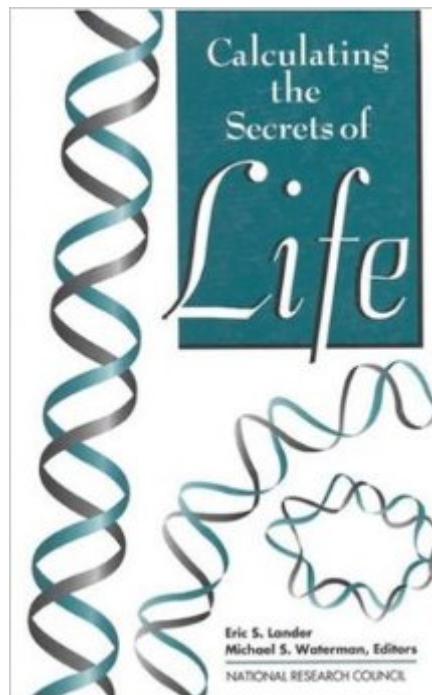


The book was found

Calculating The Secrets Of Life: Contributions Of The Mathematical Sciences To Molecular Biology



Synopsis

As researchers have pursued biology's secrets to the molecular level, mathematical and computer sciences have played an increasingly important role--in genome mapping, population genetics, and even the controversial search for "Eve," hypothetical mother of the human race. In this first-ever survey of the partnership between the two fields, leading experts look at how mathematical research and methods have made possible important discoveries in biology. The volume explores how differential geometry, topology, and differential mechanics have allowed researchers to "wind" and "unwind" DNA's double helix to understand the phenomenon of supercoiling. It explains how mathematical tools are revealing the workings of enzymes and proteins. And it describes how mathematicians are detecting echoes from the origin of life by applying stochastic and statistical theory to the study of DNA sequences. This informative and motivational book will be of interest to researchers, research administrators, and educators and students in mathematics, computer sciences, and biology.

Book Information

Hardcover: 300 pages

Publisher: National Academies Press; First Edition edition (April 6, 1995)

Language: English

ISBN-10: 0309048869

ISBN-13: 978-0309048866

Product Dimensions: 1 x 6.2 x 9.2 inches

Shipping Weight: 1.1 pounds

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,274,701 in Books (See Top 100 in Books) #97 in [Books > Science & Math > Mathematics > Applied > Biomathematics](#) #1710 in [Books > Science & Math > Biological Sciences > Biology > Molecular Biology](#) #2587 in [Books > Medical Books > Basic Sciences > Genetics](#)

[Download to continue reading...](#)

Calculating the Secrets of Life: Contributions of the Mathematical Sciences to Molecular Biology
Biology: The Ultimate Self Teaching Guide - Introduction to the Wonderful World of Biology - 3rd Edition (Biology, Biology Guide, Biology For Beginners, Biology For Dummies, Biology Books) High Throughput Screening: Methods and Protocols (Methods in Molecular Biology) (Methods in Molecular Biology, 190) Molecular Cell Biology (Lodish, Molecular Cell Biology) Some Mathematical

Questions in Biology: The Dynamics of Excitable Media (Lectures on Mathematics in the Life Sciences) Personal Injury Schedules: Calculating Damages (Third Edition) Molecular Biology and Pathogenesis of Peste des Petits Ruminants Virus (SpringerBriefs in Animal Sciences) Music that works: Contributions of biology, neurophysiology, psychology, sociology, medicine and musicology Student Solutions Manual for Stewart/Day's Calculus for Life Sciences and Biocalculus: Calculus, Probability, and Statistics for the Life Sciences Mathematical Modeling of Collective Behavior in Socio-Economic and Life Sciences (Modeling and Simulation in Science, Engineering and Technology) Introductory Mathematical Analysis for Business, Economics and the Life and Social Sciences (12th Edition) Student Solutions Manual for Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences Introductory Mathematical Analysis for Business, Economics, and the Life and Social Sciences (13th Edition) [Hardcover] [2010] 13 Ed. Ernest F. Haeussler, Richard S. Paul, Richard J. Wood College Mathematics for Business, Economics, Life Sciences & Social Sciences (11th Edition) Finite Mathematics for Business, Economics, Life Sciences, and Social Sciences (13th Edition) Calculus for Business, Economics, Life Sciences, and Social Sciences (13th Edition) Finite Mathematics for Business, Economics, Life Sciences and Social Sciences, Books a la Carte Edition (13th Edition) Calculus for Biology and Medicine (Calculus for Life Sciences Series) Volume 1 - Cell Biology and Genetics (Biology: the Unity & Diversity of Life) The Basic Writings of Sigmund Freud (Psychopathology of Everyday Life, the Interpretation of Dreams, and Three Contributions To the Theory of Sex)

[Dmca](#)