Special Issue

Research Advances in Whole-Genome/Exome Sequencing (WGS/WES) and Next-Generation Sequencing

Message from the Guest Editor

Most inherited diseases form a clinically and genetically heterogeneous group of disorders, which generally manifests in many tissues or organs, causing irreversible progressing disease, e.g., cancer, systemic disease, and age-related disease. However, the use of next-generation sequencing such as whole-exome and whole-genome sequencing has improved the diagnostic yield in the search for disease-causing variants in inherited diseases. In current standard bulk analyses on DNA genomics or RNA whole-transcriptomics technologies, biologically relevant pathophysiology differences are not always picked up on. However, new technologies, such as long-read sequencing, are being developed for complex bioinformatic analyses in organs, tissue, or even cells, offering the possibility of determining the whole transcriptome, or whole genome, and also the complete epigenome sequence in less than a day. This Special Issue aims to provide a current overview of advanced research on whole-genome/exome sequencing (WGS/WES) and next-generation sequencing. Reviews and research papers are encouraged on relevant topics.

Guest Editor

Dr. Rick Kamps

Department of Translational Genomics, School for Mental Health and Neuroscience (MHeNs), Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands

Deadline for manuscript submissions

closed (30 May 2024)

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/si/191507

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

MDPI

International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed

mdpi.com/journal/ijms

MDPI

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)