



Monday, March 9th 2026, 2pm, D LEVY room



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(Host: Virginie Tolle)

Circadian plasticity in health and disease: the clock beyond clock genes

Circadian disruption is associated with adverse mental health outcomes. Yet, the mechanisms that enable circadian clocks to resist external disturbances, or adapt through plasticity, remain poorly understood. We are using advanced approaches, including state-of-the-art cell calcium imaging in freely moving mice, to investigate neuronal activity in the suprachiasmatic nucleus (SCN), the brain's central clock. I will present our ongoing work on the functional remodelling of SCN cell network activity across the mouse lifespan, exploring both physiological (plasticity of the maternal clock during lactation) and pathological (hypothyroidism) conditions. These findings may provide critical insights into the adaptability of circadian clocks and their mood-related consequences in health and disease.

Keywords: *In vivo calcium imaging, Suprachiasmatic nucleus, Mouse behavior, Miniscope*

LINK: <https://teams.microsoft.com/meet/39758353420190?p=WO2EVTpkeKzernvF5z>