

THE MERCE MANUAL OF GERNATRICS

到為特

默克老年病手册

The Merck Manual of Geriatrics

第 3 版

原著主编 Mark H. Beers, M.D. Robert Berkow, M.D.

资深副主编 Robert M. Bogin, M.D.

Andrew J. Fletcher, M.B., B. Chir.

Mirza I. Rahman, M.D., M.P.H.

主 译 陈灏珠

副 主译 王赞舜

刘直红

人民卫生出版社

图书在版编目 (CIP) 数据》

默克老年病手册/(美)比克斯著:陈灏珠主译.

3版. 一北京:人民卫生出版社,2002

ISBN 7-117-04810-7

I.默··· Ⅱ.①比···②陈··· Ⅲ.老年病 - 诊疗-手册 Ⅳ. R592 - 62

中国版本图书馆 CIP 数据核字 (2002) 第 019907 号

Copyright © 2000 by Merck & Co., Inc.

All rights reserved. No part of this book may be reproduced or used in any form or by any means, electronic or mechanical, including photocop—ying, or by any information storage and retrieval system, without permis—sion in writing from the Publisher.

版权所有。未经出版者书面允许,不得以任何形式或方法,电子的或机械的,包括影印、信息储存和恢复系统,复制或使用本书的任何部分。

默克老年病手册 第 3 版

主 译: 陈 灏 珠

出版发行:人民卫生出版社(中继线 67616688)

地 址:(100078)北京市丰台区方庄芳群园 3 区 3 号楼

网 址: http://www.pmph.com

E - mail : pmph @ pmph. com

印刷: 三河市富华印刷包装有限公司

经 销:新华书店

开 本: 850×1168 1/32 印张: 38.5

字 数: 1480 千字

版 次: 1996年8月第1版 2002年11月第3版第3次印刷

标准书号: ISBN 7-117-04810-7/R·4811

定 价:76.00元

著作权所有,请勿擅自用本书制作各类出版物,违者必究 (凡属质量问题请与本社发行部联系退换)

编辑委员会

Richard W. Besdine, M. D.

Robert N. Butler, M. D.

Christine K. Cassel, M.D.

Terry T. Fulmer, Ph. D., R. N., F. A. A. N.

Edward G. Lakatta, M. D.

John E. Morley, M. B., B. Ch.

Mary E. Tinetti, M. D.

译者

(以章序排列)

王赞舜 金雪娟 陈灏珠 徐韬园 何燕玲 崔思松 吕传真 张光键 赵重波 徐一甄 张琳 胡吉 善文宇 沈稚舟 张期云 章仁安 张国桢 舒先红 石碧坚 刘厚钰 史振宇 黄鹤年 黎勉勤 邱丙森 潘孝彰 杨一峰 朱利平

译者序言

1995 年我们受人民卫生出版社和美国默沙东公司之托,将当年出版的第二版《默克老年病手册》翻译成中文,于1996 年 8 月由人民卫生出版社出版。2000 年第三版《默克老年病手册》问世。人民卫生出版社再次委托我们将之翻译成中文。我们于 2001 年完稿交人民卫生出版社,并于 2002 年出版。

由于本书第一、二版的首席主编 Dr. William B. Abrams 去世,本版由 Dr. Mark H. Beers 和 Dr. Robert M. Berkow 担任主编,并增加了Dr. Robert M. Bogin 和 Dr. Mirza I. Rahman 两位担任资深副主编。

本版共分16篇134章,与第二版比较内容略作调整。加强了对老年保健基础以及外科和康复等问题的阐述,对临床医学的阐述仍占最大的篇幅,但篇、章的先后安排作了调整。就整体而言,本版仍继续着对老年保健提供与临床相关信息的传统,强调老年保健是一种内科医师、护士、社会工作者、治疗专家、药学专家和无数其他保健工作者之间的协作保健,并包括对病人和保健人员进行教育。本版增加了不少近年老年病学进展的新内容,指出新的疗法已强力地有助于预防、治疗或控制那些在上一版出版前的不治之症,编者还期望在下一版出版之前甚至有更多的晚年期致命性情况将会可被预防或能够治愈。

本书编者在各版中均强调: "作为广泛的努力以保证本书所介绍的治疗、所用药物和剂量的正确性,并符合本书出版当时所公认的水准。然而,由于研究的不断发展和临床经验的不断积累,不同作者间的意见不尽一致。个体的临床情况又有其独特的方面,未必与群体完全相同,加之在编辑涉及面如此广的书难免有人为的错误。为此,我们恳请读者在进行临床决定时宜作出自己的判断,必要时参考和比较从其他方面得到的信息资料。我们特别要建议读者在开处方或应用某

药时,尤其是对不熟识或不常用的药物,先核对药厂提供的产品说明书。"鉴于我国人的情况与西方人不同,读者采用本书的治疗措施和所推荐的药物时,更宜参照我国病人的具体情况来定,以策安全。

预料本书第三版中译本的出版,将会受到我国读者的欢迎,成为 临床医师和老年医疗保健工作者广泛阅读和参考的手册。

由于译者个人文风不同,完成时间比较匆促,加之水平有限,缺 点和错误在所难免,期望读者批评指正。

陈灏珠 王赞舜 刘厚钰 于复旦大学附属中山医院 上海市华东医院 2002年3月22日

前言

随着《默克老年病手册》第三版的出版,我们得以继续着对老年保健方面提供与临床相关信息的传统。为提供最好的老年保健,需要有一个超大规模的消息基础一从内科学到药理学以及从皮肤病学到康复医学和精神病学的所有内容。然而,与医学实践的其他许多领域比较,它还需要一个与它们不同的达到保健目标的途径,一种内科医师、护士、社会工作者、治疗专家、药学专家和无数其他保健工作者之间的协作保健。老年保健还需要对病人和保健人员进行教育。因此,我们试图创造一本足以反映最适宜的老年保健途径的真正多学科性教科书。我们体会到我们提供的所有信息不是每位读者都感兴趣。然而,本书集中地涵盖了对于护理老年人所需要知道的大多数知识,虽说此书主要为临床医师而编写,但是我们希望它所广泛覆盖的内容将使本版《默克老年病手册》对涉及老年保健的其他人员、老年人及其家庭和朋友们,更为有用。

此新版《默克老年病手册》反映了5年前上版书发行以来关于老年保健方面了解到的大量新信息。老年病学和老年学仍然是研究的沃土,新的治疗已强力地有助于预防、治疗或控制那些在5年前所不能治疗的疾病。我们希望下一版出版之前甚至更多的晚年期致命性疾病将会成为可预防或可治愈的。对目前还未能得到预防、治愈或控制的疾病,我们提供姑息性治疗的建议,包括濒死的护理,这个领域我们认为应予以较多的关注。

我们感谢我们出色的编辑委员会审阅了所有各章,为本版进行重大修订作出的贡献;也感谢150多位专家提供稿件和担任顾问。他们所有人将分享这样的希望:读者将发现本书对他们有用和最终使他们的病人获益。

我们欢迎您的评论并将仔细地考虑所有关于改进的建议。

Mark H. Beers, M. D. Robert Berkow, M. D.

凡 例

从本书目录读者可查到各篇、各章的题目和页数。 本书各篇从各篇的目录表开始,表中列出本篇的章和节。 各章的编号是从书的开始到尾端顺序编排。

缩写和符号在书中通篇使用以节约篇幅,它们的注释列于第 15 页。正文中其他缩写在各章或节中第一次出现时都加以注释。

书中的实验室数据以常用的单位给出。然而,在多数情况下,随后用括弧标出国际单位。

正文中的药物主要以通用(非专利的)药名标示。在附件3,本书提到的许多药,按其通用名第一字母顺序列表显示,每一通用名后列一种或多种商品名。此表之后还有一表按商品名字母顺序排列,许多商品名后列出通用名。

重要说明:本书作者、审阅者和编辑付出很大努力以保证本书所介绍的治疗、所用药物和剂量的正确性,并符合本书出版之时所公认的水准。然而,由于研究的不断发展和临床经验的不断积累,不同作者间的意见不尽一致,个体的临床情况又有其独特的方面,未必与群体完全相同,加之在编辑涉及面如此广的书难免有人为的错误。为此我们恳请读者在进行临床决定时宜作出自己的判断,必要时参考和比较从其他方面得到的信息资料。我们特别要建议读者在开出处方或应用某药时,尤其是对不熟识或不常用的药物,先核对药厂提供的产品说明书。

缩写和符号

AIDS 获得性免疫缺陷综合征

ATP 三磷酸腺苷

bid 每日2次

C 摄氏、摄氏温度

CBC 全血细胞计数

cm 厘米

CO, 二氧化碳

CPR 心肺复苏

CT 计算机体层摄影

dl 分升 (=100ml)

DNA 脱氧核糖核酸

ECG 心电图

EEG 脑电图

ESR 红细胞沉降率

F 华氏、华氏温度

FDA 食品和药品管理局

g 克

h 小时

H₂ 组胺

Hb 血红蛋白

Hct 血细胞比容

Hg 汞

HIV 人类免疫缺陷病毒

HLA 人类白细胞抗原

Hz 赫兹 (周/秒)

Ig 免疫球蛋白

IM 肌内注射

IU 国际单位

IV 静脉注射

kcal 千卡(食物卡路里)

kg 千克

L 升

ib 磅

m米

mEq 臺当量

mg 毫克

min 分

ml 毫升

mm 毫米

mOsm 毫渗量

MRI 磁共振成像

ng 纳克 (=毫微克)

oz 盎司

pH 氢离子浓度

po 口服

q 每

qid 每日4次

RNA 核糖核酸

sc 皮下注射

SD 标准差

s 秒

tid 每日3次

U 单位

μg 微克

ul 微升

μm 微米

μU 微单位

每

小于

大于

等于或小于

等于或大于

加减

编辑和编辑委员会

主 编

MARK H. BEERS, M.D.

Senior Director of Geriatrics, Merck & Co., Inc., and Associate Clinical Professor of Medicine, MCP Hahnemann School of Medicine

ROBERT BERKOW, M.D.

Executive Director of Medical Literature, Merck & Co., Inc., and Clinical Professor of Medicine and Psychiatry, MCP Hahnemann School of Medicine

资深副主编

ROBERT M. BOGIN, M.D.

Merck & Co., Inc., Associate Clinical Professor of Medicine, MCP Hahnemann School of Medicine

ANDREW J. FLETCHER, M.B., B.Chir.

Merck & Co., Inc., Adjunct Professor of Pharmaceutical Health Care, Temple University School of Pharmacy

MIRZA I. RAHMAN, M.D., M.P.H.

Merck & Co., Inc., Adjunct Professor of Pharmacoepidemiology, Temple University School of Pharmacy

编辑委员会

RICHARD W. BESDINE, M.D.

Professor of Medicine and Director, University of Connecticut Center on Aging

ROBERT N. BUTLER, M.D.

Professor of Geriatrics and Adult Development, Mount Sinai School of Medicine; President, Chief Executive Officer, International Longevity Center

CHRISTINE K. CASSEL, M.D.

Chairman and Professor, Henry L. Schwartz Department of Geriatrics and Adult Development, Mount Sinai School of Medicine

TERRY T. FULMER, Ph.D., R.N., F.A.A.N.

Professor of Nursing, New York University

EDWARD G. LAKATTA, M.D.

Chief, Laboratory of Cardiovascular Science, National Institute on Aging

JOHN E. MORLEY, M.B., B.Ch.

Dammert Professor of Gerontology, Division of Geriatric Medicine, Saint Louis University Health Sciences Center; Geriatric Research, Education and Clinical Center, Saint Louis VA Medical Center

MARY E. TINETTI, M.D.

Professor of Medicine and Epidemiology and Public Health, Yale University

顾问和致谢

顶 问

Acute Network

MARQUETTE CANNON-BABB, Pharm.D.

Assistant Dean for Admissions, Temple University School of Pharmacy

EUGENE P. FRENKEL, M.D.

Professor of Internal Medicine and Radiology, Patsy R. and Raymond D. Nasher Distinguished Chair in Cancer Research, and A. Kenneth Pye Professorship in Cancer Research, Division of Hematology-Oncology, Department of Medicine, The University of Texas Southwestern Medical Center at Dallas

MICHAEL R. JACOBS, Pharm.D. Professor of Clinical Pharmacy, Temple University School of Pharmacy

DAVID F. POLAKOFF, M.D. Instructor in Medicine, Harvard Medical School; Chief Medical Officer, Mariner Post-

致 谢

我们希望对下述人员表示诚挚的谢意。感谢他们对某些特别章节的审校给予的大力支持。

We wish to express our appreciation to the following persons for their expert assistance in reviewing specific chapters:

Laurence Branch, Ph.D. Professor of Gerontology, Duke University Center on Aging (*Demographics*)

Janice L. Feinberg, Pharm.D., J.D. Executive Director, American Society of Consultant Pharmacists Research and Education Foundation (*Pharmacy*)

Harvey Lemont, D.P.M. Professor, Section of Podiatric Medicine, Temple University School of Podiatric Medicine; Director, Laboratory of Podiatric Pathology (*Foot Disorders*)

- **G. Alec Rooke, M.D., Ph.D.** Associate Professor of Anesthesiology, University of Washington (*Anesthesia Considerations*)
- **G. Victor Rossi, Ph.D.** Leonard and Madlyn Abramson Professor of Pharmacology, Philadelphia College of Pharmacy, University of the Sciences in Philadelphia (*Clinical Pharmacology*)

作 者

WENDY L. ADAMS, M.D., M.P.H.

Assistant Professor of Medicine, University of Nebraska Medical Center

Substance Abuse and Dependence

RONALD D. ADELMAN, M.D.

Associate Professor of Medicine, Weill Medical College of Cornell University Elder Abuse

CATHY A. ALESSI, M.D.

Associate Professor of Medicine, University of California, Los Angeles; Geriatrician, Geriatric Research, Education and Clinical Center, VA Greater Los Angeles Healthcare System Sleep Disorders

NEIL ALEXANDER, M.D.

Associate Professor of Internal and Geriatric Medicine, University of Michigan; Research Scientist, Ann Arbor VA Medical Center Falls

W. McDOWELL ANDERSON, M.D.

Associate Professor of Medicine, University of South Florida; Chief, Pulmonary and Critical Medicine, James A. Haley VA Hospital Aging and the Lungs

WILLIAM B. APPLEGATE, M.D.

Professor and Chairman, Department of Internal Medicine, Wake Forest University School of Medicine

Hypertension

WILBERT S. ARONOW, M.D.

Adjunct Professor of Geriatrics and Adult Development, Mount Sinai School of Medicine; Corporate Medical Director, Hebrew Hospital Home, Bronx and Westchester County Coronary Artery Disease

MACK N. BARNES III. M.D.

Assistant Professor of Gynecology/Oncology, University of Alabama at Birmingham Female Genital Disorders

NIR BARZILAI, M.D.

Associate Professor of Medicine, Diabetes Research Center, Albert Einstein College of Medicine

Disorders of Carbohydrate Metabolism

JANE BEAR-LEHMAN, Ph.D.

Assistant Professor of Clinical Occupational Therapy, Columbia University College of Physicians and Surgeons Occupational Therapy

BARBARA ROE BECK, M.A.

Clinical Audiologist, Department of Communication Sciences and Disorders, Saint Louis University

Hearing Loss

DOUGLAS L. BECK, Au.D.

Clinical Audiologist; President, HearAmerica, Inc., St. Louis

Hearing Loss

RICHARD BECKER, M.D.

Professor of Medicine and Director, Coronary Care Unit and Cardiovascular Thrombosis Research Center, University of Massachusetts Medical School

Hypercoagulability and Anticoagulation

MARK H. BEERS, M.D.

Editor, THE MERCK MANUALS and Senior Director of Geriatrics, Merck & Co., Inc.; Associate Clinical Professor of Medicine, MCP Hahnemann School of Medicine Behavior Disorders in Dementia

DAVID W. BENTLEY, M.D.

Professor of Internal Medicine, Division of Geriatric Medicine, Saint Louis University School of Medicine; Director, Geriatric Evaluation and Management Unit, Saint Louis VA Medical Center Human Immunodeficiency Virus Infection

BARBARA BERKMAN, Ph.D.

Helen Rehr/Ruth Fizdale Professor of Health and Mental Health, Columbia University School of Social Work Geriatric Social Work

RICHARD W. BESDINE, M.D.

Professor of Medicine and Director, University of Connecticut Center on Aging Quality of Life and Therapeutic Objectives; Hyperthermia and Hypothermia

DAN G. BLAZER, M.D., Ph.D.

J. P. Gibbons Professor of Psychiatry and Behavioral Sciences, Duke University School of Medicine

Depression; Anxiety Disorders; Somatoform Disorders; Psychotic Disorders

MARIE L. BORUM, M.D., M.P.H.

Associate Professor of Medicine, The George Washington University Medical Center Esophageal Disorders; Gastric Disorders; Malabsorption; Irritable Bowel Syndrome; Fecal Incontinence

CHAD BOULT, M.D., M.P.H.

Professor, Department of Family Practice and Community Health, University of Minnesota Medical School

Comprehensive Geriatric Assessment

RISA BRECKMAN, M.S.W.

Director of Social Work, New York Presbyterian Hospital, Wright Center on Aging Elder Abuse

DAVID BUCHNER, M.D., M.P.H.

Professor, Department of Health Services, University of Washington, Seattle; Investigator, Northwest Center for Outcomes Research in Older Adults, VA Puget Sound Health Care System, Seattle Exercise

ROBERT N. BUTLER, M.D.

Professor of Geriatrics and Adult Develop-

ment, Mount Sinai School of Medicine; President, Chief Executive Officer, International Longevity Center Sexuality

LOUIS R. CAPLAN, M.D.

Professor of Neurology, Harvard Medical School; Neurologist, Beth Israel Deaconess Medical Center Cerebrovascular Disease

ANTONI CASTELLS, M.D.

Research Fellow, Massachusetts General Hospital, Harvard School of Medicine Gastrointestinal Tumors

MELVIN CHEITLIN, M.D.

Professor of Medicine (Emeritus), University of California, San Francisco; former Chief of Cardiology, San Francisco General Hospital Valvular Heart Disease; Infective Endocarditis

NOEL CHIU, M.D.

Department of Dermatology, Boston University School of Medicine Aging and the Skin; Common Skin Disorders: Skin Cancers

GENE D. COHEN, M.D., Ph.D.

Director, Center on Aging, Health and Humanities, The George Washington University; Director, Washington DC Center on Aging Aging and Mental Health

BARRY S. COLLET, D.P.M., M.P.H.

Consultant, Hebrew Rehabilitation Center for Aged, Boston; Consultant, Brockton Hospital Foot Disorders

BARRY J. CUSACK, M.D.

Associate Professor of Medicine, Division of Gerontology and Geriatric Medicine, University of Washington, Seattle; Chief, Gerontology and Geriatric Medicine, VA Medical Center, Boise

Clinical Pharmacology

NANCY N. DUBLER, LL.B.

Professor of Bioethics, The Albert Einstein College of Medicine; Director, Division of Bioethics, Montefiore Medical Center (1987) Legal and Ethical Issues

THEODORE C. EICKHOFF, M.D.

Professor of Medicine, Division of Infectious Disease, University of Colorado Health Sciences Center

Immunization

W. GARY ERWIN, Pharm.D.

Vice President, Health Systems Program, Omnicare, Inc., Radnor, PA Pharmacy

WALTER H. ETTINGER, M.D.

Executive Vice President, Virtua Health, Marlton, NJ

Nonmetabolic Bone Disease; Local Joint, Tendon, and Bursa Disorders; Rheumatic Diseases; Vasculitic Syndromes

PAUL FADDEN, M.D.

Resident, Department of Surgery, Division of Urology, University of Wisconsin Medical School

Male Genital Disorders

BRUCE A. FERRELL, M.D.

Associate Professor of Medicine, University of California, Los Angeles; Clinical Director, Geriatric Research, Education and Clinical Center. VA Greater Los Angeles Healthcare System Pain

HOWARD FILLIT, M.D.

Clinical Professor of Geriatrics and Medicine, The Mount Sinai Medical Center; Executive Director, The Institute for the Study of Aging, Inc. Managed Care

JEROME L. FLEG, M.D.

Head, Human Cardiovascular Studies, Gerontology Research Center, National Institute on Aging

Diagnostic Evaluation; Arrhythmias and Conduction Disturbances

MARSHAL F. FOLSTEIN, M.D.

Francis Arkin Professor of Psychiatry and Chairman of Psychiatry, Tufts University School of Medicine and New England Medical Center Mental Status Examination

SUSAN E. FOLSTEIN, M.D.

Professor of Psychiatry, Tufts University School

of Medicine and New England Medical Center Mental Status Examination

MICHAEL L. FREEDMAN, M.D.

The Diane and Arthur Belfer Professor of Geriatric Medicine, New York University School of Medicine; Director, The Diane and Arthur Belfer Geriatric Center, New York University Medical Center

Aging and the Blood; Anemias; Hematologic Malignancies; Lymphomas

SANDOR A. FRIEDMAN, M.D.

Professor of Medicine, State University of New York, Health Science Center at Brooklyn; Chairman, Department of Medicine, Coney Island Hospital

Peripheral Arterial Disease; Peripheral Venous Disease; Aneurysms

TERRY T. FULMER, Ph.D., R.N.

Professor of Nursing, New York University Geriatric Interdisciplinary Teams; Nursing; Continuity of Care: Integration of Services

TOBIN N. GERHART, M.D.

Clinical Assistant Professor of Orthopaedic Surgery, Harvard University Fractures

BARBARA A. GILCHREST, M.D.

Professor and Chairman of Dermatology, Boston University School of Medicine; Chief of Dermatology, Boston Medical Center Aging and the Skin; Common Skin Disorders; Skin Cancers

JACK M. GURALNIK, M.D., Ph.D.

Chief, Epidemiology and Demography Office, National Institute on Aging Demographics

RICHARD J. HAVLIK, M.D., M.P.H.

Associate Director, Epidemiology, Demography and Biometry Program, National Institute on Aging Demographics

MICHAEL HOROWITZ, M.D.

Professor of Medicine, University of Adelaide; Director of Endocrine Unit, Royal Adelaide Hospital, Adelaide, South Australia Aging and the Gastrointestinal Tract

KATHRYN HYER, Dr.P.A.

Faculty, University of South Florida, Department of Gerontology and Geriatric Interdisciplinary Team Training Project Director Geriatric Interdisciplinary Teams; Home Health Care; Long-Term Care

MASAYOSHI ITOH, M.D., M.P.H.

Associate Professor of Clinical Rehabilitation, New York University; Senior Administrative Consultant, Goldwater Memorial Hospital Rehabilitation; Rehabilitation for Specific Problems; Speech Disorders

HUGO E. JASIN, M.D.

Professor of Internal Medicine and Director, Division of Rheumatology, University of Arkansas for Medical Sciences Diffuse Idiopathic Skeletal Hyperostosis

LARRY E. JOHNSON, M.D., Ph.D.

Associate Professor of Family and Community Medicine and Geriatric Medicine, University of Arkansas for Medical Sciences Vitamin and Trace Mineral Disorders

ROBERT J. JOYNT, M.D., Ph.D.

Distinguished University Professor, University of Rochester; Professor of Neurology and Neurobiology and Anatomy, University of Rochester School of Medicine and Dentistry Aging and the Nervous System

JAMES O. JUDGE, M.D.

Associate Professor of Medicine, University of Connecticut School of Medicine; Vice President for Medical Affairs, Masonicare Gait Disorders

PAUL R. KAESBERG, M.D.

Clinical Assistant Professor of Medicine, Hematology/Oncology, University of Wisconsin Cancer

FRAN E. KAISER, M.D.

Adjunct Professor of Medicine, Saint Louis University School of Medicine; Senior Medical Director, South Central Region, Merck & Co., Inc. Sexual Dysfunction in Men; Sexual Dysfunction in Women

HOSAM KAMEL, M.D.

Assistant Professor of Medicine, State Univer-

sity of New York at Stony Brook School of Medicine; Chief, Division of Geriatric Medicine, Nassau County Medical Center Human Immunodeficiency Virus Infection

WILLIAM B. KANNEL, M.D., M.P.H.

Professor of Medicine and Public Health, Boston University School of Medicine; Medical Director (Emeritus), Framingham Heart Study Atherosclerosis

MARILYN C. KINCAID, M.D.

Clinical Professor of Ophthalmology and Pathology, Saint Louis University Eye Institute Ocular Disorders

TALMADGE E. KING, JR., M.D.

Constance B. Wofsy Distinguished Professor, University of California, San Francisco; Chief, Medical Services, San Francisco General Hospital Interstitial Lung Diseases

DALANE W. KITZMAN, M.D.

Associate Professor of Internal Medicine (Cardiology), Wake Forest University School of Medicine; Director of Echocardiography, Wake Forest University Baptist Medical Center Heart Failure and Cardiomyopathy

HAROLD KLEINERT, M.D.

Clinical Professor of Surgery, University of Louisville School of Medicine Hand Disorders

HAROLD G. KOENIG, M.D.

Associate Professor of Psychiatry, Duke University; Geriatric Research, Education and Clinical Center, VA Medical Center Religion and Spirituality

JOYANN KROSER, M.D.

Assistant Professor of Medicine, Gastrointestinal Division, University of Pennsylvania Gastrointestinal Tumors

MARK LACHS, M.D., M.P.H.

Co-Chief of Geriatric Medicine and Associate Professor of Medicine, Weill Medical College and School of the Graduate Medical Sciences of Cornell University; Medical Director for Geriatric Medicine, The New York Presbyterian Health System Elder Abuse

EDWARD G. LAKATTA, M.D.

Chief, Laboratory of Cardiovascular Science, National Institute on Aging Aging and the Cardiovascular System

MATHEW H. M. LEE, M.D.

Howard A. Rusk Professor, Department of Rehabilitation Medicine, New York University School of Medicine; Medical Director, Rusk Institute of Rehabilitation Medicine Rehabilitation; Rehabilitation for Specific Problems; Speech Disorders

ROSANNE M. LEIPZIG, M.D., Ph.D.

Associate Professor and Vice Chair for Education, Department of Geriatrics and Adult Development, Mount Sinai School of Medicine Breast Cancer

MYRNA LEWIS, M.S.W.

Assistant Clinical Professor, Department of Community and Preventive Medicine, Mount Sinai School of Medicine Sexuality

ROBERT D. LINDEMAN, M.D.

Professor (Emeritus) and former Chief, Division of Gerontology, Department of Medicine, University of New Mexico School of Medicine Aging and the Kidney; Renal Disorders

LEWIS A. LIPSITZ, M.D.

Associate Professor of Medicine, Harvard Medical School; Physician-in-Chief and Vice President of Medical Affairs, Hebrew Rehabilitation Center for Aged Syncope; Hypotension

ELAN D. LOUIS, M.D.

Assistant Professor of Neurology, Gertrude H. Sergievsky Center, New York Movement Disorders

BRUCE A. LUXON, M.D., Ph.D.

Associate Professor, Department of Internal Medicine, Saint Louis University School of Medicine Liver and Biliary Disorders

JOANNE LYNN, M.D.

Professor of Health Care Sciences; Director, The Center to Improve Care of the Dying, George Washington University; President, Americans for Better Care of the Dying Care of the Dying Patient

BARRY J. MAKE, M.D.

Professor of Medicine, University of Colorado School of Medicine; Director, Emphysema Center, National Jewish Medical and Research Center Pulmonary Rehabilitation

STAVROS MANOLAGAS, M.D., Ph.D.

Professor of Medicine and Director, Division of Endocrinology and Metabolism, University of Arkansas for Medical Sciences Aging and the Musculoskeletal System

EDWARD MARCANTONIO, M.D.

Assistant Professor of Medicine, Harvard Medical School; Director of Quality Assurance and Outcomes Research, Hebrew Rehabilitation Center for Aged Delirium; Dementia

DANIEL McNALLY, M.D.

Associate Professor of Medicine and Acting Head, Division of Pulmonary Medicine, University of Connecticut School of Medicine Respiratory Failure

JOHN R. MICHAEL, M.D.

Professor of Medicine and Director of Medical Intensive Care Unit, University of Utah Pulmonary Embolism

JEAN-PIERRE MICHEL, M.D.

Chief, Department of Geriatrics, University of Geneva Medical School, Switzerland Aging and the Immune System

DOUGLAS K. MILLER, M.D.

Professor of Geriatric Medicine and Associate Director, Division of Geriatric Medicine, Saint Louis University Laboratory Values

PATRICIA A. MILLER, Ed.D., O.T.R.

Assistant Professor of Clinical Occupational Therapy and Public Health, Columbia University Occupational Therapy

CHARLES V. MOBBS, M.D.

Associate Professor, Fishberg Center for Neu-