New Books

Recent advances in the pathophysiology of COPD
Series: Progress in Inflammation Research. Edited by T.T. Hansel and PJ Barnes. Bikhäuser Verlag AG. CHF198.--/EUR128.--. 2003. 246 pages. Hardcover. ISBN 3-7643-6914-0

This is a book about the pathophysiology of chronic obstructive pulmonary disease (COPD), a disease usually caused by cigarette smoking but having a range of other environmental and genetic risk factors. COPD is a disease of growing importance, and currently the sixth largest killer in the world, thus ranking among the commonest diseases worldwide. COPD has a complex immunopathology that involves inflammation, fibrosis, remodelling and proteolytic destruction. These processes occur throughout the airways, in the lung interstitium and vasculature, and contribute to respiratory and cardiac failure and to a systemic cachectic syndrome. The relentless progression of the disease, that lacks truly effective therapy, elicits a pressing need for a better understanding of mechanisms of disease. This volume provides state-of-the-art information on the pathophysiology of COPD, including an outlook on potential new therapies. It is of interest to researchers and health professionals involved in the care of patients with COPD, as well as scientists seeking new therapies in the pharmaceutical industry.

Complement in autoimmunity
Series: Current Directions in Autoimmunity, Vol 7. Edited by George C Tsokos. Karger. VI+206 p., 21 fig., 2 in colour, 10 tab, hard cover, 2004. CHF198.-/EUR141.50.-/usd 172.25. ISBN 3-8055-7646-3

Complement protein expression and activation control central aspects of the normal B cell response. Imbalances in these processes invariably lead to autoimmune disease. Complement activation causes tissue damage in a number of ways and may by itself lead to autoimmune disease. Although the use of complement activation inhibitors in the treatment of complement-mediated tissue injury and disease is largely in preclinical trial status, expectations their potential of significant clinical value are high.

This volume contains a series of review articles that address the role of complement in the pathogenesis of autoimmune disease and the ensuing tissue damage. Topics include structural and functional aspects of the CD19/CD21/CD81 complex, the role of the complement system in the expression of systemic lupus erythematosus (SLE) and the antiphospholipid antibody syndrome. Also featured is the role of complement activation in ischemia/reperfusion and autoimmune disease injury. Finally, in-depth reviews about complement activation in the development of glomerulonephritis in autoimmune disease and the function of membrane-bound complement regulatory proteins in autoimmunity are presented.

Students as well as basic and clinical researchers in immunology who wish to understand the role of complement in the pathogenesis of autoimmune disease will value this comprehensive and up-to-date publication.

Asthma: social and psychological factors and psychosomatic syndromes
Series: Advances in Psychosomatic Medicine, Vol 24. Edited by E. Sherwood Brown. Karger. VIII+172 p., 10 fig., 16 tab., hard cover, 2003. CHF 158.-/EUR 113.-/USD 137.50. ISBN 3-8055-7579-3

The relationship between psychiatric disorders and general medical conditions is currently a topic of great interest. This volume includes a broad range of papers dealing with psychosocial issues in the morbidity of asthma, depressive symptoms which appear to be more common in asthma patients than in the general population, the link between asthma and anxiety disorders, or side effects of corticosteroid therapy. Furthermore, one paper looks at problems concerning adherence to treatment and the interaction between patient and provider, and another one presents a model of changing human health behaviour. Emotional disturbances contributing to several primarily psychogenic illnesses that mimic asthma are also covered. Each chapter includes an overview of the field for those with minimal knowledge of the topic.

This book is written by experts and addressed to clinicians, general practitioners, mental health professionals, allergists, pneumologists and primary care practitioners involved in treating asthma patients especially with a view to the psychological aspects and their influence on the disease.

TOR, the Target of Rapamycin
Series: Current topics in Microbiology and Immunology Edited by G. Thomas, D.M. Sabatini, M.N. Hall. Springer

Verlag. 2004. X, 364 p. 49 illus. Hardcover. EUR 109.95, EP 84.50, sFr 178.00, $ 129.00. ISBN 3-540-00534-X

TOR, the Target of Rapamycin, was discovered a little over ten years ago in a genetic screen in S. Cerevisiae in search of mutants resistant to the cytostatic effects of the antimycotic rapamycin. Recent studies have placed TOR at the interface between nutrient sensing and the regulation of major anabolic and catabolic responses. The editors have reunited the leading figures in the field of TOR and its role in cellular homeostasis and human diseases.

Regeneration: stem cells and beyond

Series: Current topics in Microbiology and Immunology Edited by E. Heber-Katz. SPRINGER VERLAG. 2004. XII, 194 p. 53 illus. Hardcover. EUR 106.95, sFr 166.00. ISBN 3-540-02238-4

In this issue of Current Topics in Microbiology and Immunology the authors present a unique range of examples of the regenerative response and the role of stem cells from amphibian to human. It seems that all roads lead to cells that have the plasticity to become something else, not only in the amphibian but also in mammals.

Diet and human immune function

Edited by David A. Hughes, L. Gail Darlington, Adrianne Bendich. THE HUMANA PRESS. December 2003. 496 pp. Hardcover. ISBN 1-58829-206-1

It is now widely appreciated that nutrition contributes significantly to the optimal function of the immune system and hence to personal health. In Diet and Human Immune Function, leading international researchers and clinicians comprehensively detail what is known about the ability of diet to enhance human immune function in health, disease, and under various (stress) conditions. The authors offer state-of-the-art critical appraisals of the influences of several important vitamins (vitamins A, C and E, as well as carotenoids, such a Beta-carotene) and minerals (iron, selenium, and zinc), on the human immune system both singly and in combination. The authors also examine how nutrition modulates immune function in such diseases as the rheumatoid arthritis, osteoporosis, HIV infection and cancer. Immune responses to three forms of stress -vigorous exercise, military conditions, and air pollution (in relation to allergic asthma)- are discussed in depth in unique chapters not found in any other texts. Probiotics and long-chain fatty acids are also examined for their immunomodulatory effects. A much-needed overview of the nutritional consequences of drug-disease interactions provides recommendations for potential nutritional interventions that could increase drug efficacy and/or reduce adverse side effects. “Conclusions” and “Take Home Messages” at the end of each chapter give physicians clear clinical instructions about special diets and dietary components for immune-related disease states.

Authoritative and highly practical, Diet and Human Immune Function provides a critical survey of the most up-to-date clinical studies of nutritional effects on immune responses for disease prevention and therapy, documenting for practicing physicians, nutritionists, immunologists, and educated consumers the enormous potential of diet to modulate immune function beneficially.