

Special Issue

Impact of Environmental Pollution on the Neuro-Vascular Unit

Message from the Guest Editors

We are pleased to introduce the Special Issue "Impact of Environmental Pollution on the Neuro-Vascular Unit", which aims to highlight the pivotal role of glial cells, including astrocytes, microglia, and oligodendrocytes, in architecture of the Neuro-Vascular Unit (NVU), encompassing a dynamic interaction between neurons, endothelial cells, and pericytes, and ensuring cerebral and central nervous system homeostasis, as well as optimal central nervous system functioning. Emerging evidence demonstrates the role of environmental pollutants in disrupting NVU integrity and glial cell function, leading to oxidative stress, neuroinflammation, and neurodegeneration. This Special Issue seeks original research and reviews on the following topics:

- Molecular and cellular mechanisms governing NVU function during environmental pollutant insult;
- NVU alterations in neurological and cerebrovascular diseases;
- Development of experimental models for NVU studies;
- Therapeutic strategies to mitigate environmental impacts, targeting NVU restoration.

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Brain Sciences* (ISSN 2076-3425). *Brain Sciences* is an open access, peer-reviewed scientific journal that publishes original articles, critical reviews, research notes, and short communications on neuroscience. The scientific community and the general public can access the content free of charge as soon as it is published.

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