Special Issue

Novel Advances in Stem Cell Therapy for Neurological Diseases

Message from the Guest Editors

The use of stem cells has opened a new perspective for the cure of neurological diseases. The aim of stem cell therapy in the context of neurological disorders is to restore tissue function via reconstructing the lost neuronal circuits. However, to date, their therapeutic contribution is quite exclusively related to their "bystander effect" on remaining healthy tissue, rather than repairing the damaged network because of their limited cell survival, inadequate neuronal differentiation, and poor integration in the host neuronal network. So, there is an urgent need to develop multidisciplinary strategies, merging stem cell biology, bioengineering, and neuroscience to achieve neurological function restoration. This Special Issue of Bioengineering on Novel advances in stem cell therapy for Neurological Diseases addresses the central role in defining the novel approaches developed to improve the efficacy of stem cell-based therapies for neurological disorders by bringing together contributions from worldwide experts on stem cell biology, engineering, biomaterials and stem cell therapy applied to neurological diseases.

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Editor-in-Chief

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