Record Nr. UNISA996426329203316 Infection and autoimmunity / / edited by Yehuda Shoenfeld, Nancy **Titolo** Agmon-Levin, Noel R. Rose Pubbl/distr/stampa London, England:,: Academic Press,, 2015 ©2015 0-444-63272-7 **ISBN** 0-444-63269-7 Edizione [2nd ed.] Descrizione fisica 1 online resource (1071 p.) Disciplina 616.97/8 Autoimmune diseases - immunology Soggetti Infections - immunology Electronic books. 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 at the end of each chapters and index. Nota di contenuto Front Cover; Infection and Autoimmunity; Copyright; Contents; Contributors; Chapter 1: Introduction; 1. Introduction; 2. Rheumatic Fever, A Prime Example; 3. Guillain-Barre Syndrome, A Second Example; 4. Underlying Mechanisms; 5. Autoimmunity Vs. Autoimmune Disease: The Adjuvant Effect; 6. The Problems and the Promise; 7. Lessons of Molecular (Epitope) Mimicry: 8. Views of the Future: Acknowledgements: References: Chapter 2: Infections and Autoimmune Diseases: An Interplay of Pathogenic and Protective Links; 1. Introduction; 2. Pathogenic Roles of Infections; 2.1. Viruses; 2.2. **Bacteria** 2.3. Fungi2.4. Parasites; 3. Protective Role of Infections; References; Part 1: Mechanisms of Autoimmunity induction by infectious agents and vaccination; Chapter 3: Molecular Mimicry and Autoimmunity; 1. Introduction; 2. Common Infectious Agents and Their Roll in Setting Autoimmune Disorders; 2.1. Viruses; 2.2. Bacteria; 2.3. Parasites; 3. Neuro-Autoimmune Disease: 4. Endocrinological Autoimmune Disease: 5. Inflammatory Articular Disease; 6. Vasculitides; 6.1. Summary and

Suggestions for the Future: `Control of Molecular mimicry; References Chapter 4: Epitope Spreading in Autoimmune Diseases1. Introduction:

- 2. Examples of Epitope Spreading in Autoimmune Diseases; 2.1. Multiple Sclerosis and Experimental Autoimmune Encephalomyelitis; 2.2. Insulin-Dependent Diabetes Mellitus or Type I Diabetes; 2.3. Arthritis; 2.4. Systemic Lupus Erythematosus; 2.5. Other Autoimmune Diseases; 3. Mechanisms Underlying Epitope Spreading During the Course of an Autoimmune Disease; 3.1. Upregulation of the Display of Cryptic/Subdominant Epitopes Within a Self Antigen Under Inflammatory Conditions
- 3.2. Release of Self Antigens and Their Processing and Presentation Following Tissue Damage in the Course of a Microbial ...3.3. Post-Translational Modification of Antigens; 3.4. The Frequency and Avidity of Epitope-Specific Precursor T Cells Within the Mature T Cell Repertoire Favoring Respons...; 3.5. Presentation of Neo-Epitopes Within a Particular Self Antigen by the B Cells Specific for That Antigen; 3.6. The Influence of Antigen-Bound Antibodies on the Processing and Presentation of T Cell Epitopes Within That Antigen; 3.7. Antigen Cross-Presentation and Epitope Spreading
- 3.8. Site of Initiation of Epitope Spreading: Target Organ Versus the Periphery4. Physiological Significance of Epitope Spreading: Involvement of Epitope Spreading in the Pathogenesis of Autoimmune Di...; 5. Implications of Epitope Spreading in Immunotherapy of Autoimmune Diseases: Hindering vs. Facilitating the Control of t...; 6. Concluding Remarks; References; Chapter 5: CD5-Expressing B-1 Cells and Infection; 1. Introduction; 2. Characterization of CD5+ B Cells; 2.1. Origins of the Cells; 2.2. Functions of CD5+ B Cells; 2.3. Control of the CD5+ B Cell Population
- 3. CD5+ B Cells and Disease

Sommario/riassunto

Autoimmune diseases are conditions where the immune system attacks the body organs instead of foreign invaders. This book deals with the various mechanisms by which infectious agents can trigger autoimmunity such as molecular mimicry and polyclonal activation. An overview is given with regard to bacteria, viruses, and parasites associated with autoimmunity, and a summary is given on classical autoimmune diseases and the infecting agents that can induce them. Includes completely updated and new chaptersBrings the reader up to date and allows easy access to individual topics in one placeIdentifie