The Prizes ............................................................................................................................................................................................. 1672s
Laureates .................................................................................................................................................................................................. 1673s
Laureate Citations .................................................................................................................................................................................. 1674s

1998 Laureates Honorary Papers

Introduction of H. Rodney Withers
Lorraine J. Gudas .................................................................................................................................................................................. 1676s
Radiation Biology and Treatment Options in Radiation Oncology
H. Rodney Withers .................................................................................................................................................................................. 1676s
Introduction of Suzanne Cory
Nicholas D. Hastie .................................................................................................................................................................................. 1685s
Insights from Bcl-2 and Myc: Malignancy Involves Abrogation of Apoptosis as well as Sustained Proliferation
Suzanne Cory, David L. Vaux, Andreas Strasser, Alan W. Harris, and Jerry M. Adams ................................................................. 1685s
Introduction of Stanley J. Korsmeyer
Nicholas D. Hastie .................................................................................................................................................................................. 1693s
BCL-2 Gene Family and the Regulation of Programmed Cell Death
Stanley J. Korsmeyer .................................................................................................................................................................................. 1693s
Introduction of H. Robert Horvitz
Stephen P. Goff .................................................................................................................................................................................. 1701s
Genetic Control of Programmed Cell Death in the Nematode Caenorhabditis elegans
H. Robert Horvitz .................................................................................................................................................................................. 1701s

DEVELOPMENTAL BIOLOGY AND CANCER

PAX Genes

Pax Genes and Their Role in Organogenesis
Ahmed Mansouri, Guy Goudeau, and Peter Gruss .......................................................................................................................... 1707s
The Role of Chimeric Paired Box Transcription Factors in the Pathogenesis of Pediatric Rhabdomyosarcoma
Frederic G. Barr .................................................................................................................................................................................. 1711s
The Partial Homeodomain of the Transcription Factor Pax-5 (BSAP) Is an Interaction Motif for the Retinoblastoma and TATA-binding Proteins
Dirk Eberhard and Meinrad Busslinger .............................................................................................................................................. 1716s

Embryonal Tumors

Id Gene Expression as a Key Mediator of Tumor Cell Biology
Mark A. Israel, Maria-Clemencia Hernandez, Monica Florio, Pedro J. Andres-Barquin, Akio Mantani, John H. Carter, and Carol M. Julin .............................................................................................................................................. 1726s
Developmental Basis of Retinal-specific Induction of Cancer by RB Mutation
Brenda L. Gallie, Christine Campbell, Hollie Devlin, Allison Duckett, and Jeremy A. Squire ...................................................................... 1731s
The Phenotypes Associated with ret Mutations in the Multiple Endocrine Neoplasia Type 2 Syndrome
Bruce A. J. Ponder .................................................................................................................................................................................. 1736s

Embryonal Tumors and Breast Cancer

Imprinting of a Genomic Domain of 11p15 and Loss of Imprinting in Cancer: An Introduction
Andrew P. Feinberg .................................................................................................................................................................................. 1743s
Multiple Roles for the Wilms' Tumor Suppressor, WT1
Rachel Davies, Adrian Moore, Andreas Schell, Eva Bratt, Kiyoshi Miyahawa, Michael Ladomery, Colin Miles, Aswin Menke, Veronica van Heyningen, and Nicholas Hastie .................................................................................................................. 1747s
BRCA1, BRCA2, and Rad51 Operate in a Common DNA Damage Response Pathway
Jun-Jie Chen, Daniel Silver, Sharon Cantor, David M. Livingston, and Ralph Scully .................................................................................. 1752s
Tissue Structure, Nuclear Organization, and Gene Expression in Normal and Malignant Breast
Mina J. Bissell, Valerie M. Weaver, Sophie A. Lelievre, Fei Wang, Ole W. Petersen, and Karen L. Schmeichel ......................................................................................................................................... 1757s
Mammary Gland Development, Reproductive History, and Breast Cancer Risk
Lewis A. Chodosh, Celina M. D'Cruz, Heather Perry Gardner, Seung I. Ha, Sandra T. Marquis, Jayant V. Rajan, Douglas B. Stairs, James Y. Wang, and Man Wang .......................................................................................................................................... 1765s

Leukemia and Developmental Genes

Identification and Characterization of Collaborating Oncogenes in Compound Mutant Mice
Anton Berns, Harald Mikkers, Paul Krimpenfort, John Allen, Blanca Scheijen, and Jos Jonkers ........................................................................ 1773s

Downloaded from cancerres.aacrjournals.org on April 19, 2017. © 1999 American Association for Cancer Research.
Role of TCL1 and ALL1 in Human Leukemias and Development

Carlo M. Croce ................................................................. 1778s

Intersections between Blood Cell Development and Leukemia Genes

Stuart H. Orkin, Catherine Porcher, Yuko Fujiwara, Jane Visvader, and Li-Chun Wang .............................................. 1784s

Leukemia and Developmental Genes: Functional Genes

Core-Binding Factor: A Central Player in Hematopoiesis and Leukemia

Nancy A Speck, Terry Stacy, Qing Wang, Trista North, Ting-Lei Gu, Janelle Miller, Michael Binder, and Miguel Marín-Padilla................................................................. 1789s

The Effect of Chromosomal Translocations in Acute Leukemias: The LMO2 Paradigm in Transcription and Development

Terence H. Rabbitts, Katharina Bucher, Grace Chung, Gerald Grutz, Alan Warren, and Yoshi Yamada ...................... 1794s

Conference Participants ........................................................................................................................................................................ 1799s

Organizational Structure: General Motors Cancer Research Foundation .......................................................................................................................... 1800s

Membership of the Awards Assembly ................................................................................................................................................ 1801s

Membership of the Selection Committees .......................................................................................................................................... 1803s

Membership of the Advisory Council ................................................................................................................................................. 1804s

Author Index ........................................................................................................................................................................................ 1809s

On the Cover

H. Robert Horvitz, Ph.D. (top), winner of the Alfred P. Sloan, Jr. Prize, was cited for his outstanding research contributions leading to the initial understanding of the programmed cell death pathway in cellular biology.

H. Rodney Withers, M.D., D.Sc. (bottom left), recipient of the Charles F. Kettering Prize, is Professor and Chair, Department of Radiation Oncology, University of California, Los Angeles. Dr. Withers was recognized for developing the concept and practice of the “hyperfractionation” technique of radiation therapy.

Suzanne Cory, Ph.D. (bottom center) and Stanley J. Korsmeyer, M.D. (bottom right), co-recipients of the Charles S. Mott Prize, were cited for their discovery that the Bcl-2 oncogene exerts its oncogenic effects through suppression of programmed cell death, or apoptosis, rather than increased cell division. This represents a fundamentally different view of malignant transformation which has had tremendous conceptual and practical implications on cancer biology and therapy.