Molecular Mechanisms of Synaptic Plasticity: Dynamic Changes in Neurons Functions

Message from the Guest Editor

Synaptic plasticity is a complex and crucial neuronal mechanism linked to principal memory and motor functions. During the developmental period into old age, the neural frame is subject to structural and functional modifications in response to external stimuli. This essential skill of neuronal cells underpins the ability to learn of mammalian organisms. Synaptic plasticity phenomena include microscopic changes.

In the last decades, it has been highlighted that de novo protein synthesis, (mRNA transcription mRNA and protein degradation, histone acetylation, DNA methylation, and miRNA regulation), as well as a new set of signaling molecules (endogenously generated cannabinoids, peptides, Neurotrophins, protein kinases, and ubiquitin-proteasome system), has been implicated in synaptic transmission and plasticity. The aim of this Special Issue is to collect original papers, reviews, case reports, and other forms of scientific communication that could increase the interest of scientists in synaptic plasticity phenomena.
Message from the Editorial Board

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Contact Us

International Journal of Molecular Sciences
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland
Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
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