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Preface

Allergy and allergic diseases have increased in prevalence dramatically over the last decades. Relevant determinants influencing the development of allergic inflammation come from the environment and are either enhancing – promoting allergy – or protective in nature. The lack of protective factors such as early stimulation of the immune system through infection or parasite infestation by improved hygiene seems to go along with allergy promoting effects of environmental pollutants such as traffic exhaust – fine or ultrafine particles – or tobacco smoke in the indoor air. Climate change with higher CO₂ concentrations in the atmosphere and increases in the Earth’s surface temperature may contribute to an increase in allergic diseases by prolonging the flowering period of pollinating plants and immigration of allergenic neophytes.

Great progress has been made in elucidating the pathomechanisms of allergic reactions both at the level of molecular genetics and in the understanding of the complex orchestra of cells and mediators in the allergic inflammation.

It has become clear that not only the deviated immune response is a prerequisite for allergy with dominant Th2 reactions and consequent IgE production, but also the epithelial barrier is of crucial importance both in the mucosal surface of the airway and in the skin.

In spite of the great progress in the experimental allergology and immunology, there is still a tremendous gap between the theoretical knowledge and the practical performance in daily life treating allergic patients in the office or in the hospital. This becomes especially obvious when we think of subjective symptoms such as itch, which is the major symptom of allergic skin disease.

Only on the basis of a better understanding of the pathomechanisms and the molecular pathways involved can new therapeutic and preventive strategies for future management of allergic patients seem possible.

This volume brings together a carefully selected list of articles based upon lectures given at the International Symposium ‘New Trends in Allergy VII’ together with the ‘6th Georg Rajka Symposium on Atopic Dermatitis’ organized in Munich in July 2010. At this symposium, two remarkable traditions were joined: the symposia ‘New Trends in Allergy’, which began in 1980 in Munich and have since been held in 5-year intervals in Munich, Hamburg and Davos. The International Symposium on
Atopic Dermatitis was started by Professor Georg Rajka in Oslo and held five times in Norway. Since 1996, taking the name of the founder, they have been continued all over the world, taking place in Aarhus, Davos, Portland, Rome, Arcachon, Kyoto and Munich, and have brought together all the experts both from clinics and research interested in the field of atopic eczema. The next Georg Rajka Symposium will be held in 2012 in Moshi, Tanzania, in order to stress the fact that allergy and eczema is not a disease of the so-called Western world, but can be found also in rural regions in central sub-Saharan Africa.

We would like to thank Alberto Giannetti (Modena), Alain Taieb (Bordeaux), Kristian Thesstrup-Petersen (Aarhus) and Hirohisa Takigawa (Matsumoto) for help in the development of the Rajka symposia. Mr. Preussler and Mrs. Burk deserve thanks for the excellent organization of the symposium in Munich. A final highlight was the performance of an ‘allergy musical’ by the coworkers of the Department of Dermatology and Allergy as well as the ZAUM [Zentrum Allergie und Umwelt (Center for Allergy and Environment)] at the Biederstein Campus of the Technische Universität München in the Löwenbräukeller: ‘King Ludwig II – His Life, His Death, His Allergy!’ In this play, undiscussed aspects of the mysterious end of Bavaria’s dream king were put to stage in a humorous fashion, at the same time giving a new example of very well accepted allergy education.

Thanks also go to Mr. Nold and Mr. Brian from Karger Publishers for the excellent help in the production of this book.

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