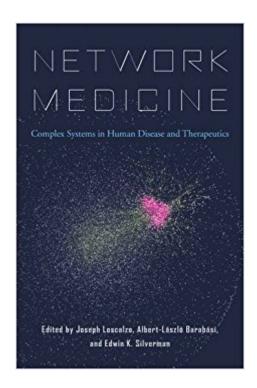


## The book was found

# Network Medicine: Complex Systems In Human Disease And Therapeutics





## Synopsis

Big data, genomics, and quantitative approaches to network-based analysis are combining to advance the frontiers of medicine as never before. Network Medicine introduces this rapidly evolving field of medical research, which promises to revolutionize the diagnosis and treatment of human diseases. With contributions from leading experts that highlight the necessity of a team-based approach in network medicine, this definitive volume provides readers with a state-of-the-art synthesis of the progress being made and the challenges that remain. Medical researchers have long sought to identify single molecular defects that cause diseases, with the goal of developing silver-bullet therapies to treat them. But this paradigm overlooks the inherent complexity of human diseases and has often led to treatments that are inadequate or fraught with adverse side effects. Rather than trying to force disease pathogenesis into a reductionist model, network medicine embraces the complexity of multiple influences on disease and relies on many different types of networks: from the cellular-molecular level of protein-protein interactions to correlational studies of gene expression in biological samples. The authors offer a systematic approach to understanding complex diseases while explaining network medicineâ ™s unique features, including the application of modern genomics technologies, biostatistics and bioinformatics, and dynamic systems analysis of complex molecular networks in an integrative context. By developing techniques and technologies that comprehensively assess genetic variation, cellular metabolism, and protein function, network medicine is opening up new vistas for uncovering causes and identifying cures of disease.

#### **Book Information**

Hardcover: 448 pages

Publisher: Harvard University Press; 1 edition (February 1, 2017)

Language: English

ISBN-10: 0674436539

ISBN-13: 978-0674436534

Product Dimensions: 1.2 x 6.5 x 9.5 inches

Shipping Weight: 2.1 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #138,549 in Books (See Top 100 in Books) #30 in Books > Medical Books >

Medical Informatics #98 in Books > Textbooks > Medicine & Health Sciences > Medicine >

Clinical > Diseases #110 in Books > Textbooks > Medicine & Health Sciences > Medicine >

### **Customer Reviews**

What will a human look like at molecular levels? The study behind the general concept of Network Medicine examines the effort to identify the blueprint and principles that will enable us to understand this complex life system at molecular levels. This book presents the state of the knowledge of network medicine and is an excellent reference for both experts in the area and general population interested in life science. (Weiniu Gan, National Heart, Lung, and Blood Institute)This book fills a gap in the literature by applying complex systems theory to the field of medicine. Such application is likely to trigger important results by promoting a very useful shift in perspective. Definitely a book to read. (Guido Caldarelli, IMT Institute for Advanced Studies Lucca)

Joseph Loscalzo is Chair of the Department of Medicine and Physician-in-Chief, Brigham and Women⠙s Hospital, and Hersey Professor of the Theory and Practice of Medicine, Harvard Medical School.Albert-Lászlà Barabási is Robert Gray Dodge Professor of Network Science and Director of the Center for Complex Network Research at Northeastern University.Edwin K. Silverman is Chief of the Channing Division of Network Medicine at Brigham and Womenâ ™s Hospital and Professor of Medicine at Harvard Medical School.

#### Download to continue reading...

Network Medicine: Complex Systems in Human Disease and Therapeutics Network Marketing: Go Pro in Network Marketing, Build Your Team, Serve Others and Create the Life of Your Dreams - Network Marketing Secrets Revealed, ... Books, Scam Free Network Marketing Book 1) Textbook of Therapeutics: Drug and Disease Management (Helms, Textbook of Therapeutics) Network Marketing For Introverts: Guide To Success For The Shy Network Marketer (network marketing, multi level marketing, mlm, direct sales) Pharmacology and Therapeutics for Dentistry, 4e (Pharmacology & Therapeutics for Dentistry) Applied Therapeutics: The Clinical Use of Drugs (APPLIED THERAPEUTICS (KODA-KIMBLE)) Kidney Disease: for beginners - What You Need to Know About Chronic Kidney Disease: Diet, Treatment, Prevention, and Detection (Chronic Kidney Disease - Kldney Stones - Kidney Disease 101) Gum Disease Cure (Gum Disease Cure, Periodontal Disease, Gum Disease, Gum Infection, Gingivitis treatment, Tooth Decay) The Gum Disease Cure: How I cured Periodontal Disease in 2 months (Gum Disease Periodontal Disease Periodontitis Receeding Gums) Introduction To Human Disease: Pathophysiology For Health Professionals (Introduction to Human Disease (Hart)) Toward Precision Medicine: Building a

Knowledge Network for Biomedical Research and a New Taxonomy of Disease Rapid Prototyping Software for Avionics Systems: Model-oriented Approaches for Complex Systems Certification (Iste) The Passive Voice and Reported Speech: Your grammar torch to shed light on passive voice, reported speech, complex subject, complex object and cleft (Brookgarbolt's treasure Book 2) How Goats Can Fight Poverty: Complex problems do not always need complex solutions Making Things Work: Solving Complex Problems in a Complex World Transgender Lives: Complex Stories, Complex Voices Engineering Systems: Meeting Human Needs in a Complex Technological World Glencoe Science: Human Body Systems, Student Edition (GLEN SCI: HUMAN BODY SYSTEMS) Glencoe Life iScience Module I: Human Body Systems, Grade 7, Student Edition (GLEN SCI: HUMAN BODY SYSTEMS) How to get every Network Diagram question right on the PMP® Exam:: 50+ PMP® Exam Prep Sample Questions and Solutions on Network Diagrams (PMP® Exam Prep Simplified) (Volume 3)

Contact Us

DMCA

Privacy

FAQ & Help