





an Open Access Journal by MDPI

Dual Function Molecules and Processes in Cell Fate Decision

Guest Editors:

Prof. Dr. Michela Giuliano

Laboratory of Biochemistry, Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF), University of Palermo, 90127 Palermo, Italy

Dr. Sonia Emanuele

Department of Biomedicine, Neurosciences and Advanced Diagnostics (BIND), Biochemistry Building, University of Palermo, 90127 Palermo, Italy

Deadline for manuscript submissions:

closed (30 June 2020)

Message from the Guest Editors

Dear Colleagues,

Recent molecular discoveries in cell biology have highlighted a number of molecules playing opposite roles in different processes, including cell death, survival, proliferation, and differentiation. This unusual behavior can be dependent on cell environment, post-translational modifications, epigenetic regulation, and complex network interactions. In some cases, hormetic responses can occur, as is the case with molecules, such as reactive oxygen species (ROS), which are active as bio-modulators at low doses and destructive at high concentrations. In addition, many cellular proteins exert a dual role in regulating cell fate determination, although the regulation mechanisms are not well known. The "Janus" role is not restricted to molecules but also involves cellular processes. The proposal for this Issue is to focus on these double-faced molecules/processes in the regulation of cell fate to provide a critical analysis of different situations and the mechanisms involved in regulative opposite responses.













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