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Titolo	Approaches in Integrative Bioinformatics [[electronic resource] ] : Towards the Virtual Cell // edited by Ming Chen, Ralf Hofestädt
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Descrizione fisica	1 online resource (385 p.)
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Soggetti	Bioinformatics Systems biology Biological systems Computer simulation Data mining Computational Biology/Bioinformatics Systems Biology Simulation and Modeling Data Mining and Knowledge Discovery
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	Part I: Introduction -- Part II: Information Fusion and Retrieval -- Part III: Network Visualization, Modeling and Analysis -- Part IV: BioData Mapping -- Part V: Biocomputation.
Sommario/riassunto	Approaches in Integrative Bioinformatics provides a basic introduction to biological information systems, as well as guidance for the computational analysis of systems biology. This book also covers a range of issues and methods that reveal the multitude of omics data integration types and the relevance that integrative bioinformatics has today. Topics include biological data integration and manipulation, modeling and simulation of metabolic networks, transcriptomics and

phenomics, and virtual cell approaches, as well as a number of applications of network biology. It helps to illustrate the value of integrative bioinformatics approaches to the life sciences. This book is intended for researchers and graduate students in the field of Bioinformatics. Professor Ming Chen is the Director of the Bioinformatics Laboratory at the College of Life Sciences, Zhejiang University, Hangzhou, China. Professor Ralf Hofestädt is the Chair of the Department of Bioinformatics and Medical Informatics, Bielefeld University, Germany.

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