Record Nr. UNINA9910830644803321 Bioinformatics: from nucleic acids and proteins to cell metabolism: **Titolo** contributions to the conference on "Bioinformatics" October 9 to 11, 1995 Braunschweig, Germany / / edited by Dietmar Schomburg, Uta Pubbl/distr/stampa Weinheim, [Germany]:,: VCH,, 1995 ©1995 **ISBN** 1-281-84272-9 9786611842727 3-527-61519-9 3-527-61518-0 Descrizione fisica 1 online resource (208 p.) Collana GBF Monographs;; Volume 18 Disciplina 572.60285 572.80285 Soggetti DNA data banks Cytology - Databases Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Bioinformatics: From Nucleic Acids and Proteins to Cell Metabolism; Contents; List of Authors; I. Biological Data Bases; An Integrated Services Approach to Biological Sequence Databases; II. DNA and RNA; Das Gensequenzanalysesystem DIANA; Statistical Analysis of DNA Sequences; A Consensus Match Scoring System that is Correlated with Biological Functionality; Algorithmic Representation of Large RNA Folding Landscapes; III. Protein Sequences and Structures; Statistical Significance of Local Alignments with Gaps; Classification of Local Protein Structural Motifs by Kohonen Networks Data set heterogeneities and their effects on the derivation of contact potential3D-Segmentierungstechniken und vektorwertige Bewertungsfunktionen fur symbolisches Protein-Protein-Docking; An Algorithm for the Protein Docking Problem; IV. From Molecules to Cell

Metabolism; Force Field Minimization: Domain Decomposition, Positive Definite Functions, and Wavelets; Ahnlichkeitsanalyse biologisch aktiver

Molekule mit durch Autokorrelationsvektoren trainierten selbstorganisierenden Karten; Algebraic Methods for the Analysis of Redundancy and Identifiability in Metabolic 13C-Labelling Systems Simulation and Animation of Intracellular Diffusion

Sommario/riassunto

Bioinformatics, in this context the application of computer science to biological problems, has become an indispensable part of any research in the biosciences. Rapid developments in gene sequencing, structure determination as well as rational protein engineering and design have made it necessary for biologists, chemists, and computer scientists to channel their expertise into large scale collaborative projects. This GBF Monograph gives a general overview of the latest versatile activities in bioinformatics:* Biological Data Bases* DNA and RNA* Protein Sequences and Structures<