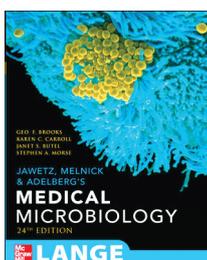


Jawetz, Melnick & Adelberg's Medical Microbiology 24th Edition



Authors: Geo F Brooks, Karen C Carroll, Janet S Butel, Stephen A Morse

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Reviewer: *Muhannad F Al-Kobaisi

جاويتزر ميلنيك واديلبيرج الأحياء الدقيقة الطبية

تأليف: جيو بروك, كارين كارول, جانيت بيوتيل, ستيفن موريس

مراجعة: مهند الكبيسي

The Authors of this book are professors from various prominent American universities and institutions:

1. Geo F Brooks, MD, Professor of Laboratory Medicine, University of California, San Francisco.
2. Karen C Carroll, MD, Professor of Pathology, The Johns Hopkins University School of Medicine, Baltimore.
3. Janet S Butel, PhD, Distinguished Professor, Baylor College of Medicine, Houston.
4. Stephen A Morse, PhD, Associate Director for Science, CDC, Atlanta.

The book's purpose is to introduce basic clinical microbiology through the fields of bacteriology, virology, mycology, and parasitology to provide a brief, accurate, and up to date presentation of these aspects of medical microbiology that are of particular significance in the fields of clinical infections and chemotherapy.

The current edition reflects the remarkable advanc-

es that have been made in our knowledge of microbes, their DNA sequence and the molecular mechanism of microbial disease. The changes to the new edition are based on the understanding of these aspects that have developed as a consequence from those studies.

The contents of the book are in seven sections distributed over 832 pages. It consists of a preface, an index and 48 chapters.

SECTION 1: FUNDAMENTALS OF MICROBIOLOGY. (7 CHAPTERS)

This section covers an introduction to the science of microbiology, the structure and function of the components of prokaryotic and eukaryotic cells, the classification of bacteria and cultivation of microorganisms. The last chapters discuss the growth, survival and death of microorganisms, microbial metabolism and, finally, microbial genetics.

SECTION 2: IMMUNOLOGY (1 CHAPTER)

An introduction to Immunology, which also contains a glossary of important immunology definitions.

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SECTION 3: BACTERIOLOGY (20 CHAPTERS)

This section starts with the pathogenesis of bacterial infection and antimicrobial chemotherapy, then proceeds with normal microbial flora of the human body and continues with the different bacterial families to end up with mycoplasmas and cell wall-defective bacteria, Rickettsia, Ehrlichia and chlamydiae.

SECTION 4: VIROLOGY (16 CHAPTERS)

These chapters discuss first the general properties of viruses then the pathogenesis and control of viral diseases, followed by the important human virus families and a chapter on the viruses which cause human cancer, AIDS and lentiviruses.

SECTION 5: MYCOLOGY (1 CHAPTER)

This chapter deals with all the medical mycology information starting with the properties and ending with different types of mycoses.

SECTION 6: PARASITOLOGY (1 CHAPTER)

The chapter involves a wide spectrum of medical parasitology information.

SECTION 7: DIAGNOSTIC MICROBIOLOGY AND CLINICAL CORRELATION (2 CHAPTERS)

The first chapter deals with the principles of diagnostic medical microbiology while the last discusses different cases and clinical correlations.

A wide spectrum of readers may benefit from this book: medical students, life sciences undergraduate, postgraduate students, all medical laboratory technologist and senior microbiology professionals, also academics and microbiology teachers.

This print of the book is the 24th edition, therefore, we should realize one important issue that is, this text book has survived for 53 years and if the information or the way it was presented fell short during any of these past years it would have for sure been discontinued.

I myself have used this book a long time ago and I still use it as a source of significant microbiology information. That is why, in my opinion, the information compiled in this text book and the long-established continuous updates should make it a very vital review text book for most readers.

This book offers a very broad look at bacteriology and virology (with some immunology and parasitology). The chapters are full of information: brief descriptions of organisms, vital perspectives on patho-

genesis, diagnostic laboratory tests, clinical findings, treatment and epidemiology, the role microorganisms play in human health and illnesses and other detailed information that will be of interest to those who make a living in the field of microbiology.

There might be books with far less information and easier to use; however, as mentioned earlier, this book is comprehensive and has been extensively revised and updated.

The main structure and organization of this book is done to link fundamental microbiology concepts with the diagnosis and treatment of clinical infections. The authors have tried to integrate extensive updates throughout the text, including the use of current nomenclature as well as coverage of some newly viruses such as West Nile virus, coronaviruses, metapneumoviruses, Hendra and other detailed information associated with them and the agents of bioterrorism.

The chapters are rich in such information and structured in a coherent approach to reflect the overall consistency of the growing information in this field of medical science. Also, at the end of each chapter a group of review questions and case studies that really are a bonus for students, trainees and readers in general.

As we look back at the early editions of this book, we find that a lot of effort has been applied to generate and develop this new edition in order to fulfill the user's requirements. However, there are a few points which need to be raised:

1. There are around 300 informative illustrations and tables, each designed to clarify and drive some important chapter concepts. Although I do not doubt the standards and professionalism of this book, I still think that it would have been more fascinating if colours were introduced to at least some of the illustrations to brighten up the text.
2. When we flip through different chapters we find that references have been added at the end, but there is no indication as to whether the information is a suggested source for extra study or if it is already incorporated into the chapters.
3. It is quite clear that the authors have realized the need to add further issues, as in the case of the last two chapters that involves diagnostic medical microbiology and clinical correlations. For that purpose, a new author was employed, since microbiology diagnostics have been evolving very fast

during the past two decades. Nevertheless, I still believe that part of these two chapters should have been incorporated into the counterpart chapters (i.e. the clinical cases could have merged with the appropriate chapters), while the diagnostic part could have been combined or added to the first section, or as an individual section that follows the

immunology section. This would further strengthen and enhance the arrangement and structure of the text book.

Finally, I am sure that this new edition will add significantly to our knowledge and understanding of microbiology as past editions have always done.