

ИСТОРИЯ МЕДИЦИНЫ

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Vladimir Germanovich Shtefko

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The article is devoted to the life and creative path of the famous Russian phthisiopathologist, biologist, anatomist and anthropologist, scientist, talented educator and organizer, patriarch of the national school of phthisiopathology, Doctor of Medical Sciences, Professor Vladimir Germanovich Shtefko (1893–1945), who was born in Moscow in the family of an employee. After graduating from the Moscow Real School, he entered the Medical and Physics and Mathematics Faculties of the Imperial Moscow University. In 1911, the pulmonary tuberculosis was diagnosed, which accompanies him throughout his life and for which he is being treated in Switzerland, where he continues his studies at the University of Lausanne. After returning to Russia, he graduated with honors from these two faculties in 1916 and devoted himself to devotion to science. The scientific interests of V. G. Shtefko and his students were primarily tuberculosis issues. He is the author of about 300 scientific papers, including 24 monographs. V. G. Shtefko was the founder of the Moscow school of phthisiopathologists, as well as comparative anatomical and age-morphological directions in medical research. He established the phenomenon of dyschronic development of intraorgan structures and concluded that the cultural races of humanity, such as Europeans have a more complex protein molecule structure than lower races. In fact, he refuted the well-known postulate that all people are brothers. Moreover, in 1929, scientists led by V. G. Shtefko developed a classification of five normal types of the human constitution (asthenoid, digestive, thoracic, muscular, abdominal, as well as mixed types), which was the reason for his political persecution, and therefore in 1938 the work had to be stopped, nevertheless, this did not stop the anger of his detractors and on October 3, 1945 in Moscow, V. G. Shtefko committed suicide at the age of 52.

Keywords: Vladimir Germanovich Shtefko, scientist-phthisiopathologist, biologist, anthropologist, ornithologist, founder of the Moscow school of Phthisiopathology.

November 29, 2023 marks the 130th anniversary of the birth of the famous Russian pathologist, biologist, anatomist, anthropologist and phthisiologist, scientist, educator and organizer, patriarch of the Russian school of phthisiopathology, Doctor of Medi-

cal Sciences, Professor Vladimir Germanovich Shtefko — a student of A.I. Abrikosov, N. F. Melnikov-Razvedenkov and D. M. Rossinsky [1].

He was born on November 29, 1893 in Moscow in the family of an employee German Georgievich Shtefko and Sofia Pavlovna Krechetnikova. His father managed to instill in his son a love of literature at an early age.

In 1910, Volodya graduated from the Moscow Real School of Konstantin Pavlovich Voskresensky on Myasnitskaya. In the same year he entered the Medical Faculty of the Imperial Moscow University (IMU), now Lomonosov Moscow State University. In 1911, he was admitted to the Natural Sciences Department of the Faculty of Physics and Mathematics, where he attended a course of lectures on anthropology by Professor Dmitry Nikolaevich Anuchin (1843–1923). In 1911, the young man was diagnosed with the pulmonary tuberculosis, for which he was treated in Switzerland and continued his studies at the University of Lausanne there. In 1912, due to the death of his mother, he returned to Russia, where 4 years later he graduated with honors from these two faculties [2].

In his last year, student Shtefko married Zinaida Mitrofanovna Blonina, who was born in Yevpatoria in the family of a dermatologist, played the piano, collected old editions of sheet music. In the future, a daughter Olga and a son Igor were born in the family of Stefko, who later became a Professor at the Moscow Institute of Railway Transport [3].

While still a student, Vladimir Shtefko was in close contact with the veterinary biological laboratory of the Moscow Zoological Garden and in 1914–1915 he completed a series of works on the study of filariasis, for which he was awarded the medal of the Imperial Russian Society for the Acclimatization of Animals and Plants. But for the first time he reported with a demonstration of parasite preparations in the Ornithology Department of the Imperial Russian Society for the Acclimatization of Animals and Plants on October 10, 1913, when he was still 19 years old, and in 1914 an article entitled “Filariasis and its spread among birds of European Russia”, dedicated to one of his teachers Dmitry Mikhailovich Rossinsky, was published in the journal “Poultry Science and Poultry Farming. 1914 (4): 40–58” [5].



Fig. 1. Shtefko Vladimir Germanovich. Available at: <http://sgma.alpha-design.ru/MMORPH/N-57-html/zubritsky/zubritsky.htm> (accessed: 20.07.2023)

In 1912–1916, Volodya, fascinated by pathological anatomy, began studying at the IMU department under the guidance of A. I. Abrikosov, while simultaneously working as an assistant to the prosector in the city maternity hospital of the Soldatenkov hospital (now the city clinical hospital named after S. P. Botkin) (Fig. 1).

In 1916, during the First World War, V. G. Shtefko was mobilized to the active army on the Caucasian front in the city of Trebizond as the head of the sanitary and epidemiological detachment of the Red Cross, where his wife worked with him as a nurse, where he suffered from tropical malaria and where he first described the pathological anatomy of Dengue fever in the literature. In the same year, he was demobilized for tuberculosis and evacuated to Kharkiv, where he worked as the head of the autopsy department at the Pathology Institute at the Nikolaev Hospital and in the Anatomical Cabinet of Kharkiv University, then at the city Infectious Diseases Hospital [6].

In 1919, in the specialized council of the Taurida University (now the Crimean Federal University named after V.I. Vernadsky) under the leadership of Prof. A. A. Ivanovsky V. G. Shtefko defended his master's dissertation on the topic "Pigment in anthropological terms. Pigments of the skin and internal organs in humans", and 2 years later, when he was 28 years old — a doctoral dissertation on the topic "Materials for the cytoarchitectonics of the cerebral cortex" under the guidance of the outstanding histologist Boris Innokentievich Lavrentiev, while becoming a master in 1919, Doctor of Medicine — respectively in 2021 After defending the master's dissertation, the master becomes a full-time Associate Professor of the University [7].

In 1921, V. G. Shtefko took the position of the Head of the Department of Normal and Pathological Anatomy at the Tauride University, where in 1924 he was awarded the title of professor, and at the same time continues to work as a prosector in the Central Bacteriological Laboratory of the Clinical Campus at the Zemstvo Tauride Hospital Province and at the Anatomical Institute of the University. In 1921, for the first time in the Crimea, the teaching of pathological anatomy began [8] (Fig. 2).

In 1924, Vladimir Germanovich moves to the Mother See and becomes more in demand: he is invited everywhere to various medical scientific and practical institutions. So, for example, from 1924 to 1930 he is elected Professor of the Department of Anthropology of the Faculty of Physics and Mathematics of Moscow University (MU) and at the same time of the Research Institute (RI) and the Museum of Anthropology named after D. N. Anuchin, one of the oldest RI of MU. From 1924 to 1945 — Head of the Laboratory of Pathomorphology at the Central Research Institute of Tuberculosis (CRIT) and at the same time part-time Head of the Experimental Department of the same institute. In 1927, V. G. Shtefko went to work at the newly created State Scientific Institute for the Health of Children and Adolescents (now the Moscow Research Institute of Pediatrics and Pediatric Surgery), where he became the first head of the laboratory of Age Morphology, and from 1936 to 1945 — Head of the Medical Veterinary Department of the Moscow Zoo. In 1938–1945 — Professor of the 1st Kiev Medical Institute and consultant of the Kiev Orthopedic Institute. In addition, V. G. Shtefko in different years was a teacher at the Department of Tuberculosis at the Institute for the Advanced Medical Training and a consultant at the Institute of Occupational Diseases, organized in 1923 by Vladimir Alexandrovich Obukh (now the Scientific Research Institute of Occupational Medicine named after Academician N. F. Izmerov), and at the Institute of Blood Transfusion (now the NMRC of Hematology) [9].



Fig. 2. Vladimir Germanovich at work.
Available at: https://ru.wikipedia.org/wiki/Штефко,_Владимир_Германович (accessed: 20.07.2023)

The scientific interests of Vladimir Germanovich and his students were primarily the issues of tuberculosis, as well as the age morphology of the child, the doctrine of the human constitution, comparative pathology, infectious diseases, pathology of the nervous and endocrine systems, anthropology and ornithology. V. G. Shtefko has priority in the elaboration of the doctrine of the endogenous development of secondary tuberculosis, the scientist studied the healing processes of tuberculous caverns in the conditions of collapse therapy, the role and importance of the lymphatic system of the lung in the pathogenesis of tuberculosis of the respiratory organs. Throughout his creative activity in Moscow, V. G. Shtefko maintained close ties with the Moscow Zoo, which gave him the opportunity to dissect zoo inhabitants who died of old age and from various diseases in order to study age-related morphological changes in representatives of various classes of vertebrates. During the Great Patriotic War, V. G. Shtefko performed a number of works, namely: on the study of traumatic pneumonia, anaerobic infection, the development of methods for the treatment of fractures, osteomyelitis, ulcerative processes. All these studies were important both for identifying the general patterns of development of pathologies in vertebrates and for restoring the health of the wounded [10].

V. G. Shtefko was the founder of the Moscow school of phthisiopathologists, as well as of comparative anatomical and age-morphological directions in medical research. Vladimir Germanovich's works in the field of pathomorphology of tuberculosis have become classics in their field and he created a large scientific school. In 1917 Vladimir Germanovich was awarded the MU Prize named after Professor of Surgery A. P. Rastsvetov, in 1923 he was awarded the All-Russian Prize named after K. A. Raukhfus from the Leningrad Society of Pediatric Physicians and the International Prize in Geneva for a series of works on the study of fasting, and in Soviet times he was also awarded the Order of the Red Banner of Labor and medals. In 1924, for the first time, he organized the pathoanatomical and experimental laboratories of the CRIT on the basis of the "High Mountains" sanatorium [4].

V. G. Shtefko is the author of about 300 scientific papers, including 24 monographs, manuals, collections devoted mainly to age morphology and pathogenesis and pathological anatomy of tuberculosis, in particular, tuberculosis of bones and joints, central nervous system, endocrine glands, and he was a member of the editorial board of the journal "Proceedings of the Moscow Zoo", Russian Ornithological Committee and editor of the morphology department of the journal "Medical Archive" [11].

The scientist was distinguished by extraordinary hard work — he almost never used the vacation, extraordinary performance, amazing clarity of the mind, real love in science, high culture, devotion, benevolence. Vladimir Germanovich possessed encyclopedic erudition, attractive power and an amazing ability to discover talented people, an excellent lecturer's gift; a man of great soul and kindness, constantly searching, loving father and husband, spoke German, French, English, Portuguese and Spanish. All these features, of course, contributed to his scientific success and the creation of original scientific directions in research work. In addition to scientific interests, V. G. Shtefko was fond of the philosophy of F. Nietzsche, O. Spengler, A. Schopenhauer, often quoted the poems of Zhukovsky, Tyutchev, A. K. Tolstoy, and Goethe recited in the original; loved hunting [12].

V. G. Shtefko's research showed that humanity is heterogeneous in its morphological and biochemical structure. Therefore, V. G. Shtefko should be considered one

of the founders of a new direction in Russian pediatrics — the age morphology of the child, studying the organism in ontogenesis, revealing individual and group differences in human tissue and organ structures in different periods of its development. The scientist used the methods of histoarchitectonics to study the stages of the formation of internal organs and established the phenomenon of dyschrony in the development of intraorgan structures. Vladimir Germanovich revealed that in certain age periods, not all histological elements develop evenly, that there is a certain predominance in the development of one or the other formations, the explanation for which lies in the alternation of stages of differentiation and stages of growth of histological elements. Dyschrony, being one of the manifestations of normal histogenesis, is a risk zone for many pathological disorders that manifest themselves in childhood. The results of scientific research V. G. Stefko and his employees laid the foundation for another scientific direction — dynamic pathomorphology. V. G. Shtefko concluded: “The considerations expressed on the basis of experimental data lead us to an extremely important and highly interesting conclusion. The cultural races of mankind, such as the Europeans, have a more complex structure of the protein molecule than the lower races. Thus, from a biological, or rather, biochemical point of view, they are more complexly organized than the second ones”¹ [13]. V. G. Shtefko essentially refuted the well-known postulate that all people are brothers [14].

In 1929, V. G. Shtefko and A. D. Ostrovsky developed a classification of five normal types of the human constitution (asthenoid, digestive, thoracic, muscular, abdominal, and mixed types), which was the reason for his political persecution, and therefore in 1938 the work had to be stopped, however, it did not stop the anger of his ill-wishes and on October 3, 1945 in Moscow, V. G. Shtefko committed suicide at the age of 52. So tragically ended the life path of the patriarch of the Russian school of phthisiopathology, Professor Vladimir Germanovich Shtefko, who left an indelible mark in the history of Russian phthisiology and pathological anatomy. He was buried at the Vvedensky cemetery in Moscow [15, 16] (Fig. 3).



Fig. 3. The tombstone monument is installed on the grave of Vladimir Germanovich and his wife Zinaida Mitrofanovna Shtefko (née Blonina) at the Vvedensky cemetery in Moscow. Photo by E. Dyatlov, 2010. Available at: <http://med-necropol.ru/sh/shtefko-vg/shtefko-vg.htm> (accessed: 20.07.2023)

¹ Shtefko Vladimir Germanovich. Available at: https://ru.wikipedia.org/wiki/Штефко,_Владимир_Германович (accessed: 20.07.2023). (In Russian)

List of the main works of V. G. Shtefko

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Статья посвящена жизненному и творческому пути известного российского фтизиопатолога, биолога, анатома и антрополога, талантливого педагога и организатора, патриарха отечественной школы фтизиопатологии, доктора медицинских наук, профессора Владимира Германовича Штефко (1893–1945). Он родился в Москве в семье служащего. После окончания Московского реального училища он поступает на медицинский и физико-математический факультеты Императорского Московского университета. В 1911 г. ему диагностируют туберкулез легких, который сопровождает его на протяжении всей жизни и по поводу которого он проходит лечение в Швейцарии, где продолжает учебу в Лозаннском университете. После возвращения в Россию В. Г. Штефко с отличием заканчивает эти два факультета в 1916 г. и посвящает себя науке. Научные интересы исследователя и его учеников лежали прежде всего в области изучения туберкулеза. Его перу принадлежит около 300 научных работ, в том числе 24 монографий. В. Г. Штефко являлся основоположником московской школы фтизиопатологов, а также сравнительно-анатомического и возрастно-морфологического направлений в медицинских исследованиях. Им обосновано явление дисхронии развития внутриорганных структур и сделан вывод о том, что «культурные» расы, к которым он относил европейцев, имеют более сложное строение белковой молекулы, чем «низшие» расы, по сути, опровергая постулат, что все люди — братья. В 1929 г. группа исследователей во главе с В. Г. Штефко разработала классификацию нормальных (астеноидный, дигестивный, торакальный, мышечный, абдоминальный) и смешанных типов конституции человека, что явилось поводом для политического преследования ученого, в связи с чем в 1938 г. работу пришлось прекратить. 3 октября 1945 г. в Москве на 52-м году жизни В. Г. Штефко покончил с собой.

Ключевые слова: Владимир Германович Штефко, ученый-фтизиопатолог, биолог, антрополог, орнитолог, основоположник московской школы фтизиопатологии.

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