Contents

391 Standardized Nomenclature for Inbred Strains of Mice: Fourth Listing.
   Joan Staats.

421 Increased Numbers of a Characteristic Type of Reticular Cell in the Thymus and Lymph Nodes of Leukemic Mice: An Electron Microscope Study.
   Jacques Izard and Etienne de Harven.

434 Cross-resistance to the Transplantation of Syngeneic Friend, Moloney, and Rauscher Virus-induced Tumors.
   J. P. Glynn, J. L. McCoy, and A. Fejer.

440 Seasonal Fluctuation of Frog Renal Adenocarcinoma Prevalence in Natural Populations.
   Robert Gilmore McKinnell and Beverly Kerr McKinnell.

445 Actinomycin D Effects on Nucleic Acids during Tumor Regression.
   Herbert S. Schwartz and J. E. Sodergren.

452 Effect of α-Methyl-p-tyrosine on 3,4-Dihydroxyphenylalanine (DOPA) Excretion of Hamsters with Melanotic Melanoma.
   Mary L. Voorhess.

455 Populations of Rat Liver Parenchymal Cells with Different Patterns of Ribonucleic Acid Synthesis during Azo-Dye Carcinogenesis.
   M. R. Banerjee and Richard S. Yamamoto.

462 Studies on the Mechanism of Prolonged Survival of Allografts from Tumor-bearing Donors.

465 Nickel Carbonyl Inhibition of Phenobarbital Induction of Hepatic Cytochrome P-450.
   F. William Sunderman, Jr.

471 The Role of the Thyroid in Hydrocarbon-induced Mammary Carcinogenesis in Rats.
   M. Gruenstein, D. R. Meranze, M. Acuff, and M. B. Shimkin.

475 The Teratogenicity of Cyclophosphamide in Mice.
   James E. Gibson and Bernard A. Becker.

481 Chromosome Patterns of Human Leukocyte Established Cell Lines.

491 Soluble Microsomal Antigens of Normal and Preneoplastic Livers.
   Hans Friedrich-Freksa, Erich Lanka, Emily M. Young, and Sam Sorof.

502 Effects of Hepatocarcinogens on the Synthesis and Content of Rat Liver Nuclear RNA.
   Donald E. Kizer and Joseph A. Clouse.

510 The Effect of a Hydrocarbon-enriched Fraction of Cigarette Smoke Condensate on Human Fetal Lung Grown in Vitro.
   Ilie Lasnitzki.

517 Effect of Cortisone on Oncogenesis by Murine Sarcoma Virus (Moloney).
   D. A. Shachat, A. Fefer, and J. B. Moloney.

521 Ultrastructure of Tumor Cells during Mitosis.
   Jeffrey P. Chang and Charles W. Gibney, Jr.

535 The Carcinogenic and Mutagenic Properties of N-Hydroxy-aminonaphthalenes.
   Sidney Belman, Walter Troll, George Teebor, and Frank Mukai.

543 Inhibition by Actinomycin D of DNA and RNA Synthesis and of Skin Carcinogenesis Initiated by 7,12-Dimethylbenz[a]anthracene or β-Propiolactone.

553 Effects of 4,4'-Diacetyl-diphenyl-urea-bis(guanylhydrazone) on a Spectrum of Mouse and Rat Tumors.
   E. Mihich and J. Gelzer.

559 Effect of Polycyclic Hydrocarbons on Steroid 11β-Hydroxylase Activity of the Adrenal in Rats.
   Thomas L. Dao, Yoshikazu Omukai, Paul Libby, and Takeshi Tominaga.

564 Modes of Uptake of Methotrexate by Normal and Leukemic Human Leukocytes in Vitro and Their Relation to Drug Response.
   David Kessel, Thomas C. Hall, and DeWayne Roberts.

571 A Comparison of the Distribution of Tumors Produced by Intravenous Injection of Type 12 Adenovirus and Adeno-12 Tumor Cells.
   David S. Yohn, L. Weiss, and Mirdza E. Neiders.

577 A Morphologic Comparison of Tumors Produced by Type 12 Adenovirus and by the HA-12-1T Line of Adeno-12 Tumor Cells.
   Mirdza E. Neiders, L. Weiss, and D. S. Yohn.
585 Ultracytochemical Studies on Aberrant Structures in Avian Virus Tumor Cells.  
Ursula Heine, Dorothy Beard, and J. W. Beard.

595 Amino Acids Associated with DNA of Tumors.  
Josephine S. Salser and M. Earl Balis.

601 Structure-Activity Studies on the Mechanism of Action of Miracil D.  
Erich Hirschberg, I. Bernard Weinstein, Naola Gersten, Emily Marner, Theodore Finkelstein, and Richard Carchman.

608 The Cytologic and Growth Characteristics of Tumor and Normal Clones of Picea glauca.  
Denes de Torok.

615 “Spontaneous” Malignant Transformation in Vitro of Adult Mouse Cell Lines: Effect of Site of Implantation on Expression of Cell Antigenicity and Malignancy.  
Robert E. McCarthy.

622 Book Reviews.

623 Books Received.

624 Announcement.

COVER LEGEND

Pierre Edouard Jean Clunet (1878–1917) was the first to demonstrate the production of cancer in rats by prolonged X-ray exposure (Recherchez experimentales sur les tumeurs malignes. These pour le Doctorate en Medicine. Paris: G. Steinheil, 1910). Neoplastic effects were observed in radiologists and other users of X-ray devices within a few years after Roentgen announced his discovery in 1895. By 1902 such “radiation cancers” were mentioned in reports from Germany, England, and the United States (A. Frieben, Cancroid des rechten Handrückens, Deut. Med. Wochschr., Vereins-Beilage, 25: 335, 1902; S. Lloyd, Epithelioma Engrafted on X-ray Burn, Med. Rec., 63: 554, 1903; Roentgen Rays in the Causation of Cancer, Med. Rec., 63: 106, 1903). By 1914 a total of 104 cases from European and American sources were described (S. Feygin, Du cancer radiologique. These pour le Doctorate en Medicine. Paris: J. Rousset, 1914).

An appreciation of Clunet appears in P. Mustacchi and M. B. Shimkin, Radiation Cancer and Jean Clunet, Cancer, 9: 1073–1074, 1956; this paper includes the photograph of Jean Clunet, located by Professor Charles Oberling. The illustration of the title page of Sophie Feygin’s thesis is from the original work at the New York Academy of Medicine Library.