Australian Anti-Infection Handbook
by Dr Frank Zhu

**Australian Anti-Infection Handbook** $39.95

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**ISBN:** 978-0-6465223-9-5

**Paperback**

**Extent:** 395 pages

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The *Australian Anti-Infection Handbook* (AAH), first published in 2009 by author Dr Frank Zhu, a general practitioner of the Hasting Macleay Division and a Visiting Medical Officer of the North Coast Area Health Service, presents a comprehensive view on various infectious diseases and provides a compact guide for the management of various infections and medical microbiology conditions.

This handbook is intended for busy hospital doctors, GPs, microbiology laboratory staff, infection control staff, medical and science students and nurses who require a quick, concise and up-to-date guide on microbial infections, diagnosis and treatment.

The handbook contains most common infections found in Australia, with 258 infectious diseases references and conditions related to bacterial, viral, mycological, parasitic conditions including those caused by insects. Features of this handbook include an A to Z alphabetical reference guide on medical microbiology and infectious disease conditions for easy use. Valuable appendices include tabulated data on National Immunisation Program Schedule, Travel Vaccination, Australian Notifiable Infections, antimicrobial monitoring and much more. The small size of the handbook makes it easy to carry. Medical microbiology readers will find the information useful, practical and easy to read. It is also inexpensive when compared to many other medical textbooks.

Dr Zhu has checked with sources believed to be reliable in the efforts to provide information that is complete and up-to-date at the time of publication. However, because of continual changes in medicine, readers are encouraged to confirm the information contained with other sources.

The handbook is published by Palmer Higgs Books Pty Ltd and further information may be obtained on www.palmerhiggsbooks.com.au

**PCR for Clinical Microbiology**

An Australian and international perspective by a panel of Australian experts in the field of basic and diagnostic biology generally and medicine specifically.

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Available in book stores and all popular online book stores e.g Amazon.com US$173.00.

This book is an attempt to bridge the gap from ‘bench to bedside’ and is notable for a number of reasons. Firstly, while the book is written with an international audience in mind, it very much has an Australian identity. It includes advice on diseases that are emerging or actual important pathogens in Australia and the nearby Asia/Pacific region, including dengue fever and malaria. Apart from providing defined methods for the identification of a diverse range of viral, bacterial and parasite pathogens it also describes protocols for susceptibility screens that encompass important resistance and virulence genes. This is, however, far more than just a ‘recipe’ book. Rather, it is designed to educate the reader in the intricacies of PCR and includes an introductory chapter on PCR basics, PCR methodology and laboratory accreditation standards. The following chapters are individually and collectively of educational value to the novice. Chapters are structured into bacteriology, virology, fungal and parasitic as well as susceptibility screens. Fundamentals are covered in Part I and the medical diagnostic perspective for disease states is introduced by a clinician in Part II.

The inclusion of medical criteria broadens the appeal of the compendium and will help the reader understand, not just the strengths of PCR as a tool, but its limitations in specific contexts in relation to other diagnostic tests.

The potential of PCR as a medical diagnostic tool was recognised in the early days of PCR. Its uptake in this field has been relatively slow, however, and the early expectations are still to be realised. There are a number of reasons for this. Most of these, however, centre around the fact that its reliability and reproducibility to a standard required for clinical diagnosis is difficult to achieve. In a research laboratory, PCR is highly tailored to address specific research questions and time and resources are generally available to identify inconsistent data and troubleshoot where necessary. Clinical priorities, however, are driven by the need to have rigorously standardised protocols that can be consistently applied across diverse laboratories by personnel whose primary training is not necessarily in PCR.

Apart from the technical aspects of carrying out a PCR, it is also the case that diagnostic tests have to be carefully designed with respect to primers to be used and to how test samples are collected and the DNA therein purified. Improper design or execution of any of these steps can lead to adverse outcomes for a patient if misdiagnosis occurs. On top of this, of course, is the fact that PCR is extraordinarily sensitive so that laboratories dedicated to the method have to be meticulously designed to minimise contamination of test material.

This compendium is a valuable tool for clinicians, scientists, researchers and students of clinical diagnostic microbiology wanting to know how to set up a PCR diagnostic microbiology laboratory according to current regulatory standards and perform assays supplied with patients’ clinical diagnostic criteria and easy-to-follow protocols.

Over 60 authors, most ASM members, made primary contribution.

The chapters in the book underwent rigorous peer review thanks to the efforts of the ASM Standing Committee in Clinical Microbiology.