

Emerging Trends in Antibacterial Discovery

Answering the Call to Arms

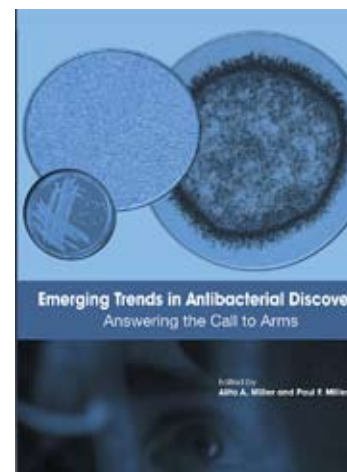
Edited by: **Alita A. Miller and Paul F. Miller**

Antibacterials Research Unit, Pfizer Worldwide R&D, Groton, CT 06340 USA

viii + 460 pp, August 2011

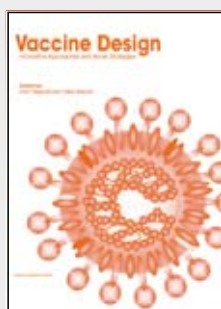
ISBN: 978-1-904455-89-9, \$360/£180

In this book, respected international experts summarize the most important concepts and pioneering strategies currently being used to develop novel antibacterials. The book opens with chapters on cellular processes that could be used as novel antibacterial targets. Examples include cell division, efflux pumps, metabolite-sensing riboswitches and bacterial secretion systems. These are followed by excellent chapters on the identification of new, naturally occurring antibacterial agents, including phage and biosynthetically engineered compounds. Understanding the host-microbe interaction and microbial communities and how they can be exploited to develop new antibacterial strategies is discussed in subsequent chapters. Other topics included are: antibacterial vaccines, host defence peptides, antibodies, within-host models, and diagnostics. Essential reading for everyone working in antibacterial research.



Contents

• Chapter 1: Answering the Call to Arms: Introduction and Overview. *Alita A. Miller and Paul F. Miller* • Chapter 2: Renewing Investment in Antibacterial Research. *L. Silvia Munoz-Price, and John P. Quinn* • Chapter 3: Mining Bacterial Cell Division for New Antibacterial Drugs. *Leigh G. Monahan, Michael A. D'Elia and Elizabeth J. Harry* • Chapter 4: Efflux Pumps from Gram-negative Bacteria: From Structure and Function to Inhibition. *Olga Lomovskaya and Helen I. Zgurskaya* • Chapter 5: Metabolite-sensing Riboswitches as Antibacterial Drug Targets. *Elaine R. Lee, Kenneth F. Blount and Ronald R. Breaker* • Chapter 6: Targeting Bacterial Secretion Systems for the Development of Novel Therapeutic Agents. *Heather B. Felise, Toni Kline & Samuel I. Miller* • Chapter 7: Recent Developments in Natural Products: Potential Impact on Antibacterial Drug Discovery. *Ronald J. Quinn and Jeffrey E. Janso* • Chapter 8: Biosynthetic Engineering of Antibacterial Natural Products. *Jay Fitzgerald, Younjoo Lee and Chaitan Khosla* • Chapter 9: Bacterial Phenotypes Refractory to Antibiotic-Mediated Killing: Mechanisms and Mitigation. *Alex J. O'Neill* • Chapter 10: Quorum Sensing Inhibitors Disable Bacterial Biofilms. *Thomas Bjarnsholt, Tim Tolker-Nielsen and Michael Givskov* • Chapter 11: The Indigenous Human Microbiota. *Adam M. Nelson and Vincent B. Young* • Chapter 12: Prospects for the Development of New Anti-TB Drugs Based on Novel Targets Related to the Host-Parasite Relationship in Tuberculosis. *Haruaki Tomioka* • Chapter 13: Current Strategies for Antibacterial Vaccine Development. *Robert G.K. Donald and Annaliesa S. Anderson* • Chapter 14: Recent Advances in Vaccine Adjuvants. *Risini D. Weeratna and Michael J. McCluskie* • Chapter 15: Host Defense Peptides. *Olga M. Pena, John D. F. Hale and Robert E.W. Hancock* • Chapter 16: Antibodies for Antibacterials. *Bret R. Sellman and C. Ken Stover* • Chapter 17: Therapeutic Applications of Phage Biology: History, Practice and Recommendations. *Jason Gill and Ryland F. Young III* • Chapter 18: Role of Within-Host Models in Target Identification, Compound Optimization and Dose Selection. *Juilee Thakar and Eric T. Harvill* • Chapter 19: Advances and Applications of Diagnostic Microbiology in Changing Antibacterial Discovery. *Audrey N. Schuetz and Yi-Wei Tang* • Chapter 20: Changing the Therapeutic Paradigm in Antibacterial Drug Therapy and Discovery. *Arturo Casadevall*



Vaccine Design: Innovative Approaches and Novel Strategies

Edited by: **Rino Rappuoli and Fabio Bagnoli**

Novartis Vaccines and Diagnostics, Research, 53100 Siena, Italy

xii + 380 (plus colour plates) pp, February 2011

ISBN: 978-1-904455-74-5, \$360/£180

Expert international authors critically review the current cutting-edge research in vaccine design and development. Particular emphasis is given to new approaches and technologies. The book has been divided into two parts. The first part reviews the technologies and approaches used to identify, generate and test new vaccines. The second part focuses on the development of new vaccines to replace or complement currently available products or for diseases against which prophylactic strategies are missing. Essential reading for everyone with an interest in vaccine R & D.

Contents

• **Introduction** • **Chapter 1:** Overview of Vaccine Strategies. • **Chapter 2:** Designing Vaccines in the Era of Genomics. • **Chapter 3:** New Analytical Approaches for Measuring Protective Capacity of Antibodies. • **Chapter 4:** New Frontiers in the Chemistry of Glycoconjugate Vaccines. • **Chapter 5:** Bacterial Protein Toxin Used in Vaccines. • **Chapter 6:** Adjuvants. • **Chapter 7:** Mucosal Vaccines. • **Chapter 8:** Intralymphatic Vaccination. • **Chapter 9:** The First Vaccine Obtained Through Reverse Vaccinology: The Serogroup B Meningococcus Vaccine. • **Chapter 10:** Vaccines for Neglected Diseases. • **Chapter 11:** Vaccines to Combat *Pseudomonas aeruginosa* Infections in Immunocompromised Patients. • **Chapter 12:** Nosocomial infections: *Staphylococcus aureus*. • **Chapter 13:** Toward the Development of a Universal Vaccine Against Group B *Streptococcus*. • **Chapter 14:** Vaccines against *Streptococcus pneumoniae*. • **Chapter 15:** Veterinary Vaccines with a Focus on Bovine Mastitis. • **Chapter 16:** Vaccines Against Newly Emerging Viral Diseases: The Example of SARS.

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