

Special Issue

Exercise-Induced Neuroplasticity: Insights from Physiological and Epigenetic Adaptations

Message from the Guest Editors

Neuroplasticity denotes the ability of the central nervous system to organize, modify and adapt its circuits and neuronal connections in response to internal and external stimuli. In this regard, physical exercise has been widely shown to promote brain plasticity through the release of several neurotrophic factors that in turn affect neuronal metabolism, nerve growth, and new synaptic connections as well as trigger intracellular molecular pathways in order to ensure neuronal survival and prevent neurodegeneration. In addition, exercise has been proven to directly affect the expression of neuroplasticity-related genes through epigenetic modifications including DNA methylation, histone modifications and microRNAs (miRNAs). We are pleased to invite you to submit your manuscript to our current Special Issue whose purpose is to investigate molecular and epigenetic mechanisms affecting exercise-induced neuroplasticity; both original research articles and reviews are welcome.

Guest Editors

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