

Special Issue

Artificial Intelligence-Driven Multi-Omics Integration for Precision Oncology and Complex Disease Research

Message from the Guest Editor

The rapid accumulation of high-throughput sequencing and molecular profiling data has made multi-omics approaches indispensable for decoding the complexity of human diseases. However, the heterogeneity and dimensionality of multi-omics datasets pose significant analytical challenges that traditional methods alone cannot fully address. Recent advances in artificial intelligence (AI), particularly deep learning and machine learning frameworks, are transforming our ability to integrate genomics, transcriptomics, proteomics, metabolomics, epigenomics, and spatial omics data into coherent biological insights. This Special Issue aims to highlight cutting-edge research and methodological innovations at the intersection of AI and multi-omics integration. We welcome original research and reviews that explore novel computational frameworks, predictive modeling, biomarker discovery, network reconstruction, and translational applications in oncology, neurology, immunology. Emphasis will be placed on studies that demonstrate clinical utility, reproducibility, and interpretability of AI-based integrative pipelines. Dr. Hengrui Liu
Dr. Qi Wang

Deadline for manuscript submissions

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

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About the Journal

Message from the Editor-in-Chief

Cancers (ISSN 2072-6694) is an international, online journal addressing both clinical and basic science issues related to cancer research. The journal will continue its open access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

Editor-in-Chief

Prof. Dr. Samuel C. Mok

Department of Gynecologic Oncology and Reproductive Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA

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