
Preface

The specter of diseases most prevalent in developing countries blatantly confronts us with one of the great ironies of the modern world, juxtaposing a tragic situation wherein rapid technological and scientific advances in biology and drug discovery have driven tremendous advances in the treatment of first-world diseases with a situation in the developing world wherein millions of people continue to die each year due to lack of safe and efficacious medicine, and where many of the drugs, when they are available, are ancient by modern standards and would not pass current requirements for safety and efficacy. Diseases of the developing world, often known by the moniker “neglected diseases,” comprise a melee of infectious and parasitic diseases that, in terms of their biology and physiopathology, defy common description; their greatest commonality being the suffering and death they afflict on the poorest of the poor.

No single volume can reasonably expect to encompass the enormity of this subject. Thus, in this volume, we have focused on a selected representative set of diseases that make major contributions to the morbidity and mortality in developing countries, with the hope of raising general awareness of these diseases and highlighting some of the recent drug-discovery advances. Following a general overview chapter, five chapters focusing on tuberculosis, malaria, kinetoplastids, dengue fever, and diarrhea provide an in-depth look at the current status of drug discovery for these diseases. Unsurprisingly, each disease is encumbered by its own unique challenges and knowledge gaps, but share commonality in that, finally, state-of-the-art drug discovery tools and approaches are being rigorously applied to discover new therapies. The picture is no longer bleak, with a number of new drug candidates under active investigation and entering clinical trials. Still, much remains to be done; with many of the more “neglected” diseases (e.g., filarial diseases) being so under-investigated and under-resourced that, sadly, no chapter review was warranted. However, the recent increase in research activity and engagement of dedicated researchers throughout the world, collaborating together in academia, industry, and the nonprofit sector, is a new and uplifting trend which portends well for the future.

It is with the greatest respect that I acknowledge the important contributions each of the authors have made in this field, and thank them for contributing chapters to this volume. It is my hope that this volume will

serve to inform and guide those working on or interested in diseases that afflict the world's poorest populations, and, more importantly, inspire a new generation of drug discoverers to devote their knowledge, skills, insight, creativity, and passion to develop new therapies for these diseases, such that we speak of these diseases as "neglected" no longer.

Richard L. Elliott

Third World Diseases

Elliott, R.L. (Ed.)

2011, XIV, 310 p., Hardcover

ISBN: 978-3-642-23486-6