Contents

263 Benzpyrene Hydroxylase Activity and Its Induction by Methylcholanthrene in Morris Hepatomas, in Host Livers, in Adult Livers, and in Rat Liver during Development.

274 Glucurononyltransferase Activity in Transplantable Rat Hepatomas.
Kim K. Lueders, Helen M. Dyer, E. Brad Thompson, and Edward L. Kuff.

280 Effect of Starvation of Intact and Adrenalectomized Mice Bearing Lymphosarcoma P1798 on Tumor Regression and Ribonuclease Activity.
Peter H. Wiernik.

283 A Series of Transplantable Rat Mammary Tumors with Graded Differentiation, Growth Rate, and Glutaminase Content.
W. Eugene Knox, Maria Linder, and Gilbert H. Friedell.

288 Virus-like Particles in Bowen’s Disease.
Robert E. Nordquist, Robert L. Olson, Mark A. Everett, and Paul T. Condit.

294 Time Course and Dose-Response Characteristics of Aflatoxin B1 Effects on Rat Liver RNA Polymerase and Ultrastructure.
Raymond S. Pong and Gerald N. Wogan.

305 An Inbred Line of Syrian Hamsters with Frequent Spontaneous Adrenal Tumors.
F. Homburger and A. B. Russfield.

309 The Bio cleavage of Alkyl Glyceryl Ethers in Morris Hepatomas and Other Transplantable Neoplasms.
James F. Soodsma, Claud Piantadosi, and Fred Snyder.

312 Studies on the Mechanism of Skin Tumor Promotion.
Henry Hennings and R. K. Boutwell.

321 Nephroblastomas Induced in Ovariectomized Rats by Dimethylbenzanthracene.
G. Jasmin and J. L. Riopelle.

327 Studies of Folate Deficiency in Patients with Neoplastic Diseases.

334 Further Studies on Liver Glyoxalase Activity in Mice Bearing Lymphosarcoma.

338 Serial Transplantation of Burkitt’s Tumor (EB3) Cells in Newborn Syrian Hamsters and Its Facilitation by Antilymphocyte Serum.
Richard A. Adams, George E. Foley, Sidney Farber, Arlene Flowers, Herbert Lazarus, and Earl E. Hellerstein.

346 A Relation between Pyridine Nucleotide-dependent Dehydrogenase Activity and Nicotinamide Adenine Dinucleotide Glycohydrolase in Ehrlich Ascites Tumor Cells.
Saul Green and Areta Dobrjansky.

352 A Rapid Method for the Isolation of Nuclei from Ehrlich Ascites Tumor Cells.
F. P. Mamaril, Areta Dobrjansky, and Saul Green.

357 Postnatal Cellular Proliferation in Mouse and Hamster Lung.
T. Timothy Crocker, Anthony Teeter, and Beryl Nielsen.

362 Effect of Combination Treatment with 5-Azacytidine and Cytidine on the Life-Span and Spleen and Bone Marrow Cells of Leukemic (L1210) and Nonleukemic Mice.
S. Vadlamudi, J. N. Chaudry, V. S. Waravdekar, I. Kline, and A. Goldin.

370 Adenosine Triphosphate:Adenosine Monophosphate Phosphotransferase Isozymes in Rat Liver and Hepatomas.

376 Cyclic Nucleotides on Cell Growth in Vitro.
Margaret L. Heidrick and Wayne L. Ryan.

379 Nuclear Protein Composition and Metabolism of HeLa Cells after Infection with Herpes Simplex Virus.
G. F. Munro, A. L. Dounce, and S. Lerman.

387 Metabolic Adaptations in Rat Hepatomas: Altered Regulation of Serine Dehydratase Synthesis by Glucose and Amino Acids in Hepatocellular Carcinomas.
Jean-Pierre Jost and Henry C. Pitot.

393 The Cellular Proliferation Kinetics of Animal Tumors.
J. Denekamp.
401 Experimental Induction of Lymphosarcoma in the Cat with “C”-type Virus.  

409 Partial Characterization of the Histones and Histone Acetylation in Cell Cultures.  
J. A. Wilhelm and K. S. McCarty.

418 The Uptake and Turnover of Acetate in HeLa Cell Histone Fractions.  
J. A. Wilhelm and K. S. McCarty.

426 Comparison of Tumorigenesis and of Long-Term Development of Ovarian Autografts on the Greater Omentum of Castrated Infantile and Mature Rats.  
Artur Ber.

430 Experimental Investigations with 1-(Morpholino-methyl)-4-phthalimidopiperidindione-2,6 and Drostanolone Propionate in Dimethylbenzanthracene-induced Tumors of Sprague-Dawley Rats.  
H. Mücket, E. Frankus, and E. Moré.

439 Effect of Purine-Protein Conjugates on the Ehrlich Ascites Tumor in Mice.  
Chaim Lachman and Sasson Cohen.

447 The Mitogenic Activity of a C57BL/10 Mouse Transplantable Lymphoma.  
Bob G. Sanders, Ray L. Teplitz, and Margaret Wilkie.

455 Tumor Production in the Glandular Stomach and Alimentary Tract of the Rat by N-Methyl-N-nitro-N-nitrosoguanidine.  
Takashi Sugimura, Shinji, Fujimura, and Tsuneo Baba.

466 L-Asparagine Requirement and the Effect of L-Asparaginase on the Normal and Leukemic Human Bone Marrow.  
D. H. W. Ho, John P. Whitecar, Jr., James K. Luce, and Emil Frei, III.

473 Uptake and Clearance of 9,10-Dimethyl-1,2-benzanthracene-9,14C by Mammary Parenchymal Cells of the Rat.  
D. H. Janss and R. C. Moon.

480 The Metabolic and Phagocytic Activities of Leukocytes from Children with Acute Leukemia.  

489 A Study of Surface Ionogenic Groups of Different Types of Normal and Leukemic Cells.  
D. Patinkin, M. Schlesinger, and F. Doljanski.

498 A Study of Surface Ionogenic Groups of Chick Embryo Cells Transformed by Rous Sarcoma Virus.  
D. Patinkin, A. Zartisky, and F. Doljanski.

504 Transplantable Thyroid Tumors in the Rat: Development of Normal appearing Thyroid Follicles in the Differentiated Tumors, and Development of Differentiated Tumors from Iodine-deficient, Thyroxine-involved Goiters.  
J. Matovinovic, R. H. Nishiyama, and G. Poissant.

515 The Dependence of DNA and RNA Synthesis on Protein Synthesis in Asparaginase-treated Lymphoma Cells.  

528 Transfer RNA Methylase Activities of SV40-transformed Cells and Cells Infected with Animal Viruses.  
Saul Kit, Kunihiro Nakajima, and D. R. Dubbs.

535 DNA Polymerase Patterns in Developing Rat Liver.  
Peter Ove, Murphy D. Jenkins, and John Laszlo.

540 Immunocompetence of Leukemic Murine Lymphoblasts: Ultrastructure, Virus, and Globulin Production.  
Jose M. Trujillo, Michael J. Ahearne, Roman J. Pienta, Cora Gott, and Joseph G. Sinkovics.

Harold P. Morris, Takeo Nagayo, and Shigeyoshi Odashima.

548 Obituary: David A. Karnofsky.  
Joseph H. Burchenal.

551 Special Announcements.

557 Announcements.

558 Erratum.

COVER LEGEND
The Japanese Foundation for Cancer Research, a forerunner of Japan’s National Cancer Institute, was established in April 1908. In May 1934 the Foundation opened a cancer institute in Tokyo known as the Laboratories and Koraku Hospital of the Japanese Foundation for Cancer Research. Until World War II most of the financial aid for cancer investigations in Japan was provided by the Foundation (Nakahara, W., Bull. Soc. Control Cancer, 20: 10–11, 1938).

In February 1962 the present National Cancer Center Research Institute was opened on premises formerly occupied by the Imperial Japanese Navy, which disbanded its facilities at the close of World War II. The former Naval Medical College and Hospital buildings were converted into the first units of the National Cancer Center Research Institute and Hospital. The Japanese Cancer Center includes 12 divisions in the basic biomedical, clinical, and epidemiological sciences. A view of the Center’s more recent activities is given by W. Nakahara (collected papers from the National Cancer Center Research Institute, 1966, 2: v, 1967).

Photographs of the National Cancer Center Research Institute (foreground) located at Tsukiji 5-chome, Chuo-Ku, Tokyo, and of Dr. Waro Nakahara, Institute Director since May 1962, appear on the cover. We are indebted to Dr. Nakahara for furnishing the illustrations.