

## Special Issue

# New Insights into Computational Genomics

### Message from the Guest Editors

The past few years have seen the emergence of novel experimental strategies that have revolutionised our capability to study the genome, epigenome, and transcriptome of living organisms. The advent of long-read sequencing, which can identify complex structural variants to study the epigenome and the transcriptome with unprecedented resolution, and the diffusion of single-cell sequencing in biomedical research settings paved the way for the detection and quantitative analysis of cellular content, allowing the profiling of the omic layers of single cells and laying the groundwork for heterogeneity-oriented studies. As experimental protocols have improved rapidly, computational workflows for processing the data have also been refined, enabling novel methods capable of handling this continuously growing data. This Special Issue invites articles that address the many aspects of the analyses of single-cell and long-read sequencing data, highlighting the key technological and computational developments that favoured their adoption in clinical applications.

### Guest Editors

Dr. Alberto Magi

Department of Information Engineering, University of Florence,  
Florence, Italy

Dr. Roberto Semeraro

Department of experimental and clinical medicine, University of  
Florence, Florence, Italy

### Deadline for manuscript submissions

closed (30 November 2023)



## Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/174158](https://mdpi.com/si/174158)

*Biomolecules*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[biomolecules@mdpi.com](mailto:biomolecules@mdpi.com)

[mdpi.com/journal/  
biomolecules](https://mdpi.com/journal/biomolecules)





# Biomolecules

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.8  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/journal/  
biomolecules](https://mdpi.com/journal/biomolecules)



## About the Journal

### Message from the Editorial Board

*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

---

### Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

---

### 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, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

#### Journal Rank:

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