

Special Issue on **Modulation of Neural Plasticity as a Strategy for the Functional Recovery from Stroke**

CALL FOR PAPERS

Stroke results in damage to the connections and communications in the brain. However, multiple studies over the last decade have documented the self-reorganization of adult brain under the conditions of multiple injuries, including stroke. This phenomenon is called neural plasticity. Neural plasticity results in establishment of a new neural pathway or the activation of an unused connection in the brain. Under the condition of stroke, the interactions of proteins and molecules in immune cells, glia, and neurons influence multiple dynamic processes of neurogenesis, axonal growth, and structural plasticity in the injured brain. On the other hand, recent research has shown that brain plasticity can be influenced by numerous external factors, such as enriched environment, experience, drugs, and diet. The knowledge of neural plasticity following stroke is crucial for the understanding of onset and progression of disease as well as further developing novel tools for use in both primary prevention and therapy of stroke.

Hence, we invite investigators to contribute original research articles as well as review articles that seek to address the mechanisms and significance of altered brain plasticity in the pathogenesis of stroke.

Potential topics include but are not limited to the following:

- ▶ Novel signaling pathways that mediates the brain plasticity after cerebral ischemia
- ▶ Role of neuron-glia interactions in neural plasticity and its association with the pathology and rehabilitation of stroke
- ▶ Brain mapping studies examining neural plasticity changes associated with stroke
- ▶ Contribution of epigenetic events (including DNA methylation, histone modification, and microRNAs) to cortical neural plasticity following ischemic stroke
- ▶ Factors (including psychological experience, inflammation, pharmacological modulators, hormones, growth factors, etc.) affecting neuronal structure and behavior during the process of stroke rehabilitation

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/np/mnps/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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