Contents

2285 Evidence for a Transport Carrier of Nitrogen Mustard in Nitrogen Mustard-sensitive and -resistant L5178Y Lymphoblasts.  
Gerald J. Goldenberg, Candice L. Vanstone, Lyonel G. Israels, Derek Ilse, and Ivan Bihler.

2292 The Circulation of Malignant Lymphoid Cells in Thoracic Duct Lymph of Rats with Lymphosarcoma and Lymphatic Leukemia.  
B. K. Sinha and Gerald J. Goldenberg.

2297 Biochemical and Pharmacological Studies with Asparaginase in Man.  
Takao Ohnuma, James F. Holland, Arnold Freeman, and Lucius F. Sinks.

2306 Establishment of a Transplantable Ascites Variant of a Rat Hepatoma Induced by 3'-Methyl-4-dimethylaminoazobenzene.  
David F. Smith, Earl F. Walborg, Jr., and Jeffrey P. Chang.

2310 Increased Incidence of Spontaneous Mammary Tumors in Female Rats with Induced Hypothalamic Lesions.  
C. W. Welsch, H. Nagasawa, and J. Meites.

2314 Cell Killing and the Accumulation of Breaks in the DNA of HEp-2 Cells Incubated in the Presence of Hydroxyurea.  
Marie B. Coyle and B. Strauss.

2320 Production of Leukemia and Stomach Neoplasms in Swiss, RF, BALB/c, and C3H Female Mice by Feeding N-[4-(5-Nitro-2-furyl)-2-thiazolyl]acetamide.  
S. M. Cohen, E. Ertürk, and George T. Bryan.

2326 The Golgi Apparatus during Mitosis in Human Melanoma Cells in Vitro.  
Gerhard Maul and B. R. Brinkley.

2336 The Metabolism of Hepatoma Cell Strains in an Improved Filter Well Apparatus.  
John A. Dickson.

2346 Decreased Hydroxylation of Steroid Hormones by Liver Microsomes from Rats Bearing Walker Carcinosarcoma 256.  
Ryuichi Kato and Atsushi Takahashi.

2353 Accelerated Response of Hepatic DNA Synthesis to Partial Hepatectomy in Rats Pre-treated with Growth Hormone or Surgical Stress.  
Frederick L. Moolten, Nancy J. Oakman, and Nancy L. R. Buhler.

2358 Inhibition of Ribonucleotide Reductase, DNA Synthesis, and L1210 Leukemia by Guanazole.  
R. W. Brockman, Sue Shaddix, W. R. Laster, Jr., and F. M. Schabel, Jr.

2369 Acid Hydrolase Activity in the Leukocytes of Tumor-bearing Rats.  
Ralph F. Kampschmidt and Dan Wells.

2372 "Induction" of Dihydrofolate Reductase: Purification and Properties of the "Induced" Human Erythrocyte and Leukocyte Enzyme and Normal Bone Marrow Enzyme.  
J. R. Bertino, A. R. Cashmore, and B. L. Hillcoat.

2379 Mechanism of the Growth Inhibition Potentiation Arising from Combination of 6-Mercaptopurine with 6-(Methylmercaptopurine Ribonucleoside.  

2388 Isolation and Propagation of a Virus from a Spontaneous Mammary Carcinoma of a Rhesus Monkey.  
Erling M. Jensen, Inna Zelljadt, Harish C. Chopra, and Marcus M. Mason.

2394 Studies on the Chemotherapy of Experimental Brain Tumors: Development of an Experimental Model.  
James I. Ausman, William R. Shapiro, and David P. Rall.

2401 Studies on the Chemotherapy of Experimental Brain Tumors: Evaluation of 1,3-Bis(2-chloroethyl)-1-nitrosourea, Cyclophosphamide, Methotrexate, and Methotrexate.  
William R. Shapiro, James I. Ausman, and David P. Rall.

2414 RNA Synthesis in Nuclei Isolated from Normal and Friend Virus-infected Mouse Spleen.  
Benjamin R. Munson, Robert J. Fiel, and Julian L. Ambrus.

2420 Effects of Cancer upon High-Density and Other Lipoproteins.  
Marion Barclay, Vladimir P. Skipski, Olga...
COVER LEGEND

With the death of Otto Warburg on August 3, 1970, the world of cancer research lost one of its most illustrious and colorful practitioners.

Otto Heinrich Warburg was born on October 8, 1883, into a family famous in science and commerce. He studied chemistry under the great Emil Fischer and, following the receipt of the doctorate in chemistry in 1906, obtained the doctorate in medicine in 1911. Since 1931, he has been the Director of the Kaiser Wilhelm Institute for Cell Physiology in Berlin-Dahlem. In a long life devoted to studies of life processes, he has been a pioneer in the application of physicochemical principles to studies of tissue and cell metabolism. The manometric apparatus for respiratory studies that bears his name has been used so widely as to have become virtually a symbol of biochemistry. Among his epoch-making discoveries are the respiratory pigments and their associated enzymes and the nicotinamide adenine dinucleotides. He is renowned particularly for his forceful, although controversial, theories on the metabolism of cancer cells and the mechanisms of photosynthesis.

His controversial theory of respiratory impairment of cancer cells, formulated as a result of his prodigious experimental work during the 1920s, has ever since been a focal point for biochemical investigations on metabolic regulation and has for many years been a guiding principle in attempts at the chemotherapy of cancer. Perhaps no other scientist has had as much impact on cancer research. His early experimental work and theoretical considerations on cancer are collected in his monograph, which first appeared in 1926 under the title Ueber den Staffwechsel den Tumoren. Berlin: Springer, 1926. The English translation appeared in 1930 under the title Metabolism of Tumors (translated by F. Dickens). London: Arnold Constable. His unparalleled contributions to biochemistry and cell physiology have been widely recognized and cited, and he was the recipient of the Nobel Prize in 1931.

The cover photograph of Professor Warburg is reproduced from an original taken in the pre-World War II period, exact date unknown.