Every Decker book is accompanied by a CD-ROM.

The disk appears in the front of each copy, in its own sealed jacket. Affixed to the front of the book will be a distinctive BcD sticker “Book cum disk”.

The disk contains the complete text and illustrations of the book, in fully searchable PDF files. As an added feature, most chapters feature problem-solving cases to allow for testing and reinforcing of the material as it applies to clinical situations. The book and disk will be sold only as a package; neither will be available independently, and no prices will be available for the items individually.

BC Decker Inc is committed to providing high quality electronic publications that will compliment traditional information and learning methods.

We trust you will find the Book/CD Package invaluable and invite your comments and suggestions.

Brian C. Decker
CEO and Publisher
Essentials of Oral Medicine

Sol Silverman, Jr, MA, DDS
Professor
Division of Oral Medicine
Department of Stomatology
University of California School of Dentistry
San Francisco, California

L. Roy Eversole, DDS, MSD, MA
Professor
Department of Pathology and Medicine
University of the Pacific School of Dentistry
San Francisco, California

Edmond L. Truelove, DDS, MSD
Professor and Chairperson
Department of Oral Medicine
University of Washington
University of Washington Medical Center
Seattle, Washington

2001
BC Decker Inc
Hamilton • London
Notice: The authors and publisher have made every effort to ensure that the patient care recommended herein, including choice of drugs and drug dosages, is in accord with the accepted standard and practice at the time of publication. However, since research and regulation constantly change clinical standards, the reader is urged to check the product information sheet included in the package of each drug, which includes recommended doses, warnings, and contraindications. This is particularly important with new or infrequently used drugs.
Contributors

BRUCE BLASBERG, DMD, FRCD(C)
Associate Professor and Division Head
Division of Oral Medicine and Pathology
Department of Oral Biological and Medical Sciences
University of British Columbia Faculty of Dentistry
Vancouver, British Columbia
Atypical Facial Pain

WILLIAM M. CARPENTER, DDS, MS
Professor and Chairman
Department of Pathology and Medicine
University of the Pacific School of Dentistry
San Francisco, California
Infection Control

ELISA M. CHÁVEZ, DDS
Clinical Assistant Professor
Department of Removable Prosthodontics
University of the Pacific School of Dentistry
University of the Pacific On Lok Senior Health Center
San Francisco, California
Special Senses: Disorders of Taste and Smell

EVE CUNY, MS
Director
Environmental Health and Safety
University of the Pacific School of Dentistry
San Francisco, California
Infection Control

JOEL B. EPESTEIN, DMD, MSD, FRCD(C)
Professor
Department of Oral Medicine
University of Washington
Seattle, Washington
Medical Dental Staff
British Columbia Cancer Agency
Vancouver Hospital
Vancouver, British Columbia
Oral Fungal Infections
Burning Mouth Syndrome
Orofacial Pain in Patients with Cancer

L. ROY EVESOLE, DDS, MSD, MA
Professor
Department of Pathology and Medicine
University of the Pacific School of Dentistry
San Francisco, California

JACOB FLEISCHMANN, MD
Clinical Professor
University of California School of Medicine and Dentistry
Greater Los Angeles VA Medical Center
Los Angeles, California
Oral Fungal Infections

PHILIP C. FOX, DDS
Biomedical Consultant
Cabin John, Maryland
Diseases of the Salivary Glands

MICHAEL GLICK, DMD
Professor
Department of Oral Medicine
University of Pennsylvania School of Dental Medicine
Director
Programs for Medically Complex Patients
Philadelphia, Pennsylvania
Human Immunodeficiency Virus Disease

MIRIAM GRUSHKA, DDS, PhD
Active Staff
Etobicoke Campus
William Osler Health Centre
Toronto, Ontario
Burning Mouth Syndrome

PETER L. JACOBSEN, PhD, DDS
Professor
Department of Pathology and Medicine
Director
Oral Medicine Clinic
University of the Pacific School of Dentistry
San Francisco, California
Adverse Drug Reactions
JED J. JACOBSON, DDS, MS, MPH
Assistant Dean
Department of Oral Medicine, Pathology, and Oncology
University of Michigan School of Dentistry
Ann Arbor, Michigan
Bacterial Infections

JILL S. KAWALEC, PhD
Director of Research
Ohio College of Podiatric Medicine
Cleveland, Ohio
Burning Mouth Syndrome

CRAIG S. MILLER, DMD, MS
Professor
Department of Oral Medicine
University of Kentucky College of Dentistry
Lexington, Kentucky
Hepatitis B and Hepatitis C Virus Infections

DOUGLAS E. PETERSON, DMD, PhD
Professor and Department Head
Department of Oral Diagnosis
University of Connecticut School of Dental Medicine
Associate Director
Cancer Program
University of Connecticut Health Center
Farmington, Connecticut
Blood Dyscrasias

MARK M. SCHUBERT, DDS, MSD
Professor
Department of Oral Medicine
University of Washington
Director of Oral Medicine
Seattle Cancer Care Alliance
Seattle, Washington
Blood Dyscrasias

JONATHAN A. SHIP, DMD
Professor
Department of Oral Medicine
Director
Bluestone Center for Clinical Research
New York University College of Dentistry
New York University Medical Center
New York, New York
Special Senses: Disorders of Taste and Smell

SOL SILVERMAN, JR, MA, DDS
Professor
Division of Oral Medicine
Department of Stomatology
University of California School of Dentistry
San Francisco, California

DAVID A. SIROIS, DMD, PhD
Associate Professor and Chairman
Department of Oral Medicine
New York University College of Dentistry
Adjunct Associate Professor
Department of Neurology
New York University School of Medicine
New York, New York
Orofacial Neuralgias and Neuropathic Pain

CAROL M. STEWART, DDS, MS
Associate Dean for Clinical Affairs
Department of Oral and Maxillofacial Surgery and Diagnostic Sciences
University of Florida College of Dentistry
Gainesville, Florida
Endocrine Diseases

EDMOND L. TRUELOVE, DDS, MSD
Professor and Chairperson
Department of Oral Medicine
University of Washington
University of Washington Medical Center
Seattle, Washington
THE PATIENT WORKUP
1. Procurement of the History
   L. Roy Eversole, DDS, MSD, MA, and Sol Silverman, Jr, MA, DDS
   1
2. Physical Diagnosis of the Head and Neck
   L. Roy Eversole, DDS, MSD, MA, and Sol Silverman, Jr, MA, DDS
   6

THE MEDICALLY COMPROMISED PATIENT
3. Cardiovascular Diseases
   L. Roy Eversole, DDS, MSD, MA
   27
4. Renal Diseases and Hypertension
   L. Roy Eversole, DDS, MSD, MA
   36
5. Respiratory Diseases
   L. Roy Eversole, DDS, MSD, MA
   42
6. Diseases of the Liver and Gastrointestinal Tract
   L. Roy Eversole, DDS, MSD, MA
   54
7. Bleeding Disorders
   L. Roy Eversole, DDS, MSD, MA
   61
8. Blood Dyscrasias
   Douglas E. Peterson, DMD, PhD, Mark M. Schubert, DDS, MSD,
   Sol Silverman, Jr, MA, DDS, and L. Roy Eversole, DDS, MSD, MA
   67
9. Endocrine Diseases
   Carol M. Stewart, DDS, MS
   84
10. Parathyroid Disease and Calcium Metabolism
    Sol Silverman, Jr, MA, DDS
    100
11. Adverse Drug Reactions
    Peter L. Jacobsen, PhD, DDS
    107

INFECTION DISEASES
12. Mechanisms of Infection and Host Defense
    L. Roy Eversole, DDS, MSD, MA
    111
13. Herpesviruses and Enteroviruses
    Sol Silverman, Jr, MA, DDS, and L. Roy Eversole, DDS, MSD, MA
    117
14. Human Immunodeficiency Virus Disease
    Michael Glick, DMD, and Sol Silverman, Jr, MA, DDS
    128
15. Human Papillomaviruses and Papillary Oral Lesions
    L. Roy Eversole, DDS, MSD, MA
    144
CONTENTS

16. Hepatitis B and Hepatitis C Virus Infections
   Craig S. Miller, DMD, MS
   152
17. Bacterial Infections
   Jed J. Jacobson, DDS, MS, MPH, and Sol Silverman, Jr, MA, DDS
   159
18. Oral Fungal Infections
   Joel B. Epstein, DMD, MSD, FRCD(C), Sol Silverman, Jr, MA, DDS, and Jacob Fleischmann, MD
   170
19. Infection Control
   Eve Cuny, MS, and William M. Carpenter, DDS, MS
   180

SOFT TISSUE DISEASE

20. Oral Premalignancies and Squamous Cell Carcinoma
    Sol Silverman, Jr, MA, DDS, and L. Roy Eversole, DDS, MSD, MA
    186
21. Immunopathologic Mucosal Lesions
    Sol Silverman, Jr, MA, DDS, and L. Roy Eversole, DDS, MSD, MA
    206
22. Pigmentations of the Oral Mucosa and Facial Skin
    L. Roy Eversole, DDS, MSD, MA, and Sol Silverman, Jr, MA, DDS
    218
23. Swellings and Tumors of the Oral Cavity and Face
    L. Roy Eversole, DDS, MSD, MA, and Sol Silverman, Jr, MA, DDS
    228
24. Orofacial Granulomatosis and Other Inflammatory Lesions
    L. Roy Eversole, DDS, MSD, MA
    245
25. Developmental Mucosal Conditions
    Sol Silverman, Jr, MA, DDS
    252
26. Diseases of the Salivary Glands
    Philip C. Fox, DDS, and L. Roy Eversole, DDS, MSD, MA
    260

FACIAL PAIN AND NEUROLOGY

27. Special Senses: Disorders of Taste and Smell
    Jonathan A. Ship, DMD, and Elisa M. Chávez, DDS
    277
28. Pain Mechanisms
    Edmond L. Truelove, DDS, MSD
    289
29. Pain and Behavior
    Edmond L. Truelove, DDS, MSD
    302
30. Temporomandibular Disorders
    Edmond L. Truelove, DDS, MSD
    311
31. Headache
    Edmond L. Truelove, DDS, MSD
    327
32. Orofacial Neuralgias and Neuropathic Pain
    David A. Strois, DMD, PhD
    339
33. Atypical Facial Pain
    Bruce Blasberg, DMD, FRCD(C)
    348
34. Burning Mouth Syndrome
    Miriam Grushka, DDS, PhD, Joel B. Epstein, DMD, MSD, FRCD(C), and Jill S. Kawalec, PhD
    354
35. Regional and Referred Orofacial Pain
    Edmond L. Truelove, DDS, MSD
    359
36. Orofacial Pain in Patients with Cancer
    Joel B. Epstein, DMD, MSD, FRCD(C)
    367
Oral medicine is a diverse and dynamic specialty that requires a clinician to have a background in the dental, medical, and basic sciences in order to manage the myriad of diseases and conditions that affect the head and neck area. These disorders may reflect local disease processes, oral manifestations of systemic diseases, or oral conditions that can affect other organ systems.

While a structured training program is required to attain a fundamental knowledge of oral medicine, varying degrees of expertise are essential to incorporating the principles of oral medicine into general practice. Since oral medicine integrates basic elements of pathology, diagnosis, prevention, and treatment, reference texts are needed; continuing education in this field never ends. Having experience in differential diagnosis, becoming knowledgeable about and proficient in diagnostic testing, and keeping abreast of therapeutics are all essential components of optimal patient care.

With this in mind, we have organized Essentials of Oral Medicine into five sections: The Patient Workup, The Medically Compromised Patient, Infectious Disease, Soft Tissue Disease, and Facial Pain and Neurology. These sections describe and illustrate a large number of oral diseases and conditions, including pathologic and molecular correlates. Our objective is to enable both students and practitioners to attain a final diagnosis and initiate the appropriate treatments.

The essential procedures of history taking, and oral or head and neck examinations, are discussed and illustrated. These are the critical first steps in correlating patient complaints and findings with abnormalities and disease entities (differential diagnosis). A brief overview of the important organ systems adds to an understanding of the interactions between oral findings and overall patient health. The text has an abundance of colored illustrations to aid a clinician in defining and classifying deviations from normal as well as disease entities. An accompanying CD-ROM contains the full text and illustrations plus problem-solving cases that accompany most chapters. This addition not only allows for testing but also reinforces the material as it applies to clinical situations.

We have prepared this text in oral medicine to simplify patient evaluation and treatment, improve patient care, and prevent complications. We hope the work will help you achieve these goals.

Sol Silverman Jr
L. Roy Eversole
Edmond L. Truelove

June 2001
We would like to express our appreciation of our students and patients, who have constantly challenged our diagnostic acumen. Special thanks is extended to Ms. Heather Kidd at BC Decker for her support and efforts in keeping us focused on the overall mission for this text, and for engineering all the aspects of this book and accompanying CD with regard to organization, the myriad of details, and formatting.

The editors also wish to extend their gratitude to Drs. Rasika Naran, Perry T. Francis, Don Fowkes, and to Mrs. Maria Co-Viray for serving as examiners and patients in the chapter on physical diagnosis. The expertise and cooperation of the contributing authors is recognized and their substantive additions to Essentials of Oral Medicine are greatly appreciated.

This book is dedicated to the patients that the three principal authors have examined, diagnosed, and treated in their clinics throughout more than a century of collective oral medicine practice. These patients have endured pain, loss of function, disfigurement, and lowered quality of life from the many neoplastic, infectious, inflammatory, and neurologic diseases from which they have suffered. We hope that we have contributed to their healing and comfort.