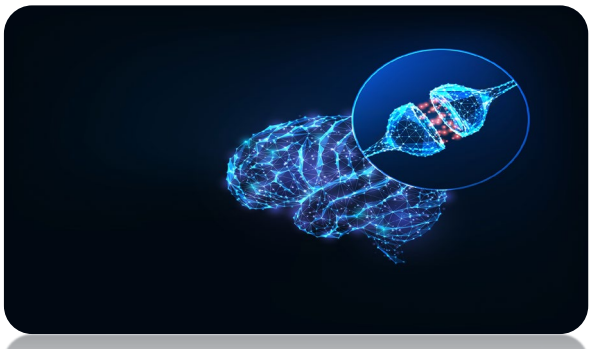
BtBs Seminars

Biotechnology and Biosciences Seminars

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Opposite chemogenetic modulation of defective PV and SOM interneurons' electrical activity rescues LTP and cognitive impairment in the Ts65Dn mouse model of Down syndrome

A prominent hypothesis in Down Syndrome (DS) is that both synaptic and behavioural abnormalities arise from altered GABAergic signalling. Notably, deficits in synaptic plasticity—such as reduced long-term potentiation (LTP)—and memory impairments can be rescued by GABAA receptor antagonists or by restoring altered chloride levels in pyramidal neurons of DS mice. However, while GABAergic alterations in DS are well known from the perspective of excitatory neurons, such as pyramidal and granule cells, cell type–specific alterations within GABAergic interneurons remain poorly understood.

We characterized parvalbumin (PV) and somatostatin (SOM)-positive interneurons in the hippocampus of 3-months-old Ts65Dn mice versus control littermates by immunohistochemistry and electrophysiology on brain slices…

Thursday
December 10, 2026

4.30 pm
to 5.30 pm

U3 building
room 10

Host:
Becchetti

The certificates of attendance for the seminar are also valid for the acquisition of CFU credits
For information, please visit the seminar's webpage

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