

Special Issue

Application of Bioinformatics to Unravel the Molecular Mechanisms of Cancer Biology

Message from the Guest Editor

Cancer is a heterogeneous group of diseases characterized by uncontrolled cell growth, metastasis, and invasiveness. Although significant progress has been made in cancer biology research, the underlying mechanisms of carcinogenesis remain incompletely understood. Bioinformatics can accelerate the elucidation of key molecular pathways and networks driving cancer progression. This Special Issue aims to focus on the application of bioinformatics in unraveling the genetic and epigenetic mechanisms underlying cancer initiation and advancement. We invite submissions of original research papers covering integrative analyses of cancer genomics, transcriptomics, and epigenomics data to gain deeper insights into the molecular mechanisms of cancer and facilitate the discovery of cancer biomarkers and novel drug targets.

Guest Editor

Dr. Yuanyan Xiong

Key Laboratory of Gene Engineering of the Ministry of Education and State Key Laboratory of Biocontrol, School of Life Sciences, Sun Yat-Sen University, Guangzhou 510006, China

Deadline for manuscript submissions

31 May 2026



Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/194618

Biology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biology@mdpi.com

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





Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



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



About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne

Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya

Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the second half of 2025).