

1. Record Nr.	UNINA9910790973403321
Titolo	Biological data mining and its applications in healthcare // editors, Xiaoli Li, ASTAR, Singapore & Nanyang Technological University, Singapore, See-Kiong Ng, A*STAR, Singapore, Jason T.L. Wang, New Jersey Institute of Technology, USA
Pubbl/distr/stampa	New Jersey : , : World Scientific, , [2014] 2014
ISBN	981-4551-01-5
Descrizione fisica	1 online resource (xvi, 420 pages) : illustrations (some color)
Collana	Science, engineering, and biology informatics ; ; volume 8
Disciplina	610.285
Soggetti	Medical informatics Bioinformatics Data mining
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	part I. Sequence analysis -- part II. Biological network mining -- part III. Classification, trend analysis and 3D medical images -- part IV. Text mining and its biomedical applications.
Sommario/riassunto	Biologists are stepping up their efforts in understanding the biological processes that underlie disease pathways in the clinical contexts. This has resulted in a flood of biological and clinical data from genomic and protein sequences, DNA microarrays, protein interactions, biomedical images, to disease pathways and electronic health records. To exploit these data for discovering new knowledge that can be translated into clinical applications, there are fundamental data analysis difficulties that have to be overcome. Practical issues such as handling noisy and incomplete data, processing compute-intensive tasks, and integrating various data sources, are new challenges faced by biologists in the post-genome era. This book will cover the fundamentals of state-of-the-art data mining techniques which have been designed to handle such challenging data analysis problems, and demonstrate with real applications how biologists and clinical scientists can employ data mining to enable them to make meaningful observations and

discoveries from a wide array of heterogeneous data from molecular biology to pharmaceutical and clinical domains.

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