

NECROLOGY

IN MEMORY OF SAMUIL YAKOVLEVICH KAPLANSKII

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On August 28, 1965 Samuil Yakovlevich Kaplanskii died at an age of 68 after a brief, grave illness.

Samuil Yakovlevich was one of the greatest Soviet biochemists who combined theoretical investigations in the field of general biochemistry with the development of problems of practical medicine. The scientific activity of S. Ya. Kaplanskii began at the Moscow University, from where he was graduated in 1920, in the Laboratory of Academician V. S. Gulevich (1921-1925). The first outstanding works which placed the scientist among the leading biochemists of the country were devoted to the problems of the biochemistry of skin and mineral metabolism. He wrote three monographs: "Biochemistry of the Skin" (1931), "Acid-base Balance in an Organism and the Significance of Its Disturbances in Pathology" (1932, 1940, second edition) and "Mineral Metabolism" (1938). These monographs are widely used by researchers engaged in these areas of pathological and medical chemistry.



The research activity of Samuil Yakovlevich was intimately associated with pedagogical activity. From 1938 to 1953 he headed the Department of Biochemistry of the I and II Moscow Institute. He trained many biochemists, researchers and physicians.

From 1937 to 1944 S. Ya. Kaplanskii directed the Department of Physiological Chemistry of the A. M. Gor'kii All-Union Institute of Experimental Medicine, on the basis of which in 1945 the Institute of Biological and Medical Chemistry of AMN USSR was created, where until recently he directed the laboratory of pathological chemistry.

During the years of the Second World War the scientist worked on problems associated with the needs of military medicine. Investigations of nitrogen protein in wound exhaustion made it possible to establish that the basic cause of this pathological state is protein insufficiency developing as a consequence of enhanced breakdown of tissue proteins, which in turn causes a change in the activity of a number of enzymes in the liver and other organs. A consequence of these investigations was the recommendation to use methionine which, when added to the diet, accelerates recovery processes on protein insufficiency brought about by various causes. As a result of studying hypovitaminosis-B₁ in traumatic lesions of the nervous system, the use of vitamin B₁ was also proposed in the treatment of pertinent disorders. The conditions of obtaining a toxin of gas gangrene were studied in order to develop toxoids.

Many works which issued from the laboratory of S. Ya. Kaplanskii were devoted to an investigation of the interrelationship and interconversion of serum and tissue proteins. It was established that in various diseases of the liver, kidneys, rheumatism, etc. immunologically altered proteins with a definite specificity appear in the blood and tissues. These data are of great theoretical and practical (diagnostic and prognostic) value.

The works of Samuil Yakovlevich and his co-workers devoted to a study of the metabolism of amino acids and the hormonal regulation of these processes are also very interesting. New data were obtained on enzymatic systems participating in the conversion of a number of amino acids (alanine, threonine, proline, and hydroxyproline, tyrosine, histidine, etc).

This quite brief review of the problems undertaken by the scientist shows the breadth of his scientific interest.

Samuil Yakovlevich actively participated in scientific and community life. He was a permanent member of the board of the Moscow Society of Physiologists, Biochemists, and Pharmacologists, and later of the Biochemical Society, performed considerable editorial, consultative, and propaganda work, and was an active participant and organizer of conferences, symposia, and congresses.

For many years Samuil Yakovlevich edited the section "Biochemistry" in our journal and to a considerable degree improved this section and the work of the entire journal.

Samuil Yakovlevich Kaplanskii was a scientist of high principles, a wonderful teacher, and a person with wide interests and great love of people.