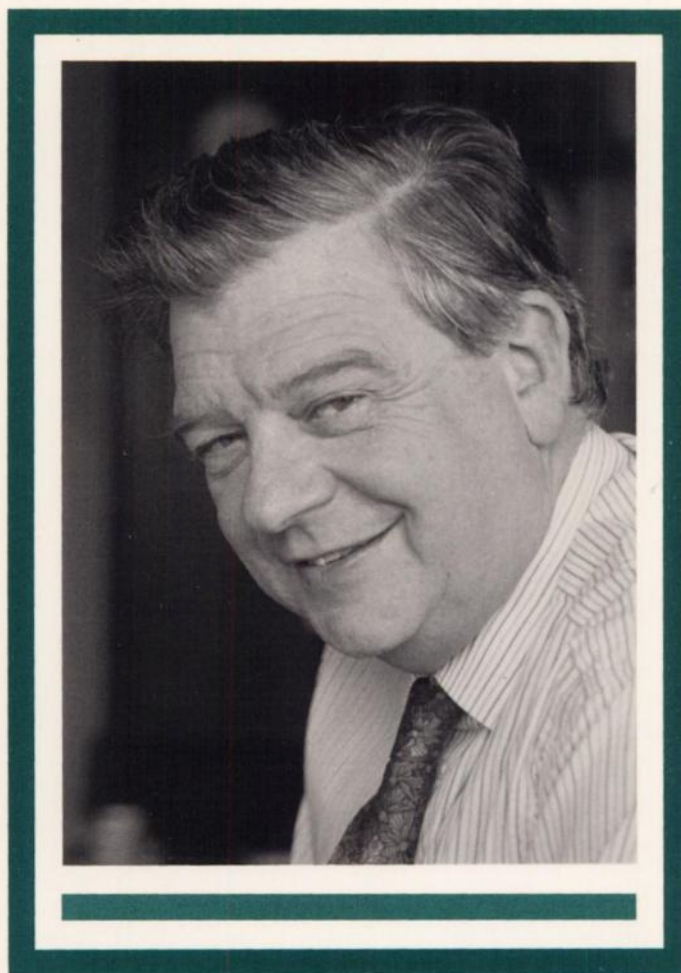




# Cancer Research

AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH



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# MOLECULAR GENETICS OF CANCER



Joint Conference of the  
American Association for Cancer Research  
and the  
European Association for Cancer Research



September 9-12, 1997  
Hertford College, University of Oxford  
Oxford, England

## CONFERENCE CHAIRPERSONS

**Sir Walter Bodmer** / Oxford, England  
**Eric J. Stanbridge** / Irvine, CA

## SCIENTIFIC PROGRAM

### Keynote Lecture

**Richard D. Klausner** / Bethesda, MD

### Lower Eukaryotes - What they Tell Us About Cancer Genes

**Roel Nusse** / Stanford, CA

**Tian Xu** / New Haven, CT

**Ronald H. A. Plasterk** / Amsterdam, The Netherlands

**Joan Massagué** / New York, NY

### New Approaches to Cloning Tumor Suppressor Genes

**Adi Kimchi** / Rehovot, Israel

**Stanley N. Cohen** / Stanford, CA

**Carlo M. Croce** / Philadelphia, PA

**David H. Mack** / Santa Clara, CA

### Cell Cycle Genes and Cancer

**Paul Nurse** / London, England

**Gordon Peters** / London, England

**Charles J. Sherr** / Memphis, TN

**Xin Lu** / London, England

### Molecular Analysis of Multistep Progression

**Peter Collins** / Goteborg, Sweden

**Paul Cairns** / Baltimore, MD

**Helene S. Smith** / San Francisco, CA

**Ramon Parsons** / New York, NY

### Transgenic Mouse Models of Cancer

**Walter Bodmer** / Oxford, England

**Terry A. Van Dyke** / Chapel Hill, NC

**Allan Bradley** / Houston, TX

**Anton J. M. Berns** / Amsterdam, The Netherlands

### Molecular Genetics of Cancer of the Cervix

**Eric J. Stanbridge** / Irvine, CA

**Karen H. Vousden** / London, England

**Garret M. Hampton** / La Jolla, CA

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

**Application deadline: June 30, 1997**

### Information and Application Forms

American Association for Cancer Research

Public Ledger Building, Suite 826

150 South Independence Mall West

Philadelphia, PA 19106-3483 USA

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## AMERICAN ASSOCIATION FOR CANCER RESEARCH SCIENTIFIC CONFERENCES

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**JUNE 7-11, 1997**

***Cancer of the Central Nervous System***

Conference with Neurosurgery Joint Section on Tumors

Chairpersons: Peter McL. Black, Boston, MA;  
Webster K. Cavenee, La Jolla, CA  
Loew's Coronado Bay Resort, San Diego, CA

**SEPTEMBER 9-13, 1997**

***Molecular Genetics of Cancer***

Conference with the European Association for Cancer Research

Chairpersons: Eric J. Stanbridge, Irvine, CA;  
Walter Bodmer, Oxford, England  
Hertford College, Oxford, England

**SEPTEMBER 26-30, 1997**

***Tumor Suppressor Genes***

Co-Sponsored by the National Cancer Institute of Canada

Chairpersons: Stephen H. Friend, Seattle, WA;  
Philip Branton, Montreal, Quebec, Canada  
Victoria Conference Centre, Victoria, BC, Canada

**OCTOBER 17-21, 1997**

***Transcriptional Control of Proliferation, Differentiation, and Development***

Chairpersons: Robert Eisenman, Seattle, WA;  
Elaine V. Fuchs, Chicago, IL

The Sagamore Resort, Bolton Landing (Lake George), NY

**DECEMBER 12-16, 1997**

***DNA Methylation, Imprinting, and the Epigenetics of Cancer***

Chairpersons: Peter A. Jones, Los Angeles, CA;  
Stephen B. Baylin, Baltimore, MD; Timothy H. Bestor, New York, NY  
El Conquistador Resort and Country Club, Las Croabas, PR

**JANUARY 9-13, 1998**

***Mechanisms of Programmed Cell Death***

Chairpersons: John C. Reed, La Jolla, CA;  
Vishva M. Dixit, Ann Arbor, MI  
Renaissance Esmeralda Resort, Indian Wells (Palm Springs), CA

**JANUARY 24-28, 1998**

***Angiogenesis and Cancer***

Chairpersons: Judah Folkman, Boston, MA;  
Michael Klagsbrun, Boston, MA  
Hyatt Orlando, Orlando, FL

**FEBRUARY 16-21, 1998**

***Innovative Molecular Biology Approaches to the Prevention, Diagnosis, and Therapy of Cancer***

Joint Meeting with the Japanese Cancer Association

Chairpersons: Edward Bresnick, Worcester, MA;  
Kaoru Abe, Tokyo, Japan  
Maui Marriott Resort, Maui, HI

**MARCH 28-APRIL 1, 1998**

***89th Annual Meeting***

Chairperson: Frank J. Rauscher III, Philadelphia, PA

Morial Convention Center, New Orleans, LA  
*Abstract Deadline: October 28, 1997*

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

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Public Ledger Building, Suite 826  
150 South Independence Mall West  
Philadelphia, PA 19106-3483  
215-440-9300 • 215-440-9313 (FAX)  
E-Mail: [aacr@aacr.org](mailto:aacr@aacr.org)

*For regular updates to this list visit the AACR's Website, <http://www.aacr.org>*

AACR SPECIAL CONFERENCE IN CANCER RESEARCH

# Transcriptional Control of Proliferation, Differentiation, and Development



October 17-21, 1997  
The Sagamore, Bolton Landing (Lake George), New York

## CONFERENCE CHAIRPERSONS

Robert N. Eisenman / Seattle, WA  
Elaine V. Fuchs / Chicago, IL

## SCIENTIFIC PROGRAM

### Keynote Session

Michael G. Rosenfeld / San Diego, CA  
Stephen K. Burley / New York, NY  
Michael R. Green / Worcester, MA

### Transcriptional Mechanisms

Richard A. Young / Cambridge, MA  
Joan W. Conaway / Oklahoma City, OK  
James L. Manley / New York, NY  
Cynthia Wolberger / Baltimore, MD

### The Influence of Chromatin Structure on Transcription

Beverly M. Emerson / La Jolla, CA  
Alan P. Wolffe / Bethesda, MD

### Transcriptional Regulation of the Cell Cycle

David M. Livingston / Boston, MA  
Bruce A. Edgar / Seattle, WA  
Charles J. Sherr / Memphis, TN  
Erin K. O'Shea / San Francisco, CA

### Signal Transduction and Transcription

Gerald R. Crabtree / Stanford, CA  
Joan Massague / New York, NY  
Hans C. Clevers / Utrecht, The Netherlands

### Oncogenic and Anti-Oncogenic Transcription Factors

Carol Prives / New York, NY  
A. Thomas Look / Memphis, TN  
George F. Vande Woude / Frederick, MD  
Robert N. Eisenman / Seattle, WA

### Transcription Control of Differentiation

David Baltimore / Cambridge, MA  
Bruce M. Spiegelman / Boston, MA  
Elaine V. Fuchs / Chicago, IL

### Gene Manipulating Strategies

Robb Krumlauf / London, England  
Spyros Artavanis-Tsakonas / New Haven, CT  
Eric N. Olson / Dallas, TX  
Norbert Perrimon / Boston, MA

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

**Application deadline: July 31, 1997**

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### Information and Application Forms

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 The logo for Cancer Research, featuring the words "Cancer Research" in a serif font, with a small black square above the letter "a" in "Research".


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This issue's cover features Sir Walter Bodmer, Principal of Hertford College, University of Oxford, London, who is a pioneer in the development of the HLA system, particularly the role of changes in HLA expression in tumors as an indication of escape from immune attack. A striking correlation between changes in HLA expression and the mismatch mutation phenotype in sporadic colon carcinomas has been demonstrated and is being further investigated in this and other cancers.

The use of human peripheral blood lymphocytes to make human-mouse somatic cell hybrids led to the first somatic cell genetic analysis of linkage between human markers, as demonstrated by Sir Walter and his colleagues (*Nature*, 223: 358-363, 1969). This was a major contribution to the revolution in human gene mapping, as well as to the development of monoclonal antibodies. Early applications included the gene assignment of EsD to chromosome 13, later used for the analysis of retinoblastoma, and use in the production and analysis of sera and monoclonal antibodies of defined specificity, and their subsequent use in cancer diagnosis and for the analysis of the HLA system. Applications in cancer included the first mapping of oncogenes, specifically c-abl to chromosome 9, from which followed the molecular analysis of the Philadelphia chromosome translocation, and the assignment of the gene for familial polyposis to chromosome 5 and the demonstration by allele loss of its substantial role in sporadic colon carcinoma, the first tumor suppressor gene clearly identified for a major common cancer (*Nature*, 328: 614-616, 1987). In 1979, Lancet Solomon and Sir Walter pioneered the suggestion of the use of DNA polymorphisms and a well spread genetic map for the systematic analysis of human variation, which provided a major argument for the development of the Human Genome Project. This Project was first discussed in general terms by Sir Walter in 1980, and in more detail in 1986 (*Cold Spring Harbor Symposia on Quantitative Biology*, pp. 511-513. NY: Cold Spring Harbor, 1986). These genetic contributions have played a significant role in the revolutionary development of our understanding of the genetics of cancer and its ultimate application to prevention, diagnosis, early detection, and treatment.

The pattern of germline and somatic mutation in the APC gene

is being analyzed. It provides the basis for the first proper estimate of germline mutation rates at the DNA level and evidence against a role for mutagens in the causation of colorectal cancer (*Br. Med. Bull.*, 50: 517-526, 1994; *Proc. Natl. Acad. Sci. USA*, 93: 14800-14803, 1996; *Hum. Genet.*, 99: 219-224, 1997; *Br. J. Surg.*, 84: 233-237, 1997). Following the work of others, mutations in the mismatch repair genes, which explain HNPCC families and which occur in sporadic tumors, are being analyzed. New models for carcinogenesis, combining effects on cell division, differentiation, and apoptosis, can explain the development of benign tumors and long lag periods before the appearance of carcinomas (*Proc. Natl. Acad. Sci. USA*, 92: 11130-11134, 1995).

Sir Walter carried out his undergraduate and graduate studies at the University of Cambridge (Clare College), where he received his B.A. in Mathematics in 1956 and his Ph.D. in Genetics in 1959. Following work as a Research and then Official Fellow at Clare College from 1958-61, Sir Walter moved on to Stanford University School of Medicine, Palo Alto, CA, where he became Assistant Professor in the Department of Genetics in 1962, followed by an Associate Professorship from 1966-68 before becoming a full Professor there in 1968. He returned to England in 1970 as Professor of Genetics at the University of Oxford, a position he held until 1979, when he became Director of the Imperial Cancer Research Fund (ICRF) in London, in which capacity he served until 1991, when he was appointed the Director-General of the ICRF. In 1996, he assumed his current duties as Principal of Hertford and Head of Laboratory, ICRF Cancer & Immunogenetics, Institute of Molecular Medicine, Oxford.

Sir Walter has over 500 publications and has contributed his time and talents to many advisory councils, including service as Chairman of the BBC General Advisory Council. He has been an active member of many professional societies, serving as President of the following: the Royal Statistical Society (1984-85); the British Association for the Advancement of Science (1987-88); the Association for Science Education (1989-90); the British Society for Histocompatibility and Immunogenetics (1990-91); the Human Genome Organisation (1990-92); the Organisation of European Cancer Institutes (1990-93); the International Federation of Associations for the Advancement of Science and Technology (1992-94); and, most recently, the European Association for Cancer Research (EACR) (1994-96). He is also a member of the American Association for Cancer Research (AACR), and he is co-chairperson, along with Eric Stanbridge of the University of California at Irvine, of the 1997 Joint AACR/EACR Conference on "Molecular Genetics of Cancer," which is to be held at Hertford College in September 1997.

For his outstanding contributions and service to the field, Sir Walter has received many honors and awards, including the bestowing of his title in 1986. In addition he is a Foreign Honorary Member of the American Academy of Arts and Sciences, a Fellow of the Royal Society and of the Royal College of Pathologists, and an Honorary Fellow of the Royal Society of Medicine, the Royal College of Physicians, and the Royal Society of Edinburgh. He is the recipient of several prestigious awards, including the William Allen Memorial Award of the American Society of Human Genetics (1980), the Conway Evans Prize of the Royal College of Physicians and the Royal Society (1982), and the Michael Faraday Award of the Royal Society (1994), and he holds honorary degrees from several universities, including Bath, Oxford, Edinburgh, Surrey, Bristol, London, and Aberdeen, among others.

Sidney Weinhouse