

Special Issue

Computational and Omics Research on Rare Diseases

Message from the Guest Editor

The comprehensive measurement of the molecular state of cells allowed by omics techniques, whether singly or together in a tissue, is rapidly redefining our understanding of disease and human development. We wish to focus such an approach on rare diseases. By definition, a rare disease affects fewer than one individual in 2000 people in the general population. However, as there are nearly 8000 rare diseases, it turns out that these “rare” diseases affect more than 300 million people worldwide. Genomics and all the emerging omics techniques hold the key to new diagnoses and therapies for rare diseases, but constant advances in analytical and computational methods are needed to support these techniques at increasing scale. Innovative approaches are also desirable to translate omics research into pharmacological therapies. We are seeking for papers that investigate rare diseases using an omics or integrated omics approach as well as computational omics involving artificial intelligence, big data, molecular simulations. Papers addressing specific pharmacological therapies involving drug-repositioning for rare diseases in light of omics studies are warmly welcomed.

Guest Editor

Dr. Andrea Bernini

Department of Biotechnology, Chemistry and Pharmacy, University of Siena, 53100 Siena, Italy

Deadline for manuscript submissions

closed (30 April 2022)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



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*International Journal of
Molecular Sciences*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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

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