Contents

271 Electron Microscopic Studies of Suspension Cultures Derived from Human Leukemic and Nonleukemic Sources. L. Recher, J. G. Sinkovics, J. A. Sykes, and J. Whitescarver.


291 The Effects of Ferrous Ion and Dithioerythritol on Inhibition by Hydroxyurea of Ribonucleotide Reductase. E. Colleen Moore.


301 The Ultrastructure of Target Cells and Immune Macrophages during Their Interaction in Vitro. Velma C. Chambers and Russell S. Weiser.


327 The Effect of Topical Vitamin A on Papillomas and Intraepithelial Carcinomas Induced in Hamster Cheek Pouches with 9,10-Dimethyl-1,2-benzanthracene. A. Polliack and I. S. Levij.

333 The Effect of Isogenic Lymphoid Cells on Primary Sarcomas in the Rat. R. W. Blaney.


338 Heterotransplantation of Mouse Tumors to Immunologically Paralyzed Rats. Nicole Suciu-Foca.


359 Quantitative Immunochemical Determination of the Isozymes of Aspartate Aminotransferase in Rat Livers and Transplantable Rat Hepatomas. J. S. Nisselbaum and Oscar Bodansky.

366 The Effect of Methotrexate on Enzymes Induced following Partial Hepatectomy. Rosalind Labow, Gladys F. Maley, and Frank Maley.


403 Comparative Biologic Activities of 7,12-Dimethylbenz(a)anthracene, 7-Hydroxymethyl-12-methylbenz(a)anthracene, 7,12-Dihydroxymethylbenz(a)anthracene, and 4-Methoxy-7,12-dimethylbenz(a)anthracene in the Sprague-Dawley Female Rat. Katherine L. Sydnor and James W. Flesher.
Preparation of Growth Hormone from a Rat Mammosomatotropic Pituitary Tumor.
William E. Groves and B. H. Sells.

Quantitative Studies on Cancer Dissemination.
Maria Grazia Donelli, Riccardo Rosso, and Silvio Gazzaniga.

Concurrent Combination Chemotherapy of Human Solid Tumors: Experience with a Three-Drug Regimen and Review of the Literature.
Larry Nathanson, Thomas C. Hall, Albert Schilling, and Sherwood Miller.

The Toxicity of Escherichia coli L-Asparaginase.
Philip S. Schein, Nathan Rakieten, Benjamin M. Gordon, Ruth D. Davis, and David P. Rall.

Changes in Virus Attachment and Other Surface Properties of L4946 Mouse Leukemia Cells on Adaptation to Growth in Tissue Culture.
David H. Burrin and Alastair P. MacLennan.

Ultrastructure of Chick Embryo Cells Altered by Strain MC29 Avian Leukosis Virus.

David Kessel, Thomas C. Hall, and David Rosenthal.

Dietary Induction of Some Enzymes of Amino Acid Metabolism during 2-Acetylaminofluorene Feeding.
Lionel A. Poirier and Henry C. Pitot.

Dietary Induction of Some Enzymes of Carbohydrate Metabolism during 2-Acetylaminofluorene Feeding.
Lionel A. Poirier, Miriam C. Poirier, and Henry C. Pitot.

Dietary Induction of Some Enzymes of Amino Acid Metabolism during Azo Dye Feeding.
Lionel A. Poirier and Henry C. Pitot.

Effect of Mumps Virus on the Resistance of Burkitt Lymphoma Cell Lines to Various Viruses.
Barbara A. Zajac, Werner Henle, and Gertrude Henle.

Effect of Herpes Simplex Virus on Cultured Burkitt Tumor Cells and Its Failure to Influence the Epstein-Barr Virus Carrier State.
Werner Henle, Gertrude Henle, and Harald zur Hausen.

Announcements.

Erratum.

The Chester Beatty Research Institute is descendant from the Free Cancer Hospital, founded by Dr. William Marsden, in 1851, for the purposes of treatment and research. Cancer investigations were begun here in 1856: at the turn of the century, a Cancer Research and Pathology Department was established under Dr. Alexander Paine. In 1909 the department was reconstituted as the Cancer Research Institute, which was removed to a separate building two years later. The Institute of Cancer Research of the Royal Cancer Hospital was again enlarged in 1939 when new quarters were provided at Fulham Road (S. W. 3). This facility became known as the Chester Beatty Research Institute in honor of its benefactor and patron, Sir Alfred Chester Beatty (b. 1875).

Alexander Haddow (b. 1907 in Scotland) was appointed fourth Director of the Chester Beatty Institute in 1946. Classic contributions from the Institute include Leitch's work on the latency of tumor induction through coal tar applications to mouse skin and the carcinogenic effect of shale oil ("mule skinners' cancer"). The pioneer studies on hydrocarbon carcinogenesis by Ernest Kennaway, third Director, and his coworkers took place here. Under Haddow, the Institute has undertaken fundamental explorations on the mechanisms of carcinogenesis, aimed at "a kind of synthetic comprehension of the carcinogenic process in general" (J. Am. Med. Assoc., 201: 715–716, 1967), and has been in the forefront of investigations on the chemotherapy of cancer. For a review see: Bruning, D. A., and Dukes, C. E., The Origin and Early History of the Institute of Cancer Research of the Royal Cancer Hospital. Proc. Roy. Soc. Med., 58: 33–36, 1965.

The photograph of Haddow is reproduced from a Lotte Meitner Graf original. Also shown are the Cancer Institutes of the Royal Cancer Hospital as they appear today. We are indebted to Sir Alexander Haddow for submitting the illustrations.