

Challenging the neuroprotective potential of physical exercise: insights into plasticity-related mechanisms in the aging brain

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Mild cognitive impairment (MCI) is a prodromal stage of Alzheimer disease (AD). To date, therapeutic approaches to AD are symptomatic and of modest efficacy. Nonetheless, studies in animal and human populations suggested that physical training results in structural and functional brain changes. The current project aims at exploring brain mechanisms mediating the neuroprotective effect of different types of physical exercise among patients with amnesic MCI (aMCI). Specifically, we performed a comprehensive study to examine the effect of aerobic and non-aerobic training. Neuropsychological evaluations, assessment of neurotrophic factor (BDNF), cardiorespiratory fitness assessment and fMRI have been performed before the

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