Contents

1161 Kinetic, Electrophoretic, and Chromatographic Studies on Glucose-ATP Phosphotransferases in Rat Hepatomas.

1173 Induction of Brain Tumors in Newborn Hamsters by Simian Adenovirus SA7.
   F. Rapp, S. Pauluzzi, T. A. Waltz, J. A. Burdine, Jr., F. A. Matsen III, and B. Levy.

1179 Regeneration, Tumor, Dietary, and L-Asparaginase Effects on Asparagine Biosynthesis in Rat Liver.
   Manford K. Patterson, Jr. and Gerald R. Orr.

1184 Differences in the in Vivo Alkylation and Cross-linking of Nitrogen Mustard-sensitive and -resistant Lines of Lettré-Ehrlich Ascites Tumors.

1195 Glutaminase Activities and Growth Rates of Rat Hepatomas.

1200 The Kinetics of the Organ-specific Metastasis of a Transplantable Reticuloendothelial Tumor.
   H. Ira Pilgrim.

1206 Pathogenesis of Chronic Friend Disease in Hybrid BDF₁ Mice.
   Peter J. Dawson and A. Howard Fieldsteel.

1212 Experimental Therapeutic Investigations with 1-(Morpholino)methyl-4-phthalimido-piperidindione-2,6 on Dimethylbenzanthracene-induced Tumors of Sprague-Dawley Rats.
   H. Mückter, E. Frankus, and E. Moré.

1218 Effects of Carcinogenic, Noncarcinogenic, and Cocarcinogenic Agents on the Biosynthesis of Nucleic Acids in Mouse Skin.
   Dieter Paul.

1226 1-Methyl-1-nitrosourea and Dialkylnitrosamine Depression of Nicotinamide Adenine Dinucleotide.
   Philip S. Schein.

1233 Apparent Reversal of X-condensation Mechanism in Tumors of the Female.

1244 Hematogenous Metastasis of Yoshida Ascites Hepatoma in the Chick Embryo Liver: Ultrastructural Changes in Tumor Cells.
   Joseph Locker, Peter J. Goldblatt, and Joseph Leighton.

1254 A New Type of Transplantable Adrenal Tumor and Its Comparative Histopathology.
   Jer K. Mody.

1262 Titration of Cytolytic Antitumor Antibody Utilizing Absorbance at 260 µm to Measure the Leakage of Cell Constituents.

1267 Effect of Perfusing Blood on Serum Protein Production by Isolated Perfused Livers from Normal or Tumor-bearing Rats.
   Milton Toporek.

1272 A Microsome-dependent Binding of Benzo[a]pyrene to DNA.
   Harry V. Gelboin.

1277 A Fluorescence Microscopic Study of Methodologic Effects on the Intranuclear Distribution of Benzo(a)-pyrene.
   T. K. Shires.

1288 Effect of Feeding Amino Azo Dyes on Mitochondrial Swelling and Contraction. Kinetic Evidence for Deletion of Membrane Regulatory Sites.
   Joseph C. Arcos, Joyce B. Mathison, Mattie J. Tison, and Anne M. Mouledoux.
1298 Sequential Alterations in Mitochondrial Inner and Outer Membrane Electron Transport and in Respiratory Control during Feeding of Amino Azo Dyes; Stability of Phosphorylation. Correlation with Swelling-Contraction Changes and Tumorigenesis Threshold. 
Joseph C. Arcos, Mattie J. Tison, Hans H. Gosch, and Judith A. Fabian.

1307 Comparative Sensitivity to Various Antimetabolites of Several Established Cell Lines Derived from the Buffy Coat of Normal Humans and Patients with Neoplastic Diseases. 
Yukitoshi Aoki and George E. Moore.

1313 Brief Communication: Virus Particles Associated with the Transplantable Novikoff Hepatoma in the Rat. 
Shuichi Karasaki.

1316 Letter to the Editor: Misquotation about the Structure of the Nucleolus. 
Robert Love.

1317 Announcements.

COVER LEGEND

Nikolai Nikolaevich Petrov (1876—1964), of Leningrad, was an outstanding clinical and experimental oncologist of the Soviet Union, and the doyen of Russian oncology. Among his contributions to cancer research were the induction of carcinoma of the gall bladder and the induction of osteogenic sarcoma in monkeys.

The Leningrad Institute of Oncology was founded by Petrov in 1926, and now memorializes his name. Since 1964 it has occupied a complex of 14 buildings 20 kilometers from the city (Pesochnaya station). The photograph is of the main building. The Institute has clinical facilities and has admitted over 55,000 patients between 1926 and 1965. The radiotherapy unit includes a linear accelerator and betatron. There are also some 12 laboratories, including experimental therapy, biophysics, biochemistry, carcinogenic agents, immunology of tumors, virology, and endocrinology.

An obituary of Petrov appears in Voprosi Onkologii, 10(4): 115–118, 1964; the Institute and its history are described in: “Sorok Let Deyatelnosti Leningradskovo Instituta Onkologii, 1926–1966,” (Forty Years’ Activity of the Leningrad Institute of Oncology), Leningrad: Meditsina, 1966. We are indebted to Prof. A. I. Serebrov for the photographs and publications.