Contents


1223 Lack of Correlation between Morphological and Biochemical Parameters in Mammary Adenocarcinomas of Rats Induced with 7,12-Dimethylbenz(a)anthracene. Russell Hilf, Harold Goldenberg, Margot Gruenstein, David R. Meranze, and Michael B. Shimkin.

1231 Effects of Antibodies on L5178Y Mouse Leukemia Cells Cultured in Vitro. T.-J. Yang and S. I. Vas.


1276 The Use of Leucovorin Orally in Normal and Leukemic L1210 Mice to Prevent the Toxicity and Gastrointestinal Lesions Caused by High Doses of Methotrexate. Joel S. Sandberg and Abraham Goldin.

1281 Similarity of the Transfer Factors in Novikoff Ascites Tumor and Other Amino Acid-incorporating Systems. Dianne D. Black and A. Clark Griffin.


1312 Influence of Vitamin A and 3,7-Dimethyl-2,6-octadienal (Citral) on the Effect of Benzo(a)pyrene on Hamster Trachea in Organ Culture. T. Timothy Crocker and Lora L. Sanders.


1338 Asparagine Metabolism in Some Lymphoproliferative Disorders. Nikolay V. Dimitrov and Isadore Brodsky.


1349 Sequential Morphological Alterations in Hepatic Cell Nucleoli Induced by Varying Doses of Actinomycin D. Peter J. Goldblatt and Richard J. Sullivan.


1370 Histochemical Studies on Rat Liver Proteins during 4-Dimethylaminoazobenzene Carcinogenesis. N. Brière and R. Daoust.


1384 Inhibiting Effect of Reserpine and Female Sensitivity in Hepatic Tumor Induction with 2,7-Diacetamidefluorene in SMA/Ms Strain Mice. Sadao Kozuka.

1387 Inhibition of Tumor Growth by Dietary Zinc Deficiency. James T. McQuitty, Jr., William D. DeWys, Liberratore Monaco, William H. Strain, Charles G. Rob, Jean Appgar, and Walter J. Pories.

1391 The Biochemical Characterization of Alkaline Phosphatase from Chemical- and Viral-induced Thymic Lymphomas of C57BL Mice. Judith Rae Lumb and Ruth G. Doell.

1397 Age Responses of Cultured Mammalian Cells to Cytotoxic Drugs. F. Mauro and H. Madoc-Jones.


1413 Relief of the Crabtree Effect by Arsenate. Leonard A. Sauer.


1429 Toxicological and Antiproliferative Effects of N^6-(3'-Isopentenyl)adenosine, a Natural Component of Mammalian Transfer RNA. D. Suk, C. L. Simpson, and E. Mihich.

1437 Fine Structure of Nuclear Inclusions in Murine Pulmonary Tumor Cells. Bojan Flaks and Antonia Flaks.

1444 Production of Tumors in Glandular Stomach of Hamsters by N-Methyl-N'-nitro-N-nitrosoguanidine. Shinji Fujimura, Kikuko Kogure, Shoichi Oboshi, and Takashi Sugimura.

1449 Rapid Induction of Subcutaneous Fibrosarcoma by 7,12-Dimethylbenz(a)anthracene in an Inbred Line of Syrian Hamsters. F. Homburger and S.-S. Hsueh.


1459 Effect of Enzymatic Removal of Cell Surface Sialic Acid on the Adherence of Walker 256 Tumor Cells to Mesothelial Membrane. David Cormack.

1467 Factors Influencing the Therapeutic Activity of L-Asparaginase (NSC 109229) in Leukemic (L5178Y) Mice. S. Vadamudi, M. Padarathsingh, V. S. Waravdekar, and A. Goldin.


1481 Some Theoretical Considerations on Chalones and the Treatment of Cancer: A Review. Olav Hilmar Iverson.


1506 Arginine Incorporation into Proteins by Supernatant Fractions of Rat Liver and Novikoff Hepatoma. Maurice Dupras and Gaston de Lamirande.


1516 The Enzymatic Reduction of Hydroxyurea to Urea by Mouse Liver. Michael Colvin and Vincent H. Bono, Jr.

1520 A Study of the Carcinogenicity of a Series of Structurally Related 4-Dimethylaminoazobenzenes. Girgis M. Bebawi, Yoon S. Kim, and J. P. Lambooy.

Cover Legend

Many animal species have yet to be investigated in the continuing search for information relating to cancer biology. Least explored of all are the invertebrate and cold-blooded vertebrate metazoans. Much of the information now available on neoplasia in these widely diversified groups is recorded in National Cancer Institute Monograph, Vol. 31, July 1969 (“Neoplasms and Related Disorders in Invertebrate and Lower Vertebrate Animals”).

Three examples of poikilothermic animals bearing anomalous growths are pictured here (top to bottom): (1) a coral colony (Madrepora kauaiensis) in which one corallite manifests anomalous growth reflected in the skeletal remains; (2) a Sydney rock oyster (Crassostrea commercialis) with an epithelioma of the mantle; and (3) a sea lamprey (Petromyzon marinus) with a melanoma with multiple subcutaneous, renal, and branchial metastases.

Hans Georg Schlumberger (1913-1967) was an outstanding comparative pathologist with an unbounded enthusiasm for studying neoplasia wherever they could be found in the animal kingdom. He was particularly interested in neoplasms in fish, amphibians, and reptiles (cf. Cancer Res., 8: 657-754, 1948 and Cancer Res., 17: 823-832, 1957), and bent his abilities with equal zest to studies of the response to methylcholanthrene in the cockroach Periplaneta americana (Arch. Pathol., 44: 98-113, 1952). Schlumberger was born in Germany, educated at the Universities of North Carolina and Pennsylvania, and was professor and head of the Department of Pathology at the Arkansas University School of Medicine (Obituary, see Arch. Pathol., 84: 102, 1967).

We are indebted to Dr. J. C. Harshbarger of the Registry of Tumors of Lower Animals, The Smithsonian Institution, and Dr. C. J. Dawe of the National Cancer Institute, NIH, for the photographs of the specimens. Specimen 1 is Accession 107, submitted by Peter H. Wolf, Fisheries Branch, Chief Secretary’s Department, Sydney, New South Wales, Australia. Specimen 2 is Accession 54, submitted by Donald F. Squires, Division of Marine Invertebrates, The Smithsonian Institution (present address: State University of New York at Stony Brook, Long Island, New York). Specimen 3 is the Registry’s Accession 89, submitted by John H. Howell, U. S. Department of the Interior, Fish and Wildlife Service, Bureau of Commercial Fisheries, Hammond Bay Biological Station, Millersburg, Michigan.
Cancer Research

30 (5)


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