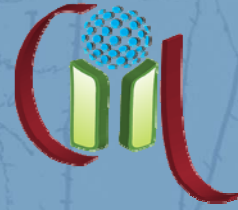


# SEMINAR



Center for Infection  
& Immunity of Lille

## Regulation of Synaptic Transmission

**Dr. Shyam Krishnakumar**

**Research scientist**

Dept of Cell Biology, Yale School of Medicine, USA

Dept of Clinical and Experimental Epilepsy, UCL

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*“The release of neurotransmitters at the neuronal synapses is precisely timed to follow the arrival of a nerve impulse. To achieve this, synaptic vesicles (loaded with neurotransmitters) are already docked in the presynaptic membrane, ready to release the neurotransmitters when the signal arrives. The protein machinery involved in this process are SNARE proteins, which catalyze the fusion of the vesicles; and set of chaperones (Munc18/Munc13) and regulatory proteins (Complexin and Synaptotagmin), which synchronize the release of the neurotransmitter to the triggering signal (calcium ions). Our research is focused on elucidating the molecular architecture at the presynaptic terminals and determine the precise sequence of molecular events that leads to Ca<sup>2+</sup>-triggered synaptic vesicle fusion.”*



**Friday 19th October, 13:00**



**IBL Auditorium, Pasteur Campus**



No inscriptions required!  
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Pyramidal neurons. Reproduced from an original drawing, © Inheritors of Santiago Ramon y Cajal

