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# **Sustaining Members**

The American Association for Cancer Research is pleased to acknowledge its 1994 Sustaining Members and welcomes to the AACR several newly elected companies, indicated by an asterisk (\*). We are grateful for the generous support derived from this category of membership, which is open to organizations that pay dues and make other significant contributions toward the purposes, activities, and overall mission of the Association. The AACR looks forward to a long and productive partnership with the new and charter Major Sustaining Members and regular Sustaining Members listed below.

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AACR SPECIAL CONFERENCE IN CANCER RESEARCH

# Transcriptional Control of Cell Growth and Differentiation

October 16-20, 1994

Chatham Bars Inn, Chatham (Cape Cod), Massachusetts



## CONFERENCE CHAIRPERSONS

**Eric N. Olson** / Houston, TX  
**Bruce M. Spiegelman** / Boston, MA

## PROGRAM COMMITTEE

**Elaine V. Fuchs** / Chicago, IL  
**Joan V. Ruderman** / Boston, MA

## SCIENTIFIC PROGRAM

### Opening Lectures

**David Baltimore** / New York, NY  
**Robert Tjian** / Berkeley, CA  
**James E. Darnell, Jr.** / New York, NY

### Cell Cycle and Transcription - I

**David M. Livingston** / Boston, MA  
**Stephen J. Elledge** / Houston, TX  
**Robert N. Eisenman** / Seattle, WA  
**Carol L. Prives** / New York, NY

### Cell Cycle and Transcription - II

**George F. Vande Woude** / Frederick, MD  
**Mark Kirschner** / Boston, MA  
**Steven I. Reed** / La Jolla, CA

### Signal Transduction Systems Influencing Transcription

**Joan V. Ruderman** / Boston, MA  
**Marc Montminy** / La Jolla, CA  
**Jean Y. J. Wang** / La Jolla, CA  
**Spyridon Artavanis-Tsakonas** / New Haven, CT

### Transcription Factors Controlling Cell Growth

**Michael Karin** / La Jolla, CA  
**Richard Treisman** / London, England  
**Michael Z. Gilman** / Cold Springs Harbor, NY

### Transcription Factors Controlling Cell Differentiation - I

**Bruce M. Spiegelman** / Boston, MA  
**Elaine V. Fuchs** / Chicago, IL  
**Michael G. Rosenfeld** / La Jolla, CA  
**Michael Levine** / La Jolla, CA

### Transcription Factors Controlling Cell Differentiation - II

**Eric N. Olson** / Houston, TX  
**Stuart Orkin** / Boston, MA  
**Charles P. Emerson** / Philadelphia, PA

### Development

**Eddy M. De Robertis** / Los Angeles, CA  
**Richard Behringer** / Houston, TX  
**Janet Rossant** / Toronto, Ontario, Canada  
**Clifford Tabin** / Boston, MA

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

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### Information and Application Forms

American Association for Cancer Research  
Public Ledger Building  
620 Chestnut Street, Suite 816  
Philadelphia, PA 19106  
(215) 440-9300 (215) 440-9313 (FAX)

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**Application Deadline: June 27, 1994**



## AMERICAN ASSOCIATION FOR CANCER RESEARCH SCIENTIFIC CONFERENCES

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**JULY 1-8, 1994**

***Molecular Biology in Clinical Oncology***  
A Workshop for Clinical Oncologists in Training  
*Supported by a Generous Grant from the National Cancer Institute*  
Chairpersons: Stephen H. Friend, Charlestown, MA; L. Michael Glode, Denver, CO  
The Given Institute, Aspen, CO

**JULY 17-24, 1994**

***Histopathobiology of Neoplasia***  
The Edward A. Smuckler Memorial Workshop for  
Predoctoral and Postdoctoral Fellows  
Contemplating Careers in Basic Cancer  
Research  
*Supported by a Generous Grant from the National Cancer Institute*  
Chairperson: Michael W. Lieberman, Houston, TX  
Keystone Conference Center, Keystone, CO

**OCTOBER 16-20, 1994**

***Transcriptional Control of Cell Growth  
and Differentiation***  
Chairpersons: Eric N. Olson, Houston, TX; Bruce  
M. Spiegelman, Boston, MA  
Chatham Bars Inn, Chatham (Cape Cod), MA

**NOVEMBER 7-11, 1994**

***Modern Developments in Cancer  
Therapeutics***  
Joint Meeting with Academia Sinica  
Chairperson: Yung-chi Cheng, New Haven, CT  
Academia Sinica, Taipei, Taiwan, R.O.C.

**NOVEMBER 29-DECEMBER 4, 1994**

***Translational Research in Cancer***  
Chairperson: Carlo M. Croce, Philadelphia, PA  
Grove Park Inn, Asheville, NC

**DECEMBER 8-13, 1994**

***Basic and Clinical Aspects of  
Prostate Cancer***  
Chairperson: Donald S. Coffey, Baltimore, MD  
Marriott's Rancho Las Palmas Resort, Rancho  
Mirage (Palm Springs), CA

**JANUARY 14-19, 1995**

***Mechanism of Action of Retinoids,  
Vitamin D, and Steroid Hormones***  
Chairpersons: Michael B. Sporn, Bethesda, MD;  
Ronald M. Evans, San Diego, CA; David  
Mangelsdorf, San Diego, CA  
Whistler Resort and Conference Center, Whistler,  
B.C., Canada

**FEBRUARY 13-18, 1995**

***Molecular Biology of Cancer: Implications  
for Prevention and Therapy***  
Joint Meeting with Japanese Cancer Association  
Chairpersons: Lee W. Wattenberg, Minneapolis,  
MN; Masaaki Terada, Tokyo, Japan  
Maui Marriott Hotel, Maui, HI

**MARCH 19-22, 1995**

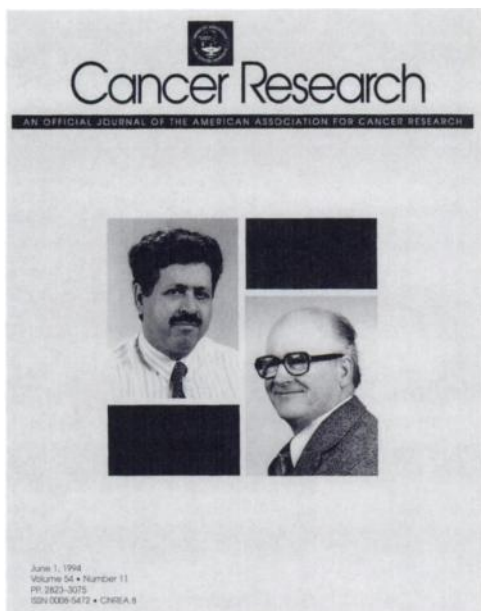
***86th Annual Meeting***  
Chairperson: Donald S. Coffey, Baltimore, MD  
Metro Toronto Convention Centre, Toronto,  
Ontario, Canada  
(Abstract Deadline: October 14, 1994)

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AACR members will receive brochures on the  
above special conferences as soon as they are  
available. Nonmembers should call or write:

American Association for Cancer Research  
Public Ledger Building  
620 Chestnut Street, Suite 816  
Philadelphia, PA 19106-3483  
215-440-9300 • 215-440-9313 (FAX)

# COVER LEGEND



Chemicals that induce cancer in humans and in animal models undergo metabolism. In relation to carcinogenesis, an important determinant is the capability of a given host to convert a procarcinogen into a reactive product that can modify DNA as a first step leading to mutation. Reactive metabolites may also react with proteins, leading to toxicity as well as to the generation of modified serum proteins, thus providing methods for the specific detection of exposure.

During the past 40 years, a number of laboratories have contributed to this important field. A continuing high-quality research program has been provided by the laboratory of Dennis Vernon Parke (*right*) and his colleague, Costas Ioannides (*left*). Dr. Parke is the scientific successor to the late R. Tecwyn Williams, one of the first pharmacologists to study the metabolic fate of chemicals, carcinogens, and drugs, and an author of many useful resources, one of which was *Detoxication Mechanisms* (Ed. 2. London: Chapman and Hall, 1959).

Drs. Parke and Ioannides described several types of what is now known as the cytochrome P-450 superfamily of enzymes. They initially had observed a cytochrome P-450 (CYP2B), and another cytochrome P-448 (CYP1), based on the specific enzymic and spectroscopic behavior of these two enzyme families, that had distinct attributes in the metabolic activation and detoxication of xenobiotics [Biochem. Pharmacol., 15: 7, 1966; Chem. Ind. (Lond.), 21: 854, 1980; Xenobiotica, 14: 119, 1984; Biochem. Pharmacol., 35: 2179, 3879, 1986]. They classified carcinogens based on their susceptibility to be metabolized by one or the other type of cytochrome system (Arch. Toxicol., 60: 5, 1987; Chem.-Biol. Interact., 64: 39, 1987). They investigated systematically the induction of cytochrome P-450 systems as a function of molecular size and shape and other attributes of the inducer and the key role of this metabolic system in activation and detoxication, bearing on safety evaluation and human risk assess-

ment (Drug Metab. Rev., 22: 1, 1990; Br. J. Ind. Med., 48: 437, 1991). Furthermore, they used metabolic behavior as a tool to perform structure-activity associations in carcinogenesis and, in collaboration with David F. V. Lewis, developed computer modeling [Regul. Toxicol. Pharmacol., 7: 220, 1987; Toxicol. Lett. (Amst.), 45: 1, 1989; Mutagenesis, 5: 433, 1990; Eur. J. Cancer Prev., 2: 275, 1993]. More recently, they reported on nutritional parameters modifying toxicity and pathology associated with reactive oxygen species (Chem.-Biol. Interact., 70: 263, 1989; Food Addit. Contam., 8: 382, 1991). They organized an International Conference on Food, Nutrition and Chemical Toxicity, the proceedings of which were published recently (Smith-Gordon, London, 1993).

Dr. Parke earned a medical degree and served as physician and pathologist in the British forces from 1942 to 1947. He then joined the laboratory of Dr. Williams at the famed St. Mary's Hospital Medical School, where he earned a Ph.D. and a D.Sc., and continued there, eventually earning the rank of Senior Lecturer and Reader in Biochemistry. He moved to the University of Surrey in 1967 as Chairman and Professor of Biochemistry and Dean of the Faculty of Biological and Chemical Sciences. Dr. Parke served on numerous British committees, such as the Committee on Safety of Medicines and the Food Additives and Contaminants Committee. He was Visiting Professor at the University of California (Davis), consultant to the Food and Drug Administration and the Environmental Protection Agency, and was active on panels for WHO, NATO, and others. He received several distinctions, including the Scheele Medal, and was made an honorary fellow/member of the Royal College of Physicians, the Biochemical Society, and several other professional societies. He is the founding editor of *Xenobiotica*, and he is the author of a number of books, chapters, and more than 400 titles. Since 1990, he has been Professor Emeritus and is active as a professional consultant.

Dr. Ioannides was a graduate student with Dr. Parke at the University of Surrey in the 1970s, where he earned his doctorate. He spent some years as Head of the Drug Metabolism Section of the European Batelle Research Institute in Geneva, Switzerland, and then returned to the University of Surrey as a member of the Faculty of Biochemistry. He is currently a Senior Research Fellow. The research of Dr. Ioannides, together with that of Dr. Parke, relates the key role of the cytochrome P-450 metabolic systems to toxicity and carcinogenicity and has provided biochemical means to distinguish carcinogens from noncarcinogens. Dr. Ioannides has developed procedures for the safety evaluation of chemicals based on their biochemical attributes, such as the induction of different families of cytochrome P-450s and their patterns of metabolism. His bibliography lists about 170 papers and 4 books.

We are indebted to Dr. Parke for background information and photographs.

John H. Weisburger