



Colloquium

The Institute Colloquium: Local Protein Synthesis in Neurons

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Host:

Neurogliaform cells are unique components in microcircuits of the cerebral cortex being capable of eliciting slow inhibition. These neurons reach GABAA and GABAB receptors on target cells through a novel form of single cell driven volume transmission by flooding the area covered by the extremely dense axonal arborisation with GABA, thus extend the boundaries of classical unitary (single cell triggered) signals towards network events. We developed a combination of oligocellular gene-chip and single cell digital PCR methods in order to analyze the global gene expression profile of physiologically and anatomically identified neurogliaform cells. This resulted in the functional identification of several unexpected marker genes with previously unknown functions in the cortical microcircuit. The presentation will also discuss the hypothesis that neurogliaform cells would act on all cellular elements of the cortex including parts of neurons not accessible for synapses, glial cells and the vasculature in the area covered with GABA and/or cotransmitters released by neurogliaform cells.

Monday, November 26, 2012 04:30pm - 05:30pm

Raiffeisen Lecture Hall, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: <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.