

MICROBIOLOGICAL REVIEWS

VOLUME 57 • SEPTEMBER 1993 • NUMBER 3

Wolfgang K. Joklik, Editor in Chief (1995)

*Duke University Medical Center
Durham, N.C.*

John C. Boothroyd, Editor (1997)
*Stanford University School of
Medicine
Stanford, Calif.*

Jean E. Brenchley, Editor (1997)
*The Pennsylvania State University
University Park, Pa.*

Franklin M. Harold, Editor (1997)
*Colorado State University
Fort Collins, Colo.*

Alan G. Hinnebusch, Editor (1997)
*National Institute of Child Health
and Human Development
Bethesda, Md.*

Jack D. Keene, Editor (1997)
*Duke University Medical Center
Durham, N.C.*

Stephen Lory, Editor (1997)
*University of Washington
Seattle, Wash.*

Catherine L. Squires, Editor (1997)

*Columbia University
New York, N.Y.*

James T. Staley, Editor (1997)
*University of Washington
Seattle, Wash.*

James M. Tiedje, Editor (1997)
*Michigan State University
East Lansing, Mich.*

O. C. Yoder, Editor (1997)
*Cornell University
Ithaca, N.Y.*

Barbara H. Iglewski, Chairman, Publications Board

Linda M. Illig, Director, Journals

Jack Kenney, Production Editor

Julie A. Antolick, Assistant Production Editor

Microbiological Reviews considers for publication both solicited and unsolicited reviews and monographs dealing with all aspects of microbiology. Manuscripts, proposals, and correspondence regarding editorial matters should be addressed to the Editor in Chief, Wolfgang K. Joklik, Department of Microbiology and Immunology, P.O. Box 3020, Duke University Medical Center, Durham, NC 27710.

Microbiological Reviews is published quarterly (March, June, September, and December), one volume per year, by the American Society for Microbiology (ASM). The nonmember print subscription prices are \$120 (U.S.) (Canadians add 7% GST) and \$136 (other countries) per year; single copies are \$40 (Canadians add 7% GST). The member print subscription prices are \$25 (U.S.) (Canadians add 7% GST) and \$39 (other countries); single copies are \$10 (Canadians add 7% GST). For prices of CD-ROM 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 Division, 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.

Second-class postage paid at Washington, DC 20005, and at additional mailing offices.

POSTMASTER: Send address changes to *Microbiological Reviews*, ASM, 1325 Massachusetts Ave., N.W., Washington, DC 20005-4171.

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

Copyright © 1993, American Society for Microbiology.

All Rights Reserved.

ISSN 0146-0749

CODEN: MBREDS

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., 27 Congress St., Salem, MA 01970, 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.

Call for Papers . . .

CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY

The American Society for Microbiology will commence publication of a bimonthly journal, *Clinical and Diagnostic Laboratory Immunology*, in January 1994 that will bring together information on the latest developments in human immune response assessment, including indications for testing, methods, and interpretation of results.

Peer-reviewed research articles describing the laboratory diagnostic aspects of the following will be featured:

- humoral and cellular immunity, including specific immune cell functions (B cells, T cells, and their subsets)
- mediators and cytokines, complement components, and other serum proteins
- natural killer cells, monocytes/macrophages, neutrophils, and myeloid cells
- immune responses to infection caused by bacteria, viruses, fungi, and parasites
- AIDS and other retroviral diseases
- primary and secondary immunodeficiency disorders
- evaluation of hypersensitivity and autoimmune diseases
- histocompatibility and transplantation immunology
- lymphoreticular malignancies and cancer immunology
- immunogenetic testing applied to human disease diagnosis and evaluation
- immunologic monitoring, including flow cytometry and vaccine therapy
- laboratory immunology as related to allergy, dermatology, immunohematology, rheumatology, neurology, oral medicine, and other medical and surgical subspecialties

Novel animal models relevant to the diagnosis of human disease, animal studies on how to assess the immune response, new or evolving technology in diagnostic methods, establishment of normal immune responses and/or values, case reports, quality control, and biostatistics are also suitable topics for the journal.

Minireviews, guest commentaries, and letters to the editor will be included.

Editor in Chief: Steven D. Douglas. **Editors:** James D. Folds, David E. Normansell, Noel R. Rose, Daniel P. Stites, and Theresa L. Whiteside.

Editorial Board: P. W. Askenase, J.-F. Bach, Z. H. Bentwich, G. F. Bottazzo, R. A. Bray, C. L. Burek, D. E. Campbell, C. B. Carpenter, W. S. Ceglowski, I. J. Check, L. Cook, K. M. Cost, S. Cunningham-Rundles, B. Detrick, J. Y. Djeu, P. Dore-Duffy, A. Etzioni, J. I. Fahey, T. Feizi, P. J. Felsburg, T. A. Fleisher, M. M. Frank, H. Friedman, P. C. Giclas, B. C. Gilliland, J. A. Goeken, Richard L. Gregory, R. J. Harbeck, R. B. Herberman, R. L. Hodinka, T. Hoffman, P. E. Hurtubise, J. C. Jennette, J. M. Kagan, N. R. Kamani, D. F. Keren, T. Kishimoto, P. Lalezari, A. L. Landay, S. A. Larsen, M. F. La Via, M. S. Leffell, J. A. Levy, S. A. Lobel, L. F. Mayer, J. B. Natvig, K. Okumura, C. K. Osterland, L. M. Pachman, J. E. W. Palmblad, G. M. Penn, R. Penny, J. B. Peter, P. K. Peterson, C. A. Phillips, C. D. Platsoucas, S. A. Plotkin, H. E. Prince, B. S. Rabin, E. Reiss, N. J. Roberts, J. L. Rossio, R. F. Schell, R. T. Schooley, P. H. Schur, S. A. Schwartz, N. H. Sigal, L. E. Silberstein, S. C. Specter, E. R. Stiehm, J. Verhoef, G. Virella, G. N. Vyas, M. E. Weksler, J. A. Winkelstein, A. Zeevi, S. Zolla-Pazner, D. Zucker-Franklin, S. H. Zuckerman, and B. Zweiman.

Submit your contribution *now*! The format and procedures for publishing in the journal are the same as for the other ASM journals. Details are described in the Instructions to Authors, which may be obtained from the CDLI editors or from the ASM Journals Division (1325 Massachusetts Ave., N.W., Washington, DC 20005-4171; phone, 202 737-3600; fax, 202 942-9355).

JOIN the American Society for Microbiology, the largest single life science organization in the world, and subscribe to CDLI at low member rates for 1994: U.S./Canadian, \$40; others, \$68. Non-member rates: U.S./Canadian, \$200; others, \$235. (Canadians add 7% GST.) The journal will also be available on CD-ROM for either MS-DOS or Macintosh personal computers. For additional pricing or membership information, contact the ASM Subscriptions Unit (1325 Massachusetts Ave., N.W., Washington, DC 20005-4171; HOTLINE phone, 202 942-9319; fax, 202 942-9346).