Special Issue

Histamine-Related Molecules as Therapeutic Targets

Message from the Guest Editors

Histamine is known to mediate the induction of various allergic responses via the histamine H1 receptor and gastric acid secretion via H2 receptor. The histamine H3 and H4 receptors also regulate various pathological and physiological responses; consequently, the antagonists/agonists of these receptors are expected to be new medicines. Furthermore, recent basic studies have indicated that various histamine-related molecules, which are involved in histamine production, release, and clearance, adjust the concentration and activity of histamine. These molecules include the histamine-producing enzyme, histidine decarboxylase; the metabolizing enzyme, histamine Nmethyltransferase; and the transporters, monoamine transporter and organic cation transporter 3. In addition. a novel G protein-coupled receptor on mast cells, MASrelated G protein-coupled receptor X2 (MRGPRX2), was reported to be involved in IgE-independent histamine release from mast cells. These molecules will be the therapeutic targets. This special issue of IJMS addresses the current topics in the study of these molecules in basic and clinical research to drive the development of new medicines.

Guest Editors

Prof. Dr. Noriyasu Hirasawa

Laboratory of Pharmacotherapy of Life-Style Related Diseases, Tohoku University, Sendai, Japan

Prof. Dr. Hiroyuki Fukui

Department of Molecular Studies for Incurable Diseases, Tokushima University, Tokushima 770-0855, Japan

Deadline for manuscript submissions

closed (30 November 2018)



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed



mdpi.com/si/15846

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

mdpi.com/journal/ ijms





International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 8.1 Indexed in PubMed





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 (Inorganic Chemistry)

