

Hypertension

An Official Journal of the American Heart Association

Hypertension (ISSN 0194-911X) is published monthly by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231-4596.

Editorial Correspondence should be addressed to Allyn L. Mark, MD, *Hypertension* Editor-in-Chief, 609 MRC, Cardiovascular Center, College of Medicine, University of Iowa, Iowa City, IA 52242. Telephone (319) 335-9160. Fax (319) 335-9169.

Instructions to Authors appear twice a year, in the January and July issues. Authors should consult these instructions before submitting manuscripts to *Hypertension*.

Author Costs include page charges, cost of color figures, and cost of offprints, if ordered.

Business Correspondence should be addressed to Scientific Publishing, American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231-4596. Telephone (214) 706-1310. Fax (214) 691-6342.

Change of Address: Please supply old and new addresses. Allow 6 weeks for changes.

Subscription Rates: In the United States, individuals may subscribe to *Hypertension* for their personal use at the annual rates of \$85 for members of an American Heart Association scientific council and \$106 for nonmembers. Outside the United States, add \$38 for postage.

Medical professionals and scientists in training may subscribe for \$53 in the United States and \$72 outside the United States if payment is accompanied by a letter from the department chairman verifying post held and completion date.

Prepayment is required. Make check, draft, or money order payable to the American Heart Association in US dollars drawn on a US bank, with *Hypertension* on the face of the check. To charge on Visa or MasterCard, include account number, expiration date, and name as it appears on card.

Contact AHA for single copy rates and subscription rates for libraries, reading rooms, and other multiple-use institutions.

Subscription Rates in Japan: Contact Nankodo Co., Ltd., 42-6 Hongo 3-chome, Bunkyo-ku, Tokyo 113, Japan. Telephone 03 (3811) 9950. Fax 03 (3811) 5031.

Offprints: For orders of fewer than 100, offprints are available from corresponding authors. For orders of 100 or more, contact Scientific Publishing, Reprint Specialist, Telephone (214) 706-1466.

Advertising Correspondence should be addressed to Pharmaceutical Media, Inc., 14th Floor, 440 Park Avenue South, New York, NY 10016. Telephone (212) 685-5010. Fax (212) 685-6126. Advertising copy must be approved by the American Heart Association. Advertising forms close 45 days before the first day of publication month.

Secondary Services

Indexed or Abstracted in *Biological Abstracts*, *Chemical Abstracts*, *Cumulative Index to Nursing and Allied Health Literature*, *Excerpta Medica*, and *Index Medicus*.

Available On-line from BRS Colleague, 8000 Westpark Drive, McLean, VA 22102. Telephone (800) 955-0906.

Microform Edition available from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106-1346. Telephone (313) 761-4700.

Authorization to photocopy items from this publication for personal and internal use, or for the personal or internal use of specific clients, is granted by the American Heart Association on the condition that the copier pay a fee of \$1.00 per article plus \$.10 per page to the Copyright Clearance Center, Inc. (CCC), 27 Congress St, Salem, MA 01970. Telephone (508) 744-3350. Payment should include the fee code 0194-911X/92/\$1.00+.10. This consent does not extend to copying for advertising or promotional purposes, for creating new collective works, or for resale. Individuals may make single photocopies for personal, non-commercial use without obtaining permission. For all other use, permission should be sought directly from the American Heart Association. Telephone (214) 706-1309.

Hypertension

An Official Journal of the American Heart Association

Hypertension is a forum for the presentation of scientific investigation of the highest quality in the broad field of cardiovascular regulation as it may affect high blood pressure research. The editors are interested in receiving original articles that deal with either basic or clinical research in the fields of biochemistry, cellular and molecular biology, immunology, physiology, pharmacology, and epidemiology. In addition, an important part of the journal is reserved for articles on clinical investigation that yield insight into the mechanisms of blood pressure regulation.

Editor-in-Chief

Allyn L. Mark

Associate Editors

Gerald F. DiBona
Donald D. Heistad
Larry S. Tobacman

Consulting Editors

Victor J. Dzau
Carlos Ferrario
Eduardo Marban
Suzanne Oparil
Henry W. Overbeck
Stephen M. Schwartz

Managing Editor

Sharyl A. Cartmill

Editorial Assistant

Theresa Betz

Editorial Board

Erling A. Anderson, *Iowa City, Iowa*
Sharon Anderson, *Portland, Oregon*
Warwick P. Anderson, *Victoria, Australia*
Gary L. Baumbach, *Iowa City, Iowa*
Kathleen H. Berecek, *Birmingham, Alabama*
Bradford C. Berk, *Atlanta, Georgia*
Tomas Berl, *Denver, Colorado*
Henry R. Black, *New Haven, Connecticut*
Edward H. Blaine, *Creve Coeur, Missouri*
Richard D. Bukoski, *Galveston, Texas*
John C. Burnett Jr., *Rochester, Minnesota*
Duncan Campbell, *Victoria, Australia*
Mitzy L. Canessa, *Boston, Massachusetts*
John P. Chalmers, *Bedford Park, Australia*
Mark W. Chapleau, *Iowa City, Iowa*
William R. Clarke, *Iowa City, Iowa*
Debra I. Diz, *Cleveland, Ohio*
Murray Epstein, *Miami, Florida*
Murray Esler, *Victoria, Australia*
Frank M. Faraci, *Iowa City, Iowa*
Alberto U. Ferrari, *Milan, Italy*
Loren J. Field, *Indianapolis, Indiana*
Gregory D. Fink, *East Lansing, Michigan*
John S. Floras, *Toronto, Canada*
David G. Gardner, *San Francisco, California*
Kenneth W. Gross, *Buffalo, New York*
John E. Hall, *Jackson, Mississippi*
John M. Hamlyn, *Baltimore, Maryland*
Willa Hsueh, *Los Angeles, California*
Michael H. Humphreys, *San Francisco, California*
Paul A. Insel, *La Jolla, California*
Harlan E. Ives, *San Francisco, California*
Bruce Jackson, *Victoria, Australia*
Edwin K. Jackson, *Pittsburgh, Pennsylvania*
Allan W. Jones, *Columbia, Missouri*
Norman M. Kaplan, *Dallas, Texas*
Lawrence P. Karniski, *Iowa City, Iowa*
Hollis D. Kleinert, *Abbott Park, Illinois*
Hermes A. Kontos, *Richmond, Virginia*

Ulla C. Kopp, *Iowa City, Iowa*
Theodore A. Kotchen, *Morgantown, West Virginia*
Theodore W. Kurtz, *San Francisco, California*
Friedrich C. Luft, *Erlangen, Federal Republic of Germany*
Thomas F. Lüscher, *Basel, Switzerland*
Kevin R. Lynch, *Charlottesville, Virginia*
Stephen MacMahon, *Auckland, New Zealand*
Christopher J. Mathias, *London, England*
Hisayuki Matsuo, *Osaka, Japan*
Oleg S. Medvedev, *Moscow, U.S.S.R.*
Gerald A. Meininger, *College Station, Texas*
Joel Menard, *Paris, France*
Virginia M. Miller, *Rochester, Minnesota*
Trefor O. Morgan, *Victoria, Australia*
Cynthia D. Morris, *Portland, Oregon*
Michael J. Mulvany, *Aarhus, Denmark*
Daniel T. O'Connor, *San Diego, California*
Teruo Omae, *Osaka, Japan*
Gary K. Owens, *Charlottesville, Virginia*
Gianfranco Parati, *Milan, Italy*
Marc A. Pfeffer, *Boston, Massachusetts*
Thomas G. Pickering, *New York, New York*
John L. Reid, *Glasgow, Scotland*
Christopher M. Rembold, *Charlottesville, Virginia*
Richard J. Roman, *Milwaukee, Wisconsin*
J. Carlos Romero, *Rochester, Minnesota*
Gabor M. Rubanyi, *Berlin, Federal Republic of Germany*
Jean Sassard, *Lyon, France*
Ernesto L. Schiffrin, *Montreal, Canada*
A. Guillermo Scicli, *Detroit, Michigan*
Subha Sen, *Cleveland, Ohio*
Rose Stamler, *Chicago, Illinois*
Akira Takeshita, *Fukuoka, Japan*
Michael Tuck, *Sepulveda, California*
Thomas Unger, *Heidelberg, Federal Republic of Germany*
Ronald G. Victor, *Dallas, Texas*
Alan B. Weder, *Ann Arbor, Michigan*
Ben G. Zimmerman, *Minneapolis, Minnesota*

Scientific Publishing Committee, American Heart Association

Alfred P. Fishman, *Chairman, Philadelphia, Pennsylvania*
Howard E. Morgan, *Vice Chairman, Danville, Pennsylvania*

Kathleen Case, *Philadelphia, Pennsylvania*
Dennis L. DeSilvey, *Rutland, Vermont*
Margaret Foti, *Philadelphia, Pennsylvania*
Valentin Fuster, *Boston, Massachusetts*

Mary Jane Jesse, *Cincinnati, Ohio*
Clyde E. Johnson, *Baton Rouge, Louisiana*
Kern Wildenthal, *Dallas, Texas*
Frank M. Yatsu, *Houston, Texas*