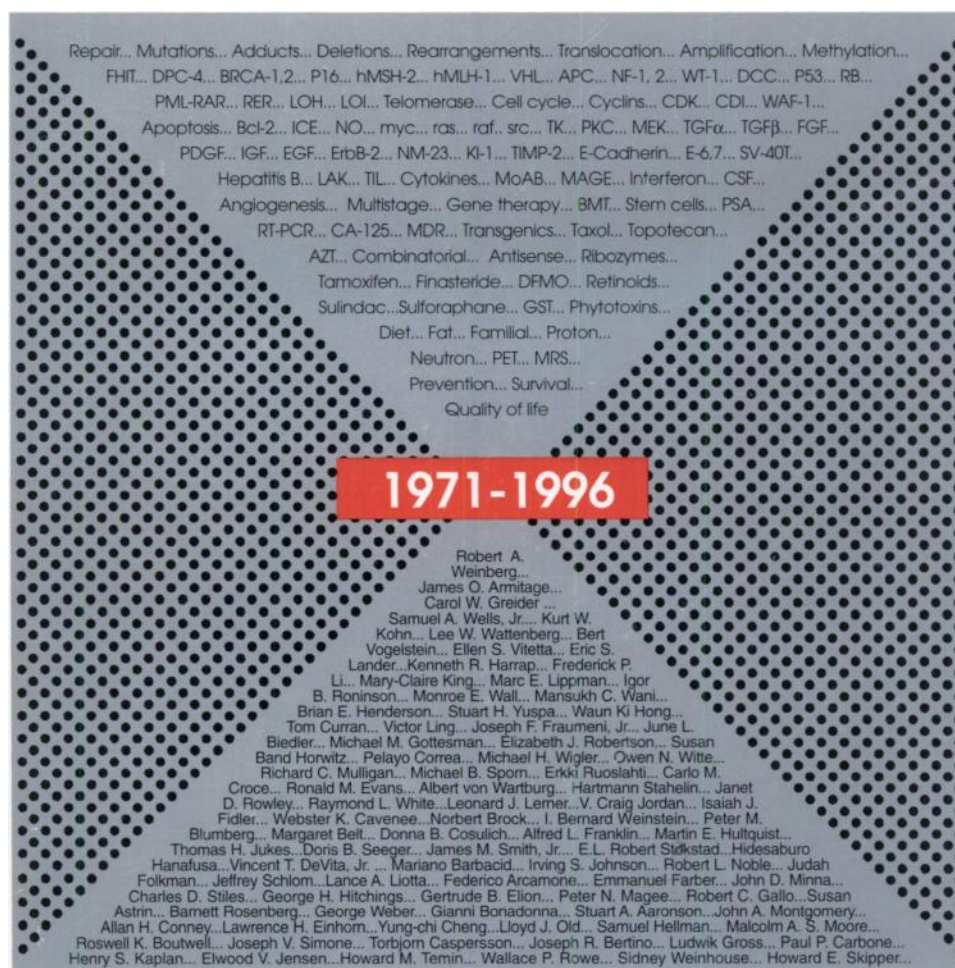




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PREDICTIVE ONCOLOGY & THERAPY

IMPACT OF CANCER BIOTECHNOLOGY

DIAGNOSTIC & PROGNOSTIC INDICATORS

Nice, France ♦ October 26 - 28, 1996

3rd International Symposium ♦ Plenary Program ♦ <http://www.ummed.edu:8000/dept/cancerprev>

► Biology/Genetics

DNA repair deficiencies

AR SARASIN, PhD
CNRS Cancer Research, Villejuif

DNA adduct levels

SA KYRTOPOULOS, MD
National Hellenic Fdn, Athens

Telomerase prognosis

JS SHAY, PhD
Southwestern Med Ctr, Dallas

Glycobiology of metastasis

K OLDEN, PhD
NIEHS, Res Triangle Park, NC

Growth factor receptors

P COMOGLIO, MD, PhD
Univ Turin, Turin, Italy

Signal transduction

IB WEINSTEIN, MD
Columbia Univ Cancer Ctr, NY

Chronic oxidative stress

LA LOEB, MD PhD
Univ Washington, Seattle

Genomic instability

CR BOLAND, MD
Univ California, San Diego

Cell transformation by oncogenic retroviruses

L CHIECO BIANCHI, MD
Univ Padua, Padua, Italy

Cell cycle control & differentiation

P HINDS, MD
Harvard Med School, Boston

Oncogene & tumor suppressor gene mutations

M GREENBLATT, MD
Univ Vermont Med College, Burlington

Transgenic mouse models for tumor suppressor genes

MM MATZUK, MD PhD
Baylor College Med, Houston

► Risk Assessment

Multiple gene mutations

R MONIER, PhD
Gustave Roussy, Villejuif

Molecular genetics

L STRONG, MD
UTX MD Anderson Cancer Ctr, Houston

Carcinogenic susceptibility

S PARODI, MD PhD
National Cancer Research Ctr, Genoa

Precursor lesions

E DMITROVSKY, MD
Memorial Sloan-Kettering Ctr, NY

Biomarkers of carcinogen exposure

R SANTELLA, PhD
Columbia Univ Cancer Ctr, NY

Management: patients at risk

J HORTON, MBCHB
Moffitt Cancer Ctr, Tampa

► Predictive Markers

Systemic markers

K FRENKEL, PhD
NYU, NY

Site-specific markers

WR BRUCE, MD PhD
Ontario Cancer Inst, Toronto

Preneoplastic p53 expression

G SELIVANOVA, PhD
Karolinska Inst, Stockholm

Prognostic implications of heat shock proteins

S FUQUA, PhD
UTX, San Antonio

DNA adducts of carcinogen exposure

C WILD, PhD
IARC, Lyon

Prognostic oncogene expression

Z RONAI, PhD
American Health Fdn, Valhalla, NY

► Novel Therapies

Angiogenesis inhibitors

RS KERBEL, PhD
Sunnybrook HSC, Toronto

Molecular screening modalities

J MANDEL, PhD
Univ Minnesota, Minneapolis

Genetically engineered vaccines

C LOCHT, MD
Institut Pasteur, Lille

Reversal of drug resistance

P WIERNIK, MD
A Einstein Med Ctr, Bronx, NY

Antisense therapy

AM GEWIRTZ, MD
Univ Pennsylvania, Philadelphia

Bridging research to clinic

RA GOOD, MD PhD
Univ S Florida, St Petersburg

Molecular genetics lymphoid neoplasms

U JAEGER, MD
Allgemeines Krankenhaus, Vienna

Choice of gene therapy vectors

R CRISTIANO, MD
UTX MD Anderson Cancer Ctr, Houston

Stem cell delivery systems

P QUESENBERY, MD
Univ Massachusetts, Worcester

Retroviral gene therapy

AB DEISSEROTH, MD PhD
Yale Cancer Ctr, New Haven

Adenoviral gene transfer

M PERRICAUDET, PhD
Gustave Roussy, Villejuif

Clinical use of growth factors

J GABRILOVE, MD
Memorial Sloan Kettering Ctr, NY

Early detection & therapy

V KOROLTCHOUK, MD
WHO, Geneva

DEADLINE FOR ABSTRACTS ~ JUNE 28, 1996

Details from: HE Nieburgs MD • Fax: 508-856-1824 • Tel: 212-534-4991 • e-mail: CANCER@BANYAN.ummed.edu

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CARCINOGENESIS FROM ENVIRONMENTAL POLLUTION: ASSESSMENT OF HUMAN RISK AND STRATEGIES FOR PREVENTION

Joint Meeting Organized by the
American Association for Cancer Research (AACR)
and the **International Agency for Research on Cancer (IARC)**

With the Collaboration of the Hungarian Cancer Society



October 6-9, 1996
Hotel Gellért
Budapest, Hungary



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Kenneth Olden / Research Triangle Park, USA
Alán Pintér / Budapest, Hungary
Manfred F. Rajewsky / Essen, Germany
David Zaridze / Moscow, Russia

SCIENTIFIC PROGRAM

Keynote Address

Curtis C. Harris / Bethesda, USA

Cancer Incidence and Etiology

Witold A. Zatoński / Warsaw, Poland
Frederica Perera / New York, USA
J. Carl Barrett / Research Triangle Park, USA
Helmut Bartsch / Heidelberg, Germany

Air, Water, Food, and Soil Contamination

Radim J. Šrám / Prague, Czech Republic
Joellen Lewtas / Research Triangle Park, USA
Wiesław Jedrychowski / Cracow, Poland
Olav Axelson / Linköping, Sweden

Ambient, Environmental, and Occupation Exposure and Cancer Risk

Mieczysław R. Chorąży / Gliwice, Poland
Alán Pintér / Budapest, Hungary
Kimmo Peltonen / Helsinki, Finland
Monica C. Hollstein / Heidelberg, Germany
Kari Hemminki / Stockholm, Sweden

Tobacco

Ivan Plesko / Bratislava, Slovakia
Barbara S. Hulka / Chapel Hill, USA
Paolo L. Vineis / Turin, Italy
Stephen S. Hecht / Valhalla, USA
Krystyna Frenkel / New York, USA
Bernadette Schoket / Budapest, Hungary

Strategies for Prevention

Waun Ki Hong / Houston, USA
I. Bernard Weinstein / New York, USA
Anna Tompa / Budapest, Hungary

Roundtable Discussion

Paul Kleihues / Lyon, France
Hans-Olov Adami / Uppsala, Sweden
Paolo Boffetta / Lyon, France
Edward Bresnick / Worcester, USA
Andrew E. Czeizel / Budapest, Hungary
Terri Damstra / Research Triangle Park, USA
Edith Olah / Budapest, Hungary
Kenneth Olden / Research Triangle Park, USA
Manfred F. Rajewsky / Essen, Germany
William A. Suk / Research Triangle Park, USA
David Zaridze / Moscow, Russia

*Applicants are encouraged to submit abstracts
for poster presentation.*

Information and Application Forms

American Association for Cancer Research
Public Ledger Building, Suite 816
150 S. Independence Mall West
Philadelphia, PA 19106-3483
(215) 440-9300 (215) 440-9313 (FAX)
Email: aacr@aol.com

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Texas Tech University Health Sciences Center
Oncology Division
Department of Internal Medicine
3601 4th Street
Lubbock, Texas 79430

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MAYO CLINIC DIVISION OF MEDICAL ONCOLOGY AND MAYO CANCER CENTER

Clinical Research Positions

The Division of Medical Oncology and the NCI-designated Mayo Cancer Center in Rochester, Minnesota, invite applications for two clinical research positions. Clinical investigators with established cancer research programs are encouraged to apply. The Mayo Clinic provides an outstanding environment for investigators interested in conducting translational research with the goal of improving prevention, diagnosis, and treatment of cancer. Interested applicants should submit a statement of research interests, curriculum vitae, bibliography, and list of references to:

James N. Ingle, M.D.
Associate Director for Clinical Research
Mayo Cancer Center
Mayo Clinic
200 First Street, SW
Rochester, MN 55905



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THE SURGERY BRANCH, NATIONAL CANCER INSTITUTE, NIH, IS SEEKING PATIENTS FOR ONGOING CLINICAL TREATMENT PROGRAMS.

PATIENTS WITH THE FOLLOWING MALIGNANCIES ARE BEING TREATED UNDER COMBINED MODALITY OR INNOVATIVE IMMUNOTHERAPY PROGRAMS:

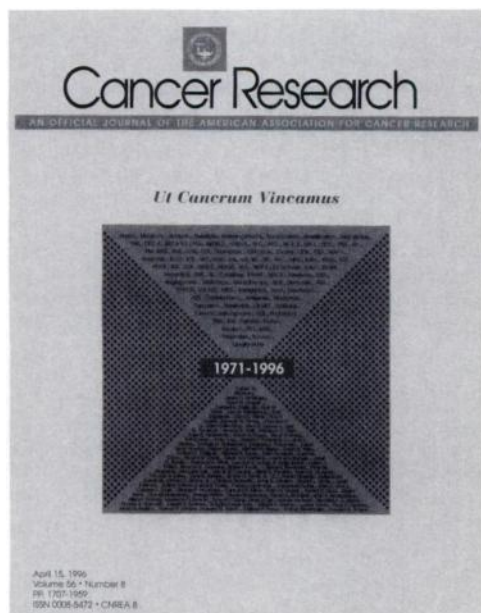
- METASTATIC MELANOMA AND KIDNEY CANCER •
- STAGE II OR LOCALLY ADVANCED BREAST CANCER •
- METASTATIC COLORECTAL CANCER TO THE LIVER •
- LOCOREGIONAL GASTRIC OR PANCREATIC CANCER •
- MESOTHELIOMA, PULMONARY METASTASES, STAGE IIIA, B LUNG CANCER
OR ESOPHAGEAL CANCER •
- LOCALIZED SOFT TISSUE SARCOMAS •
- PERITONEAL CARCINOMATOSIS •



CARE FOR ALL PATIENTS IS PROVIDED AT THE CLINICAL CENTER, NIH, BETHESDA, MARYLAND.

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Marking the 25th Anniversary of the National Cancer Act: A New Call to Arms

In 1971 the U.S. Government declared war on cancer, but the term has been a great misnomer and has led to false expectations by everyone. Visualizing the fight against cancer as a war is an appropriate analogy, but the battle with this enemy is too often left to defenseless patients, and their casualties are unacceptable to all of us. To win this war, we desperately need new, modern weapons that have to be designed, developed, and tested in the field.

Unfortunately, a real war against cancer has never been mounted by the federal government. To date, available federal funds have supported only a small, intense skirmish by a limited number of investigators. The number of invading cancer cells and their effectiveness are difficult for one to realize. Each year, these marauding cells kill almost ten times as many U.S. citizens, more than 550,000, as were killed in the entire Vietnam conflict (58,150) that covered a period of nine years (1964–1973). From 1970 to 1995, roughly the same period as the National Cancer Act, our national defense budget increased 208% and rose from \$81.7 billion to \$252.2 billion. In part, this defense budget is considered necessary by policymakers to prevent us from dying from war, yet it is over 100 times the amount of the budget of the National Cancer Institute (NCI), which supports research to protect U.S. citizens and others around the world from a far more probable and menacing killer.

Stealth cancer cells will attack and ultimately kill 1 out of every 4 Americans who are alive today. The two fields of dots in the cover design connote the nearly 1,550 deaths from cancer per day in the U.S. This death rate is steadily increasing every year. However, during the past 10 years, U.S. Government funding for cancer research, when adjusted for inflation, has increased only 1%. Total federal research funding per year for the two leading cancers diagnosed in the U.S. male (prostate and lung) would not represent enough money to purchase three new fighter planes. Obviously, this does not reflect a Congressional commitment to a "war against cancer."

Somehow in politics, taxes, and budgets, the Nation seems to have lost a clear perspective on the important priorities. Maybe the advice of the news commentator Sam Donaldson was correct when he suggested to us at a recent summit in Washington on the cancer problem—"Never try to get Congress to see the light; rather, make them feel the heat." To those of us who are busy with the battle, this seems to be a very sad commentary. Already we are called away from the field to write extensive grant applications proposing our ideas, with less than a 1 in 5 chance of their being armed by funding. Our time is already limited, so how can we now find even more time to educate our own legislators and fellow voters about the value of cancer research? Equally alarming is a 1994 report by the National Research Council that the number of grant applications from young scientists under the age of 37 declined 54% between 1985 and 1993. We are losing over half of our new young warriors just when new weaknesses are being revealed in our enemy—the cancer cell. Why are we running training camps if the trainees will not be permitted to join the campaign? Furthermore, where will our replacements come from in the future? Everyone has to wake up and shake our leaders.

Congress and the public often ask us, "When are you going to cure cancer?" Thank goodness we have already cured some types of cancers, especially those that strike our young people. From 1973 to 1990, the death rate from cancer from

birth to 19 years of age decreased 38.4%; from 20 to 44 years, 20.7%; and from 45 to 54 years, 10.5%. This is terrific news for young people who earlier would have had a fatal diagnosis if told they had leukemia, Hodgkin's disease, or testicular cancer. Today they can survive these previously devastating tumors thanks to the hard-won victories achieved primarily through federally supported medical research. A 17-year government investment of a total of \$56 million in testicular cancer research yielded a 91% cure rate, with an increased life expectancy of 40 years and a savings of \$166 million annually. This was a great benefit to the patients and a big bargain for the taxpayers. This type of victory is our proof of principle, but we have not yet won on the major fronts. Most of the cancers in America occur in the lung, colon, breast, and prostate, and the incidence, mortality, and cost of these cancers are steadily increasing. Unless these cellular foes are halted by progress in research, they will continue to drive the suffering, death, and cost from cancer to an unprecedented level. In fact, by the turn of the century, cancer is expected to be the Nation's #1 killer.

The research community cannot afford to be silent any longer. We must all be active leaders; let us draw up new battle plans. These must include: political campaigns, scientific campaigns, financial campaigns, industrial campaigns, media campaigns, whatever it takes. Let us focus on funding, which is always so critical to any campaign. The fiscal realities must be considered in these times of spending constraints. Today, cancer health care costs the American people \$104 billion per year, a level that is over 50 times the NCI budget. Put another way, the NCI budget to help reduce this disease is equivalent to only 2% of this annual cancer health care cost. Any discovery that impacts cancer quickly returns the investment, and this does not even take into consideration reducing the potential for human suffering and personal loss due to cancer.

How can we restore our spirits? Even with the limited number of investigators and inadequate support, cancer researchers can take pride in the large number of new and exciting discoveries that they have generated since the passage of the National Cancer Act of 1971. Among those contributing to the many advances in the field have been the distinguished recipients of the AACR awards. The names of the award winners from 1971–1996 appear on the front cover below a list of some of the major discoveries and areas of activity in the field over the past 25 years. Each day these and other discoveries are illuminating our battlefield and are placing the cancer targets into sharper focus.

Are we short of questions that, if studied, might yield surprising new ideas and insights? Absolutely not. We all have favorite research questions we wish some young scientist would pursue and solve. A few of my own favorites are: (a.) Why is prostate cancer so common in the human and dog and yet totally absent from all other animal species such as cats, bulls, and horses? What is the molecular mechanism that protects these species? (b.) Why are some organs in the human totally resistant to developing cancers? For example, the seminal vesicles, epididymis, and bulbourethral gland are devoid of tumors, even though they share the same genes. (c.) Why does an inherited cancer mutation remain silent in some cells but highly active in others? How does the same gene yield different proteins in different cells? (d.) What sets and determines the exquisite balance in the rates of cell gain and cell loss in our normal organs? Other investigators have even better and more timely questions in their own areas.

Today, there are a tremendous number of good ideas at both the clinical and basic levels that are not being studied. We urgently need a balanced attack of a much higher magnitude than is now available. The last five types of cancer cured came from both great clinical and great basic research; neither area of research has greater importance, nor should it have when it comes to funding.

What is on the immediate horizon? There are hundreds of good leads that cannot be followed today because of limited funds. The chances for funding keep getting worse. The overall percentage of approved but unfunded investigator-initiated grants steadily increased from 40% in the 1970s to 85% in 1995. We are hopeful that it will come down to only 75% in 1996. If the President's 1997 budget request for the NCI is approved, still about 3 out of 4 of all NCI research grants that have been approved following scientific peer review will lie silent and inactive without funding. This continues to represent lost opportunities in our important mission. To turn this trend around we ourselves must act first and then recruit help from a variety of sectors, from leaders in the community, and from the public at large.

As President Nixon stated when he signed the National Cancer Act almost 25 years ago on December 23, 1971, it is essential to have "... a total commitment of Congress and the President ... to provide the funds ... for the conquest of cancer." This legislation was a contract with America that every patient, researcher, and potential victim is waiting to celebrate one day with a great sigh of relief. Cancer must and will be conquered. Whether it be through prevention, control, or cure, it will be accomplished by good, well-funded research. It is past the time to declare the real World War II on cancer. Just reading this won't make a hill of beans difference if we don't all get up and do something about it, both as individuals and as a society. Godspeed in your efforts.

Donald S. Coffey
President-Elect, 1996–97
American Association for
Cancer Research