



## Molecular Biology of Histamine Systems 2.0

Guest Editors:

**Dr. Paul L. Chazot**

Department of Biosciences,  
Durham University, Durham DH1  
3LE, UK

**Dr. Ilona Obara**

Senior Lecturer of Pharmacology,  
School of Pharmacy, Institute of  
Neuroscience, University of  
Newcastle, Newcastle, UK

Deadline for manuscript  
submissions:

**closed (15 February 2023)**

### Message from the Guest Editors

Histamine is arguably the most pleiotropic transmitter in the human body. Despite over a century of study since the first seminal work of Sr Henry Dale, who first identified an action for histamine on living tissue, and with significant advances in histamine pharmacology and drug development, with successful drug targeting three of the four histamine receptors, H1-4R, we are still lacking in a full understanding of the molecular biology of the histamine system. Histamine is synthesized from the amino acid histidine via the enzyme, histidine decarboxylase (HDC). The histamine receptors are classic G-protein coupled receptors. Despite the importance of histamine, transcriptional regulation of histamine receptor and HDC gene expression in mammals is still poorly understood. Furthermore, there are significant deficits in our knowledge regarding native histamine signaling pathways. This themed volume will endeavor to extend our understanding of these important issues.





an Open Access Journal by MDPI

## 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

## 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.

## 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 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI