

美国医师执照考试高效复习丛书（中英文对照）

High-Yield **MICROBIOLOGY AND** **INFECTIOUS DISEASES**

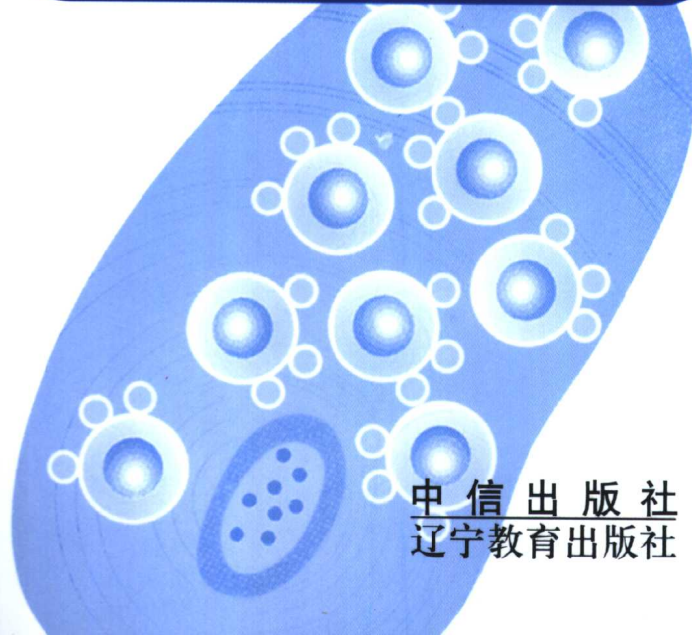
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微生物学与感染性疾病

[美]路易丝·B·霍利 (Louise B. Hawley) ◆著



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陈海伦 译

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微生物学与感染性疾病

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译者前言

《美国医师执照考试高效复习丛书》由 Lippincott Williams & Wilkins 公司出版,为参加美国医师行医执照考试(United States Medical Licensing Examination, USMLE)所用的培训教材,其主要读者对象是美国国内准备参加考试的医学生或毕业生和有志获取美国行医执照的外国医生或医学生。为了满足我国广大医学生和医生的需求,适应双语教学的需要,中信出版社和辽宁教育出版社委托首都医科大学组织学校及各附属医院相关学科的专家教授翻译了这套丛书。

丛书共 17 个分册,涵盖 USMLE 第一阶段(Step 1)基础医学和第二阶段(Step 2)临床医学的主要课程。丛书复习的高效性主要体现在:内容高度概括,重点突出,利于考生抓住重点,快速记忆;内容选择针对性强,用较少的时间便可掌握更多更重要的知识。各分册均由相关专业的专家教授编写,使丛书内容更具有权威性。

丛书的主要特点:(1)编排新颖、图文并茂:既有基础知识要点的分类介绍,又有以疾病为核心的综合复习,同时还有相关学科的横向比较和归纳;该丛书收集了大量丰富多彩的图片,使内容直观易懂;运用了大量表格对重要概念和问题进行比较、归纳和总结,便于快速理解和记忆。(2)理论联系实际,基础与临床结合:基础医学部分在讨论基础医学知识的同时,设有“与临床联系”等类似内容。临床医学部分在学习临床理论的同时,给出各种“病例分析”,使理论与实践紧密结合。这对医学教育的思维模式是一种创新。(3)丛书出版采取中英文合出的形式,即前面是中文,后面是英文。

丛书既可作为教学材料,又可供学生课后参考,适应于医学院校开展双语教学;也可作为我国执业医师资格考试复习的参考书,以及有志于获取美国行医执照的中国医学生和医生参考。

需要说明的是,书中部分图片是引用其他作者的,因在英文部分均有交代,在中文部分未列出。

Preface

High-Yield™ Microbiology and Infectious Diseases provides a review of these subject areas as they have typically been covered on Step 1 of the United States Medical Licensing Examination (USMLE) and Comprehensive Osteopathic Medical Licensing Examination (COMLEX). I have also included topics that I anticipate will be added to the exams this year.

The material is presented using four different approaches:

1. **Bug Parade Approach: Microbiology, Bacteria, Viruses, Fungi, Parasites (Chapters 1–34).** These chapters cover major microbial and parasitic genera and species, presenting important organism characteristics and the diseases each organism causes. There are separate chapters covering bacterial and viral genetics; bacterial genetic concepts are generously illustrated.
2. **Organ-System/Disease Approach: Infectious Diseases (Chapters 35–43).** Pneumonias, rashes, and other diseases and conditions are presented in an easy-to-use clinical vignette format suitable for both fast review and self-testing. Each “high-yield” case is followed by the questions that are most likely to be asked on the exam. You won’t have to flip pages for the answers—they’re right below the questions! (For self-testing, use a cover sheet to cover the answers.)
3. **Comparative Microbiology Approach (Chapter 44).** The comparative chapter groups microorganisms according to important features—for example, “Antiphagocytic Structures,” or “Toxins with ADP-Ribosyl Transferase Activity.” The outline format allows you to either quickly scan for review or test yourself (using a cover sheet) to ensure that, when these features are used as clues on the exam, you will answer the questions with ease. This section also includes tables that highlight important toxins, culture media, and modes of transmission important in differentiating infectious disease agents.
4. **High-Yield Case Set-up Approach.** This section consists of high-yield case set-ups, which are cases composed of essential clues without the easily changeable “window dressing.” The case set-ups are presented in random order; each case is followed by a series of likely exam questions, with answers immediately following the questions. The format allows for both quick review and self-testing. Much faster and broader self-testing is possible with this format than with multiple-choice questions.

The inclusion of these four different approaches gives you several options. For example, you can focus on a “bug” approach if you were taught according to an “organ-system” approach—or vice versa. Or you can study the entire book, which will provide the repetition you will need to retain the many facts crucial to analyzing the exam’s clinical cases and answering the questions.

Other features that are used throughout the book to enhance your review include illustrations, tables, boldface terms, and **memory tricks** (identified with the symbol ●). Organisms that are particularly likely to be on the exam are often identified simply as “high-yield.” In conjunction with the *High-Yield™* series outline format, these features provide for an efficient review.

The USMLE’s (and COMLEX’s) Strategy For Microbiology Testing

On the USMLE and COMLEX examinations, many questions start with a clinical scenario. For the microbiology and infectious disease questions, you will need to recognize the disease presentation and identify the causative agent based on clinical or basic science information. You may be asked to iden-

Preface

tify the causative agent, but more frequently that question will be skipped and instead you will be asked a basic science question about the causative agent, the disease, or therapeutic mechanisms. For instance, the exam may present a case history of a child with cough, coryza, conjunctivitis, and small gray oral lesions with a red base, which is followed by the development of a macular papular rash from the ears down that becomes confluent on the face. You might be asked to identify the family of the viral causative agent (measles is caused by Rubeola which is a Paramyxovirus), or the replicative intermediate of the causative agent (it replicates through a positive RNA intermediate). In infections where there is a dominant causative agent (e.g., a urinary tract infection), you will need to know what it is (*E. coli*). In some cases, distinguishing clues will be used to point you to a specific but less common organism; for example, if a catalase-positive, Gram-positive coccus is the predominant organism in a urinary tract infection, then the infecting organism is *Staphylococcus saprophyticus*. Clues may include bug characteristics, virulence factors, geography, route and timing of exposure, patient's age, underlying condition, and symptomology.

There will also be questions comparing different organisms or groups of organisms, toxins or other virulence factors. *Example*: A case of pneumonia (maybe without geographical or environmental clues!) with a description of the causative agent in tissue, such as "broad-based budding yeast in tissue which grows as a filamentous form with nondescript small conidia at room temperature" (*Blastomyces dermatitidis*). The next question might be about the disease's endemic regions (great riverbeds in U.S. and the southeastern U.S. seaboard states), or where in the environment the exposure originated (high-organic soil with rotting wood). [An association with bats would indicate *Histoplasma*; with pigeons, *Cryptococcus*; and with desert sand, *Coccidioides*.] Because of the low computer screen resolution on the computerized exams, microscopic images are less likely to be used than verbal descriptions.

In the great majority of questions, high-order thinking will be required—you will have to piece together several clues. This book presents the essential database of concepts and facts that will enable you to answer the questions. The fourfold approach of *High-Yield™ Microbiology and Infectious Diseases* not only provides the repetition needed to improve retention of the data, but also provides several options for optimizing your review. In addition, the Infectious Disease section and the High-Yield Cases in Chapter 45 will provide you some insight and practice into the problem solving.

If you have any comments about this High-Yield™ title or suggestions for the next edition, please send them to the publisher at Lippincott Williams & Wilkins, Review Books, Rose Tree Corporate Center, Building II, Suite 5025, 1400 N. Providence Road, Media, PA 19063-2043, or via e-mail to Rounds@lww.com.

I wish you good luck!

Louise B. Hawley, Ph.D.

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