

1. Record Nr.	UNINA9910253861903321
Titolo	Application of Clinical Bioinformatics // edited by Xiangdong Wang, Christian Baumgartner, Denis C. Shields, Hong-Wen Deng, Jacques S Beckmann
Pubbl/distr/stampa	Dordrecht : , : Springer Netherlands : , : Imprint : Springer, , 2016
ISBN	94-017-7543-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (395 p.)
Collana	Translational Bioinformatics, , 2213-2775 ; ; 11
Disciplina	572.80285
Soggetti	Medicine Bioinformatics Health informatics Biomedicine, general Health Informatics
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 at the end of each chapters.
Nota di contenuto	The Era of Big Data: From Data-driven Research to Data-driven Clinical Care -- Biostatistics, data mining and computational modeling -- Gene expression and profiling -- The next generation sequencing and applications in clinical research -- Clinical epigenetics and epigenomics -- Proteomic profiling: Data mining and analyses -- Targeted metabolomics: the next generation of clinical chemistry!?! -- Clinical bioinformatics for biomarker discovery in targeted metabolomics -- Metagenomic Profiling, Interaction of Genomics with Meta-genomics -- Clinical Epigenetics and Epigenomics -- Integrative Biological Databases -- Standards and Regulations for (Bio)Medical Software -- Clinical applications and systems biomedicine -- Key Law and Policy Considerations for Clinical Bioinformaticians -- Challenges and Opportunities in Clinical Bioinformatics -- Heterogeneity of Hepatocellular Carcinoma.
Sommario/riassunto	This book elucidates how genetic, biological and medical information can be applied to the development of personalized healthcare, medication and therapies. Focusing on aspects of the development of evidence-based approaches in bioinformatics and computational

medicine, including data integration, methodologies, tools and models for clinical and translational medicine, it offers an essential introduction to clinical bioinformatics for clinical researchers and physicians, medical students and teachers, and scientists working with human disease-based omics and bioinformatics. Dr. Xiangdong Wang is a distinguished Professor of Medicine. He is Director of Shanghai Institute of Clinical Bioinformatics, Director of Fudan University Center for Clinical Bioinformatics, Deputy Director of Shanghai Respiratory Research Institute, Director of Biomedical Research Center, Fudan University Zhongshan Hospital, Shanghai, China; Dr. Christian Baumgartner is a Professor of Health Care and Biomedical Engineering at Institute of Health Care Engineering with European Notified Body of Medical Devices, Graz University of Technology, Graz, Austria; Dr. Denis Shields is a Professor of Clinical Bioinformatics at Conway Institute, Belfield, Dublin, Ireland; Dr. Hong-Wen Deng is a Professor at Department of Biostatistics and Bioinformatics, Tulane University School of Public Health and Tropical Medicine, USA; Dr. Jacques S Beckmann is a Professor and Director of Section of Clinical Bioinformatics, Swiss Institute of Bioinformatics, Switzerland.

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