Special Issue

Mechanisms of Modulation of Sensory Plasticity in the Cerebral Cortex

Message from the Guest Editor

One of the most important functions of the central nervous system (CNS) is to receive sensory information and generate a response. Synaptic plasticity is thought to form the cellular basis of learning and memory processes in the cortex, which can lead to information processing and storage through increases or decreases in synaptic strength, lasting from milliseconds to days. Since a form of synaptic plasticity termed long-term potentiation (LTP) was discovered in the hippocampus by Bliss and Lomo in 1973, it has been shown that several forms of LTP and long-term depression (LTD) can be induced in the different regions of the CNS. LTP and LTD can be induced by modifications at the presynaptic and/or postsynaptic level of synaptic transmission and may also require the participation of astrocytes. This Special Issue will focus on the modulatory mechanisms of synaptic plasticity in the cortex that may contribute to sensory processing and the control of behavior. Studies that explore sensory processing disorders will also be considered.

Guest Editor

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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