

Special Issue

Biomedical Data Mining: Emerging Methods and Applications

Message from the Guest Editors

The rapid growth of biomedical data, from electronic health records to multi-omics profiles, imaging, wearable sensors, digital phenotyping, offers unprecedented opportunities to improve prevention, diagnosis, and treatment. However, these data are often high-dimensional, heterogeneous, incomplete, difficult to access, making robust analytical methods essential for generating clinically meaningful insights. This Special Issue aims to advance the current state of knowledge in biomedical data mining through a comprehensive spectrum of studies, ranging from algorithmic development and computational methodologies to practical implementations in healthcare settings. Furthermore, it intends to address research gaps by enhancing the accuracy, efficiency, and interpretability of data-driven approaches in biomedicine. Topics of interest include, but are not limited to, machine learning and deep learning in healthcare, natural language processing to mine unstructured data, network and graph-based analysis, multimodal data integration and explainable AI. We also encourage the submission of reviews and systematic perspectives that summarize emerging trends and methodological challenges.

Guest Editors

Dr. Andrei Flavius Radu

1. Department of Psycho-Neurosciences and Recovery, Faculty of Medicine and Pharmacy, University of Oradea, 410073 Oradea, Romania
2. Doctoral School of Biological and Biomedical Sciences, University of Oradea, 410087 Oradea, Romania

Prof. Dr. Delia Mirela Tit

1. Department of Pharmacy, Faculty of Medicine and Pharmacy, University of Oradea, 410028 Oradea, Romania
2. Doctoral School of Biomedical Sciences, University of Oradea, 410087 Oradea, Romania

Deadline for manuscript submissions

31 August 2026



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



mdpi.com/si/270081

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

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





Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Biomedical)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).