

clinical chemistry



Journal of the American Association for Clinical Chemistry, Inc.

Editor

David E. Bruns
University of Virginia
Charlottesville, VA

Associate Editors

John J. Albers
University of Washington
School of Medicine
Seattle, WA

Larry D. Bowers
Indiana University Medical
Center
Indianapolis, IN

James C. Boyd
University of Virginia
Charlottesville, VA

Robert Rej
Wadsworth Center for
Laboratories and Research
Albany, NY

Editor Emeritus

J. Stanton King
Winston-Salem, NC

Board of Editors

Executive Committee:

Carl A. Burtis, *Chairman*
Oak Ridge National
Laboratory
Oak Ridge, TN

Laurence M. Demers,
Editorials Editor
Pennsylvania State University
College of Medicine
Hershey, PA

Ronald J. Elin,
Book Reviews Editor
Clinical Center, NIH
Bethesda, MD

George Klee,
Reviews Editor
Mayo Clinic
Rochester, MN

Members:

Thomas M. Annesley
University of Michigan
Ann Arbor, MI

Fred S. Apple
Hennepin Co. Medical Center
and University of
Minnesota
Minneapolis, MN

Gregory Buffone
Texas Children's Hospital
Baylor College of Medicine
Houston, TX

Daniel W. Chan
Johns Hopkins University
Baltimore, MD

Basil T. Dumas
Medical College of Wisconsin
Milwaukee, WI

John H. Eckfeldt
University of Minnesota
Minneapolis, MN

Eric D. Green
National Center for Human
Genome Research
Bethesda, MD

Lawrence A. Kaplan
Bellevue Hospital Center
New York, NY

Michael Kleerekoper
Wayne State University
Detroit, MI

Thomas P. Moyer
Mayo Clinic
Rochester, MN

Paul J. Orsulak
University of Texas
Southwestern Medical Center
Dallas, TX

Roberta G. Reed
Mary Imogene Bassett
Hospital
Cooperstown, NY

Nader Rifai
Harvard Medical School and
Children's Hospital
Boston, MA

Eric J. Sampeon
Centers for Disease Control
and Prevention
Atlanta, GA

Gérard Siest
Centre du Medicament
Nancy, France

Lawrence Silverman
University of North Carolina
UNC Hospitals
Chapel Hill, NC

Steve Soldin
Children's Hospital National
Medical Center and George
Washington University
Washington, DC

Roland Valdes, Jr.
University of Louisville
School of Medicine
Louisville, KY

Editorial Offices:

Charlottesville, VA (new manuscripts and reviewing)

Sandy Weaver, *Senior Editorial Assistant*

Laura O. Sutherland, *Editorial Assistant*

Donna Brandl, *Editorial Assistant*

Telephone: 1-804-979-7009; Fax: 1-804-979-7599

Regular mail: *Clinical Chemistry*, P.O. Box 3757,

University Station, Charlottesville, VA 22903-0757

Express mail: *Clinical Chemistry*, Tower Office Bldg., Suite
609, 1224 W. Main St., Charlottesville, VA 22903

Washington, DC (production and books for review)

Leah V. Blackburn, *Managing Editor*

Virginia Marcum, *Senior Editor*

Caryl L. Greenfield, *Assistant Editor*

Yolanda Y. Stewart, *Editorial Assistant and*

Book Reviews Coordinator

Telephone: 1-202-857-0717; Fax: 1-202-833-4568

Regular and express mail: *Clinical Chemistry*, 2101 L Street,
NW, Suite 202, Washington, DC 20037-1526

Clinical Chemistry (ISSN 0009-9147) is published monthly by the American Association for Clinical Chemistry, Inc., 2101 L Street, NW, Suite 202, Washington, DC 20037-1526.

Second class postage is paid at Washington, DC 20037, and at additional mailing offices. Printed at 2901 Byrd Hill Rd., Richmond, VA 23228. POSTMASTER: send address changes to AACC, Inc., 2101 L Street, NW, Suite 202, Washington, DC 20037.

Copyright© 1994 by the American Association for Clinical Chemistry, Inc. Printed in the U.S.A.

Complete Information for Authors appears in the January issue.

Subscriptions (rates per year, including postage by domestic or surface mail): Individuals, \$130 in US; \$150 in North America outside US; \$160 elsewhere. Members of AACC (domestic and foreign): \$55 (included in membership dues). Institutions (rates per year for *Clinical Chemistry Reference Edition*): \$245 in US; \$270 in North America outside US; \$290 elsewhere. For airmail, add \$150 to price of subscription. Send complete payment with subscription order. (For Japanese yen price, contact AACC agent in Japan: USACO Corporation, 13-12, Shimbashi 1-chome, Minato-ku, Tokyo, 105 Japan.) All subscriptions received before October 1 start with first issue of current volume. Telephone: 1-800-892-1400; Fax: 1-202-887-5093.

Information for Authors

Clinical Chemistry welcomes manuscripts containing original information, experimental or theoretical, that advances the science of clinical chemistry. Such information may concern analytical and molecular diagnostic techniques, instrumentation, data processing, statistical analyses of data, clinical investigations in which chemistry has played a major role, and laboratory animal studies of chemically oriented problems of human disease. Equal consideration is given to manuscripts in English from any country, whether or not the authors are members of the AACC. Manuscripts are usually evaluated by two reviewers who may or may not be members of the Editorial Board. Manuscripts found by the editors to be inappropriate for the journal may be returned to authors without peer review. Prospective authors of Editorials and Reviews should submit, for review by the Editor, a brief outline of the proposed manuscript before preparing it in final form. Authors are usually notified of the disposition of a manuscript within 6 weeks of the date of its receipt by the Editor.

Editorial Policies. Manuscripts are considered for publication with the understanding that (a) each author has participated significantly in the work and assumes responsibility for the manuscript's content; (b) the authors have disclosed any commercial associations that might pose a conflict of interest with the work submitted; (c) no paper presenting the same information — other than an abstract or preliminary report or poster (cited in the manuscript) — has been or will be published elsewhere; (d) unique materials necessary to reproduce the results reported are available for use by qualified investigators; and (e), if the paper is accepted, copyright is transferred to the publisher. These agreements must be conveyed by completing the Author's Assurances and Assignment of Copyright form that can be copied from page 6 of the Information for Authors published in the January issue of the journal, or obtained from the Washington edito-

rial office. All authors must sign the form, and original signatures are required; the form should be sent by mail, not Fax.

Authors citing unpublished work by individuals other than themselves should include with their manuscript a letter from the individuals concerned giving permission to cite the work. For studies conducted with humans, a statement in the text should indicate whether the procedures used were in accordance with the ethical standards of their institution's responsible committee or with the Helsinki Declaration of 1975, as revised in 1983.

Submission of Manuscripts. Submit four copies of the manuscript to Dr. David E. Bruns, Editor, *Clinical Chemistry*. For regular mail: PO Box 3757, University Station, Charlottesville, VA 22903-0757. For express delivery: Towers Office Building, Suite 609, 1224 West Main Street, Charlottesville, VA 22903. Include a covering letter stating (a) the title of the paper; (b) the paper's main point; and (c) the name, address, and telephone and Fax numbers of the corresponding author.

Manuscript Preparation. Use double (typewriter) or triple (word processor) spacing throughout the manuscript. Type or print on one side of each page. For most manuscripts, include the following sections: an abstract, introduction, materials and methods, results, discussion, and references. For Reviews and Case Reports, use headings appropriate to the text. After tentative acceptance, revised version of manuscripts should be submitted on disk.

Illustrations. Submit four copies of each figure on high-quality coated glossy or laser-printer paper. Photocopies on absorbent or bond paper are not acceptable. Verify that symbols and lettering will be legible when the figures are reduced to publication size. Final version of figures should be supplied on disk as well as on hard copy.

The complete Information for Authors is published in the January issue.

©1994 The American Association for Clinical Chemistry, Inc.

Subscriptions and Reprints:

Telephone: 1-800-892-1400; Fax: 1-202-887-5093

Reprints: Reprint order forms are mailed to authors with proofs of their manuscripts and can also be obtained from Francis Alvero at the numbers shown above. Minimum order is 100 copies.

Missing Copies: Claims will not be allowed (a) unless we are notified within 3 months after the issue date for domestic and Canadian subscribers, or 6 months after the issue date for foreign subscribers; (b) if notice of a recent change of address has not been received; or (c) if the reason for claim is "missing from files." For claims to be processed, the subscriber's number and exact name and address as they appear on the mailing list must be included in correspondence.

Back Issues: Single copies of current and back-volume issues: \$15.00 (\$20.00 CCRE); ask for current prices on Special Issues. Microfilm/microfiche versions available by volume from University Microfilms International, 300 Veeb Rd., Ann Arbor, MI 48106; contact UMI directly for prices.

Indexing Services: *Clinical Chemistry* is covered by the major indexing and abstracting services, including the following: Abstracts Express, Analytical Abstracts, Biological Abstracts, BIOSIS, Chemical Abstracts Service, Current Clinical Cancer, Current Contents/Life Sciences, Excerpta Medica/EMBASE, Index Medicus, MEDLINE, Reference Update, Research Alert, Science Citation Index, and SciSearch. The full text of *Clinical Chemistry*,

starting with Vol. 38, No. 1, is available online through BRS Colleague.

Copyright Permission: Reprographic copying beyond that permitted by Sections 107 or 108 of the US Copyright Law is authorized by the American Association for Clinical Chemistry, Inc., for internal or personal use, provided that (a) the base fee of \$2.50 per copy is paid directly to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, or (b) a photocopy license has been granted by the CCC. Fees are subject to change. This consent does not extend to other kinds of copying, such as for general or external distribution, resale, advertising, or promotional purposes or for creating new collective works; for these purposes, contact AACC Inc., 2101 L Street, NW, Suite 202, Washington, DC 20037-1526.

Disclaimers: Manuscripts published in *Clinical Chemistry* reflect the individual views of their authors and, in the absence of a statement to the contrary, not the views of the institutions with which the authors are affiliated. The contents of advertisements or articles are not to be construed as official statements, evaluations, or endorsements by the Board of Editors or the American Association for Clinical Chemistry, Inc.

Advertising Inquiries: Contact Sherago International, Inc., 11 Penn Plaza, Suite 1003, New York, NY 10001. Telephone: 1-212-643-1750; Fax: 1-212-643-1757.



BPA *Clinical Chemistry* is printed with organic-based inks.

AACC Officers 1994

Lawrence M. Killingsworth, *President*
Peter Wilding, *President-Elect*
Lemuel Bowie, *Past-President*
Cecilia Habertzettl, *Secretary*
Christopher S. Frings, *Treasurer*

Board of Directors 1994

Mary F. Burritt, Laurence M. Demers,
Ronald J. Elin, Jean C. Joseph,
Stephen Kahn, Daniel Nealon

Commission on Publications

K. Owen Ash, *Chairman*

AACC National Office

Richard Flaherty, *Executive Vice President*
Jerry Goldsmith, *Vice President, Marketing Programs*
Chris Hoelzel, *Director of Marketing and Publications*
Tina Blume, *Circulation Coordinator*
Francis Alvero, *Reprints*