Computational Studies of Mutagenic Processes in Cancer

Guest Editors:

Dr. Teresa M. Przytycka

National Center for Biotechnology Information (NCBI), National Library of Medicine (NIH), Bethesda, MD 20894, USA

Dr. Damian Wójtowicz

Faculty of Mathematics, Informatics, and Mechanics, University of Warsaw, Warsaw, Poland

Prof. Dr. Roded Sharan

School of Computer Science, Tel-Aviv University, Tel-Aviv 69978, Israel

Deadline for manuscript submissions:
closed (30 October 2023)

Message from the Guest Editors

Dear Colleagues,

Recent advances in the computational analysis of somatic mutations in cancer genomes provided a wealth of information on mutagenic processes in cancer. For example, there is a growing recognition that mutagenic processes can be studied through the lenses of mutational signatures: characteristic mutation patterns attributed to individual mutagens. Several computational approaches were recently developed for the identification of these patterns and to link them to specific causes. However, the etiology of many mutational patterns remains unknown or not fully understood.

It was also recognized that the mutation landscape of a cancer genome is the result of a complex interaction between DNA damage, DNA repair, and other processes in the cell such as replication stress. New computational methods and analyses began to uncover and model these dependencies.

This Special Issue will focus on recent advances in the computation analysis of mutational processes, including emerging computational methods and new insights obtained through computational approaches applied to large cancer datasets.

Special Issue

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