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Sommario/riassunto	The second edition of Advances in Bioinformatics presents the latest developments in bioinformatics in gene discovery, genome analysis,

genomics, transcriptomics, proteomics, metabolomics, metabolic flux analysis, drug discovery, and drug repurposing. It includes advancements in the applications of bioinformatics in the analysis of non-coding RNA, next-generation sequencing, gene synthesis, genome-scale modeling, high throughput drug screening, precision medicine, automation, artificial intelligence, and machine learning. Additionally, the book highlights some of the areas in which bioinformatics resources and methods are being developed to support the drug discovery pipeline. The chapter also discusses the role of bioinformatics in modeling and simulations of molecular biology systems in pathways identification and design. It is a valuable source of information for beginners in bioinformatics and students, researchers, scientists, clinicians, practitioners, policymakers, and stakeholders who are interested in harnessing the potential of bioinformatics in biomedical and allied sciences.