

GOLDMAN'S CECIL MEDICINE

LEE GOLDMAN
ANDREW I. SCHAFER

VOLUME 1

24TH
EDITION

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24TH EDITION

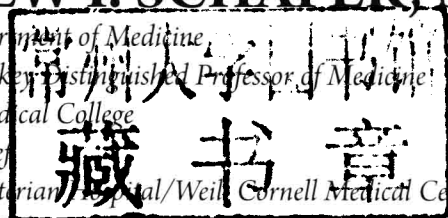
Volume 1

LEE GOLDMAN, MD

*Dean of the Faculties of Health Sciences and Medicine
Executive Vice President for Health and Biomedical Sciences
Harold and Margaret Hatch Professor of the University
Professor of Medicine and of Epidemiology
Columbia University
New York, New York*

ANDREW I. SCHAFER, MD

*Chairman, Department of Medicine
The E. Hugh Luckey Distinguished Professor of Medicine
Weill Cornell Medical College
Physician-in-Chief
New York-Presbyterian Hospital/Weill Cornell Medical Center
New York, New York*



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Acquisitions Editor: Dolores Meloni

Developmental Editors: Catherine Carroll, Taylor Ball, Virginia Wilson

Publishing Services Manager: Patricia Tannian

Team Leader: Radhika Pallamparthy

Senior Project Manager: Linda Van Pelt

Project Manager: Anitha Sivaraj

Design Direction: Steven Stave

Marketing Manager: Helena Mutak

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GOLDMAN'S
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ASSOCIATE EDITORS

William P. Arend, MD

Distinguished Professor Emeritus
Arend Endowed Chair in Rheumatology
University of Colorado School of Medicine
Aurora, Colorado

James O. Armitage, MD

The Joe Shapiro Professor of Medicine
University of Nebraska College of Medicine
Section of Oncology and Hematology
University of Nebraska Medical Center
Omaha, Nebraska

David R. Clemmons, MD

Kenan Professor of Medicine
University of North Carolina at Chapel Hill School of Medicine
Chapel Hill, North Carolina

Jeffrey M. Drazen, MD

Distinguished Parker B. Francis Professor of Medicine
Harvard Medical School
Senior Physician
Division of Pulmonary and Critical Care Medicine
Brigham and Women's Hospital
Editor-in-Chief
New England Journal of Medicine
Boston, Massachusetts

Robert C. Griggs, MD, FAAN

Professor of Neurology, Medicine, Pediatrics, and Pathology and Laboratory
Medicine
University of Rochester School of Medicine and Dentistry
Rochester, New York

Donald W. Landry, MD, PhD

Samuel Bard Professor and Chair, Department of Medicine
Columbia University College of Physicians and Surgeons
New York, New York

Wendy Levinson, MD

Sir John and Lady Eaton Professor and Chair
Department of Medicine
University of Toronto
Toronto, Ontario, Canada

Anil K. Rustgi, MD

T. Grier Miller Professor of Medicine and Genetics
Chief of Gastroenterology
American Cancer Society Research Professor
University of Pennsylvania School of Medicine
Philadelphia, Pennsylvania

W. Michael Scheld, MD

Bayer-Gerald L. Mandell Professor of Infectious Diseases
Director
Pfizer Initiative in International Health
Department of Medicine
University of Virginia Health System
Charlottesville, Virginia

PREFACE

The 24TH Edition of *Goldman's Cecil Medicine* symbolizes a time of extraordinary advances in medicine and in technological innovations for the dissemination of information. This textbook and its associated electronic products incorporate the latest medical knowledge in formats that are designed to appeal to learners who prefer to access information in a variety of ways.

The contents of *Cecil* have remained true to the tradition of a comprehensive textbook of medicine that carefully explains the *why* (the underlying normal physiology and pathophysiology of disease, now at the cellular and molecular as well as the organ level) and the *how* (now frequently based on Grade A evidence from randomized controlled trials). Descriptions of physiology and pathophysiology include the latest genetic advances in a practical format that strives to be useful to the nonexpert. Medicine has entered an era when the acuity of illness and the limited time available to evaluate a patient have diminished the ability of physicians to satisfy their intellectual curiosity. As a result, the acquisition of information, quite easily achieved in this era, is often confused with knowledge. We have attempted to counteract this tendency with a textbook that not only informs but also stimulates new questions and gives a glimpse of the future path to new knowledge. Grade A evidence is specifically highlighted in the text and referenced at the end of each chapter. In addition to the information provided in the textbook, the Cecil website supplies expanded content and functionality. In many cases, the full articles referenced in each chapter can be accessed from the Cecil website. The website is also continuously updated to incorporate subsequent Grade A information, other evidence, and new discoveries.

The sections for each organ system begin with a chapter that summarizes an approach to patients with key symptoms, signs, or laboratory abnormalities associated with dysfunction of that organ system. As summarized in Table 1-1, the text specifically provides clear, concise information regarding how a physician should approach more than 100 common symptoms, signs, and laboratory abnormalities, usually with a flow diagram, a table, or both for easy reference. In this way, *Cecil* remains a comprehensive text to guide diagnosis and therapy, not only for patients with suspected or known diseases but also for patients who may have undiagnosed abnormalities that require an initial evaluation.

Just as each edition brings new authors, it also reminds us of our gratitude to past editors and authors. Previous editors of *Cecil Medicine* include a short but remarkably distinguished group of leaders of American medicine: Russell Cecil, Paul Beeson, Walsh McDermott, James Wyngaarden, Lloyd H. Smith, Jr., Fred Plum, J. Claude Bennett, and Dennis Ausiello. As we welcome new

associate editors—Wendy Levinson, Donald W. Landry, Anil Rustgi, and W. Michael Scheld—we also express our appreciation to Nicholas LaRusso and other associate editors from the previous editions on whose foundation we have built. Our returning associate editors—William P. Arend, James O. Armitage, David Clemmons, Jeffrey M. Drazen, and Robert C. Griggs—continue to make critical contributions to the selection of authors and the review and approval of all manuscripts. The editors, however, are fully responsible for the book as well as the integration among chapters.

The tradition of *Cecil Medicine* is that all chapters are written by distinguished experts in each field. We are also most grateful for the editorial assistance in New York of Theresa Considine and Silva Serghian. These individuals and others in our offices have shown extraordinary dedication and equanimity in working with authors and editors to manage the unending flow of manuscripts, figures, and permissions. We also thank Faten Abera, Reza Akari, Robert C. Brunham, Ivan Ciric, Seema Daulat, Gregory F. Erikson, Kevin Ghassemi, Jason H. Huang, Caron Jacobson, Lisa Kachnic, Bryan T. Kelly, Karen Krok, Heather Lehman, Keiron Leslie, Luis Marcos, Michael Overman, Eric Padron, Bianca Maria Piraccini, Don W. Powell, Katy Ralston, James M. Swain, Tania Thomas, Kirsten Tillisch, Ali Turabi, Mark Whiteford, and Y. Joseph Woo, who contributed to various chapters. At Elsevier, we are most indebted to Dolores Meloni and Linda McKinley, and also thank Cathy Carroll, Taylor Ball, Virginia Wilson, Linda Van Pelt, Suzanne Fannin, and Steve Stave, who have been critical to the planning and production process under the direction of Mary Gatsch. Many of the clinical photographs were supplied by Charles D. Forbes and William F. Jackson, authors of *Color Atlas and Text of Clinical Medicine*, Third Edition, published in 2003 by Elsevier Science Ltd. We thank them for graciously permitting us to include their pictures in our book. We have been exposed to remarkable physicians in our lifetimes and would like to acknowledge the mentorship and support of several of those who exemplify this paradigm—Robert H. Gifford, Lloyd H. Smith, Jr., Frank Gardner, and William Castle. Finally, we would like to thank the Goldman family—Jill, Jeff, Abigail, Mira, Daniel, and Robyn Goldman—and the Schafer family—Pauline, Eric, Pam, John, Evan, and Kate—for their understanding of the time and focus required to edit a book that attempts to sustain the tradition of our predecessors and to meet the needs of today's physician.

LEE GOLDMAN, MD
ANDREW I. SCHAFER, MD

CONTRIBUTORS

Charles S. Abrams, MD

Professor of Medicine, Associate Chief, Hematology-Oncology, Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
Thrombocytopenia

Frank J. Accurso, MD

Professor of Pediatrics, University of Colorado Denver School of Medicine, Denver, Colorado
Cystic Fibrosis

Nezam H. Afdhal, MD

Associate Professor of Medicine, Harvard Medical School; Chief of Hepatology, Beth Israel Deaconess Medical Center, Boston, Massachusetts
Diseases of the Gallbladder and Bile Ducts

Cem Akin, MD, PhD

Lecturer, Harvard Medical School; Department of Internal Medicine, Division of Rheumatology, Immunology and Allergy, Brigham and Women's Hospital, Boston, Massachusetts
Mastocytosis

Allen J. Aksamit, Jr., MD

Professor, Department of Neurology, Mayo Medical School; Consultant, Department of Neurology, Mayo Clinic, Rochester, Minnesota
Acute Viral Encephalitis; Poliomyelitis

Qais Al-Awqati, MB ChB

Robert F. Loeb Professor, Department of Medicine and Department of Physiology and Cellular Biophysics, Columbia University College of Physicians and Surgeons, New York, New York
Structure and Function of the Kidneys

Ban Mishu Allos, MD

Assistant Professor of Medicine and Preventive Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee
Campylobacter Infections

David Altshuler, MD, PhD

Professor of Genetics and Medicine, Harvard Medical School; Department of Molecular Biology and Medicine, Massachusetts General Hospital, Boston, Massachusetts; Deputy Director and Chief Academic Officer, Broad Institute of MIT and Harvard, Cambridge, Massachusetts
The Inherited Basis of Common Diseases

Michael J. Aminoff, MD, DSc

Professor, Department of Neurology, University of California, San Francisco School of Medicine, San Francisco, California
Approach to the Patient with Neurologic Disease

Jeffrey L. Anderson, MD, MACP

Professor, Department of Internal Medicine, University of Utah School of Medicine, Salt Lake City; Associate Chief of Cardiology, Intermountain Medical Center, Murray, Utah
ST Elevation Acute Myocardial Infarction and Complications of Myocardial Infarction

Karl E. Anderson, MD

Professor of Preventive Medicine and Community Health and Internal Medicine, University of Texas Medical Branch, Galveston, Texas
The Porphyrrias

Larry J. Anderson, MD

Professor and Co-Director, Division of Pediatric Infectious Diseases, Emory University School of Medicine, Atlanta, Georgia
Coronaviruses

Karen H. Antman, MD

Provost, Boston University Medical Campus, and Dean, Boston University School of Medicine, Boston, Massachusetts
Primary and Metastatic Malignant Bone Lesions

Aśok C. Antony, MD

Professor of Medicine, Indiana University School of Medicine, Indianapolis, Indiana
Megaloblastic Anemias

Gerald B. Appel, MD

Professor of Clinical Medicine, Columbia University College of Physicians and Surgeons; Director of Clinical Nephrology, Department of Medicine, Columbia University Medical Center, New York, New York
Glomerular Disorders and Nephrotic Syndromes

Frederick R. Appelbaum, MD

Professor and Head, Division of Oncology, University of Washington School of Medicine; Director, Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, Washington
The Acute Leukemias

William P. Arend, MD

Arend Endowed Chair in Rheumatology and Distinguished Professor Emeritus, University of Colorado School of Medicine, Aurora, Colorado
Approach to the Patient with Rheumatic Disease

Paul Arguin, MD

Chief, Domestic Malaria Unit, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia
Approach to the Patient before and after Travel

James O. Armitage, MD

The Joe Shapiro Professor of Medicine, University of Nebraska College of Medicine, Section of Oncology and Hematology, University of Nebraska Medical Center, Omaha, Nebraska
Venomous Snake Bites; Approach to the Patient with Lymphadenopathy and Splenomegaly; Non-Hodgkin's Lymphomas

Cheryl A. Armstrong, MD

Professor and Chair, Department of Dermatology, University of Arkansas for Medical Sciences; Section Chief, Dermatology Section, Central Arkansas Veterans Healthcare System, Little Rock, Arkansas
Examination of the Skin and an Approach to Diagnosing Skin Diseases

M. Amin Arnaout, MD

Professor of Medicine, Harvard Medical School; Physician and Chief, Division of Nephrology, Department of Medicine, Massachusetts General Hospital, Boston, Massachusetts
Cystic Kidney Diseases

Robert Arnold, MD

Leo H. Crip Chair in Patient Care, Department of Medicine, Section of Palliative Care and Medical Ethics, University of Pittsburgh, Pittsburgh, Pennsylvania
Care of Dying Patients and Their Families

David Atkins, MD, MPH

Director, Quality Enhancement Research Initiative, Office of Research and Development, Department of Veterans Affairs, Washington, DC
The Periodic Health Examination

William L. Atkinson, MD, MPH

Medical Epidemiologist, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia
Immunization

Dennis Ausiello, MD

Jackson Professor of Clinical Medicine, Harvard Medical School; Physician-in-Chief, Massachusetts General Hospital, Boston, Massachusetts
Disorders of Sodium and Water Homeostasis

Bruce R. Bacon, MD

James F. King MD Endowed Chair in Gastroenterology, Professor of Internal Medicine, Division of Gastroenterology and Hepatology, Saint Louis University School of Medicine, St. Louis, Missouri
Inherited and Metabolic Disorders of the Liver; Iron Overload (Hemochromatosis)

Grover C. Bagby, MD

Professor, Department of Medicine, Department of Molecular and Medical Genetics, Oregon Health & Science University; Staff Physician, Hematology/Oncology, Portland Veterans Affairs Medical Center, Portland, Oregon
Aplastic Anemia and Related Bone Marrow Failure States

Barbara J. Bain, MB ChB

Professor in Diagnostic Haematology, Imperial College London; Consultant Haematologist, St Mary's Hospital, London, England
The Peripheral Blood Smear

Dean F. Bajorin, MD

Professor of Medicine, Department of Medicine, Weill Cornell Medical College; Attending Physician, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, New York
Tumors of the Kidney, Bladder, Ureters, and Renal Pelvis

Mark Ballow, MD

Professor of Pediatrics, Chief, Division of Allergy and Clinical Immunology, University at Buffalo School of Medicine and Biomedical Sciences, Women & Children's Hospital of Buffalo, Buffalo, New York
Primary Immunodeficiency Diseases

Robert W. Baloh, MD

Professor of Neurology and Surgery (Head and Neck), David Geffen School of Medicine at UCLA, University of California, Los Angeles, California
Neuro-Ophthalmology; Smell and Taste; Hearing and Equilibrium

Jonathan Barasch, MD, PhD

Associate Professor of Medicine, Columbia University College of Physicians & Surgeons, New York, New York
Structure and Function of the Kidneys

Richard L. Barbano, MD, PhD

Professor of Neurology, University of Rochester; Chief of Neurology and Physical Medicine and Rehabilitation, Rochester General Hospital, Rochester, New York
Mechanical and Other Lesions of the Spine, Nerve Roots, and Spinal Cord; Videos

Murray G. Baron, MD

Professor of Radiology, Emory University School of Medicine, Atlanta, Georgia
Radiology of the Heart

Elizabeth Barrett-Connor, MD

Distinguished Professor and Chief, Division of Epidemiology, Department of Family and Preventive Medicine, University of California, San Diego, School of Medicine, La Jolla, California
Menopause

Michael J. Barry, MD

Professor of Medicine, Harvard Medical School; Medical Director, John D. Stoeckle Center for Primary Care Innovation, Massachusetts General Hospital, Boston, Massachusetts
Benign Prostatic Hyperplasia and Prostatitis

Bruce A. Barshop, MD, PhD

Professor, B. L. Maas Chair in Inherited Metabolic Disease, Department of Pediatrics, University of California, San Diego, School of Medicine, La Jolla, California
Homocystinuria and Hyperhomocysteinemia

John G. Bartlett, MD

Stanhope Bayne-Jones Professor of Medicine, Division of Infectious Diseases, Johns Hopkins University School of Medicine, Baltimore, Maryland
Bioterrorism

Mary Barton, MD, MPP

Scientific Director, U.S. Preventive Services Task Force, Center for Primary Care, Prevention and Clinical Partnerships, Agency for Healthcare Research and Quality, Rockville, Maryland
The Periodic Health Examination

Robert C. Basner, MD

Associate Professor of Clinical Medicine, Columbia University College of Physicians & Surgeons; Director, Cardiopulmonary Sleep and Ventilatory Disorders Center, Columbia University Medical Center, New York, New York
Obstructive Sleep Apnea

Stephen G. Baum, MD

Professor of Medicine and of Microbiology and Immunology, Albert Einstein College of Medicine; Senior Associate Dean for Students, Albert Einstein College of Medicine, Bronx, New York
Mycoplasma Infections

Daniel G. Bausch, MD, MPH&TM

Associate Professor, Department of Tropical Medicine and Section of Adult Infectious Diseases, Tulane University Health Sciences Center, New Orleans, Louisiana
Viral Hemorrhagic Fevers

Arnold S. Bayer, MD

Professor of Medicine, David Geffen School of Medicine at UCLA; Associate Chief, Adult Infectious Diseases, Senior Investigator, LA Biomedical Research Institute, Los Angeles, California
Infective Endocarditis

Hasan Bazari, MD

Associate Professor of Medicine, Harvard Medical School; Program Director, Internal Medicine Residency, Clinical Director, Nephrology Division, Massachusetts General Hospital, Boston, Massachusetts
Approach to the Patient with Renal Disease

John H. Beigel, MD

Medical Scientist, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland
Antiviral Therapy (Non-HIV)

George A. Beller, MD

Ruth C. Heede Professor of Cardiology, Division of Cardiovascular Medicine, Department of Medicine, University of Virginia Health System, Charlottesville, Virginia
Noninvasive Cardiac Imaging

Robert M. Bennett, MD

Professor of Medicine and Nursing, Oregon Health & Science University,
Portland, Oregon
Fibromyalgia and Chronic Fatigue Syndrome

Joseph R. Berger, MD

Ruth L. Works Professor and Chairman, Department of Neurology,
University of Kentucky, Lexington, Kentucky
*Cytomegalovirus, Epstein-Barr Virus, and Other Slow Virus Infections of the
Central Nervous System; Neurologic Complications of Human
Immunodeficiency Virus Infection; Brain Abscess and Parameningeal Infections*

Paul Berk, MD

Professor, Department of Medicine, Columbia University College of
Physicians and Surgeons, New York, New York
Approach to the Patient with Jaundice or Abnormal Liver Tests

Nancy Berliner, MD

Professor of Medicine, Harvard Medical School; Chief, Division of
Hematology, Department of Medicine, Brigham and Women's Hospital,
Boston, Massachusetts
Leukocytosis and Leukopenia

James L. Bernat, MD

Louis and Ruth Frank Professor of Neuroscience, Professor of Neurology and
Medicine, Dartmouth Medical School, Hanover, New Hampshire;
Attending Neurologist, Dartmouth-Hitchcock Medical Center, Lebanon,
New Hampshire
Coma, Vegetative State, and Brain Death

Philip J. Bierman, MD

Professor, Department of Internal Medicine, University of Nebraska Medical
Center, Omaha, Nebraska
Non-Hodgkin's Lymphomas

Bruce R. Bistrian, MD, PhD, MPH

Professor of Medicine, Harvard Medical School; Chief, Clinical Nutrition,
Beth Israel Deaconess Medical Center, Boston, Massachusetts
Nutritional Assessment

Joseph J. Biundo, MD

Clinical Professor of Medicine, Tulane Health Science Center, New Orleans,
Louisiana
Bursitis, Tendinitis, and Other Periarticular Disorders and Sports Medicine

Charles D. Blanke, MD

Professor and Head, Medical Oncology, University of British Columbia; Vice
President, Systemic Therapy, British Columbia Cancer Agency, Vancouver,
British Columbia, Canada
Neoplasms of the Large and Small Intestine; Videos

Joel N. Blankson, MD, PhD

Associate Professor, Division of Infectious Diseases, Department of
Medicine, Johns Hopkins University School of Medicine, Baltimore,
Maryland
Immunopathogenesis of Human Immunodeficiency Virus Infection

Martin J. Blaser, MD

Frederick H. King Professor of Internal Medicine and Chair, Department of
Medicine; Professor of Microbiology, New York University Langone
Medical Center, New York, New York
Acid Peptic Disease

William A. Blattner, MD

Professor and Associate Director, Institute of Human Virology, University of
Maryland School of Medicine, Baltimore, Maryland
Retroviruses Other Than Human Immunodeficiency Virus

Thomas P. Bleck, MD

Professor of Neurological Sciences, Neurosurgery, Medicine, and
Anesthesiology and Assistant Dean, Rush Medical College; Associate
Chief Medical Officer for Critical Care, Rush University Medical Center,
Chicago, Illinois
Arboviruses Affecting the Central Nervous System

William E. Boden, MD

Clinical Chief, Division of Cardiovascular Medicine, Professor of Medicine
and Preventive Medicine, University at Buffalo Schools of Medicine and
Public Health; Medical Director, Cardiovascular Services, Kaleida Health,
Chief of Cardiology, Buffalo General and Millard Fillmore Hospitals,
Buffalo, New York
Angina Pectoris and Stable Ischemic Heart Disease

C. Richard Boland, MD

Chief, Division of Gastroenterology; Director, GI Cancer Research
Laboratory, Baylor University Medical Center, Dallas, Texas
Cancer Genetics

Jean Bolognia, MD

Professor, Department of Dermatology, Yale University School of Medicine,
New Haven, Connecticut
*Infections, Hyper- and Hypopigmentation, Regional Dermatology, and Distinctive
Lesions in Black Skin*

Robert Bonomo, MD

Professor of Medicine, Pharmacology, and Molecular Biology and
Microbiology, Case Western Reserve University School of Medicine;
Director, VISN 10 GRECC, Louis Stokes Cleveland Veterans Affairs
Medical Center, Cleveland, Ohio
Diseases Caused by Acinetobacter and Stenotrophomonas Species

Larry Borish, MD

Professor of Medicine, Asthma and Allergic Disease Center, University of
Virginia, Charlottesville, Virginia
Allergic Rhinitis and Sinusitis; Videos

Patrick J. Bosque, MD

Associate Professor, Department of Neurology, University of Colorado
Denver School of Medicine, Aurora, Colorado; Neurologist, Division of
Neurology, Denver Health Medical Center, Denver, Colorado
Prion Diseases

Randall Brand, MD

Professor of Medicine and Academic Director, GI Division Shadyside;
Director, GI Malignancy Early Detection, Diagnosis and Prevention,
University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania
Pancreatic Cancer

Itzhak Brook, MD, MSC

Professor, Department of Pediatrics and Medicine, Georgetown University,
Washington, DC
Diseases Caused by Non-Spore-Forming Anaerobic Bacteria; Actinomycosis

Enrico Brunetti, MD

Assistant Professor of Infectious Diseases, University of Pavia; Attending
Physician, Division of Infectious and Tropical Diseases, IRCCS San
Matteo Hospital Foundation; Co-Director, WHO Collaborating Centre for
Clinical Management of Cystic Echinococcosis, Pavia, Italy
Cestodes

David M. Buchner, MD, MPH

Professor, Department of Kinesiology and Community Health, University of
Illinois at Urbana-Champaign, Champaign, Illinois
Physical Activity

Pierre A. Buffet, MD, PhD

Assistant Professor, Department of Parasitology, Pitié-Salpêtrière Hospital,
Paris 6 University, Institut Pasteur, Paris, France
Leishmaniasis

H. Franklin Bunn, MD

Professor of Medicine, Harvard Medical School; Senior Physician, Brigham and Women's Hospital, Boston, Massachusetts

Approach to the Anemias

Peter A. Calabresi, MD

Professor of Neurology, Director, Johns Hopkins Multiple Sclerosis Center; Director, Division of Neuroimmunology and Neuroinfectious Diseases, Johns Hopkins University, Baltimore, Maryland

Multiple Sclerosis and Demyelinating Conditions of the Central Nervous System

David P. Calfee, MD, MSc

Associate Professor of Medicine and Public Health, Chief Hospital Epidemiologist, New York-Presbyterian Hospital/Weill Cornell Medical Center, New York, New York

Prevention and Control of Health Care-Associated Infections

Hugh Calkins, MD

Professor of Medicine, Director of Electrophysiology, Johns Hopkins Medical Institutions, Baltimore, Maryland

Principles of Electrophysiology

Douglas Cameron, MD, MBA

Emeritus Professor, Department of Ophthalmology, Mayo Medical School, Rochester, Minnesota

Diseases of the Visual System

Michael Camilleri, MD

Atherton and Winifred W. Bean Professor and Professor of Medicine and Physiology, Mayo Medical School; Consultant in Gastroenterology and Hepatology, Mayo Clinic, Rochester, Minnesota

Disorders of Gastrointestinal Motility

Grant W. Cannon, MD

Professor of Medicine, Division of Rheumatology, University of Utah School of Medicine; Associate Chief of Staff for Academic Affiliations, George E. Wahlen Veterans Affairs Medical Center, Salt Lake City, Utah

Immunosuppressing Drugs including Corticosteroids

Maria Domenica Cappellini, MD

Professor of Internal Medicine, Department of Internal Medicine, Università di Milano-Policlinico "Ca Granda" Foundation IRCCS, Milano, Italy

The Thalassemias

Blase A. Carabello, MD

Professor of Medicine, Baylor College of Medicine; Chief of Medicine, Michael E. DeBakey Veterans Affairs Medical Center, Houston, Texas

Valvular Heart Disease

Edgar M. Carvalho, MD, PhD

Professor of Clinical Medicine, Faculdade de Medicina da Bahia, Universidade Federal da Bahia, Salvador-BA, Brazil

Schistosomiasis (Bilharziasis)

Agustin Castellanos, MD

Professor of Medicine, Director, Clinical Electrophysiology, Division of Cardiovascular Medicine, University of Miami, Miller School of Medicine, Miami, Florida

Approach to Cardiac Arrest and Life-Threatening Arrhythmias

Naga P. Chalasani, MD

Professor of Medicine and Cellular and Integrative Physiology, Director, Division of Gastroenterology and Hepatology, Department of Medicine, Indiana University School of Medicine, Indianapolis, Indiana

Alcoholic and Nonalcoholic Steatohepatitis

Henry Chambers, MD

Professor of Medicine, University of California, San Francisco, School of Medicine; Chief, Division of Infectious Diseases, San Francisco General Hospital, San Francisco, California

Staphylococcal Infections

Mary Charlson, MD

William T. Foley Distinguished Professor of Medicine, Chief, Division of Epidemiology and Evaluative Sciences Research, Executive Director of Center for Integrative Medicine, Department of Medicine, Weill Cornell Medical College, New York, New York

Complementary and Alternative Medicine

William P. Cheshire, Jr., MD

Professor of Neurology, Director of Clinical Neurophysiology Laboratory, Mayo Clinic, Jacksonville, Florida

Autonomic Disorders and Their Management

Patrick F. Chinnery, MB BS

Director and Professor of Neurogenetics, Institute of Genetic Medicine, Newcastle University; Honorary Consultant Neurologist, Newcastle upon Tyne Hospitals NHS Trust, Newcastle upon Tyne, United Kingdom

Muscle Diseases

David C. Christiani, MD, MPH

Professor of Medicine, Harvard Medical School; Elkan Blout Professor of Environmental Genetics, Environmental Health, Harvard School of Public Health; Physician, Pulmonary and Critical Care Unit, Massachusetts

General Hospital, Boston, Massachusetts

Physical and Chemical Injuries of the Lung

David R. Clemmons, MD

Kenan Professor of Medicine, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina

Approach to the Patient with Endocrine Disease; Principles of Endocrinology

Jeffrey Cohen, MD

Chief, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland

Varicella-Zoster Virus (Chickenpox, Shingles)

Myron S. Cohen, MD

J. Herbert Bate Distinguished Professor, Departments of Medicine, Microbiology and Public Health; Associate Vice Chancellor and Director, Institute of Global Health and Infectious Diseases, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina

Approach to the Patient with a Sexually Transmitted Disease

Steven P. Cohen, MD

Associate Professor, Department of Anesthesiology, Johns Hopkins Medical Institutions, Baltimore, Maryland; Professor and Director of Pain

Research, Department of Surgery, Walter Reed Army Medical Center, Washington, DC; Colonel, Medical Corps, U.S. Army Reserve

Pain

Steven L. Cohn, MD

Clinical Professor of Medicine, SUNY Downstate; Director, Medical Consultation Service, Kings County Hospital Center, Brooklyn, New York

Preoperative Evaluation

Robert Colebunders, MD, PhD

Professor, Department of Clinical Sciences, Institute of Tropical Medicine; Department of Epidemiology and Social Medicine, University of Antwerp, Antwerp, Belgium

Immune Reconstitution Inflammatory Syndrome in HIV/AIDS

Joseph M. Connors, MD

Clinical Professor, Division of Medical Oncology, Department of Medicine, University of British Columbia; Clinical Director, Centre for Lymphoid Cancer, British Columbia Cancer Agency, Vancouver, British Columbia, Canada

Hodgkin's Lymphoma

Deborah J. Cook, MD, MSc

Professor, Department of Medicine, Clinical Epidemiology, and Biostatistics, Academic Chair, Critical Care Medicine, McMaster University, Hamilton, Ontario, Canada

Approach to the Patient in a Critical Care Setting

C. Ralph Corey, MD

Gary Hock Distinguished Professor of Global Health, Director, Infectious Disease Research, Duke Clinical Research Institute; Director, Hubert/Yeargan Center for Global Health; Professor of Medicine and Pathology, Duke University Medical Center, Durham, North Carolina
Venomous Snake Bites

Kenneth H. Cowan, MD, PhD

Director, Eppley Cancer Center, University of Nebraska Medical Center; Director, Eppley Institute for Research in Cancer, University of Nebraska Medical Center, Omaha, Nebraska
Biology of Cancer

William A. Craig, MD

Professor Emeritus, Department of Medicine, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin
Antibacterial Chemotherapy

Simon L. Croft, PhD

Professor of Parasitology, Head, Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, England
Leishmaniasis

Mary K. Crow, MD

Joseph P. Routh Professor of Rheumatic Diseases in Medicine, Chief, Rheumatology Division, Department of Medicine, Weill Cornell Medical College; Physician-in-Chief and Chair, Rheumatology Division, Hospital for Special Surgery, New York, New York
Systemic Lupus Erythematosus

John A. Crump, MB ChB

Associate Professor of Medicine and Pathology, Division of Infectious Diseases and International Health, Duke University Medical Center; Director, Duke Tanzania Operations, Duke Global Health Institute, Duke University, Durham, North Carolina
Salmonella Infections (including Typhoid Fever)

Mark R. Cullen, MD

Professor of Medicine, Chief, Division of General Medical Disciplines, Stanford University School of Medicine, Stanford, California
Principles of Occupational and Environmental Medicine

Gary C. Curhan, MD, ScD

Associate Professor of Medicine, Harvard Medical School; Associate Professor of Epidemiology, Harvard School of Public Health; Physician, Renal Division and Channing Laboratory, Brigham and Women's Hospital, Boston, Massachusetts
Nephrolithiasis

Inger K. Damon, MD, PhD

Chief, Poxvirus and Rabies Branch, Centers for Disease Control and Prevention, Atlanta, Georgia
Smallpox, Monkeypox, and Other Poxvirus Infections

Troy E. Daniels, DDS, MSc

Professor, Department of Orofacial Sciences, University of California, San Francisco, School of Dentistry; Professor, Department of Pathology, University of California, San Francisco, School of Medicine, San Francisco, California
Diseases of the Mouth and Salivary Glands

Nancy Davidson, MD

Professor of Medicine and Pharmacology and Chemical Biology, University of Pittsburgh School of Medicine; Director, University of Pittsburgh Cancer Institute and UPMC Cancer Centers, Pittsburgh, Pennsylvania
Breast Cancer and Benign Breast Disorders

Lisa M. DeAngelis, MD

Professor of Neurology, Weill Cornell Medical College; Chair, Department of Neurology, Memorial Sloan-Kettering Cancer Center, New York, New York
Tumors of the Central Nervous System and Intracranial Hypertension and Hypotension

Malcolm M. DeCamp, MD

Fowler McCormick Professor of Surgery and Professor of Medicine, Northwestern University Feinberg School of Medicine; Chief, Division of Thoracic Surgery, Northwestern Memorial Hospital, Chicago, Illinois
Interventional and Surgical Approaches to Lung Disease; Video

Carlos Del Rio, MD

Hubert Professor and Chair, Hubert Department of Global Health, Rollins School of Public Health of Emory University; Professor of Medicine, Emory University School of Medicine, Atlanta, Georgia
Prevention of Human Immunodeficiency Virus Infection

George D. Demetri, MD

Associate Professor of Medicine, Harvard Medical School; Director, Ludwig Center at Dana-Farber Cancer Institute; Senior Vice President for Experimental Therapeutics, Dana-Farber Cancer Institute, Boston, Massachusetts
Sarcomas of Soft Tissue and Bone, and Other Neoplasms of Connective Tissues

Robert H. Demling, MD

Professor of Surgery, Harvard Medical School; Director of Education and Research, Department of Surgery, Brigham and Women's Hospital, Boston, Massachusetts
Medical Aspects of Trauma and Burn Care

Patricia A. Deuster, PhD, MPH

Professor and Scientific Director, Consortium for Health and Military Performance, Department of Military and Emergency Medicine, Uniformed Services University of the Health Sciences, Bethesda, Maryland
Rhabdomyolysis

Robert B. Diasio, MD

William J. and Charles H. Mayo Professor, Departments of Molecular Pharmacology and Experimental Therapeutics and Oncology, Mayo Medical School; Director, Mayo Clinic Cancer Center, Rochester, Minnesota
Principles of Drug Therapy

David J. Diemert, MD

Assistant Professor, Department of Microbiology, Immunology and Tropical Medicine, George Washington University; Director of Clinical Trials, Albert B. Sabin Vaccine Institute, Washington, DC
Intestinal Nematode Infections; Tissue Nematode Infections

Kathleen B. Digre, MD

Professor of Neurology and Ophthalmology, Adjunct Professor of Obstetrics and Gynecology, Director, Headache Clinic, University of Utah School of Medicine, Salt Lake City, Utah
Headaches and Other Head Pain

John M. Douglas, Jr., MD

Chief Medical Officer, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia
Papillomavirus

Jeffrey M. Drazen, MD

Distinguished Parker B. Francis Professor of Medicine, Harvard Medical School; Senior Physician, Division of Pulmonary and Critical Care Medicine, Brigham and Women's Hospital; Editor-in-Chief, *New England Journal of Medicine*, Boston, Massachusetts
Asthma; Video

Stephen C. Dreskin, MD, PhD

Professor of Medicine and Immunology, Division of Allergy and Clinical Immunology, University of Colorado Denver School of Medicine, Aurora, Colorado
Urticaria and Angioedema

W. Lawrence Drew, MD, PhD

Professor, Laboratory Medicine and Medicine, University of California, San Francisco, School of Medicine, San Francisco, California
Cytomegalovirus

George L. Drusano, MD

Co-Director, Ordway Research Institute, Albany, New York
Antibacterial Chemotherapy

Thomas D. DuBose, Jr., MD

Tinsley R. Harrison Professor and Chair, Department of Internal Medicine, Wake Forest University School of Medicine, Winston-Salem, North Carolina
Vascular Disorders of the Kidney; Video

F. Daniel Duffy, MD

Steven Landgarten Professor in Medical Leadership, Dean, University of Oklahoma, School of Community Medicine, Tulsa, Oklahoma
Counseling for Behavior Change

Herbert L. DuPont, MD

H. Irving Schweppe, Jr., Chair of Internal Medicine and Vice Chairman, Department of Medicine, Baylor College of Medicine; Chief, Internal Medicine, St. Luke's Episcopal Hospital; Director, Center for Infectious Diseases, University of Texas–Houston School of Public Health, Houston, Texas
Approach to the Patient with Suspected Enteric Infection

Madeleine Duvic, MD

Professor of Dermatology and Medicine, Deputy Chairman, Department of Dermatology, The University of Texas M.D. Anderson Cancer Center, Houston, Texas
Urticaria, Drug Hypersensitivity Rashes, Nodules and Tumors, and Atrophic Diseases

Kathryn M. Edwards, MD

Sarah H. Sell Professor of Pediatrics, Vanderbilt University School of Medicine, Nashville, Tennessee
Parainfluenza Viral Disease

N. Lawrence Edwards, MD

Professor of Medicine, Vice Chairman, Department of Medicine, University of Florida College of Medicine; Chief, Section of Rheumatology, Veterans Administration Medical Center, Gainesville, Florida
Crystal Deposition Diseases

Lawrence H. Einhorn, MD

Distinguished Professor of Medicine, Lance Armstrong Foundation Professor of Oncology, Indiana University School of Medicine, Indianapolis, Indiana
Testicular Cancer

Ronald J. Elin, MD, PhD

A. J. Miller Professor and Chair, Department of Pathology and Laboratory Medicine, University of Louisville School of Medicine, Louisville, Kentucky
Reference Intervals and Laboratory Values

George M. Eliopoulos, MD

Professor of Medicine, Harvard Medical School; Division of Infectious Diseases, Beth Israel Deaconess Medical Center, Boston, Massachusetts
Principles of Anti-Infective Therapy

Perry Elliott, MBBS, MD

Reader in Inherited Cardiac Disease, The Heart Hospital, University College London, London, United Kingdom
Diseases of the Myocardium and Endocardium

Jerrold J. Ellner, MD

Professor of Medicine, Boston University; Chief, Section of Infectious Diseases, Boston Medical Center, Boston, Massachusetts
Tuberculosis

Louis J. Elsas II, MD

Professor and Chair, Department of Biochemistry and Molecular Biology, University of Miami; Professor, Department of Pediatrics, University of Miami, Miller School of Medicine, Miami, Florida
Approach to Inborn Errors of Metabolism

Dirk M. Elston, MD

Director, Department of Dermatology, Geisinger Medical Center, Danville, Pennsylvania
Arthropods and Leeches

Ezekiel J. Emanuel, MD, PhD

Chair, Department of Bioethics, The Clinical Center, National Institutes of Health, Bethesda, Maryland
Bioethics in the Practice of Medicine

Gregory F. Erickson, PhD

Professor Emeritus of Reproductive Medicine, Division of Reproductive Endocrinology, University of California, San Diego, School of Medicine, La Jolla, California
Ovaries and Development; Reproductive Endocrinology and Infertility

Armin Ernst, MD

Associate Professor of Medicine and Surgery, Harvard Medical School; Chief of Interventional Pulmonology, Beth Israel Deaconess Medical Center, Boston, Massachusetts
Interventional and Surgical Approaches to Lung Disease

Joel D. Ernst, MD

Professor, Departments of Medicine, Pathology, and Microbiology; Director, Division of Infectious Diseases, New York University School of Medicine, New York, New York
Leprosy (Hansen's Disease)

David S. Ettinger, MD

Alex Grass Professor of Oncology, Department of Oncology, The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, Maryland
Lung Cancer and Other Pulmonary Neoplasms

Amelia Evoli, MD

Associate Professor, Department of Neuroscience, Catholic University, Rome, Italy
Disorders of Neuromuscular Transmission

Douglas O. Faigel, MD

Professor of Medicine, Mayo Medical School; Division of Gastroenterology and Hepatology, Mayo Clinic, Scottsdale, Arizona
Neoplasms of the Large and Small Intestine; Videos

Gary W. Falk, MD, MSc

Professor of Medicine, Division of Gastroenterology, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
Diseases of the Esophagus

Murray J. Favus, MD

Professor of Medicine, Section of Endocrinology, Diabetes and Metabolism, University of Chicago Pritzker School of Medicine, Chicago, Illinois
Mineral and Bone Homeostasis

Gene Feder, MD

Professor of Primary Health Care, School of Social and Community Medicine, University of Bristol, Bristol, United Kingdom
Intimate Partner Violence

Stephan D. Fihn, MD, MPH

Professor, Medicine and Health Services, University of Washington School of Medicine; Director, Analytics and Business Intelligence, Department of Veterans Affairs, Seattle, Washington
Measuring Health and Health Care

Gary S. Firestein, MD

Professor of Medicine, Dean and Associate Vice Chancellor of Translational Medicine, University of California, San Diego, School of Medicine, La Jolla, California
Mechanisms of Inflammation and Tissue Repair

Neil Fishman, MD

Associate Professor of Medicine, University of Pennsylvania School of Medicine; Director, Department of Healthcare Epidemiology, Infection Prevention and Control; Director, Antimicrobial Stewardship Program, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania
Prevention and Control of Health Care–Associated Infections

Lee A. Fleisher, MD

Robert D. Dripps Professor and Chair of Anesthesiology, Professor of Medicine, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
Overview of Anesthesia

Marsha D. Ford, MD

Adjunct Professor, Department of Emergency Medicine, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina; Director, Carolinas Poison Center, Carolinas Medical Center, Charlotte, North Carolina
Acute Poisoning

Chris E. Forsmark, MD

Professor of Medicine, Chief, Division of Gastroenterology, Hepatology, and Nutrition, University of Florida College of Medicine, Gainesville, Florida
Pancreatitis

Vance G. Fowler, Jr., MD, MHS

Associate Professor, Department of Medicine, Division of Infectious Diseases, Duke University Medical Center, Durham, North Carolina
Infective Endocarditis

Jay W. Fox, PhD

Professor, Department of Microbiology, University of Virginia School of Medicine, Charlottesville, Virginia
Venoms and Poisons from Marine Organisms

Manuel A. Franco, MD, PhD

Director of Postgraduate Programs, School of Sciences, Pontificia Universidad Javeriana, Bogota, Colombia
Rotaviruses, Noroviruses, and Other Gastrointestinal Viruses

Martyn A. French, MD, MB ChB

Winthrop Professor in Clinical Immunology, School of Pathology and Laboratory Medicine, University of Western Australia; Consultant Clinical Immunologist, Royal Perth Hospital, Perth, Western Australia, Australia
Immune Reconstitution Inflammatory Syndrome in HIV/AIDS

Karen Freund, MD, MPH

Professor of Medicine, Director, Women's Health Interdisciplinary Research Center, Boston University School of Medicine; Professor of Epidemiology, Boston University School of Public Health, Boston, Massachusetts
Approach to Women's Health

Linda P. Fried, MD, MPH

Dean and DeLamar Professor of Public Health and of Medicine, Senior Vice President, Columbia University Medical Center; Professor of Epidemiology, Columbia University Mailman School of Public Health, New York, New York
Epidemiology of Aging: Implications of the Aging of Society

Cem Gabay, MD

Professor of Medicine, University of Geneva School of Medicine; Head, Division of Rheumatology, University Hospitals of Geneva, Geneva, Switzerland
Biologic Agents

Kenneth L. Gage, PhD

Chief, Flea-Borne Diseases Activity, Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, Fort Collins, Colorado
Plague and Other Yersinia Infections

Robert F. Gagel, MD

Head, Division of Internal Medicine, Endocrine Neoplasia and Hormonal Disorders, The University of Texas M.D. Anderson Cancer Center, Houston, Texas
Endocrine Manifestations of Tumors: "Ectopic" Hormone Production

John N. Galgiani, MD

Professor of Medicine and Director, Valley Fever Center for Excellence, University of Arizona; Chief Medical Officer, Valley Fever Solutions Inc., Tucson, Arizona
Coccidioidomycosis

Patrick G. Gallagher, MD

Professor, Department of Pediatrics and Genetics, Yale University School of Medicine, New Haven, Connecticut
Hemolytic Anemias: Red Cell Membrane and Metabolic Defects

Eithan Galun, MD

Professor, Director, Goldyne Savad Institute of Gene Therapy, Hadassah Hebrew University Hospital, Jerusalem, Israel
Gene and Cell Therapy

Leonard Ganz, MD

Associate Professor of Medicine, University of Pittsburgh School of Medicine, UPMC-Shadyside, Pittsburgh, Pennsylvania
Electrocardiography

Guadalupe Garcia-Tsao, MD

Professor of Medicine, Section of Digestive Diseases, Yale University School of Medicine, New Haven, Connecticut; Chief, Digestive Diseases, VA-CT Healthcare System, West Haven, Connecticut
Cirrhosis and Its Sequelae

Jonathan D. Gates, MD, MBA

Assistant Professor of Surgery, Harvard Medical School; Director, Trauma Center and Vascular Surgeon, Brigham and Women's Hospital, Boston, Massachusetts
Medical Aspects of Trauma and Burn Care

William M. Geisler, MD, MPH

Associate Professor of Medicine and Epidemiology, University of Alabama at Birmingham School of Medicine, Birmingham, Alabama
Diseases Caused by Chlamydiae

Tony P. George, MD

Professor, Department of Psychiatry, Psychology and Medical Sciences, University of Toronto, Toronto, Ontario, Canada
Nicotine and Tobacco

Dale N. Gerding, MD

Professor, Department of Medicine, Loyola University Chicago Stritch School of Medicine, Maywood; Associate Chief of Staff for Research, Research Service, Hines Veterans Affairs Hospital, Hines, Illinois
Clostridial Infections

M. Eric Gershwin, MD

Distinguished Professor of Medicine, Chief, Division of Rheumatology, Allergy and Clinical Immunology, University of California, Davis, School of Medicine, Davis, California
Sjögren's Syndrome

Morie A. Gertz, MD

Professor and Chair, Department of Medicine, Mayo Medical School and Mayo Clinic, Rochester, Minnesota
Amyloidosis

Gordon D. Ginder, MD

Professor, Internal Medicine, Virginia Commonwealth University; Director, Massey Cancer Center, Virginia Commonwealth University, Richmond, Virginia
Microcytic and Hypochromic Anemias

Jeffrey Ginsberg, MD

Professor, Department of Medicine, McMaster University, Hamilton, Ontario, Canada
Peripheral Venous Disease

Geoffrey S. Ginsburg, MD, PhD

Professor of Medicine and Pathology, Duke University School of Medicine; Director, Center for Genomic Medicine, Institute for Genome Sciences and Policy; Director, Center for Personalized Medicine, Durham, North Carolina
Applications of Molecular Technologies to Clinical Medicine

Michael Glogauer, DDS, PhD

Associate Professor, Faculty of Dentistry, University of Toronto, Toronto, Ontario, Canada
Disorders of Phagocyte Function

John W. Gnann, Jr., MD

Professor of Medicine, Pediatrics, and Microbiology, University of Alabama at Birmingham School of Medicine and Birmingham Veterans Affairs Medical Center, Birmingham, Alabama
Mumps

Matthew R. Golden, MD, MPH

Associate Professor of Medicine, Director, PHSKC HIV/STD Program, University of Washington Center for AIDS and STD, Harborview Medical Center, Seattle, Washington
Neisseria Gonorrhoeae Infections

Lee Goldman, MD

Dean of the Faculties of Health Sciences and Medicine, Executive Vice President for Health and Biomedical Sciences, Harold and Margaret Hatch Professor of the University, Professor of Medicine and of Epidemiology, Columbia University, New York, New York
Approach to Medicine, the Patient, and the Medical Profession: Medicine as a Learned and Humane Profession; Approach to the Patient with Possible Cardiovascular Disease

Ellie J. Goldstein, MD

Clinical Professor of Medicine, David Geffen School of Medicine at UCLA, Los Angeles, California; Director, R.M. Alden Research Laboratory, Santa Monica, California
Diseases Caused by Non-Spore-Forming Anaerobic Bacteria

Lawrence T. Goodnough, MD

Professor of Pathology and Medicine, Stanford University School of Medicine; Director, Transfusion Service, Stanford University Medical Center, Stanford, California
Transfusion Medicine

Jörg J. Goronzy, MD, PhD

Professor of Medicine, Division of Immunology and Rheumatology, Stanford University School of Medicine, Stanford, California
The Innate and Adaptive Immune Systems

Eduardo Gotuzzo, MD

Principal Professor of Medicine, Universidad Peruana Cayetano Heredia; Director, Instituto de Medicina Tropical "Alexander von Humboldt," Lima, Peru
Cholera and Other Vibrio Infections; Liver, Intestinal, and Lung Fluke Infections

Deborah Grady, MD, MPH

Professor, Department of Medicine, University of California, San Francisco, School of Medicine; Associate Dean for Clinical and Translational Research, University of California, San Francisco, San Francisco, California
Menopause

Leslie C. Grammer, MD

Professor, Department of Medicine, Division of Allergy-Immunology, Northwestern University Feinberg School of Medicine, Chicago, Illinois
Drug Allergy

F. Anthony Greco, MD

Medical Director, Sarah Cannon Cancer Center, Nashville, Tennessee
Cancer of Unknown Primary Origin

Harry B. Greenberg, MD

Joseph D. Grant Professor of Medicine and Microbiology and Immunology; Senior Associate Dean of Research; Stanford University School of Medicine, Stanford, California
Rotaviruses, Noroviruses, and Other Gastrointestinal Viruses

Peter K. Gregersen, MD

Professor, Molecular Medicine, Director, Robert S. Boas Center for Genomics and Human Genetics, The Feinstein Institute for Medical Research, Hofstra University School of Medicine, Manhasset, New York
The Major Histocompatibility Complex

Robert C. Griggs, MD

Professor of Neurology, Medicine, Pediatrics, and Pathology and Laboratory Medicine, University of Rochester School of Medicine and Dentistry, Rochester, New York
Approach to the Patient with Neurologic Disease

Lisa M. Guay-Woodford, MD

Professor and Vice Chair, Department of Genetics; Pediatric Nephrologist, University of Alabama at Birmingham School of Medicine, Birmingham, Alabama
Hereditary Nephropathies and Developmental Abnormalities of the Urinary Tract

Richard L. Guerrant, MD

Thomas H. Hunter Professor of International Medicine, Infectious Diseases, and International Health, Director, Center for Global Health, University of Virginia School of Medicine, Charlottesville, Virginia
Escherichia Coli Enteric Infections; Cryptosporidiosis

Colleen Hadigan, MD, MPH

Staff Clinician, Laboratory of Immunoregulation, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland
Treatment of Human Immunodeficiency Virus Infection and Acquired Immunodeficiency Syndrome

John D. Hainsworth, MD

Chief Scientific Officer, Sarah Cannon Research Institute, Nashville, Tennessee
Cancer of Unknown Primary Origin

Anders Hamsten, MD, PhD

Professor of Cardiovascular Diseases, Department of Medicine, Center for Molecular Medicine, Karolinska University Hospital, Karolinska Institutet, Stockholm, Sweden
Atherosclerosis, Thrombosis, and Vascular Biology

Kenneth R. Hande, MD

Professor, Departments of Medicine and Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee
Carcinoid Syndrome

H. Hunter Handsfield, MD

Clinical Professor of Medicine, Center for AIDS and STD, University of Washington School of Medicine; Senior Research Leader, Battelle Centers for Public Health Research and Evaluation, Seattle, Washington
Neisseria Gonorrhoeae Infections

Göran K. Hansson, MD, PhD

Professor, Center for Molecular Medicine, Department of Medicine, Karolinska University Hospital, Karolinska Institutet, Stockholm, Sweden
Atherosclerosis, Thrombosis, and Vascular Biology

Rashidul Haque, MB, PhD

Senior Scientist and Head, Parasitology Laboratory, Laboratory Sciences Division, International Centre for Diarrheal Disease Research, Bangladesh (ICDDR,B), Dhaka, Bangladesh
Amebiasis

Raymond C. Harris, MD

Anne and Roscoe R. Robinson Professor of Medicine and Chief, Division of Nephrology, Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee
Diabetes and the Kidney

Stephen Crane Hauser, MD

Associate Professor of Medicine, Mayo Medical School; Consultant, Division of Internal Medicine, Gastroenterology and Hepatology, Mayo Clinic, Rochester, Minnesota
Vascular Diseases of the Gastrointestinal Tract

Frederick G. Hayden, MD

Richardson Professor of Clinical Virology, Professor of Medicine, University of Virginia School of Medicine, Charlottesville, Virginia
Influenza

Letha Healey, MD

Staff Clinician, Critical Care Medicine Department, Clinical Center, National Institutes of Health, Bethesda, Maryland
Treatment of Human Immunodeficiency Virus Infection and Acquired Immunodeficiency Syndrome

Douglas C. Heimbarger, MD, MS

Professor of Medicine, Associate Director for Education and Training, Vanderbilt Institute for Global Health, Vanderbilt University School of Medicine, Nashville, Tennessee
Nutrition's Interface with Health and Disease

Erik L. Hewlett, MD

Professor of Medicine and Pharmacology, Division of Infectious Diseases and International Health, University of Virginia School of Medicine, Charlottesville, Virginia
Whooping Cough and Other Bordetella Infections

David R. Hill, MD, DTM&H

Director, National Travel Health Network and Centre; Honorary Professor, London School of Hygiene and Tropical Medicine, London, England
Giardiasis

Nicholas S. Hill, MD

Professor of Medicine, Tufts University School of Medicine; Chief, Division of Pulmonary, Critical Care, and Sleep Medicine, Tufts Medical Center, Boston, Massachusetts
Respiratory Monitoring in Critical Care

L. David Hillis, MD

Professor and Chair, Department of Medicine, University of Texas Health Science Center at San Antonio, San Antonio, Texas
Acute Coronary Syndrome: Unstable Angina and Non-ST Elevation Myocardial Infarction

Jack Hirsh, MD, DSc

Professor Emeritus, McMaster University, Hamilton, Ontario, Canada
Antithrombotic Therapy

V. Michael Holers, MD

Scoville Professor of Rheumatology, Department of Medicine, University of Colorado Denver School of Medicine, Aurora, Colorado
Complement in Health and Disease

Steven M. Holland, MD

Chief, Laboratory of Clinical Infectious Diseases, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland
The Nontuberculous Mycobacteria

Steven Hollenberg, MD

Professor of Medicine, Robert Wood Johnson Medical School/UMDNJ; Director, Coronary Care Unit, Cooper University Hospital, Camden, New Jersey
Cardiogenic Shock

Edward W. Hook III, MD

Professor of Medicine, Epidemiology, and Microbiology, Director, Division of Infectious Diseases, University of Alabama at Birmingham School of Medicine, Birmingham, Alabama
Granuloma Inguinale (Donovanosis); Syphilis; Nonsyphilitic Treponematoses

Laurence Huang, MD

Professor of Medicine, University of California, San Francisco, School of Medicine; Chief, HIV/AIDS Chest Clinic, San Francisco General Hospital, San Francisco, California
Pulmonary Manifestations of Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome

Leonard D. Hudson, MD

Professor of Medicine, Endowed Chair in Pulmonary Disease Research, Division of Pulmonary and Critical Care Medicine, University of Washington School of Medicine, Seattle, Washington
Acute Respiratory Failure; Mechanical Ventilation

Steven E. Hyman, MD

Provost, Harvard University, Cambridge, Massachusetts; Professor, Department of Neurobiology, Harvard Medical School, Boston, Massachusetts
Biology of Addiction

Michael Iannuzzi, MD, MBA

Edward C. Reifenshtein Professor and Chair, Department of Medicine, Upstate Medical University, Syracuse, New York
Sarcoidosis

Robert D. Inman, MD

Professor of Medicine and Immunology, University of Toronto; Director, Arthritis Center of Excellence, Toronto Western Hospital, Toronto, Ontario, Canada
The Spondyloarthropathies

Sharon K. Inouye, MD, MPH

Professor of Medicine, Harvard Medical School; Director, Aging Brain Center, Milton and Shirley F. Levy Family Chair, Institute for Aging Research, Hebrew SeniorLife; Faculty, Division of Gerontology, Beth Israel Deaconess Medical Center, Boston, Massachusetts
Neuropsychiatric Aspects of Aging; Delirium or Acute Mental Status Change in the Older Patient; Video

Karl L. Insogna, MD

Professor of Medicine, Section of Endocrinology, Department of Internal Medicine, Director, Yale Bone Center, Yale University School of Medicine, New Haven, Connecticut
The Parathyroid Glands, Hypercalcemia, and Hypocalcemia

Silvio E. Inzucchi, MD

Professor of Medicine, Clinical Director, Section of Endocrinology, Yale University School of Medicine; Director, Yale Diabetes Center, Yale-New Haven Hospital, New Haven, Connecticut
Type 1 Diabetes Mellitus; Type 2 Diabetes Mellitus

Eric M. Isselbacher, MD

Associate Professor of Medicine, Harvard Medical School; Associate Director, Heart Center and Co-Director, Thoracic Aortic Center, Massachusetts General Hospital, Boston, Massachusetts
Diseases of the Aorta

Ahmedin Jemal, DVM, PhD

Vice President, Surveillance Research, American Cancer Society, Inc., Atlanta, Georgia
The Epidemiology of Cancer

Joanna Jen, MD, PhD

Professor, Department of Neurology, David Geffen School of Medicine at UCLA, University of California, Los Angeles, California
Neuro-Ophthalmology; Smell and Taste; Hearing and Equilibrium

Dennis M. Jensen, MD

Professor of Medicine, David Geffen School of Medicine at UCLA, University of California, Los Angeles, CURE Digestive Diseases Research Center; Staff Physician, West Los Angeles Veterans Affairs Medical Center, Los Angeles, California
Gastrointestinal Hemorrhage and Occult Gastrointestinal Bleeding

Michael D. Jensen, MD

Professor of Medicine, Department of Endocrinology, Mayo Clinic, Rochester, Minnesota
Obesity

Robert T. Jensen, MD

Chief, Cell Biology Section, Digestive Diseases Branch, National Institute of Diabetes, Digestive and Kidney Diseases, National Institutes of Health, Bethesda, Maryland
Pancreatic Endocrine Tumors

Mariell Jessup, MD

Professor of Medicine, Department of Medicine, University of Pennsylvania School of Medicine; Medical Director, Penn Heart and Vascular Center, University of Pennsylvania Health System; Associate Chief, Clinical Affairs, Cardiovascular Division, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
Cardiac Transplantation

Stuart Johnson, MD

Professor of Medicine, Loyola University Chicago Stritch School of Medicine, Maywood; Deputy Associate Chief of Staff for Research, Hines Veterans Affairs Hospital, Hines, Illinois
Clostridial Infections

Ralph F. Józefowicz, MD

Professor of Neurology and Medicine, Associate Chair for Education, Department of Neurology, University of Rochester School of Medicine and Dentistry, Rochester, New York
Approach to the Patient with Neurologic Disease

Stephen G. Kaler, MD

Molecular Medicine Program, Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, Maryland
Wilson's Disease

Moses R. Kamya, MD, PhD

Professor of Medicine, Chair, Department of Medicine, School of Medicine, Makerere University College of Health Sciences, Kampala, Uganda
Malaria

Hagop Kantarjian, MD

Professor and Kelcie Margaret Kana Research Chair, Department of Leukemia, The University of Texas M. D. Anderson Cancer Center, Houston, Texas
The Chronic Leukemias

David R. Karp, MD, PhD

Professor and Chief, Rheumatic Diseases Division, The University of Texas Southwestern Medical Center at Dallas, Dallas, Texas
Complement in Health and Disease

Daniel L. Kastner, MD, PhD

NIH Distinguished Investigator, Scientific Director, Division of Intramural Research, National Human Genome Research Institute, National Institutes of Health, Bethesda, Maryland
The Systemic Autoinflammatory Diseases

David A. Katzka, MD

Professor of Medicine, Mayo Medical School, Rochester, Minnesota
Diseases of the Esophagus

Debra K. Katzman, MD

Professor of Pediatrics, Department of Pediatrics, University of Toronto; Head, Division of Adolescent Medicine, Senior Associate Scientist, Research Institute, The Hospital for Sick Children and University of Toronto, Toronto, Ontario, Canada
Adolescent Medicine

Carol A. Kauffman, MD

Professor, University of Michigan; Chief, Infectious Diseases Section, Veterans Affairs Ann Arbor Healthcare System, Ann Arbor, Michigan
Histoplasmosis; Blastomycosis; Paracoccidioidomycosis; Cryptococcosis; Sporotrichosis; Candidiasis

Kenneth Kaushansky, MD, MACP

Senior Vice President, Health Sciences, Dean, School of Medicine, Stony Brook University, Health Sciences Center, Stony Brook, New York
Hematopoiesis and Hematopoietic Growth Factors

Emmet B. Keeffe, MD

Professor of Medicine Emeritus, Division of Gastroenterology and Hepatology, Department of Medicine, Stanford University Medical Center, Stanford, California
Hepatic Failure and Liver Transplantation

Morton Kern, MD

Professor of Medicine, Associate Chief, Cardiology, University of California Irvine, Orange; Chief, Cardiology, Long Beach Veterans Administration Hospital, Long Beach, California
Catheterization and Angiography

Gerald T. Keusch, MD

Professor, International Health, Boston University School of Public Health; Associate Director, National Emerging Infectious Diseases Laboratory, Boston University, Boston, Massachusetts
Shigellosis

David H. Kim, MD

Associate Professor of Radiology, Section of Abdominal Imaging, University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin
Diagnostic Imaging Procedures in Gastroenterology

Matthew Kim, MD

Instructor in Medicine, Harvard Medical School; Associate Physician, Division of Endocrinology, Diabetes and Hypertension, Brigham and Women's Hospital, Boston, Massachusetts
Thyroid

Louis V. Kirchhoff, MD, MPH

Professor, Departments of Internal Medicine (Infectious Diseases) and Epidemiology, University of Iowa; Staff Physician, Medical Service, Department of Veterans Affairs Medical Center, Iowa City, Iowa
Chagas' Disease

Michael J. Klag, MD, MPH

Dean, The Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland
Epidemiology of Cardiovascular Disease

Samuel Klein, MD

William H. Danforth Professor of Medicine and Nutritional Science,
Director, Center for Human Nutrition, Washington University School of
Medicine, St. Louis, Missouri
Protein-Energy Malnutrition

David S. Knopman, MD

Professor of Neurology and Consultant in Neurology, Mayo Clinic,
Rochester, Minnesota
*Regional Cerebral Dysfunction: Higher Mental Functions; Alzheimer's Disease
and Other Dementias*

Tamsin A. Knox, MD, MPH

Associate Professor of Medicine, Nutrition/Infection Unit, Tufts University
School of Medicine, Boston, Massachusetts
Gastrointestinal Manifestations of HIV and AIDS

Albert I. Ko, MD

Associate Professor of Epidemiology and Medicine, Division Head,
Epidemiology of Microbial Disease, Yale School of Public Health, New
Haven, Connecticut; Collaborating Researcher, Oswaldo Cruz
Foundation, Brazilian Ministry of Health, Salvador, Brazil
Leptospirosis

Rami S. Komrokji, MD

Associate Professor, Department of Oncologic Sciences, University of South
Florida; Clinical Director, Department of Malignant Hematology,
Associate Member, Moffitt Cancer Center and Research Institute, Tampa,
Florida
Myelodysplastic Syndrome

Dimitrios P. Kontoyiannis, MD, ScD

Professor of Medicine and Deputy Chair, The University of Texas M.D.
Anderson Cancer Center, Houston, Texas
Mucormycosis; Mycetoma

Barbara S. Koppel, MD

Professor of Clinical Neurology, New York Medical College, Valhalla,
New York; Chief of Service, Metropolitan Hospital, New York, New York
Nutritional and Alcohol-Related Neurologic Disorders

Kevin Korenblat, MD

Associate Professor of Medicine, Washington University School of Medicine,
St. Louis, Missouri
Approach to the Patient with Jaundice or Abnormal Liver Tests

Bruce R. Korf, MD, PhD

Professor and Wayne H. and Sara Crews Finley Chair in Medical Genetics,
Department of Genetics; Director, Heflin Center for Genomic Sciences,
University of Alabama at Birmingham, Birmingham, Alabama
Principles of Genetics

Neil J. Korman, MD, PhD

Professor, Department of Dermatology, Case Western Reserve University;
Clinical Director, Murdough Family Center for Psoriasis, University
Hospitals Case Medical Center, Cleveland, Ohio
Macular, Papular, Vesiculobullous, and Pustular Diseases

Joseph A. Kovacs, MD

Senior Investigator, Critical Care Medicine Department, National Institutes
of Health, Bethesda, Maryland
Pneumocystis Pneumonia

Monica Kraft, MD

Professor of Medicine, Vice Chair for Research, Department of Medicine;
Director, Duke Asthma, Allergy and Airway Center, Duke University
Medical Center, Durham, North Carolina
Approach to the Patient with Respiratory Disease

Christopher M. Kramer, MD

Professor of Radiology and Medicine, Director, Cardiovascular Imaging
Center, University of Virginia Health System, Charlottesville, Virginia
Noninvasive Cardiac Imaging

Donna M. Krasnewich, MD, PhD

Program Director, National Institute of General Medical Sciences, National
Institutes of Health, Bethesda, Maryland
The Lysosomal Storage Diseases

Peter J. Krause, MD

Senior Research Scientist, Yale School of Public Health, Yale School of
Medicine, New Haven, Connecticut
Babesiosis and Other Protozoan Diseases

Henry M. Kronenberg, MD

Professor of Medicine, Harvard Medical School; Chief, Endocrine Unit,
Massachusetts General Hospital, Boston, Massachusetts
Polyglandular Disorders

Ernst J. Kuipers, MD, PhD

Professor of Medicine, Department of Gastroenterology and Hepatology,
Department of Internal Medicine, Erasmus MC University Medical
Center, Rotterdam, The Netherlands
Acid Peptic Disease

Paul Ladenson, MD

John Eager Howard Professor of Endocrinology; Professor of Medicine,
Pathology, Oncology, Radiology and Radiological Sciences; Distinguished
Service Professor, and Director, Division of Endocrinology and
Metabolism, Johns Hopkins University School of Medicine, Baltimore,
Maryland
Thyroid

Donald W. Landry, MD, PhD

Samuel Bard Professor of Medicine and Chair, Department of Medicine,
Columbia University College of Physicians and Surgeons, New York,
New York
Approach to the Patient with Renal Disease

Nancy E. Lane, MD

Professor of Medicine and Rheumatology, University of California, Davis,
School of Medicine; Director, Aging Center, University of California at
Davis Medical Center, Davis, California
Osteoarthritis

Anthony E. Lang, MD

Professor, Department of Medicine (Neurology), University of Toronto;
Director, Movement Disorders Center, Toronto Western Hospital;
Director, Division of Neurology, Jack Clark Chair for Parkinson's Disease
Research, Toronto, Ontario, Canada
Parkinsonism; Other Movement Disorders; Videos

Richard A. Lange, MD, MBA

Professor and Executive Vice Chairman, Department of Medicine, University
of Texas Health Science Center San Antonio, San Antonio, Texas
*Acute Coronary Syndrome: Unstable Angina and Non-ST Elevation Myocardial
Infarction*

George V. Lawry, MD

Clinical Professor of Medicine, Chief, Division of Rheumatology, University
of California Irvine, Orange, California
Approach to the Patient with Rheumatic Disease

Thomas H. Lee, MD, MSC

Professor of Medicine, Harvard Medical School; Network President, Partners
Healthcare System, Boston, Massachusetts
Using Data for Clinical Decisions