Technical Pitfalls and Biases in Molecular Biology

Guest Editor:

Prof. Dr. Irmgard Tegeder
Pharmazentrum Frankfurt, Dept. 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

mdpi.com/si/32509

Special Issue

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 & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us