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Sommario/riassunto

Computational Immunology: Applications focuses on different mathematical models, statistical tools, techniques, and computational modelling that helps in understanding complex phenomena of the immune system and its biological functions. The book also focuses on the latest developments in computational biology in designing of drugs, targets, biomarkers for early detection and prognosis of a disease. It highlights the applications of computational methods in deciphering the complex processes of the immune system and its role in health and disease. This book discusses the most essential topics, including Next generation sequencing (NGS) and computational immunology Computational modelling and biology of diseases Drug designing Computation and identification of biomarkers Application in organ transplantation Application in disease detection and therapy Computational methods and applications in understanding of the invertebrate immune system Shyamasree Ghosh (MSc, PhD, PGDHE, PGDBI) Scientific Officer (F), is currently working in the School of Biological Sciences, National Institute of Science Education and Research (NISER), Bhubaneswar, DAE, Govt of India, graduated from the prestigious Presidency College Kolkata in 1998. She was awarded the prestigious National Scholarship from the Government of India. She has worked and published extensively in glycobiology, sialic acids, immunology, stem cells and nanotechnology. She has authored several publications that include books and encyclopedia chapters in reputed journals and books.