

AXE NEUROSCIENCES

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BDNF signaling onto astrocyte TrkB.T1- a novel mechanism driving astrocyte structural plasticity

Astrocyte processes enwrap excitatory spines where they mediate glutamate and K⁺ uptake and contribute to synapse development and stabilization. Despite decades of research indicating astrocytes enwrap/contact excitatory synaptic elements, with increased coverage of mature synapses, there is little known regarding molecular signals that recruit astrocyte processes to synaptic structures or drive astrocyte structural plasticity in response to neuronal signaling. Dr. Olsen will present evidence that BDNF signaling onto astrocyte truncated TrkB receptor (TrkB.T1) serves as a signaling cue, recruiting the astrocyte to the synapse, driving astrocyte structural plasticity via actin mediated reorganization. BDNF signaling through astrocyte TrkB represents a novel signaling pathway to recruit astrocytes processes to spines and govern structural plasticity in an activity dependent manner.

Le vendredi 8 novembre 12 h à 13 h

Pavillon C - C.07.7105
1000 rue Saint-Denis
Montréal (QC) H2X 0C1

Lien Zoom :

<https://umontreal.zoom.us/j/88547434595?pwd=qesvXKtQY0MiZoDRDJM0ocBwKx6T39.1>

ID de réunion : 885 4743 4595

Mot de passe : 643274

L'AUDACE DE
CHERCHER
PLUS LOIN

Séminaire organisé par Nicole Leclerc

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