1. Record Nr. UNINA9910253907903321 Genome Analysis and Human Health / / edited by Leena Rawal, Sher Ali Titolo Singapore:,: Springer Singapore:,: Imprint: Springer,, 2017 Pubbl/distr/stampa **ISBN** 981-10-4298-5 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XI, 168 p. 19 illus. in color.) Disciplina 611.01816 599.935 Soggetti Human genetics Molecular biology Cancer research Nucleic acids Biomedical engineering **Human Genetics** Molecular Medicine Cancer Research **Nucleic Acid Chemistry** Biomedical Engineering/Biotechnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Chapter 1. Genetic and epigenetic regulation of autophagy in cancer --Chapter 2. Genome Analysis and Cancer -- Chapter 3. Cancer Genomics and Precision Medicine: a way towards early diagnosis and effective cancer treatment -- Chapter 4. Genetics of Liver Diseases --Chapter 5. Implication of Pre-replication Complex Proteins in Human Disease -- Chapter 6. Non-muscle myosin II motor proteins in health and diseases -- Chapter 7. Bioinformatics Databases: Implications in Human Health -- Chapter 8. Genomics of the Human Y chromosome: Applications and Implications -- Chapter 9. Human Microbiome: Implications on health and diseases. This book highlights selected current data and its relevance in the Sommario/riassunto

human health care system, offering a fundamental primer on genetics

and human health. With the advent of new high-throughput

technologies (for the whole genome including exome sequencing), the conventional focus on genetics and individual genes is now shifting toward the analysis of complex genes, gene-gene interactions and the association between genes and environment, including epigenetics. The rapidly changing scientific research landscape, with the ever-growing influx of data on one hand and emergence of newer and more complicated diseases on the other, has created a dilemma for researchers and caregivers, who are still hopeful that advances in genetics and genomics will provide avenues for the understanding, prevention and possible cure of human diseases. The book focuses on the interactions between genes and proteins at both the transcriptome and proteome levels, which in turn affect the human genome and health. Additionally, it covers the domain that must be explored in order to understand the gene-gene and protein-protein interactions that contribute to human health. The book offers a valuable guide for all students and researchers working in the area of molecular genetics and genomics.