

第8版

临床药物治疗学

APPLIED THERAPEUTICS
THE CLINICAL USE OF DRUGS

营 养

原著 Mary Anne Koda-Kimble
Lloyd Yee Young
Wayne A. Kradjan
B. Joseph Guglielmo
Brian K. Alldredge
Robin L. Corelli

主译 王秀兰 贾继东 张淑文

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Mary Anne Koda-Kimble, et al.

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王秀兰 等主译

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邮 编: 100078

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参编人员名单

Steven R. Abel, PharmD

Professor and Head
Department of Pharmacy Practice
Purdue University School of Pharmacy
and Pharmaceutical Sciences
Indianapolis, Indiana

Brian K. Alldredge, PharmD

Professor of Clinical Pharmacy
Clinical Professor of Neurology
Departments of Clinical Pharmacy and Neurology
Northern California Comprehensive Epilepsy Center
University of California, San Francisco
San Francisco, California

Judith Ann Alsop, PharmD

Associate Clinical Professor of Pharmacy
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

J. V. Anandan, PharmD, BCPS

Adjunct Associate Professor
Eugene Applebaum College of Pharmacy and Health Sciences
Wayne State University
Pharmacy Specialist, Department of Pharmacy, Henry Ford
Hospital
Detroit, Michigan

Edgar R. Arriola, PharmD

Coordinator, Drug Information Center
UCLA Medical Center
Department of Pharmaceutical Services
Los Angeles, California

Sara Grimsley Augustin, PharmD, BCPP

Assistant Professor
Clinical and Administrative Sciences
Mercer University Southern School of Pharmacy
Atlanta, Georgia

Francesca T. Aweeka, PharmD

Professor, Director of Drug Research Unit
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

Omar Badawi, PharmD

Assistant Clinical Professor
Department of Pharmacy Practice and Science, University of
Maryland
Clinical Pharmacist, Cardiac Intensive Care Unit
University of Maryland Medical Center
Baltimore, Maryland

Andrew D. Barnes, PharmD

Clinical Pharmacist
Cardiothoracic Surgery, Department of Pharmacy, University of
Washington Medical Center
Clinical Assistant Professor, School of Pharmacy
University of Washington
Seattle, Washington

David T. Bearden, PharmD

Clinical Assistant Professor
Department of Pharmacy Practice
College of Pharmacy
Oregon State University
Portland, Oregon

Sandra Benavides, PharmD

Assistant Professor
University of Texas, Pan American
Edinburg, Texas

William H. Benefield Jr., PharmD, BCPP, FASCP

Clinical Assistant Professor
Department of Pharmacotherapy, University of Texas, Health
Sciences Center at San Antonio
Consultant, PharmERICA
San Antonio, Texas

Paul M. Beringer, PharmD

Associate Professor
USC School of Pharmacy
Los Angeles, California

Daniel Bestul, PharmD

Oncology Pharmacy Specialist
Pharmacy Department, University of Colorado Hospital
Department of Clinical Pharmacy
University of Colorado School of Pharmacy
Denver, Colorado

Nicholas Ronald Blanchard, PharmD, Med

Associate Professor
Pharmacy Practice
Wingate University
Wingate, North Carolina

Ann M. Bolinger, PharmD

Associate Professor of Clinical Pharmacy
Department of Clinical Pharmacy
School of Pharmacy
University of California, San Francisco
San Francisco, California

Thomas C. Bookwalter, PharmD

Assistant Clinical Professor
Department of Clinical Pharmacy, School of Pharmacy
Clinical Pharmacist, Department of Clinical Pharmacy,
Long-Moffitt Hospital
University of California, San Francisco
San Francisco, California

Mary C. Borovicka, PharmD, BCPP

Assistant Professor
Department of Pharmacy Practice, University of Toledo
Clinical Pharmacy Specialist, Pharmacy Department,
Louis Stokes VA Medical Center
Toledo, Ohio

Tina Penick Brock, PharmD

Clinical Associate Professor
Department of Pharmacy, University of North Carolina at Chapel
Hill
Clinical Specialist, Pharmacy Department,
UNC Hospitals
Chapel Hill, North Carolina

Donald F. Brophy, PharmD, BCPS

Associate Professor
Departments of Pharmacy Practice and Internal Medicine
School of Pharmacy
Virginia Commonwealth University
Richmond, Virginia

Glen R. Brown, PharmD

Clinical Coordinator
Pharmacy Department
St. Paul's Hospital
Vancouver, British Columbia, Canada

Jill S. Burkiewicz, PharmD

Assistant Professor
Director, Primary Care Residency Program Midwestern University
Midwestern University Chicago College of Pharmacy
Clinical Pharmacist, Advocate Health Centers
Downer's Grove, Illinois

Betsy A. Carlisle, PharmD, CDF

Clinical Coordinator
Department of Pharmacy
Seton Medical Center
Austin, Texas

Barry L. Carter, PharmD, FCCP, BCPS, FAHA

Professor and Head
Division of Clinical and Administrative Pharmacy
College of Pharmacy and Department of Family Medicine
University of Iowa
Iowa City, Iowa

Pauline Ann Cawley, PharmD

Clinical Assistant Professor
Clinical Pharmacy, University of Utah
Clinical Pharmacist Specialist, Critical Care
LDS Hospital
Salt Lake City, Utah

Jennifer C. Y. Chan, PharmD

Clinical Assistant Professor
College of Pharmacy, The University of Texas at Austin
Clinical Associate Professor of Pediatrics and Clinical Assistant
Professor of Pharmacology
The University of Texas Health Science Center
San Antonio, Texas

Stanley W. Chapman, MD

Director, Division of Infectious Diseases
Professor of Medicine, Department of Medicine
University of Mississippi Medical Center
Jackson, Mississippi

Steven W. Chen, PharmD, FASHP, CDM

Assistant Professor of Clinical Pharmacy
University of Southern California
Los Angeles, California

Michael F. Chicella, PharmD

Clinical Specialist, Pediatrics
Children's Hospital of the King's Daughters
Norfolk, Virginia

Moses S. S. Chow, PharmD, FCP, FCCP

Professor and Director
School of Pharmacy
Faculty of Medicine
The Chinese University of Hong Kong
Shatin, Hong Kong

Tom E. Christian, RPh, BCPS

Staff Pharmacist
Pharmacy Department, Southwest Washington Medical Center
Vancouver, Washington

John D. Cleary, PharmD

Professor,
School of Pharmacy, Department of Clinical Pharmacy Practice
School of Pharmacy
Department of Clinical Pharmacy Practice
Associate Professor of Infectious Diseases
University of Mississippi Medical Center
Jackson, Mississippi

Lenore Coleman, PharmD

Research Fellow
School of Pharmacy
Howard University
Washington, DC

Thomas J. Comstock, PharmD

Associate Professor
Department of Pharmacy
Virginia Commonwealth University
Richmond, Virginia

Michelle Condren, PharmD

Assistant Professor
Department of Pharmacy Practice
Texas Tech University Health Science Center School of Pharmacy
Amarillo, Texas

Andrea Cooper, PharmD, BCPS

Assistant Professor of Clinical Pharmacy
Pharmacy Department
University of Southern California School of Pharmacy
Los Angeles, California

Robin L. Corelli, PharmD

Associate Professor of Clinical Pharmacy
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

Larry H. Danziger, PharmD

Professor of Pharmacy Practice
Department of Pharmacy Practice
University of Illinois at Chicago
Chicago, Illinois

Lisa E. Davis, PharmD, FCCP, BCPS, BCOP

Associate Professor of Clinical Pharmacy
Philadelphia College of Pharmacy
University of the Sciences in Philadelphia
Philadelphia, Pennsylvania

Suzanne D. Day, PharmD, BCOP

Clinical Pharmacy Associates, Inc.
Atlanta, Georgia

Cathi Dennehy, PharmD

Associate Clinical Professor
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

Betty Jean Dong, PharmD

Professor of Clinical Pharmacy
Departments of Clinical Pharmacy and Family and Community
Medicine
University of California, San Francisco
San Francisco, California

Andrew J. Donnelly, PharmD, MBA

Director, Hospital Pharmacy Services
University of Illinois Medical Center at Chicago
Clinical Professor Department of Pharmacy Practice
University of Illinois Medical Center at Chicago
Chicago, Illinois

Julie Ann Dopheide, PharmD, BCPP

Associate Professor of Clinical Pharmacy,
Psychiatry and the Behavioral Sciences
USC Schools of Pharmacy and Medicine
University of Southern California
Los Angeles, California

Richard Drew, PharmD, BCPS

Associate Professor
Duke School of Medicine,
Campbell University School of Pharmacy
Clinical Pharmacist, Infectious Diseases, Duke Medical Center
Durham, North Carolina

Vicky Dudas, PharmD

Assistant Clinical Professor of Pharmacy
Department of Clinical Pharmacy, School of Pharmacy
University of California at San Francisco
San Francisco, California

Robert E. Dupuis, PharmD, BCPS

Clinical Associate Professor
School of Pharmacy
Division of Pharmacotherapy
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Sandra B. Earle, PharmD, BCPS

Assistant Professor of Pharmacy Practice
Department of Pharmacy Practice, College of Pharmacy
Oregon State University
Portland, Oregon

Allan Ellsworth, PharmD, BCPS, PA-C

Professor of Pharmacy and Family Medicine
Schools of Pharmacy and Medicine, Departments of Pharmacy and
Family Medicine
Clinical Pharmacist/Physician Assist, Department of Family
Medicine
University of Washington
Seattle, Washington

Michael E. Ernst, PharmD

Assistant Professor (Clinical)
Division of Clinical and Administrative Pharmacy
Assistant Professor (Clinical)
Department of Family Medicine
The University of Iowa Hospitals and Clinic
University of Iowa College of Pharmacy
Iowa City, Iowa

Martha P. Fankhauser, MS Pharm, FASHP, BCPP

Clinical Associate Professor
Department of Pharmacy Practice and Science
University of Arizona College of Pharmacy
Tucson, Arizona

Patrick R. Finley, PharmD, BCPP

Associate Clinical Professor
Department of Clinical Pharmacy,
University of California, San Francisco
San Francisco, California

Douglas N. Fish, PharmD, BCPS

Associate Professor of Pharmacy
Department of Pharmacy Practice,
University of Colorado School of Pharmacy
Clinical Pharmacist
Medical/Surgical Intensive Care Units, Department of Pharmacy
University of Colorado Hospital
Denver, Colorado

Mark W. Garrison, PharmD

Associate Professor
Department of Pharmacotherapy
Washington State University, Spokane
Spokane, Washington

Steven P. Gelone, PharmD

Associate Professor of Pharmacy
Pharmacy Practice Department
School of Pharmacy
Assistant Professor of Medicine
Section of Infectious Diseases
Department of Medicine, School of Medicine
Clinical Pharmacist in Infectious Diseases
Temple University Health System
Temple University
Philadelphia, Pennsylvania

Jane Maria Gervasio, PharmD, BCNSP

Nutrition Support Pharmacist
Clinical Pharmacy
Clarian Health at Methodist Hospital
Indianapolis, Indiana

Barry E. Gidal, PharmD

Assistant Professor
University of Wisconsin
School of Pharmacy and Department of Neurology
Division of Neurology
Madison, Wisconsin

Jeffery A. Goad, PharmD, BCPS

Assistant Professor of Clinical Pharmacy
Pharmacy Department
University of Southern California School of Pharmacy
Los Angeles, California

Julie A. Golembiewski, PharmD

Clinical Associate Professor
Department of Pharmacy Practice, College of Pharmacy, University
of Illinois at Chicago, University of Illinois Medical Center at
Chicago
Pharmacotherapist, Pharmacy Services - Anesthesiology
University of Illinois Medical Center
Chicago, Illinois

William C. Gong, PharmD, FASHP

Associate Professor of Clinical Pharmacy
Director, Residency and Fellowship Training
University of Southern California, School of Pharmacy
Los Angeles, California

Susan Goodin, PharmD, BCPS, BCOP

Associate Professor of Medicine
Division of Medical Oncology
UMDNJ/Robert Wood Johnson Medical School
Director, Division of Pharmaceutical Sciences
The Cancer Institute of New Jersey
New Brunswick, New Jersey

B. Joseph Guglielmo, PharmD

Professor and Vice Chair
Department of Clinical Pharmacy
School of Pharmacy
University of California, San Francisco
San Francisco, California

Mark R. Haase, PharmD

Assistant Professor of Pharmacy Practice
Department of Pharmacy Practice
Texas Tech University School of Pharmacy
Amarillo, Texas

Emily B. Hak, PharmD

Associate Professor, Pharmacy and Pediatrics
University of Tennessee Health Sciences Center
Clinical Pharmacist, Pharmacy Department, Le Bonheur Children's
Medical Cen
Memphis, Tennessee

Raymond W. Hammond, PharmD, FCCP, BCPS

Associate Dean for Practice Programs
Clinical Associate Professor
College of Pharmacy
University of Houston
Houston, Texas

Jennifer L. Hardman, PharmD

Clinical Assistant Professor
Department of Pharmacy Practice and Obstetrics and Gynecology,
University of Illinois at Chicago
Clinical Pharmacist, Department of Pharmacy Practice
University of Illinois Medical Center
Chicago, Illinois

R. Donald Harvey, III, PharmD, BCPS, BCOP

Division of Pharmacotherapy
University of North Carolina
Senior Clinical Specialist, Department of Pharmacy
University of North Carolina Hospitals
Chapel Hill, North Carolina

Fotini K. Hatzopoulos, PharmD

Clinical Associate Professor
Pharmacy Practice
Assistant Director, Clinical Services, Hospital Pharmacy Services
University of Illinois at Chicago Medical Center
Chicago, Illinois

David W. Henry, M.S., B.C.O.P., FASHP

Associate Professor, Pharmacy Practice
Pharmacy Specialist in Pediatric Hematology/Oncology
University of Kansas Medical Center
Kansas City, Kansas

Beverly J. Holcombe, PharmD, BCNSP

Clinical Professor
Division of Pharmacotherapy, School of Pharmacy
Clinical Specialist, Department of Pharmacy, University of North
Carolina Health Care
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Mark T. Holdsworth, PharmD, BCOP

Associate Professor of Pharmacy and Pediatrics
College of Pharmacy
University of New Mexico
Albuquerque, New Mexico

Curtis D. Holt, PharmD

Associate Clinical Professor
Department of Surgery
UCLA Medical Center
Los Angeles, California

Yvonne Huckleberry, PharmD

Clinical Assistant Professor
Department of Pharmacotherapy
College of Pharmacy
Washington State University
Pullman, Washington

Karen Suchanek Hudmon, Dr. P. H.

Assistant Clinical Professor
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

Joanna Q. Hudson, PharmD, BCPS

Assistant Professor
Departments of Clinical Pharmacy and Medicine (Nephrology)
Clinical Pharmacist, Pharmacy Department, UT Bowld Hospital
University of Tennessee, Memphis
Memphis, Tennessee

Gail S. Itokazu, PharmD

Clinical Assistant Professor
Department of Pharmacy Practice
University of Illinois at Chicago
Clinical Pharmacist, Department of Medicine, Division of
Infectious Diseases
Cook County Hospital
John H. Stroger, Jr. Hospital of Cook County
Chicago, Illinois

Timothy J Ives, PharmD, MPH, FCCP, BCPS

Associate Professor of Pharmacy
School of Pharmacy and Medicine
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Curtis A. Johnson, PharmD

Professor
School of Pharmacy
University of Wisconsin-Madison
Madison, Wisconsin

Paul W. Jungnickel, PhD

Professor and
Associate Dean for Academic and Student Affairs
Harrison School of Pharmacy
Auburn University
Auburn, Alabama

Angela Kashuba, PharmD

Associate Professor of Pharmacy
Division of Pharmacotherapy, School of Pharmacy
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Michael B. Kays, PharmD, BCPS, FCCP

Associate Professor of Pharmacy Practice
Department of Pharmacy Practice
Perdue University School of Pharmacy
Indianapolis, Indiana

Jiwon W. Kim, PharmD

Assistant Professor
Department of Pharmacy, University of Southern California
Clinical Pharmacist, Department of Pharmacy,
University of Southern California University Hospital
Los Angeles, California

Mary Anne Koda-Kimble, PharmD

Professor and Dean
TJ Long Chair in Chain Pharmacy Practice
School of Pharmacy
University of California, San Francisco
San Francisco, California

Peter J.S. Koo, PharmD

Pharmacist Specialist, Pain Management
Associate Clinical Professor of Pharmacy,
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

Wayne A. Kradjan, PharmD

Dean and Professor
College of Pharmacy
Oregon State University
Oregon Health and Science University
Corvallis, Oregon

Donna M. Kraus, PharmD

Pediatric Clinical Pharmacist
Associate Professor of Pharmacy Practice
Departments of Pharmacy Practice and Pediatrics
Colleges of Pharmacy and Medicine
University of Illinois at Chicago
Chicago, Illinois

Lisa Kroon, PharmD, CDE

Associate Clinical Professor
Department of Clinical Pharmacy
University of California, San Francisco
San Francisco, California

Jonathan Lacro, PharmD, BCPS, BCPP

Associate Clinical Professor
Psychiatry Department, University of California, San Diego
VA San Diego Healthcare System, Clinical Pharmacist, Pharmacy
Service
University of California San Diego
San Diego, California

Alan H. Lau, PharmD, FCCP

Professor
Department of Pharmacy Practice
College of Pharmacy
University of Illinois at Chicago
Chicago, Illinois

Kelly C. Lee, PharmD

Assistant Professor of Pharmacy Practice
Clinical Pharmacy
Loma Linda University School of Pharmacy
Loma Linda, California

Susan H. Lee, PharmD

Clinical Pharmacist
Department of Pharmacy Services
University of Washington
Clinical Care Pharmacist
Department of Pharmacy Services
Harborview Medical Center
Seattle, Washington

Celeste Lindley, PharmD, FCCP, FASHP, BCOP

Associate Professor of Pharmacy
Clinical Associate Professor of Medicine
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Rex S. Lott, PharmD

Associate Professor
Department of Pharmacy Practice & Administrative Science
College of Pharmacy
Idaho State University
Clinical Pharmacist, Psychiatric Department
Boise Veterans Affairs Medical Center
Boise, Idaho

Raymond C. Love, PharmD, BCPP, FASHP

Professor
Department of Pharmacy Practice & Science
School of Pharmacy
University of Maryland
Baltimore, Maryland

Andrew D. Luber, PharmD

Executive Director
Pacific Oaks Research
Clinical Pharmacy Specialist—HIV/Infectious Diseases
Pacific Oaks Medical Group
Beverly Hills, California

Sherry Luedtke, PharmD

Associate Professor
Pharmacy Practice
Associate Dean for Professional Affairs
Texas Tech University Health Science Center School of Pharmacy
Amarillo, Texas

James W. McAuley, PhD

Associate Professor
College of Pharmacy
The Ohio State University
Columbus, Ohio

James P. McCormack, PharmD

Associate Professor
Faculty of Pharmaceutical Sciences
University of British Columbia
Vancouver, British Columbia, Canada

Jeannine McCune, PharmD

Assistant Professor
University of Washington
Seattle, Washington

James M. McKenney, PharmD

Professor Emeritus
Virginia Commonwealth University
President and CEO, National Clinical Research
Richmond, Virginia

Robert J. Michocki, PharmD

Professor
Pharmacy Practice and Science
School of Pharmacy
University of Maryland
Baltimore, Maryland

Robert Keith Middleton, PharmD

Clinical Coordinator
Department of Pharmacy,
Beebe Medical Center
Lewes, Delaware

Milap C. Nahata, PharmD

Professor and Chair
College of Pharmacy
The Ohio State University
Columbus, Ohio

Jean M. Nappi, PharmD, FCCP, BCPS

Professor of Pharmacy
Department of Pharmacy Practice
Medical University of South Carolina
Charleston, South Carolina

Paul G. Nolan Jr., PharmD, FCCP, FASHP

Professor
Department of Pharmacy Practice and Science
University of Arizona
Tucson, Arizona

Cindy Lea O'Bryant, PharmD, BCOP

Assistant Professor
Department of Clinical Pharmacy University of Colorado School
of Pharmacy
University of Colorado Health Sciences Center
Denver, Colorado

Judith A. O'Donnell, PharmD

Associate Professor of Medicine and Public Health
Division of Infectious Diseases,
Drexel University College of Medicine
Attending Physician - Hospital Epidemiologist, Division of
Infectious Diseases
Medical College of Pennsylvania Hospital
Philadelphia, Pennsylvania

Ali J. Olyaei, PharmD, BCPS

Assistant Professor of Medicine
School of Medicine
Oregon Health & Science University
Portland, Oregon

Neeta Bahal O'Mara, PharmD, BCPS

Clinical Pharmacist
Dialysis Clinics, Inc.
North Brunswick, New Jersey

Robert Lee Page, PharmD

Assistant Professor
Department of Clinical Pharmacy
UCHSC School of Pharmacy
Clinical Specialist, Cardiology/Heart Failure
Department of Pharmacy
University of Colorado
Denver, Colorado

Louise Parent-Stevens, PharmD, BCPS

Clinical Assistant Professor
Department of Pharmacy Practice
College of Pharmacy
Pharmacist, Department of Family Medicine
University of Illinois at Chicago
Chicago, Illinois

Jennifer Tran Pham, PharmD, BCPS

Clinical Assistant Professor
Department of Pharmacy Practice
University of Illinois at Chicago
Neonatal Clinical Pharmacist, Pharmacy Department
University of Illinois Medical Center at Chicago
Chicago, Illinois

David J. Quan, PharmD

Associate Clinical Professor
Department of Clinical Pharmacy
Clinical Pharmacist, Pharmaceutical Services, UCSF Medical
Center
University of California San Francisco
San Francisco, California

Carrie Quigley, PharmD

Assistant Professor
Pharmacy Practice, Midwestern University
Chicago College of Pharmacy
Clinical Pharmacist, Pharmacy Department, North Chicago VA
Medical Center
Downers Grove, Illinois

Ralph H. Raasch, PharmD

Associate Professor
Division of Pharmacotherapy
School of Pharmacy
Clinical Specialist, Pharmacy Department, University of North
Carolina Hospitals
University of North Carolina at Chapel Hill
Chapel Hill, North Carolina

Lori Reisner, PharmD

Palo Alto Medical Foundation
Palo Alto, California

Marjorie D. Robinson, PharmD

Antiviral Global Project Team, GPRD
Abbott Laboratories
Fort Lauderdale, Florida

Carol J. Rollins, RD, PharmD, BCNSP

Clinical Associate Professor
College of Pharmacy, Department of Pharmacy Practice and
Science
Clinical Specialist, Pharmacy Department, University Medical
Center
University of Arizona
Tucson, Arizona

Tricia M. Russell, PharmD, BCPS

Assistant Professor
Department of Pharmacy Practice,
Wilkes University Nesbitt School of Pharmacy
Geisinger Health System, Clinical Pharmacist, Lipid Management
Clinic, Geisinger Medical Group - Lake Scranton
Wilkes-Barre, Pennsylvania

Rosalie Sagraves, PharmD

Dean and Professor of Pharmacy Practice
College of Pharmacy
University of Illinois at Chicago
Chicago, Illinois

Joseph J. Saseen, PharmD, BCPS

Associate Professor
Departments of Pharmacy and Family Medicine
University of Colorado Health Sciences Center
Denver, Colorado

Larry D. Sasich, PharmD, MPH

Pharmacist
Public Citizen's Health Research Group
Washington, District of Columbia

Terry L. Seaton, PharmD, FCCP, BCPS

Associate Professor
Division of Pharmacy Practice
Clinical Pharmacist Faculty, Mercy Family Medicine, St. John's
Mercy Medical Center
St. Louis College of Pharmacy
St. Louis, Missouri

Timothy H. Self, PharmD

Professor, Department of Pharmacy
Director, Internal Medicine
Pharmacy Practice Residency Program
UT Bowld Hospital
University of Tennessee
Memphis, Tennessee

John Siepler, PharmD, BCNSP

Clinical Professor
Department of Clinical Pharmacy, School of Pharmacy, University
of California San Francisco
Nutrition Support Specialty Pharmacist, Department of Pharmacy
University of California Davis Medical Center
Davis, California

Robert E. Smith, PharmD

Professor and Head
Department of Pharmacy Practice
Auburn University, Harrison School of Pharmacy
Auburn University, Alabama

Jessica Song, PharmD

Assistant Professor, Pharmacy Practice
University of the Pacific School of Pharmacy
San Jose Clerkship Coordinator
Department of Pharmacy Services
Santa Clara Valley Medical Center
University of the Pacific School of Pharmacy
San Jose, California

Suellyn J. Sorensen, PharmD, BCPS

Clinical Pharmacy Manager
Pharmacy Manager
Indiana University Hospital of Clarian Health Partners
Indianapolis, Indiana

Anne P. Spencer, PharmD, BCPS

Assistant Professor of Pharmacy Practice
College of Pharmacy
Clinical Specialist, Department of Pharmacy Services, Medical
University of South Carolina Medical Center
Medical University of South Carolina
Charleston, South Carolina

Renee Spencer, PhD

Assistant Clinical Professor
School of Pharmacy, University of California San Francisco
Drug Information Coordinator and Clinical Pharmacist, Child,
Youth and Family Services
San Francisco Community Mental Health Service
San Francisco, California

Glen L. Stimmel, PharmD

Professor of Clinical Pharmacy and Psychiatry
University of Southern California
School of Pharmacy
Los Angeles, California

Sana Sukkari, B Sc Phm, M. Phil

Oncology Palliative Care Pharmacist
Pharmacy Department
Joseph Brant Memorial Hospital
Burlington, Ontario, Canada

David Taber, PharmD

Clinical Assistant Professor
College of Pharmacy
Clinical Specialist, Pharmacy Department
Medical University of South Carolina
Charleston, South Carolina

Daniel J.G. Thirion, M.Sc, PharmD, BCPS

Clinical Assistant Professor
Faculte de Pharmacie,
Universite de Montreal
Clinical Pharmacist- Internal Medicine Teaching Unit, Pharmacy
Department, Hospital Sacre-Coeur de Montreal
Montreal, Quebec, Canada

John F. Thompson, PharmD, FCP

Adjunct Associate Professor of Pharmacy Practice
University of Southern California
Los Angeles, California

Toby C. Trujillo, PharmD, BCPS

Adjunct Assistant Professor
Department of Pharmacy Practice, Massachusetts College of
Pharmacy and Health Sciences
Clinical Coordinator - Cardiovascular Specialist, Pharmacy
Department
Boston Medical Center
Boston, Massachusetts

Candy Tsourounis, PharmD

Associate Clinical Professor
Department of Clinical Pharmacy
School of Pharmacy
University of California, San Francisco
San Francisco, California

John Valgus, PharmD, BCOP

Clinical Assistant Professor
Division of Pharmacotherapy, UNC School of Pharmacy
Clinical Hematology/Oncology Specialist, Department of
Pharmacy
University of North Carolina Hospitals and Clinics
Chapel Hill, North Carolina

Geoffrey Wall, PharmD, BCPS

Assistant Professor
Department of Pharmacy Practice,
College of Pharmacy, Drake University
Internal Medicine Clinical Pharmacist, Department of Pharmacy
Iowa Methodist Medical Center
Des Moines, Iowa

Mark D. Watanabe, PharmD, PhD, BCPP

Assistant Clinical Specialist, Pharmacy Practice
Northeastern University
Boston, Massachusetts

Charles Wayne Weart, PharmD, BCPS, FASHP

Professor
Department of Pharmacy Practice, College of Pharmacy
Medical University of South Carolina
Charleston, South Carolina

Timothy Edward Welty, PharmD, FCCP, BCPS

Associate Professor of Pharmacy Practice
McWhorter School of Pharmacy
Samford University
Adjunct Associate Research Professor,
Department of Neurology
University of Alabama, Birmingham
Birmingham, Alabama

C. Michael White, PharmD

Associate Professor of Pharmacy Practice
University of Connecticut School of Pharmacy
Co-Director, Arrhythmia and Cardiovascular Pharmacology
Research, Pharmacy Department
Hartford Hospital Drug Information Center
Storrs, Connecticut

Bradley R. Williams, PharmD

Associate Professor
Clinical Pharmacy and Clinical Gerontology
Schools of Pharmacy and Gerontology
University of Southern California
Los Angeles, California

Dennis M. Williams, PharmD

Associate Professor
Division of Pharmacotherapy
Senior Clinical Specialist, Pharmacy Department, UNC Hospitals
University of North Carolina
Chapel Hill, North Carolina

Laura Winter, PharmD

Clinical Assistant Professor
Department of Pharmacy, University of Washington School of
Pharmacy
Clinical Pharmacist, Hematology/Oncology and HCT, Pharmacy
Department
Children's Hospital and Regional Medical Center
Seattle, Washington

Ann K. Wittkowsky, PharmD, CACP

Clinical Professor
University of Washington School of Pharmacy
Director of Anticoagulation Services
University of Washington Medical Center
Seattle, Washington

Annie Wong-Beringer, PharmD

Associate Professor of Pharmacy Practice
University of Southern California, School of Pharmacy
Los Angeles, California

Lloyd Y. Young, PharmD

Professor and Chair
Department of Clinical Pharmacy
TA Oliver Endowed Chair in Clinical Pharmacy, School of
Pharmacy
University of California, San Francisco
San Francisco, California

Veronica S.L. Young, PharmD

Clinical Assistant Professor
College of Pharmacy
University of Texas at Austin
Assistant Director, Drug Information Service
University of Texas Health Science Center
University of Texas Health Science Center at San Antonio
San Antonio, Texas

Wendy Zerngast, MD, PharmD

Resident Physician
Department of Anesthesiology
University of Washington Medical Centers
University of Washington
Seattle, Washington

Paolo V. Zizzo, DO

Assistant Clinical Professor
Department of Medicine, UCSD School of Medicine
Clinical Internist, Mobile Physician Services
San Diego, California

Wendy Zizzo, PharmD

Adjunct Professor of Behavioral Sciences
Alcohol and Other Drugs Study Program, San Diego City College
Assistant Clinical Professor of Pharmacy, Division of Clinical
Pharmacy, School of Pharmacy
University of California, San Francisco
San Francisco, California

Margaret M. Pearson, PharmD, MS

Division of Epidemiology
Mississippi State Department of Health
Jackson, Mississippi

《临床药物治疗学》(Applied Therapeutics) 是世界上高水平的经典教科书。自 1975 年问世以来, 随着医学、药学及各学科领域新知识、新技术的快速发展, 每 3~5 年更新再版, 每次再版都增补了很多新的内容。目前本书不仅是美国等国家药学院临床药学教育的共用教科书, 也是许多临床工作者实用的参考书, 人民卫生出版社引进本书, 对我国临床药学教育的发展具有很好的参考价值。

本书第 8 版的内容广泛, 覆盖了医药学各学科领域。不但包括了当前医、药等各方面的最新信息, 而且知识融会贯通, 同时采用了大量临床病例, 列举治疗方案、合理用药及治疗效果评估, 使理论与实践相结合, 突出了如何进行正确的临床思维, 对培养临

床医学生、药学生、临床药剂师及其他临床工作者获得解决临床实际问题的能力非常有帮助。真诚希望《临床药物治疗学》中文版的问世, 对广大医学生、药学生及临床医师乃至我国临床药学教育的发展有所裨益。

本书翻译工作由主要来自首都医科大学附属北京友谊医院的专家、教授组成的翻译委员会完成, 工作中得到美国肯塔基大学药学院临床药学博士蔡立坚先生的指导。本书翻译工作开始前大家开会制定了统一标准, 翻译力求忠实原著, 保证质量。这本近 800 万字的著作, 译者花费了近一年的工作时间, 付出了很大的努力。译著经过多次审校, 总体翻译水平较高; 然而错误在所难免, 欢迎广大同仁对本书提出宝贵意见。



于北京

第8版前言

本书《临床药物治疗学》一书自第1版问世以来已近30年了，案例教学和以问题为中心的教学方法，并结合最新的临床信息是本著作编写革新的根本原则，最新版的编排格式保持着其完整性。编作者们在不断发展变化的医疗环境中，尽量提供给读者当前推荐使用的最新的治疗方案。人类免疫缺陷病毒(HIV)在1975年尚未闻晓，但是在今天，艾滋病的发展速度和新的治疗策略，连同其他新知识、新技术激励着最新版的出版与发行。本书再版增加了新的章节(人文关怀、临终关怀治疗和戒烟)，每一章都重新强调辅助疗法、替代疗法以及最新的治疗方案。医务工作者对临床用药做出有根据的决定是治疗成功的关键。随着人口的老龄化，更多患者患有多种慢性疾病。有关病理生理和药物特性新知识的不断发展，拓宽了我们使用药物治疗的途径，于是在许多病例的治疗中采用联合用药已经成为常规疗法。但是在另一方面，联合用药增加了患者受到药物副作用伤害的几率。再者，最新统计显示

2002年美国医疗卫生开发费用达到16 000亿美元，处方药费用超过1 600亿美元。即使在不断强化的监控下，仍然是医疗卫生费用中增长最快的部分。重要立法为医疗服务接受者提供使用处方药物的益处，进而增加了对处方药的需求，与此同时也会增加相应的经济负担。我们希望本书读者更合理地治疗他们的患者和做出决定，以便保证最有效地利用有限的时间和医疗资源。

本书与以前的版本一样，作者们在文中给出了各种临床病例，以引导和促使读者在联系特定的临床情况下综合应用治疗原则。我们亦尽量为学生和医务人员提供作为临床医生评价和处理治疗问题的思路，因此他们能够逐步培养和发展自己解决问题的临床思维能力和技巧。尽管作者们非常仔细地选择和推荐与现代标准和可靠的文献相一致的治疗方法，我们仍然建议读者，当处理新的和不熟悉的药物时，参考查询一些更适当的信息。

第7版《临床药物治疗学》最后一章已经送交出版商，我们庆祝此书的完成。同时对为此书付出辛勤劳动的各位作者、编辑、校对和出版者致以诚挚的谢意。虽然此书的出版工作已近结束，但我们清楚目前卫生保健事业存在着巨大压力，许多工作亟待我们去完成。在过去的十年中，护士、药剂师人员短缺、医务人员面对新技术飞速发展的挑战、医疗费用的日益增加以及医疗服务的相对不足，这些仍持续增长的不利因素与经济的迅速发展同步存在。与此同时，卫生行业也在尽一切努力来寻找应对费用增加、提高医疗服务质量的良策，以降低医疗费用、提高服务质量，最终满足（乃至超出）公众日益增长的健康需求。随着老龄人口的增加，人们对医疗保健的需要更多，因而对医疗安全和避免差错（包括治疗差错）措施的保障体系的需求迫在眉睫。

医疗事业的未来最终寄托在下一代医务工作者身上。我们必须要选择最出色、最聪明的继任者，我们还有责任培养他们能够面对明日的挑战。现在，随着人们对疾病认识的不断深入以及新药的不断出现，我们迫切需要如神经生物化学、遗传学、基因学、医

学及公共卫生领域进一步的研究成果。我们希望第7版《临床药物治疗学》能够具有显著的临床思路的特点，有助于医学生获得解决临床问题的技能，我们希望通过本书能使将所学的知识融会贯通，达到合理使用药物的目的。

本版所有章节都进行了修订和更新，以反映我们对药物认识的更新，及这种认识更新在临床的应用。与前一版相同，我们提倡作者在书中提供实际病例，以启发读者针对特定的病例，将一般的药物治疗原则与具体患者有机结合起来；我们努力提供给医学生和临床医生在解决治疗问题时思路的概要，以使他们开始形成自己的解决问题的技能体系。

本书许多内容来自每位作者本人的临床经验，对每一位读者来说，对一特定见解应结合具体的临床实际和相应学科的发展来评价其意义。虽然书中的治疗方案是作者们依据现行标准和可查到的文献谨慎推荐的，我们还是要求学生或从业者，在使用新药或不熟悉的药物时，要从多方面获取相关的信息和资料。

B. Joseph Guglielmo
Mary Anne Koda-Kimble
Wayne A. Kradjan
Lloyd Yee Young

2000年10月

(郑玉译)

在过去的十年里，药剂师的作用日益突出。在卫生保健实施中药剂师越来越多地起着举足轻重的作用，并对医疗质量有重要的影响。M. Silverman 和 P. Lee 在《药物、利益和政策》¹一书中充分地评估了现在及将来药师在药物、利润、政策方面所起的作用：

“正是药剂师，在指导临床医师开出合理处方上起到重要作用；他可以帮助临床医师如何对具体的患者在恰当的时间，使用合理、适量的药物，并且考虑到治疗价格的因素。同时他还能帮助患者知道怎样、何时、为什么使用处方药和非处方药品。

“正是药剂师，他受过高级培训，成为了药品方面的专家；他有很好的机会掌握此领域的最新知识及发展动态；他对于临床医生和患者来说都是一位知识丰富的顾问。正是药剂师，他能够在防止药物错用、滥用和不合理处方几方面起到关键作用。”

许多药学院已经在课程上做了大量的改动以使其毕业生能够胜任其职责。虽然传统药学课程讲授关于药物的特性等知识，而没有结合患者实际阐述药物的治疗作用。同样，传统药学和医学教科书，也没有为医生提供对特定患者在药物选择及剂量确定方面所需的足够信息。临床医师在使用药物前，必须考虑到患者的年龄、肝肾功能、目前病情及用药和是否存在过敏等；另外，还必须考虑药物的生物利用度、药代动力学、药物效用和毒性、风险与得益的比率以及费用等因素。

(郑玉译)

我们业已发现，学生们遇到的最大困难是，很难将所学习的各种知识融会贯通，把最安全、最合理的药物应用于具体患者。我们还看到，虽然学生能够详述一种药物副作用，但在具体患者身上很难做到正确识别或监测其不良反应。

本书取材于加州大学和华盛顿州立大学的临床药学课程，其主旨是使学生提高临床实践学习的效果。课堂讨论可作为疾病过程病理生理和医学治疗理论讲授的补充，讨论中，学生们需要回答临床医生经常提出的问题，并需要对用药进行评价及做出其他恰当选择。本书和课堂讨论的初衷是使学生掌握药物治疗的相关因素，诸如一种特定药物能否解除患者的症状、药物间相互作用的临床意义、为什么一种药物没有到达血液治疗浓度；以及多种疾病患者的药物剂量等。

在我们的课程中成功应用了课堂讨论的经验是本书采用这种框架的主要决定因素：由病例营造的实际临床背景及提出一些有关治疗的问题，都附有详尽的参考答案。

本书许多内容来自作者个人的临床经验，对每一位读者来说，对一特定见解应结合具体的临床实际和相应学科的发展来评价其意义。虽然本书中治疗方法是作者依据现行标准和可查文献所谨慎推荐的，我们还是要求学生或从业者，在使用新药或不熟悉的药物时，还要从多方面获取相关的信息。

郑玉 译

¹ M. Silverman 和 P. Lee 《药物，利益和政策》(Pills, Profits and Politics) 一书由加利福尼亚大学出版社于1975年出版。

计量单位换算表

本书为反映其英文原版之风格，并且避免反复换算带来不必要的计算错误，保留了部分英制计量单位。鉴于我国推广使用法定计量单位之要求，现将这些单位与法定计量单位的换算关系列表如下。本表仅供参考。

英制单位 (符号)	法定计量单位 (符号)	换算关系
埃 (Å)	米 (m)	$1 \text{ Å} = 10^{-10} \text{ m}$
盎司 (常衡) (oz)	克 (g)	$1 \text{ oz} = 28.35 \text{ g}$
盎司 (药衡) (oz)	克 (g)	$1 \text{ oz} = 31.10 \text{ g}$
盎司 (美液) (oz)	升 (L)	$1 \text{ oz} = 0.02957 \text{ L}$
盎司 (英液) (oz)	升 (L)	$1 \text{ oz} = 0.02841 \text{ L}$
磅 (lb)	克 (g)	$1 \text{ lb} = 453.59 \text{ g}$
标准大气压 (atm)	帕 (Pa)	$1 \text{ atm} = 101325 \text{ Pa}$
达因 (dyn)	牛 (N)	$1 \text{ dyn} = 10^{-5} \text{ N}$
打兰 (美液) (dr)	升 (L)	$1 \text{ dr} = 0.0037 \text{ L}$
打兰 (英液) (dr)	升 (L)	$1 \text{ dr} = 0.00355 \text{ L}$
当量 (Eq)	摩尔 (mol)	$1 \text{ Eq} = 1 \text{ mol}$ (1价离子)
当量 (Eq)	摩尔 (mol)	$1 \text{ Eq} = 0.5 \text{ mol}$ (2价离子)
当量 (Eq)	摩尔 (mol)	$1 \text{ Eq} = 1/3 \text{ mol}$ (3价离子)
尔格 (erg)	焦 (J)	$1 \text{ erg} = 10^{-7} \text{ J}$
辐透 (ph)	勒 (lx)	$1 \text{ ph} = 10^4 \text{ lx}$
格令 (gr)	克 (g)	$1 \text{ gr} = 0.064799 \text{ g}$
毫米汞柱 (mmHg)	帕 (Pa)	$1 \text{ mmHg} = 133.322 \text{ Pa}$
华氏度 (°F)	开/摄氏度 (K/°C)	$1 \text{ °F} = 5/9 \text{ K} (\text{°C})^*$
加仑 (美) (gal)	升 (L)	$1 \text{ gal} = 3.785 \text{ L}$
加仑 (英) (gal)	升 (L)	$1 \text{ gal} = 4.546 \text{ L}$
居里 (Ci)	贝可 (Bq)	$1 \text{ Ci} = 3.7 \times 10^{10} \text{ Bq}$
卡 (Cal)	焦 (J)	$1 \text{ Cal} = 4.18 \text{ J}$
夸特 (qr)	千克 (kg)	$1 \text{ qr} = 12.70 \text{ kg}$
夸脱 (美) (qt)	升 (L)	$1 \text{ qt} = 0.946 \text{ L}$
夸脱 (英) (qt)	升 (L)	$1 \text{ qt} = 1.137 \text{ L}$
拉德 (rad)	戈 (Gy)	$1 \text{ rad} = 10^{-2} \text{ Gy}$
雷姆 (rem)	希 (Sv)	$1 \text{ rem} = 10^{-2} \text{ Sv}$
厘米水柱 (cmH ₂ O)	帕 (Pa)	$1 \text{ cmH}_2\text{O} = 98 \text{ Pa}$
哩 (mi)	米 (m)	$1 \text{ mi} = 1609 \text{ m}$
伦琴 (R)	库每千克 (C/kg)	$1 \text{ R} = 2.58 \times 10^{-4} \text{ C/kg}$
码 (yd)	米 (m)	$1 \text{ yd} = 0.914 \text{ m}$
品脱 (美) (pt)	升 (L)	$1 \text{ pt} = 0.473 \text{ L}$
品脱 (英) (pt)	升 (L)	$1 \text{ pt} = 0.568 \text{ L}$
蒲式耳 (美) (bu)	升 (L)	$1 \text{ bu} = 35.24 \text{ L}$
蒲式耳 (英) (bu)	升 (L)	$1 \text{ bu} = 36.37 \text{ L}$
英尺 (ft)	米 (m)	$1 \text{ ft} = 0.3048 \text{ m}$
英寸 (in)	米 (m)	$1 \text{ in} = 0.0254 \text{ m}$

* 此为温度度量的换算。对于温度而言可按下式换算：摄氏度 = 5/9 (华氏度 - 32)。