



EXPERIENCE DEPENDANCE BRAIN PLASTICITY REVEALED BY TEMPORARY AND PERMANENT SENSORY DEPRIVATION

h 16:00 - 18:00, 7th May , 2019
Sala Seminari (Palazzo Badini)
Dipartimento di Psicologia
Via Giuseppe Verdi 10

ABSTRACT

During brain development, maturation and experience work jointly to determine the optimal neural representations of the environment to cope with future needs. Studies on the impact of temporary and permanent sensory deprivation provided fundamental knowledge about how sensory inputs shape the functional and structural organization of the human brain. On the one hand, the models of temporary deprivation, are fundamental to test for the existence of sensitive periods, during which specific sensory input must be available for typical development of neural circuits. On the other hand, the models of permanent deprivation, e.g. deafness and blindness, have revealed compensatory phenomena occurring in spared (intra-modal) and deprived (cross-modal) sensory cortices. In the seminar I will focus on both deprivation models to investigate the experience dependence and degree of plasticity at multiple processing levels.

