



Technical Pitfalls and Biases in Molecular Biology

Guest Editor:

Prof. Dr. Irmgard Tegeder

Pharmazentrum Frankfurt,
Department of Clinical
Pharmacology, Goethe-University
of Frankfurt, Theodor Stern Kai 7,
Bd. 74, 4th Fl, 60590 Frankfurt am
Main, Germany

Deadline for manuscript
submissions:

closed (31 May 2023)

Message from the Guest Editor

This Special Issue aims to gather a unique collection of original research articles and reviews, that address the occurrence, recognition, and avoidance of biases and errors and sharpen the awareness of experimental and data-analysis-based pitfalls. For example, the off-target effects of gene manipulation or pharmacological interventions may produce unexpected effects, transgenic models may turn out to be something else, antibodies may un-specifically detect other proteins, alternative methods for normalization of omics data may yield controversial results. We welcome the submission of articles that cover, but are not limited to, the following topics:

- Impact of extraction procedures for DNA/RNA, proteins, metabolites, etc.
- Off-target effects of drugs or gene/protein manipulations
- Un-specificity of immune – or RNA-based detection and quantification methods
- Data-analysis based biases owing to normalization, data transformation, low expression genes/protein, low sample sizes, use of statistical methods, etc.
- Variability between labs or researchers versus biological variability
- Confounding influences of environmental factors
- Methods for visualizing biases





an Open Access Journal by MDPI

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

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.

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)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI