

IMPACT FACTOR 4.4





an Open Access Journal by MDPI

Graph Neural Networks in Cancer Research

Guest Editors:

Prof. Dr. Manuel B. Graeber

Ken Parker Brain Tumor Research Laboratories, Brain and Mind Center, Faculty of Medicine and Health, University of Sydney, Sydney, NSW 2050, Australia

Dr. Xiuying Wang

School of Computer Science, The University of Sydney, Sydney, NSW 2006, Australia

Deadline for manuscript submissions:

closed (31 December 2024)

Message from the Guest Editors

Dear Colleagues,

The advent of deep learning methods has enriched computer-aided research. Graph neural networks (GNNs) are already showing particular potential in biomedicine. Cancer research is at the forefront of this development, as examples from the fields of automatic detection and segmentation of tumors, prognostication, and anticancer drug design show. Significantly improved software frameworks and increasing computing power have contributed to this progress. GNNs are attracting particular attention due to their wide applicability, visual nature and interpretable decision-making ability. Notable developments include the application of relationinformation theory to cancer identification, classification, segmentation and tracking for the optimization of personalized treatment, and the investigation of gene sequences and tumor heterogeneity.

For this Special Issue, we welcome original research articles or comprehensive review articles focusing on GNN-based methods in cancer research. We hope that such a collection will promote the development of GNN-based methods and provide novel tools for the fight against cancer.













an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Cancers is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in 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.

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

Journal Rank: JCR - Q2 (Oncology) / CiteScore - Q1 (Oncology)

Contact Us