

Contents

Contributors, vii

Preface, xii

Section A: General Concepts

1 Epidemiology of Allergic Diseases, 1

Erika von Mutius

2 Natural History of Allergic Diseases and Asthma, 7

Andrew H. Liu, Fernando D. Martinez

3 The Genetics of Allergic Disease and Asthma, 16

John W. Holloway

Section B: Immunologic Diseases

4 Approach to the Child With Recurrent Infections and Molecular Diagnosis, 30

Charlotte Cunningham-Rundles

5 Primary Antibody Deficiency, 38

Paul J. Maglione

6 T Cell Immunodeficiencies, 44

Luigi D. Notarangelo

7 Complement Deficiencies, 55

Kathleen E. Sullivan

8 Defects of Innate Immunity, 64

Sergio D. Rosenzweig, Steven M. Holland

9 Congenital Immune Dysregulation Disorders, 75

Troy R. Torgerson, Joao Bosco Oliveira

10 Immunoglobulin Therapy, 84

Elena E. Perez, Mark Ballow

11 Hematopoietic Stem Cell Therapies, 92

Donald B. Kohn

Section C: Diagnosis and Treatment of Allergic Disease

12 Diagnosis of Human Allergic Disease, 99

Robert G. Hamilton

13 Outdoor Allergens, 109

Richard W. Weber

14 Indoor Allergens, 115

William J. Sheehan, Wanda Phipatanakul

15 Environmental Control, 120

Torie Grant, Robert A. Wood

16 Immunotherapy for Allergic Disease, 126

Pooja Varshney, Elizabeth C. Matsui

Section D: Upper Airway Disease

17 Allergic Rhinitis, 135

Thomas Eiwegger, Michael B. Soyka

18 Sinusitis, 147

Kenny H. Chan, Mark J. Abzug, Andrew H. Liu

19 Chronic Cough, 158

Julie M. Marchant, Susanne G. Lau, Anne B. Chang

Section E: Asthma

20 Immunology of the Asthmatic Response, 167

Oscar Palomares, Cezmi A. Akdis

21 Lung Function Testing in Children, 178

Karen M. McDowell, Theresa W. Guilbert

22 Infections and Asthma in Childhood, 185

Daniel J. Jackson

23 Special Considerations for Infants and Young Children, 193

Ronina A. Covar, Joseph D. Spahn

24 Inner City Asthma: Strategies to Reduce Mortality and Morbidity, 209

Meyer Kattan

25 Asthma in Older Children: Special Considerations, 216

Jeffrey R. Stokes, Leonard B. Bacharier

26 Collaborating With Schools to Support Children With Asthma, 228

Melanie Gleason, Lisa Cicutto, Stanley J. Szefler

27 Refractory Childhood Asthma: Assessment and Management, 236

Andrew Bush, Louise Fleming

28 Promoting Adherence and Self-Management, 247

Bruce G. Bender

29 Strategies for the Primary Prevention of Asthma, 251

Fernando D. Martinez

Section F: Food Allergy

30 Mucosal Immunology: An Overview, 257

Daniel Lozano-Ojalvo, M. Cecilia Berin

31 Evaluation of Food Allergy, 264

Scott H. Sicherer, Hugh A. Sampson

32 Approach to Feeding Problems in the Infant and Young Child, 270

Alexia Beauregard, Marion Groetch

33 Enterocolitis, Proctocolitis, and Enteropathies, 275

Scott H. Sicherer, Anna Nowak-Węgrzyn

34 Eosinophilic Gastrointestinal Diseases, 284

Mirna Chehade, Amanda B. Muir, Jonathan E. Markowitz, Chris A. Liacouras, Glenn T. Furuta

35 Management of Food Allergy, 291

Marion Groetch, Carina Venter

36 Prevention of Food Allergy, 301

Jennifer Koplin, Katrina Allen

37 Immunotherapeutic Approaches to the Treatment of Food Allergy, 307

Amy M. Scurlock, Wayne G. Shreffler

Section G: Allergic Skin Diseases

38 Evaluation and Management of Atopic Dermatitis, 318

Mark Boguniewicz, Donald Y.M. Leung

39 Urticaria and Angioedema, 329

Shyam R. Joshi, David A. Khan

40 Contact Dermatitis, 340

Luz Fonacier, Erin Banta

Section H: Other Allergic Diseases

41 Allergic and Immunologic Eye Disease, 354

Leonard Bielory, Brett P. Bielory

42 Drug Allergy, 368

Anca M. Chiriac, Pascal Demoly

43 Insect Sting Allergy, 375

Hanneke (Joanne) N.G. Oude Elberink, Lisa Arzt-Gradwohl, Gunter J. Sturm

44 Anaphylaxis: Assessment and Management, 387

Julie Wang

45 Mast Cell Disease and Hypereosinophilic Diseases, 400

Malika Gupta, Cem Akin, Anna Kovalszki

Index, 410