



SAPIENZA
UNIVERSITÀ DI ROMA



Webinar

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CANNABINOID RECEPTORS LINK BRAIN METABOLISM TO BEHAVIOUR

Mitochondria are the main energy power-plants of cells. As the brain is one the most energy consuming organs in the body, mitochondrial processes are key signalling elements of behavioural functions. We discovered that cannabinoid type-1 CB1 receptors are associated to brain mitochondria (mtCB1), regulating cellular energy-related processes, thereby determining behaviour. For instance, hippocampal mtCB1 receptors mediate amnesic effects of cannabinoids. On the other hand, astrocytes take up glucose from the bloodstream to produce brain energy fuels, thereby allowing neuronal activity and behavioural responses. We recently showed that activation of astroglial mtCB1 receptors hampers brain glucose metabolism and lactate production, thereby altering neuronal functions and, in turn, impairing behavioral responses in social interaction assays. The presentation will discuss previous and new data linking brain energy metabolism to the control of behavioural responses.

WEBINAR LINK: <https://meet.google.com/gem-hrhg-ohk>
(free attendance)

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