1. Record Nr. UNINA9910826586903321 Autore **Ghosh Shyamasree Titolo** Computational immunology Basics / / Shyamasree Ghosh Pubbl/distr/stampa [New York, NY]:,: CRC Press,, 2020 **ISBN** 1-351-02554-6 1-351-02552-X 1-351-02553-8 Descrizione fisica 1 online resource (xxxvi, 312 pages) Disciplina 616.079 Soggetti **Immunology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Overview of Immunology and Computational Immunology -- Immune Nota di contenuto Organs and Cells, Antigen, and Antibody, B-Cell, and T-Cell -- Antigen Processing and Presentation -- Innate Immunity -- Inflammation --Infection and Immunity -- Transplantation Immunology -- Vaccines --Diseases due to Abnormalities of the Immune System -- Cancer Biology. Sommario/riassunto The immune system is highly complex system with large number of macromolecules, signaling pathways, protein-protein interactions, and gene expressions. Studies from genomics, transcriptomics. metabolomics are generating huge high throughput data that needs to be analyzed for understanding the Immune system in Health and Disease. Computational approaches arehelping in understanding the study of complex biology of immunology and thereby enabling design of therapeutic strategies in diseases like infectious diseases, immunodeficiency, allergic, hypersensitive, autoimmune disorders and diseases like Cancer, HIV etc. Computational Immunology: Basics highlights the basics of the immune system and function in health and disease. This book offers comprehensive coverage of the most essential topics, including Overview of Immunology and computational Immunology Immune organs and cells, antigen, antibody, B, cell, T cell Antigen Processing and presentation Diseases due to abnormalities of

the immune system Cancer Biology.