



Mieczysław Minkowski
1884-1972

OBITUARIES

IN MEMORY OF PROFESSOR MIECZYŚLAW MINKOWSKI
1884-1972

On July 20, 1972, one of the most prominent neurologists of our time died at the age of 88. He was Mieczysław Minkowski, emeritus professor of neurology of the University of Zürich and world famous scientist.

Professor Minkowski was born in Warszawa in 1884. His family was prominent in the intellectual life of Poland. Both Professor Herman Minkowski, the great mathematician who created four-dimensional geometry and pioneered the theory of relativity, and Oscar Minkowski, well-known investigator of diabetes mellitus, were members of this family. After finishing high school Mieczysław Minkowski became a student at Warszawa University (then in Tsarist Russia). His sympathies with the progressive student movement resulted in his withdrawal from the University. He left Warszawa to study at Wrocław. In 1907 he received his medical degree. At that time his scientific interest had crystallized, and his doctoral dissertation was concerned with the disorders of bladder function due to cerebral origins. Thereafter he worked with the most prominent representatives of the neurological sciences, such as I. P. Pavlov in Petersburg, Professor Alzheimer in München and Professor Rothman in Berlin. Following this period of study he established himself in Zürich where he worked under Constantin von Monakow.

Mieczysław Minkowski's main interest involved experimental studies in the field of neuroanatomy and neurophysiology. While he was in Berlin during the years 1909 to 1911, he published in the *Pflüg. Arch. Ges. Physiol.* a now classical work entitled "Zur Physiologie der corticalen Sehphäre". After moving to Switzerland he continued to be interested in the central visual system. He was very successful in this line of research and demonstrated the human structure of the lateral geniculate body in which particular laminae represent alternately the left

and right eye. This discovery was the basis for explaining the mechanism of binocular vision. His monograph concerning this field was published in 1913 in the Transactions of the Institute of Brain Anatomy in Zürich.

Among his neuroanatomical works we should also mention an extensive study published in four parts in *Schweiz. Arch. Neurol. Psychiat.*, Volumes 12, 14 and 15, under the title "Etude sur les connections anatomiques des circonvolutions rolandiques, pariétales et frontales". Now after 50 years of very extensive physiological and behavioral investigation concerning functional interrelations between the three lobes of the cerebral cortex, this work still has considerable significance.

Finally we should emphasize his enduring and generally well-known investigations concerning the development of motor activity in the human embryo in correlation with the morphological development of the nervous system. Later work on the ontogenesis of the nervous system was based on fundamental research in this area.

Although Minkowski's main interest in life was centered around his research in neuroanatomy and neurophysiology, he was not able to devote himself to basic science. Due to pressures of the times he was obliged to switch to clinical neurology. However, owing to his extensive knowledge in the field of brain research, his achievements in his clinical studies were extremely important. Among other contributions his work on aphasia in polyglots should be emphasized. He has shown that disorders of speech may affect only one of two languages spoken by the patient.

Although Minkowski had become a citizen of Switzerland and participated fully in the material and intellectual life of his adopted country, he never lost his deep love for Poland. He continued to have strong patriotic feelings for Poland and both suffered from the disasters which occurred in his native land and rejoiced in the successes. He was a frequent guest in Poland both before and after the war and was on friendly terms with the leading Polish neurologists and psychologists. His own pleasant nature and happy outlook on life made him welcome. He published a number of articles in our scientific journals in the Polish language.

I was visiting Switzerland a few months ago at the invitation of the present director of the Brain Research Institute in Zürich, Professor Konrad Akert. At that time I had the honor and privilege of meeting Professor Minkowski. It was clear both to his colleagues and the people around him that his health was rapidly deteriorating. It was obvious that he had but a short time to live. Nevertheless he came to my lecture; he was interested in its subject concerning functional organization of the frontal cortex; and he took part in the discussion with his usual

brilliance and wisdom. After my lecture there was a banquet during which he delivered a beautiful speech. He shared his memories of the past and spoke of his humanistic ideals, especially those concerning peaceful contacts among people. He was very happy to learn that close scientific relationships had been established in the field of brain research between Switzerland and Poland. Minkowski was delighted to know that both these countries would cooperate scientifically for their mutual benefit. The last part of his speech, the most personal, was delivered in Polish. It turned out that this was his last public appearance. After my return to Poland I sent him a letter, which he was unable to read because of his increasing weakness.

I am happy, indeed, when I realize that before his death he was able to see his greatest desire become reality. This of course was the establishment of strong ties in his beloved scientific field between his homeland, which he never stopped loving, and his adopted country, for which he had done so much.

Jerzy Konorski

K. S. ABULADZE
1895-1972

On the 14th of September of this year occurred the sudden death of Dr K. S. Abuladze, one of the few remaining pupils of I. P. Pavlov. He was born in 1895 and from 1932 worked in the physiological laboratory of the Institute of Experimental Medicine in Leningrad. In his first work, which was performed in Pavlov's laboratory, he studied the brain activity of the dog after depriving the animal of vision, audition and olfaction. Thereafter he invented a new method of putting a part of the tongue through the cheek to the outside. In this way he could stimulate its receptors by chemical substances and record salivation. This contributed to the better understanding of the mechanisms of salivary reflexes.

Dr Abuladze was a very pleasant person, fully dedicated to his scientific work.

Jerzy Konorski