

Special Issue

Current Research in Membrane Transporters, Channels, and Receptors

Message from the Guest Editor

Membrane transporters, ion channels, and receptors mediate ion and molecule exchange essential for homeostasis, signaling, and disease. They critically determine drug absorption, distribution, and efficacy, making them key pharmacological targets. Advances in structural biology; computational modeling; and biomolecular techniques have greatly expanded our understanding of their mechanisms; regulation; and pharmacological modulation. This Special Issue aims to highlight cutting-edge research in this dynamic field, covering topics such as structure–function relationships; transport kinetics; regulatory mechanisms; and drug targeting. We welcome submissions encompassing molecular; biochemical; and biophysical approaches; including computational and experimental studies. While purely clinical studies fall outside our scope, we encourage translational research combining biomolecular experiments with mechanistic models. This collection seeks to advance our understanding of membrane transport and receptor-mediated processes and their implications in health, disease, aging and pharmacology.

Guest Editor

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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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