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Nota di contenuto	Chapter 1. Graph Theory in the Biological Networks -- Chapter 2. Biological Networks Analysis -- Chapter 3. Network Analysis based software packages, tools, and web servers to accelerate bioinformatics research -- Chapter 4. Networks Analytics of Heterogeneous Big Data -- Chapter 5. Network Medicine: Methods and Applications -- Chapter 6. Role of R in Biological Network Analysis -- Chapter 7. Machine Learning in Biological Networks.
Sommario/riassunto	This book presents methods and tools of network biology and bioinformatics for understanding the disease dynamics and identification of drug targets. The initial section of chapters introduce the theoretical aspects followed by the different applications for construction and analysis of biological networks, methods for identifying crucial nodes in networks, and network dynamics. The book covers the latest advances in the network medicine, exploring the different types of biological networks, and their applications. It further reviews the role of R language in the network-based approaches that help in understanding biological systems and identifying biological functions. Towards the end, the book explores the recent developments and applications in machine learning and its potential for

advancing network biology. Finally, the book elucidates a comprehensive yet a representative description of challenges associated with the understanding of disease dynamics using network biology. Given its scope, the book is intended for researchers and advanced postgraduate students of bioinformatics, computational biology, and medical sciences.

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