



Short Biography

Rosa Cossart is the Director of the Institute of Mediterranean Neurobiology (INMED), affiliated to INSERM and Aix-Marseille University, a pioneering Institute in the field of Systems Developmental Neuroscience. After graduating in Mathematics and Physics from the Ecole Centrale Paris, she studied the functional rewiring of GABAergic circuits in epilepsy during her PhD with Drs. Bernard and Ben-Ari. As a postdoctoral fellow with Pr. Yuste at Columbia University, she pioneered the use of calcium imaging to study cortical circuit function. Her lab made seminal contributions to the understanding of how development scaffolds hippocampal circuits. They discovered “hub cells” and more recently “assemblies” forming the functional building blocks of hippocampal function.

Title: “Shedding light on developing cortical circuits”

Abstract:

Advances in molecular genetics and imaging have allowed for the dissection of neuronal connectivity with unprecedented detail while in vivo recordings are providing much-needed clues as to how sensory, motor and cognitive function is encoded in neuronal firing. However, bridging the gap between the cellular and behavioral levels ultimately requires an understanding of the functional organization of the underlying neuronal circuits. In this talk, I will present experimental evidence for the existence of hub neurons, cells critically contributing to the maturation of functional cortical circuits during brain development.

Affiliation: INMED (INSERM U1249), Aix-Marseille University, Turing Center for Living Systems

<http://www.inmed.fr/en/>

<https://centuri-livingsystems.org/>

Date: May 10th, April 2021, from 10am to 11am (CEST)

Zoom link:

<https://univ-amu-fr.zoom.us/j/92849173263?pwd=N04xaE9XUVN0NkVRbi9pZ2ErWTZDQT09>

ID de réunion : 928 4917 3263

Code secret : @IUCgEu2Yy

Contact AMU: Julie.hyzewicz@univ-amu.fr