

Features:

- **Building-block approach** encourages you to use previously learned information in mastering new material.
- **Full-color photographs and photomicrographs** make it easier to understand and apply diagnostic microbiology concepts.
- **Case studies** describe clinical and laboratory findings, offering opportunities to correlate observations with possible etiologic agents and to build critical thinking and problem-solving skills.
- **Hands-on procedures** in the appendices describe techniques used in the lab setting.
- **Issues to Consider boxes** list important points to think about while reading the chapter.
- **Case Checks** in each chapter highlight specific points in the text and show how they connect to case studies.
- **Bolded key terms with abbreviations** are listed at the beginning of each chapter, showing the most important and relevant terms in each chapter.
- **Learning Objectives** at the beginning of each chapter supply you with a measurable learning outcome to achieve by completing the material.
- **Points to Remember sections** at the end of each chapter provide a bulleted list of key concepts.
- **Learning Assessment Questions** at the conclusion of each chapter help you to think critically and to evaluate how well you have mastered the material.
- **Agents of Bioterror and Forensic Microbiology chapter** provides the most current information about these important topics.
- **Lab manual on the Evolve website** reinforces concepts with real-life scenarios and review questions.
- **Glossary** at the end of the book supplies you with a quick reference for looking up definitions of key terms.

New To This Edition:

- **NEW! Information about SARS-CoV-2 and COVID-19** is added to this edition.
- **NEW! Updated content** is included throughout the book, and several chapters are reorganized and refocused.
- **NEW! Enterobacteriaceae chapter** is updated.

Περιεχόμενα:

Part 1: Introduction to Clinical Microbiology Chapter 1: Bacterial Cell Structure, Physiology, Metabolism, and Genetics Chapter 2: Host-Parasite Interaction Chapter 3: The Laboratory Role in Infection Control Chapter 4: Control of Microorganisms: Disinfection, Sterilization, and Microbiology Safety Chapter 5: Performance Improvement in the Microbiology Laboratory Chapter 6: Specimen Collection and Processing Chapter 7: Microscopic Examination of Materials from Infected Sites Chapter 8: Use of Colony Morphology for the Presumptive Identification of Microorganisms Chapter 9: Biochemical Identification of Gram-Negative Bacteria Chapter 10: Immunodiagnosis of Infectious Diseases Chapter 11: Applications of Molecular Diagnostics Chapter 12: Antibacterial Mechanisms of Action and Bacterial Resistance Mechanisms Chapter 13: Antimicrobial Susceptibility Testing Part 2: Laboratory Identification of Significant Isolates Chapter 14: Staphylococci Chapter 15: Streptococcus, Enterococcus, and Other Catalase-Negative, Gram-Positive Cocci Chapter 16: Aerobic Gram-Positive Bacilli Chapter 17: *Neisseria* Species and *Moraxella catarrhalis* Chapter 18: *Haemophilus*, *HACEK*, *Legionella* and Other Fastidious Gram-Negative Bacilli Chapter 19: Enterobacteriaceae Chapter 20: *Vibrio*, *Aeromonas*, and *Campylobacter* Species Chapter 21: Nonfermenting and Miscellaneous Gram-Negative Bacilli Chapter 22: Anaerobes of Clinical Importance Chapter 23: The Spirochetes Chapter 24: Chlamydia, Rickettsia, and Similar Organisms Chapter 25: *Mycoplasma* and *Ureaplasma* Chapter 26: *Mycobacterium tuberculosis* and Nontuberculous *Mycobacteria* Chapter 27: Medically Significant Fungi Chapter 28: Diagnostic Parasitology Chapter 29: Clinical Virology Chapter 30: Agents of Bioterror and Forensic Microbiology Chapter 31: Biofilms: Architects of Disease Part 3: Laboratory Diagnosis of Infectious Diseases: and Organ System Approach to Diagnostic Microbiology Chapter 32: Upper and Lower Respiratory Tract Infections Chapter 33: Skin and Soft Tissue Infections Chapter 34: Gastrointestinal Infections and Food Poisoning Chapter 35: Infections of the Central Nervous System Chapter 36: Bacteremia and Sepsis Chapter 37: Urinary Tract Infections Chapter 38: Genital Infections and Sexually Transmitted Infections Chapter 39: Infections in Special Populations Chapter 40: Zoonotic Diseases Chapter 41: Ocular Infections Appendix A: Selected Bacteriologic Culture Media Appendix B: Selected Mycology Media, Fluids, and Stains Appendix C: Selected Procedures Appendix D: Answers to Learning Assessment Questions Glossary