

Special Issue

Computational Approaches in Biomedicine: Innovations and Insights

Message from the Guest Editor

Computational science is rapidly transforming biomedicine, enabling breakthroughs in understanding biological mechanisms, drug discovery, and personalized care. This Special Issue, *“Computational Approaches in Biomedicine: Innovations and Insights”*, highlights advances in computational methods across biomedical research. We invite submissions on novel algorithms, models, and applications addressing key biomedical challenges. Topics include bioinformatics, genomics, structural biology, cheminformatics, medical imaging, and systems biology. Special interest lies in AI, machine learning, and HPC for precision medicine, biomarker discovery, and therapeutic development. Furthermore, papers addressing the computational challenges inherent in emerging fields like single-cell analysis, spatial transcriptomics, and synthetic biology are highly encouraged. This Special Issue explores how computational approaches are advancing biomedicine. We welcome original articles, reviews, and short communications that showcase impactful advances and innovative solutions in biomedical science and healthcare.

Guest Editor

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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.

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