

Notice to Members of the American Association for Cancer Research

Officers for 1993-1994

President: Margaret L. Kripke, M.D. Anderson Cancer Center, Houston, TX 77030

President-Elect: Edward Bresnick, Dartmouth-Hitchcock Medical Center, Lebanon, NH 03756

Treasurer: Thomas J. King, Georgetown University Medical Center, Washington, DC 20007

Executive Director: Margaret Foti, AACR, Public Ledger Building, 620 Chestnut St., Suite 816, Philadelphia, PA 19106-3483

Annual Dues

The annual dues of active members of the American Association for Cancer Research are \$135.00 and they include a subscription to one AACR journal. The member rate for each additional journal is \$45.00. Corresponding members of the Association will be charged an appropriate fee to offset postage costs. Payment of dues and changes of address of members of the Association should be sent promptly to: Member Services, American Association for Cancer Research, Inc., Public Ledger Building, 620 Chestnut St., Suite 816, Philadelphia, PA 19106-3483. Telephone: (215) 440-9300.

Back Issues and Single Copy Sales of the Journal

Copies of back stock of the journal *Cancer Research* may be ordered from Waverly Press, Inc. As long as supplies permit, single copies of *Cancer Research* will be sold by this company at \$30.00 per copy for regular issues and \$30.00 per copy for Supplement issues which contain material from conferences on topics related to cancer. The annual *Proceedings of the American Association for Cancer Research* is available at \$35.00 per copy. Orders outside the U. S. and Canada add \$2.00/copy to offset postage costs.

Advertisements in *Cancer Research*

Advertisement insertion orders and copy must be received 60 days prior to the date of issue in which the advertisement is to be published. The journal is mailed approximately 7 days preceding the date of issue. Inquiries about advertising should be directed to: Elizabeth Mosko, Williams and Wilkins, 428 E. Preston Street, Baltimore, MD 21202-3993. Telephone: (410) 528-4005.

Historical Cover Themes

Readers are invited to submit themes (events, persons, institutions) for consideration for the illustrated covers of *Cancer Research*. Correspondence regarding suggested cover themes, or other matters regarding covers, should be addressed to the Cover Editor, AACR Publications Department.

Submission of Manuscripts

Manuscripts should be sent to the attention of: Dr. Carlo M. Croce, Editor-in-Chief, AACR Publications Department, American Association for Cancer Research, Public Ledger Building, 620 Chestnut St., Suite 816, Philadelphia, PA 19106-3483. Telephone: (215) 440-9300. If accepted, they will be listed under one of ten categories in the Table of Contents. Please specify in a covering letter which category applies to your submission: biochemistry and biophysics, carcinogenesis, clinical investigations; endocrinology, epidemiology; experimental therapeutics; immunology, molecular biology and genetics, tumor biology, and virology. (Final categorization in the Table of Contents is at the discretion of the Editor-in-Chief.) Consult the "Instructions for Authors" printed in the January 1 issue of the journal for other submission requirements. Reprints of the "Instructions" are available upon request.

Manuscript Processing Fee

Journal policy requires that a manuscript processing fee of \$75.00 be assessed for each paper to defray the expenses incurred in the editorial review process. Each manuscript submitted for publication should be accompanied by a check (drawn on a U.S. bank) or purchase order for \$75.00 in U. S. currency, payable to *Cancer Research* at the above address. Note: If an author resubmits a manuscript that our Editors previously found unacceptable for publication, it is journal policy to consider it a new submission, assign it a new manuscript number, and charge the author another \$75.00 handling fee to cover the cost of review.

Page Charges

Accepted manuscripts will be published with the understanding that the author(s) will pay a charge of \$65.00 per printed page. Under exceptional circumstances, when no source of grant or other support exists, the author(s) may apply to Dr. Carlo M. Croce, Editor-in-Chief, at the time of submission, for a waiver of the page charges. All such applications must be countersigned by an appropriate institutional official stating that no funds are available for the payment of page charges.

Copyright and Copyright Clearance Center

The Copyright Revision Act (PL 94-553), which became effective January 1, 1978, states that the copyright of a work is vested in the author from the moment of creation. Therefore, all authors who wish to publish in *Cancer Research* must formally transfer copyright to the proprietor of the journal, the American Association for Cancer Research, Inc. It is understood by this transfer that the authors relinquish all exclusive rights of copyright ownership, including the rights of reproduction, derivation, distribution, sale, and display.

Authors who prepared their articles as part of their official duties as employees of the U. S. Federal Government are not required to transfer copyright to the American Association for Cancer Research, Inc., since these articles are considered to be in the public domain. However, it is necessary for these authors to sign the appropriate section of the transfer form. In the case of articles supported by federal grants or contracts, copyright transfer to the American Association for Cancer Research, Inc., is required. The federal government may retain a nonexclusive license to publish or republish such material.

Copies of articles for which the American Association for Cancer Research, Inc. owns the copyright may be made for personal or internal use, provided that the copier pay the per-copy fee of \$2.00 through the Copyright Clearance Center, Inc. This Center is a nonprofit organization through which individuals and institutions may reimburse a copyright owner for photocopying journal articles beyond what is defined as "fair use" in Sections 107 and 108 of the Copyright Revision Act of 1978. Those who wish to photocopy *Cancer Research* articles may report the number of copies they have made, together with the fee code 0008-5472/93 \$02.00, to: Copyright Clearance Center, Inc., 27 Congress St., Salem, MA 01970. Remittances may be sent to the Center at the time of reporting or the Center will bill the user on a monthly basis. Deposit accounts and prepayment plans may also be arranged.

Between June 1978 and August 1983, a fee code appeared on the first page of all articles for which *Cancer Research* owned the copyright. For those issues, it is understood that any articles which did not carry this code are in the public domain.

Cancer Research is abstracted or indexed in *Biological Abstracts*, *Chemical Abstracts*, *Index Medicus*, *MEDLINE*, *Current Contents*, and *CancerLit*. This journal is printed on acid-free paper.

No responsibility is accepted by the Editors, by the American Association for Cancer Research, Inc., or by Waverly, Inc. for the opinions expressed by contributors or for the content of the advertisements.

Cancer Research (ISSN 0008-5472) is published twice a month for \$80 per year (for members of the American Association for Cancer Research) or \$390 per year (for nonmembers) by the American Association for Cancer Research, Inc. Second-class postage paid at Baltimore, MD and additional mailing offices. POSTMASTER: Send address changes to *Cancer Research*, c/o Waverly Press, Inc., 428 E. Preston Street, Baltimore, MD 21202-3993.

Copyright 1993 by the American Association for Cancer Research, Inc.

SECOND INTERNATIONAL SYMPOSIUM ON HORMONAL CARCINOGENESIS

IN ASSOCIATION WITH THE
CENTER FOR NUTRITIONAL TOXICOLOGY
THE KAROLINSKA INSTITUTE (NOVUM, SOUTH CAMPUS)

JULY 5-9, 1994

KAROLINSKA INSTITUTE
STOCKHOLM, SWEDEN



EXECUTIVE BOARD

JONATHAN J. LI

SARA ANTONIA LI

DIVISION OF ETIOLOGY &
PREVENTION OF HORMONAL CANCERS
UNIVERSITY OF KANSAS CANCER CENTER

SATYABRATA NANDI

CANCER RESEARCH LABORATORY
UNIVERSITY OF CALIFORNIA, BERKELEY

LEA I. SEKELY

DIVISION OF CANCER ETIOLOGY
NATIONAL CANCER INSTITUTE

SCIENTIFIC ADVISORY BOARD

Janet R. Daling - USA

Jack Gorski - USA

Jan-Ake Gustafsson - Sweden

Rolf Shulte-Hermann - Austria

Shutsung Liao - USA

George Lucier - USA

Manfred Metzler - Germany

James S. Norris - USA

Pentti Siiteri - USA

Naoki Terakawa - Japan

Reijo Vihko - Finland

James D. Yager - USA

Sole Travel Agent:

Bryan World Tours- Topeka,

Kansas (1-800-255-3507)

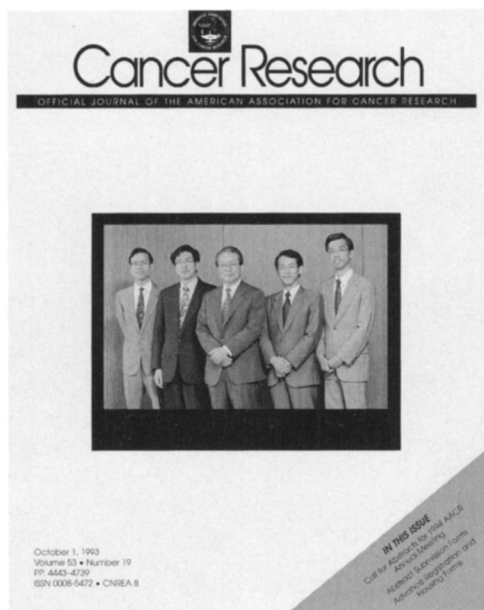
Delta Airlines

Applicants are encouraged to submit
abstracts for poster presentation.
Epidemiology/Cell&Molecular Biology

Information and Application Forms:
Dr. Jonathan J. Li, Chairman
Hormonal Carcinogenesis Symposium
University of Kansas Cancer Center
University of Kansas Medical Center
3901 Rainbow Blvd.
Kansas City, Kansas 66160-7312

Publishers: Springer-Verlag NY, NY
Deadline Registration: April 10, 1994

COVER LEGEND



Featured on this issue's cover of *Cancer Research* are Dr. Nobuyuki Ito and his colleagues at Nagoya City University, Japan, who have been active in the field of experimental carcinogenesis for many years. Concentrating first on the histogenetic aspects of and then defining the sequences of lesions involved in the pathogenesis of cancer of the liver, urinary bladder, stomach, kidney, and large intestine, this group has contributed a great deal of information on carcinogenic and modulating agents.

The work for which Dr. Ito is perhaps best known, however, is in the area of risk assessment, and especially for his research of the risk potential of food additives. Considerable attention has been devoted to antioxidants, which are widely used in foodstuffs, medicines, and cosmetics, because of their action in preventing the oxidation of lipids. Butylated hydroxyanisole (BHA) is a particularly important example of a useful food additive, generally considered safe, and lacking mutagenic or carcinogenic potential. In fact, BHA has been thought of as a good candidate for chemoprevention, because it inhibits the carcinogenic process in several animal models.

However, in 1982–1983, Dr. Ito and his coworkers published clear evidence of BHA carcinogenicity in the forestomach of F344 rats (Gann, 93: 332, 1982; J. Natl. Cancer Inst., 70: 343, 1983), which provoked great controversy concerning the interpretation of the effects of antioxidants on carcinogenesis. The most remarkable impact of their BHA findings on the world of risk assessment is reflected in the achievement of a consensus that regulatory actions should be decided after thorough examination of both the benefit and the risk of the chemicals. The fact that consideration of the relative benefits of the chemicals is now more vigorously advocated is directly related to the Ito group's documentation of BHA carcinogenicity as a function of dosage and its intrinsic mechanisms of action.

Subsequently, this collective has concentrated its efforts on the modifying potential of numerous other antioxidants, both synthetic and naturally occurring. Thus, in many instances, they have found that beneficial and disadvantageous actions can be exerted simultaneously in different tissues. Based on the experience of BHA, Ito and his colleagues have also extended their studies of carcinogenicity to other antioxidants, such as catechol, caffeic acid, sesamol, and hydroquinone. One finding of particular note was that catechol, a natural antioxidant used widely in industry, induces glandular stomach adenocarcinomas in F344 rats (Jpn. J. Cancer Res., 81: 207, 1990; Adv. Cancer Res., 53: 247, 1989).

With considerable expertise in the carcinogenic process in several organ systems, Dr. Ito and his associates are now primarily occupied with the problem of risk assessment of the large number of man-made agents being introduced into the environment. They have, therefore, focused on the development of a reliable medium-term bioassay for detecting carcinogens and modifiers. Named the "liver medium-term bioassay for carcinogens," the resultant protocol has been established as particularly useful for the initial safety assessment of environmental carcinogens [Carcinogenesis (Lond.) 9: 387, 1988; CRC Crit. Rev. Toxicol., 19: 385, 1989; Food Chem. Toxicol., 30: 979, 1992]. Recently, they have also successfully developed a new "multiorgan carcinogenesis bioassay" system, which can detect carcinogens or modifiers in various organs within the same animals [Carcinogenesis (Lond.) 13: 1513, 1992; Cancer Res., 53: 32, 1993]. The findings that have been generated to date bear a good relationship to known results from long-term, conventional carcinogenesis assays.

Acting as a team, but with each member concentrating on different organs, they are continuing their efforts to develop and improve animal models for such important human neoplasms as prostate, urinary bladder, kidney, stomach, and intestine, as well as liver carcinomas. The aim is to provide reliable aids with which to investigate the mechanisms underlying human neoplasia and approaches to chemoprevention in each organ. These models have already contributed to research into human cancer control. The prostate cancer model using 3,2'-dimethyl-4-aminobiphenyl, established by Katayama *et al.* (J. Natl. Cancer Inst., 68: 867, 1982) and perfected by Dr. Ito's group, is, for example, now one of the most appropriate systems for studying human prostate cancer (Cancer Res., 51: 1264, 1991).

Pictured are Nagoya City University staff members, from left to right, Drs. Katsumi Imaida, Tomoyuki Shirai, Nobuyuki Ito, Masao Hirose, and Ryohei Hasegawa. We are indebted to Dr. Takashi Sugimura for background material and illustrations.

Sidney Weinhouse