

## Special Issue

# Advanced Research Progress of Blood-Brain Barrier

### Message from the Guest Editor

The blood–brain barrier (BBB) is a complex dynamic interface between the blood and the central nervous system (CNS), which plays the critical role of regulating the homeostatic, nutritive and immune environments of the CNS, as well as the exchange of informational molecules between the CNS and periphery. BBB impairments have been strongly associated with the onset and progression of many neurological disorders, while also representing a major hindrance to CNS drug delivery. There is a need to further our understanding of the molecular mechanisms regulating BBB functions, including its physiological and pathological responses to bloodborne substances and xenobiotics, which also comprise putative brain-targeting therapeutics. This Special Issue of the *International Journal of Molecular Sciences* welcomes both original research articles and review papers that deal with the molecular mechanisms underpinning the BBB in health and disease, as well as recent advances in experimental in vitro technologies that can further our understanding of the BBB and aid the process of CNS drug discovery.

### Guest Editor

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### Deadline for manuscript submissions

closed (20 March 2025)



## International Journal of Molecular Sciences

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### Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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