Special Issue

Mechanism-Based Therapeutic Interventions for Brain Diseases

Message from the Guest Editors

This Special Issue, titled “Mechanism-Based Therapeutic Interventions for Brain Diseases”, covers a wide range of brain diseases including stroke, Alzheimer’s disease, Parkinson’s disease, multiple sclerosis (MS), etc., using a number of mechanism-based therapeutic interventions targeting the neuronal/glial sites responsible for neuronal protection and neurogenesis, as illustrated below.

- Brain cells death/injury can be triggered by external factors such as brain trauma, stroke, infection, aging, or intrinsic metabolic stress such as oxidative stress, inflammation, vascular dysfunction, the depletion of oxygen, glucose, and trophic factors.
- Brain cells death/injury will lead to a massive release of glutamate, resulting in further neuronal death/injury known as “Excitotoxicity” through a number of pathways, including mitochondrial, ER, autophagy, and microglial stress pathways.
- Therapeutic interventions for brain diseases could then be developed by targeting these stress pathways. In addition, the neurogenesis process through the mTOR or the neurotrophic factors pathways can also be targeted.

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Deadline for manuscript submissions

closed (10 February 2024)

Cells

an Open Access Journal by MDPI

Impact Factor 5.2
CiteScore 10.5
Indexed in PubMed

mdpi.com/si/177015

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Message from the Editorial Board

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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