



Edition: 1st Edition 2016

pages: 306 Images: 272

Cover: Hardcover, 22 x 28,5 cm ISBN: 978-0-86715-647-8

Stock No.: 7401

Published: January 2016

£78.00

Subject to changes!

Quintessence Publishing Company, Ltd.

Grafton Road
 KT3 3AB New Malden, Surrey
 United Kingdom

- **)** +44 (0)20 8949 6087
- +44 (0)20 8336 1484
- http://nginx/gbr/en

Book information

Authors: Nejat Düzgünes

Title: Medical Microbiology and Immunology for Dentistry

Short text:

This clinically oriented textbook explores medical microbiology and immunology as they relate to the practice of dentistry, including sections on the microbiologic basis of caries, periodontal disease, and endodontic infection. The book begins with a thorough discussion of immunology and then systematically covers the bacteria, fungi, viruses, and parasites that affect the human body as well as their oral manifestations. Exremely detailed illustrations throughout aid the reader in comprehending the complex interactions involved in processes such as cellular immunity, bacterial and fungal infiltration, biofilm and dental plaque formation, and virus entry and replication.

Sections on recombinant DNA technology, molecular diagnostics, and genomics familiarize the reader with new technologies and emerging fields that will impact future practice. Notable discoveries in molecular biology are highlighted throughout, and research questions are featured as well to engage understanding and critical thinking. Finally, an appendix of cases in medical microbiology challenges the reader to pose diagnoses based on clinical symptoms. This book will no doubt become the definitive textbook on microbiology for dental students and dentists.

Contents

Part I: Immunity

Chapter 01. The Immune System

Chapter 02. Antibodies and Complement

Chapter 03. Cellular Immunity

Chapter 04. The Immune Response to Pathogens and Immunopathogenesis

Chapter 05. Vaccines

Part II: Bacteria

Chapter 06. Bacterial Structure, Metabolism, and Genetics

Chapter 07. Bacterial Pathogenesis

Chapter 08. Antibacterial Chemotherapy

Chapter 09. Sterilization, Disinfection, and Antisepsis

Chapter 10. Microbial Identification and Molecular Diagnostics

Chapter 11. Staphylococcus

Chapter 12. Streptococcus

Chapter 13. Miscellaneous Gram-Positive Bacilli

Chapter 14. Clostridium

Chapter 15. Bordetella, Legionella, and Miscellaneous Gram-Negative Bacilli

Chapter 16. Neisseria and Neisseriaceae

Chapter 17. Spirochetes

Chapter 18. Enterobacteria, Campylobacter, and Helicobacter

Chapter 19. Mycoplasma and Ureaplasma

Chapter 20. Mycobacteria

Chapter 21. Chlamydia, Rickettsia, and Related Bacteria

Chapter 22. Vibrio, Pseudomonas, and Related Bacteria

Chapter 23. Oral Microflora and Caries

Chapter 24. Periodontal and Endodontic Infections

Part III: Fungi

Chapter 25. Fungal Structure, Replication, and Pathogenesis

Chapter 26. Fungal Diseases

Chapter 27. Antifungal Chemotherapy

Part IV: Viruses

Chapter 28. Viral Structure, Replication, and Pathogenesis

Chapter 29. Antiviral Chemothreapy

Chapter 30. Naked Capsid DNA Viruses

Chapter 31. Human Immunodeficiency Virus and Other Retroviruses

Chapter 32. Hepatitis Viruses

Chapter 33. Herpesviruses

Chapter 34. Orthomyxoviruses: Influenza Virus

Chapter 35. Paramyxoviruses: Measles, Mumps, and Respiratory Syncytial Viruses

Chapter 36. Picornaviruses

Chapter 37. Arboviruses

Chapter 38. Rhabdoviruses, Poxviruses, and Coronaviruses

Chapter 39. Rubella Virus, Filoviruses, Reoviruses, and Noroviruses

Part V: Other

Chapter 40. Prions

Chapter 41. Pathogenic Parasites

Categories: Human Medicine, General Dentistry, Student literature