

AUTOIMMUNITY

Genetic, Immunologic, Virologic,
and Clinical Aspects

Edited by

NORMAN TALAL, M.D.

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and Clinical Aspects

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NORMAN TALAL, M.D.

Department of Medicine

School of Medicine

University of California, San Francisco

and Clinical Immunology and Arthritis Section

Veterans Administration Hospital

San Francisco, California



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List of Contributors

Numbers in parentheses indicate the pages on which the authors' contributions begin.

- A. C. ALLISON (91), Division of Cell Pathology, Clinical Research Centre, Medical Research Council, Harrow, Middlesex, England
- ARTHUR J. AMMANN (479), Department of Pediatric Immunology, University of California, San Francisco, California
- FRITZ H. BACH (1), Immunobiology Research Center and Departments of Medical Genetics and Surgery, The University of Wisconsin, Madison, Wisconsin
- J. F. BACH (207), Inserm U25, Hospital Necker, Paris, Cedex, France
- M. A. BACH (207), Inserm U25, Hospital Necker, Paris, Cedex, France
- L. D. BACON (63), Department of Immunology and Microbiology, Wayne State University School of Medicine, Detroit, Michigan
- P. E. BIGAZZI (63), Department of Pathology, University of Connecticut School of Medicine, Farmington, Connecticut
- PAUL H. BLACK (385), Department of Medicine, Massachusetts General Hospital, and Harvard Medical School, Boston, Massachusetts
- F. M. BURNET (513), Department of Microbiology, University of Melbourne, Parkville, Victoria, Australia
- C. CARNAUD (207), Inserm U25, Hospital Necker, Paris, Cedex, France
- P. R. CARNEGIE (597), Russell Grimwade School of Biochemistry, University of Melbourne, Parkville, Victoria, Australia
- IRUN R. COHEN (231), Department of Cell Biology, The Weizmann Institute of Science, Rehovot, Israel
- M. DARDENNE (207), Inserm U25, Hospital Necker, Paris, Cedex, France
- DEBORAH DONIACH (621), Departments of Immunology and Nuclear Medicine, The Middlesex Hospital Medical School, London, England
- P. ESQUIVEL* (63), Facultad de Medicina, Departamento de Medicina Experimental, Universidad Austral de Chile, Valdivia, Chile

* Present address: Universidad Austral de Chile, Valdivia, Chile.

- RICHARD K. GERSHON (171), Department of Pathology, Yale University School of Medicine, New Haven, Connecticut
- DAVID GLASS (531), Department of Medicine, Robert B. Brigham Hospital, Harvard Medical School, Boston, Massachusetts
- ALAN O. HAAKENSTAD (277), Division of Rheumatology, Department of Medicine, University of Washington, Seattle, Washington
- MARTIN S. HIRSCH (385), Department of Medicine, Massachusetts' General Hospital, and Harvard Medical School, Boston, Massachusetts
- HEINZ KOHLER (267), La Rabida-University of Chicago Institute, and Departments of Pathology and Biochemistry, University of Chicago, Chicago, Illinois
- Y. M. KONG (63), Department of Immunology and Microbiology, Wayne State University School of Medicine, Detroit, Michigan
- JAY A. LEVY (403), Department of Medicine and Cancer Research Institute, University of California, San Francisco, California
- I. R. MACKAY (597), Clinical Research Unit, The Walter and Eliza Hall Institute of Medical Research, Royal Melbourne Hospital, Victoria, Australia
- MART MANNIK (277), Division of Rheumatology, Department of Medicine, University of Washington, Seattle, Washington
- NICHOLAS J. MARSHALL (621), Department of Nuclear Medicine, The Middlesex Hospital Medical School, London, England
- J. C. MONIER (207), Hopital Edouard Herriot, Lyon, Cedex, France
- PHILIP Y. PATERSON (643), Department of Microbiology-Immunology, The Medical and Dental Schools, Northwestern University, Chicago, Illinois
- MAX R. PROFFITT (385), Department of Medicine, Massachusetts General Hospital, and Harvard Medical School, Boston, Massachusetts
- N. R. ROSE (63), Department of Immunology and Microbiology, Wayne State University School of Medicine, Detroit, Michigan
- DONALD R. ROWLEY (267), La Rabida-University of Chicago Institute, Chicago, Illinois
- PETER H. SCHUR (531), Department of Medicine, Robert B. Brigham Hospital, Harvard Medical School, Boston, Massachusetts
- R. S. SUNDICK (63), Department of Immunology and Microbiology, Wayne State University School of Medicine, Detroit, Michigan
- NORMAN TALAL (183), Department of Medicine, School of Medicine, University of California, San Francisco, and Clinical Immunology and Arthritis Section, Veterans Administration Hospital, San Francisco, California
- NOËL L. WARNER* (33), Genetics Unit, The Walter and Eliza Hall Institute of Medical Research, Melbourne, Australia
- WILLIAM O. WEIGLE (141), Department of Immunopathology, Scripps Clinic and Research Foundation, La Jolla, California
- HARTMUT WERKERLE (231), Max-Planck-Institut für Immunbiologie, Freiburg, Germany

* Present address: Department of Pathology, University of New Mexico School of Medicine, Albuquerque, New Mexico.

- HANS WIGZELL (693), Department of Immunology, Biomedical Center, Uppsala University, Uppsala, Sweden
- RALPH C. WILLIAMS, JR. (457), Department of Internal Medicine, Bernalillo County Medical Center, University of New Mexico School of Medicine, Albuquerque, New Mexico
- ROLF M. ZINKERNAGEL (363), Department of Immunopathology, Scripps Clinic and Research Foundation, La Jolla, California
- NATHAN J. ZVAIFLER (569), Division of Rheumatology, Department of Medicine, University of California, San Diego, La Jolla, California

Preface

The pathogenesis of autoimmunity appears to involve genetic, immunologic, and viral factors interacting through complicated mechanisms still poorly understood. Recent evidence suggests that self-recognition of histocompatibility antigens may be a normal event in immune surveillance which promotes simultaneous recognition of viral or other new cell surface antigens. The "network theory" of immune regulation through idotype recognition represents another physiological expression of autoimmunity which may have potential for immune tolerance and immunotherapy. The rapidly expanding area of autoimmunity directed against receptors for hormones and neurotransmitters opens the possibility that many presumed nonimmunologic diseases may actually have an underlying immune basis. The relationship between autoimmunity and malignant lymphoproliferation leads into the broad area of neoplasia and the normal control of cellular growth and differentiation.

Autoimmunity, then, is an important immunobiologic clue into the physiology and regulation of the immune system. At the same time, autoimmunity is an aspect of clinical medicine that is relevant to many afflictions involving several different organ systems. The task of editing a volume on autoimmunity becomes a challenge potentially as broad as immunology and medicine.

In selecting the contributors to this book, I hoped to create a compendium of fact and opinion that might state the problems and point out future directions in a way described so beautifully by George Santayana:

Our knowledge is a torch of smokey pine which lights the path but one step ahead across a void of mystery and dread.

If successful, each chapter in this volume may serve as a torch illuminating a small area of the problem. Hopefully, the whole will be greater than

the sum of its parts and the biologic mystery of autoimmunity will be found on and between these pages.

I am deeply grateful to the busy scientists and clinicians who found time to prepare these chapters, to Maurice Landy who suggested that I undertake this responsibility, and to the staff of Academic Press whose help has been invaluable. To the reader, I apologize not for what is on these pages, but for the many areas not included.

Norman Talal, M.D.

Contents

List of Contributors	xiii
Preface	xvii

***Part I* GENETIC ASPECTS**

***Chapter 1* The Major Histocompatibility Complex and Its Relationship to Autoimmune Disease**

FRITZ H. BACH

I. Basic Genetics	4
II. Markers for MHC Genes	8
III. MHC Loci	9
IV. Genetic Control of CML	15
V. Techniques for Detection of MHC LD Antigens	16
VI. Modification of the SD Antigens	19
VII. <i>In Vivo</i> Role of MHC Antigens	22
VIII. Disease Susceptibility Genes	22
IX. Summary	29
References	30

***Chapter 2* Genetic Aspects of Autoimmune Disease in Animals**

NOEL L. WARNER

I. Introduction	33
II. Genetic Analysis of Autoimmunity in NZ Mouse Strains	35
III. Immune Responsiveness of NZ Mouse Strains	49
IV. Genetic Control in Other Autoimmune Diseases	56

V. Conclusions	59
References	59

Chapter 3 Genetic Regulation in Autoimmune Thyroiditis

N. R. ROSE, L. D. BACON, R. S. SUNDICK,
Y. M. KONG, P. ESQUIVEL,
AND P. E. BIGAZZI

I. Human Thyroid Disease	63
II. Experimentally Induced Thyroiditis	66
III. Spontaneously Appearing Thyroiditis	75
IV. Conclusions	84
References	85

Part II IMMUNOLOGIC ASPECTS

Chapter 4 Autoimmune Diseases: Concepts of Pathogenesis and Control

A. C. ALLISON

I. Introduction	92
II. The T Lymphocyte Bypass Concept	95
III. The Concept of T Lymphocyte Suppression of Autoimmunity	109
IV. Autoimmune Diseases Mediated by Autoantibodies	115
V. Collaboration of Autoantibodies and Complement	117
VI. Collaboration of Autoantibodies and Mononuclear Phagocytes	120
VII. Pathogenesis of Disease by Autoantibodies Generating Immune Complexes	122
VIII. Collaboration of Autoantibodies with Nonspecific Effector Cells (K Cells)	124
IX. Autoimmune Disease Mediated by T Lymphocytes	128
X. Collaboration of Autoantibodies and Cell-Mediated Immunity	132
References	133

Chapter 5 Cellular Events in Experimental Autoimmune Thyroiditis, Allergic Encephalomyelitis, and Tolerance to Self

WILLIAM O. WEIGLE

I. Introduction	141
II. Immunologic Tolerance	142
III. Autoimmunity	149
IV. Summary	166
References	167

Chapter 6 Suppressor T Cell Dysfunction as a Possible Cause for Autoimmunity

RICHARD K. GERSHON

I. Introduction	171
II. Definition of T Cell Subclasses with Anti-Ly Sera	172
III. Potential Role of the Ly 123 Cell	175
IV. Potential Causes of Breakdown in T Cell Regulation Which Could Lead to Autoimmunity	177
V. Relation of Suppressor Activity to Histocompatibility Antigens	178
References	180

Chapter 7 Autoimmunity and Lymphoid Malignancy: Manifestations of Immunoregulatory Disequilibrium

NORMAN TALAL

I. Introduction	184
II. Autoimmunity and Lymphoid Malignancy in NZB and NZB/NZW F ₁ (B/W) Mice	185
III. Monoclonal Immunoglobulins and Autoimmunity	198
IV. Other Experimental Models of Autoimmunity and Malignant Lymphoproliferation	199
V. Clinical Experiences with the Association of Autoimmunity and Lymphoma	200
VI. Theoretical Considerations	202
VII. Conclusions	204
References	205

Chapter 8 Thymic Hormones and Autoimmunity

J. F. BACH, M. A. BACH, C. CARNAUD,
M. DARDENNE, AND J. C. MONIER

I. Thymus Hormones: Present Status	208
II. Thymus Hormones and the Control of Autoimmunity	212
III. Swan Mice	223
References	227

Chapter 9 Autoimmunity, Self-Recognition, and Blocking Factors

IRUN R. COHEN AND HARTMUT WEKERLE

I. Introduction	231
II. The Detection of Lymphocytes That Recognize Self-Antigens	233
III. Blocking Factors	238
IV. Examples of Blocking Factors	241
V. Do Blocking Factors Regulate Self-Tolerance?	252
VI. Does Self-Recognition Have a Normal Function in the Immune System?	255
References	261

Chapter 10 Self-Recognition: The Basic Principle in the Immune System

HEINZ KOHLER AND DONALD A. ROWLEY

I. Introduction	267
II. Self-Recognition in the Immune System	268
III. The Effects of Autoimmune Responses: Control of the Expression of Receptors	270
IV. The Concept of the Interaction of Complementary Clones	271
V. Complementary Clonal Interaction during Evolution	272
VI. Conclusion	274
References	274

Chapter 11 The Biology of Immune Complexes

ALAN O. HAAKENSTAD AND MART MANNIK

I. Introduction	278
II. Formation of Antigen Antibody Complexes	278
III. Biologic Properties of Immune Complexes	286
IV. Models of Immune Complex Diseases and the Fate of Circulating Immune Complexes	313
V. Detection of Immune Complexes	337
VI. Overview of Human Immune Complex Diseases	348
References	350

Part III VIRAL ASPECTS

Chapter 12 H-2 Restriction of Cell-Mediated Virus-Specific Immunity and Immunopathology: Self-Recognition, Altered Self, and Autoaggression

ROLF M. ZINKERNAGEL

I. Introduction	363
II. The Targets of T Cell-Mediated Immunity	366
III. Murine Lymphocyte Choriomeningitis Virus Infections	367
IV. H-2 Restriction of CMI to Virus Infection	373
V. Is Virus-Specific Cytotoxicity Directed against "Altered Self" or against Virus and Self Independently?	374
VI. Immune Protection and Immunopathology	376
VII. Is There Evidence for Cytotoxicity against "Normal" Self during Virus Infections?	379
VIII. Summary	381
References	381

Chapter 13 Viruses, Autoimmunity, and Murine Lymphoma

MAX R. PROFFITT, MARTIN S. HIRSCH,
AND PAUL H. BLACK

I. Introduction	385
II. T Cell-Mediated Autoreactivity in a Model of Murine Lymphomagenesis	386
III. Autoreactivity of Thymocytes from MuLV-M Carrier Mice	387
IV. Characterization of Autoaggressive Thymocytes from MuLV-M Carrier Mice	389
V. Specificity of Virus-Associated Autoreactivity	389
VI. Specificity of the Protective Effect Conferred on Syngeneic Target Cells by Infection with MuLV-M	390
VII. Specificity of Target Cell Killing by Autoaggressive MuLV-M Carrier Thymocytes	390
VIII. Discussion	393
References	398

Chapter 14 C-Type RNA Viruses and Autoimmune Disease

JAY A. LEVY

I. Introduction	404
II. C-Type Viruses	407
III. Autoimmune Disease of New Zealand Black Mice	414
IV. Equine Infectious Anemia Virus	423
V. Canine Systemic Lupus Erythematosus	429
VI. Other Characteristics of C-Type Virus Infection Which May Be Involved in the Pathogenesis of Autoimmunity	432
VII. C-Type Viruses and Autoimmune Disease in Man	436
VIII. Discussion	440
IX. Conclusions and Summary	444
References	446

Part IV CLINICAL ASPECTS*Chapter 15* Infection and Autoimmunity

RALPH C. WILLIAMS, JR.

I. Introduction	457
II. Rheumatoid Factors	461
III. Antinuclear Antibodies	471
IV. Smooth Muscle Antibodies	472
V. Lymphocytotoxic Antibody	473
VI. Miscellaneous Autoantibodies Associated with Infections	474
References	475

Chapter 16 Immunodeficiency Disorders and Autoimmunity

ARTHUR J. AMMANN

I. Introduction	479
II. Disorders of Antibody-Mediated Immunity Associated with Autoimmunity	481
III. Disorders of Cell-Mediated Immunity Associated with Autoimmunity	498
IV. Abnormality of Phagocytosis Associated with Autoimmunity: Chronic Granulomatous Disease	503
V. Conclusions	506
References	508

Chapter 17 Autoimmunity and Aging

F. M. BURNET

I. Current Views of the Aging Process	513
II. The Self-Monitoring Function of the Immune System in Relation to Aging	515
III. The Age-Specific Incidence of Autoimmune Disease	517
IV. Association of Autoimmune Disease with Certain HLA Types	519
V. Lymphoproliferative Processes	522
VI. Amyloidosis	524
VII. Age and Autoimmunity in Animal Models	525
VIII. Conclusion	527
References	528

Chapter 18 Autoimmunity and Systemic Lupus Erythematosus

DAVID GLASS AND PETER H. SCHUR

I. Introduction	532
II. SLE: Genetic Predisposition	532
III. Immune Status of SLE Patients	538
IV. Immune Response to Nuclear Substances	540
V. Other Autoimmune Antibodies	548
VI. Drug-Induced Lupus	549
VII. SLE as an Immune Complex-Mediated Disease	549
VIII. Discussion	556
IX. Summary	559
References	560

Chapter 19 Rheumatoid Arthritis

NATHAN J. ZVAIFLER

I. Clinical Features of Rheumatoid Arthritis	569
II. Rheumatoid Factors	571
III. Pathogenesis of Rheumatoid Joint Disease	573
IV. Extraarticular Manifestations of Rheumatoid Arthritis	583
References	592

Chapter 20 Cell-Surface Receptors and Autoimmune Responses

I. R. MACKAY AND P. R. CARNEGIE

I. Introduction	597
II. Myasthenia Gravis	601
III. Thyroid Gland and Graves' Disease	606
IV. Diabetes Mellitus	607
V. Other Endocrinopathies	610
VI. Multiple Sclerosis	611
VII. Lymphocyte Receptors for Antigen	613
VIII. Conclusion	614
References	616

Chapter 21 Autoantibodies to the Thyrotropin (TSH) Receptors on Thyroid Epithelium and Other Tissues

DEBORAH DONIACH AND
NICHOLAS J. MARSHALL

I. Introduction	621
II. Clinical Background	622
III. Pathogenesis of Thyrotoxicosis	624
IV. Conclusions	637
References	638

Chapter 22 Autoimmune Neurological Disease: Experimental Animal Systems and Implications for Multiple Sclerosis

PHILIP Y. PATERSON

I. Introduction	644
II. Emerging Concepts of Neuroallergy and Autoimmune CNS Disease and Neuroimmunovirological Mechanisms Implicated in MS	645
III. Immunopathogenesis of EAE	654
IV. EAE as an Experimental Model System for MS	673
V. Immunovirological Mechanisms in MS	678
References	684
Note Added in Proof	691

Chapter 23 Positive Autoimmunity

HANS WIGZELL

I. Introduction	693
II. "Anti-Self" Reactivity May Be a Normal Feature of All Immunocompetent T Lymphocytes	694

III Positive Consequences of Induced Autoimmunity: A Discussion as to Possible Future Applications	697
IV Conversion of Tumor-Associated Proteins into Self-Immunogens	698
V Regulation of Endocrine Functions via Auto-Anti-Hormone Antibodies	700
VI Specific Autoimmunity against Antigen-Binding Receptors on Lymphocytes: A Way to Induce Specific Immunologic Tolerance in B as well as T Lymphocytes	701
VII Concluding Remarks	705
References	706
Index	709

Part I

GENETIC ASPECTS