Special Issue

Astrocytes and Microglia In Sickness and in Health

Message from the Guest Editor

In both healthy and diseased states, astrocytes and microglia perform a number of physiological and pathological functions that are essential to maintain neuronal homeostasis in the central nervous system (CNS). Astrocytes are critical for neuronal migration. synaptogenesis, and neuroplasticity, while microglia are the predominant immune cells in the CNS. During the disease progression, dysfunctional astrocytes disrupt glutamate homeostasis and lead to excitotoxicity, while senescent microglia loss the phagocytic activity. A plethora of pro-inflammatory effectors derived from over-activated astrocytes and microglia exacerbates alia-mediated neuro-inflammation that is a common pathological feature shared by many neurological diseases, such as Alzheimer's disease, Parkinson's disease, stroke, traumatic brain injury, spinal cord injury, and other CNS diseases. This Special Issue invites submissions of original research articles. communications, and comprehensive reviews elaborating the current developments in the field of astrocytes and/or microglia. Articles with a therapeutic perspective are especially welcome.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2022)



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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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