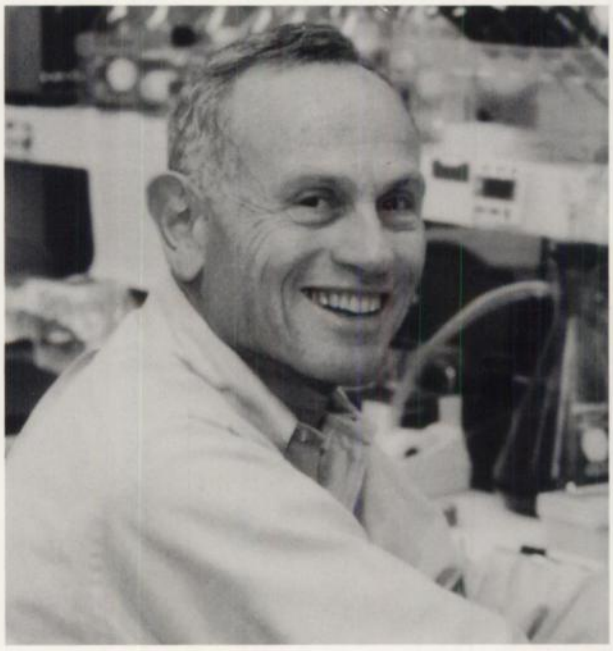
Cancer Research

AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH



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PREDICTIVE ONCOLOGY & THERAPY

IMPACT of BIOTECHNOLOGY on CANCER

PROGNOSIS ◆ DETECTION ◆ PREVENTION

Nice, France ◆ 1998 ◆ October 24-27

4th International Symposium ◆ Plenary Program

MOLECULAR BIOLOGY

Molecular study of an environmental carcinogen
E Bresnick PhD UMass

Tumor suppressor genes & cell cycle
D Haber MD Mass General

Telomerase-diagnostic application
H Tahara MD Univ Hiroshima

Regulation of p53 stability
Z Ronai PhD Mt Sinai NY

Stromal-epithelial interactions
LWK Chung PhD Univ Virginia

Genetic predisposition & therapy
G Thomas MD St Antoine Paris

MOLECULAR MECHANISMS

Tumor promotion pathways & inhibitors
H Fujiki MD Saitama Cancer Inst

Genetic–epigenetic multistage oncogenesis
H Yamasaki PhD IARC Lyon

PAP1 modulates BRCA1 function
FJ Raushcer PhD Wistar, Phila

Disorders in cell cycle control proteins
IB Weinstein MD Columbia Presb

p53-induced apoptosis
TD Tlsty MD UC San Francisco

Matrix metalloproteinases & inhibitors
P Basset MD PhD Strassbourg

COFACTORIAL INFLUENCES

Environmental & genotoxic exposures
H Vainio MD IARC Lyon

Viral effects
G de Thé MD Pasteur Paris

Endocrine regulation of differentiation
M Gottardis MD Ligand

Nutrition-cancer relationship
HO Adami MD Karolinska Inst

Helicobacter pylori & stomach cancer
D Palli MD Careggi Fierenze

AIDS-assoc. tumors
H Ioachim MD Lenox Hill NY

MULTIFACTORIAL DIAGNOSIS

Genetic analysis on electronic microchips
M Nerenberg PhD Nanogen

Genetic susceptibility & DNA adducts
H Bartsch PhD DKZ Heidelberg

DNA methylation–chromosome aberr.
JM Trent PhD NCHGR Bethesda

Microsatellite analysis for early detection
L Mao MD UTX MDA

Prostate–precursor lesions & prognosis
DG Bostwick MD Mayo Clinic

Predictive assessment of multidrug resistance
P Sonneveld MD Rotterdam

MOLECULAR THERAPY

Gene therapy progress
WH Fridman MD Curie Paris

Advances in gene therapy vectors
B Huber MD Glaxo/Wellcome

Telomerase inhibition

Topoisomerase inhibition
A Harstrick MD Essen

Pancreas–farnesyl transferase inhibition
JB Gibbs Merck

Novel differentiation agents
S Waxman MD Mt Sinai NY

RISK ASSESSMENT

p53 in *normal* epithelium adjacent to h/n ca.
FX Bosch MD Univ Heidelberg

Telomerase in *normal* mucosa adjacent to ca.
NW Kim MD Geron

***k-ras* mutations in *normal* tissue: lung cancer**
T Minamoto MD Univ Kanazawa

DNA adducts in *normal* tissue adj. to breast ca.
D Li MD UTX MDA

DNA in *normal* tissue adjacent to colon ca.
P Beaune MD Necker Paris

LOH in *normal* tissue adj. to breast cancer
SH Dairkee, PhD San Francisco

PREDICTIVE MARKERS

Genetics of glioma progression
P Kleihues MD IARC Lyon

Cell cycle inhibitor protein p27
JM Slingerland MD Toronto

Prognostic oncogene expression
EMJJ Berns MD Rotterdam

Tumor angiogenesis & inhibition

Circadian rhythm chemotherapy
WJM Hrushesky MD Albany Med

Biotech. in cancer epidemiology studies
R Hayes MD NCI Bethesda

NOVEL IMMUNOTHERAPY

Novel human intra tumoral immunother.
T Tursz ScD MD IGR Villejuif

Cytotoxic T lympho cytes and IL-2
N Restifo MD NCI Bethesda

Dendritic cells in immunotherapy
H Bohlen MD Cologne

Breast–target-recognizing TIL
F Marincola MD NCI Bethesda

Clinical use of antisense strategies
AM Gewirtz MD Univ Pennsylvania

Xenotherapy
M Soulilou MD Univ Rennes

DEADLINE for ABSTRACTS - JULY 10, 1998

http://www.cancerprev.org

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AACR SPECIAL CONFERENCE IN CANCER RESEARCH

Cellular Targets of Viral Carcinogenesis

September 24-28, 1998
Marriott's Laguna Cliffs Resort
Dana Point, California

CONFERENCE CHAIRPERSONS

Thea D. Tlsty / San Francisco, CA
Eileen P. White / Piscataway, NJ
Don Ganem / San Francisco, CA
Carol Prives / New York, NY

TENTATIVE SCIENTIFIC PROGRAM

Cell Cycle
Jean Y. J. Wang / La Jolla, CA
William Kaelin / Boston, MA
Karen H. Vousden / Frederick, MD
Thomas E. Shenk / Princeton, NJ

Signal Transduction
Daniel C. DiMaio / New Haven, CT
Elliott Kieff / Boston, MA

Apoptosis
Eileen P. White / Piscataway, NJ
Anne E. Griep / Madison, WI
Philip E. Branton / Montreal, Canada

Genomic Instability
Carol Prives / New York, NY
Thea D. Tlsty / San Francisco, CA
Michael R. Botchan / Berkeley, CA

Evasion of Host Cell Defenses
Grant McFadden / London, Canada
Marshall S. Horwitz / Bronx, NY
Robert H. Silverman / Cleveland, OH

Cell Proliferation
Karl Munger / Boston, MA
Elizabeth Moran / Philadelphia, PA
Don Ganem / San Francisco, CA

Animal Models
Francis V. Chisari / La Jolla, CA
Lisa M. Coussens / San Francisco, CA
Douglas Hanahan / San Francisco, CA

Therapeutic Opportunities
Pramod K. Srivastava / Farmington, CT
David H. Kirn / Richmond, CA

Additional Speakers to be Announced

Applicants are encouraged to submit abstracts for poster presentation. Selected proffered papers will also be scheduled for oral presentations.

Application deadline: July 13, 1998

Information and Application Forms

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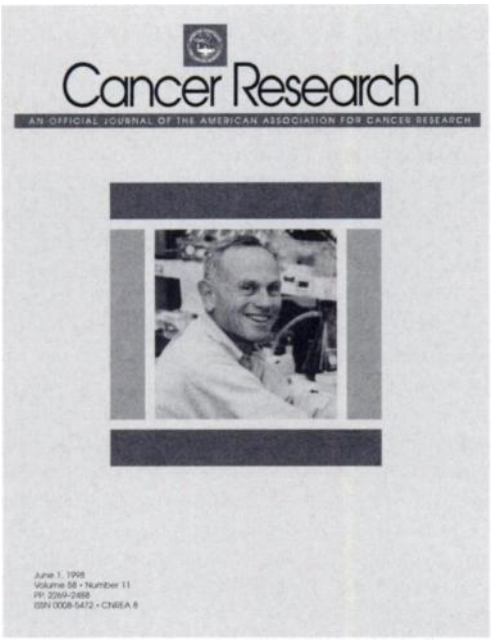
AACR Website: http://www.aacr.org

COVER LEGEND



Michael B. Sporn (*cover*), a pioneer in the field of chemoprevention, is the winner of the 21st annual Bristol-Myers Squibb Award for Distinguished Achievement in Cancer Research. Dr. Sporn and his collaborators developed the first widely recognized class of chemopreventives—derivatives of vitamin A, which were christened "retinoids." His group elucidated the relationship between the structure and activity of these molecules and demonstrated that retinoids synthesized in the laboratory would be much safer and more effective for use in human patients.

As early as the 1920s, the pathologist Burt Wolbach observed that, in vitamin A-deficient tissues in rats, epithelial cells had increased mitotic activity and dedifferentiated. He described these changes as resembling precancerous lesions and his work suggested that vitamin A is really a hormone that regulates cell differentiation.

In the 1970s, in experiments with hamsters conducted at the National Institutes of Health (NIH), Dr. Sporn's group made similar observations in vitamin A-deficient tracheal organ cultures grown in defined, serum-free medium. In deficient tracheas, ciliated cells disappear and are replaced by keratinizing squamous cells. These changes closely resemble those that occur in the premalignant and malignant lung cells of heavy smokers. Treatment of organ cultures with retinoids reversed these changes. In 1976, based on this work, Dr. Sporn published a landmark paper in *Federation Proceedings* (*35:* 1332, 1976) in which he formally coined the terms "retinoids" and "chemoprevention." He subsequently developed a method for evaluating retinoids and tested hundreds of compounds to determine their potency and their effect on cell differentiation. His group and others then went on to show that retinoids can inhibit carcinogenesis at most epithelial sites in experimental animals. In humans, this approach has been successful for prevention of oral carcinomas and uterine cervical cancer, as well as for second primary cancers of the head and neck. Subsequently, Pierre Chambon, Ronald M. Evans, David J. Mangelsdorf, and others have identified six receptors for retinoids in epithelial cells, increasing the promise of retinoid-based drug development. The retinoid receptors belong to a "superfamily" of steroid receptors that includes the receptors for vitamin D, estrogens, androgens, and glucocorticoids, and it is now known that retinoids regulate gene function in many types of cells throughout the body.

Dr. Sporn believes that, ultimately, most epithelial cancers will prove to be preventable, with combination chemoprevention proving the most successful strategy in preventing epithelial cancers. He is also interested in the relationship between epithelial cells and the underlying stromal cells, as carcinogenesis is driven by multiple interactive factors, entailing a prolonged series of failed reciprocal interactions between epithelium and stroma (W. H. Clark, Acta Oncol., *34:* 3, 1995). Combination chemoprevention will require the development of new chemopreventive agents, and Dr. Sporn is presently collaborating with Gordon Gribble and Tadashi Honda at Dartmouth to synthesize and test new triterpenoids for this purpose.

Dr. Sporn's research has been performed in collaboration with a large number of other investigators, most notably Anita B. Roberts at the National Cancer Institute (NCI) in Bethesda, Waun Ki Hong at M.D. Anderson Cancer Center in Houston, Richard C. Moon at IIT Research Institute in Chicago, and Carl Nathan at Cornell Medical College in New York.

Dr. Sporn received his undergraduate education at Harvard and then, in 1959, he received his M.D., with honor, from the University of Rochester. After interning in Psychiatry and Medicine at the University of Rochester Medical Center, he joined the NIH in 1960, and in 1973 became Chief of NCI's Lung Cancer Branch. In 1978, he was named Chief of NCI's Laboratory of Chemoprevention, which post he held until 1995. Since 1995, Dr. Sporn has been the Oscar M. Cohn '34 Professor of Pharmacology and Medicine at Dartmouth Medical School in Hanover, NH. He came to Dartmouth through a joint appointment in the Medical School and the Norris Cotton Cancer Center.

Dr. Sporn has published over 370 original research articles and has contributed his expertise to the editorial boards of many prestigious journals, including service as an Associate Editor for *Cancer Research* (1978–84; 1993–) and for *Clinical Cancer Research* (1994–). In addition to his being honored with this year's Bristol-Myers Squibb Award, Dr. Sporn's contributions to cancer research have been recognized by his receipt of the American Cancer Society Medal of Honor (Basic Research) (1994), the Mider Lecture Award of the NIH (1994), and the Bruce F. Cain Memorial Award of the American Association for Cancer Research (AACR) (1991).

Dr. Sporn's contributions to the AACR have been substantive and numerous. A member since 1966, he has supported the Association through dedicated participation in many of its activities as well as publication in AACR journals. He served on the Board of Directors (1993–96) and was the Chairperson of the 1993 Annual Meeting Program Committee, as well as having served on prior Program Committees in 1975 and 1989. Other committee service includes: Chairperson of the Nominating Committee (1996–98), of the DeWitt S. Goodman Lectureship Committee (1996), and of the Glaxo Wellcome Oncology Clinical Research Scholar Award Committee (1995); NCI Affairs Committee (1995–96); Clinical Cancer Research Committee (1993–95); Task Force on Chemoprevention (1991–94); and Membership Committee (1977). His most recent exciting initiative is the AACR Prevention Working Group for which he is serving as Co-chairperson along with Dr. Hong. He has also been the AACR's Representative to the European Association for Cancer Research (1994–96), and he has co-chaired two highly successful AACR Special Conferences on Mechanism of Action of Retinoids, Vitamin D, and Steroid Hormones (1993; 1995).

Sidney Weinhouse