

YOUR EPOCH IS NOT FOR TRYING. IT'S FOR LIVING AND FOR DYING...

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SUMMARY

The article is devoted to biographies of three Russian physicians of the Silver Age (a period in the History of Russian culture between 1890 and 1917). They made early, significant and internationally recognized contribution into medical science and became eponymous, although social disasters of the twentieth century caused deep impact on their subsequent lives and careers, so their role was shadowed from global medical community. The article analyzes biographies and academic achievements of A-F.K. Siewert (aka: Zivert, Ziwert, von Siewert) (1872–1922), known for first description of the hereditary dyskinesia of cilia (as a triad of: situs inversus of the viscera, abnormal frontal sinuses producing sinusitis and bronchiectasis); S.S. Abramov (1875–1951), discoverer of primary idiopathic myocarditis, and N.I. Taratynov (1887–1919), who was the first in description of a local form of histiocytosis X (solitary eosinophilic granuloma) and predicted the eosinophilic origin of Charcot-Leyden crystals. The contribution of these scientists into Medicine is reviewed in context of historical epoch, on background of their different individual social choices and the fate of their families. Besides their eponymous descriptions, other medical priorities of these scholars are analyzed. Some previously unpublished materials from their family archives are presented, which witness for possible existence of unknown prototype for the main hero of 'Doctor Zhivago' novel by B. L. Pasternak and for probable priorities of doctor Zivert – in active diastole concept, or doctor Abramov – in description of dilated cardiomyopathy. The factors facilitating rapid development of theoretical and practical Medicine in imperial Russia of late XIX – early XX centuries are discussed. The conclusion of the author is that in any epoch, even the most cruel and unfavorable one, the creative activity is a way to social immortality (19 figs, 68 refs).

Key words: Alfons-Ferdinand-Julius Karlovich Siewert - Nikolai Ivanovich Taratynov - Sergei Semionovich Abramov - Zivert-Kartagener triad - Taratynov's disease - Abramov-Fiedler myocarditis - History of Medicine - Silver Age - Russian civilization

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Introduction

The period between 1890 and 1917 in the history of Russian science and culture is called "Silver Age". Within the terms of Cultural Studies, it is defined as archeo-modern, when Russian society went into modernity, still keeping many cultural archetypes from the pre-modern Past (Rykova 2007). It was a time of rapid progress and vanguard innovations not only in domestic Arts, but in literature, and science as well. It brought global fame to many Russian intellectuals, beginning from Nobel Prize winners in Medicine Ivan Petrovich Pavlov (1849–1936) and Ilya Il'ich Mechnikov (1845–1916) and ending with coryphaei of Russian music and ballet or forerunners of the world Visual Arts, Theatre and Literature. These were not only ethnic Russians, but representatives of many nations of multinational Russian civilization. The passionate overheating of that epoch resulted in three Russian revolutions. Finally, World War I and Civil War in Russia have stopped or redirected this rise of Russian thought, crushed the Russian Empire, and gave birth to the Soviet Republic. For many creative intellectuals these events were fatal or turned their energy on survival, so after very bright and early debut in creative work their footprints were later lost in history, and sometimes the West knows only their surnames, if remembers them at all. At the same time, they hold undoubted global

priority in many areas, including Medicine. I am writing to fill this gap.

The most characteristic figures in this long row of the Silver Age medical contributors, nowadays almost forgotten were: Doctor Nikolay Ivanovich Taratynov (1887–1919), Doctor Sergei Semionovich Abramov (1875–1951) and Doctor Alfons-Ferdinand Julius Karlovich Zivert (1872–1922).

Who was Dr. Zivert? The typical figure of the Silver Age that was blown by the winds of wars and revolutions

The triad of *situs inversus of the viscera, early chronic sinusitis and bronchiectasis* is known all over the medical world as Zivert (Siewert) – Kartagener syndrome (a variant of primary dyskinesia of cilia), and its pathogenesis related to systemic cytoskeleton abnormality and immobility of the cilia is well understood. 114 years after description of Kartagener–Zivert syndrome medical community still knows much more about Swiss physician, expatriate from Austrian Galicia, Manes Kartagener (7 January 1897 – 5 August 1975), than about Dr. Zivert, who described the syndrome 31 years prior to him. And for Chris McManus, an author of "Lancet" this Russian physician still looks "anonymous" (McManus 2004). Even in very trustworthy Enersen's explanatory dictionary of medical eponyms,

used online by global medical community, Zivert was until very recent time just mentioned by last name as a "Ukrainian" physician, but without any biographical data (Enersen 2016). Now, I think, the question put by Dr. Chris McManus in "Lancet" (2004) finally has got a complete answer.

Alfons-Ferdinand-Julius Siewert (9 August 1872–1922) (aka: Alfons (Aleksandr) Karlovich Zivert in his everyday life) was a Russian internist, physiologist, toxicologist and military physician, born and died in Kiev, a descendant of German family sworn to Russian Empire. His father, privy councilor (since 28 March, 1904) Karl-Ferdinand Zivert (6 May 1843 – after 22 August 1917) was a remarkable figure in the history of intelligence service and Russian censorship. He was born in Byalystok, left gymnasium just after 4 years of studies and started his labor career at Wilno as a junior telegrapher. Later he worked as an interpreter for local administration and as a post official at Wilno, Kowno, Grodno; and on the top of his career became a chief of the "Black Cabinet" (censorship and intelligence service division) at Kiev Communication District. His main job was to organize a secret perusal of letters. A skillful conspirator, he invented the unique device to read letters clandestinely without staying a trace, introduced a special system of secret letter exchange with doubled and even tripled envelopes and was related with perusal of the mail of diplomats and even state officials, for example before and after assassination of Prime Minister P.N. Stolypin in Kiev (1 September 1911). For his merits in 1898 he was awarded the Order of St. Vladimir (4th degree) and has got hereditary nobility status for himself and his family by Tsar's edict of 12 February 1901 (Izmozik 2015). After fall of Empire, in the end of such a long and successful career of scout and censor (March, 1917) he was accused by local commissars of Provisional Government as double (Russian-German) agent, although justified. The case was dismissed, but in spite of that, in August, 1917 new authorities of Russian Republic rejected his application for pension equal to his salary (2400 rubles per year), which he based on privileges guaranteed by old law (Izmozik 2015, Rowan 1937). K.F. Zivert married Johanna-Ludwiga-Emilia Dreyer. They had 4 sons and 2 daughters. Alfons Zivert was the senior to his 3 brothers (Pavel, Erich and Richard) and 2 sisters (Elena and Gertruda). One of his brothers – Erich Karlovich Zivert – inherited father's occupation. After graduation of gymnasium he also became post official, censor and was involved in secret post perusal. As an officer of Russian Army, during World War I E.K. Zivert was mobilized and fought in Galicia. In June, 1915 he was captured by Austrians. His later fate is unknown (Izmozik 2015, Rowan 1937). Senior son of Ziverts, Alfons-Ferdinand Julius Zivert choose medical career. He studied Medicine in the Emperor's St. Vladimir University at Kiev, successfully graduated from this prestigious school (20 September 1899) and was

admitted to the Clinic of Propedeutics as an "super-numerary intern" (22 February 1903), also being a practitioner in local private K.E. Wagner's Clinic. The therapeutic school in Kiev was at that time one of the strongest in the Europe. Its leading figures were: The first descriptors of the various clinical forms of myocardial infarction: Vasiliy Parmenovich Obraztsov (1849–1920) and Nicholay Dimitrievich Strazhesko (1876–1952); an outstanding internist Theophil Gavrilovich Yanovskiy (1860–1928), an inventor of quantitative urine analysis, renown internist and homoeopathist Anton Fomich Kakovskiy (1871–1953), and many others. All these brilliant clinicians were contemporaries, teachers and/or colleagues of A.K. Zivert, who had the pleasure of working closely with them (Makarenko & Polyakova 2001). In that period there were many ethnically German Russian scholars among faculty members (Vinnichenko & Vinnichenko 2009). On 1 June 1903 Zivert was officially stayed in University clinic for 2 years (for preparation of his doctoral thesis with perspective of professorship). After defending of the thesis and staging abroad (see below) in 1909 Zivert became Privatdozent (Adjunct Associate Professor) of Internal Medicine Department at St. Vladimir University. Since 18 January 1909 till 1912 he served as a military doctor of Kubanskiy and later – of Mirgorodskiy infantry regiments, in the end of his military service he was Chief Physician of the 12th Clinic of Internal Medicine at Kiev Clinical Military Hospital (State Archive of Kiev, Vasil'ev 2010, Makarenko, Polyakova 2001). Finally during 1920–1921 he achieved a position of the Chairman of Internal Medicine Department at his alma mater.

A paper which immortalized his name was published quite early, in 1902, when doctor was 30 years old and had not yet any academic appointments. A.K. Zivert published in national weekly medical paper ("Russkiy Vrach" – "The Russian Physician") at Saint Petersburg a description of a case of young man with sinusitis, congenital bronchiectasis and situs inversus viscerum (Zivert 1902), later this Russian original paper was republished in Germany (Siewert 1904). This later German version of his article is referred to by Western specialists as the first description of Siewert-Kartagener triad (McManus 2004, Enersen 2016), although in fact it was published by Zivert in Russian 2 years earlier. He defended his doctoral thesis (17 May 1906) and on its basis published a monograph in Toxicology (Zivert 1906). As a toxicologist, Zivert studied experimentally the effects of various alcohols (ethanol, methanol, fusel oil components), especially on isolated heart function (Zivert 1908). We can conclude that, like other leading physicians of that era, he was not merely a medical practitioner, but also was engaged in natural science, or as we would say today: "Biomedicine". Moreover, it was a kind of "Translational Medicine" of that period, if one will use the modern term: After publication of experimental data he published on the subject one more

clinical article correlated to laboratory findings under the noteworthy title: "The therapeutic value of alcohol" (Zivert 1909). As it was common among young Russian doctors and researchers of the time, he received a governmental scholarship for overseas internships and during 1906-08 studied in Germany for improvement. While being in Germany, he published together with well known pharmacologist Wolfgang Huebner a paper in experimental Strophanthinum intoxication of isolated heart (von Siewert & Huebner 1908). This article (Figure 1) was published in special issue of "Archiv für experimentelle Pathologie und Pharmakologie" among selected papers of most outstanding biomedical scientists of Europe, dedicated to 70th anniversary of Oswald Schmiedeberg (1838–1921), patriarch of Pharmacology and leading researcher of cardiac glycosides, whose life and career were closely related to Russian Empire (he was born near Talsy, Kurlandia, graduated from Dorpat University, Liflandia and taught at this school for some time, having in Russia many pupils). Figure 2 represents a group of contributors into this remarkable selection book, among them: O. Schmiedeberg himself (N 17) and also creator of first animal model of diabetes mellitus – Oskar Minkovski (N 26), pioneer of ultraviolet rickets prevention – K. Huldshinsky (N 24), prominent Russian pathophysiological, creator of first immunopathological animal model of glomerulonephritis – V.K. Lindemann (N 9). We can see among them Zivert's co-author from Berlin – W. Huebner (N 6)

(Holmstedt & Liljestrand 1963). Such a bright company may witness for considerable scientific weight of Zivert's studies, indeed he had renowned teachers and eminent co-author. Zivert also studied Physiology of blood pressure, which was a frontier of medical science in the time of his research (Siewert 1904) and uric acid excretion in relation to various diets. The data of his research polyglot Zivert published in Russian, German and Polish literature (Zhebrowskiy & Zivert 1911, Siewert & Zebrowski 1912, Żebrowski & Ziwert 1912). That's why Zivert's name was a subject of some confusion in modern medical citations: it is spelled differently in English and in original Russian, Polish or German texts. To appreciate the academic influence and level of his studies, one needs to know that it was A.K. Zivert, whom 4th National Congress of Russian Internists invited as a speaker in Cardiology (1912). His presentation about active mechanisms of cardiac diastole was quite remarkable, because it contained an idea that energy is used by myocardium not only for contraction, but also for relaxation, which statement sounds pretty modern even in our time, when the necessity of ATPase for withdrawal of excessive free calcium from diastolic cardiomyocyte sarcoplasm has been demonstrated. He republished its revisited version much later in Germany, signed it "Professor A. Siewert" (Siewert 1922), and this late paper (1 December, 1922) was probably his last or even posthumous one.

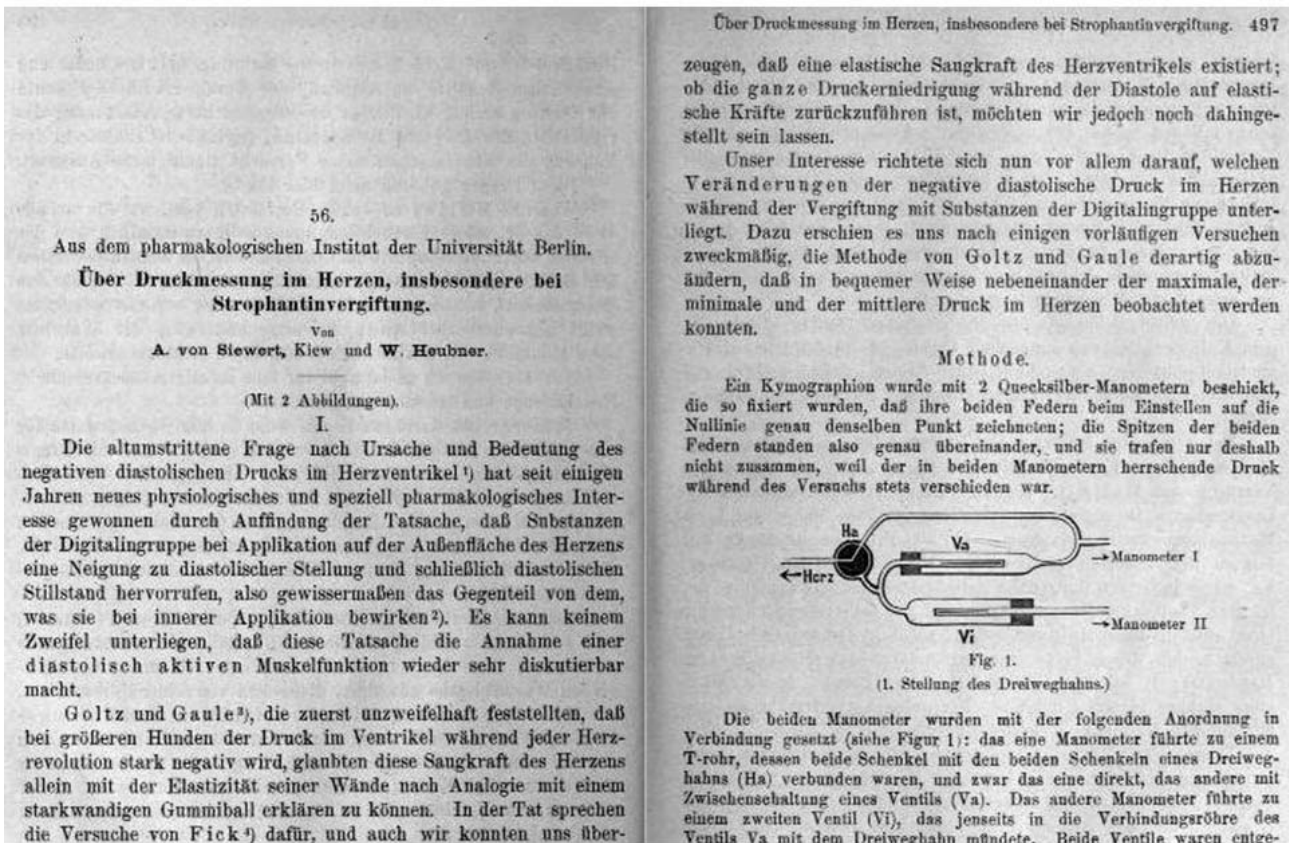
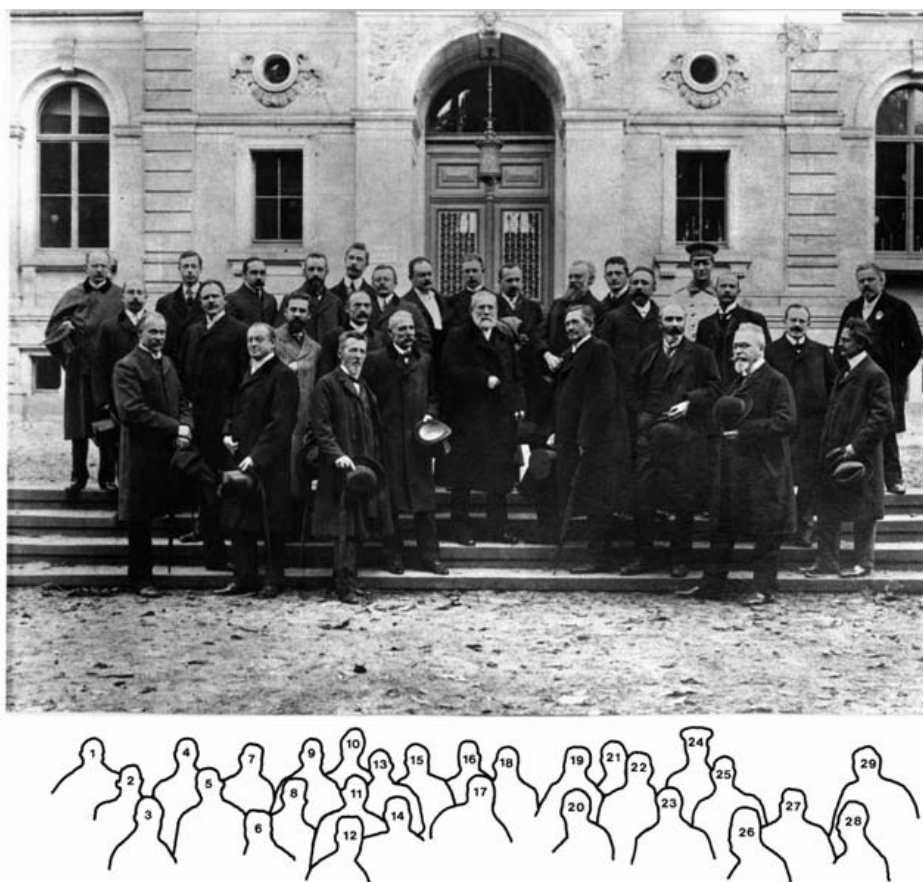


Figure 1. A facsimile of an article by A. von Siewert & W. Huebner (1908) from the jubilee book of O. Schmiedeberg



1 von Recklinghausen jr.; 2 Reeb ; 3 Cloetta; 4 Wallace; 5 Siegert; 6 Heubner; 7 Fetzer; 8 Herlant; 9 Lindemann; 10 Faust; 11 Kobert; 12 Meyer; 13 Fühner; 14 Cervello; 15 Straub; 16 Jacobj; 17 Schmiedeberg; 18 Spiro; 19 Hofmeister; 20 Harnack; 21 Muffat; 22 Heffter; 23 Cushny; 24 Huldshinsky; 25 His; 26 Minkowski; 27 Gottlieb; 28 Bethe; 29 Zinck

Figure 2. The leading biomedical scientists – authors of jubilee book, celebrating O. Schmiedeberg’s jubilee, 1909 (Holmstedt & Liljestrand 1963)

Alfons Karlovich Zivert was also skillful clinician and gifted clinical teacher. On return from abroad to Kiev, since 13 January 1909 he lectured in Introduction into Internal Medicine, which always was (and still is) a fundamental course for physician’s skills and medical professionalism. In Russian higher medical schools this introductory course traditionally is named “Propeutics”. Hence, he published a lot of methodological articles in this field, mostly related to physical examination or functional diagnosis in Gastroenterology, for example he described rare vascular murmur over the liver and was one of the forerunners in gastrotonometry (Zivert 1903a, 1903b, 1906b).

Dr. A.K. Zivert married Yulia Vladimirovna Puhal’skaya, the daughter of a known Russian musician and art scientist Prof. V.V. Puhal’sky (1848-1933), Director of Kiev Emperor’s Conservatory, a teacher of famous Vladimir Horowitz; they had 2 sons (Vladimir and Georgiy) and daughter Maria (born 31 March 1904). All family belonged to Orthodox confession. Their senior son, Vladimir Alfonsovich Zivert (4 July 1902 – 7 May 1938) lived with dramatic life, stressful for his parents. Vladimir graduated from gymnasium at Kiev in 1919.

He entered St. Vladimir’s University as a student of Law faculty. Since 1917 he was deeply involved in revolutionary events, and became a member (1917), later – a secretary (May, 1918) and one of the leaders of monarchist Union of South-Russian Youth, strictly opposed both to Bol’sheviks and to Ukrainian nationalists (1917–1919). He was in military organization of this Union named “Our Motherland” (since November, 1918), although did not take part in the battles of Civil War¹ directly. A gifted speaker and organizer, he was anti-Soviet activist. Vladimir Zivert joined in public performances, concerts and took part in collecting of

¹ Civil War in Russia (1917-1922) was between the Red Army (revolutionaries who fought for the power of “Soviets” which means parliaments of all levels) and White Army (supporters of Monarchy and old regime). White Army was supported by several allied countries of Entente. Irregular armed groups of the anarchists (the Greens) and nationalistic armed forces of the separated parts of Russian Empire also took part in this war as the “third force”. The war ended with the victory of the Reds, as a result the Union of the Soviet Socialist Republics was formed on the major part of former territories of Empire; Finland (peacefully), Baltic States and Poland have got independence, Bessarabia was occupied by Romania.

donations for the "Union". In May, 1919 bolshevist Cheka arrested him. But soon, through the intercession of his father, skillful physician who possessed with some influence in post-revolutionary Kiev (which suffered from flu and typhus epidemics), Zivert-junior was liberated, although his case was not dismissed. Later Vladimir graduated from Kiev Institute of Foreign Relations and worked as a lawyer.

All the dramatic events of WWI and Civil War, of course, did not improve Dr. Zivert's health, because historical shocks severely hit his father, junior brother and finally his son. In 1922 Professor A.K. Zivert died on the 50th year of his life. Without any doubts, this bright and fruitful representative of Kiev therapeutic school, "standing on the shoulders" of domestic and foreign medical giants, had huge potential for subsequent deep impact into Medicine, but the calamities of the time shortened his life. Since 1922 his son Vladimir had to work as a locksmith, not able to be employed in accordance with his qualifications. Even his junior sister Maria had to work as a driver in order to support family after father's death. In the beginning of 1929 Vladimir again was imprisoned for the same episode of belonging to tsarist organization. In October, 1929 he was exiled to Siberian town of Minusinsk, where Zivert-junior had to stay until 1932. In 1932 he returned and until 1937 again worked in Kiev as an auditor of regional financial supervision. But in 1937, with new wave of repressions in the USSR he was once more removed from Kiev to the town of Nezhin. On 13 February 1938 Vladimir Zivert was arrested and accused as a member of anti-Soviet clerical pro-fascist organization. Later he was imprisoned to GULAG at northern Autonomous Komi Republic. 28 April 1938 he was sentenced to death and 9 days later shot (Kal'chenko 2016; State Archive of RF; Vinnichenko, Vinnichenko 2009).

The figure of A.K. Zivert and analysis of his creative activity and biography may point towards some very important factors promoted rapid and fruitful development of theoretical and practical Medicine in Russian Empire. Russian physicians were not separated from European medical community. Broad contacts between Russian physicians of that period and their Western colleagues were free from any linguistic, economical, political, or bureaucratic restrictions. According the data of National population census of 1897, 14% of people in Russian State (which had the borders spread far to the West compared to their current positions) were of Catholic or Lutheran confession. In Russian cities many teachers, physicians and university professors were ethnic Germans, Austrians, French, Swedes, Finns, and Poles, few of them – were English, Italians, Dutch – all having roots abroad. They tightly and fruitfully interacted with other Russian physicians and medical teachers (Statistical Yearbook... 1914, Vinnichenko & Vinnichenko 2009). Almost every graduate of medical school in Russia of that period spoke fluently at least

one foreign language, learnt in childhood with the help of multiple governesses and teachers – native speakers living in Russia, but typically medical doctors were polyglots. Social and economical status of Russian physician or university teacher was prestigious, stable and high enough to travel abroad (Shipilov 2003; Kudinov 2005). Moreover, all best graduates of Imperial Universities could rely upon state support of their long academic visits to best medical labs and schools of Europe. And they were welcomed there: no visas required, Russian school and university diplomas in Germany, for example, were validated automatically, many foreign medical graduates worked in Russia – so, the way of Dr. Zivert to the top stratum of European Medicine was quite typical for that epoch. This system joined to principles of Zemstvo Medicine established for Russia most rapid decrease of mortality rates in its history (Zaichik et al. 2013) and brought 2 Nobel Prizes in Medicine for the first 9 years of its assignment. And it could bring much more, but everything was gone with the wind of wars and revolutions. It was reflected in the fate of Zivert's family, like in a small piece of a broken mirror...

Who was Dr. Taratynov? Had his life inspired the Pasternak's Dr. Zhivago?

The WHO classification unites under the term of histiocytosis X (or Langerhans cell histiocytosis) several syndromes. Among them are: Abt–Letterer–Siwe disease, Hand–Schüller–Christian disease and solitary eosinophilic granuloma of the bones or Taratynov's disease (DiCaprio & Roberts 2014).

The biographies of a hereditary pediatrician from USA Arthur Frederick Abt (1898–1974), a pathologist from Germany Erich Letterer (1895–1982), a Swedish pediatrician Sture August Siwe (1897–1966), another American pediatrician Alfred Hand Jr. (1868–1949), an Austrian radiologist Artur Schüller (1874–1957), as well as an American internist Henry Asbury Christian (1876–1951) – all are well known, and their biographies available elsewhere (Enersen 2016). But until now there was no information on Dr. Taratynov, neither in international, nor in Russian sources on medical eponyms, although he described in 1913 the earliest recognized form of histiocytosis X. Even his full name was obscure, and explanatory dictionaries of medical eponyms (yet those published in Russian speaking countries) just mentioned him as "domestic physician of XX century" (Gorbach 1997). But, recently we came across an option to fill this gap. The reason of Taratynov's long existed oblivion was simple: his life was very short and interrupted suddenly, soon after his discovery, during Civil War between the Reds and the Whites in revolutionary Russia. Nikolai Ivanovich Taratynov (28 April, 1887–1919) was a Russian pathologist and military physician (Figure 3). He was born in the city of Kazan, to the family of Ivan and Sophia Taratynovs.



Figure 3. N.I. Taratynov (1915)

Ivan Ivanovich Taratynov (Figure 4), whose ancestors came from Chuvashia, was a teacher. He worked in the national education system and at one time served as the school district trustee. The family was typical for Russian *intelligentsia* of that period and at that region. Even in the photos of them one can see much similar to well known photos of Ulyanov's family, which lived simultaneously downstream the same Volga river, where Vladimir Ilyich Ulyanov-Lenin was grown up (he also was a son of a teacher whose ancestors were from Chuvashia). Nikolay graduated in his hometown high school (gymnasium) with a gold medal "To the Successful", exactly like Vladimir Ulyanov few years earlier at neighboring Simbirsk (Figure 5) and entered the Emperor's Kazan University (which also did Lev Tolstoy and Vladimir Ulyanov-Lenin few years before, although they both did not graduate). Unlike orientalist Tolstoy or lawyer Ulyanov, Nikolay Taratynov preferred the Medical Faculty. The University in that period (1863–1917) was on the top of its rapid development, with a constellation of brilliant scientists concentrated there and establishing for the School highest reputation (Liga 2016). Not mentioning other areas, just in the field of Medicine these were: psychiatrist V.M. Bekhterev, physiologist N.A. Kovalevsky, biochemist A.Ya. Danilevsky, pathophysiological V.V. Pashutin, ophthalmologist E.V. Adamyuk, anatomist and one of the first Sports Medicine specialists P.F. Lesgaft,



Figure 4. Left: Ivan Ivanovich Taratynov, 1910. Right: Kolya Taratynov in childhood (1889)

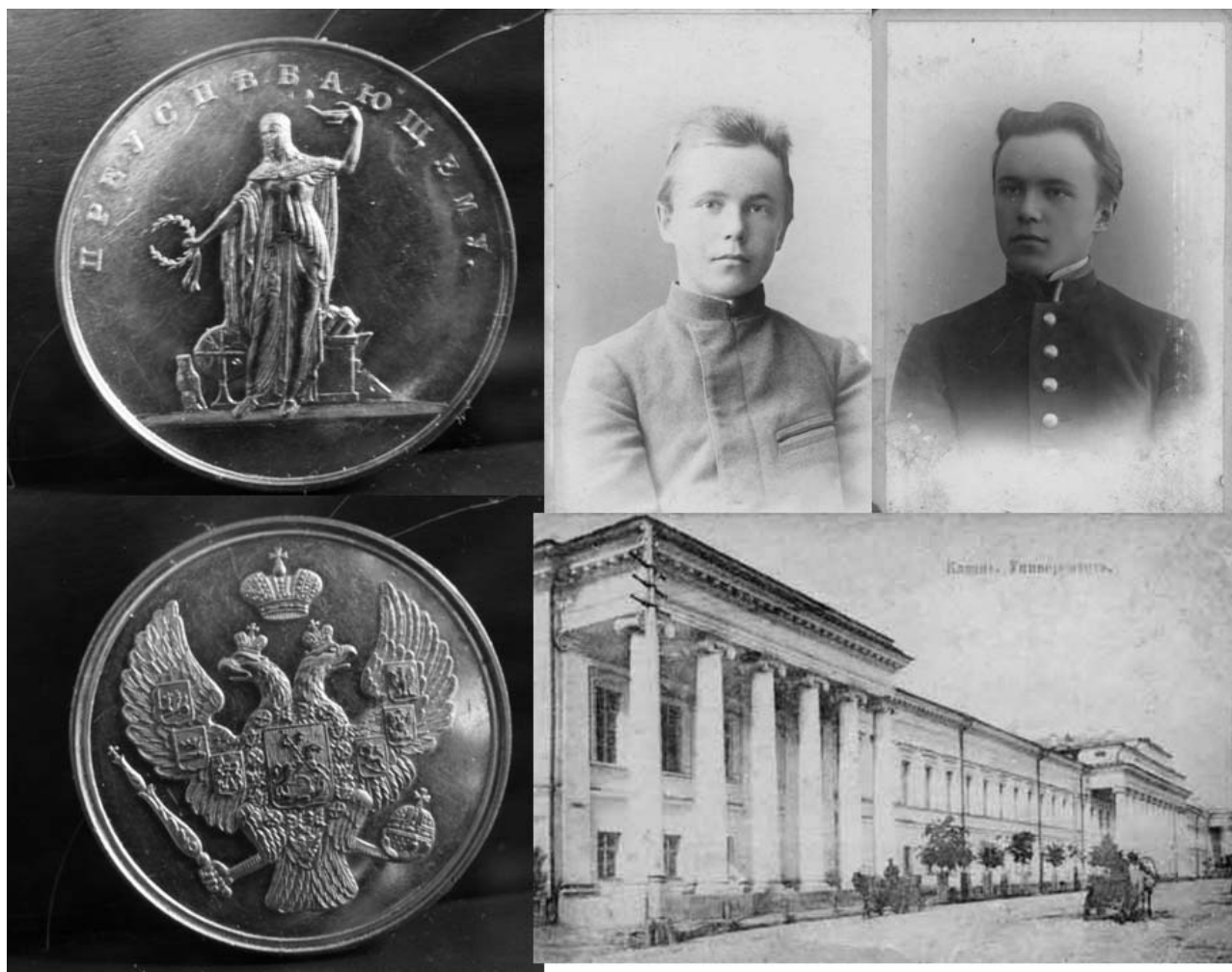


Figure 5. Left: N.I. Taratynov's gold medal for school successes, top right: Nikolay Taratynov at gymnasium (1897) and 1st year student (1906); bottom right: Kazan University (1910)

surgeons O.A. Rustitsky and L.L. Levshin and a lot of other outstanding scientists, which enjoyed with European recognition. Young Taratynov had known the happiness of direct apprenticeship with such coryphaei of Medicine as: microbiologist I.P. Skvortsov, pathophysiological and immunologist I.G. Savchenko, anatomist V.N. Tonkov, physiologist N.A. Mislavsky, histologist D.A. Timofeev, pharmacologist I.M. Dogel', internists A.M. Kazem-Bek and V.F. Orlovsky, surgeons V.I. Razumovsky and A.V. Vishnevsky, hematologist N.Ya. Goryaev, the last two were both very young themselves in that period. World known neurologist L.O. Darkshevich (together with A.M. Kazem-Bek) supervised student's scientific circle of medical faculty. The Taratynov's generation of Kazan medical students was extremely gifted and bright. During 1906–1912 among students of medical faculty (and among the members of above mentioned student's scientific society) there were 11 future full or corresponding members of the national Academy of Sciences and/or Academy of Medical Sciences! These are: physiologists K.M. Bykov (1886–1959) and I.P. Razenkov (1888–1954), pathophysiological A.D. Speransky (1888–1961), microbiologists and

immunologists V.M. Aristovsky (1882–1950) and P.F. Zdrovovsky (1890–1976), parasitologist P.G. Sergiev (1893–1973), phthisiologist V.A. Ravich-Shcherbo (1890–1955), histologist B.I. Lavrentiev (1892–1944), pharmacologist V.M. Karasik (1894–1964), surgeon A.T. Lidsky (1890–1973), obstetrists and gynecologist M.S. Malinovsky (1880–1976). Moreover, two other classics of domestic medical science: A famous pharmacologist S.V. Anitchkov (1892–1981) and discoverer of cyclic solar depending metachromasia of bacteria microbiologist S.T. Velhover (1887–1942) – also were Kazan medical students while Taratynov studied and/or taught there (Liga 2016; Kiyasova 2014). Some of Kazan medical alumni of that period entered into medical “hall of fame” in other countries (like V.A. Kazem-Bek (1892–1931), after whom a street was named at Harbin, China). For sure, Doctor N.I. Taratynov had all chances to join this glorious cohort and to become 12th academic “knight of round table” in the history of Kazan Medicine of twentieth century. In 1912 he graduated from this influential higher school. His middle brother, Piotr, also a graduate of the Kazan University, has become a chemist. They had also junior brother Andrew (Figure 6).



Figure 6. Piotr (left) and Andrew Taratynovs (1914)

During N.I. Taratynov's student years and throughout his subsequent career his academic supervisor was a remarkable domestic pathologist, one of the pioneers of Immunology in Russia, a graduate of the Emperor's Military Medical Academy, hereditary physician and medical scientist Fedor Yakovlevich Chistovich (1870–1942) (Figure 7). F.Ya. Chistovich was Chairman of Anatomic Pathology Department since 1908 (Kiyasova 2014).



Figure 7. Prof. Fedor Yakovlevich Chistovich (circa 1908)

On 12 September 1912 N.I. Taratynov was admitted to Department of Anatomic Pathology at his alma mater as Junior Assistant Professor. The attention to the Pathology of the blood system was traditional for the Department of Anatomic Pathology in Kazan. The previous

Head of the Department (and during the revolutionary 1905–1906 also the first publicly elected Rector of the University), Nikolai Matveevich Lyubimov (1852–1906) was an expert in the field of Hematology, the author of one of the first domestic monographs on leukemia (Lyubimov 1906; Liga 2016). Just a few months after the start of work at the Department twenty-six years old N.I. Taratynov published in the first issue of "Kazan Medical Journal" (still published to present), an article, which was in line with the theme of the Kazan school of pathologists and immortalized his name (Taratynov 1913). In the onset of 1913 he investigated a surgical case of parietal bone injury complicated in a male patient with a strange granuloma, looked like tuberculosis one. Dr. Taratynov revealed that the lesion was of mixed eosinophilic and mononuclear nature, obviously distinct from tuberculosis ones. He rejected a diagnosis of bone tuberculosis, suspected by surgeons, and coined in a hypothesis that it was a new class of granulomata related to eosinophils. Also in the same paper he correctly predicted that eosinophils are the source of Charcot-Leyden crystals abundant in such granulomata. As we know now, that the main constituent of these crystals is galectin-10, product of eosinophils, interacting with eosinophilic lysophospholipases and their inhibitors (Ackerman et al. 2002). It is necessary to mention that in 1891–93 an American pediatrician Alfred Hand, Jr. (1868–1949) already observed a child with similar cranial granulomata and dyspituitarism and interpreted the case as tuberculosis (Hand 1893), but Taratynov's detailed microscopic investigation demonstrated a distinct nature of the disease.

Taratynov's academic supervisor, Prof. F.Ya. Chistovich, was no longer exclusively anatomic pathologist in the classical sense, inherent to XIX century. He devoted many of his studies to Immunology, discovered

precipitating antibodies, and spent some time at I.I. Mechnikov's laboratory, working on organ-specific antisera. In the spirit of the time he has evolved in the direction of the General Pathology, that is, the rising Pathophysiology (Kiyasova 2014). Therefore, he reserved for his disciple an experimental pathological and even immunopathological topic of research: "On resorption of muscles after their damage and the origin of myophages". In 1914, a young scientist successfully defended his doctorate thesis on above mentioned pathophysiological theme under the guidance of F.Ya. Chistovich. Definitely, it was a work of Mechnikov's

school (Taratynov 1914). Further scientific work has been frozen: In the course of the First World War N.I. Taratynov joined the Russian Army, his military medical service was held in his native city of Kazan, at local military hospital (Figure 8). After 1916 he became a Privatdozent of the Anatomic Pathology Department (adjunct position). In 1912 Nikolay Ivanovich Taratynov and Antonina Nikolaevna Alekseeva (Taratynova) got married (Figure 9), and in 1917, the only daughter Yekaterina was born to their family. After the February revolution of 1917, the pathologist obtained a tenured position of regular Associate Professor at his Department.



Figure 8. N.I. Taratynov – military physician of Russian Army (1914)



Figure 9. Top left: N.I. and A.N. Taratynovs in 1912; bottom left: Church where they got married; right: Taratynovs in 1914

And in that moment the Civil War broke out in Russia. Kazan was in the centre of hot battles between the Red and White armies. Within a week after the October Revolution of 1917 armed uprising against Provisional Government spread over Kazan and brought the city to Bolsheviks. But on 9 August 1918 the city was taken back by the White Army (Grazhdanskaya... 2010). An American writer Alan Furst misattributed the famous phrase: "You may not be interested in war, but war is interested in you" to Lev Davidovich Trotsky (1879–1940). In fact Trotsky said these words not about "war", but about "dialectics" (Furst 2002). Anyway, he was a Chairman of Revolutionary Military Soviet (Council) of Russian Federation, and it was under his command that the Reds took the city of Kazan back from the Whites on September 10th, 1918 (Figure 10). Both sides during their capture and re-capture of the city performed bloody terror against the opponents. In 1918 a considerable part of University professors perished (like internist L.L. Fofanov, a victim of spotted typhus), or left the city, escaping the dangers of cruel war. Some of them retreated with the White Army to Siberia, where many of them later worked at Irkutsk or Tomsk Universities (like A.M. Kazem-Bek), or to the south of Russia (like I.G. Savchenko, who moved to Yekaterinodar), and even to Harbin, Manchuria (V.A. Kazem-Bek). Others emigrated (like V-E. F. Orlovsky, who went to Krakow and became classic of Polish Medicine).



Figure 10. Artillery of the Red Army enters city of Kazan on 10 September 1918

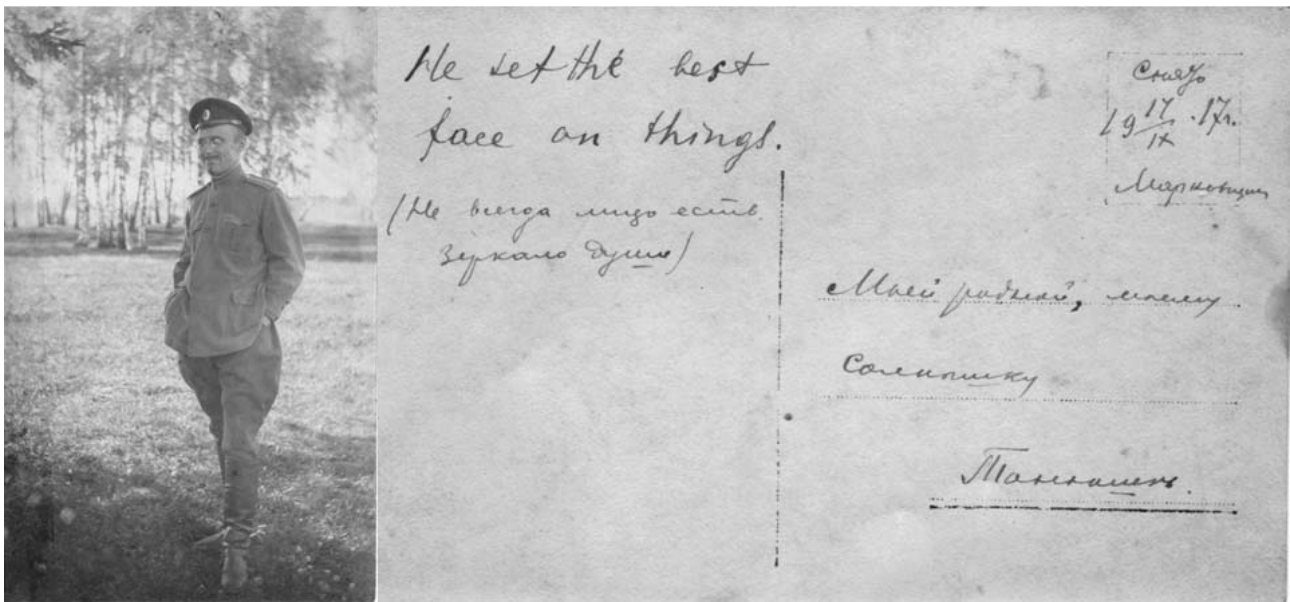


Figure 11. Letter of N.I. Taratynov to his wife Antonina in October, 17th 1917. On backside he wrote: "He set the best face on things [in English]. Not always a face is a mirror of sole. To my native, my Sunny Tonyushka [in Russian]"

But N.I. Taratynov stayed in Kazan University. And finally war "interested" in Dr. Taratynov: He was drafted into the Red Army as a battle physician. During the battle against the forces of white Admiral A.V. Kolchak (1874-1920), who attempted to take the city back in 1919, N.I. Taratynov served as a medical intern, and later the chief doctor of the floating military hospital,

equipped on board of the ship sailing on the Volga River along the coast where the fighting was going on (Figure 11). In April, 1919 the Whites approach close to Kazan (just about 140 km), and the discipline among the Red troops weakened. In these days in the hospital, headed by Dr. Taratynov, a patient died. Moved by feeling of vengeance, a brother of perished person, an armed

revolutionary sailor, came to Taratynov's cabin and committed a military crime by shooting "former tsarist officer". That's how the life of one of the most brilliant and promising young Russian pathologists ended!

In 1921, the widow of N.I. Taratynov, Antonina, who was a schoolteacher, died of typhus, and their small daughter Yekaterina was orphaned. She was raised by her grandmother and uncle. Later Yekaterina Nikolaevna Taratynova grew up, graduated from the First Leningrad Medical Institute and, in spite of all the hardships and difficulties, continued the pathway of her prematurely deceased father. Yekaterina Nikolaevna Taratynova (Yaroshevskaya) (1917–2013) was a known domestic pediatric pathologist and orthopaedist (Figure 12).



Figure 12. E.N. Taratynova

Almost 70 years of her career were affiliated with Anatomic Pathology, 56 of them she spent in G.I. Turner Research Institute of Pediatric Orthopedics at Tsarskoye Selo, suburbs of Saint Petersburg (Pamyati... 2013). Nikolay Taratynov's grandniece, Olga Vyacheslavovna Taratynova still lives there; she is a renowned architect and art scientist, current director of the famous Museum-Preserve "Tsarskoye Selo" (Artemenko 2016). The younger brother of N.I. Taratynov, Andrew, falsely accused of anti-Soviet agitation, died in the dungeons of the GULAG in 1938 and the average brother of him Piotr, who became a stepfather of his daughter Yekaterina, worked for many years as a chemical engineer in the Ural town of Berezniki, involved in the production of mineral fertilizers.

The tragic death of Nikolay Taratynov happened "during the blast-off", on the rise, which was symbolic for the whole of Russian culture of the Silver Age. "No single man makes history. History cannot be seen, just as one cannot see grass growing", – wrote in the novel "Doctor Zhivago" the brightest philosophical poet of the epoch – Nobel Prize laureate Boris Leonidovich Pasternak (1890–1960). He himself passed all that tragic and heroic way, which our Fatherland moved during the last century. According the novel story, the main hero, a young doctor Yury Zhivago, involuntarily joint to the Red Partisans, eventually was perished due to previous sufferings of the revolution and Civil War, but the novel ends optimistically: Its final scenes are open, the daughter of Yuri Zhivago, an orphan was found and saved by his brother general Evgraf Zhivago and entered into a new life (Pasternak 1989). In an Oskar-winner movie of 1965 by David Lean (1908–1991) after this book, the final scene with Evgraf Zhivago (Alec Guinness) can be interpreted as a hymn to the historical correctness of the people, through the image of a girl (Rita Tushingham) who finds her place in the life after and among tragedies, during the great communist construction (Figure 13).



Figure 13. A screenshot from D. Lean's "Doctor Zhivago" movie (1965) with Evgraf Zhivago and his niece

The multiple coincidences in *fiction* life and the fate of Yury, his daughter Tonya, his brother, Evgraf Zhivago, and *real* life and fate of Nicholas, his wife Tonya, his daughter and his brother Pior Taratynov are obvious. Even more striking is that in the year 1916 a young beginner in poetry, 26 years old Boris Pasternak, recent graduate of University, spent 6 months in Berezniki and in close vicinity at Vsevolodo-Vilva township (Figure 14), working as a cashier at the same chemical plant where later Piotr, brother of Nikolay Taratynov worked (Abashev 2009).

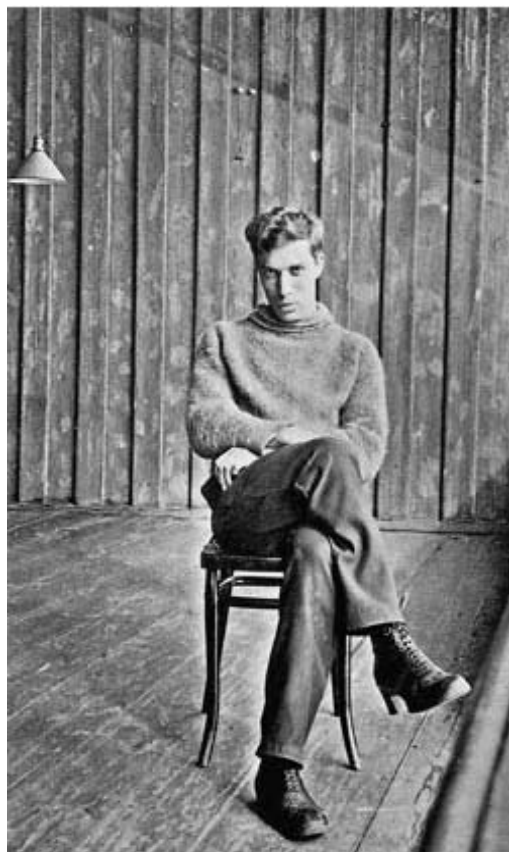


Figure 14. B.L. Pasternak in 1916 at Vsevolodo-Vil'va

The history is a process consisting of accidents, but the general course of it has not anything accidental.

And it is not occasional, that long oblivion of Russian pathologist N.I. Taratynov in medical literature finally ended (Churilov et al. 2010).

Who was Dr. Abramov ? – The intellectual émigré and Russian academia abroad

A creative person always is strong enough to generate or discover something new in certain areas of life, but not necessarily has the capacity and motivation to fight against common adverse way of living or to transform society. Some talented medical doctors were also revolutionaries, prominent radical politicians, guerrilla commanders and fought against unbearable social system vigorously, sometimes forcibly, sacrificing their

lives or losing freedom. The examples are numerous and include physicians of different nations: Jean-Paul Marat (1743-1793) in France, Ernesto Guevara de la Serna (1928-1967) in Cuba, Salvador Allende Gossens (1908-1973) in Chile, Antonio Agostinho Neto (1922–1979) in Angola, Mohammad Najibullah (1947-1996) in Afghanistan, Nikolay Ernestovich Bauman (1873-1905) in Russia, Radovan Karadzic (born 1945, presently trialed for war crimes in Den Haag) in Yugoslavia, as well as the representatives of junior and middle medical personnel: Samora Moisés Machel (1933–1986) in Mozambique and Nikolai Aleksandrovich Schors (1895–1919) in Russia. But many of medics, who lived among stormy revolutionary events, were themselves innovative *evolutionists* rather than *revolutionaries*. Having space and time hostile and restrictive for creative life, and being not able to select another time for living, they simply performed space change or emigration.

There is a special, often fatal, and still not entirely understood kind of myocardium disease with appearance of giant cells, called Abramov–Fiedler myocarditis. In later literature it was concluded that Abramov described dilated cardiomyopathy, and Fiedler – primary diffuse myocarditis, both with severe course and immunopathological component of pathogenesis (Novikov et al. 1992). Life and deeds of Karl-Ludwig Alfred Fiedler (1835–1921), who described it as idiopathic disease in German literature (1900) (Fidler 1900), are well known to medical community, and his biographical data available elsewhere (Enersen 2016), but his Russian colleague, who published original description 3 years prior to Fiedler's one (Abramov 1897), is much less known. Even Russian sources of Soviet period just mentioned him as “domestic physician of late XIX – early XX century” (Entsiklopedicheskiy... 1982-84), without details or, at least, dates of his life. But now we know much more of his hectic life of a rolling stone.

A typical figure of those years, lived a life of a wanderer: *Sergei Semionovich Abramov* was born on 14 September 1875 to the family of a successful municipal official, in the southern city of Nakhichevan'-on-Don, located near Rostov-on-Don (since 1928 it is a part of Rostov city) (Figure 15). His father was of Armenian origin. His great-grandfather Ivan Ovanesovich Abramyan born in the town of Theodosia, Crimea, was an officer of A.V. Suvorov's army, took part in Russian-Turkish wars and when Empress Catherine the Great invited Crimean Armenians, deported from Turkish Crimea, to re-settle into Novorossiya, he became a deputy of Armenian community, who brought from Saint Petersburg on 26 November 1779 a decree of Empress gifting to Crimean Armenians territories for a new settlement and some privileges. More than 20 000 of them moved into Russia. They founded there in 1779 new Nor-Nakhichevan' city, and retired lieutenant-colonel I.O. Abramyan became its first Mayor.



Figure 15. Left: Young S.S. Abramov and right: Central square of Nakhichevan-on-Don city in the beginning of XX century

In future history of Russia this Armenian community, speaking the Western “Ani” dialect of Armenian language, gave birth to many outstanding citizens: writers, painters, architects, politicians, militaries and merchants – and still lives there. In 1795 I.O. Abramyan achieved an official sign of honors – a “gratitude letter” of local community. But, due to a conflict with Armenian clericals he was finally dismissed from his position. Later on I.O. Abramyan (as an owner of wool and silk factories and a mill in Nakhichevan’-on-Don) headed local guild of merchants and in 1813 was buried near local Surb Nikohaios Church as a honorary citizen (Areshyan 1957; Bagdykov 2014).

Soon after Sergei’s birth his family moved to Rostov-on-Don, where he has grown up. He entered Khar’kov University (I.I. Mechnikov’s alma mater), later transferred to Moscow University and graduated from its Medical Faculty with honors in 1899.

Abramov described a case of special myocarditis with cardiomegaly and its autopsy picture as early as in 1897, while being still a medical student (Abramov 1897). Because of his gift and inclination to Anatomic Pathology, after graduation he has got a stipend for postgraduate fellowship in this field. In 1899–1901 young doctor worked at the Department of Anatomic Pathology under the guidance of eminent pathologist and bacteriologist, one of the discoverers of spleen functioning as bacterial filter in circulation, Professor Mikhail Nikiforovich Nikiforov (1858–1915). The teacher of Abramov was a founder of glorious domestic pathomorphological school: among his pupils were also H.V. Davydovsky, A.I. Abrikosov, V.T. Talalaev – all later became outstanding Soviet pathomorphologists (Strukov 1958). M.N. Nikiforov also became eponymous for his invention of Nikiforov’s mixture (96% ethanol and diethyl ether, taken half by half for fixation of tissues and smears) (Figure 16).

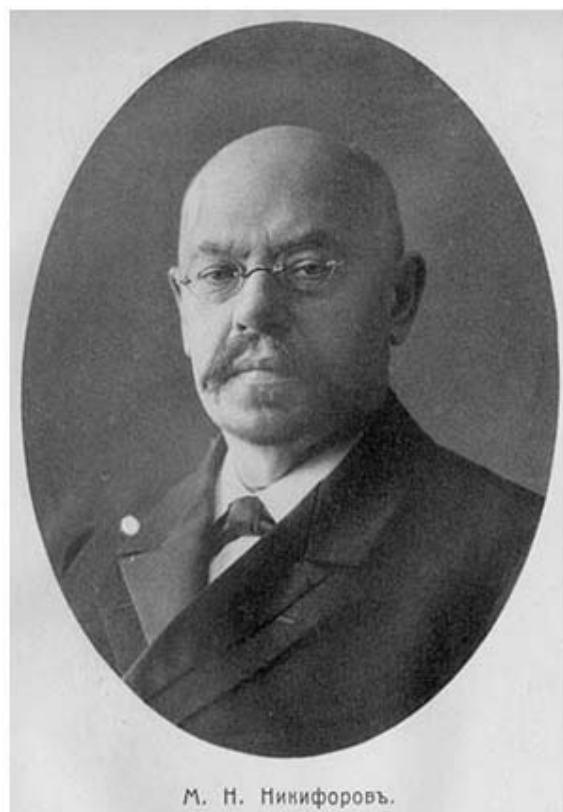


Figure 16. M.N. Nikiforov in 1913. [URL: <http://all-photo.ru/portret/photos/26056-0.jpg>]

In 1902 Abramov returned to Rostov-on-Don, where he worked as a dissector at Nikolayevskaya hospital, recently (1890) established on the border of Nakhichevan and Rostov-on-Don. At his own expense he built there the first prosectorium in the history of the whole region of Southern Russia (1902–1903). The facility was in function until 1915, when (during German occupation of Poland) Emperor’s Warsaw University with its advanced pathomorphological units was evacuated to

Rostov-on-Don (Tvorcheskiy... 1976). Abramov's Ph.D. Thesis was dedicated to pathogenesis of jaundice in different liver disorders (1905). He defended it at Moscow University. In 1906 Abramov was elected for the position of Privatdozent of Anatomic Pathology there and in 1906-1908 lectured in Anatomic Pathology and Bacteriology. He combined academic activities with practical work of dissector. Until 1910 he continued to maintain his prosectorium at Rostov-on-Don, but later left his native city and passed this responsibility to a younger colleague, doctor A.N. Obraztsov (Tvorcheskiy... 1976). To that moment prosectorium established by Abramov, has been already advanced into Bacteriological Institution with an autopsy unit. Abramov continued his work in Moscow, at Saint Sophia's Pediatric Hospital (1908-1912), at Moscow General Military Hospital (1912-1918) and also at Moscow Orphanage (1912-1920) (Armenian... 2016). He was not "pure" anatomic pathologist in the sense of XIX age. Abramov's sphere of academic and research interests included experimental Immunology and Microbiology. As early as in 1897 he published a brochure about preventive vaccination, which was a frontier of innovative Medicine for that period. A book, published in Tiflis, provoked a hot (and not always friendly) discussions with his senior and apparently more conservative colleague Associate Professor Barykin (Abramov 1897, 1898). Later, in 1909-1919 S.S. Abramov headed the Laboratory of Experimental Pathology and Sera Testing at the Moscow Bacteriological Institute, under the guidance of well known Russian bacteriologist Filipp Markovich Blumenthal

(1859-1927), one of the pioneers of Phthisiology in Russia (Mnukhin et al. 2008). Dr. Abramov published several papers in Bacteriology, including a monograph on pathogenesis of diphtheria and a practicum in Bacteriology, which was very popular among specialists (Abramov 1916). This book of 1916 he dedicated to the memory "of deeply honored teacher M.N. Nikiforov" (Figure 17). Abramov's most significant contribution into Microbiology and Infectious Pathology was a notorious guide "Pathogenic Microorganisms", claimed by physicians and republished at least 6 times in Russia and abroad (Abramov 1917). Since August, 1918 he was appointed Academic Secretary of Moscow University, which was a position traditionally occupied by eminent scholars, so one may appreciate degree of his recognition among faculty members. As a Professor of Bacteriology, Abramov part-time collaborated with Moscow State Higher Medical School for Women (1913-1919); this school later became 2nd N.I. Pirogov Moscow Medical University.

During Civil War in Russia Dr. Abramov was appointed the head of laboratory at the Main Military Sanitary Administration of Red Army (1918). Before World War I (1909-13) he had performed several visits to leading foreign laboratories and Universities of Germany, France and Switzerland for staging and refreshing in Anatomic Pathology and Immunology, for example in 1910 he studied influence of pH on complement binding at Paul Ehrlich's lab in Frankfurt, Germany (Mnukhin et al. 2008, Armenian... 2016). He kept there good academic relations.

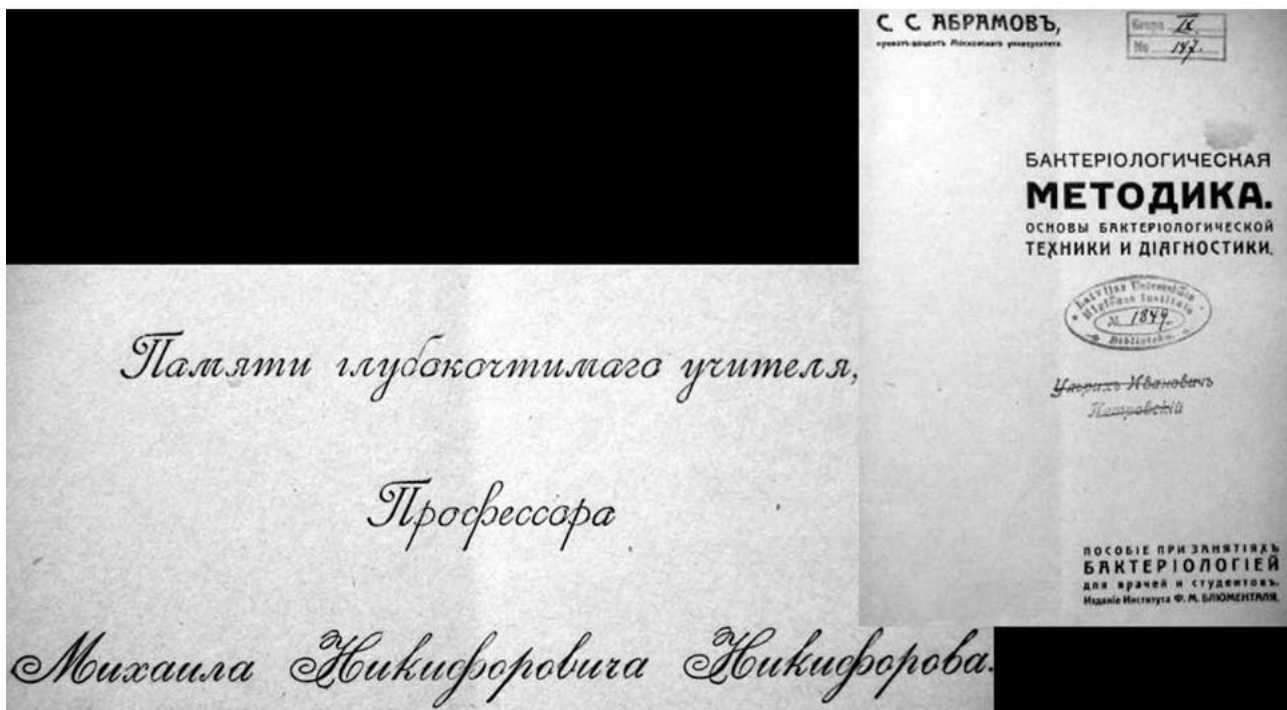


Figure 17. Title page (right) and dedication of S.S. Abramov's book

The period of Civil War was full of calamities and deprivation: According some much later assessments, during 1917–1922 Russia lost because of war actions, terror, starvation and epidemics 5 750 000 people, only 1 150 000 of them were militaries, also about 2 000 000 of citizens emigrated (Sokolov 1989). In Abramov's opinion, this environment was absolutely not suitable for academic work. This particular reason of emigration he later indicated in his immigrant's questionnaire (Vasil'ev 2004a). Abramov used for escape an occasion of his detached duty to fighting army during Soviet-Polish conflict of 1920 and escaped from Soviet Russia across the loose frontline, via Warsaw – to Berlin. More than a year he spent in the Berlin University, studying Pathomorphology of exanthemata and published a paper in this field (Vasil'ev 2004a, Abramow 1921). Later he moved to Bulgaria, like many academic Russian emigrants of that period. Totally about 30 000 Russians moved to this friendly Slavic country after 1917. Mostly these were intellectuals or militaries and members of their families. The Bulgarian government deeply interested in progress of health care and education in postwar country, equalized expatriate medical doctors from Russia with domestic ones in professional rights. Since 10 February 1921 till 20 December 1924 S.S. Abramov was first Chairman and Professor of the Department of General and Anatomic Pathology at the University of Sofia. Medical Faculty was just recently established there (1918) and half of its teachers (as well as 20% of medical doctors in the country – more than 200 physicians) were refugees from Russia (Vasil'ev 2004b, Editorial 2004). In Sofia Abramov published first ever Bulgarian textbook in Pathology (“The pathological processes”, 1923) (Abramov 1923) (Figure 18).



Figure 18. First ever textbook of Pathology in Bulgarian language written by S.S. Abramov



Проф. Сергей Абрамов

Figure 19. S.S. Abramov during Bulgarian period of his academic career

S.S. Abramov trained first Bulgarian pathologists, who later replaced him in University of Sofia. He is still remembered by physicians and pathologists of this Balkan country (Zapryanov & Naidenov 1972, Katedra 2016) (Figure 19). In Sofia's medical community he was definitely one of the brightest figures, together with other Russian professors: prominent anatomist V.P. Vorob'ev (who later returned to the USSR and took central part in the project of Lenin's body preservation), another renowned anatomist I.F. Shapshal (author of the first Bulgarian textbook of Human Anatomy), pathologist A.F. Man'kovsky, pioneer of experimental Endocrinology (who lectured in Pathology before election of S.S. Abramov and immediately after his departure), physiologist V.V. Zav'yalov, biochemist A.K. Medvedev, gynecologist G.E. Rein, psychiatrist N.M. Popov, neurologist A.E. Yanishevsky and few more scholars-refugees (Vasil'ev 2004b, Editorial 2004, Zapryanov & Naidenov 1972). Nevertheless, in 1924 S.S. Abramov, together with his spouse L.I. Abramova, moved to France and since 1925 worked at Russian Faculty of Sorbonne, where children of emigrants studied. Dr. Abramov was prolific writer, versatile and socially active person. He authored not only medical texts, but also a fiction novel “Fall of Acropolis”, and collaborated in public societies of Russian physicians abroad. In Germany he edited a Russian medical journal “Vrachebnoe Obozrenie” (Medical Review) and fruitfully worked with “Vrach” Publishers. German-Russian publishing house “Vrach” several times republished his textbook and atlas in infectious pathology. Another publisher, “Universal Russian Publishers” issued in Berlin Abramov's books in current problems of Immunology (1921) and Gerontology (1921–22).

Also Abramov translated and commented for “Vrach” a German “Fundamentals of Anatomic Pathology” by H. Schmaus (1922–23). In Bulgaria he was a Chairperson of the Society of Russian Physicians from the date of its foundation, in France he was among leaders of I.I. Mechnikov Society of Russian Physicians and among active members of Moscow University Alumni Society. After 1934 he concentrated on social activities. It is not surprising, that the Association of Russian Physicians Abroad during its 1st congress in Paris (1936) elected him Chairman of its Board. Unlike many Russian emigrants in France, he did not find enough courage to join the anti-fascist struggle and stood apart. In 1941–1945 Abramov lived and worked in Germany (Editorial 2004, Mnukhin et al. 2008, Armenian... 2016). As an illegal emigrant from the Soviet Russia and resident of Nazi Germany, he did not expect a warm welcome in the USSR, so after victory of anti-Nazi coalition he preferred to leave Germany for USA, where he spent his last years, no longer academically active, in a small settlement of Hathaun (Armenian... 2016), by the way, not found by author on the map. He died on 21 August 1951, forgotten in his native country.

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Conflict of interest: None to declare.

Conclusion

Who knows, what heights could reach Russian Medicine if all these talented physicians of the Silver Age were not separated by Civil War on Reds and Whites, but for lifelong collaborated in domestic health care, like red and white blood cells in streaming blood? To resume this paper, author feels most appropriate here the verses by a present-days Russian poet Alexander Semyonovich Kushner (born 1936) (Kushner 2014):

“Your epoch is not for trying.

It's for living and for dying.

There is no blander pose

Than to bargain and protest,

As if times could these for those

Be exchanged upon request.

Every age seems Age of Iron,

But a garden shines inspiring...”.

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