



Centro Interdipartimentale di Biotecnologie Molecolari “Guido Tarone”

MBC Lectures & Seminars

February 19th, 2024, 1pm

Leonardo Room, MBC

“Modulation of striatal glutamatergic signaling in adaptive behavior”

Raffaella Tonini, PhD



Raffaella Tonini is a Senior Researcher with Tenure at the Italian Institute of Technology (IIT) where she leads the Neuromodulation of Cortical and Subcortical Circuits (NmCS) research unit. She obtained her Ph.D. in Physiology at the University of Milan. Subsequently she spent seven years as Post-doc first at the University of Rome and then at the University College of London. Her research investigates the neuromodulatory synaptic mechanisms that influence the functional connectivity between the cortex and the basal ganglia, essential for sensory-motor integration and reward-based learning, the flexible and adaptive execution of new tasks (goal-directed behavior) and automatization of regularly repeated tasks (habitual behavior). Employing a combination of neurophysiological and imaging techniques, in-vivo pharmacology, behavioral analysis, and optogenetic/chemogenetic methodologies to map the spatiotemporal dynamics of behaviorally relevant neuromodulatory signals at a cellular resolution, leveraging novel tools to probe, analyze, and manipulate the brain's micro- and macrocircuits.

Host: Salvatore Oliviero