CANCER RESEARCH

MICHAEL B. SHIMKIN, Editor

EDWARD KRAVITZ, Managing Editor

Associate Editors

GEORGE E. BOXER EMMANUEL FARBER CHARLES J. KENSLER SAUL KIT JOSEPH LEITER

ROBERT LOVE

DAVID PRESSMAN FRANK M. SCHABEL, JR. MARVIN A. SCHNEIDERMAN JESSE L. STEINFELD LEE W. WATTENBERG SIDNEY WEINHOUSE RICHARD J. WINZLER

Editorial Advisory Board

CHARLES T. ASHWORTH RENATO BASERGA NATHANIEL I. BERLIN OSCAR BODANSKY MICHAEL J. BRENNAN IRWIN D. J. BROSS KELLY H. CLIFTON ALBERT J. DALTON

EUGENE D. DAY KENNETH B. DEOME LEON DMOCHOWSKI HANS L. FALK JACOB FURTH HARRY V. GELBOIN ALFRED GELLHORN

R. E. HANDSCHUMACHER T. C. Hsu ROBERT B. HURLBERT JOSEPH L. MELNICK JOHN B. MOLONEY CHARLES A. NICHOL JAMES M. PRICE SUMNER WOOD, JR.

CANCER RESEARCH is sponsored by The American Association for Cancer Research, Inc.; The Anna Fuller Fund; The Jane Coffin Childs Memorial Fund for Medical Research; The Elsa U. Pardee Foundation; The American Cancer Society; the National Cancer Institute, Public Health Service; and the Damon Runyon Memorial Fund for Cancer Research, Inc.

NOTICE TO MEMBERS OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH Officers for 1965-66

President:

Joseph H. Burchenal, Sloan-Kettering Institute for Cancer Research, New York, N. Y. 10021

Vice-President:

Henry S. Kaplan, Stanford Medical Center, Palo Alto, Calif.

Secretary-Treasurer: Hugh J. Creech, Institute for Cancer Research, Fox Chase, Philadelphia, Pa., 19111

The annual dues of active members of the American Association for Cancer Research include a subscription to the journal CANCER RESEARCH. Payment of dues and changes of address of members of the Association should be sent promptly to Dr. Creech.

NOTICE TO SUBSCRIBERS

CANCER RESEARCH is published monthly (except March) for Cancer Research, Inc., by The Williams & Wilkins Co. Subscriptions are payable in advance. Subscriptions include Proceedings of American Association for Cancer Research, published in March each year. Subscription rates in U.S.A. and possessions: 1 year, \$15.00; 2 years, \$30.00; 3 years, \$45.00. Canada: 1 year, \$15.50; 2 years, \$31.00; 3 years, \$46.50. All other countries and Pan American Postal Union: 1 year, \$16.00; 2 years, \$32.00; 3 years, \$48.00. Single copies: \$2.50. Subscriptions will be entered on a volume basis only.

Business communications, remittances (in United States currency or its equivalent), and subscriptions should be addressed to The Williams & Wilkins Co., 428 E. Preston St., Baltimore, Md. 21202. All other communications should be addressed to: Dr. Michael B. Shimkin, Cancer Research Editorial Office, Fels Research Institute, Temple University Medical School, Philadelphia, Pa., 10140.

Claims for missing numbers should be made within the month following the regular month of publication. The publishers expect to supply missing numbers free only when losses have been sustained in transit and when the reserve stock will permit. Changes of address should be reported to the publisher and local postmaster immediately. All changes of address should provide both the old and the new address. Allow six weeks for the change.

No responsibility is accepted by the Editors, by Cancer Research, Inc., or by the publishers of CANCER RESEARCH for opinions expressed by contributors.

Second-class postage paid at Baltimore, Maryland.

Copyright 1965 by Cancer Research, Inc.

Cancer Research

The Official Organ of the AMERICAN ASSOCIATION FOR CANCER RESEARCH, INC.

Volume 25 • January-December 1965

MICHAEL B. SHIMKIN, Editor

Edward Kravitz, Managing Editor

Associate Editors

GEORGE E. BOXER

EMMANUEL FARBER

CHARLES J. KENSLER

SAUL KIT

Joseph Leiter

ROBERT LOVE

DAVID PRESSMAN

FRANK M. SCHABEL, JR.

MARVIN A. SCHNEIDERMAN

JESSE L. STEINFELD

LEE W. WATTENBERG

SIDNEY WEINHOUSE

RICHARD J. WINZLER

Editorial Advisory Board

CHARLES T. ASHWORTH

RENATO BASERGA

NATHANIEL I. BERLIN

OSCAR BODANSKY

MICHAEL J. BRENNAN

IRWIN D. J. BROSS

KELLY H. CLIFTON

ALBERT J. DALTON

EUGENE D. DAY
KENNETH B. DEOME
LEON DMOCHOWSKI
HANS L. FALK
JACOB FURTH

HARRY V. GELBOIN

ALFRED GELLHORN

R. E. HANDSCHUMACHER

T. C. Hsu

ROBERT B. HURLBERT
JOSEPH L. MELNICK
JOHN B. MOLONEY
CHARLES A. NICHOL
JAMES M. PRICE
SUMNER WOOD, JR.

THE OFFICIAL ORGAN OF THE

AMERICAN ASSOCIATION FOR CANCER RESEARCH, INC.

AMERICAN ASSOCIATION FOR CANCER RESEARCH, INC.

OFFICERS • April, 1965-April, 1966

President
JOSEPH H. BURCHENAL

Vice-President HENRY S. KAPLAN

Secretary-Treasurer Hugh J. Creech

BOARD OF DIRECTORS

Term Expiring April, 1966

Joseph H. Burchenal Harris Busch HILARY KOPROWSKI R. WAYNE RUNDLES

Term Expiring April, 1967

HARRY EAGLE EMMANUEL FARBER

HENRY S. KAPLAN SARAH E. STEWART

Term Expiring April, 1968

CHARLES HEIDELBERGER LLOYD W. LAW

JAMES A. MILLER C. GORDON ZUBROD

Note to members of the Association—Changes of address should be sent promptly to Dr. Hugh J. Creech, Institute for Cancer Research, Fox Chase, Philadelphia, Pennsylvania 19111. This will enable the Secretary to maintain an up-to-date file and will insure receipt of the journal by active members of the Association.

Copyright 1965 by Cancer Research, Inc.