

## BOOK REVIEW

PERLMANN, P. & TROYE-BLOMBERG, M. – Malaria Immunology. 2<sup>nd</sup> revised and enlarged edition. Basel, Karger, 2002. 406p. illus. (Chemical Immunology, v. 80). ISSN 1015-0145.

Despite extensive efforts to control this infection, malaria is still one of the most devastating infectious diseases worldwide. This book, now in its second edition, provides a broad and up-to-date overview of the rapidly expanding field of malaria immunology and its importance in the control of this disease.

This book is composed of 19 chapters arranged in four major sections.

The first section deals with the malaria parasite and its interactions with both the vertebrate host and the mosquitoes which transmit the disease. In the second part, the mechanisms of immunity and their regulation by environmental and genetic factors are discussed. Section three: Malaria Infection: Immunity and Regulation (3 chapters) reports on the mechanisms of immunity and their regulation by environmental and genetic factors. Finally, this volume contains several chapters on malaria vaccine development, describing the application of the most recent vaccine technologies as well as ongoing and planned vaccine trials.

Authored by well-recognized experts, this volume not only demonstrates the rapid progress being made in the search for vaccines against malaria, but also broadens our understanding of immunity to infection in general. It is therefore highly recommended reading for all scientists and professionals in the fields of immunology, infection and vaccine development.

### CONTENTS:

#### *Malaria Parasites and Disease*

- Structure and life cycle - Fujioka, H. & Aikawa, M.
- Malaria parasites and the Anopheles mosquito - Dimopoulos, G.; Kafatos, F.C.; Waters, A.P. & Sinden, R.E.
- Malaria: pathogenicity and disease - English, M. & Newton, C.R.J.C.

#### *Malaria Antigens*

- Sporozoite antigens: Biology and Immunology of the circumsporozoite protein and thrombospondin-related anonymous protein - Sinnis, P. & Nardin, E.

- Immune responses to liver-stage parasites: implications for vaccine development - Hollingdale, M.R. & Krzych, U.
- Merozoite antigens involved in invasion - Berzins, K.
- Asexual blood stages of Malaria antigens: cytoadherence - Baruch, D.I.; Rogerson, S.J. & Cooke, B.M.
- Rosetting and autoagglutination in *Plasmodium falciparum* - Fernandez, V. & Wahlgren, M.
- Sexual and sporogonic stage antigens - Sauerwein, R.W. & Eling, W.M.C.

#### *Malaria Infection: Immunity and Regulation*

- Mouse models of blood-stage infections: immune responses and cytokines involved in protection and Pathology - Langhorne, J.; Quin, S.J. & Sanni, L.A.
- Malaria and the immune system in humans - Perlmann, P. & Troye-Blomberg, M.
- Genetic regulation of Malaria infection in humans - Troye-Blomberg, M.

#### *Malaria Vaccines*

- Pre-erythrocytic Malaria vaccines to prevent *Plasmodium falciparum* Malaria - Ballou, W.R.; Kester, K.E. & Heppner, D.G.
- Vaccines against asexual stage Malaria parasites – Kumar, S.; Epstein, J.E. & Richie, T.L.
- Transmission-blocking vaccines - Kaslow, D.C.
- Nucleic acid vaccines against Malaria - Doolan, D.L. & Hoffman, S.L.
- Antidisease vaccines - Schofield, L.
- Adjuvants and malaria vaccine development - Xiao, L.; Rafi-Janajreh, A.; Patterson, P.; Zhou, Z. & Lal, A.A.
- Malaria vaccine trials - Greenwood, B. & Alonso, P.

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