

CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY

VOLUME 6 • JULY 1999 • NUMBER 4

Steven D. Douglas, *Editor in Chief* (2003)
Children's Hospital of Philadelphia
University of Pennsylvania
Philadelphia, Pa.

James D. Folds, *Editor* (2003)
University of North Carolina Hospitals
Chapel Hill, N.C.

Stanley A. Schwartz, *Minireview Editor*
(2001)
Buffalo General Hospital
Buffalo, N.Y.

Steven C. Specter, *Editor* (2001)
University of South Florida
Tampa, Fla.

Daniel P. Stites, *Editor* (2001)
University of California San Francisco
Medical Center
San Francisco, Calif.

Theresa L. Whiteside, *Editor* (2001)
Pittsburgh Cancer Institute
Pittsburgh, Pa.

EDITORIAL BOARD

Vincent Agnello (2000)
Thomas S. Alexander (2000)
Julian Ambrus, Jr. (2000)
Burt E. Anderson (1999)
Philip W. Askenase (2000)
William R. Bartholomew (1999)
Mauro Bendinelli (1999)
Zvi H. Bentwich (2000)
Vincent R. Bonagura (1999)
William Borkowsky (2000)
Gian Franco Bottazzo (2000)
Gunter Brittinger (2001)
Harald Brussow (2001)
C. Lynne Burek (2000)
Donald E. Burgess (2001)
Donald E. Campbell (2000)
Marion C. Cohen (2001)
Stanley Cohen (2001)
Beth W. Colombe (1999)
Linda Cook (2000)
Karen M. Cost (2001)
Peggy Crowley-Nowick (2000)
Susanna Cunningham-Rundles (2001)
Thomas N. Denny (1999)
Barbara Detrick (2001)
James D. Dick (1999)
Julie Y. Djeu (2000)
Paula Dore-Duffy (2000)
J. Stephen Dumler (1999)
Garth Ehrlich (1999)
Toby K. Eisenstein (1999)
Amos Etzioni (2000)
John L. Fahey (2001)
Peter J. Felsburg (2000)
Susan Fiscus (2001)
Thomas A. Fleisher (2001)
Mary Ann Fletcher (2001)
Michael M. Frank (2000)

Diana Friberg (1999)
Herman Friedman (2001)
Ben Zion Garty (1999)
Patricia C. Giclas (2001)
Bruce C. Gilliland (2000)
James A. Goeken (2000)
Karl Goodkin (2001)
Michael Gottlieb (2001)
Richard L. Gregory (2000)
Robert G. Hamilton (2000)
Ronald J. Harbeck (2001)
John Hay (2000)
Harry R. Hill (1999)
Wen-Zhe Ho (2001)
Richard L. Hodinka (2001)
Christie A. Holland (2000)
Thomas Inzana (2001)
J. Charles Jennette (2001)
Jonathan M. Kagan (2001)
Naynesh R. Kamani (2000)
Alan M. Kaplan (2000)
Sandra S. Kaplan (1999)
Neil E. Kay (2000)
Ronald C. Kennedy (2001)
David F. Keren (2000)
Parviz Lalezari (2000)
Alan L. Landay (2001)
Janet Lathey (2000)
Mariano F. La Via (2001)
Howard M. Lederman (1999)
Michael M. Lederman (1999)
Mary S. Leffell (2000)
Diane S. Leland (2001)
Jay A. Levy (2001)
Steven A. Lobel (2000)
Clifford A. Lowell (1999)
Daniel R. Lucey (1999)
David M. Lyerly (1999)
Barbara J. Mann (1999)

Joseph B. Margolick (2001)
Lukas Matter (2000)
William F. McCarthy (2001)
Elizabeth McFarland (2000)
Thomas M. McHugh (1999)
James H. McKerrow (1999)
Gerald C. Miller (2000)
James J. Mond (1999)
Dimitri Monos (1999)
Anna-Barbara Moscicki (2000)
Donna Murasko (2001)
Irving Nachamkin (1999)
Madhavan Nair (2000)
Jacob B. Natvig (2000)
Oliver K. Ndimbie (2001)
Janet K. A. Nicholson (1999)
David E. Normansell (2001)
Jeanne M. Novak (2001)
Hans Ochs (1999)
Itzhak Ofek (2001)
Maurice O'Gorman (1999)
Ko Okumura (2000)
Emilia L. Oleszak (2000)
C. Kirk Osterland (2001)
Cynthia M. Otto (1999)
Savita Pahwa (1999)
Paul Palumbo (2001)
Charles Pavia (2000)
Helene Paxton (2001)
Ronald Penny (2001)
Philip K. Peterson (2001)
Catherine A. Phillips (2001)
Susan Plaeger (2000)
Chris D. Platsoucas (2000)
Stanley A. Plotkin (2001)
Harry E. Prince (2000)
Bruce S. Rabin (2001)
Errol Reiss (2001)
James M. Reuben (2001)

Charles R. Rinaldo, Jr. (2001)
Norbert J. Roberts (2000)
Frank G. Rodgers (2001)
Noel R. Rose (2000)
Howard Rosenblatt (2000)
Jeffery L. Rossio (2001)
Matti Sällberg (1999)
Ronald F. Schell (2000)
John L. Schmitz (1999)
Robert T. Schooley (2000)
Peter H. Schur (2000)
Ted E. Schutzbank (1999)
Joph D. Schwartzman (1999)
John L. Sever (2001)
William T. Shearer (2000)
Leslie E. Silberstein (2000)
John Sleasman (2000)
Ralph Snyderman (2000)
Celsa A. Spina (2000)
E. Richard Stiehmel (2000)
Kathleen Sullivan (2001)
Russell H. Tomar (1999)
George C. Tsokos (1999)
Kenneth E. Ugen (1999)
Gabriel Virella (2001)
Girish N. Vyas (2001)
Mark A. Wainberg (2000)
David Hughes Walker (1999)
Adriana Weinberg (2000)
Marc E. Weksler (2000)
Joel Wessfeld (1999)
Caroline C. Whitacre (2000)
Danny L. Wiedbrauk (1999)
Jerry A. Winkelstein (2001)
M. Mitsuo Yokoyama (2001)
Adriana Zeevi (2000)
Dorothea Zucker-Franklin (2000)
Steven H. Zuckerman (2001)
Burton Zweiman (2000)

Samuel Kaplan, *Chairman, Publications Board*
Arthur Gelmis, *Production Editor*

Linda M. Illig, *Director, Journals*
Robert D. Loper, *Assistant Production Editor*

Clinical and Diagnostic Laboratory Immunology (ISSN 1071-412X), a publication of the American Society for Microbiology (ASM), 1325 Massachusetts Ave., N.W., Washington, DC 20005-4171, is devoted to the study of all aspects of human immune response assessment, including indications for testing, methods, and interpretation of results. Instructions to authors are published in the January issue each year; reprints are available from the editors and the Journals Department. *Clinical and Diagnostic Laboratory Immunology* is published bimonthly, one volume (6 issues) per year. Nonmember print subscription prices (per year) are: \$239, U.S.; \$242, Canada (plus 7% GST, or 7% GST + 8% HST where applicable); \$280, Europe; \$281, Latin America; \$282, rest of world. Member print subscription prices (per year) are: \$51, U.S.; \$54, Canada (plus 7% GST, or 7% GST + 8% HST where applicable); \$79, Europe; \$80, Latin America; \$81, rest of world. Single copies are: \$47, nonmember; \$15, member (Canadians add 7% GST, or 7% GST + 8% HST where applicable). For prices of electronic versions, contact the Subscriptions Unit, ASM. Correspondence relating to subscriptions, defective copies, missing issues, and availability of back issues should be directed to the Subscriptions Unit, ASM; correspondence relating to reprint orders should be directed to the Reprint Order Unit, ASM; and correspondence relating to disposition of submitted manuscripts, proofs, and general editorial matters should be directed to the Journals Department, American Society for Microbiology, 1325 Massachusetts Ave., N.W., Washington, DC 20005-4171. Phone: (202) 737-3600.

Claims for missing issues from residents of the United States, Canada, and Mexico must be submitted within 3 months after publication of the issues; residents of all other countries must submit claims within 6 months of publication of the issues. Claims for issues missing because of failure to report an address change or for issues "missing from files" will not be allowed.

POSTMASTER: Send address changes to *Clinical and Diagnostic Laboratory Immunology*, ASM, 1325 Massachusetts Ave., N.W., Washington, DC 20005-4171.

Made in the United States of America. Printed on acid-free paper.

Copyright © 1999; American Society for Microbiology.

All Rights Reserved.

CODEN: CDIMEN

The code at the top of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal use or for personal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per-copy fee through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, for copying beyond that permitted by Sections 107 and 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.