Contents

2401 Effects of Temperature, Potassium, and Calcium on the Electrical Potential Difference in HeLa Cells. 
A. B. Borle and J. Loveday.

2406 The Effect of a Leukemia Virus on Thrombopoiesis. 
Isadore Brodsky, Evelyn M. Ross, S. Benham Kahn, and Goldie Petkov.

2413 Regression of Estrone-induced Mammary Tumors in the Rat. 
J. Harry Cutts and G. C. Froude.

2419 The Carcinostatic Activity of 5-Hydroxy-2-formylpyridine Thiosemicarbazone. 
Erwin J. Blanz, Jr. and Frederic A. French.

2423 Meningiomas and Fibroblastic Neoplasia in Calves Induced with the Bovine Papilloma Virus. 
Donovan E. Gordon and Carl Olson.

Jules E. Harris and Evan M. Hersh.

2437 Action of Daunomycin on the Nucleic Acid Metabolism and Viability of HeLa Cells. 

2443 Studies on Unbalanced Growth in Synchronized HeLa Cells. 
Jae Ho Kim, Amaury G. Perez, and Bozidar Djordjevic.

2448 Pharmacologic Studies of the Antitumor Agent 5-(Dimethyltriazeno)imidazole-4-carboxamide. 
Ti Li Loo, James K. Luce, John H. Jardine, and Emil Frei, III.

2454 Electron Microscopy of a Herpes Virus Associated with the Agent of Marek's Disease in Cell Culture. 
Keyvan Nazerian and B. R. Burmester.

2463 The Inhibitory Effect of Griseofulvin on the "Promotion" of Skin Carcinogenesis. 
S. D. Vesselinovitch and N. Mihailovich.

2466 The Heterogeneity of DNA Polymerases in Rat Liver and Hepatomas. 
Yasuko Iwamura, Tetsuo Ono, and Harold P. Morris.

2477 Nonvirus-associated Antigens in Virus-induced Mouse Mammary Tumors. 
Jan Vaage.

2484 The Influence of Actinomycin D on Survival of X-irradiated RF Mice. 
Harry Givelber, Joseph A. DiPaolo, and Marvin Schneiderman.

2489 Fluorescent Antibody and Gel Diffusion Reactions of Human and Chimpanzee Sera with Cells Cultured from Burkitt Tumors and Normal Chimpanzee Blood. 
Morris Goldman, John C. Landon, and Joel I. Reisher.

2496 Tumorigenesis on Mineral-deficient Tomato Plants. 
Lenard W. Swain and John P. Rier, Jr.

2502 The Antigenicity and Immunogenicity of Cell-free Extracts of Chemically Induced Murine Sarcomas. 
Yosef H. Pitch.

2512 5'-Adenosylmethionine Synthetase Activity in Some Normal Rat Tissues and Transplantable Hepatomas. 
Bertram Sheid and Elena Bilik.

2516 Prediction of in Vivo Cytotoxicity of Chemotherapeutic Agents by Their in Vitro Effect on Leukocytes from Patients with Acute Leukemia. 
Martin J. Cline and Ernest Rosenbaum.

2522 Antigenic Characteristics of Lymphomas Induced by Radiation Leukemia Virus (RadLV) in Mice and Rats. 
Jorge F. Ferrer and Henry S. Kaplan.

2529 Comparative Studies of Fluorinated Pyrimidines with Various Cell Lines. 
Makoto Umeda and Charles Heidelberger.
Induction of Increased Benzpyrene Hydroxylase Activity by 2-Phenylbenzothiazoles and Related Compounds.
Lee W. Wattenberg, Mary Anne Page, and J. Lionel Leong.

Metabolic Properties of Mouse Transplantable Adenocarcinoma.
Antonio Caputo and Aristide Floridi.

The Biochemical Identification of Blood and Bone Marrow Cells of Patients with Acute Leukemia.
Joseph F. Seitz and Irina S. Lugarova.

Brief Communications:

Hyperplasia-inducing Factor in Mouse Salivary Gland Isografts.
Kazumasa Hoshino and Ching Der Lin.

Acute Lymphocytic Leukemia in a White-Cheeked Gibbon (Hylobates concolor).
A. De Paoli and F. M. Garner.

Canine Lymphoma as a Potential Model For Experimental Therapeutics.
Ralph E. Johnson, Thomas P. Cameron, and Roy Kinard.

Nickel Carbonyl Inhibition of RNA Polymerase Activity in Hepatic Nuclei.
F. William Sunderman, Jr. and Mojtaba Esfahani.

Book Reviews.

Announcements.

Acknowledgment to Reviewers.

Index to Volume 28.


Cover Illustrations for 1968.

In the Spring of 1898 the New York State legislature appropriated $10,000 for the purpose of "equipping and maintaining a laboratory to be devoted to the study of the cases, mortality rate and treatment of cancer" (New York State Assembly Documents, 2: 32, 1898). The New York State Pathological Laboratory of the University of Buffalo, opened the same year, was thus founded and became one of the earliest cancer research facilities organized under government auspices.

Roswell Park (1852—1914), Professor of Surgery at the University of Buffalo, was appointed first Director. In 1901 the laboratory was relocated in a separate building known as the Gratwick Research Laboratory in honor of its principal benefactor, Mrs. William H. Gratwick of North Tonawanda, New York. The following year, the Gratwick Laboratory became affiliated with the New York State Department of Health, and in 1911 a fully official status was granted by a legislative act that created the New York State Institute for the Study of Malignant Diseases. In 1946 this enlarged complex was designated the Roswell Park Memorial Institute, commemorating its founder and organizer.

The Institute now occupies an extensive site, comprising a clinical center with adjoining units for experimental research in central Buffalo. A biologic station at Springville, New York, was established in 1913. Research at the Roswell Park Memorial Institute traverses a full spectrum of laboratory and clinical problems: cancer epidemiology and statistics, the action of chemotherapeutic agents, chemical carcinogenesis, the role of viruses in tumor formation, cancer biology, and other approaches. It is one of the larger clinical and research facilities for cancer in the world. A detailed history is available in: E. A. Mirand, History of Roswell Park Memorial Institute, Niagara Frontier (Autumn, 1961), published by the Buffalo and Erie County Historical Society.

We are indebted to Dr. James T. Grace, Jr., present Director of Roswell Park Memorial Institute, for furnishing the cover illustrations: a photograph taken from a portrait of Roswell Park and an aerial view of the Institute as it appears today.