

Special Issue

Blood–Brain Barrier: From Physiology to Disease and Back

Message from the Guest Editor

The blood–brain barrier (BBB) is the interface between the central nervous system (CNS) and the cerebral blood circulation. It is a dynamic barrier essential for maintaining the microenvironment of the brain.

Compromised BBBs have been found in various neurological disorders including schizophrenia, autism, Alzheimer’s disease, and brain tumors, to name a few. The biomimetic BBBs derived from hiSPCs not only enable the cost-effective development of systemic drug delivery methods but also drug screening targeting the neurovascular coupling for these neurological disorders. This Special Issue thus aims to collect contributions on topics including 1) the development and characterization of the BBB from primary and hiPSC-derived cells, as well as cell lines in health and disease; 2) the investigation of molecular and cellular mechanisms for compromised BBBs in neurological disorders; 3) the development of methods for drug delivery across the BBB; 4) drug screening utilizing the developed BBBs for the treatment of neurological disorders; and 5) the investigation of immune- and tumor-cell adhesion to and transmigration across the BBB.

Guest Editor

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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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