acquisition and the application of statistical modelling for the interpretation of directional data.

Wednesday, January 22, 2020 10:30am - 11:00am

Seminar Room, Lab Building East



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

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<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.