

Special Issue

New Advances in Aquaporinopathy

Message from the Guest Editors

The first aquaporin (AQP) was discovered as a water channel protein of human red blood cell, but many of later AQP members permeate not only water but many small solutes, ions (chloride and nitrate), arsenate, boron, silicon and even gases (CO₂, NH₃ and NO). Beyond these heterogeneities in channel function, functions other than channel have been discovered, such as cell membrane adhesion (AQP4), signal transduction (AQP2), stimulator of cell migration and wound recovery (AQP1, 3), trigger of auto-immune system (AQP4) and mediator of inflammation (AQP3). However, until now, aquaporinopathy which includes diseases and disordered conditions caused by AQP's dysfunction is recognized in a limited spectrum of diseases. There are 13 members of AQP in human and they are conserved through the evolution, implying that they play indispensable roles for survival that are easily overlooked in comfortable environment in modern life. Understanding aquaporinopathy is anticipated to reveal novel therapeutic targets in many diseases. This special issue will welcome papers focusing on AQP-related diseases and abnormal states, and their pathophysiology.

Guest Editors

Prof. Sei Sasaki

Department of Nephrology, and Cellular and Structural Physiology Laboratory, Institute of Science Tokyo, Tokyo 113-8519, Japan

Dr. Yumi Noda

1. Department of Nephrology, Nitobe Memorial Nakano General Hospital, Tokyo 164-8607, Japan

2. Department of Nephrology, Institute of Science Tokyo, Tokyo 113-8519, Japan

Deadline for manuscript submissions

closed (28 February 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/75171

*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
ijms@mdpi.com

mdpi.com/journal/

[ijms](https://ijms.mdpi.com)





International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 5.6
CiteScore 10.0
Indexed in PubMed



[mdpi.com/journal/
ijms](https://mdpi.com/journal/ijms)



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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.

Editor-in-Chief

Prof. Dr. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, MEDLINE, Embase, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)