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Advances in Cerebral Blood Flow Regulation and Neurovascular Dysfunction

Guest Editor:

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Deadline for manuscript submissions:

closed (30 November 2019)

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) abnormal CBF consequences of regulation neurovascular dysfunction. Original manuscripts, as well as review papers, are welcome for submission.













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Message from the Editor-in-Chief

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