

1. Record Nr.	UNINA9910143712203321
Titolo	Immunogenomics and human disease [[electronic resource] /] / [edited by] Andras Falus
Pubbl/distr/stampa	Chichester, West Sussex, England ; ; Hoboken, NJ, : John Wiley, c2006
ISBN	1-280-41112-0 9786610411122 0-470-03409-2 0-470-03324-X
Descrizione fisica	1 online resource (558 p.)
Altri autori (Persone)	FalusAndras
Disciplina	616.0796 616.979
Soggetti	Immunogenetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Immunogenomics and Human Disease; Contents; Preface; List of Contributors; 1 Genotyping methods and disease gene identification; 1.1 Introduction; 1.2 Genotyping of single-nucleotide polymorphisms; 1.3 Methods for interrogating SNPs; 1.4 Analysis formats; 1.5 The current generation of methods for SNP genotyping; 1.6 The next generation; 1.7 Classical HLA typing; 1.8 MHC haplotypes; 1.9 Molecular haplotyping; 1.10 Microhaplotyping; 1.11 MHC and disease associations; 1.12 Conclusions; Acknowledgements; References 2 Glycomics and the sugar code: primer to their structural basis and functionality2.1 Introduction; 2.2 Lectins as effectors in functional glycomics; 2.3 Galectins: structural principles and intrafamily diversity; 2.4 Ligand-dependent levels of affinity regulation; 2.5 Perspectives for galectin-dependent medical applications; 2.6 Conclusions; References; 3 Proteomics in clinical research: perspectives and expectations; 3.1 Introduction; 3.2 Proteomics: tools and projects; 3.3 Discussion; 3.4 Concluding remarks; Acknowledgements; References 4 Chemical genomics: bridging the gap between novel targets and small molecule drug candidates. Contribution to immunology4.1 Introduction of chemical genomics: definitions; 4.2 Chemical

microarrays; 4.3 Small molecule and peptide probes for studying binding interactions through creating a covalent bond; 4.4 Photochemical proteomics; 4.5 General aspects of photoaffinity labelling; 4.6 Photoreactive probes of biomolecules; 4.7 Application to the immunobiology of living cells; 4.8 Multifunctional photoprobes for rapid analysis and screening; 4.9 Advanced application to functional proteomics

4.10 SummaryReferences; 5 Genomic and proteomic analysis of activated human monocytes; 5.1 Primary human monocytes, as a model system; 5.2 Transcriptional profiling of activated monocytes; 5.3 Functional genomics; 5.4 Proteomic analysis of activated human monocytes; References; 6 Bioinformatics as a problem of knowledge representation: applications to some aspects of immunoregulation; 6.1 Introduction; 6.2 Sequences and languages; 6.3 Three-dimensional models; 6.4 Genomes, proteomes, networks; 6.5 Computational tools; 6.6 Information processing in the immune system; 6.7 Concluding remarks

References7 Immune responsiveness of human tumours; 7.1 Introduction; 7.2 Defining tumour immune responsiveness; 7.3 Studying immune responsiveness in human tumours; 7.4 Immune responsiveness in the context of therapy; 7.5 The spatial dimension in the quest for the target; 7.6 Studying the receiving end - tumour as an elusive target for immune recognition; 7.7 The role of the host in determining immune responsiveness; 7.8 Concluding remarks; References; 8 Chemokines regulate leukocyte trafficking and organ-specific metastasis; 8.1 Chemokines and chemokine receptors

8.2 Chemokine receptors in the organ-specific recruitment of tumour cells

---

#### Sommario/riassunto

This book provides an overview of key conceptual and molecular technologies being deployed in immunogenomics, followed by detailed evaluations of the impact of genomics and systems biology on important areas such as cancer immunology, autoimmunity, allergy and the response to infection.

---