

Cancer Epidemiology & Prevention

Biomarkers

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

American Association for Cancer Research, Inc.

**Executive Director and
Director of Publications**
Margaret Foti

Publications Staff

**Associate Director
of Publications**
Mary Anne Mennite

Manager, Editorial Services
Heide M. Pusztay

Staff Editors

Lisa A. Chippendale
Pamela M. Grebow
Michael J. Beveridge
Kathleen C. Assenmacher
Pamela R. Arnold
Laurie B. Baker

Senior Editorial Assistant
Theresa A. Griffith

Staff Assistant
Mary Ellen Purring

Editorial Assistants
Valerie L. Samuel
Andrea Conrad
Katherine V. Pawlowski
Bethann Massarella
Edward L. Dodd III

Administrative Staff

Director of Administration
Adam D. Blistein

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 Horst-Martz

Assistant to the Executive Director
Ruth E. Fortson

Membership Development Coordinator
Robin E. Felder

Administrative Assistant
Margaret A. Pickels

Systems Specialist
Lydia I. Rodriguez

Secretary
Malika L. Wright

Editorial Secretary
Diana F. Certo

Office Clerk
James J. Waters

Data Entry Clerk
Robert A. Simms II

Office of the Editor-in-Chief

Editorial Assistant
Cheryl C. Carter

Editor-in-Chief
Pelayo Correa

Associate Editors

W. Robert Bruce
Webster K. Cavenee
Joseph F. Fraumeni, Jr.
Ellen R. Gritz
Curtis C. Harris
Stephen S. Hecht
Barbara S. Hulka
Fred F. Kadlubar
Laurence N. Kolonel
Frederick P. Li
W. Thomas London
Thomas E. Moon
Abraham M. Y. Nomura
John D. Potter
James A. Swenberg
Steven R. Tannenbaum
Alice S. Whittemore
Chung S. Yang
Mimi C. Yu

Assistant Editor
Elizabeth T. H. Fontham

Editorial Advisory Board

Hans-Olov Adami
Bruce K. Armstrong
Helmut Bartsch
Valerie Beral
Leslie Bernstein
John S. Bertram
Joan R. Bloom
William J. Blot
John D. Boice, Jr.
George E. Bonney
Robert M. Bostick
Ricardo R. Brentani
Eva Buiatti
Neil E. Caporaso

Wong-Ho Chow
Philip Cole
K. Michael Cummings
Susan J. Curry
Janet Daling
Mary Daly
Eduardo DeStefani
Paul F. Engstrom
Virginia L. Ernster
Michael Fiore
David Forman
Eduardo L. Franco
Yu-Tang Gao
E. Robert Greenberg
Raymond S. Greenberg
Peter Greenwald
F. Peter Guengerich
Rodrigo Guerrero
Clark W. Heath, Jr.
Kathy J. Helzlsouer
Elizabeth A. Holly
Waun Ki Hong
Geoffrey R. Howe
Mary Claire King
Leo J. Kinlen
Paul Kleihues
Alfred G. Knudson, Jr.
Bernard Levin
Lance A. Liotta
Martin Lipkin
Richard R. Love
Thomas Mack
Frank L. Meyskens, Jr.
Christopher J. Michejda
Rodney F. Minchin
John D. Minna
Ruggero Montesano
John J. Mulvihill
Alvaro Muñoz
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
Ross Prentice
Barbara Rimer
Nathaniel Rothman
George C. Roush
Jose Russo
Jonathan M. Samet
Arthur Schatzkin
Mark H. Schiffman
David Schottenfeld
Paul A. Schulte
Peter Shields
Roy E. Shore
Margaret R. Spitz
Louise C. Strong
Takashi Sugimura
G. Marie Swanson
Eiichi Tahara
Bruce Trock
Sally Vernon
Michael J. Wargovich
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
Regina Ziegler

Cancer Epidemiology, Biomarkers & Prevention is published monthly, 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 or (201) 627-2427; 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, Tsutsumi Bldg., 13-12, Shimbashi 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 5 (1996) of *Cancer Epidemiology, Biomarkers & Prevention* at the rate of \$85 (individual nonmembers) or \$215 (institutional nonmembers), including postage. Institutional and individual nonmembers outside of the United States should add \$40 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: Member 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 all AACR journals to AACR members in Japan is fully supported by a generous grant from the Banyu Pharmaceutical Company, Tsukuba, Japan.