Record Nr. UNINA9910830283903321 Medical biostatistics for complex diseases [[electronic resource] /] / **Titolo** edited by Frank Emmert-Streib and Matthias Dehmer Pubbl/distr/stampa Weimheim,: Wiley-VCH, 2010 **ISBN** 1-282-68778-6 9786612687785 3-527-63033-3 3-527-63034-1 Descrizione fisica 1 online resource (413 p.) Altri autori (Persone) Emmert-StreibFrank **DehmerMatthias** 610.72721 Disciplina 614.4015195 Soggetti Medicine - Research - Statistical methods Medical statistics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Medical Biostatistics for Complex Diseases; Foreword; Contents: Preface: List of Contributors: Part One: General Biological and Statistical Basics; 1 The Biology of MYC in Health and Disease: A High Altitude View: 1.1 Introduction: 1.2 MYC and Normal Physiology: 1.3 Regulation of Transcription and Gene Expression; 1.4 Metabolism; 1.5 Cell-Cycle Regulation and Differentiation; 1.6 Protein Synthesis; 1.7 Cell Adhesion; 1.8 Apoptosis; 1.9 MicroRNAs; 1.10 Physiological Effects of Loss and Gain of c-mvc Function in Mice: 1.10.1 Loss of Function 1.10.2 Gain of Function: Inducible Transgenic Animals1.11 Contributions of MYC to Tumor Biology; 1.12 Introduction of Hematopoietic Malignancies; 1.13 Mechanisms of MYC Dysregulation in Hematological Malignancies; 1.14 Mutation(s) in the MYC Gene in Hematological Cancers; 1.15 Role of MYC in Cell Cycle Regulation and Differentiation in Hematological Cancers; 1.16 Role of BCR Signaling in Conjunction with MYC Overexpression in Lymphoid Malignancies; 1.17

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Sommario/riassunto

A collection of highly valuable statistical and computational approaches designed for developing powerful methods to analyze large-scale high-throughput data derived from studies of complex diseases. Such diseases include cancer and cardiovascular disease, and constitute the major health challenges in industrialized countries. They are characterized by the systems properties of gene networks and their interrelations, instead of individual genes, whose malfunctioning manifests in pathological phenotypes, thus making the analysis of the resulting large data sets particularly challenging. This is