

Contents

1	Introduction	1
	Shan Wang, Ailin Tao and Eyal Raz	
2	Allergic Disease Epidemiology	15
	Juan Wang, Junshu Wu and He Lai	
3	The Pathogenesis of Allergy: A Brief Introduction	43
	Zhi-Qiang Liu and Ping-Chang Yang	
4	Genetics and Epigenetic Regulation in Allergic Diseases	49
	Chang-Hung Kuo and Chih-Hsing Hung	
5	Cross-Reactivity	67
	Wen Li and Zehong Zou	
6	From Allergen Extracts to Allergen Genes and Allergen Molecules . . .	93
	Jiu-Yao Wang	
7	Allergen Gene Cloning	105
	Xue-Ting Liu and Ailin Tao	
8	High Throughput Screening of Allergy	121
	Junyan Zhang and Ailin Tao	
9	Surrogate Markers for Allergen-Specific Immunotherapy	139
	Jiu-Yao Wang	
10	Immune Responses to Allergens in Atopic Disease: Considerations for Bioinformatics	147
	Wayne R. Thomas	
11	Antigenicity, Immunogenicity, Allergenicity	175
	Jianguo Zhang and Ailin Tao	
12	Bioinformatic Classifiers for Allergen Sequence Discrimination	187
	Yuyi Huang and Ailin Tao	

13 Strategies for the Modification and Evaluation of Allergenicity. 195
Zhaoyu Liu, Huifang Chen and Ailin Tao

14 Bioinformatics Methods to Predict Allergen Epitopes. 223
Ying He and Ailin Tao

15 Allergen Database 239
Yuyi Huang and Ailin Tao

Allergy Bioinformatics

Tao, A.; Raz, E. (Eds.)

2015, XII, 251 p. 45 illus., 39 illus. in color., Hardcover

ISBN: 978-94-017-7442-0