Record Nr. UNINA9910484976703321 Pattern recognition in bioinformatics: international workshop, PRIB Titolo 2006, Hong Kong, China, August 20, 2006; proceedings // Jagath C. Rajapakse, Limsoon Wong, Raj Acharya (eds.) Berlin; ; New York, : Springer, c2006 Pubbl/distr/stampa 3-540-37447-7 **ISBN** Edizione [1st ed. 2006.] Descrizione fisica 1 online resource (XII, 186 p.) Lecture notes in computer science. Lecture notes in bioinformatics. Collana 0302-9743 : : 4146 LNCS sublibrary. SL 8, Bioinformatics Altri autori (Persone) RajapakseJagath Chandana WongLimsoon <1965-> AcharyaRajgopal Sundaraj Disciplina 570.285 Soggetti **Bioinformatics** Computational biology Computer vision in medicine 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 pt. 1. Signal and motif detection; gene selection -- pt. 2. Models of DNA, RNA, and protein structures -- pt. 3. Biological databases and imaging. Sommario/riassunto The field of bioinformatics has two main objectives: the creation and maintenance of biological databases, and the discovery of knowledge from life sciences data in order to unravel the mysteries of biological function, leading to new drugs and therapies for human disease. Life sciences data come in the form of biological sequences, structures, pathways, or literature. One major aspect of discovering biological knowledge is to search, predict, or model specific patterns of a given dataset, which have some relevance to an important biological phenomenon or another dataset. To date, many pattern recognition algorithms have been applied or catered to address a wide range of bioinformatics problems. The 2006 Workshop of Bioinformatics in Pattern Recognition (PRIB 2006) marks the beginning of a series of

workshops that is aimed at gathering researchers applying pattern

recognition algorithms in an attempt to resolve problems in computational biology and bioinformatics. This volume presents the proceedings of Workshop PRIB 2006 held in Hong Kong, China, on August 20, 2006. It includes 19 technical contributions that were selected by the Program Committee from 43 submissions. We give a brief introduction to pattern recognition in bioinformatics in the first paper. The rest of the volume consists of three parts. Part 1: signal and motif detection, and gene selection. Part 2: models of DNA, RNA, and protein structures. Part 3: biological databases and imaging.