

## Special Issue

# Advancements in Protease and Carbonic Anhydrase Inhibitors as Targeted Therapies in Infection and Disease

### Message from the Guest Editors

Proteases are targeted clinically with selective inhibitors, and are mostly used as antiviral agents to treat HIV/AIDS and hepatitis C infections. The potential use of protease inhibitors to block the replication of human coronaviruses has also accelerated in the fight against Covid-19 worldwide. Carbonic anhydrases are expressed widely in cells and tissues, and broad-spectrum CA inhibitors like acetazolamide are widely used in the treatment of glaucoma, epilepsy and altitude sickness. The generation of CA isoform selective inhibitors enabled their potential wider use, most noticeably the CAIX/XII inhibitors in malignant neoplasms. The present Special Issue of the International Journal of Molecular Sciences welcomes contributions dealing with all aspects connected to the chemistry, biochemistry, virology, pharmacology and toxicology of this important class of enzyme inhibitors.

### Guest Editors

Prof. Dr. Kaye J. Williams

Faculty of Biology, Medicine and Health, School of Pharmacy and Optometry, University of Manchester, Manchester M13 9PL, UK

Dr. Roben Gieling

Faculty of Science and Environment, School of Geography and Natural Sciences, University of Northumbria, Newcastle Upon Tyne NE1 8ST, UK

### Deadline for manuscript submissions

closed (15 February 2023)



## International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/60134](https://mdpi.com/si/60134)

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

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





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
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*, 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.

---

### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

---

### 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, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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