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Nota di contenuto	PATHWAY ANALYSIS FOR DRUG DISCOVERY; CONTENTS; Preface; Contributors; 1 Introduction to Pathway Analysis; 2 Software Infrastructure and Data Model for Pathway Analysis; 3 Automatic Pathway Inference in Heterogeneous Biological Association Networks; 4 Algorithmic Basis for Pathway Visualization; 5 Pathway Analysis of High-Throughput Experimental Data; 6 Integrative Pathway Analysis of Disease Molecular Data; 7 Whole-Genome Expression Profiling of Papillary Serous Ovarian Cancer: Activated Pathways, Potential Targets, and Noise; 8 Mammalian Proteome and Toxicant Network Analysis 9 Unraveling Mechanisms of Toxicity with the Power of Pathways: ToxWiz Tool as an Illustrative Example10 Impact of Chemistry Information on Pathway Analysis; 11 Propagation of Concentration Perturbations in Equilibrium Protein Binding Networks; 12 An Adaptive System Model of the Yeast Glucose Sensor System; 13 Present and Future of Pathway Analysis in Drug Discovery; Index

Sommario/riassunto

This book introduces drug researchers to the novel computational approaches of pathway analysis and explains the existing applications that can save time and money in the drug discovery process. It covers traditional computational methods and software for pathway analysis microarray, proteomics, and metabolomics. It explains pathway reconstruction of diseases and toxic states, pathway analysis in various phases, dynamic modeling of drug responses, and more. This is a core resource for drug discovery and pharmaceutical industry researchers, chemists, and biologists and for professionals in rela
