

英文原版

鲁道夫儿科学

下卷

21ST EDITION

RUDOLPH'S PEDIATRICS

COLIN D. RUDOLPH

ABRAHAM M. RUDOLPH

MARGARET K. HOSTETTER

GEORGE LISTER

NORMAN J. SIEGEL



人民卫生出版社

21ST EDITION

RUDOLPH'S PEDIATRICS

Editors

Colin D. Rudolph, MD, PhD

Professor and Chief, Pediatric Gastroenterology & Nutrition
Medical College of Wisconsin
Milwaukee, Wisconsin

Abraham M. Rudolph, MD

Professor Emeritus of Pediatrics
School of Medicine
University of California-San Francisco
San Francisco, California

Coeditors

Margaret K. Hostetter, MD

Professor of Pediatrics and Microbial Pathogenesis
Yale University School of Medicine
New Haven, Connecticut

George Lister, MD

Professor of Pediatrics and Anesthesiology
Yale University School of Medicine
New Haven, Connecticut

Norman J. Siegel, MD

Professor of Pediatrics and Medicine
Yale University School of Medicine
New Haven, Connecticut

Volume 2

人民卫生出版社

人民卫生出版社

McGraw-Hill



A Division of The McGraw-Hill Companies

Rudolph's Pediatrics, Twenty-First Edition (2 Volumes)

Copyright © 2003 by The McGraw-Hill Companies, Inc. All rights reserved. Printed in the United States of America.

Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

图书在版编目(CIP)数据

鲁道夫儿科学/(美)鲁道夫(Rudolph, C. D.)编著.
北京:人民卫生出版社, 2003.3
ISBN 7-117-05400-X

I. 鲁... II. ①鲁...②C... III. 儿科学—英文 IV. R72

中国版本图书馆 CIP 数据核字(2003)第 008562 号

图字: 01-2002-1720

鲁道夫儿科学(英文版)
(上、下卷)

编 著: C. D. Rudolph

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: 三河富华印刷包装有限公司

经 销: 新华书店

开 本: 889 × 1194 1/16 印张: 172 插页: 3

字 数: 8000 千字

版 次: 2003 年 5 月第 1 版 2003 年 5 月第 1 版第 1 次印刷

标准书号: ISBN 7-117-05400-X/R·5401

定 价: 368 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)

P R E F A C E

The 21st edition of *Rudolph's Pediatrics* continues a tradition of evolving and adapting to changes in pediatric medicine. Originally published in 1897 as *Diseases of Infancy and Childhood*, written by L. Emmett Holt, the editors have consistently strived not only to provide descriptions of the clinical features and treatment of diseases of childhood but also to review the biologic principles underlying these processes. Achieving this goal is increasingly challenging during this era due to the extraordinary explosion of knowledge in all areas of pediatrics that has been spurred by our increased understanding of the molecular basis of disease and the rapid emergence of new technologies for diagnosis and treatment.

In an effort to adapt to these changes, the twenty-first edition of *Rudolph's Pediatrics* has been extensively revised. I have been aided in this endeavor by the previous editor, my father, Abraham M. Rudolph. The editorial expertise and perspective has been further expanded by the addition of three new co-editors, Margaret K. Hostetter, George Lister, and Norman J. Siegel. New associate editors participated in updating and reorganizing twenty of the twenty-seven chapters. A new chapter edited by Norman Siegel provides a concise overview of contemporary diagnostic techniques utilized across pediatric specialties. Other chapters were reorganized to align with emerging specialties in pediatric medicine. The chapter on toxicology and accidents has been replaced by a chapter on emergency medicine and critical care to provide more focused discussions on the management of the acutely ill child. The chapter on ethical issues in pediatrics has been expanded to include a review of terminal and palliative care and coping with the dying child. A new section on rehabilitation and care of the disabled child provides guidance on the management of this expanding population of children. The previous chapter on genetic disorders and birth defects has been expanded into two new chapters, one that discusses metabolic disorders and the other on genetics and dysmorphology.

In the previous edition, we introduced sections focused on the approach to diagnosis and management of various symptom complexes. These were often presented in algorithmic form. Because this was well received, most chapters in this edition now include sections on the approach to evaluation of relevant symptom presentations. In order to maintain the textbook as a single volume, we often needed to limit the discussion of various topics. Hopefully, the numerous changes in this edition continue the tradition of providing a balanced, comprehensive resource to aid health professionals in the care of infants and children.

Leonard Apt, MD, Professor of Ophthalmology, Director Emeritus, Division of Pediatric Ophthalmology, University of California, Los Angeles, Jules Stein Eye Institute, School of Medicine, Special Consultant in Pediatric Ophthalmology, Los Angeles City Health Department and Bureau of Maternal and Child Health, Department of Public Health, State of California, Los Angeles, California

Chapter 26/The Eyes

Michael J. Bamshad, MD, Eccles Institute of Human Genetics, Assistant Professor of Pediatrics and Human Genetics, University of Utah School of Medicine, Salt Lake City, Utah

Chapter 10/Genetics and Dysmorphology

Richard D. Bland, MD, Formerly: Professor of Pediatrics, University of Utah School of Medicine, Salt Lake City, Utah

Chapter 2/The Newborn Infant

W. Thomas Boyce, MD, Professor of Epidemiology and Child Development, Division of Health and Medical Sciences, The School of Public Health and Institute of Human Development, University of California, Berkeley, California

Chapter 5/Developmental-Behavioral Pediatrics

John C. Carey, MD, MPH, Professor of Pediatrics, University of Utah School of Medicine, Division of Medical Genetics, Primary Children's Hospital and University of Utah Medical Center, Salt Lake City, Utah

Chapter 10/Genetics and Dysmorphology

Robin T. Cotton, MD, Professor, Otolaryngology-Head and Neck Surgery, University of Cincinnati College of Medicine, Director, Otolaryngology and Maxillofacial Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

Chapter 15/Ear, Nose, Oropharynx, and Larynx

Alvin H. Crawford, MD, Professor of Pediatric Orthopedic Surgery, University of Cincinnati College of Medicine, Director of Orthopedic Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

Chapter 27/Orthopedic Problems

Darryl C. De Vivo, MD, Professor of Pediatrics and Neurology, Columbia University College of Physicians and Surgeons, Director of The Neurological Institute, Division of Pediatric Neurology, Columbia Presbyterian Hospital, New York, New York

Chapter 25/The Nervous System

Murray Dock, DDS, MSD, and Robert L. Creedon, DDS, Associate Professor of Clinical Pediatrics, University of Cincinnati College of Medicine, Director of Residency Training, Pediatric Dentistry and Orthodontics, Children's Hospital Medical Center, Cincinnati, Ohio; Formerly: Director of Pediatric Dentistry, Children's Hospital Medical Center, Cincinnati, Ohio

Chapter 16/The Teeth and Supporting Structures

Jonathan D. Gitlin, MD, Helene B. Roberson Professor of Pediatrics, Professor of Pathology and Immunology, Washington University School of Medicine, Director, Division of Immunology and Rheumatology, St. Louis Children's Hospital, St. Louis, Missouri

Chapter 11/Allergy and Immunology

David N. Glass, MD, Professor of Pediatrics, University of Cincinnati College of Medicine, Director, Division of Rheumatology, Children's Hospital Medical Center, Cincinnati, Ohio

Chapter 12/Rheumatology

Thomas A. Hazinski, MD, Professor and Associate Chair of Pediatrics, Vanderbilt University School of Medicine, Director, Pediatric Pulmonary Medicine, Vanderbilt University Medical Center, Nashville, Tennessee

Chapter 23/The Respiratory System

Julien I. E. Hoffman, MD, Professor Emeritus, Department of Pediatrics, University of California School of Medicine, San Francisco, California

Chapter 22/The Circulatory System

Angela R. Holder, LLM, Professor of the Practice of Medical Ethics, Center for the Study of Medical Ethics and Humanities, Duke University Medical Center, Durham, North Carolina

Chapter 7/Ethical Issues in Pediatrics and Terminal Care

Charles E. Irwin, MD, Professor of Pediatrics, Director, Division of Adolescent Medicine, University of California School of Medicine, San Francisco, California

Chapter 3/The Adolescent Patient

Maureen M. Jonas, MD, Associate Professor of Pediatrics, Harvard Medical School, Associate in Medicine, Department of Gastroenterology and Nutrition, Children's Hospital, Boston, Massachusetts

Chapter 18/The Liver and Bile Ducts

George Lister, MD, Professor of Pediatrics and Anesthesiology, Section Chief, Pediatric Emergency Services, Department of Pediatrics, Yale University School of Medicine, New Haven, Connecticut

Chapter 4/Emergency and Critical Care

Bernard Lo, MD, Professor of Medicine and Director, Program in Medical Ethics, University of California-San Francisco, San Francisco, California

Chapter 7/Ethical Issues in Pediatrics and Terminal Care

Roderick McInnes, MD, PhD, and Joe T.R. Clarke, MD, Professor of Paediatrics and Molecular and Medical Genetics, University of Toronto, Chair, Molecular Medicine, Hospital for Sick Children, Toronto, Ontario, Canada; Department of Genetics

Chapter 9/Metabolic Disorders

Linda J. Michaud, MD, Associate Professor, Physical Medicine and Rehabilitation and Pediatrics, University of Cincinnati College of Medicine, Director, Pediatric Rehabilitation, Children's Hospital Medical Center, Cincinnati, Ohio

Chapter 6/Rehabilitation and the Child with Disability

Kevin M. Miller, MD, Associate Professor of Clinical Ophthalmology, Division of Comprehensive Ophthalmology, Los Angeles, California

Chapter 26/The Eyes

Walter L. Miller, MD, Professor of Pediatrics, the Metabolic Research Unit, and the Biomedical Sciences Graduate Program, Chief of Endocrinology, University of California School of Medicine, San Francisco, California

Chapter 24/The Endocrine System

Anna-Barbara Moscicki, MD, Professor of Pediatrics, Division of Adolescent Medicine, University of California-San Francisco, San Francisco, California

Chapter 3/The Adolescent Patient

Dennis L. Murray, MD, Professor of Pediatrics, Medical College of Georgia, Chief, Pediatric Infectious Diseases, Medical College of Georgia Children's Center, Augusta, Georgia

Chapter 13/Infectious Disorders

Kim J. Overby, MD, Pediatric Medical Care Coordinator, Child Welfare Division, Elwyn, Inc., Elwyn, Pennsylvania

Chapter 1/Pediatric Health Supervision

Amy S. Paller, MD, Professor of Pediatrics, Northwestern University Medical School, Director, Division of Dermatology, Children's Memorial Hospital, Chicago, Illinois

Chapter 14/The Skin

Howard A. Pearson, MD, Professor of Pediatrics, Yale University School of Medicine, Director, Sickle Cell and Thalassemia Programs, Yale-New Haven Medical Center, New Haven, Connecticut

Chapter 19/Blood and Blood Forming Tissues

Julio Pérez-Fontán, MD, Alumni Endowed Professor of Pediatrics, Professor of Anesthesiology, Director, Division of Critical Care Medicine, Department of Pediatrics, Washington University School of Medicine, St. Louis, Missouri

Chapter 4/Emergency and Critical Care

David Pleasure, MD, Professor of Neurology and Pediatrics, University of Pennsylvania School of Medicine, Director, Division of Neurology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Chapter 25/The Nervous System

Colin D. Rudolph, MD, PhD, Professor of Pediatrics, Medical College of Wisconsin, Director, Division of Gastroenterology, Children's Hospital of Wisconsin, Milwaukee, Wisconsin

Chapter 17/Gastroenterology and Nutrition

Alan L. Schwartz, MD, PhD, Department Head, Pediatrics, Professor, Molecular Biology and Pharmacology, Washington University School of Medicine, Physician-in-Chief, St. Louis Children's Hospital, St. Louis, Missouri

Chapter 20/Oncology

Mary-Ann Shafer, MD, Professor in Residence of Pediatrics, University of California-San Francisco, San Francisco, California

Chapter 3/The Adolescent Patient

Jack P. Shonkoff, MD, Dean, Florence Heller Graduate School for Advanced Studies in Social Welfare, Brandeis University, Waltham, Massachusetts

Chapter 5/Developmental-Behavioral Pediatrics

Norman J. Siegel, MD, Professor of Pediatrics and Medicine, Yale University School of Medicine, Physician-in-chief, New Haven, Connecticut

Chapter 8/Contemporary Diagnostic Techniques

Chapter 21/Kidneys

C O N T R I B U T O R S

Arthur R. Ablin, MD, Professor Emeritus, Clinical Pediatrics, Program Member, UCSF Comprehensive Cancer Center, University of California-San Francisco, San Francisco, California

Steven H. Abman, MD, Professor of Pediatrics, University of Colorado Health Sciences Center, Division of Pulmonary Medicine, Children's Hospital, Denver, Colorado

N. Scott Adzick, MD, C. Everett Koop Professor of Pediatric Surgery, University of Pennsylvania School of Medicine, Surgeon-in-Chief, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Salman Ahmad, MD, University of Florida Health Science Center, Department of Pediatrics, Jacksonville, Florida

Samhar Al-Akash, MD, Consultant, Pediatric Neurology, Department of Pediatrics, Riyadh, Saudi Arabia

Abby D. Alkon, RN, PhD, Assistant Professor, Family Health Care Nursing, University of California-San Francisco, San Francisco, California

Marilee C. Allen, MD, Associate Professor of Pediatrics, Johns Hopkins University School of Medicine, Director, NICU Follow Up Clinic, Johns Hopkins Hospital, Baltimore, Maryland

Rudy Allen, MD, Cancer Institute of New Jersey, New Brunswick, New Jersey

Blanche P. Alter, MD, Visiting Professor of Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Maryland

Claudine Amiel-Tison, MD, Professor Emeritus of Pediatrics, Port-Royal-Baudelocque Hospital, Paris, France

Michael Apkon, MD, PhD, Associate Professor of Pediatrics, Yale University School of Medicine, New Haven, Connecticut

Leonard Apt, MD, MPH, Professor of Ophthalmology, Director Emeritus, Pediatrics, Jules Stein Eye Institute, Los Angeles, California

Robert J. Arceci, MD, PhD, Jacob Schmidlapp Professor of Hematology/Oncology, University of Cincinnati College of Medicine, Director of Hematology/Oncology, Children's Hospital Medical Center, Cincinnati, Ohio

Susan T. Arnold, MD, Assistant Professor of Pediatrics and Neurology, Washington University School of Medicine, Co-Director, Epilepsy Center at St. Louis Children's Hospital, St. Louis, Missouri

Harvey Artsob, PhD, Zoonotic Diseases Section, Bureau of Microbiology, Winnipeg, Manitoba, Canada

Basim I. Asmar, MD, Professor of Pediatrics, Wayne State University School of Medicine, Director, Division of Pediatric Infectious Diseases, Children's Hospital of Michigan, Detroit, Michigan

Jane T. Atkins, MD, Assistant Professor of Pediatrics, University of Texas Health Sciences Center, Hermann Children's Hospital, Houston, Texas

Rita Ayangar, MD, Clinical Assistant Professor of Physical Medicine and Rehabilitation, University of Michigan School of Medicine, Attending Physician, University of Michigan Medical Center, Ann Arbor, Michigan

Richard Azizkhan, MD, Professor of Pediatric Surgery and Pediatrics, University of Cincinnati College of Medicine, Surgeon-in-Chief and Director, Pediatric Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

Leonard Bacharier, MD, Instructor in Pediatrics, Washington University School of Medicine, Attending Physician, Allergy and Pulmonary Medicine, St. Louis Children's Hospital, St. Louis, Missouri

Peter Baehler, MD, Clinique de Pédiatrie, Hôpital Cantonal, Fribourg, Switzerland

M. Douglas Baker, MD, Professor of Pediatrics, Section Chief, Pediatric Emergency Services, Department of Pediatrics, Yale University School of Medicine, New Haven, Connecticut

Hanan H. Balkhy, MD, Jeddah, Saudi Arabia

Philip L. Ballard, MD, PhD, Professor of Pediatrics, Director of Research, Division of Neonatology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Michael J. Bamshad, MD, Eccles Institute of Human Genetics, Assistant Professor of Pediatrics and Human Genetics, University of Utah School of Medicine, Salt Lake City, Utah

Eduardo Bancalari, MD, Professor of Pediatrics, University of Miami School of Medicine, Director, Division of Neonatology, Jackson Children's Hospital, Miami, Florida

Stephen J. Barenkamp, MD, Professor of Pediatrics, Saint Louis University School of Medicine, Director, Pediatric Infectious Diseases, Cardinal Glennon Children's Hospital, St. Louis, Missouri

Frederic G. Barr, MD, PhD, Associate Professor, Anatomic Pathology, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

Ronald G. Barr, MD, Professor of Pediatrics, McGill University Faculty of Medicine, Head, Child Development Programme, Montreal Children's Hospital, Montreal, Quebec, Canada

Karyl S. Barron, MD, Division of Intramural Research, NIAID-National Institutes of Health, Bethesda, Maryland

J. Bronwyn Bateman, MD, Professor and Chair, Rocky Mountain Lions Eye Institute, Aurora, Colorado

Mark L. Batshaw, MD, Chairman of Pediatrics, George Washington University School of Medicine, Chief Academic Officer, Children's National Medical Center, Washington, DC

Agatino Battaglia, MD, DPED, DNEVROL, Adjunct Professor of Child Neuro-Psychiatry, University of Pisa, Italy, Director, Center for Congenital Malformation Syndromes, Neurologist-in-Chief, Clinical Neurophysiology, Stella Maris Scientific Research Institute, Calambrone, 56018, Italy

Roberta E. Bauer, MD, Developmental Pediatrician, The Cleveland Clinic Children's Hospital for Rehabilitation, Cleveland, Ohio

Michel Baum, MD, Sara M. and Charles E. Seay, Chair of Pediatric Research, Director of Pediatric Nephrology, University of Texas Southwestern Medical School, Dallas, Texas

Laurie J. Bauman, PhD, MD, Professor of Pediatrics, Albert Einstein College of Medicine, Bronx, New York

Jacqueline A. Bello, MD, Professor of Clinical Radiology and Clinical Neurological Surgery, Albert Einstein College of Medicine, Director of Neuroradiology, Montefiore Medical Center, Bronx, New York

Kurt Benirschke, MD, Professor Emeritus of Pathology, University of California School of Medicine, San Diego, California

Robert A. Berg, MD, Professor and Associate Head, Department of Pediatrics, University of Arizona School of Medicine, Director of Critical Care, University Medical Center, Tucson, Arizona

Brad Berman, MD, Assistant Clinical Professor of Pediatrics, Division of Behavior and Development, University of California-San Francisco, San Francisco, California

Daniel Bernstein, MD, Professor of Pediatrics, Stanford University School of Medicine, Director, Division of Cardiology, Children's Hospital, Palo Alto, California

David I. Bernstein, MD, Professor of Pediatrics, University of Cincinnati College of Medicine, Director of Infectious Diseases, Children's Hospital Medical Center, Cincinnati, Ohio

Richard D. Bland, MD, Formerly: Professor of Pediatrics, University of Utah Health Sciences Center, Salt Lake City, Utah

Johan Blickman, MD, Professor of Radiology and Pediatrics, Boston University School of Medicine, Boston, Massachusetts

Eduardo Bonilla, MD, Professor of Clinical Neurology and Pathology, Columbia University College of Physicians and Surgeons, New York, New York

Margaret Bouwkamp, MA CC/SLP, Assistive Technologies Consultant, South Bend, Indiana

W. Thomas Boyce, MD, Professor of Epidemiology and Child Development, School of Public Health and Institute of Human Development, University of California, Berkeley, California

John Boyle, MD, Associate Professor of Pediatrics, University of South Carolina School of Medicine, Medical Director of Gastroenterology, Children's Hospital of Greenville, Greenville, South Carolina

Francisco Bracho, MD, Assistant Professor of Pediatrics, Division of Pediatric Hematology/Oncology, Bone and Marrow Transplant, Georgetown University Children's Medical Center, Washington, DC

Michael T. Brady, MD, Professor of Pediatrics and Preventive Medicine, Ohio State University, Physician Director of HIV Program, Physician Director of Department of Epidemiology, Children's Hospital, Columbus, Ohio

Rebecca C. Brady, MD, Instructor of Pediatrics, University of Cincinnati College of Medicine, Division of Infectious Diseases, Cincinnati Children's Medical Center, Cincinnati, Ohio

Denise Bratcher, DO, Associate Professor, Infectious Diseases
University of Louisville, Louisville, Kentucky

Philip P. Breitfeld, MD, Kligler Professor of Pediatrics and
Biochemistry & Molecular Biology, Indiana University School of
Medicine, Director, Pediatric Hematology/Oncology, James
Whitcomb Riley Hospital for Children, Indianapolis, Indiana

David Brent, MD, Professor of Psychiatry, Pediatrics, and
Epidemiology, University of Pittsburgh School of Medicine,
Academic Chief, Child and Adolescent Psychiatry, University of
Pittsburgh Medical Center, Pittsburgh, Pennsylvania

Kenneth R. Bridges, MD, Associate Professor of Medicine,
Harvard Medical School, Director, Joint Center for Sickle Cell
and Thalassemic Disorders, Brigham and Women's Hospital,
Boston, Massachusetts

James D. Bristow, MD, Professor of Pediatrics, University of
California-San Francisco, San Francisco, California

Michael M. Brook, MD, Associate Professor of Clinical
Pediatrics, University of California at San Francisco, San
Francisco, California

Garrett M. Broudeur, MD, Professor of Pediatrics and
Oncology, Chief, Division of Oncology, Children's Hospital of
Pennsylvania, Philadelphia, Pennsylvania

Rebecca Brown, MD, Assistant Professor of Clinical Surgery
and Pediatrics, University of Cincinnati College of Medicine,
Children's Hospital Medical Center, Cincinnati, Ohio

Frederick W. Bruhn, MD, Clinical Associate Professor
Pediatrics, University of California-San Francisco, Hospitalist,
Valley Children's Hospital, Madera, California

Jane L. Burns, MD, Associate Professor of Pediatrics,
University of Washington School of Medicine, Clinic Chief,
Infectious Diseases, Children's Hospital and Regional Medical
Center, Seattle, Washington

Christina Butera, MD, Office Park Eye Center, Jacksonville,
North Carolina

David A. Cabral, MBBS, FRCPC, British Columbia
Children's Hospital, Vancouver, British Columbia, CANADA

Enrique Cacaes, MD, Pediatric Infectious Disease Specialist,
Rainbow Pediatric Clinic, McAllen, Texas

Mitchell S. Cairo, MD, Professor of Pediatrics, Associate
Director of Pediatric Oncology, Columbia University College of
Physicians and Surgeons, New York, New York

Michael Cappello, MD, Associate Professor of Pediatrics and
Epidemiology, Yale University School of Medicine, New Haven,
Connecticut

Michael P. Carboni, MD, Pediatric Cardiology and
Electrophysiology, Nemours Cardiac Center, Wilmington,
Delaware

John C. Carey, MD, MPH, Professor of Pediatrics,
University of Utah Health Sciences Center, Division of Pediatric
Genetics, Primary Children's Medical Center, Salt Lake City,
Utah

David P. Carlton, MD, Associate Professor of Pediatrics,
University of Wisconsin Medical School, Director of
Neonatology, Meriter Hospital, Madison, Wisconsin

William L. Carroll, MD, Formerly: Professor of Pediatrics,
University of Utah Health Sciences Center, Salt Lake City, Utah

Pranash K. Chakraborty, MD, Division of Clinical and
Metabolic Genetics, Hospital for Sick Children, Toronto,
Ontario, Canada

Tien-Lan Chang, MD, Instructor in Pediatrics, Harvard
Medical School, Boston, Massachusetts

Valerie E. Charlton, MD, Clinical Professor of Pediatrics,
University of California-San Francisco, Chief, Childhood Lead
Poisoning Prevention Branch, California Department of Health
Services, San Francisco, California

Talal A. Chatila, MD, Associate Professor of Pediatrics,
Washington University School of Medicine, Division of Pediatric
Immunology and Rheumatology, St. Louis Children's Hospital,
St. Louis, Missouri

Yuan-Tsong Chen, MD, PhD, Professor of Pediatrics, Chief
of Medical Genetics, Duke University Medical Center, Durham,
North Carolina

Zhong Chen, MD, Associate Professor of Pediatrics,
University of Utah Health Sciences Center, Co-Director Medical
Cytogenetics Laboratory, Salt Lake City, Utah

Patricia J. Chesney, MD, Professor of Pediatrics, University
of Tennessee School of Medicine, Department of Infectious
Diseases, St. Jude's Children's Research Hospital, Memphis,
Tennessee

Steven D. Chernausk, MD, Professor of Pediatrics,
University of Cincinnati College of Medicine, Associate Director
of Endocrinology, Children's Hospital Medical Center,
Cincinnati, Ohio

Daniel R. Chernavsky, MD, Research Fellow, Pediatric
Nephrology, University of Virginia, Charlottesville, Virginia

Robert L. Chevalier, MD, Benjamin Armistead Shepard
Professor and Chair, Department of Pediatrics, University of
Virginia, Charlottesville, Virginia

Clifford Chin, MD, Assistant Professor of Pediatrics, Stanford University, Lucile Salter Packard Children's Hospital, Palo Alto, California

Claudia A. Chiriboga, MD, Associate Professor of Clinical Neurology, Columbia University, New York, New York

Daniel Choo, MD, Assistant Professor, Otolaryngology-Head and Neck Surgery, University of Cincinnati College of Medicine, Assistant Professor, Children's Hospital Medical Center, Cincinnati, Ohio

John C. Christenson, MD, Professor of Pediatrics, University of Utah School of Medicine, Chief, Division of Infectious Diseases and Geographic Medicine, Salt Lake City, Utah

Robin B. Churchill, MD, Assistant Professor, Pediatrics, Eastern Virginia Medical School, Attending Physician, Pediatrics, Children's Hospital of the King's Daughters, Norfolk, Virginia

Joe T.R. Clarke, MD, Division of Clinical and Metabolic Genetics, Hospital for Sick Children, Toronto, Ontario, Canada

Ronald I. Clyman, MD, Professor in Residence of Pediatrics, University of California-San Francisco, San Francisco, California

Stephen L. Cochi, MD, MPH, Division Director of Global Immunization, Centers for Disease Control and Prevention, Atlanta, Georgia

Janice L. Cockrell, MD, Clinical Associate Professor, Oregon Health Sciences University, Medical Director, Pediatric and Adolescent Rehabilitation, Emanuel Children's Hospital, Portland, Oregon

Bruce H. Cohen, MD, Director, Pediatric Neurology, The Cleveland Clinic Foundation, Cleveland, Ohio

Mitchell Cohen, MD, Professor, Pediatric Gastroenterology and Nutrition, Attending Physician, Pediatric Gastroenterology and Nutrition, Children's Hospital Medical Center, Cincinnati, Ohio

Pinchas Cohen, MD, Professor of Pediatrics, University of California-Los Angeles School of Medicine, Division of Endocrinology, Mattel Children's Hospital, Los Angeles, California

John W. Colberg, MD, Associate Professor of Surgery, Division of Urology, Yale University School of Medicine, New Haven, Connecticut

Beverly L. Connelly, MD, Associate Professor, Pediatrics, University of Cincinnati College of Medicine, Assistant Director, Infectious Diseases, Director, Infection Control Program, Children's Hospital Medical Center, Cincinnati, Ohio

Dan Michael Cooper, MD, Department of Pediatrics, University of California-Irvine School of Medicine, Division of Pulmonary Medicine, Miller Children's Hospital, Irvine, California

Michael J. Corwin, MD, Associate Professor of Pediatrics, Boston University School of Medicine, Boston, Massachusetts

Juliet M. Coscia, PhD, Neuropsychologist, Assistant Professor of Clinical Pediatrics, Children's Hospital Medical Center, Cincinnati, Ohio

C. Michael Cotten, MD, Clinical Professor of Pediatrics, Duke University Medical School, Durham, North Carolina

Robin T. Cotton, MD, Professor, Otolaryngology-Head and Neck Surgery, University of Cincinnati College of Medicine, Director, Otolaryngology and Maxillofacial Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

Joseph Cox, MD, Clinical Professor of Surgery & Pediatrics, University of Cincinnati College of Medicine, Division of Pediatric Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

Alvin H. Crawford, MD, Professor of Pediatrics, University of Cincinnati, Director, Orthopedic Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

David F. Crawford, MD, PhD, Fellow in Pediatric Hematology and Oncology, Washington University School of Medicine, St. Louis Children's Hospital, St. Louis, Missouri

Robert L. Creedon, DDS, Professor Emeritus of Pediatrics, University of Cincinnati College of Medicine, Cincinnati, Ohio

Bari B. Cunningham, MD, Assistant Professor of Pediatrics and Medicine (Dermatology), Division of Pediatric and Adolescent Dermatology, Children's Hospital, San Diego, California

Michael L. Cunningham, MD, PhD, Assistant Professor of Pediatrics, University of Washington, Director, Craniofacial Center, Children's Hospital and Regional Medical Center, Seattle, Washington

Leonna Cuttler, MD, Professor of Pediatrics and Pharmacology, Case Western Reserve University School of Medicine, Chairman, Pediatric Endocrinology and Metabolism, Cleveland, Ohio

Michael W. Dae, MD, Professor in Residence of Radiology, University of California-San Francisco, San Francisco, California

Ronald E. Dahl, MD, Associate Professor of Psychiatry and Pediatrics, University of Pittsburgh School of Medicine, Director, Child and Adolescent Sleep Evaluation Center, Western Psychiatric Institute and Clinic, Pittsburgh, Pennsylvania

Peter R. Dallman, MD, Emeritus Professor of Pediatrics, University of California-San Francisco, San Francisco, California

Toni Darville, MD, Associate Professor of Pediatrics, University of Arkansas, Associate Professor of Pediatrics, Arkansas Children's Hospital, Little Rock, Arkansas

Brian Davison, MD, Boston University Medical Center, Boston, Massachusetts

J. Michael Dean, MD, Professor of Pediatrics, University of Utah School of Medicine, Chief, Critical Care Medicine, Primary Children's Hospital, Salt Lake City, Utah

Jaime de Inocencio, MD, PhD, PEDIATRA EAP, Insalud Atencion Primaria Area Madrid, Madrid, Spain

William DeMeyer, MD, Professor, Neurology and Pediatrics, Indiana University, Riley Hospital for Children, Indianapolis, Indiana

A. Joseph D'Ercole, MD, Professor of Pediatrics, University of North Carolina School of Medicine, Chief, Pediatric Endocrinology, Women's and Children's Hospital, Chapel Hill, North Carolina

Robert Desnick, MD, PhD, Professor and Chairman, Department of Human Genetics, Mount Sinai School of Medicine, New York, New York

Darryl C. De Vivo, MD, Professor of Pediatrics and Neurology, Columbia University College of Physicians and Surgeons, Director of The Neurological Institute, Division of Pediatric Neurology, Columbia Presbyterian Hospital, New York, New York

William H. Dietz, MD, PhD, Director, Nutrition and Physical Activity, Centers for Disease Control and Prevention, Atlanta, Georgia

Carlo DiLorenzo, MD, Associate Professor of Pediatrics, University of Pittsburgh, Director, Motility Center, Children's Hospital of Pittsburgh, Pittsburgh, Pennsylvania

Salvatore DiMauro, MD, Professor of Neurology, Columbia University, New York, New York

Suzanne D. Dixon, MD, Associate Clinical Professor, Pediatrics, University of Washington, Behavioral and Developmental Pediatrician, Great Falls Clinic, Great Falls, Montana

Murray Dock, DDS, Associate Professor of Clinical Pediatrics, University of Cincinnati College of Medicine, Pediatric Dentistry, Children's Hospital Medical Center, Cincinnati, Ohio

Marla Dubinsky, MD, Director, Pediatric Bowel Disease Center, Cedars-Sinai Medical Center, Los Angeles, California

Peter Duric, MD, FRCP (C), Professor, Pediatrics, University of Toronto, Head, Cystic Fibrosis Research Group, The Hospital for Sick Children, Toronto, Ontario, Canada

Paul H. Dworkin, MD, Professor and Chairman, Pediatrics, University of Connecticut School of Medicine, Director and Chairman, Pediatrics, Saint Francis Hospital and Medical Center, Hartford, Connecticut

Allison A. Eddy, MD, Professor of Pediatrics, University of Washington, Head, Division of Nephrology, Children's Hospital and Regional Medical Center, Seattle, Washington

Morven S. Edwards, MD, Professor of Pediatrics, Infectious Diseases, Baylor College of Medicine, Active Staff, Infectious Diseases, Texas Children's Hospital, Houston, Texas

Lawrence F. Eichenfield, MD, Associate Clinical Professor of Medicine, Chief, Division of Pediatric and Adolescent Dermatology, Children's Hospital and Health Center, San Diego, California

Glen R. Elliott, MD, PhD, Associate Professor of Psychiatry, Langley Porter Psychiatric Institute, University of California, San Francisco, California

Cynthia Epstein, MD, Assistant Professor of Pediatrics, Virginia Commonwealth University School of Medicine, Division of Pediatric Pulmonology, VCU Health System-MCV Hospitals, Richmond, Virginia

Michele M. Estarbrook, MD, Associate Clinical Professor of Pediatrics, University of California-San Francisco, San Francisco, California

Robert Ettenger, MD, Professor of Pediatrics, University of California-Los Angeles School of Medicine, Head, Division of Pediatric Nephrology, Children's Hospital, Los Angeles, California

John Fahey, MD, Associate Professor of Pediatrics, Yale University School of Medicine, New Haven, Connecticut

Sheila Fallon-Friedlander, MD, Associate Clinical Professor of Pediatrics and Medicine (Dermatology), University of California-Los Angeles School of Medicine, Staff Physician, Children's Hospital, Los Angeles, California

Leland Fan, MD, Professor of Pediatrics, Baylor College of Medicine, Cystic Fibrosis Center, Texas Children's Hospital, Houston, Texas

Avroy A. Fanaroff, MD, Professor of Pediatrics and Reproductive Biology, Case Western Reserve University School of Medicine, Co-Director, Neonatology, Rainbow Babies and Children's Hospital, Cleveland, Ohio

Michael Farrell, MD, Professor of Pediatrics, University of Cincinnati College of Medicine, Chief of Staff, Children's Hospital Medical Center, Cincinnati, Ohio

Jeffrey A. Feinstein, MD, Lucile Salter Packard Children's Hospital, Stanford University School of Medicine, Palo Alto, California

Neil A. Feldstein, MD, Assistant Professor of Clinical Neurosurgery, Columbia University College of Physicians and Surgeons, New York, New York

Jeffrey R. Fineman, MD, Professor of Pediatrics, University of California-San Francisco, San Francisco, California

Delbert A. Fisher, MD, Professor Emeritus, University of California, Los Angeles, School of Medicine, Chief Science Officer, Quest Diagnostics-Nichols Institute, San Juan, California

Margaret C. Fisher, MD, Professor of Pediatrics, Associate Chair of Medical Education, Medical College of Pennsylvania Hahnemann School of Medicine, Section of Infectious Disease, St. Christopher's Hospital for Children, Philadelphia, Pennsylvania

Marvin A. Fishman, MD, Professor of Pediatrics and Neurology, Baylor University School of Medicine, Director, Pediatric Neurology, Texas Children's Hospital, Houston, Texas

Patricia M. Flynn, MD, Associate Professor, Pediatrics, University of Tennessee, Associate Member, Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, Tennessee

Robert P. Foglia, MD, Surgeon-in-Chief, St. Louis Children's Hospital, St. Louis, Missouri

E. Lee Ford-Jones, MD, FRCP(C), Associate Professor, University of Toronto, Department of Infectious Diseases, Hospital for Sick Children, Toronto, Ontario, Canada

John W. Foreman, MD, Professor of Pediatrics, Duke University, Chief, Pediatric Nephrology, Duke University Medical Center, Durham, North Carolina

Melvin H. Freedman, MD, Professor of Pediatrics, University of Toronto School of Medicine, Hospital for Sick Children, Toronto, Ontario, Canada

Ilona J. Frieden, MD, Clinical Professor of Pediatrics and Dermatology, Director of Pediatric Dermatology Clinics, University of California-San Francisco, San Francisco, California

Sheila Friedlander, MD, Department of Dermatology, Children's Hospital and Health Center, San Diego, California

Philip Frykman, MD, University of Cincinnati, Children's Hospital Medical Center, Cincinnati, Ohio

Tina Gabby, MD, Assistant Clinical Professor of Pediatrics, Division of Behavioral and Developmental Pediatrics, University of California-San Francisco, San Francisco, California

Giuliana Galassi, MD, Modena, Italy

Susan A. Galel, MD, Associate Professor of Pathology, Stanford Medical School Blood Center, Associate Medical Director, Stanford Hospital Transfusion Service, Palo Alto, California

James H. Garvin, Jr., MD, Professor of Clinical Pediatrics, Columbia University, Attending Pediatrician, Babies and Children's Hospital of New York, New York Presbyterian Hospital, New York, New York

Aditya Gaur, MD, DCH, Fellow, Pediatric Infectious Diseases, University of Tennessee and St. Jude Children's Research Hospital, Memphis, Tennessee

Michael A. Gerber, MD, Medical Officer, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland

Jill P. Ginsberg, MD, Division of Oncology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Brett P. Giroir, MD, Division Director, Critical Care Medicine, Department of Pediatrics, University of Texas-Southwestern Medical Center, Dallas, Texas

Stephen E. Gitelman, MD, Associate Professor of Pediatrics, University of California-San Francisco, San Francisco, California

Jonathan D. Gitlin, MD, Helene B. Roberson Professor of Pediatrics, Professor of Pathology and Immunology, Washington University School of Medicine, Director, Division of Immunology and Rheumatology, St. Louis Children's Hospital, St. Louis, Missouri

David N. Glass, MD, Professor of Pediatrics, University of Cincinnati College of Medicine, Director, Pediatric Rheumatology, Children's Hospital Medical Center, Cincinnati, Ohio

Wallace Gleason, Jr., MD, Professor of Pediatrics, Assistant Dean for Admissions, The University of Texas-Houston Health Sciences Center, Chief, Gastroenterology, Hepatology and Nutrition, Hermann Children's Hospital, Houston, Texas

Maurice Godfrey, PhD, Associate Professor of Pediatrics, University of Nebraska Medical Center, Omaha, Nebraska

Ronald N. Goldberg, MD, Professor and Vice Chair of Pediatrics, Duke University School of Medicine, Chief, Neonatal and Perinatal Medicine, Duke University Medical Center, Durham, North Carolina

Lauren Heim Goldstein, PhD, Research Psychologist, University of California, Berkeley Institute of Human Development, Berkeley, California

R. Ariel Gómez, MD, Genentech Professor of Pediatrics, Associate Chair for Research, Pediatric Nephrology Division, University of Virginia, Charlottesville, Virginia

Regino P. Gonzales-Peralta, MD, Assistant Professor, Pediatric Gastroenterology and Hepatology, University of Florida, Attending Physician, Pediatric Gastroenterology and Hepatology, Shands Children's Hospital, Gainesville, Florida

Stephen Irwin Goodman, MD, Professor, Pediatrics and Cellular and Structural Biology, Chief, Section of Metabolism and Birth Defects, University of Colorado Health Sciences Center, Denver, Colorado

Ramya Gopinath, MD, National Institutes of Health, Hemorrhage Immunology Section, Laboratory of Parasitic Diseases, Bethesda, Maryland

Ralph C. Gordon, MD, Professor of Pediatrics/Human Development, Michigan State University, Associate Director, Pediatrics, Kalamazoo Center for Medical Studies, Kalamazoo, Michigan

Stephen J. Gould, PhD, Associate Professor, Departments of Biological Chemistry, Cell Biology and Anatomy, Johns Hopkins University School of Medicine, Baltimore, Maryland

Elizabeth A. Grady, RRT, Children's Hospital Medical Center, Cincinnati, Ohio

Christopher G. Green, MD, Professor and Associate Chairman of Pediatrics, University of Wisconsin School of Medicine, Madison, Wisconsin

Daniel M. Green, MD, Professor of Pediatrics, State University of New York, Associate Chief, Pediatrics, Roswell Park Cancer Institute, Buffalo, New York

William A. Greenhill, DMD, Assistant Professor, Clinical Pediatrics, University of Cincinnati College of Medicine, Division of Pediatric Dentistry, Children's Hospital Medical Center, Cincinnati, Ohio

George A. Gregory, MD, Professor Emeritus of Anesthesia/Perioperative Care, University of California-San Francisco, San Francisco, California

Holcombe E. Grier, MD, Associate Professor of Pediatrics, Harvard Medical School, Clinical Director of Pediatric Oncology, Dana Farber Cancer Institute, Boston, Massachusetts

Markus Grompe, MD, Professor, Molecular and Medical Genetics and Pediatrics, Oregon Health and Science University, Portland, Oregon

Moses Grossman, MD, Professor Emeritus of Pediatrics, University of California-San Francisco, San Francisco, California

Jeffrey R. Gruen, MD, Associate Professor of Pediatrics, Yale Child Health Research Center, Yale University School of Medicine, New Haven, Connecticut

Melvin M. Grumbach, MD, DM Hon. causa, Edward B. Shaw Professor of Pediatrics and Emeritus Chairman, Pediatrics, University of California-San Francisco, Attending Physician, Pediatrics, Medical Center at the University of San Francisco and San Francisco General Hospital, San Francisco, California

Thomas N. Hansen, MD, Professor and Chair, Department of Pediatrics, Ohio State University School of Medicine and Children's Hospital, Columbus, Ohio

Philip J. Hashkes, MD, Clinical Lectures, Pediatrics, Technion School of Technology, Senior Physician, Consultant in Pediatric Rheumatology, Safed, Israel

David B. Haslam, MD, Assistant Professor of Pediatrics and Molecular Microbiology, Attending Physician, Division of Infectious Diseases, St. Louis Children's Hospital, St. Louis, Missouri

Eric Hassall, MB, CHB, FRCP (C), Associate Professor, Gastroenterology, University of British Columbia, British Columbia's Children's Hospital, Vancouver, British Columbia, Canada

Samuel Hawgood, MD, Professor of Pediatrics, Director, Neonatal Intensive Care Nursery, University of California-San Francisco, San Francisco, California

William W. Hay, Jr., MD, Professor of Pediatrics, University of Colorado Health Sciences Center, Director, Training Program in Neonatal-Perinatal Medicine and Neonatal Clinical Research Center, Denver, Colorado

Robert J. Hayashi, MD, Assistant Professor, Pediatric Hematology/Oncology, Washington University, Director, Pediatric Bone Marrow Transplant Program, St. Louis Children's Hospital, St. Louis, Missouri

Morey W. Haymond, MD, Professor of Pediatrics, Program Director, Child Health Research Center, Baylor College of Medicine, Houston, Texas

Arthur P. Hays, MD, Associate Professor of Clinical Neuropathology, Columbia University College of Physicians and Surgeons, New York, New York

Thomas A. Hazinski, MD, Professor and Vice Chairman, Pediatrics, Vanderbilt University, Director, Pediatric Pulmonary Medicine, Vanderbilt University Medical Center, Nashville, Tennessee

Adelaide A. Hebert, MD, Professor and Vice Chairman of Dermatology, University of Texas-Houston Medical School, Houston, Texas

Markku Heikinheimo, MD, PhD, Associate Professor, Children's Hospital, University of Helsinki, Helsinki, Finland

Leo A. Heitlinger, MD, Chief of Pediatrics, St. Luke's Hospital, Bethlehem, Pennsylvania

Melvin Heyman, MD, Professor of Pediatrics, Chief, Pediatric Gastroenterology, Hepatology & Nutrition, Director, Training Program in Pediatric GI/Nutrition, University of California-San Francisco, San Francisco, California

Lisa Jo Hicks, CTRS, Recreational Therapist, Children's Hospital Medical Center, Chattanooga, Tennessee

Charles B. Higgins, MD, Professor of Radiology, University of California-San Francisco, San Francisco, California

Friedhelm Hildebrandt, MD, Department of Pediatric Nephrology, University Children's Hospital, Freiburg, Germany

Alan Hill, MD, Professor and Head, Neurology, Pediatrics, University of British Columbia, British Columbia's Children's Hospital, Vancouver, British Columbia, Canada

Ivor D. Hill, MD, Professor of Pediatrics and Internal Medicine/Gastroenterology, Wake Forest University School of Medicine, Winston-Salem, North Carolina

Dee Hodge, III, MD, Associate Professor of Pediatrics, Washington University School of Medicine, Associate Director, Clinical Affairs for Emergency Services, St. Louis Children's Hospital, St. Louis, Missouri

W. Alan Hodson, MD, Professor of Pediatrics, University of Washington School of Medicine, Attending Physician, Division of Neonatology, Children's Hospital and Regional Medical Center, Seattle, Washington

Edward Hoffenberg, MD, Associate Professor, Pediatrics, University of Colorado School of Medicine, Director, Center for Pediatric Inflammatory Bowel Diseases, The Children's Hospital of Denver, Denver, Colorado

Julien I.E. Hoffman, MD, Professor of Pediatrics (Emeritus), University of California-San Francisco, Attending Physician, Moffitt/Long Hospitals, San Francisco, California

Angela R. Holder, LL.M., Professor of the Practice of Medical Ethics, Center for the Study of Medical Ethics and Humanities, Duke University School of Medicine, Durham, North Carolina

Allison Holm, MD, Clinical Instructor, Pediatrics and Dermatology, University of Rochester School of Medicine, Rochester, New York

Miriam Horowitz, RD, Pediatric Nutrition Support Nutritionist, Division of Pediatric Gastroenterology, Nutrition, and Liver Diseases, New York, New York

Margaret K. Hostetter, MD, Professor of Pediatric and Microbial Pathogenesis, Chief, Pediatric Immunology, Yale University School of Medicine, Attending Physician, Yale-New Haven Children's Hospital, New Haven, Connecticut

Barbara J. Howard, MD, Assistant Professor of Pediatrics, Division of Behavioral and Developmental Pediatrics, Johns Hopkins University School of Medicine, Baltimore, Maryland

Frederick Huang, MD, Research Associate, Department of Hematology/Oncology, Children's Hospital Medical Center, Cincinnati, Ohio

Melissa M. Hudson, MD, Associate Professor, Pediatrics, University of Tennessee, Associate Member, Hematology/Oncology, St. Jude Children's Research Hospital, Memphis, Tennessee

Walter T. Hughes, MD, Professor of Pediatrics and Preventive Medicine, University of Tennessee College of Medicine, Emeritus Member, Department of Infectious Diseases, St. Jude Children's Research Hospital, Memphis, Tennessee

Janelle Huttenlocher, MD, William S. Gray Professor of Psychology, Chair, Developmental Psychology, University of Chicago, Chicago, Illinois

Peter R. Huttenlocher, MD, Professor of Pediatrics and Neurology, University of Chicago School of Medicine, Division of Pediatric Neurology, University of Chicago Children's Hospital, Chicago, Illinois

Charles E. Irwin, Jr., MD, Professor of Pediatrics, Director of Adolescent Medicine, University of California-San Francisco, San Francisco, California

Richard F. Jacobs, MD, Horace C. Cabe Professor of Pediatrics, University of Arkansas for Medical Sciences, Chief, Division of Pediatric Infectious Diseases, Children's Hospital, Little Rock, Arkansas

David M. Jaffe, MD, Dana Brown Professor of Pediatrics, Washington University School of Medicine, Director, Pediatric Emergency Medicine, St. Louis Children's Hospital, St. Louis, Missouri

Julia Jaskiewicz, MD, Pediatrician, Eastgate Pediatrics, Cincinnati, Ohio

Michael Jellinek, MD, Professor of Psychiatry and Pediatrics, Harvard Medical School, Chief, Child Psychiatry Service, Massachusetts General Hospital, Boston, Massachusetts

Linda Bone Jeng, MD, PhD, Center for Human Genetics, Rainbow Babies and Children's Hospital, Cleveland, Ohio

John M. Jemerin, MD, Assistant Professor in Residence, Department of Pediatrics, University of California-San Francisco, San Francisco, California

Chandy C. John, MD, Assistant Professor, Geographic Medicine and Infectious Diseases, Case Western Reserve University, Rainbow Babies and Children's Hospital, Cleveland, Ohio

Christopher Jolley, MD, Assistant Professor of Pediatrics, University of Florida, Attending Physician, Pediatrics, Shands Children's Hospital, Gainesville, Florida

Maureen M. Jonas, MD, Associate Professor, Pediatrics, Harvard Medical School, Associate in Gastroenterology, Children's Hospital, Boston, Massachusetts

M. Douglas Jones, Jr, MD, Chairman, Department of Pediatrics, University of Colorado Health Sciences Center, Pediatrician-in-Chief, Children's Hospital, Denver, Colorado

Lynn B. Jorde, PhD, Professor of Genetics, University of Utah School of Medicine, Salt Lake City, Utah

Jill Jump, CCC-SLP, Assistant Technology Coordinator, Children's Hospital Medical Center, Cincinnati, Ohio

Stephen G. Kahler, MSD, Principal Fellow (Assoc. Professor), Pediatrics, Murdoch Children's Research Institute, Director of Genetics, Royal Children's Hospital, Parkville, Australia

Barton A. Kamen, MD, American Cancer Society, Clinical Research Professor, Professor of Pediatrics and Pharmacology, Cancer Institute of New Jersey

Clifford E. Kashtan, MD, Professor of Pediatrics, Division of Pediatric Nephrology, University of Minnesota Medical School, Minneapolis, Minnesota

Michael Katz, MD, Vice-President for Research, March of Dimes Birth Defects Foundation, White Plains, New York

Samuel L. Katz, MD, DSC, Wilburt C. Davison Professor and Chairman Emeritus, Department of Pediatrics, Division of Infectious Diseases, Duke University Medical School, Durham, North Carolina

Edward Kaye, MD, Formerly: Professor of Pediatrics, University of Pennsylvania School of Medicine, Chief, Division of Metabolism, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Constance Helen Keefer, MD, Instructor in Pediatrics, Harvard Medical School, Child Development Unit, Children's Hospital, Boston, Massachusetts

Desmond P. Kelly, MD, Associate Professor of Pediatrics, University of South Carolina School of Medicine, Medical Director of Developmental Pediatrics, Children's Hospital, Greenville, South Carolina

Thomas Kennedy, MD, Chairman, Department of Pediatrics, Bridgeport Hospital, Bridgeport, Connecticut, Clinical Professor of Pediatrics, Yale University School of Medicine, New Haven, Connecticut

Ali S. Khan, MD, Director, Bioterrorism Division, Centers for Disease Control and Prevention, Atlanta, Georgia

Janice J. Kim, MD, Adjunct Assistant Professor of Pediatrics, University of California-San Francisco, San Francisco, California

Douglas G. Kinnett, MD, Assistant Professor of Clinical Physical Medicine and Rehabilitation and Clinical Pediatrics, University of Cincinnati College of Medicine, Children's Hospital Medical Center, Cincinnati, Ohio

John P. Kinsella, MD, Associate Professor of Pediatrics, University of Colorado Health Sciences Center, Section of Neonatology, Children's Hospital, Denver, Colorado

Joseph A. Kitterman, MD, Professor of Pediatrics in Residence, Senior Staff Member, Cardiovascular Research Institute, University of California-San Francisco, San Francisco, California

Martin B. Kleiman, MD, Ryan White Professor of Pediatrics, Indiana University School of Medicine, Indianapolis, Indiana

Teresa M. Kohlenberg, MD, Instructor in Psychiatry, Harvard Medical School, Staff Psychiatrist, Children's Hospital, Watertown, Massachusetts

E. Kent Korgenski, MS, MT(ASCP), Clinical Microbiology Laboratory, Primary Children's Medical Center, Salt Lake City, Utah

Peter J. Krause, MD, Professor of Pediatrics, University of Connecticut School of Medicine, Chief, Division of Infectious Diseases, Connecticut Children's Medical Center, Hartford, Connecticut

Beatriz D. Kuizon, MD, Assistant Professor of Pediatrics, Department of Pediatrics, University of California, Los Angeles, School of Medicine, Los Angeles, California

Ashir Kumar, MD, Professor of Pediatrics and Human Development, Division of Pediatric Infectious Diseases, Michigan State University, East Lansing, Michigan

Ann W. Kummer, PhD, Director, Speech Pathology, Children's Hospital Medical Center, Cincinnati, Ohio

Lisa A. Kurtz, M.Ed, OTR/L, FAOTA, Clinical Assistant Professor of Occupational Therapy, University of New England, Occupational Therapist, Jameson School, Scarborough, Maine

Peter O. Kwitrovich, Jr., MD, Professor of Pediatrics and Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland

Craig B. Langman, MD, Professor of Pediatrics, Northwestern University School of Medicine, Head, Nephrology and Mineral Metabolism, Children's Memorial Hospital, Chicago, Illinois

Allan S.Y. Lau, MD, Honorary Consultant, Department of Pediatrics, Queen Mary Hospital, Hong Kong

Deborah Lehman, MD, Assistant Clinical Professor, Pediatrics, UCLA School of Medicine, Los Angeles, Cedars-Sinai Medical Center, Los Angeles, California

Neal Leleiko, MD, PhD, Chief, Pediatric Gastroenterology and Nutrition, Mount Sinai Medical Center, New York, New York

Robert Lemanske, Jr., MD, Professor of Pediatrics and Medicine, University of Wisconsin School of Medicine, Madison, Wisconsin

Marsha Leen-Mitchell, MD, Pregnancy RiskLine, University of Utah Medical Center, Salt Lake City, Utah

Claire O. Leonard, MD, FAAP, Associate Professor of Pediatrics, Division of Medical Genetics, University of New Mexico School of Medicine, Albuquerque, New Mexico

Nicole M.A. LeSaux, MD, Division of Infectious Diseases, Children's Hospital of Eastern Ontario, Ottawa, Ontario, Canada

John M. Leventhal, MD, Professor of Pediatrics, Yale University School of Medicine, New Haven, Connecticut

Melvin D. Levine, MD, Professor of Pediatrics, Director, Clinical Center for Study of Development and Learning, University of North Carolina, Chapel Hill, North Carolina

Fiona Howard Levy, MD, Assistant Professor of Pediatrics, Washington University School of Medicine, Medical Director of the Pediatric Intensive Care Unit, St. Louis Children's Hospital, St. Louis, Missouri

B.U.K. Li, MD, Professor of Pediatrics, Northwestern University, Director of Gastroenterology, Children's Memorial Hospital, Chicago, Illinois

Poh-Lian Lim, MD, Fellow, Infectious Diseases, Tulane University School of Medicine, New Orleans, Louisiana

Dana Thompson Link, MD, MS, Department of Otorhinolaryngology, Head and Neck Surgery, Division of Pediatric Otolaryngology, Rochester, Minnesota

Jeffrey Michael Lipton, MD, PhD, Associate Professor, Albert Einstein College of Medicine, Director, Pediatric Hematology/Oncology and Stem Cell Transplantation, Schneider Children's Hospital, New Hyde Park, New York

George Lister, MD, Professor of Pediatrics and Anesthesiology, Yale University School of Medicine, Director, Pediatric Critical Care, Yale-New Haven Children's Hospital, New Haven, Connecticut

James H. Liu, MD, Clinical Fellow, Division of Pediatric Otolaryngology, University of Cincinnati College of Medicine, Cincinnati, Ohio

Bernard Lo, MD, Professor of Medicine and Director, Program in Medical Ethics, University of California-San Francisco, San Francisco, California

Ashima Madan, MD, Assistant Professor of Pediatrics, Stanford University School of Medicine, Palo Alto, California

Deborah Madansky, MD, Medical Director, CARE Children's Counseling Center, Sebastopol, California

Joseph A. Majzoub, MD, Chief, Division of Endocrinology, Harvard Medical School, Children's Hospital, Boston, Massachusetts

Anthony J. Mancini, MD, Assistant Professor of Pediatrics and Dermatology, Northwestern University Medical School, Attending Physician and Clinical Practice Director, Children's Memorial Hospital, Chicago, Illinois

Marilyn J. Manco-Johnson, MD, Professor of Pediatrics, University of Colorado Health Science Center, The Children's Hospital of Denver, Denver, Colorado

Arik V. Marcell, MD, MPH, Adolescent Medicine Fellow, University of California-San Francisco, San Francisco, California

Andrew M. Margileth, MD, Clinical Professor, Pediatrics, Mercer University School of Medicine, Director, Pediatric Dermatology, Backus Children's Hospital, Savannah, Georgia

John M. Maris, MD, Assistant Professor of Pediatrics Oncology, University of Pennsylvania School of Medicine, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Lynne P. Martinez, MD, Program Manager, Pregnancy RiskLine, Salt Lake City, Utah

Deborah Mason, RN, MSN, CPNP, Nurse Coordinator Interdisciplinary Feeding Team, Department of Pediatric Surgery, Children's Hospital Medical Center, Cincinnati, Ohio

Theresa L. Massagli, MD, Associate Professor of Rehabilitation Medicine and Pediatrics, University of Washington, Attending Physician, Children's Hospital and Regional Medical Center, Seattle, Washington

Dietrich Matern, MD, Assistant Professor of Laboratory Medicine, Co-director, Biochemical Genetics Laboratory, Mayo Clinic and Foundation, Rochester, Minnesota

John McBride, MD, Professor and Vice Chair of Pediatrics, Northeastern Ohio University College of Medicine, Director, Robert T. Stone, MD Respiratory Center, Children's Hospital Medical Center of Akron, Akron, Ohio

Roderick McInnes, MD, PhD, Professor of Pediatrics and Molecular and Medical Genetics, University of Toronto, Chair of Molecular Medicine, Hospital for Sick Children, Toronto, Ontario, Canada

Mary A. McMahon, MD, Assistant Professor of Clinical and Physical Medicine and Rehabilitation and Clinical Pediatrics, Cincinnati, Ohio

Julia A. McMillan, MD, Associate Professor of Pediatrics, Johns Hopkins University School of Medicine, Vice Chair, Pediatric Education, Johns Hopkins Hospital, Baltimore, Maryland

Charles T. Mehlman, DO, MPH, Assistant Professor of Surgery, University of Cincinnati, Director, Musculoskeletal Outcomes Research, Children's Hospital Medical Center, Cincinnati, Ohio

William C. Mentzer, Jr., MD, Professor and Director, Hematology/Oncology, University of California, San Francisco, Professor and Director, Hematology/Oncology, San Francisco General Hospital, San Francisco, California

Kathy Ann Merritt, MD, Assistant Consulting Professor, Community Programs, Duke University Medical Center, Durham, North Carolina

Denise W. Metry, MD, Assistant Professor of Pediatrics and Dermatology, Baylor College of Medicine, Houston, Texas

W. Peter Metz, MD, Associate Professor of Psychiatry and Pediatrics, University of Massachusetts Medical School, Director, Division of Child and Adolescent Psychiatry, University of Massachusetts Memorial Health Care Inc., Worcester, Massachusetts

Rebecka L. Meyers, MD, Associate Clinical Professor of Surgery and Chief of Pediatric Surgery, University of Utah School of Medicine, Pediatric Surgical Director of the Liver Transplant Team, Primary Children's Hospital, Salt Lake City, Utah

Tory Meyers, MD, Pediatric Surgeon, Children's Hospital, Austin, Texas

Wayne M. Meyers, MD, PhD, D.Sc.(HON), Chief, Mycobacteriology, Armed Forces Institute of Pathology, Washington, District Columbia

Linda J. Michaud, MD, Associate Professor of Clinical Physical Medicine and Rehabilitation and Clinical Pediatrics, University of Cincinnati College of Medicine, Director, Pediatric Rehabilitation, Children's Hospital Medical Center, Cincinnati, Ohio

Peter Milla, MD, Professor of Pediatric Gastroenterology and Nutrition, University College, Honorary Consultant, Pediatric Gastroenterology, Institute of Child Health, London, WC 1, England

Kevin M. Miller, MD, Associate Professor of Clinical Ophthalmology, Division of Comprehensive Ophthalmology, Los Angeles, California

Walter L. Miller, MD, Professor of Pediatrics, The Metabolic Research Unit, and The Biomedical Sciences Graduate program, Chief of Pediatric Endocrinology, University of California-San Francisco, San Francisco, California

Marsha Leen-Mitchell, Teratology Educator, Pregnancy Risk Line, University of Utah, Salt Lake City, Utah

Christopher M. Mjaanes, MD, Pediatrics Resident, University of Wisconsin Children's Hospital, Madison, Wisconsin

James H. Moller, MD, Professor and Head of Pediatrics, Paul Dwan Professor of Pediatric Cardiology, University of Minnesota College of Medicine, Minneapolis, Minnesota

Ramon Montes, MD, Staff Gastroenterologist, Phoenix Children's Hospital, Phoenix, Arizona

Phillip Moore, MD, Associate Clinical Professor of Pediatric Cardiology, Director, Congenital Cardiac Catheterization Program, University of California at San Francisco, San Francisco, California

Claire Morress, OTR/L, Aaron W. Perlman Center for Children, Children's Hospital Medical Center, Cincinnati, Ohio

Anna-Barbara Moscicki, MD, Professor of Pediatrics, Division of Adolescent Medicine, University of California-San Francisco, San Francisco, California

Mark H. Moss, MD, Assistant Professor of Medicine and Pediatrics, Section of Allergy and Immunology, University of Wisconsin Hospital and Clinics, Madison, Wisconsin

Kevin P. Murphy, MD, Associate Professor, University of Minnesota Duluth Medical School, Medical Director, Gillette Children's Northern Clinics, Duluth, Minnesota

Dennis L. Murray, MD, FAAP, Professor of Pediatrics and Chief, Pediatric Infectious Diseases, Medical College of Georgia, Atlanta, Georgia

Robert D. Murray, MD, Associate Professor of Pediatrics, Ohio State University, Children's Hospital, Columbus, Ohio

Charles M. Myer III, MD, Professor of Otolaryngology, University of Cincinnati College of Medicine, Division of Otolaryngology, Children's Hospital Medical Center, Cincinnati, Ohio