

1. Record Nr.	UNINA9910483429603321
Titolo	Computational Methods in Systems Biology : International Conference, CMSB 2006, Trento, Italy, October 18-19, 2006, Proceedings // edited by Corrado Priami
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-46167-1
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (X, 323 p.)
Collana	Lecture Notes in Bioinformatics, , 2366-6331 ; ; 4210
Altri autori (Persone)	PriamiCorrado
Disciplina	572.80285
Soggetti	Bioinformatics Computer simulation Software engineering Database management Computational and Systems Biology Computer Modelling Software Engineering Database Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Modal Logics for Brane Calculus -- Deciding Behavioural Properties in Brane Calculi -- Probabilistic Model Checking of Complex Biological Pathways -- Type Inference in Systems Biology -- Stronger Computational Modelling of Signalling Pathways Using Both Continuous and Discrete-State Methods -- A Formal Approach to Molecular Docking -- Feedbacks and Oscillations in the Virtual Cell VICE -- Modelling Cellular Processes Using Membrane Systems with Peripheral and Integral Proteins -- Modelling and Analysing Genetic Networks: From Boolean Networks to Petri Nets -- Regulatory Network Reconstruction Using Stochastic Logical Networks -- Identifying Submodules of Cellular Regulatory Networks -- Incorporating Time Delays into the Logical Analysis of Gene Regulatory Networks -- A Computational Model for Eukaryotic Directional Sensing -- Modeling Evolutionary Dynamics of HIV Infection -- Compositional Reachability

Analysis of Genetic Networks -- Randomization and Feedback
Properties of Directed Graphs Inspired by Gene Networks --
Computational Model of a Central Pattern Generator -- Rewriting Game
Theory as a Foundation for State-Based Models of Gene Regulation --
Condition Transition Analysis Reveals TF Activity Related to Nutrient-
Limitation-Specific Effects of Oxygen Presence in Yeast -- An In Silico
Analogue of In Vitro Systems Used to Study Epithelial Cell
Morphogenesis -- A Numerical Aggregation Algorithm for the Enzyme-
Catalyzed Substrate Conversion -- Possibilistic Approach to
Biclustering: An Application to Oligonucleotide Microarray Data
Analysis.

Sommario/riassunto

This book constitutes the refereed proceedings of the International Conference on Computational Methods in Systems Biology, CMSB 2006, held in Trento, Italy, in October 2006. The 22 fully revised papers presented together with 2 invited talks were carefully reviewed and selected from 68 submissions. The papers present a variety of techniques from computer sciences, such as language design, concurrency theory, software engineering, and formal methods.
