

# New Books

## ***Ultrastructure of mast cells and basophils***

Chemical Immunology and Allergy Series. Edited by Ann M. Dvorak. KARGER. XII + 352 p., 185 fig., 4 in color, hard cover, 2005; CHF 298/ EUR 213/USD 271; ISBN 3-8055-7864-4.

Basophils and mast cells are similar but unique secretory cells which play a central role in inflammatory and immediate allergic reactions. In this book, the author reviews the ultrastructural studies of basophils and mast cells performed since the publication of an earlier monograph in 1991. These studies include the use of ultrastructure rules that allow identification of basophils and mast cells in new circumstances. The secretory granules and lipid bodies present in these cells are established as different, important organelles. A number of standard and newly developed ultrastructural imaging methods are described which define the subcellular locations of chymase, Charcot-Leyden crystal protein, histamine, and heparin as well as materials important in arachidonate and RNA metabolism, and in cytokine biology in basophils and mast cells. The findings presented elucidate new aspects of the secretory mechanisms of basophils and mast cells, their recovery, and the transepithelial route of passage of macromolecules stimulated by permeability mediators released from these cells.

Including more than 180 excellent micrographs, this book will be of special interest to basic scientists in immunology, cell biology, secretion and angiogenesis research, and histochemistry. As mast cells and basophils play a crucial role in various diseases, it will be essential reading for allergists, immunologists, dermatologists, hematologists, gastroenterologists, rheumatologists, neurologists, pathologists, pulmonologists, and cardiologists.

## ***Allergy in Practice***

Edited by Johannes Ring. SPRINGER. 2005, XIX, 276 p. 149 illus. In 175 parts. Hardcover. ISBN 3-540-00219-7.

Allergy is one of the major health problems of most modern societies. Although allergic diseases are well-known for almost two hundred years, their prevalence has increased dramatically over the last decades. Allergic reactions manifest in various organs, most commonly in the skin and mucous membranes, the frontier surfaces

where the contact between the individual and the environment takes place. In a very concise and practical way this book covers all aspects of allergic reactions from pathophysiology to diagnosis, therapy and prevention with a strong focus on relevant aspects for the everyday work of the practising dermatologist and allergist in the hospital and office. This book reflects the rich personal experience of a German allergist with international training and reputation, who is active in immunology and allergy research and practice for almost 30 years. In this book, not only IgE-mediated allergic reactions are covered but all other kinds of allergies such as atopic eczema, contact dermatitis, drug eruptions, anaphylaxis and food allergies are equally represented as well as psychosomatic aspects and problems of environmental intolerances.

## ***Control of infectious animal diseases by vaccination***

Development in Biological Series, Vol 119. Edited by Alejandro Schudel and Michel Lombard. KARGER. XII + 516 p, 79 fig, 46 tab., soft cover, 2004. ISBN 3-8055-7874-1.

This monograph contains the proceedings from the International Conference on the Control of Infectious Animal Diseases by Vaccination held in Buenos Aires, Argentina, in April 2004.

It provides up-to-date information and examples of successful controls of various diseases, including transboundary diseases, e.g. foot-and-mouth disease, rinderpest and bluetongue, as well as parasitic infestations by using traditional or marker vaccines. The publication aims at improving the international standards related to the use of vaccines and presents recommendations to the World Organisation for Animal Health (OIE).

All the partners in the decision-making process for controlling diseases, i.e. chief veterinary officers, animal health regulatory officials, veterinarians, cattle-raising associations and consumer associations will find useful advice for the elimination or eradication of pathogens. This volume will also be of great interest to professors in veterinary medicine, animal health researchers at universities, public research laboratories and commercial organisations developing vaccines with markers or without viral non-structural proteins for distinguishing between infected and vaccinated animals.

***Mast cells in allergic diseases***

Chemical Immunology and Allergy, Vol 87. Edited by Saito H and Okayama Y. KARGER. XIV + 218 p, 38 fig, 10 in color, 8 tab, hardcover. 2005. ISBN 3-8055-7948-9.

The discovery of IgE and its association with mast cell histamine release provided the initial understanding of the role of mast cells in asthma and acute allergic reactions. However, mast cells are now recognized as tissue-dwelling effector cells that play multiple roles not only in immediate-type allergic reaction but also in innate immunity, inflammation, angiogenesis, and tissue

remodeling. Mast cells produce a variety of lipid mediators, chemokines, cytokines, and enzymes that may interact with inflammatory tissues such as asthmatic lungs.

This book focuses on the roles of mast cell products in allergic diseases and discusses strategies to regulate mast cell functions without perturbing their physiological roles. It also aims at understanding mast cells and the system level by creating a detailed model of cell regulation which is expected to lead to highly mast cell-specific, i.e. efficient and safe, drug targets. Allergists, immunologists and pharmacologists interested in developing new drugs for allergies will benefit from these timely reviews.