

GUEST LECTURES RTG 2413

Aude Panatier, PhD

Neurocentre Magendie, Bordeaux, France

>> Astrocytes are key partners of neurons in the control of synaptic NMDA receptors functions <<

Hosted by: Danai Katsere

18.11.2022 12:00 – 13:30 pm

Zoom Lecture https://ovgu.zoom.us/j/61028626617 Meeting-ID: 610 2862 6617 Kenncode: MED-DO-40

Organizer contact info:

Dr. Anika Dirks contact@synage.de www.synage.de



GUEST LECTURES RTG 2413

Abstract

While it is well established that the neuron is the fundamental cellular unit of the brain, it is necessary to consider that it is not the only type of cells. Indeed, among other classes of glial cells, astrocytes are ideally positioned in between blood vessels and synapses. At the end of the twentieth century, and since then, accumulation of data obtained in several laboratories around the world have indeed identified that astrocytes are involved in much more complex functions than initially expected, as they are able, among other functions to: i) detect synaptic transmission, ii) integrates synaptic information and in turn iii) release transmitters, called gliotransmitters, like D-serine to regulate synaptic activity, plasticity and higher brain functions.

In the present lecture, I will discuss past and recent data we have obtained in the understanding of the role of astrocyte in the regulation of the activity of synaptic NMDA receptors at CA3-CA1 hippocampus in adulthood and therefore long-term synaptic plasticity and memory in healthy and pathological conditions.

Dr. Anika Dirks contact@synage.de www.synage.de