Special Issue

Advances in Cerebral Blood Flow Regulation and Neurovascular Dysfunction

Message from the Guest Editor

The brain is a very needy organ, requiring about 20% of cardiac output to meet the metabolic demands of neurons. Cerebral blood flow (CBF) must therefore be tightly regulated spatially and temporally. The neurovascular unit, comprised of neurons, endothelial cells, pericytes or smooth muscle cells, and astrocytes, plays an important role in normal CBF regulation. Several disease states such as hypertension, stroke, and traumatic brain injury are associated with impairments in cerebral blood flow autoregulation or an uncoupling of metabolic activity and local blood flow. This Special Issue welcomes manuscripts addressing (1) mechanisms of normal and abnormal cerebral blood flow, (2) changes in components of the neurovascular unit in various disease states, and (3) consequences of abnormal CBF regulation or neurovascular dysfunction. Original manuscripts, as well as review papers, are welcome for submission.

Guest Editor

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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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