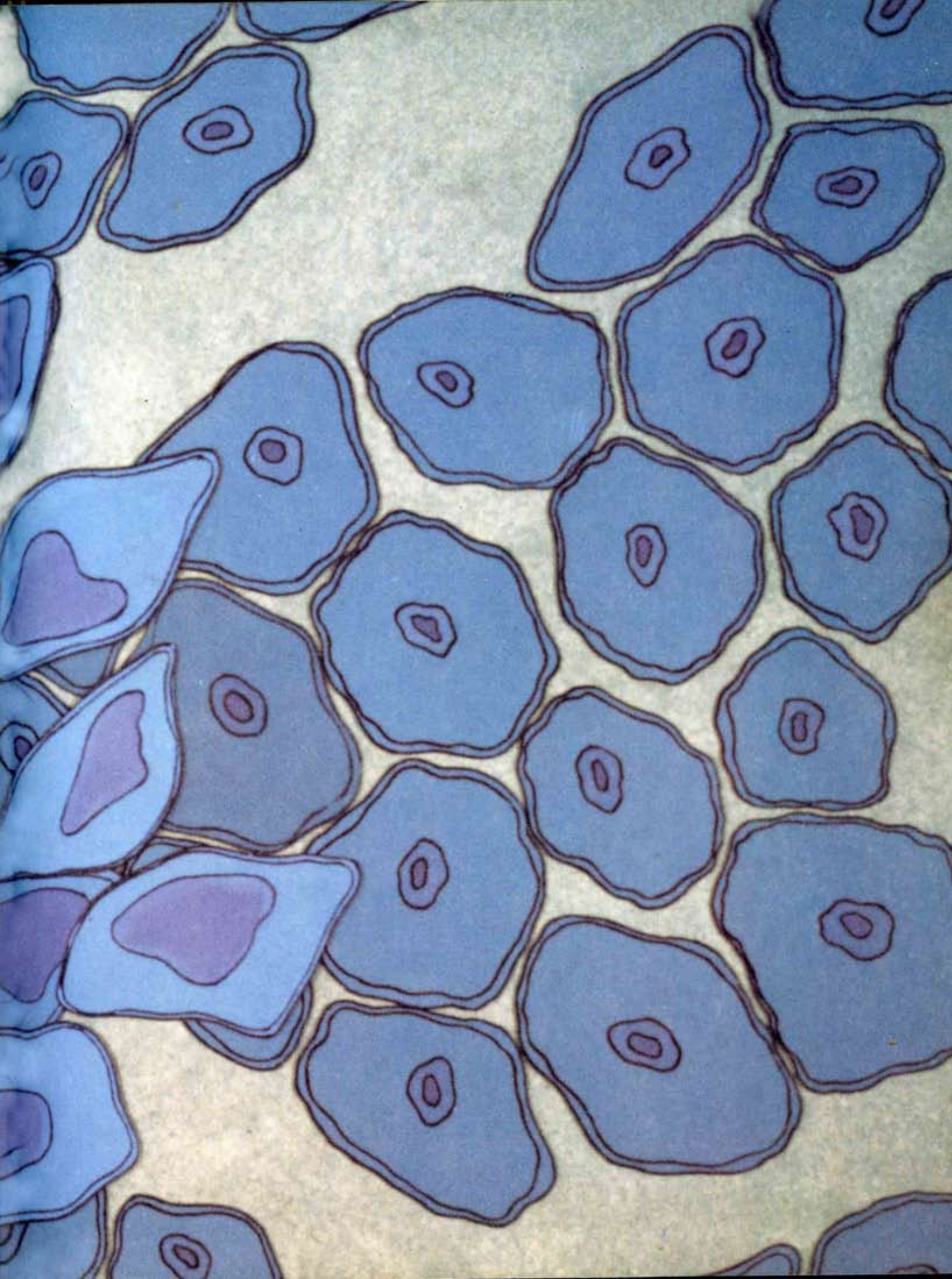






The centaur *Chiron*, teacher of *Asclepios*. Attica amphora, ca 520 BC (K. Kerényi, *Der göttliche Arzt*. Basel: Ciba 1948)

Dedicated to the
Eventual
Prevention and Cure of Cancer

CONTRARY TO

Being an illustrated
commentary on some
persons and events of
historical importance in
the development of
knowledge concerning



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NATURE



• • **CANCER**

by

Michael B. Shimkin

1977

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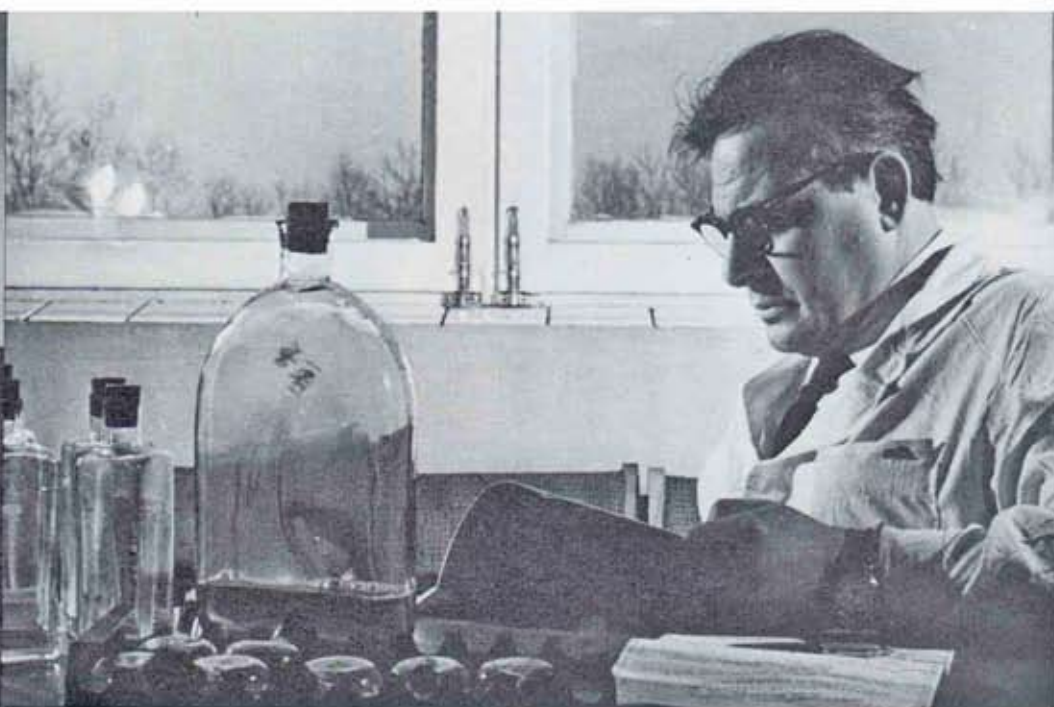
IX-H.

Biochemistry of Cancer

IX-H-5. Fetal antigens: Zilber and Abelev.



L.A. Zilber



G.I. Abelev

Lev Alexandrovich Zilber (1894-1966), doctor of medical sciences and member of the U.S.S.R. Academy of Medical Sciences, was the founder of the Russian school of viral oncology. A graduate of Moscow State University in 1919, his earlier experimental work was on autoserotherapy of typhus (1921), hereditary transformation of serotypes in **Proteus vulgaris** (1922-1923), and the replication of viruses in unnatural hosts, as vaccinia virus in yeast (1932-1934). He and his coworkers identified the tick-borne, summer-spring encephalitis of the Far East regions of the U.S.S.R. He began work on the virological aspects of cancer in 1944, heading the Department of Immunology and Virology of Tumors in the Gamaleya Institute of Epidemiology and Microbiology, Moscow.

Zilber and his associates described specific tumor antigens and the induction of tumors in mammals by Rous sarcoma virus.

The Selected Works of L. A. Zilber, edited by N. N. Blokhin (Meditsina, Leningrad, 1971), lists 11 monographs and over 260 articles published by Zilber.

G. I. Abelev (1928-) doctor of biological sciences and professor of biochemistry, graduated from Moscow State University in 1950. He was an assistant of Zilber, whom he succeeded as departmental chairman at the Gamaleya Institute in 1966. Abelev and his colleagues devoted their attention to tumor-specific antigens and demonstrated striking immunological individuality in mouse hepatomas.

The most important contribution from Abelev's groups was the 1963 discovery of embryo-specific α -globulin (α -fetoprotein, or AFP) in experimental hepatomas. This led to the development of an immuno-diagnostic test for hepatocellular carcinoma and teratocarcinoma in man.

L. A. Zilber. Specific tumor antigens. **Adv. Cancer Res.** 5: 291-329, 1958.

L. A. Zilber. Pathogenicity and oncogenicity of Rous sarcoma virus for mammals. **Prog. Exp. Tumor Res.** 7: 1-48, 1965.

G. I. Abelev. Antigenic structure of chemically-induced hepatomas. **Prog. Exp. Tumor Res.** 7: 104-157, 1965.

G. I. Abelev. Alpha-fetoprotein in oncogenesis and its association with malignant tumors. **Adv. Cancer Res.** 14: 295-358, 1971.

IX-Q.

Cancer Institutes and Services.

IX-Q-10. Institute of Experimental and Clinical Oncology:
Blokhin and Shabad.

Nikolai N. Blokhin

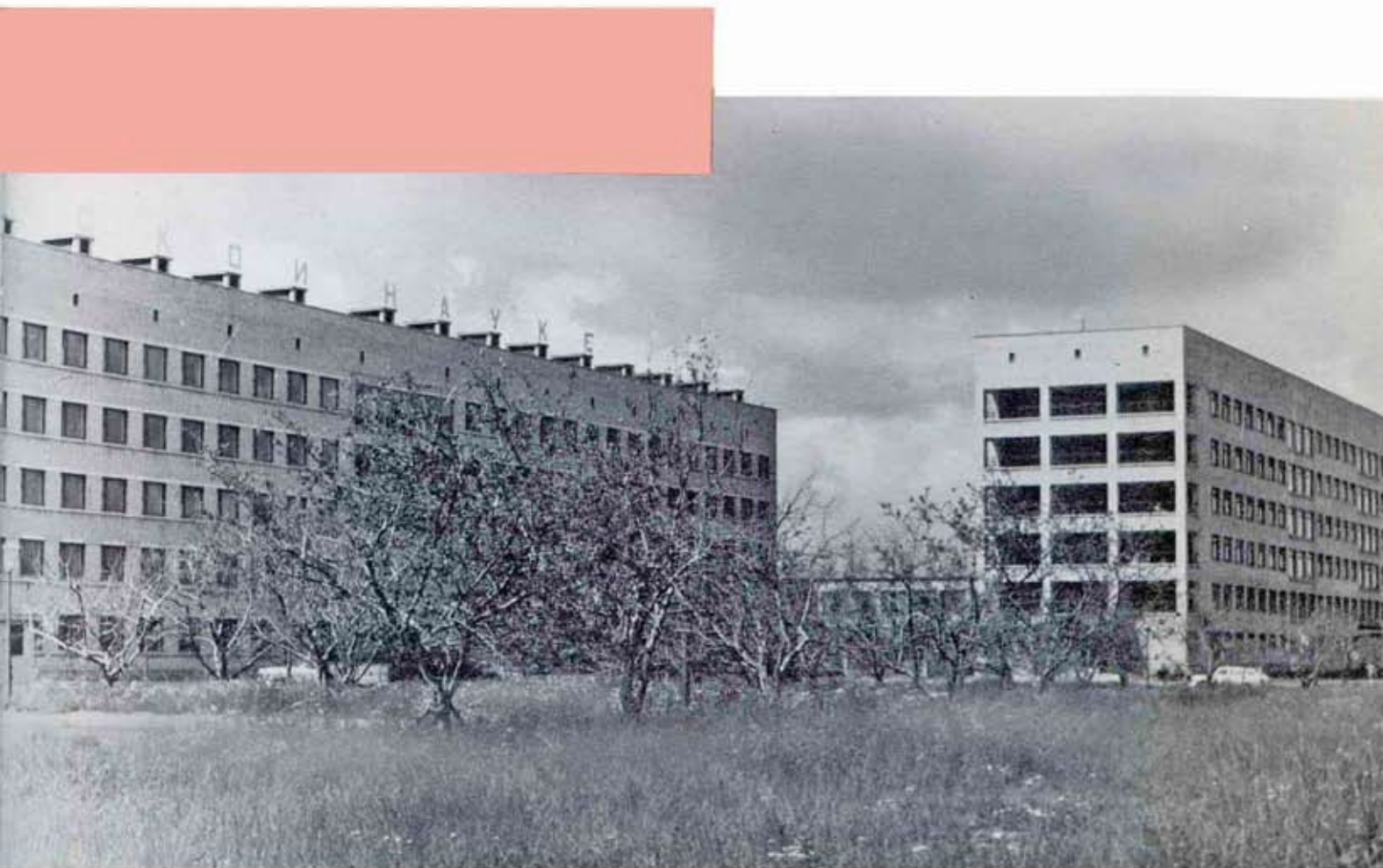


.. M. Shabad

The Institute of Experimental and Clinical Oncology of the Academy of Medical Sciences of the USSR is located on Kashirskoye Chausse in Moscow. It was founded in 1951 and is the largest center in the USSR for laboratory and clinical research on cancer.

Nikolai Nikolaevich Blokhin (born in 1912 in Lukoyanov) has been director of the Institute since its opening. He was graduated from Gorky State Medical In-

stitute in 1934 and in the same year founded the Institute of Restorative Surgery, Orthopedics, and Traumatology where he was director of general surgery from 1950 to 1952. He was president of the Academy of Medical Sciences of the USSR (1960-1968) and president of the International Union Against Cancer (1966-1970). The author of over 50 works, Dr. Blokhin has contributed to the literature on cancer control, plastic sur-



Institute of Experimental and Clinical Oncology, Moscow, U.S.S.R., 1970.

gery, and chemotherapy of cancer.

Leon Manusovich Shabad (born in 1902 in Minsk) is a pathologist who is chief of the Department of Carcinogenic Agents at the Institute. He was graduated from the Leningrad Medical Institute in 1924, and in 1925 began working in the field of experimental oncology. Shabad is a member of the Academy of Medical Sciences of the USSR. He is world renowned for his work on environmental

carcinogenesis, for which he was awarded a prize by the United Nations in 1962. His numerous publications include books on pathology and oncology. He continues to be a frequent contributor to the cancer literature in English as well as in the Russian language.

L. M. Shabad. Studies in the USSR on the distribution, circulation, and fate of carcinogenic hydrocarbons in the human environment and the role of their disposition in tissues in carcinogenesis: a review. **Cancer Res.** 27: 1132-37, 1967.