

Special Issue

Role of Phosphodiesterase in Biology and Pathology

Message from the Guest Editors

The Special Issue will publish the most exciting articles on the role of phosphodiesterases in health and disease. Phosphodiesterases are ubiquitous enzymes which hydrolyze cAMP and cGMP second messengers in a temporal, spatial, and integrated manner according to their expression and localization inside the cell. cAMP and cGMP signaling regulate a huge variety of cell functions; therefore, phosphodiesterases are involved in any aspect of cell biology. In recent years, further research has focused on the role of these proteins in compartmentalization of the cyclic nucleotide signal in a wide number of cell models. The understanding of cell signaling pathways in which phosphodiesterases are involved is of great importance in cell physiology and human pathology. A great number of pharmaceutical inhibitors are available, and over the past few decades, they have been successfully used in the treatment of impotence and chronic pulmonary diseases. New evidence underlines a possible use of phosphodiesterase inhibitors in the treatment of cardiovascular diseases, type 2 diabetes, cancer, inflammation, and many more other pathologies which have recently been identified.

Guest Editors

Dr. Fabio Naro

Università degli Studi di Roma La Sapienza, Rome, Italy

Prof. Dr. Mauro Giorgi

Department of Biology and Biotechnology "Charles Darwin", Sapienza University of Rome, P.le A. Moro 5, 00185 Rome, Italy

Dr. Manuela Pellegrini

Institute of Biochemistry and Cell Biology, IBBC-CNR, via E. Ramarini, 32, 00015 Monterotondo Scalo, Rome, Italy

Deadline for manuscript submissions

closed (31 January 2021)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/35573

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

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)