1. Record Nr. UNINA9910298410803321 Autore Kangueane Pandjassarame Titolo Bioinformation Discovery: Data to Knowledge in Biology / / by Pandjassarame Kangueane Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-95327-3 Edizione [2nd ed. 2018.] Descrizione fisica 1 online resource (226 pages) 570.285 Disciplina Soggetti **Bioinformatics Immunology** Vaccines **Proteins** Computational Biology/Bioinformatics Vaccine Protein Structure Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Creating Datasets -- Tools and Techniques -- Protein Subunits Nota di contenuto Interaction -- Homodimer Folding and Binding -- Fusion Proteins --Major Histocompatibility Complex (MHC) and Peptide Binding -- HLA Supertypes -- T-Epitope Designer -- Eukaryotic Genes, Functions, Genomes, Design, and Evolution -- Single Nucleotide Polymorphism. Genes, Proteins and Diseases -- Protein Functions Driven By Surface Electrostatics. Sommario/riassunto This new edition continues to illustrate the power of biological data in knowledge discovery. It describes biological data types and representations with examples for creating a workflow in bioinformation discovery. The concepts in knowledge discovery from data are illustrated using line diagrams. The principles and concepts in knowledge discovery are used for the development of prediction models for simulations of biological reactions and events. Advanced

> topics in molecular evolution and cellular & molecular biology are addressed using bioinformation gleaned through discovery. Each

chapter contains approximately 10 exercises for practice. This will help students to expand their problem solving skills in Bioinformation Discovery. In this new edition, there are three new chapters covering single nucleotide polymorphism, genes, proteins and disease, and protein functions driven by surface electrostatics. .