PROGRAM PLANNING COMMITTEE

Co-Chairmen

Emmanuel Farber
Michael B. Sporn

Committee Members

Roswell K. Boutwell
Gilbert H. Friedell
Pietro M. Gullino
Martin Lipkin
Paul Nettesheim
James Price

PROGRAM

INTRODUCTION

Introductory Remarks.
Umberto Saffiotti ......................................................... 2479
Introductory Remarks.
Emmanuel Farber ......................................................... 2481

SESSION ON CERVIX AND BLADDER

Co-Chairmen: Gilbert H. Friedell and James Price

Carcinoma, Carcinoma in Situ, and “Early Lesions” of the Uterine Cervix and the Urinary Bladder: Introduction and Definitions.
Gilbert H. Friedell ......................................................... 2482

In Vivo and in Vitro “Markers” of Human Cervical Intraepithelial Neoplasia.
George D. Wilbanks ......................................................... 2485

Morphological and Clinical Observations of Patients with Early Bladder Cancer Treated with Total Cystectomy.
George M. Farrow, David C. Utz, and Charles C. Rife ......................................................... 2495

Membrane Changes during Urothelial Hyperplasia and Neoplasia.
R. Marian Hicks, and J. St. John Wakefield ......................................................... 2502

Early Lesions in Experimental Bladder Cancer: Experimental Design and Light Microscopic Findings.
Samuel M. Cohen, Jerome B. Jacobs, Masayuki Arai, Sonny Johansson, and Gilbert H. Friedell ......................................................... 2508

Jerome B. Jacobs, Masayuki Arai, Samuel M. Cohen, and Gilbert H. Friedell ......................................................... 2512

Changes in Plasma Membrane Structure Associated with Malignant Transformation in Human Urinary Bladder Epithelium.
Ronald S. Weinstein ......................................................... 2518

Organ Culture of Normal and Carcinogen-treated Rat Bladder.
David H. Reese, Rosalind D. Friedman, Joseph M. Smith, and Michael B. Sporn ......................................................... 2525

Early Changes Caused by N-Butyl-N-(4-hydroxybutyl)nitrosamine in the Bladder Epithelium of Different Animal Species.
Nobuyuki Ito ......................................................... 2528

SESSION ON LIVER

Co-Chairmen: Peter P. Anthony and Emmanuel Farber

Hyperplastic Areas, Hyperplastic Nodules, and Hyperbasophilic Areas as Putative Precursor Lesions.
Emmanuel Farber ......................................................... 2532

Sequential Phenotypic Changes in Hyperplastic Areas during Hepatocarcinogenesis in the Rat.
Tomoyuki Kitagawa ......................................................... 2534

Functional Markers and Growth Behavior of Preneoplastic Hepatocytes.
Gary M. Williams ......................................................... 2540
Kinetics of Induction and Growth of Enzyme-deficient Islands Involved in Hepatocarcinogenesis.
E. Scherer and P. Emmelot .......................................................... 2544

Cytology and Cytogenesis of Neoplastic (Hyperplastic) Hepatic Nodules.
Peter Bannasch ................................................................. 2555

Sequential Phenotypic and Biochemical Alterations during Chemical Hepatocarcinogenesis.
Frederick F. Becker .......................................................... 2563

Ultrastructural and Cytochemical Studies on Hyperbasophilic Foci with Special Reference to the Demonstration of
Cell Surface Alterations in Hepatocarcinogenesis.
Shuichi Karasaki .............................................................. 2567

Experimental Hepatocellular Carcinogenesis.
Paul M. Newberne .......................................................... 2573

Precursor Lesions for Liver Cancer in Humans.
Peter P. Anthony .......................................................... 2579

Sex Hormones and Hepatic Neoplasia.
Stanley Goldfarb .......................................................... 2584

SESSION ON BREAST
Chairman: Pietro M. Gullino

Preneoplastic Lesions in Murine Mammary Cancer.
Daniel Medina ............................................................ 2589

Structural, Antigenic, and Biological Characteristics of Precancerous Mastopathy.
Maurice M. Black .......................................................... 2596

Preneoplastic Lesions of the Human Mammary Gland Transplanted into the Nude Athymic Mouse.
Hanne M. Jensen and Setton R. Wellings ............................. 2605

Angiogenic Capacity of Preneoplastic Lesions of the Murine Mammary Gland as a Marker of Neoplastic Transfor-
mation
Michael A. Gimbrone, Jr., and Pietro M. Gullino .................... 2611

Prophylaxis of Early Preneoplastic Lesions of the Mammary Gland.
Clifford W. Welsh .......................................................... 2621

Inhibition of 7,12-Dimethylbenz(a)anthracene-induced Mammary Carcinogenesis by Retinyl Acetate.
Richard C. Moon, Clinton J. Grubbs, and Michael B. Sporn .................. 2626

SESSION ON SKIN
Chairman: Roswell K. Boutwell

The Biochemistry of Preneoplasia in Mouse Skin.
Roswell K. Boutwell .......................................................... 2631

Epidermal Growth Control Mechanisms, Hyperplasia, and Tumor Promotion in the Skin.
Friedrich Marks .......................................................... 2636

The Induction of Ornithine Decarboxylase as an Early, Possibly Obligatory, Event in Mouse Skin Carcinogenesis.
T. G. O'Brien ............................................................... 2644

SESSION ON RESPIRATORY TRACT
Chairman: Paul Nettesheim

Precursor Lesions of Bronchogenic Carcinoma.
Paul Nettesheim .......................................................... 2654

Fate of Early Carcinogen-induced Lesions in Tracheal Epithelium.
Richard A. Griesemer, Paul Nettesheim, and Ann C. Marchok .............. 2659

SESSION ON GASTROINTESTINAL TRACT
Chairman: Martin Lipkin

Early Proliferative Changes in Intestinal Cells.
Martin Lipkin and Eleanor Deschner .............................................. 2665

JULY 1976 2477
The Precursor Tissue of Ordinary Large Bowel Cancer.
Nathan Lane ................................................................. 2669

Precancerous Changes in the Stomach.
Takashi Kawachi, Mariko Kurisu, Noriko Numamyu, Koji Sasajima, Tomono Sano, and Takashi Sugimura ... 2673

Characteristic Complements of Nuclear Nonhistone Proteins in Colonic Epithelial Tumors.
Lidia C. Boffa and Vincent G. Allfrey ........................................ 2678

Biochemical Changes in Preneoplastic Rodent Intestines.
William J. Ball, Jr., Josephine S. Salse, and M. Earl Baïs .................................................. 2686

Morphological Lesions Associated with Human Primary Invasive Nonendocrine Pancreas Cancer.
Antonio L. Cubilla and Patrick J. Fitzgerald ........................................... 2690

DISCUSSION AND SUMMARY

Approaches to Prevention of Epithelial Cancer during the Preneoplastic Period.
Michael B. Sporn .............................................................. 2699

Putative Precursor Lesions: Summary and Some Analytical Considerations.
Emmanuel Farber .................................................................... 2703

Summary Statement.
Peter P. Anthony, Roswell K. Boutwell, Emmanuel Farber, Gilbert H. Friedell, Pietro M. Guiliño, Martin Lipkin, Paul Nettesheim, James Price, and Michael B. Sporn ........................................ 2706

* * *

The Conference Co-Chairmen wish to thank Dr. Carl E. Smith for his helpful assistance in the planning and publication of this Symposium. We thank Doris Overman for her help in preparing manuscripts for publication and Margaret Foti and her staff at CANCER RESEARCH for skilled editorial assistance with the final publication.