Sickness and Wealth: The Corporate Assault on Global Health
Edited by Meredith Fort, Mary Anne Mercer, and Oscar Gish

It could be argued that, since the start of the new millennium, globalization has had a greater impact on disease than it has on almost any other facet of life for poor people living in developing countries. On the positive side, globalization has created an unprecedented advocacy that has resulted in the creation of new and innovative public-private partnerships that target neglected tropical diseases. Some of these public-private partnerships, such as the African Programme for Onchocerciasis Control, the Global Alliance to Eliminate Lymphatic Filariasis, and the International Trachoma Initiative, exist because of generous donations from multinational pharmaceutical corporations, including Merck, GlaxoSmithKline, and Pfizer. As a result, several neglected tropical diseases are being targeted for control or elimination. In addition, efforts are underway to work towards bundling these public-private partnership activities in order to integrate control and elimination programs for neglected tropical diseases. This could increase disease control efficiency and save on costs. Moreover, in part because of globalization, several middle-income countries have promoted health technology innovation within their borders. As a result, the so-called “innovative developing countries,” such as India, China, Brazil, Malaysia, Thailand, and Indonesia, are now manufacturing and distributing their own health products, including drugs, vaccines, and diagnostics. Many of these health products are being exported from innovative developing countries to low-income countries. In this sense, globalization has helped stimulate a silent revolution that could alleviate some of our planet’s greatest health disparities.

This book reminds us that there is also a dark side to globalization. For instance, the penetration of managed care in Latin America has further marginalized the very poorest people, who suffer from neglected diseases and other afflictions, and globalization may have possibly helped to promote the reemergence of cholera, leprosy, dengue, and typhus in Latin America and South America and pediatric tuberculosis and infantile diarrhea in Argentina. In addition, the rise of militarism in sub-Saharan Africa and Latin America has interfered with public health efforts to control African sleeping sickness and other conditions, and some World Trade Organization agreements have slowed the development and distribution of badly needed drugs and health services. This book includes fascinating chapters about the role globalization might have played in promoting a cholera epidemic in South America, and about the emergence of malaria as a result of irrigation and water mismanagement, pesticide overuse, poverty, and civil unrest. There is a detailed discussion about contemporary issues that surround patents and the use of antiretrovirals for treating HIV/AIDS in Africa.

Like all edited volumes, there is some degree of unevenness among the different chapters, and stylistically, some are quite different. However, the quality of writing is generally good and the topics covered are timely and highly relevant to our most pressing global health issues. My only major criticism of this book is that it provides a somewhat one-sided view of globalization, and ignores some of its tremendous benefits (such as those outlined above). A couple of the chapter authors (and possibly the editors as well) presume the readers agree with their belief that multinational companies are inherently bad. In a few instances, the bias is so over-the-top that it can be a distraction. Therefore, one has to read some chapters with a grain of salt. However, once the reader gets past this, there is lots of useful information here.

This work is an important and very readable contribution to the field of global health. I particularly liked the historical context that is often provided to explain current crises. Given its modest price, the book should be accessible to students in undergraduate and graduate courses in global health, international affairs, and health policy, as well as students of the health professions.

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Peter J. Hotez
Department of Microbiology, Immunology, and Tropical Medicine, The George Washington University, Washington, D.C.

Microbial Forensics
Edited by Roger Breeze, Bruce Budowle, and Steven Schutzer

This book aims to serve as a primer for this evolving field which is described as “the scientific discipline dedicated to analyzing evidence from a bioterrorism act, biocrime, or inadvertent microorganism/toxin release for attribution purposes” (p. 9). The editors have gathered an impres-
sive array of experts and present 18 chapters that give the reader both an overview of microbial forensics and fairly intricate details regarding different aspects of the field.

The book begins with a somewhat acronym-laden introduction to the different federal agencies and working groups involved in bioterrorism investigations. Of interest, the reader learns that the Federal Bureau of Investigation hosts the Scientific Working Group on Microbial Genetics and Forensics. This group provides an avenue for scientists from diverse disciplines to address issues collaboratively and to develop guidelines related to the practice of microbial forensics. The goals of the Scientific Working Group on Microbial Genetics and Forensics include (1) defining quality assurance guidelines for laboratories that perform microbial forensic casework analyses, (2) establishing criteria for the development of and the validation of methods to characterize or individualize various threat agents in ways that can be used forensically to attribute those agents to criminal acts, (3) prioritizing efforts to identify those pathogens and toxins that would most likely be used in biological crimes, (4) understanding and enhancing microbial population genetic data so that findings can be interpreted; and (5) establishing design criteria for information databases.

The next 3 chapters focus on viral pathogenesis. There is a fair amount of repetition among these chapters, although the basic information is quite sound. Chapter 2 contains brief forays into clinical medicine; these may prove frustrating to the infectious diseases physician who reads this text, because there are outdated and incorrect statements, including comments about respiratory syncytial virus prophylaxis with a product that is no longer manufactured, and the statement that rabies virus is the only viral infection for which postexposure immunization is helpful. In addition, the writing style leaves something to be desired; comments such as “The bottom line is that it is truly a molecular jungle out there” (p. 42) abound.

The chapter that introduces bacterial pathogens is well written and clearly organized. The chapter about fungal pathogens is also well written, but it has fewer examples of human diseases than clinicians will likely prefer. The chapter on biologic toxins is excellent and makes very good correlations between basic science and clinical medicine. Steven A. Morse and Ali S. Kahn contribute a chapter that is a well written introduction that links epidemiology to the investigation of biologic events. This is somewhat complemented by a chapter by Lynda Collins Kelley and Roger Breeze that also applies basic epidemiology to bioterrorist events, but these 2 chapters should have been combined.

The following 3 chapters provide basic information about forensic handling of specimens in laboratories, including DNA-based and non–DNA-based typing methods, and serve as solid references for those who have little experience with such activities. The best-written and most readable chapter is by Steven Schutzer; it is about the relationship between microbial forensics and host defenses. There is an extensive chapter composed of 1-to-3-paragraph descriptions of bioinformatic detection techniques. A subsequent chapter describes evolving legal thought on the admissibility of an assortment of techniques, such as mitochondrial DNA analysis, in court. The book ends with a chapter and an appendix about laboratory quality assurance methodology that will be familiar to microbiology laboratory professionals, but that provides background for other readers.

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tions of the book contain an introductory chapter that addresses general pharmacodynamic and pharmacokinetic principles of specific groups of agents.

This volume is useful as a reference text for pharmacists, pharmacologists, and infectious diseases specialists who want ready access to detailed information regarding the clinical and molecular pharmacology of anti-infective agents. The sections about antibacterial agents included in the text range from providing information about old standards, such as chloramphenicol, aminoglycosides, and tetracyclines, to discussing the newest agents, such as the ketolides and the oxazolidinones. Other sections discuss newer agents and classes of agents, such as the echinocandins, viral fusion inhibitors, and newer antiparasitic drugs. The completeness of information and the organization of the book provide easy access to information. The sections are written in great detail and are heavily referenced. Illustrations and tables are plentiful, and they summarize the most important points of each topic. The chapters are clearly written and the style is consistent throughout, even though there were multiple authors.

The book has several weaknesses. First, like most print textbooks, the information will become dated over time. Supplementing the text with updated information on a Web site can reduce or eliminate the problem. Second, this text does not address the clinical issues of anti-infective therapy in detail. Although the editors suggest that this is accomplished on the Web site, that claim could not be validated. It is also unclear whether other volumes of the series are intended to address clinical use of anti-infective agents. In either case, the book misses the mark on this point. Finally, the construction of the book itself is of concern. The copy submitted for review had several groups of 20–30 pages that came loose from the binding.

In summary, this work can be recommended both as a reference and as a textbook for pharmacists and clinical pharmacologists. Although most infectious diseases specialists will find the book to be of limited use in clinical applications, trainees will find that the information on clinical and molecular pharmacology of anti-infective agents is clear and concise.

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Stephen C. Aronoff
Department of Pediatrics, Temple University School of Medicine, Temple Children’s Medical Center, Philadelphia, Pennsylvania

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