Cancer Research
The Official Organ of the American Association for Cancer Research, Inc.

Volume 29 / Number 5 / May 1969

Contents

977 Biochemical Characteristics of Mammary Glands and Mammary Tumors of Rats Induced by 3-Methylcholanthrene and 7,12-Dimethylbenz(a)anthracene. Russell Hill, Harold Goldenberg, Inge Michel, M. Joyce Carrington, Carlton Bell, Margot Gruenstein, David R. Meranze, and Michael B. Shimkin.

989 The Susceptibility of Fetal Rat Skin in Different Immunologic Environments to Neoplastic Induction with Shope Papilloma Virus. John W. Kreider and Charles Breedis.

994 Relation of Thymidine Index to Pulmonary Tumor Response in Mice Receiving Urethan and Other Carcinogens. M. B. Shimkin, T. Sasaki, M. McDonough, R. Baserga, D. Thatcher, and R. Wieder.


1008 Increased Tumorigenesis of Murine Sarcoma Virus (Moloney) by Coinfection with Rauscher Virus or by Treatment with Antilymphocyte Serum. W. A. Hook, M. A. Chirigos, and S. P. Chan.

1013 The Metabolism of the 8-Methyl Ether of Xanthurenic Acid in the Mouse. Gerald M. Lower, Jr. and George T. Bryan.


1024 The Sex-dependent Difference in the Development of Liver Tumors in Mice Administered Dimethyl-nitrosamine. S. D. Vesselinovitch.

1028 Acid Hydrolase Activity during the Induction and Transplantation of Hepatomas in the Rat. Ralph F. Kampschmidt and Dan Wells.

1036 Biochemical and Genetic Studies of a Mutant Strain of Mouse Leukemia L1210 Resistant to 1-β-D-Arabinofuranosylcytosine (Cytarabine) Hydrochloride. Michael K. Bach.

1045 Renal Epithelial Neoplasms Induced in Male Wistar Rats by Oral Aflatoxin B1. Sheldon M. Epstein, Barbara Bartus, and Emmanuel Farber.

1051 Comparison of Transfer Ribonucleic Acids and Aminoacyl Synthetases of Liver and Ascites Tumor Cells. Michele Goldman, William M. Johnston, and A. Clark Griffin.


1062 A Ten-Year Study of 5-Fluorouracil in Disseminated Breast Cancer with Clinical Results and Survival Times. Fred J. Ansfield, Guillermo Ramirez, Sanford Mackman, George T. Bryan, and A. R. Curreri.


1082 Cellular Kinetics of Invasive Squamous Carcinoma of the Human Cervix.
*James L. Bennington.*

1089 Biologic Studies on Hamster Tumors Induced by the Murine Sarcoma Virus (Moloney).

1103 Inhibition of the Growth of Mouse Polyoma Tumors by Lymph Node Fragments from Specifically Immunized Rats.
*H. F. Jeejeebhoy and A. G. Rabbat.*

1111 Enhancement of Spleen Focus Formation and Virus Replication in Friend Virus-infected Mice.
*R. A. Steeves, E. A. Mirand, S. Thomson, and L. Avila.*

1117 Biologic Studies on 7,12-Dimethylbenz(α)anthracene-induced Rat Leukemia with Special Reference to the Specific Chromosomal Abnormalities.
*Taketoshi Sugiyama, Yoshinori Kurita, and Yasuaki Nishizuka.*

1125 The Role of the Spleen in the Immunity to a Chemically Induced Sarcoma in C3H Mice.
*David S. Bard, and Yosef H. Pilch.*

1132 Enhancement by Glucose of the Inhibition of an Ehrlich Ascites Tumor by Tetraazatricyclooctadecane.
*Charles D. Stevens and Robert C. Mosteller.*

1137 The Development of Carcinoma in Liver of Rats Treated with m-Toluylenediamine and the Synergistic and Antagonistic Effects with Other Chemicals.
*Nobuyuki Ito, Yoshio Hiasa, Yoichi Konishi, and Masao Marugami.*

1146 Tumors of the Thymus in Cattle, Sheep, and Pigs.
*A. T. Sandison and Lindsay J. Anderson.*

1151 Teratogenic Effects of N-Ethyl-N-nitrosourea in the Syrian Hamster.
*Harry M. Givelber and Joseph A. DiPaolo.*

Brief Communication:

1156 The Recovery in Vivo of DNA Synthesis following Radiation.
*W. B. Looney and L. O. Chang.*

1159 Announcements.

1160 Erratum.

---

COVER LEGEND

Robert H. Wilson (b. 1903) and Floyd DeEds (b. 1894), both of the U. S. Western Regional Agriculture Laboratory, and Alvin J. Cox, Jr. (b. 1907) of the Department of Pathology, Stanford University School of Medicine at San Francisco, uncovered (1941) the carcinogenic effect of 2-acetaminofluorene (N-2-fluorenylacetyamide; 2-FAA). See: Cancer Res., 1: 595–608, 1941. In 1940, 2-FAA received a U. S. Patent for use as an insecticide. The studies of the Wilson group revealed that the compound had no demonstrable acute toxicity for rats. Among the chronic toxic effects in rats fed continuously with food containing 2-FAA were malignant epithelial proliferations of bladder, renal, pelvic, hepatic, pancreatic, and lung tissues. Subsequent studies on 2-FAA have provided valuable insights into the mechanism of action of chemical carcinogens.


Cover illustrations of Wilson (center), DeEds (left), and Cox (right) are displayed within a structural model of 2-acetaminofluorene.