*Special Issue Reprint*

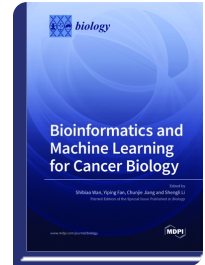# Bioinformatics and Machine Learning for Cancer Biology

www.mdpi.com/books/reprint/5918

Edited by
Shibiao Wan
Yiping Fan
Chunjie Jiang
Shengli Li

Cancer is a leading cause of death worldwide, claiming millions of lives each year. Cancer biology is an essential research field to understand how cancer develops, evolves, and responds to therapy. By taking advantage of a series of "omics" technologies (e.g., genomics, transcriptomics, and epigenomics), computational methods in bioinformatics and machine learning can help scientists and researchers to decipher the complexity of cancer heterogeneity, tumorigenesis, and anticancer drug discovery. Particularly, bioinformatics enables the systematic interrogation and analysis of cancer from various perspectives, including genetics, epigenetics, signaling networks, cellular behavior, clinical manifestation, and epidemiology. Moreover, thanks to the influx of next-generation sequencing (NGS) data in the postgenomic era and multiple landmark cancer-focused projects, such as The Cancer Genome Atlas (TCGA) and Clinical Proteomic Tumor Analysis Consortium (CPTAC), machine learning has a uniquely advantageous role in boosting data-driven cancer research and unraveling novel methods for the prognosis, prediction, and treatment of cancer.

MDPI

Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/5918

# MDPI\Books
## Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.

### Open Access
Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.

### Author Focus
Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.

### High Quality & Rapid Publication
MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.

### High Visibility
Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

### Print on Demand and Multiple Formats
MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

Learn more ▶ mdpi.com/books