Record Nr. UNISA996466207603316 Computational Methods in Systems Biology [[electronic resource]]: **Titolo** 10th International Conference, CMSB 2012, London, UK, October 3-5. 2012, Proceedings / / edited by David Gilbert, Monika Heiner Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa , 2012 **ISBN** 3-642-33636-1 Edizione [1st ed. 2012.] 1 online resource (XII, 396 p. 145 illus.) Descrizione fisica Lecture Notes in Bioinformatics; ; 7605 Collana Disciplina 572.80285 Soggetti **Bioinformatics** Computers Computer simulation **Bioinformatics** Computational biology Software engineering Computer science—Mathematics Computational Biology/Bioinformatics Computation by Abstract Devices Simulation and Modeling Computer Appl. in Life Sciences Software Engineering Symbolic and Algebraic Manipulation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali International conference proceedings. Includes bibliographical references and author index. Nota di bibliografia Nota di contenuto Differential and Integral Views of Gene-Phenotype Relations --Resolving the Three-Dimensional Histology of the Heart -- Bimodal Protein Distributions in Heterogeneous Oscillating Systems --Expressive Statistical Model Checking of Genetic Networks with Delayed Stochastic Dynamics -- Detection of Multi-clustered Genes and Community Structure for the Plant Pathogenic Fungus -- Analysis of Modular Organization of Interaction Networks Based on Asymptotic

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Networks -- Investigating Co-infection Dynamics through Evolution of Bio-PEPA Model Parameters: A Combined Process Algebra and Evolutionary Computing Approach -- Population Dynamics P Systems on CUDA -- Efficient Handling of Large Signaling-Regulatory Networks by Focusing on Their Core Control -- Simulating Insulin Infusion Pump Risks by In-Silico Modeling of the Insulin-Glucose Regulatory System -- Revisiting the Training of Logic Models of Protein Signaling Networks with a Formal Approach Based on Answer Set Programming.

Sommario/riassunto

This book constitutes the thoroughly refereed conference proceedings of the 10th International Conference on Computational Methods in Systems Biology, CMSB 2012, held in London, UK, during October 3-5, 2012. The 17 revised full papers and 8 flash posters presented together with the summaries of 3 invited papers were carefully reviewed and selected from 62 submissions. The papers cover the analysis of biological systems, networks, and data ranging from intercellular to multiscale. Topics included high-performance computing, and for the first time papers on synthetic biology.