

Special Issue

Molecular Precision Medicine: Unraveling Disease Mechanisms, Targeted Therapeutics and Innovative Diagnostics

Message from the Guest Editor

The concept of “one treatment for all” represents the hope that we can cure disease with a singular modality of treatment. This is possible for some diseases but not most, and it is especially is not true for cancer, neurodegenerative and cardiometabolic disorders, inflammatory bowel disease (IBD) and others. There has been a paradigm shift in personalized treatment/medicine to focus on the patient with a disease and not the disease in a patient. Personalized medicine has accelerated the need for rapid information gathering about patients with diseases to understand how to treat them by acquiring a detailed molecular understanding of their disease. Today, the success of molecular precision medicine is heavily dependent on non-invasive rapid biomarker analysis utilizing very low amounts of biological fluids to truly accelerate diagnosis and treatment. The focus of this Special Issue is to highlight these advancements and describe the future needs of personalized medicine.

Guest Editor

Dr. Shairaz Baksh

1. Department of Biochemistry, Faculty of Medicine & Dentistry, University of Alberta, 113 Street 87 Avenue, Edmonton, AB T6G 2E1, Canada (2005–2018)
2. Department of Pediatrics, Faculty of Medicine & Dentistry, University of Alberta, 113 Street 87 Avenue, Edmonton, AB T6G 2E1, Canada (2005–2018)
3. Department of Oncology, Faculty of Medicine & Dentistry, University of Alberta, 113 Street 87 Avenue, Edmonton, AB T6G 2E1, Canada (2005–2018)
4. BioImmuno Designs, 4747 154 Avenue, Edmonton, AB T5Y 0C2, Canada
5. Bio-Stream Diagnostics, F200-2410 94th Street, Edmonton, AB T6N 1H1, Canada

Deadline for manuscript submissions

closed (20 July 2025)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/215995

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



About the Journal

Message from the Editor-in-Chief

The *International Journal of Molecular Sciences (IJMS)* 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, and molecular biophysics. *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. José L. Quiles
Department of Physiology, Institute of Nutrition and Food Technology
"Jose Mataix", Biomedical Research Center, University of Granada,
Avda. Conocimiento s/n, 18100 Armilla, Granada, Spain

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, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)