

Special Issue

New Insights into Aquaporins

Message from the Guest Editors

Aquaporins (AQPs) are involved in many biological functions, including transepithelial fluid transport, cell migration and proliferation, brain oedema and neuroexcitation, adipocyte metabolism and epidermal water retention. In the plant kingdom, aquaporins are key proteins providing strict regulation of water uptake and transport across cellular membranes and tissues at the whole-plant level, regulating plant growth and development. In the last decade, aquaporins have become a hot area of research in molecular cell biology, biochemistry and biophysics, with increasing physiological and medical implications. In addition, human diseases caused by aquaporin dysfunction have unveiled these proteins' potential as drug targets and opened new perspectives with which to untangle mechanisms. This Special Issue aims to provide an updated scientific view of the aquaporin field, including structure–function relationships, physiological and chemical regulation, implications in disease and potential as drug targets, creating opportunities for drug development and novel therapies. Authors are invited to submit original research and review papers.

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Deadline for manuscript submissions

closed (30 June 2024)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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*International Journal of
Molecular Sciences*
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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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