Cancer Epidemiology
Biomarkers & Prevention

An Official Journal of the American Association for Cancer Research ■ Cosponsored by the American Society of Preventive Oncology

Editor-in-Chief
Pelayo Correa

Associate Editors
W. Robert Bruce
Webster K. Cavenee
Joseph F. Fraumeni, Jr.
Ellen R. Gritz
Curtis C. Harris
Fred F. Kadlubar
Frederick P. Li
W. Thomas London
Thomas E. Moon
Abraham M. Y. Nomura
James A. Swenberg
Steven R. Tannenbaum
Alice S. Whittemore
Mimi C. Yu

Assistant Editor
Elizabeth T. H. Fontham

Editorial Advisory Board
David B. Abrams
Hans-Olov Adami
Bruce K. Armstrong
Helmut Bartsch
Valerie Beral
John S. Bertram
Joan R. Bloom
William J. Blot
John D. Boice, Jr.
George E. Bonney
Ricardo R. Brentani
Eva Buiatti
Neil E. Caporaso
Lan Bo Chen
Philip Cole
K. Michael Cummings
Susan J. Curry
Eduardo DeStefani
Paul F. Engstrom
Virginia L. Ernster
Yu Tang Gao
E. Robert Greenberg
Raymond S. Greenberg
Peter Greenwald
John D. Groopman
F. Peter Guengerich
Clark W. Heath, Jr.
Stephen S. Hecht
Kari Hemminki
Rolando Herrero
Elizabeth A. Holly
Lars-Erik Holm
Waan K. Hong
Robert N. Hoover
Geoffrey R. Howe
Barbara S. Hulka
Ronald H. Jensen
Mary Claire King
Leo J. Kinlen
Paul Kleihues
Alfred G. Knudson, Jr.
Laurence N. Kolonel
Lance A. Liotta
Martin Lipkin
Richard R. Love
Thomas Mack
Frank L. Meykens, Jr.
Christopher J. Michejda
Rodney F. Minchin
John D. Minna
Ruggero Montesano
John J. Mulvihill
Nubia Muñoz
Alfred I. Neugut
Gilbert S. Omenn

C. Tracy Orleans
David L. Page
Frederica Perera
Nicholas L. Petrakis
John P. Pierce
Miriam C. Poirier
Bruce A. J. Ponder
John D. Potter
Ross Prentice
Barbara Rimer
George C. Rouss
Jose Russo
Jonathan M. Samet
Rodolfo Saracci
Mark H. Schifman
David Schottenfeld
Paul A. Schulte
Roy E. Shore
Margaret R. Spitz
Louise C. Strong
Takashii Sugimura
G. Marie Swanson
Cesar Victor
Jürgen Wahrendorf
Nicholas Wald
Lee W. Wattenberg
I. Bernard Weinstein
John H. Weisburger
Noel S. Weiss
Ainsley Weston
Walter C. Willett
Rodger J. Winn
Gerald N. Wogan
Sandra R. Wolman
Ernst L. Wynder
Witold Zatonski
Harald zur Hausen

American Association for Cancer Research, Inc.
Executive Director and
Director of Publications
Margaret Foti

Publications Staff

Administrative Director
of Publications
Mary Anne Menemite

Manager, Editorial Services
Heide M. Pusstay

Assistant Director
of Publications
Lisa A. Chippendale
Pamela M. Grebowa
Michael J. Beveridge
Kathleen C. Assenmacher

Supervisor, Manuscript Processing
Margaret A. Pickels

Assistant Supervisor, Manuscript Processing
Thomas A. Griffith

Editorial Assistants
Valerie L. Taylor
Andrea Conrad
Katherine V. Pawlowski
Bethann Massarella
Charles W. Wells, Jr.

Administrative Staff

Director of Administration
Adam D. Bliestin

Controller
Joan D. Brokenshire

Coordinator, Financial Operations
George L. Moore

Meetings Coordinator
Jeffrey M. Ruben

Meeting Planner
Carole L. Kanoff

Public Information Coordinator
Jenny Anne Kost-Mart

Executive Assistant for Programs
Ruth F. Forsyth

Administrative Assistant
Robin E. Felder

Systems Specialist
Lydia I. Rodriguez

Staff Assistant
Lori L. Holmes

Secretary
Malika L. Wright

Editorial Secretary
Diana F. Cento

Office Clerk
James J. Waters

Data Entry Clerk
Robert A. Simmons II

Financial Clerk
Paul Perrault

Office of the Editor-in-Chief

Editorial Secretary
Cheryl C. Carter

Cancer Epidemiology, Biomarkers & Prevention is published eight times a year, one volume annually, by the American Association for Cancer Research, Inc. Except for members of the American Association for Cancer Research, all subscriptions are payable in advance to Cancer Epidemiology, Biomarkers & Prevention, P. O. Box 3000, Denville, NJ 07834 (Telephone: (800) 875-2997; FAX: (201) 627-5872), to which all business communications, remittances (in United States currency or its equivalent), and subscription orders should be sent. In Japan, send orders and inquiries to (sole agent): USACO Corporation, Tsusumi Bldg., 13-12, Shimibashi 1-chome, Minato-ku, Tokyo 105, Japan; Tel: (03) 502-6471. Nonmembers of the American Association for Cancer Research within the United States may subscribe to Volume 4 (1995) of Cancer Epidemiology, Biomarkers & Prevention at the rate of $85 (individual nonmembers) or $165 (institutional nonmembers), including postage. Institutional and individual nonmembers outside of the United States should add $20 to their respective rates to offset second-class postage costs. Canadian subscribers should add 7% GST. Changes of address notification should be sent 60 days in advance and include both old and new addresses. Member subscribers should send address changes to: Membership Services, American Association for Cancer Research, Inc., Public Ledger Bldg., Suite 816, 150 South Independence Mall West, Philadelphia, PA 19106-3483. Nonmember subscribers should send changes of address to: Cancer Epidemiology, Biomarkers & Prevention, P. O. Box 3000, Denville, NJ 07834. Copies of the journal which are undeliverable because of address changes will be destroyed. Accelerated mailing of journals to AACR members in Japan is supported by a generous grant from the Banyu Pharmaceutical Company.