

BOOK OF ABSTRACTS

47th Congress of the International Society for the History of Medicine



SOCIETAS INTERNATIONALIS



HISTORIÆ MEDICINÆ

It is for me a very high satisfaction the possibility to express now in some words the significance that represents this Abstracts Book of the XLVII Congress of the International Society for the History of Medicine which will be held at Riga. The celebration of this Congress and the number of papers to be presented in it is the result of a hard working and of the enthusiasm of the Organizing Committee headed by Prof. Iuris Salaks in a very complicated context, that of the COVID19 pandemic. Most of the abstracts here jointed were ready to be presented a year ago, in August 2020. A virtual Inaugural Ceremony was the only activity possible then, but was a prelude for a year of continuous work in the preparation for the rest of Congress activities in a near future time, which is that arriving now. This Abstract Book is an evident testimony of these projective vision, with the addition of new thematic items, as is that of History of epidemics and pandemics, which clearly enriched and actualize the scope of the congress and testifies the very dimension of historical studies conceived not only as a nostalgic approach to the past but as a constructive vision of a reality, with the immediate consequence of the capability to build concrete images of the past and have integral views of health problems and medicine in different historical, social and cultural contexts including among them the actual one, that is our own historical dimension.

This Abstracts Book gives us a first approach to the Congress contents, a very promissory one, and also encourages all of us to go ahead participating actively in the sessions and in the developing of materials for the coming Proceedings.

I congratulate myself for being a modest part of this effort and express my gratefulness to all the participants in this event and especially to the Organizing Committee.

Carlos Viesca T. ISHM President

Mercedes ALANIS

Medicine on the Walls. Muralists Painting the History of Medicine in Mexico During the XXth Century

Architecture and art combined to make visible the value and significance of some hospitals and other buildings. It was from the 1920s, once the revolutionary armed struggle was over, the State of post-revolutionary Mexico sought to imbue a nationalist sense in society through culture, art and architecture. This project was intertwined with the transcendent national hospital project headed by the doctor Gustavo Baz Prada, secretary of Health, who entrusted architects such as Carlos Obregon Santacilia and Jose Villagran Garcia as commissioned by the Department of Public Health to build important hospital buildings such as headquarters of the Department of Public Health, the Sanatorium of Tuberculums of Huipulco and the National Institute of Cardiology, with which it gave a new orientation to the Mexican hospital design, more in line with the avant-garde models of the time for the care of the sick.

In the words of Villagran Garcia, in Mexico the hospital was conceived for the 1940s as a building that was an architectural work, and, therefore, a work of art. For the architect Villagran the technical, the constructive functional and the social must coexist in the hospital building to be able to define it as a living work of art, a work at the service of man. Idea that served as an ideal framework for the work of the great muralists who sought the walls to paint the greatness of Mexico with a brush to perpetuate it for the knowledge of the people. In this sense the work of various doctors was fundamental, because they created a transformation for the hospital system in which it included this conception of hospital outlined by the doctor Gustavo Baz and the architects. Muralists as Diego Rivera completed this painting.

The aim of this presentation is to talk in the context of Mexico from 1920—1960 how different muralists, including Diego Rivera, were capturing a series of murals that reflected aspects of the history of medicine in the walls of different buildings in Mexico City, mainly hospitals. Nowadays they are part of Mexico artistic heritage.

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A "Moral Cure for Madness" Practiced by Joseph Frank (1771–1842) During his Teaching Years at Vilnius University

The work focuses on the treatment that Joseph Frank practiced on one of his patients during his long stay in Vilnius as a professor of Practical Medicine at the local University. Joseph Frank was an important figure in European medicine in the late eighteenth and mid-nineteenth centuries. Son of the famous physician Johann Peter Frank (1745—1821) he was born in Rastatt, Baden-Wuttemberg, in 1771 and died in Como, in the Austrian Lombardy-Veneto region, in 1842. After working as father's assistant at the Universities of Pavia and of Vienna, in 1804 he moved with his father to Lithuania where he remained as a university professor even after the departure of his father. He settled in Vilnius until 1823 when he finished his teaching in the Faculty of Medicine. In addition to teaching, Joseph Frank maintained a large private clientele, attracted by his institutional role and his good reputation as a clinician.

The clinical case object of the work regards a lady affected psychiatric pathology treated by Joseph Frank. The patient feared to die of bleeding and for this reason kept the anal and vaginal orifices obstructed; he also lay motionless on the bed in the belief that any movement could cause a bleeding and kept his room in the dark fearing that his body could catch fire with light. Professor Frank treated this patient according to the so-called "moral method" then in vogue in the French psychiatrist, consisting of misleading the bizarre and fantasies of the mentally ill with suitable arguments and demonstrations. With such treatment, in fact, the patient healed completely returning to her usual life.

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The First Public Organization of Doctors at the North of the European Part of Russia — Society of Arkhangelsk Doctors

In the study of the history of medicine, an important place takes by the activities of public medical organizations — professional associations, whose members were actively involved in solving socially significant scientific and practical problems of healthcare and clinical medicine. By the end of the 19th century, there were about 200 scientific and medical public organizations in Russia. Inspired by the creation of the St. Petersburg Society of Maritime Doctors, public doctors of the Arkhangelsk province decided to create their own organization, which became one of the first regional medical communities in Russia.

For many years the museum complex of the Northern State Medical University (Arkhangelsk) has been conducting research about the history of pre-revolutionary medicine. A valuable source for this work was the protocols of the Society of Arkhangelsk Doctors (SAD), created in 1863 and functioning for more than half a century.

In 1864, the members of the SAD organized free admission for the poor people in the Hospital of the Department of Public Relief (DPR), military hospital and the shelter of St. Peter. On January 1, 1875 they opened a hospital for the poor people which was one of the most significant events of SAD. In 1876, with the support of SAD, feldsher-midwives and veterinary schools were opened, functioning as a single educational institution at the DPR hospital.

In connection with the venue of the conference, prompts the interest the biography of doctor and social activist, secretary and active member of the SAD G. M. Leibson, who was a native of the city of Mitau, Kurland Province (now — Jelgava, Latvia). After graduating from Imperial University of Dorpat, this doctor and his wife went to the Arkhangelsk province for a unique professional experience. He did a lot to improve public health in the North: first, as a county doctor in Pinega, and then as chief doctor of the Arkhangelsk city hospital. He was one of the initiators of the creation of the Arkhangelsk branch of the Tuberculosis League, led a military-sanitary unit under the auspices of the Russian Red Cross Society in the Far East during the Russian—Japanese War, for which he was granted many awards.

In January 1907, at the initiative of the SAD, the First Congress of Doctors of the Arkhangelsk Province was held, at which about 30 reports were heard. They discussed a wide range of issues, including the state of medical care for

rural residents and workers in logging plants. However, the SAD and the Medical Board could not improve the situation, as they depended on the provincial administrative committee, which, in turn, depended on the central government. Nevertheless, at the beginning of the 20th century, thanks to the SAD, significant changes took place in the organization of medical services in Arkhangelsk: a city sanitary station was established and the post of city sanitary doctor was introduced; measures have been taken to improve child care and reduce child mortality. The great merit of SAD was the study of regional pathology and social diseases in the absence at that time of specialized institutions in Arkhangelsk.

Thus, the activities of the SAD in 1863—1917 played an important role in uniting the doctors of the province, contributed to the growth of their qualifications and the development of healthcare and clinical medicine in the North of the European part of Russia.

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To the History of the Development of Problems of Marine Medicine in the XX Century (by the Materials of the X International Symposium "Man and Ship of 2000", Riga, 1986)

In September 1986, the 10th International Symposium on Marine Medicine "Man and a Ship of 2000" was held in Riga (Latvia) under the auspices of WHO with the assistance of the Academy of Sciences and the Ministry of Health of the Latvian SSR, the Ministry of the Marine Fleet of the USSR etc. To prepare the symposium, a National Organizing Committee (NOC) was created under the chairmanship of Deputy Minister of Health N.P. Burgasov and Minister of Health of the Latvian SSR V. V. Kaneps. The co-chairs were well-known organizers of marine health E. V. Kosenko, N. I. Lysenko, N. G. Smirnov, Yu. M. Stenko and B. P. Trunov. The delegation of scientists and maritime doctors of Arkhangelsk was headed by a well-known surgeon, rector of the Arkhangelsk State Medical Institute (ASMI), professor N. P. Bychikhin. As a member of the NOC and chairman of the clinical section, he made a major contribution to the preparation and conduct of the Symposium. The co-chairs of the section were professors Filikowski (Poland), Ohashi (Japan) and L. L. Kurako (USSR). The source for the research was a collection of materials from the Symposium. Its editorial board was headed by Yu. M. Stenko — Director of the Odessa Research Institute of Water Transport Hygiene, specialist in marine and river medicine, ship hygiene. His deputy was a prominent hygienist V.A. Hofmekler.

Compilation includes more than 200 texts, respectively divided into three main sections of the Symposium. The first section was devoted to healthcare organization. The chairman of this section was a well-known physiologist, academician N. A. Aghajanyan from the University of Friendship of Peoples P. Lumumba (now — Peoples' Friendship University of Russia). The most extensive second section of the compilation represented by articles on hygiene, physiology and psychology, on the chemical and physical factors of the work of seafarers, on epidemiology and environmental health and nutrition on ships. The third section included article about the clinical problems of marine medicine. At the opening of the section, N.P. Bychikhin made a report called "The main directions of clinical research in marine medicine".

The report "Morphological and functional manifestations of the adaptation of the seaman's organism to working conditions on long-range vessels" was presented by F. G. Lapitsky and A. V. Gribanov from Arkhangelsk. A number

of reports were made by employees of the North Central Basin Clinical Hospital named after N. A. Semashko. About "The use of immobilized trypsin for the treatment of purulent wounds" reported N. P. Bychikhin, L. G. Vlasov and S. P. Glyantsev. As a bandage the authors proposed an innovative sterile band — trypsin immobilized on a textile cellulose matrix, which could be stored under conditions of long voyage without loss of healing properties. Our report will also present the results of studies in all three sections of the Symposium.

Presentation of the main results of the Symposium, which was held 30 years ago, and their implementation in modern marine medicine was presented on June 1, 2019 from the tribune of the First Russian Scientific Conference on the History of Marine Medicine, which was held in Arkhangelsk. During the conference, the first marine medicine audience in the Russia was opened, which reflects the contribution of northerners to the development of the branch on an international scale, including their participation in the X International Symposium "Man and a Ship 2000".

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Maria Vittoria ANGRISANI

Giuliano Vanghetti: the Naval Surgeon who Invented Cineplastic Prosthesis

Giuliano Vanghetti (1861—1940) was an Italian physician and orthopaedist. He received his medical degree on July 1890 from the University of Bologna. After graduating, he worked as a country doctor in Empoli, but dissatisfied with his profession he became a naval surgeon. After the battle of Adwa (1896), during the first Italo—Aethiopian War, he was deeply impressed by the condition of the eight hundred Askaris who had their right hand and left foot amputated in retaliation. Vanghetti performed some first experiments on hens and concluded that the moving parts of the prostheses had to be directly linked to residual muscles and tendons after the amputation. He was the first medical doctor who applied engineering to medicine to restore movements in the prostheses provided to the Askaris by the Italian government. This contribution will focus on the life and works of a man who can rightly be defined as the father of neuroprosthetics.

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Recipes for Women in the History of Arabic Medicine

After 8th Century, the Arabic pharmaceutical knowledge was developed due to many factors such as the translation movement from Greek, Persian, and other languages into Arabic, then adding new information about using simple drugs and preparing internal/external formulations. These factors had an impact in authoring some important Arabic pharmaceutical sources, which include many formulations those Arabic medieval physicians were producing for the treatment of ailments in general, however, these sources contain many recipes to be used for women.

In parallel, around middle of 15th century, al-Shirwānī wrote a pharmaceutical encyclopaedia where the purpose of writing it was to provide a reference for all pharmaceutical workers that would give them comprehensive information about recipes and their methods of preparation. He quoted information from many sources, and according to their geographical distribution; we could consider his book as a conclusion for the Arabic medieval pharmaceutical knowledge.

Based on this important pharmaceutical encyclopaedia, this talk is going to look after the main recipes that were mentioned by the author in aiming to heal diseases or symptoms that might happen for the women, and there will be a discerning between recipes used internally or externally. Moreover, the talk will shed light on recipes that were applied for women to take care them before being pregnant, during it, and even after it. In the conclusion of talk, the audience will gain an overview about the medieval Arabic pharmaceutical culture, and know more about how the Arabic physicians dealt with different kinds of recipes for the women.

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Andrés ARANDA CRUZALTA

S. Eisenstein and A. Best Maugard Two Cinematographic Points of View over Public Health and Social Care

Adolfo Best Maugard (1891—1964) was a Mexican artist, who was designated in 1930, by Mexican government, censor and adviser of the film recording ¡Qué viva México! Unfinished movie made by Sergei Eisenstein (1898—1948) in the Mexican states of Oaxaca and Hidalgo. Along of the shooting work the relationship between both artist was great, especially if one takes in consideration that the diplomatic relations between Mexico and the Soviet Union broke just in January of that year.

Beyond the advices given by Best Maugard to Eisenstein about the locations to record his film, since an artistic point of view, is possible to identify esthetics interchanges between both artist, which includes formal aspects and artistic expression media, been the most evident of this, the incursion on cinema by Adolfo Best Maugard after his experience beside the soviet director.

In the 30s Best Maugard would become part of the Mexican artists who made an effort to consolidate Mexican cinematography, more specifically between 1933 and 1937 Best Maugard dabbled in cinematographic direction recording a total of three movies, two short movies and one film. The first short movie was a documentary called "Humanidad" (Humanity) it was about the role of the Mexican Social Care, unfortunately this short film doesn't preserve complete in our days, in spite of the aforementioned it is possible to have an idea about the content of the documentary film through the cinematographic reviews of the Mexican critics. Furthermore, through the fragments preserved it is possible to see the esthetics strategies employed by Adolfo Best.

On the other hand, within the broad filmography of Sergei Eisenstein exist a short film named "Misery and fortune of woman" recorded in 1929, just one year before him traveled to Mexico, it is a propagandistic piece about women abortion, in this film Eisenstein deployed a lot of editing strategies which had been developed by Lev Kuleshov previously.

In this work I am going to show some cinematographic relations between "Misery and fortune of woman" and "Humanidad" and also some influences of others films from Eisenstein and Mexican filmography, and the presence of some formal esthetic sources employed by Adolfo Best and Sergei Eisenstein in they films in general, with the idea to show some esthetics interchanges between both artist, but also to achieve a better understanding of the discursive differences emanated from the both social revolutionary process at the beginning of the XX century, it's to say the Mexican and the Soviet Revolutions, and they incipient perspectives over Social Care and Social Health captured in the short films aforementioned.

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Development of Preventive Medical Education in Latvia

This year we have celebrated the centenary since the beginning of studies in higher education in Latvia. The first lecture on anatomy was read on February 2, 1920. One year later the Hygiene Institute was established at the Faculty of Medicine of the Higher School of Latvia and the Department of Hygiene was founded on August 15, which can be considered as the predecessor of the present RSU Department of Occupational and Environmental Medicine. The first Head of the Department was German professor Ernest Friedrich Alexander Fermann (1921—1939), followed by Viktors Mīlenbahs (1939—1944), Jānis Maizīte (1945—1950), Mihails Garbarenko(1952—1962) and Zinaida Linberga (1962— 1990). In 1990 Hygiene department was taken over by Professor M. Eglīte and the training included also occupational courses, but the name of the Department until 1993 was Hygiene and Occupational Diseases Department. The main task of our department is to develop students' skills of preventive medicine, occupational hazards, nutrition, air and water pollution. Since 1997, the Department has been named the Department of Occupational and Environmental Medicine. Environmental health training is based on the socio-hygienic and medical biological regularities in the system environment — human — society. For providing high quality training, several lecturers at the department took special courses in occupational and environmental medicine at Uppsala University in Sweden and improve their knowledge by participating in various seminars, courses, conferences in Latvia and abroad. Department lecturers, having had a lot of research and practical work experience, lead studies in all the faculties. Training is provided with teaching aids written by the lecturers of the department — textbooks, booklets, video collections, modern equipment for practical classes. A new extensive textbook on environmental health written by all our lecturers has been published. The number of students who choose the Environmental and Occupational Medicine themes for their research papers is growing. In the last ten years Professor M. Eglīte's book on occupational medicine has been published twice. Associated Professor J. I. Dundurs has written textbook on environmental and occupational medicine for foreign students.

The award of the State Order of the Three Stars to the Head of the department, Professor M. Eglīte evidences the fact that Environmental and Occupational Medicine is valued highly by the State.

In the past 17 years hygiene training has gained good results on the way to developing a European single higher education system and quality assurance.

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About the Real Significance of Miasmatic Theory

Modern historiography recognizes priority of Hippocrates in creating a doctrine on the influence of environmental factors on human health and disease. In the meanwhile, there are reasons to criticize the widespread reconstruction of the history of main epidemiologic theories. Some authors accept a certain "miasmatic" theory of Hippocrates, which then was replaced by the theory of "contagions" of G. Fracastoro. I argue that while reading texts of the "Hippocratic Corpus" it is impossible to find the exact statement qualifying such "miasmas" as certain active substance of disease. To my point of view, "miasmas" look like physical pathogenic factors: of course, swampy area, according to Hippocrates, spread "miasmas", but this is closer to a characteristic of unhealthy air filled with stench, the existence of which in the atmosphere is in general harmful to human body. In my opinion, it is impossible to find a place in Hippocrates, on the basis of which the "miasmas" can be described as a disease transmission mechanism. However, G. Fracastoro writes about such a mechanism in the context of "contagions" concept. I think that these two theories does not contradict, but complement each other. It seemed to me that Hippocrates was more about describing a certain physical nature of the surrounding human atmosphere as a pathogenic factor.

This idea could be also proved by introduction of the new source: Galen's treatise "Commentary on Hippocrates' 'Aphorisms'". It is known that in doctrines of Hippocrates and Galen there is "krasis", which characterizes the state of health of the human body, and "dysrasia", which characterizes the state of the disease. The same system of concepts is applied by Galen (explaining the ideas of Hippocrates) in relation to the air surrounding a human. The atmosphere may be wetter or drier, colder or warmer, etc. The surrounding air can be characterized, like the human body, by a varying degree of dysrasia. According to Galen, there is an exchange of pneuma between the body and the surrounding air — pneuma from the air gets into the body, where it undergoes certain transformations, including the process of the formation of three types of endogenous pneuma.

Galen distinguishes climatic dyskrasias by their physical nature and the nature of their effect directly on the human body — for example, wet dyskrasia of the air is more dangerous than dry. That is an explanation of the mechanism of influence of the so-called "miasmas": excessively humid air and unhealthy for the human body products of decay in it, evaporated by the swamp, are the carrier of harmful excesses absorbed by the human body. Following Plato, Galen distinguished two forms of breathing: through the lungs and the skin. This also

explains the harmful effects of swamp miasmas in relation to the skin diseases, complications of wounds, etc. Physical factors that come from the outside with air that is in dyskrasia by the wet type are characterized as "unhealthy," and sometimes "deadly". According to Galen, air dyskrasias are simple and complex, he distinguishes four simple ones and eight complex ones. This can be understood in the categories of opposites "wet" — "dry", "cold" — "warm". Accordingly, wet dyskrasia of a swampy climate (this is where the "miasma" came from in the literature) helps to the development of skin diseases, fevers, diarrhea, purulent abscesses, and provokes seizures of epilepsy.

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Dana BARAN

Dr. Victor Gomoiu and the IXth Congress of the International Society for the History of Medicine

From September 11th to 18th, 1932 the International Society for the History of Medicine (ISHM) organised its IXth Congress in Bucharest (Romania) under the patronage of King Carol II. ISHM Honorary President was Prof. Jean-Joseph Tricot-Royer, ISHM founding president in 1920, in Paris. The IXth Congress President was Dr. Victor Gomoiu (1882—1960), founder of the Romanian Society for the History of Medicine and its Museum in 1929, whereas the General Secretary was Dr. Viorica Gomoiu, Dr. Gomoiu's wife and efficient supporter. Æsculape journal, ISHM official periodical by then, published Prof. Tricot-Royer's report of this successful scientific event. Two prominent Romanian scientists, members of outstanding national and international scientific Academies, were Congress Vice-presidents: a famous microbiologist, Ioan Cantacuzino, and an illustrious historian, Nicolae Iorga. In his full record Tricot-Royer outlined that Romania gave great attention to this moment: the Post issued special stamps, the King himself took part in the opening ceremony, met the delegates and awarded them the Cultural Merit Medal-Equestrian Order that had as motto "Through Culture to Liberty". Proving his esteem to scientists, King Carol II of Romania conferred the Sanitary Merit Medal 1st class — to officials from universities and major scientific institutions alone. H.S. the Patriarch of Romania and religious dignitaries warmly welcomed the participants, since both "Doctors and priests aim for the same goal, the moral and physical relief of suffering humanity." Countries of the Balkan Peninsula were represented — former Yugoslavia, Bulgaria, Turkey, Greece and Albania —, along with France, Belgium, Italy, Germany, Austria, Portugal, Poland, Spain, Sweden and, naturally, Romania. Two main themes were dealt with in 50 communications presented by speakers illustrating 22 nations: the history of medicine in the Balkans and the European defence against the plague. Well-known medical historians and personalities interested in this field delivered interesting lectures: Jules Guiart, Maxime Laignel-Lavastine, Édouard Jeanselme, Jean Vinchon, Jacques Hérissay, Eugène-Humbert Guitar, Gabriel Beytout, Olof Hult, Davide Giordano, Arturo Castiglioni, Pietro Capparoni, Gustavo Tanfani, Georg Sticker, Ricardo Jorge, Ludwik Zembruzki, Tadeusz Blliklewlcz, Władysław Szumowski, Aristoteles Kousis, Galip Ata, Ahmed Süheyl, Stoyanoff, Ali Mihali, Glück, Lujo Thaller, Juraj Körbler, Mihai Berza, Valeriu L. Bologa, Alexandru Lenghel, and Pompei Samarian, among many others. Just remembering these celebrated scholars' names and contribution means

traveling through modern medical history. All the more so when reading the Proceedings volume. The Congress was well accomplished and a year later (1933), Dr. Gomoiu became ISHM vice-president and its president, in 1936. He closely collaborated with Prof. Tricot-Royer and they decided together the best solutions for the ISHM further substantial expansion and activity. Their cooperation ceased in 1939, due to the World War II when ISHM remained silent, necessarily keeping a low profile. After the War, Gomoiu was imprisoned (1950—1955) for ideological reasons, then released and socially rehabilitated. He was even invited to join the Romanian Academy and be a full professor for his merits (1957), an offer this erudite humanist, great philanthropist and skilled surgeon rejected with dignity asking only for his retirement pension he eventually got.

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Metamorphoses of the Serpent, an Ancient Universal Symbol of Medicine

The serpent revealed to be a cultural archetype directly connected with vitality, fertility, regeneration, health and the healing art in many ancient civilisations. His esthetic pattern inspired art and art therapy, ritual dances and music, mimicking the animal's wavy motion, unveiling the divine gnosis. Legendary symbolic snakes in Ancient Egypt, such as uraeus, ouroboros, Seth or Apophis, the Sumerian snake accompanying god Ningizzida or the Bible serpent, all expressed prudent intelligence, efficient protection, satanic force, a dual character. The snake venom itself could be used both as a painkiller drug and a fatal poison. However the snake-dragon was mainly a propitiatory sign. The same seems true for the Indian kundalini energy and dynamics. This also happened in Ancient China where this symbol was revered as well. In the mythology of ancient Dacia (today's Romania) the wolf-headed flying serpent was equally worshipped and continued to be so in the Romanian folklore and fairy-tales. The snake was concurrently associated with the tree of life and healing remedies, with the Garden of rejuvenating springs, delight and philosophy. Illustrating a complex immortality symbol, the Dacian "flying dragon" flag equally reminds somehow the feathered serpent Quetzalcoatl, master of the Aztec sky. A creator god, he closely correlated with other early deities of Latin American cultures, such as the Mayan feathered-serpent god Kukulcán. Quetzalcoatl symbolised wisdom and cyclic events like death and resurrection. Hinting at the snake body movements, the geometry of "energetic" mazes, network lines adorning Neolithic idols, ritual tattoos or masks may potentially reveal the occult paths of Heaven and Earth, life and death, which cross each other extending within the human body, soul and spirit. Oscillating between identity and alterity, transcending worlds, transgressing borders, mortal beings were considered to bear magically the mark of eternity, enabling health restoration and improved rebirth. An apotropaic motif, the serpent mastered Nature's almighty power. A protective sign, it was engraved on sacred and profane objects. Famous multi-spiral serpent-like Dacian bracelets, e.g., used not only as mere ornaments but also as a defensive insignia or votive offerings, ended by snake heads. In turn, testifying agrarian, chthonic cults, profane Romanian mythology described a "house serpent", guardian of homes and families. Emblem of interconnection between the underworld, the terrestrial and celestial kingdoms, the mythological snake-dragon strongly manifested regenerative forces, enabling the hero's rebirth on another spiritual level, as a wiser, robuster human.

The Italian motif of the "biscione" metaphorically retelling Jonah's story hints at an identical birth trauma by being swallowed up, then reborn in an a better condition, on a higher level. Ancient Dacia got acquainted to many serpent cults. In the II-nd century AD, in Dobruja, besides Apollo and Asklepios, the snake Glykon —"the Sweet" friendly healer or "the new Asklepios"— was worshipped, too, even though probably a "fake-god". Similarly to the cult of Asklepios, that of Glykon survived until the IIIrd century AD under the new Christian god and moral principles, due to his humane behaviour, love for mankind, benevolent and saving personality. Nowadays, as if reflecting a fractal archetype, the DNA double helix itself reminds the same pervasing and promising symbolism of vivid snakes.

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Maria do Sameiro BARROSO

A Recipe by Aspasia (VI D.C.) — the Use of Medicinal Plants in the Light of Modern Biochemistry

The immemorial use of medicinal plants is based on the empirical observation of the therapeutic properties of plants. Among the most used, there is the group that the Greeks called aromatic, which include aromatic resins, such as myrrh and incense, spices and perfumes. For the ancient people, what would be pleasant to smell, would please the gods and be useful in the treatment of diseases and wounds. On the other hand, what smelled bad was associated with poor health and decay. Modern phytochemical studies have made it possible to identify anti-inflammatory, antimicrobial and healing components in many of these plants. In this communication, we present a recipe by Aspasia, a Byzantine doctor from the 6th century AD, for difficult labour analyzing the possible therapeutic efficacy of the mentioned ingredients in the light of current phytochemical studies.

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Maria do Sameiro BARROSO

The Strigil as Medical Instrument and Chthonic Symbol of Harmony and Well-Being

In Portuguese territory, not many specimens of this instrument mainly used by the Greeks and Romans in the removal of oils, applied to the skin, before bathing, are extant, aside a complete strigil in the Monographic Museum of Coimbra and an incomplete (the handle missing) at the D. Diogo de Sousa Archaeological Museum, in Braga.

Besides their primary function in hygiene care, strigils are part of medical-surgical instruments, referred to by authors such as Caius Cornelius Celsus (15 BC—50 AD) or Celius Aurelianus (5th century AD). In Claudius Galenus (129—c. 200 AD), it assumes a relevant role in the treatment of symptoms caused by excessive physical exercise, in athletes, configuring a condition compatible with lactic acidosis. Associated with a healthy lifestyle, strigils appear as a symbol of balance and well-being. In iconography, they come up as the most emblematic symbols of the medical profession in antiquity, in the sarcophagus with the Greek doctor, from Ostia, dated around 300 AD. C., in which the doctor is represented with his books and his surgical instruments.

The strigils were generally made of metal (bronze), there are also specimens of glass, in funerary contexts. They often decorate Roman marble vases and sarcophagi, between the 2nd and 4th century AD, of which the sarcophagus with lion protons from the National Museum of Archeology is an example. A marble funerary vase, from the Antonin period, decorated with a strigilated pattern and handles in the form of intertwined serpents, substantiates its relationship with harmony after death, in the chthonic world.

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Gout a Papal Disease: A Study of 22 Popes from Gregory I (580–604) to Pius VIII (1829–1830)

Gout, from Latin gutta, is considered the disease of kings and of affluent people. It was identified in Egypt (2460 BC) and described by Hippocrates (460—367 NC) as 'the unwalkable disease'. Araeteus of Cappadocia (floruit 130—140 AD) described the pain at the great toe, Galen (129—199 AD) described tophi, Alexander of Tralles (c525—c605) introduced colchicum autumnale to relieve pain.

This study was devised to study gout in Roman pontiffs and is centered on 22 popes — reigning in the years 580—1830 AD — studied mainly in the works of De Novaes(1736—1821), Marini (1742—1816), von Pastor (1854—1928) Cosmacini (b.1931) and Agostino Paravicini Bagliani (b.1943).

The first gouty Pope was Gregory I (Magnus)— born c.540 AD, pope 560—604 AD — who wrote 'have been confined to bed for the last eleven months, because of pain and malaise and suffer because of gout and my life has been turned into a penitence'. The list includes Sisinnius, (b.650, Pope 21 day in 708); Boniface VI (b. 806, Pope 15 days in 886), Honorius IV (b.1210, Pope 1285—1287); Boniface VIII (b. 1230, Pope 1294—1303); Clement VI (b.1281, Pope 1342—1352), Nicholas V (b.1387, Pope 1447—1455); Callixtus III (b.1378. Pope 1455—1458; Pius II (b. 1405, Pope 1458—1464); Sixtus IV (b. 1414, Pope 1471—1474); Pius III (b.1440, Pope 26 days in 1503); Pius IV (b. 1499, Pope 1559—1565); Julius II (b. 1443, Pope 1503—1516); Julius III (b.1481, Pope 1550—1555); Clement VIII (b. 1536, Pope 1592—1605); Gregory XV(b.1554, Pope 1621—1623); Clement X (b.1581, Pope 1670—1676); Innocent XI (b.1681, Pope 1676—1689); Innocent XII (b.1649, Pope 1676—1692); Innocent XIII (b.1655, Pope 1721—1724); Benedict XIV (b. 1765, Pope 1740—1758) and Pius VIII (b.1761, Pope 1829—1830).

Their mean age at death was 69.4 years, the youngest being Sisinnius (59 years), the oldest being Clement X (96 years). Some popes were strong eaters like Boniface VIII. He was chronically affected by gout and renal stone disease and by the fear for death, and the search for therapies capable to prolong life. Cosmacini says "podagroso e gottoso"... the Pope is affected by arthritis and renal disease due to overalimentation very rich (straricca) in meat". He enrolled various archiaters among them Taddeo Alderotti (1223—1295), Pietro da Abano (1257—1315), Anselmo da Bergamo, Simone of Genova (author of Clavissanationis), Accursino from Pistoia, Manzia from Fabriano, Gugliemo da Brescia, Angelo

da Camerino and Campano da Novara, the naturalist affected by renal stone disease. Julius III was a strong eater (he loved fatty foods seasoned with garlic) as was Pius IV, the hard worker who everyday used to take a nap after lunch and a long walk later in the day. By contrast Nicholas V (his Pontiff saw in 1453 the Fall of Costantinople and the end of the Hundred Years War) was a sober eater and drinker as were Pius II who made use of simple common foods, little wine and slept up to 5—6 hours. Probably Nicholas V died uremic since his pale natural color switched into yellowish-brown. His disease started in 1450 as painful gout attacks and pain on the flank. It is reported that some time he was obliged to 'refrain from hearings'. Pius III "was a sober eater and drinker and used to dine every two days. Callixtus III, a sober man, spent great part of his papal days confined in bed afflicted by pain, fever, renal stones and sandy urine.

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Luca BORGHI

Who let Castellani go? War and Medicine in the Life of Sir Aldo Castellani

Sir Aldo Castellani (1874—1971), Italian-British expert in tropical medicine and famous for his crucial contribution to the discovery of the pathological agent of Sleeping sickness, was personally involved in three wars: first and second World Wars, plus the second Italo—Ethiopian War (1935—37). This contribution will focus on the medical and scientific support he gave to different armies during such wars. From the development and subministration of effective multiple vaccines during WW1, to the impressive results he obtained through preventive measures for the health of Italian army in Ethiopia. His medical successes were such that a popular US magazine defined him "the man who won the war". For this reason, when Italy entered the WW2 alongside the Nazis and Castellani hurriedly left London to join the Italian army, some British newpa pers worriedly outcried: "Who let Castellani go?".

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Carlo BOVOLO

Facing the Artificial Selection of the Humankind: Catholic Physicians and the Catholic Way to Eugenics

The paper intends to explore the relations, approaches and attitudes of Italian and European catholic physicians towards eugenic studies and policies between 19th and 20th centuries. From the Eighties of the 19th century to the Fifties of the 20th century eugenics became a significant medical and scientific issue, involving also the catholic physicians. Coined in 1883 by Francis Galton, the term "Eugenics" indicates the scientific field finalized to the biological improvement of the humankind. The eugenics had a widespread diffusion in all over the world (Europe, USA, Latin America, Australia) involving several scientists, physicians, intellectuals, politicians. The debate about eugenics involved not only medicine and biology, but also other disciplines, such as human sciences, and, in general, the fields of politics, culture, society and economics. The eugenics studies and policies produced strong debates and resistances, especially within the Catholics. Their opposition were scientific, medical, political, cultural and, of course, theological: they criticized the lack of certain scientific basis in some eugenic hypotheses and they defended the human freedom from the public interventions of the governments, in order to preserve the social, cultural, moral, and political influence of the Catholicism. Catholics opposed mostly towards the Nordic current of eugenics, spread in the Anglo-Saxon, German and Scandinavian world, characterized by the idea of the need of an artificial selection of the humankind through strong interventions (such as sterilization, abortion, birth control, etc.). A Latin current of eugenics, however, based mostly education, prevention and demographic increase, and spread in catholic States in Europe and Latin America, obtained consideration in some part of the catholic movement, for example the Franciscan physician Agostino Gemelli, a key figure of the catholic science in 20th century. Rejecting and reproving the Nordic eugenics policies, Gemelli and other catholic physicians, scientists, theologians and intellectuals (such as the Belgian Valérè Fallon, the German Joseph Muckermann, the French Jean Viollet, etc.) approved and, in some case, embraced the Latin eugenics, stating that the Catholic morals represented the best and most effective eugenic principle (importance to family and marriage, abstinence, etc.). In this process, a Catholic medicine and its medical, biological, and scientific argumentations played a key role. Among Catholics several attitudes and approaches towards eugenics spread out, from the opposition to the acceptance. However, the aim was almost the same: claiming the cultural, social, political and also scientific role of the Church

and of Catholicism in an issue that involved many fields and questions (from spirituality and theology to biology and sexuality, from medicine to politics). Catholic physicians tried to build a Catholic way to eugenics, in accordance to the Faith, and consequently to gain a public recognized role in the eugenic debates. Their works included both specialized medical papers and studies for the intellectual and scientific debates, and popular books and pamphlets, for the moral and medical education. The paper wants to examine the role and the contributions of Catholic physicians in building a scientific and medical opposition to the Nordic eugenics and, at the same time, in shaping a catholic approach towards eugenics.

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Sofia BRUZZESE

The Early Years of Hematology: Gabriel Andral and Giulio Bizzozero's Solutions to the Blood Enigma

Gabriel Andral (1797—1876) is the undisputed father of modern hematology, a position already aknowledged by his contemporaries. Since his early studies in physiopathology, Andral showed his interest for this field, tracing back the causes of the considered ailment to possible modification in blood composition. Between 1840 and 1842, Andral started to center his research on the composition of blood. In 1843, he published his "Essai d'hematologie pathologique", a cornerstone of this field. In this manner the field of hematology, under the guide of Andral, assumed a new fundamental role in the branch of pathology. He showed the importance of defining the blood composition and developed more efficient methods for its study, introducing his innovative point of view on the use of the microscope. This instrument was not commonly used during this period, but Andral who was a farsighted scientist, understood the benefit of its practice, expecially in the study of the blood. His findings laid the foundation stone for the next generations of doctors. Following in Andral's footsteps, Italian Giulio Bizzozero (1846—1901) conducted important studies on the hematopoietic function of the bone marrow and on the platelets. In this presentation I will try to describe the ideal thread that connects those two great scientists.

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Maria Sofia CARACÒ, Maria Vittoria ANGRISANI

Limb Prostheses: Historical Development and Psychosocial Impact in 19th and 20th Centuries

Between the last half of the 19th century and the midst of the 20th century, the world was torn apart by numerous wars. For this presentation, the most important were the Crimean War and the two World Wars. Such military conflicts were characterized by the use of new weapons: including "rifled weapons", more precise in hitting enemies and expanding bullets, in the Crimean War; hand grenades, flamethrowers, chemical bombs, tanks and bombers during the World Wars. Since the soldiers were not prepared to defend themselves against such destructive weapons, the number of wounded and, above all, the number of maimed, increased enormously. The Crimean War marked a turning point in the history of nursing thanks to the important figure of Florence Nightingale (whose birth this year is celebrated the bicentenary), who lavished great effort on the wounded and the mutilated and introduced important and fundamental innovations in the field of hospital hygiene, helping to eradicate diseases such as typhus, cholera and dysentery, which at that time perhaps killed more than war wounds, due to the precarious or absent hygienic conditions of the field hospitals. Nursing wasn't the only sector to go through an incredible breakthrough. In the same way the thirty years which includes the two World Wars (1915-1945), were characterized by a large number of mutilated soldiers and civilians, so much so as to mark a watershed in the history of prosthetic limbs. In addition to the wars, the other factor that contributed to the significant increase in mutilations was, in the civil field, the construction of railways and building sites, following the Second Industrial Revolution. The new industrial machinery, on the one hand, gave an unprecedented boost to economic and social progress, but on the other, also caused an increase in the number of accidents at work with the consequent frequent mutilations. These events gave an impetus to the production and design of increasingly innovative prostheses. Starting in the second half of the 19th century, the A. A. Marks, a New York company founded in 1853 by Amasa Abraham Marks, played a particularly important role in the production of increasingly efficient prostheses. The objective of this company, since its foundation, was to concern itself with the social reintegration of the mutilated and to "ameliorate the conditions of the crippled and rescue them from a life-long condition of dependence".

The numerous publications of Marks, containing technical details and practical help for those undergoing an amputation and numerous testimonies of users who, despite the lack of one or more arts, quietly performed the most varied activities, by leading an almost normal life, allowed us to reconstruct the state of the prosthetic at that time and, above all, they allowed us to analyze its psychosocial impact.

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Jessica CASACCIA, Luca BORGHI

In the Material Footsteps of Louis Pasteur

Louis Pasteur (1822—1895) was a French chemist, considered the founder of modern microbiology. On the occasion of the bicentenary of his birth, which will be the next year, I would like to celebrate this important character for the History of Vaccination.

This contribution, in collaboration with the project "Himetop — The History of Medicine Topographical Database" (himetop.net), aims to retrace material memories related to Louis Pasteur, collecting objects and places in order to create a photographic route of his life and career.

The main objective is to prove the importance of material culture as a tool not only to preserve memory but also to educate and inspire people, especially during this pandemic crisis. Material things can contribute to the motivation of the healthcare staff and the education of the population about vaccination, donating tools for understanding and positive inspiration.

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Kenneth COLLINS

Dr. Hetty Ockrim (1919–2007): The 'Letters to No-one' and her Medical Legacy

This paper describes a study which adds to the growing body of material on the history of general medical practice in Britain, through patient narratives as mediated by one of their own family doctors. This extensive oral history material, a unique account of the doctor-patient encounter, illuminates the attitudes of patients to general practice before and after the introduction of the National Health Service in 1948, maternity provision in hospital and the community and the role of women in medicine, especially during the 1940s and 1950s. Other topics relate to illnesses in children and adults, problems with addiction, patient self-help groups and many more.

The study aimed to elicit the health care account of patients in one urban practice and allows for the reconstruction of history in the telling of its story. Dr. Hetty Ockrim conducted this study in a Glasgow inner-city practice between October 1989 and March 1992 with testimonies illustrating the diverse nature of the local community.

Following her death in August 2007 a series of hand-written letters was discovered in her desk, written some eighteen years earlier, with the words 'Letters to No-one' on the envelope. The letters outlined her hopes and fears as she approached retirement after forty-three years as a general medical practitioner as well as recording her worried about the patients she had cared for whose personal problems affected her deeply. This transformative study of British general practice, covering memories over several decades, illustrates the centrality of primary care in patients' lives and forms a fitting and lasting legacy to an outstanding medical practitioner.

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Kenneth COLLINS

Joshua 0. Leibowitz (1895—1993). From Riga to Jerusalem: A Life in Medicine and Medical History

Joshua Leibowitz was born in Vilnius in 1895 but the death of his mother caused the family to relocate to Riga where he arrived as a young child and he spent all his school years there. In 1913 he began his medical studies at the University of Heidelberg. As a Russian citizen his studies were interrupted by internment and he was only able to resume them in 1918, receiving his MD degree in 1922. His medical training at Heidelberg accommodated courses on philosophy, the history of art as well as rabbinical learning, topics which served him well in his future life.

His medical interests ranged through internal medicine, psychiatry and neurology. His post-graduate years as Director of the Jewish Sanatorium in Bad-Homburg brought him into contact with the Judisches Lehrhaus of Frankfurtam-Main where he taught Hebrew literature and Jewish thought. He was already a serious student in the history of medicine and his rare book library came with him when he fled Nazi Germany and emigrated to Palestine in 1935.

He was co-founder of the Israel Society for the History of Medicine and Science in 1947 and of its journal Korot in 1952. He attended all the Congresses of the International Society for the History of Medicine from the 12th Congress in Amsterdam in 1950 to the 28th Congress in Paris in 1982, delighting in opportunities to meet colleagues and extend his own work. He was for several years President of the short-lived International Academy of the History of Medicine in the 1960s. Most of his contributions covered a wide range of Jewish medical topics especially relating to the mediaeval period but also included more general medical topics usually related to heart disease. His bibliography of articles, reviews and other publications includes over two hundred items.

His particular blend of medical, linguistic and historical scholarship was representative of that Baltic-Jewish tradition of learning which contributed so much to European culture before its dispersal and decimation by the Holocaust. This presentation will review his life, his background in Riga, his scholarship and contribution to the history of medicine.

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Anita DABUZINSKIENE, Rimvydas STROPUS

The First Hundred Years of Kaunas Anatomists' Research Work

On January, 27, 2020 there was the hundredth anniversary of the foundation of Higher Courses in Kaunas, the first higher education center in the independent Lithuania in the Lithuanian language after occupation of Vilnius by the Polish army in 1919. On January 29, 1920 the first lecture of Human Anatomy marked the commencement of Kaunas Anatomy School. There were 3 periods of Kaunas anatomists' scientific activity: the period of independent Lithuania — between the 1st and 2nd World wars; the Soviet occupation period, and the period of restored Lithuania. During the 1st period (1920—1940) the Lithuanian anatomical and anthropological school was created. The founder was Prof. Jurgis Žilinskas (1885— 1957), who graduated Juryev (Tartu) University in 1912. During the 1st World War he was working as a surgeon in the Russian Red Cross Hospital. In 1919 he returned to Lithuania and started to work as a surgeon in the Military Hospital of Kaunas. He played an active part in the organization of the Faculty of Medicine and was appointed Lecturer of Anatomy and Surgery. After the establishment of the University of Lithuania he became the head of the Institute of Anatomy. J. Žilinskas was a student of a famous German anatomist, anthropologist, and embryologist August Rauber (1841—1917). Žilinskas modelled the Lithuanian Anatomy School on the German School. Prof. Žilinskas strived to develop the research school of Lithuanian Ethnic Anthropology and Craniology, based on archeological investigations; somatometric and anthropometric examinations of 5011 Lithuanian soldiers (21—22 years old) and 1006 inhabitants of Lithuania Minor (Prussian Lithuania). The Soviet occupation suspended these investigations. Prof. J. Žilinskas was blamed for spreading racist ideas in the science and was dismissed from the University. After the 2nd World War (1945—1990) the research work was controlled by the Soviet Government. The war disrupted the work of Anatomy School of Kaunas. The student of Prof. J. Žilinskas, Assoc. Prof. Artūras Jurgutis (1909—1967) stayed in Kaunas and supervised the 1944—1967 reconstruction of the Kaunas Anatomy School. He started to develop dedicated Neuroanatomical research. Stimulus for that was his specialization as a neurologist as well as political opportunities. During this time Assoc. Prof. A. Jurgutis defended his doctoral thesis "Variations of the Human Brain Weight and Size." It was the first doctoral thesis done by Kaunas Neuroanatomical School and defended in the Academy of Sciences of the USSR (1957). In the 1970s, the research interests shifted to cardiovascular research. In the 80s extensive human

and experimental animal histochemical investigations of heart in norm and pathology were started. The Kaunas anatomists became the leaders in the field and their scientific works (1977—1982) were incorporated into the USSR — the USA scientific programme "Sudden Death" and achieved international acclaim. So in the postwar years, Kaunas anatomists by ceaseless scientific work accomplished international level and successfully managed the school of Neuromorphological Research (it yielded 24 Doctors of Science) that carried on after restoration of Lithuanian independence in the 90s. Nowadays Kaunas anatomists are making immunochemical, luminescent, confocal, and electron microscopic investigations, their research articles are published in scientific journals worldwide, and their research results are successfully used for creating invasive methods for treatment of rhythm disturbances of the heart.

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Nikola DANILOV

The Restoration of the Medical Institute in Kyiv under Nazi Occupation (1941–1943) as Reflected in the Local Ukrainian Press

During the German—Soviet War 1941—1945, the Ukrainian city of Kyiv had been under German Nazi occupation from September 19, 1941, till November 6, 1943. The majority of the staff of the preexistent Kyiv Medical Institute (KMI) facing the occupation threat was evacuated to Kharkiv and then to Russian Cheliabinsk, where it continued its academic activity. The minority of the KMI staff remained in Kyiv. Considering the growing need of the qualified medical professionals for the local civilians, the German occupation authorities gave permission to restore some medical institutes and nursing/midwifery schools in the Reichskommissariat Ukraine and Distrikt Galizien. Among those restored institutions was the KMU (in November 1942 renamed to Polymedicum). Unfortunately, due to pure political reasons, in the Soviet Ukraine this page of the KMI history was not reflected at all in the official chronicles of KMI and seemed to be proclaimed as non-existent.

We have analyzed any mentions about the restored KMI in the local Ukrainian language press published under Nazi occupation and found in the Central State Archive of Supreme Authorities and Governments (CDAVO) of Ukraine. The most relevant newspapers were "Ukrayinske Slovo" and "Nove Ukrayinske Slovo".

In October 1941 the press wrote about general medical situation in Kyiv freed from the Communist government accounting 21 ambulatories, 15 hospitals, 14 pediatric clinics, and 9 sanitary stations. All certified medical specialists left in Kyiv were re-registered and re-appointed to their work places. The Kyiv Municipal Government made all necessary preparations to re-open special schools and educational institutes, including KMI.

In November 15, 1941, the newspapers informed about restored training in the KMI for senior students. In January 28, 1942, appeared a call for admission for the 1st year students of the Medical, Dental, and Pharmaceutical faculties. Prof. O. Lazurenko was appointed as the Director of the restored KMI.

During 1941—1942 the newspapers mentioned many professors working at KMI clinical departments, among them: Synhalevych, Ziukov, Kramarenko, Bohatyrchuk, Podushko, Yarovyi, Ventskivsky, Neschadymenko, Bohayevsky, Khokhutov, Levytsky, Tomilin, Pliusch, Bazilevych, Kucherenko, Solntsev, Lysovetsky, Lozinsky, Rumyantsev, Sofin, Seletsky, Studzynsky, Ruchkivsky,

Sementsov, Ivakin. Prof. Y. Kramarenko and Prof. F. Bohatyrchuk were themselves authors of several articles in the local newspapers.

The significant portion of the clinical work of the KMI academic staff was dedicated to the treatment of POWs, i.e. Red Army soldiers treated in occupied Kyiv, e.g. in the 1st Municipal Clinical Hospital.

The work of the Polymedicum was gradually put to the end by Nazi occupiers who beginning from January 1942 recruited Ostarbeiters. Though initially such recruitment seemed to be on a voluntary basis, during summer—autumn 1942 it was more and more liked to human hunting. Some caught students were forcefully engaged in agricultural seasonal works in Ukraine. Therefore, the KMI students eventually began to boycott institutional meetings or lessons and tried to hide elsewhere. At the last academic meeting on November 13, the KMI/Polymedicum was dissolved, and all its students were subject to forced labour in Germany.

The last mention about the former KMI/Polymedicum students in the "Nove Ukrayinske Slovo" is dated to November 15, 1942.

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John XXI, the Pope Philosopher and Physician-Scientist of Portuguese Origins Died of Crush Syndrome in 1277

The aim of this work is to refer on the death due to crush syndrome in 1277 of Pope John XXI, philosopher, logician, anatomist, physician scientist, university professor of medicine at the university of Siena and author of books adopted for nearly 4 centuries in universities in the Middle Ages.

The pope died crushed by the ceiling of his office which had been built in rush to meet his need for a quiet and warm place, his need of light and nature. There he attended to his duties of governing the church, studied fine theological questions, inspected the stars, made experiments and discussed with the renowned ophthalmologists who in those days made Viterbo the center of the study on vision. Following the fall of the ceiling of his apartment, John XXI was extracted alive from among the pieces of wood and stones. However, a few days after the disaster he died in bad conditions (miserabiliter). He experienced a typical death due to crush syndrome which was described for the first time by Antonino D'Antona, following the Messina-Reggio Calabria 1908 earthquake.

He was born (c.1210—c1220) in Lisbon as Pedro Hispano (Peter of Spain). He had regular trivium and quadrivium courses at the University of Paris under Albertus Magnus, a talented naturalist. He became Master of Arts, then studied medicine out of Paris (probably Montpellier or Salerno). He wrote three treatises (On the eye (de Oculo), The Treasury of Medicines for the Poor (Thesaurus Pauperum) and Little Summaries of Logic (Summulaelogicales)) which were used in the European universities from the 13th to the beginning of the 18th century. Pedro Hispano was advisor of King Alphonso III for affairs inherent to the Church, bishop of Braga and then Cardinal Bishop of Tusculum and Pope as John XXI. He was buried in the Cathedral of Viterbo, the city where he had settled the seat of the Pontiff.

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Athanasios DIAMANDOPOULOS

Paramedical Marginalia in the Vast Literature about Gout

We present our findings only from the poetical and lyrical works as drawings and similar works have been widely discussed by others. The initiative to start this study was a 12th-century couplet in the 102 Byzantine 12-syllable poem "Against the sexually hungry old woman" by the Byzantine literatus-monk Prodromos. It writes: "Suffering from podagra she tries to cover up the disease working diligently to imitate her body graciously bending". This attitude by gouty persons had not been reported before but was elaborated by stating that people pretend that they are healthy to avoid discrimination or that they are sick in order to gain sympathy. One of the main diseases people pretended to suffer from in the 18th century was podagra. A 2013 report on the Maori people describes recently two old sisters insisting that the knocked their feet, not admitting that the cause was gout. Back in Byzantium, we trace the 11th century "excellent medical poem by the wisest Psellos" where again podagra was described in verse. Similar examples go back to Hellenistic times. In Epigram IV, the protagonist defies podagra, boasting that either with it or as fast as a sprinter he will go to Hades anyway, while Hydelos in another epigram referring to the causes of gout, says "By the sorrows melting Bachus and the sorrows melting Venous a daughter sprang, Podagra the master of limbs". Epigram 11.403 in Greek Anthology states that Podagra delights in Italian wines and other delicacies. However, the vast majority of poetic works on gout comes from Latin authors. Virgil in his Georgica poem Liber III, calls podagra a foul kind of scub. But it was Lucian who made the disease famous, with his poem Tragopodagra. This is a mock-tragedy, starring a gouty man, the notorious goddess Podagra, a chorus of Pains and some mediocre doctors. This poem sets an example for several similar works to be produced. Catullus in his dedicatory poem to Virro connects sexual intercourse with gout: "For, when in hot embrace the lovers burn, she is cloaked with stench and he with gout is turn". In the poetical translations of the elegies of Tibulus and poems of Sulpicius, there is a cynical note "With money a prostitute may embrace a gouty man". We find versified references to podagra in poems by Horace, Lucilius, Ennius and Plautus as well.

The funny epigram VIII, 39 by Valerius Marcialis describes the fake podagra Caelius was pretending to suffer from in order to avoid boring company. However, he did it so successfully that in the end he was afflicted by it in reality. The following centuries offer a collection of verses on the subject that go beyond the brevity of an abstract. Two examples may only be noted.

Firstly, Lafontain's oft-translated Fable "The spider and the gout". In it, the two plagues choose the houses more fitted for them to dwell. It starts with: "When Nature angrily turn'd out Those plagues, the spider and the gout, [...]. As expected, in the end gout lives in a palace and the spider in a hut.

Secondly, the Irish author and satirist Jonathan Swift's (1667—1745) poem about his acquaintance Rebecca Dingley, entitled "Bec's Birthday" (1726). With it, he articulates the concept that podagra could also be used as a remedy for venereal diseases

Several more poems will be presented in the full paper.

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Hippocrates' Case Reports from the Greater Larissa Area

Aim: As the 2020 Riga ISHM Congress is formally the first to include the International Association for the History of Nephrology (IAHN) as a joint partner, we took the initiative to present cases from Larissa, where the formal contact of collaboration between the two Bodies was signed last year. These are 24 reports thought to be written by Hippocrates himself while he was staying in Larissa, where he eventually died in a very advanced age and was buried.

Material and Method: We traced these case reports from his work Epidemiae volumes 2, 3,4,5 and 6, written from 420 B.C. to 348 B.C. Thirteen out of the fourteen cases in vol. 5 are from Larissa. This volume was written by some of his students after the teacher's death. We proceeded to an historical, social and clinical analysis of the cases, trying to correlate some of them with current medical knowledge.

Results: There are 22 cases presented with a patient name while the remaining two give information about the climate and nosology of the nearby town Kranon. The social status and trade of the patients varies from aristocrats to slaves and they include 11 men, 10 women and 2 children. There is a meticulous monitoring of the clinical symptoms and the urine's and faeces' signs of the diseases. Out of the 22 cases, 11 died.

Discussion: Retrospecting diagnosis is always risky. However, some are clearly stated, like trauma, gangrene, epilepsy while others are obscure. Special attention is given to urine colour, consistency and opacity. This is natural, given the ancients' preoccupation with uroscopy, although Hippocrates is not very pedantic about it. Still his remarks about the correlation of urine appearance and the outcome of the disease sound logical. In two instances, Hippocrates (or whoever wrote this chapter) does not hesitate to be critical of other doctors' faults, while also admitting his own. An unexpected finding is his attitude towards the patient. He describes everything in detail but from a cool, distanced perspective. There is no sign of empathy from the man who was later considered the champion of humanistic medicine.

Conclusion: The Larissa case reports by Hippocrates included in the Epidemiae provide a wealth of interesting information about the social structure and climate of the city in his era, about the variety of the diseases and some of their bizarre signs, and the first attempts of a clinicolaboratory correlation. The author's self-confidence is evident.

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Ekaterina DREYTSER

"The Notes of an Ambulance Physician" by A. G. Dreytser — a Popular Documentary Work about the Great Patriotic War

"The Notes of an Ambulance physician" is a collection of documentary essays dedicated to the life of Moscow and Muscovites during the Great Patriotic War seen by a doctor. A. G. Dreytser was on duty at the Ambulance Station at the Sklifosovsky Institute several times a month, combining those shifts with his work at a polyclinic, trying to compensate for his dismissal from the front due to his age. These stories are very popular in Russia, however, the facts of Dreytser's life are almost unknown.

The aimes of our work was to define the unknown facts of the biography of A. G. Dreytser and to analyse the literary and research activities of A. G. Dreytser.

The sources we used for our work were the texts of "The Notes of an Ambulance physician" and Ph. D. dissertation "The Material on the Question of Sudden Death: According to the Data of Morgues, Moscow City Emergency Stations and the Department of Clinical Examination of the Central Polyclinic of the People's Commissariat for Health of the USSR" by A. G. Dreytser. In order to clarify many points related to Dreytser's life and activities during the time prior to the creation of the Notes we used the materials stored in the State Archive of the Russian Federation, the Central State Archive of the City of Moscow, the Russian State Archive of Literature and Art, as well as the personal archive of the Dreytser family.

We discovered that during the First World War (November 1914—August 1915) A. G. Dreytser was a medical student acting as a medical assistant and was awarded the medal of St. George on the 7th of November 1914. From September 1915 to March 1917 he continued his medical education at Imperial Moscow University. During the Civilian War he served as military physician. After that he served as a Head of Health department of Tashkent and Kazan Railway and as a ship physician. In the 1930-s A. G. Dreytser worked in Moscow at a polyclinic. Among his patients were many prominent figures of science and culture, such as a famous novelist A. K. Vinogradov.

The author of the Notes mainly cites cases of "civilian" medicine, and not the ones related to the provision of medical aid to victims of military actions. All discussed in the book conveys the flavor of wartime and the life of the front-line city, such as emotional background and features of day-to-day life. The description by A. G. Dreytser of the way, how the Muscovites spend their time in the underground during the air raids, is often used by writers or journalists, who write about the Great Patriotic war.

At the same time A G. Dreytser analyzed in his Ph. D. dissertation how the human body is responding to the immense stresses of wartime. The author notes the insufficient study of this problem and links it to the need to study not only human pathology, but also the system of domestic and other circumstances, and also sets the task of rationalizing emergency care and preventative work. The statistical material compiled by A. G. Dreytser showed that the main causes of sudden death were cardiovascular diseases, diseases of the respiratory system, central nervous system, gastrointestinal tract, and infections.

Our research discovered some unknown facts of Dreytser's life and defined the connections between his literary and scientific work. A. G. Dreytser used in his Ph. D. dissertation the data, which was collected during the period described in the Notes.

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A Comparative Study Between Egyptian and Greek Medicine in Antiquity

The aim of this work is to compare the ancient Egyptian Medicine with the ancient Greek Medicine.

The material is various textbooks of History of Medicine, Ancient Greek Literature, and scientific dictionary.

The method is the textual criticism of the relative accessible to us bibliography.

The results are, first of all, there are disputable aspects between ancient Egyptians regarding the goddess of medicine Isis, moon (Diod. I.11.1), mixed, person with horns of cow (Diod. I.11.4), person (Diod. I.13.4 and Diod. I.27.4—6), while ancient Greeks say for its Greek origin (Diod. I.24.8), meanwhile for Asclepios, deity of medicine by Greeks, there is a stable aspect (Diod. IV.71.1). As arises from papyruses the religious character of Medicine is more exaggerated in Egyptian medicine particularly in recent years than in elder, say Ackerknecht — Murken, while the Greek medicine by the time is more and more rational. The embalming was notdmedical work. The specialization did not included obligingly knowledge of general medicine (Herod. II. 84), due, probably, to the fact that every part of the body was joined with some deity, thus Sigerist speaks for "mythical anatomy" (see, Ackerknecht — Murken), while Greek physicians had knowledge of general medicine. Greek physicians were probably instructed in medicine either by Babylonians and Summerians, whose the Hammurabi's code is elder of Smith's papyrus or by Egyptians or by themselves. The first famous Greek physicians as Cheiron, Mahaon, Podalirius, Alcmaeon, Democedes, and Hippocrates is being referred had learn the Medicine in Greece. Democedes treated successfully Persian King Darius while Egyptian physicians had previously been unsuccessful in treating him (Herod. III. 129—132). To keep in mind the name "Egypt" is Greek (Apollodorus II. 1. 4—5) and there is Greek mythology about the Egyptian people (Apollodorus, II. 1—5).

In conclusion, Egyptian medicine was developed probably by Greek support but by the time declined, while the Greek medicine progressively became more scientific.

A Historical Report on the ISHM

The aim of this work is to present a historical reports on the Congresses of ISHM, on occasion of its centenary from its foundation.

The material of this work is the Arthur Castiglioni's (1874—1953 CE) textbook "A History of Medicine" of the first half of 20th c. CE.

The method is the textual criticism in order to validate the research as can be determined from the relative, accessible to us, bibliography.

The results are firstly, Art. Castiglioni says: "The International Society of History of Medicine, with a permanent seat in Paris, tries to coordinate the work of various countries and it has convoked until now eleven international congresses (Antwerp, Paris, Brussels, Geneva, Leiden — Amsterdam, Oslo, Rome, Bucharest, Madrid, Yugoslavia). IIW—W interrupted its activity and it is difficult to predict whether and when to be started again". For correction, between Paris and Brussels there is a congress in London. What is more, in other part at the same paragraph Art. Castiglioni mentions: "... "Aesculapious" official organ of the International Union, of which the edition interrupted during the W – W both...". Besides, in other paragraph, he says: "... J. Tricot-Royer, of Antwerp, founder and Emeritus President of International Union...".

In conclusion, taking everything of the above in consideration, I am convinced that the Art. Castiglioni's reports are obvious and as these reports are derived from an eye-earwitness, they establish historical witnesses.

Historical Aspects on Pulmonary Circulation Based in Contemporaneous Data

Aim of this work is to present a history on pulmonary circulation concerned the contemporaneous data by bringing the relative witnesses, with all due respect to the predecessors ancient physicians from China, Egypt, Greece, Arab speaking lands, Latin speaking lands of Middle Ages and wherever other part.

Material of this work is a dissertation of late renaissance, medical articles and textbook of medicine.

Method is the textual criticism of the accepting to us bibliography.

In the results, at first, Ibn Al-Nafis (1215—1288 AD), contradicting to Avicenna in his commentary, describes only the right sided pulmonary circulation of the blood, disproving also the existence of pores in the interventricular septum and establishing for first time the term "small circulation". Does not be excluded the translation in latin of Nafis' commentary for pulmonary circulation, by Andrew Alapago and John Guinter Servetus' teacher (early 16th c. AD), influence the research, due to the idea of modern pulmonary circulation appears in 1546 CE. Then, Vesalius (1452—1519 CE), excludes pores in the interventricular septum and Jacopo Berengario da Carpi (1470—1530 CE) describes the atrioventricular and semilunar valves. Follow, Realdo Colombo di Cremona around 1550 CE who describes the pulmonary circulation; M. Servetus in 1553 CE who denotes the pulmonary circulation; Andrea Cesalpino in 1559 CE describes the pulmonary circulation, using the terms "vena arterialis", "arteria venalis" and "anastomoses" between them. Guilielmi Harvei (William Harvey) in 1628 CE published his work by which proves experimentally the pulmonary circulation using the physics and mathematics for measuring volumes, however imaginated an anastomosis between arteries and veins. In 1661 CE, Marcello Malpighi investigated and discovered the pulmonary vases capillaries by microscope. Alexander Mavrocordatus in Padua 1664 CE verified the Harvey's aspect on pulmonary circulation by examples and proofs. In 20th c. has been clarified the pulmonary circulation and function in cellular and biochemical level by numerous researchers.

Concluding, the study of heart began from prehistory, the study of pulmonary circulation was started in 13th c. CE and renaissance always despite the errors and the deficiencies and it is continuing now in laboratory level intending the human health.

Historical Aspects on the Intubation of the Upper Gastrointestinal Tract

The aim of this work is to present historical witnesses on account of the intubation of the esophagus, stomach, duodenum and jejunum.

The material is textbooks of History of Medicine, textbooks of Surgery and Internal Medicine, other medical books and medical articles.

The method is the textual criticism.

In the results, in Middle Ages concerning the feeding, were Guido Lanfranchi, a surgeon (1260?—1315 C.E.) with his innovative technique of intubation of the esophagus and Jean Yperman a surgeon (1295—1361 C.E.) who describes esophageal feeding via a silver tube. Concerning the decompression of the stomach and small intestine firstly was Kussmaul's method (1867) which was simplified by Ewald (1874). Abraham Louis Levin in 1921 invented his homonymous nasogastric catheter initially for diagnostic uses as gallbladder disease but by his 1927 publication anticipated the modern use for gastric decompression, duodenal drainage and trauma patient. Th. Miller and W. Abbott after a commencement of studies from 1934 introduced in 1939 the long biluminal catheter. Cantor invented in 1957 the homonymous tube for intestinal decompression. Concerning the study of the gastric fluid, firstly was in 1777 Stevens who studied the proteolytic activity of gastric secretion in man; follow Prout in 1824 who demonstrated and measured hydrochloric acid (HCL) in human gastric juice and von Leube in 1871who deviced the first clinical gastric secretion test, always via a naso-/orogastric catheter. Concerning the study of duodenal secretion, Einhorn was the first, who in 1909 passed a duodenal catheter along a thread attached to a radio-opaque metal bucket for the study of duodenal fluid. Finally, concerning the gastric endoscopy, in 1868 again Kussmaul first developed a long gastroscope fitted with a lamp; in 1879, the first report of a gastroscope fitted with electric lighting was made by Nitze. In 1932, Schindler and Wolf in Munich developed a flexible and bendable gastroscope. In 1950, Uji et al. in Japan developed the gastrocamera. In 1957, Hirshowitz in the USA developed the first fiberoptic endoscope, containing light-carrying bundles of glass fibres. In 1983, Welch Allyn Inc. in USA developed the video-endoscope.

Concluding, the intubation of upper gastrointestinal tract has a longstanding course initiating from Middle Ages until in nowadays contributing on the decrease of the morbidity and of mortality.

Medical Reports in S. Augustine's Writings

The aim of this work is to present S. Augustine's (350—430 CE.) medical reports from his writings.

The material are his writings "Confessions" and "On the Trinity".

The method is the textual criticism in order to validate the research as can be determined from the relative accessible to us bibliography.

The results are that in his writing "Confessions" S. Augustine mentions the manner of acquisition of an infant's speaking by himself and not by teaching of his parents, calling it a natural language, using initially cries, broken accents, various motions and then practicing the memory at names of everything by calling and pointing out them through other persons (Confessions, I.8). In other part of this work S. Augustine mentions for a wise man, in his homeland, who understanding Hippocrates, he had taken to medicine and became very skilful and renowned therein it (Confessions, III.3), whom in another chapter assigns the Vindicianus designating as an acute old man (Confessions VII.6). Besides, in the same writing S. Augustine mentions the critical phase of a disease saying "...pass from sickness unto health, after the access, as it were, of a sharper fit, which physicians call "the crisis"..." (Confessions, VI.1). Also, S. Augustine brings an opinion of the people about the physicians mentioning "...one who has tried a bad physician, fears to trust himself with a good one..." (Confessions, VI.2). In the other S. Augustine's writing, "On the Holy Trinity", the author mentions the theory of the humors by the physicians of this era in order to present the cause of a disease (On the Holy Trinity, III.3). In other part of this writing presents his famous theory of the "seminal reasons" which for the man contains primitive elements of the Embryology (On the Holy Trinity III.8—9). Also, S. Augustine refers to medical prognosis saying: "...things future are conjectured by experience of things past (as physicians also have committed many things to writing in the way of foresight, which they themselves have noted by experience; ..." (On the Holy Trinity IV. 17/22).

In conclusion, taking everything into consideration, I would like to say S. Augustine presents medical knowledge of his era (4th—5th c. CE) useful for the History of Medicine.

On the Relation of Medicine with God in Treatises of Hippocratic Collection

The aim of this project is to present the relation between physician and God, as it is mentioned by treatises of Hippocratic Collection.

The material is the questionable for philologists but invaluable to the historians of Medicine, as says the philologist W. H. Jones, treatise of Hippocratic Collection entitled "Decorum", and the treatise entitled "Heart", which properly this second treatise, has enjoyed considerable attention from twentieth century scholars, as says its editor and translator Paul Potter.

The method is the textual criticism from the accessible to us bibliography. In the results, in "Decorum", writer firstly denotes, on the characteristics of wise physician, except the freedom from superstition, the recognition of divine pre-excellence (Decorum V. 10.). Secondly, the writer says the knowledge of God rationally is woven through medicine. For in various diseases, medicine is honoured by God and physicians have given place to God (Decorum, VI. 1—5.). In the treatise "Heart", his writer refers to God through medicine, saying about the heart, this is the creation of a good handworker (Heart, 8).

Summarizing, the writers of these treatises of the Hippocratic Collection accepts the God's existence, considering the creation by means of God and recognizing the impotence of medicine.

On the Theory of Elements in Science

Aim of work is to present the theory of elements of which is composed the universe in ancient primitive, prehistoric and historic science with reflection always, on ancient medicine in various people.

The material is various textbooks of History of Medicine, the ancient Greek literature textbooks of Chemistry and scientific articles.

The method is the textual criticism of the relative accessible to us bibliography. As results, there is the consideration and the acceptance of theory of five elements of yang (active, light, dry, warm, positive) and yin (passive, dark, moist, cold, negative) with ultimate principle the tao (the way) which determines the proportions of yang and yin by ancient Taoist Chinese philosophers with representative the Lao-tzu (6th c. B.C.). Secondly, in ancient Persia (Iran) and ancient India is the theory of "thridosha" that is the theory of three principles, in which food and medication with their "veerya" (general result), "vipaka" (chemical composition) and "guna" (physiologic mechanism) act upon these principles with reflexion to pathology as spirit, bile and phlegm. Follows the ancient Greek science (5th c. B.C.) starting from Ionia (Asia Minor) and Magna Grecia (Sicily, Calabria, Apulia) and ending in Alexandria. According Greeks there are four elements in the universe: Water (Thales, c. 586 BC), air (Anaximenes, c. 546 BC), fire (Heraclitus, c. 504 BC; Hippasus of Metapontum 5th c. BC) and earth ground (Empedocles, c.450 BC). The elements water and earth are reduced to Orpheus' theology (prehistory), whereas all the elements are reflected to Hippocratic medicine (5th—3rd c. BC) as heat, cold, moisture, dryness (Ancient Medicine, I.3) and/or blood, phlegm, yellow bile, black bile (Nature of man, V.1) supported by Galen and all Greek, Roman and Arab speaking physicians until 16th c. CE. According Aristotle (4th c. BC), Pythagoreans and Alcmaeon of Croton (6th—5th c. BC) hold that there are ten elements in a series of pairs: limited/unlimited, odd/even, unity/plurality, right/left, male/female, rest/motion, straight/crooked, light/darkness, good/evil, square/oblong (Metaphysics, I. V. 6 or Aristotle 986a, 20—30). The theory of four elements endures until 18th c. CE in some university. During 1200 — 1500 CE grew the Alchemists' theory of three elements (mercury, sulphur, salt) for metals. Paracelsus (16th c. CE) accepted both theories, of four and three elements. Follows the Flogistonistes' theory with three elements, air, water, earth, one of them named "flogiston", i.e.combustible (George Ernst Stahl, 1660—1734). Later, Antoine Laurent Lavoisier 18th c. CE introduced the first periodic table with 33 elements, Dalton 36 elements (1766—1844)

In 19th c. CE, Bercellius 47 elements (1814), J. Newlands 56 elements (1866), Dmitri Mendeleev 63 elements (1869) and finally Moseley (1913) gave the final form of the periodic table, which enriched continuously, having in nowadays 118 elements, of which 98 natural and 20 artificial.

In conclusion, the theory of the elements starting from ancient era, was proved and enriched by the time, offering many benefits on science and human kind and keeping always in mind that element, according R. Boyle (1627—1691), is the limit of chemical analysis of a substance.

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Theodore DRIZIS

Saint J. Damascenes' Reports Relative to Medicine

The aim of this work is to present reports relatives to Medicine from a Saint Joanne's Damascenes' (680—750 CE) writing, constituting them historical witnesses.

The material is the S. J. Damascene's writing "Sacra Parallela" from the Greek Patristic with our translation to English for this part.

The method is the textual criticism in order to validate the research as can be determined from the relative and accessible to us bibliography.

On the results, S. J. Damascenes in this writing presents reports in relation to medicine from various written sources. He begins with an exhortation of the Hebraic (Deuterocanonical) Book entitled "Sirach" (2nd c. BC) of the Old Testament (Greek Bible), to the people for the physicians which says: "...Honor physicians for their services, for the Lord created them...The skill of physician makes him distinguished, and in the presence of the great he is admired...Then give the physician his place, for the Lord created him...He who sins against his Maker, will be defiant toward the physician..." (Sacra Parallela, 10. 5A). He continues with some Saint Basil's (4th c. AD) phrases, in relation to physicians, which says: "...The healers of the bodies secure the healthy human with protecting assistance, however the seized of a grave disease human do not touch him... unscientific physician visiting sick human instead of health remove the minimum of his well — being too...The excellent of the physicians give at patients with

malnutrition the more severe of the medicaments smearing with honey the cup..." (Sacra Parallela, 10. 5B). S. Damascenes, going on, presents a S. Chrysostom's (4th c. CE) phrase saying: "...I think the ancient of the physicians did not legislated simply nor irrationally to publish the medical instruments but in order to secure the healthy people showing them what will take place if they will go astray..." (Sacra Parallela, 10. 5B). Continuing, S. Damascenes presents a Didymi's Alexandrinis (4th c. CE) report in regards to physicians, which says: "... We define perfect physician him who omits nothing of them which appertain to benefit and therapy..." (Sacra Parallela, 10. 5C). Finally, S. Damascenes brings a Philonis' (5th c. CE) report saying: "...Excellent physician is who does not give or make to the patient all of the therapy plenty and at once, due to the fact that he knows that he will provoke damage than benefit; nevertheless, he estimates the time and distributes the beneficial proportionally, adding others too and making thus the health by a meek manner..." (Sacra Parallela, 10. 5C).

To conclude, taking everything in consideration of the mentioned above, S. Damascenes presents reports of other writers indispensable to the history and useful to medical training.

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Surgical Writings of Later Middle Ages in Western Europe

The aim of this work is to present surgical writings during the later Middle Ages in Western Europe constituting historical milestones in Surgery.

The material is textbooks of History of Medicine and a historical treatise for Medieval Surgery.

The method is the textual criticism of the relative accessible to us bibliography.

Chronologically, the results are the anonymous author's "Bamberg Surgery" of Salernitan School, middle of 12th c. CE, the "Practica Chirurgiae" or "Surgery of Master Roger", a collection of Ruggierio Frugardi's lectures in Salernitan School end of 12th c. CE; the "Rolandina" of Rolando Capelluti from Parma, mid-13th c. CE of Salernitan School too. Theodoric's "Chirurgia" (Teodorico

Borgognoni), 13th c. CE of the University of Bologna, son of the universitarian surgeon Ugo (Hugh) Borgognoni in Bologna. The Bruno's of Longoburg "Chirurgia Magna" and "Chirurgia Parva" in 13th c. CE. The Guglielmo's (William's) Salicetti "Ciroxia Vulgamente Fatta" of School of Bologna in 13th c. CE. The Guido's Lanfrachi of Milan "Chirurgia Parva" and "Chirurgia Magna" in Paris 13th c. CE. The Henri's de Mondeville "Chirurgie" in Paris 13th c. CE. The Arnold's of Villanova "Parabole" in Montpellier 13th c. CE. The Mundinus di Luzzi "Anatomia" in Bologna (1275—1326 CE) with dissecting and surgical techniques. The Guy de Chauliac's "Inventorium Seu Collectorium Cyrurgie" in manuscript or "La Grand Chirurgie" in printing later, in Paris and Avignon 14th c. CE with descriptions in anatomy and surgery. The Jean Yperman's "La Chirurgie" Flemish (Flanders) in 14th c. CE. The Peter's of Angelata six books on surgery in Bologna 14th c. CE. The John's of Mirfield "Breviarium Bartolomei" in London 14th c. CE. The John's of Ardene surgical writings in Newark of Nottinghamshire and in London, 14th c. CE. All the previous referred surgeons — writers were clerics, all the writings were in manuscript form.

In conclusion, as Ira M. Rutkow says: "...The Middle Ages was a time of rediscovery in surgery...The revival of surgical learning presaged the Renaissance and the eventual maturation of modern surgical thought".

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Theodore DRIZIS

The Course of Medicine in Space and in Time

Purpose of this work is to present the historical course of Medical Science in space and in time. The material is textbooks of History of Medicine, medical article and ancient Greek Literature. The method is the textual criticism.

As results, first witnesses are from Mesopotamia, written in cuneiform writing at the end of the third millennium B.C. on wooden tablet, clay model, and soapstone, while the Hammurabi's code is written in 1700 B.C. In India is well known the paved bathroom excavated in Mohenjo — Daro (c. 3300 B.C.) indicative of advanced systems of public sanitation. Muthu denotes in Rigveda, the eldest of bedas (4000 B.C.), besides the religious references, referred

pharmaceutical plants. The Atharvaveda, later veda, contains magic prescriptions, the latest veda, the Ayurbeda, contains, references to pure medicine with a theory of humors. In China, it refers the Red Emperor's (Hung Ti) first medical herbal with 365 drugs and the first charts on acupuncture (2600 B. C.), presumably even older, transmitted orally and edited later. In Egypt, historical witnesses on account of physicians there are inscriptions of 2600–2400 B.C., the Kahun's elder medical papyrus (2000—1800 B.C.) only for gynecological topics, the Smith's papyrus (17th c. B.C.), probably a copy of another papyrus of 3000 B.C. with surgical interesting. Then, there is Ebers' papyrus (16th c. B.C.), Hearst's papyrus (16th c. B.C.), London papyrus (14th c. B.C.), Brags—Berlin (early 13th c. B.C.) and Chester Beatty (later 13th c. B.C.). Later, Greek medicine comes with medical reports in Homer [Asclepius, Machaon, Podalirius (Iliad, II. 729—732), and Chiron Centaur (Iliad, 830—836)] (8th c. B.C.), in Herodotus [Democedes (Persian Wars III. 125)] (5th c. B.C.) and follows the primitive scientific medicine, initially with Alcmaeon's and Empedocles' reports, Hippocratic collection, Platon's and Aristotle's writings (5—3 c. B.C.), then Dioscurides, Soranus', Aretaeus' and Galen's books (1—2nd c. A.D.). The march is continued in Byzantine Empire with Orebasius, Aetius, Alexander of Tralles, Paul Aegineta (4th—7th c. A.D.) and others; in Roman Empire in latin language with Celsus, Scribonius Largus, Antyllus', Vindicianus, Priscianus medical writings (1st—5th c. A.D.). In Middle Ages, in Latine speaking kingdons except various translations from Greek and Arabic, first is the writing "Bamberg Surgery" of Salernitan School (12th c. A.D.) and then follow medical writings in all over the western Europe; in Byzantine Empire Theophilus "Therapeutics", Meletius "On Nature", Leoni "Synopsis Medica" (7th–9th c. A.D.) and many others. In America, mainly USA, the first medical treatise is the Zabdiel Boylston's treatise entitled "An Historical Account of the Small Pox Innoculated in New England, Upon All Sorts of Persons, Whites, Blacks, and of All Ages and Constitutions (1726); the first surgical work, entitled "Jone's Plain Concise Practical Remarks on the Treatment of Wounds and Fractures (1775). Afterwards, from Dutch and America the modern medicine is shifting in Japan the 19th c. A.D.

Concluding, the course of medical science began from prehistoric period, from East to West and finished from West to East in 19th—20th c. A.D., following the course of whole Science.

Olga DZHARMAN, Galina MIKIRTICHAN

Hospital Building Activity in St. Petersburg (Russian Empire) from 18th until the Beginning of 19th Centuries

The rapid growth of the population of the capital of Russian Empire, St. Petersburg in 18th—19th centuries (75,000 in 1750; 192,000 in 1784; 220,000 by the beginning of 19th century; 425,000 in 1825) lead to measures to be taken regarding medical aid for the city dwellers. The first building sites became two hospitals (Hospital of Admiralty Shipyards (1715) and Land-Forces Hospital (1717 by Domenico Trezzini), following the enfilade layout, widespread in the period in question. The first hospital rules were established in 'Statutes' of Peter I and later — in 'Hospitals Regulations' (1735). The main part of population dwelt in unsanitary conditions, which had nurtured epidemics of smallpox, parasitic typhoid fevers, intestinal infectious diseases, venereal diseases. The situation being challenging, two more civil hospitals were opened in St. Petersburg: Kalinkinskaya (1762, by N.F.Gerbel) for women suffering from syphilis and Obukhovskaya (1779), a general hospital with a 'soul sick' department, in which a stone building was erected in 1784 by Giacomo Quarenghi and L.Ruska. The projects were also based on the enfilade layout, according to a centralized scheme as single-unit buildings; all the patients were located in one large (rectangle or long) building having 2—3 stores and a high basement-floor. Only one separation of patients was available, i.e. according to gender. Men's and women's wards or departments were located either on different floors or indifferent aisles of the building on the both sides from the main entrance. Separate yard buildings included a mortuary with autopsy room, washhouse, and stables. The wards in the earliest hospitals were large (about 200 m2) and walkthrough, for 20—50 beds, which reflected the rules of 'Hospitals Regulations' (ch.XII,2). In the end of the building near the stairs, there were small wards for infectious or patients suspected of being infected. In 1803 the Mariinskaya Hospital, which was more elaborate, with the building designed by Giacomo Quarenghi and having noble simplicity of forms and proportions. The majestic main portico with 8 Ionic columns opened the view; two ramps were designed for patients transportation lead to the main entrance. The main building was located with offset from frontage line and was flanked with two symmetrical outbuildings for maintenance services. The inner lay-out also had been planned thoughtfully by Quarenghi: the 'corridor principle', when corridors went through the whole building with the ward on both sides (this principle is still in use nowadays). Wards were separated by thick walls.

200 patients (male and female) were located in 26 wards up to 15 beds in each (men on the right side of the building, women on the left side, on two floors). Cleverly designed development of illumination was applied in the corridors and on the stairs as well as one of ventilation enough for the adequate air exchange in the wards. The building of maintenance building and staff buildings was completed simultaneously with the main building. The hospital gardens were also planned by Quarenghi. To sum up, the very beginning of hospital building in St. Petersburg is connected with names of famous architects. The base of their projects was a centralized scheme including single-unit buildings and enfilade layout of the large wards, followed by corridor layout later on. Innovations of hospital building such as ensemble principle and hygienic improvements were also introduced.

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Origins of Perinatology in Folk-medicine of Ancient Rus

In Ancient Rus the main population had acquired a sedentary lifestyle since a very early period of time. Agriculture, fishery and crafts were widely practiced. This allowed favourable conditions to start large families with many children, which, in its turn, led to the evolution of childbirth traditions and rites of mythological background. It is highly likely that in the earliest stages of society the care of a woman giving birth in Slavic culture was similar to other societies, i.e. parturition with help of an elder, experienced woman, who also could take care of the newborn in the first days, both physical and against 'the evil eye'. Some women might give birth unassisted, too. Historically, the newborn care belonged to the post-partum care, fulfilled by a wisewoman (midwife) for long centuries. They kept the lore of folk-medicine, besides, they possessed a wide range of sacral knowledge (e.g. incantation to protect the newborn and the mother from any evil). The wisewomen also attempted to cure postpartum illnesses. The tradition of delivery assisting, hygiene and bringing up the newborn child especially in the first years were transmitted orally and later got the literary fixation in a number of Russian medieval compendia, usually called a 'Travnik' ('Book of Herbs') or a 'Lechebnik' (Book of Remedies). Russian folk culture developed a

long-living ethical code towards a pregnant woman in order to keep her in good health — a condition absolutely necessary for survival of her child and her in the harsh climate of Russia. The base of that ethical code were both social and religiously cultural. The birth was considered as the greatest mystery with destiny of the child (including health) determined already in the womb and connected immediately with the mother's health. The ethical and behavior code manifested in everyday life. The position of a pregnant woman dependent a lot of material situation in her family, relation between members of her family, amount of the working hands, the pregnant woman's personality etc. Nevertheless, the main attitude was to 'spare' the pregnant woman. In order to keep the child safe in the womb and alleviate delivery a range of rites was performed, varying from area to area. The skills of midwives obviously did vary, too. Neglecting traditional rules of newborn care was frowned upon in the community.

The approaches of newborn care in Russian folk-medicine can be classified in three groups: 1) rational methods, which were beneficial for the child's health; 2) dangerous for the child's health; 3) useless but harmless traditions or rites. Therapies in Ancient Rus societies consisted of remedies of herbal, mineral and animal origin; incantations and Christian prayers with mixed folk and Church ideas of imperfect human nature, sin and illnesses as its results had rather prominent place, too. Insufficient level of medical knowledge, lack of skilled midwives, frequent pregnancies, hard manual work, and food deficiency contributed a lot in maternal and neonatal mortality rates. Relative stability of mentality through centuries kept the medieval models of perception of the child and child's socialization, as well as child treatment and care until the 19th century in rural areas, with ethnographic materials available.

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Development of Occupational Health in Latvia and Worldwide

The aim of this article is to study the development of occupational health as a science field in Latvia in light of overall development of this discipline in the world. Occupational health is wide science sector integrating all aspects of health and safety at workplaces.

Occupational health as a separate medical specialisation started to develop already many centuries ago. Hazardous working conditions for workers of different professions and some of the occupational diseases were already known at the times of Hippocrates who described symptoms of occupational lung diseases among miners thus becoming first occupational health doctor in history. Also other harmful effects of poisonous dust among ore miners were described by doctors of ancient Rome. More information on occupational diseases began to appear in 16th century when German doctor and metallurgist Agricola described serious occupational diseases among miners followed by famous physician and chemist Paracelsus who also wrote about the diseases among miners. In 17th century, Mr. Pans also described diseases of miners and metal smelters adding the knowledge on cases of lead intoxication. During 16th and 17th century, first health services for workers were established in countries like England, Germany and Sweden. In 1713, a book by Professor Bernardino Ramacini (1633—1714) of the University of Padua, entitled "Reflection on Artisan Diseases" were published describing 60 know occupational diseases of that time. B. Ramacini thus was considered as established of occupational medicine speciality and first specialised occupational diseases clinic was founded in 1910 in Milan — hometown of B. Ramacini. During 20th century this field developed very quickly in industrially developed countries with opening of numerous occupational health clinics and research institutions.

In Latvia issues of occupational health were addressed systematically for first time in 1960s when Central Scientific Research Laboratory was established in 1966 at the Riga Medical Institute with special Hygiene and Occupational Diseases unit. It was founded by professor Lev Israilet (1924—1980). In 1976 the Republican Centre for Occupational Diseases was opened at Pauls Stradins Clinical hospital later to be renamed as the Centre of Occupational and Radiation medicine. In 1992 the Institute of Occupational medicine was established at Latvian Medical academy incorporating the Laboratory of Hygiene and Occupational diseases using the capacity of Hygiene and Occupational Diseases

unit. At that time the accreditation according to ISO 17025 standard was achieved allowing performance of physico-chemical testing of work and ambient air and medical products as well as other test of working environment. This institute has been renamed now as the Institute of Occupational safety and environmental health. Currently Centre of Occupational and Radiation medicine of P. Stradins clinical university hospital continues collaboration with Department of Occupational and Environmental Medicine and Institute of Occupational Safety and Environmental Health working on various topics to improve diagnostics, treatment of occupational health problems and training of occupational health professionals.

The development of this field in world and in Latvia has always been complex.

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Source Domain of Metaphorical Terminology in Corpus Hippocraticum and Corpus Galenicum

There are two collections from the antiquity — Corpus Hipporaticum and Corpus Galenicum — considered as a foundation in the development of medicine. Just as in other fields of Greek τέχναι/technai 'arts' a special medical terminology was created — terminology which is nowadays essential for proper communication in the field. In these two collections anatomical, clinical, and pharmaceutical terminology is found based on Greek origin roots and suffixes.

This paper deals with the question of how this particular terminology was created. One of the answers lays in metaphors. From Poetics by Aristotle it is known that metaphors can give objects a name that originally belongs to something else. Metaphors are considered successful when they render things vividly visible to one's inner eye, and Aristotle calls these $\pi p \grave{o}$ $\grave{o} \mu \mu \acute{\alpha} \tau \omega v/p ro$ ommaton 'before the eyes'. These two aspects can be observed in the terminology of these medical collections.

The source domain of metaphorical terminology is part of larger research of a collection of metaphorical terms in Ancient Greek medical texts. The collection consists of 88 terms chosen by two parameters: firstly, a term is made using a metaphor and, secondly, it is still used in medical terminology of today. There are 11 lexical-semantic groups of source domain observed in the collection: 1) humans (13%), 2) fauna (13%), 3) flora (16%), 4) natural phenomena (9%), 5) household objects (26%), 6) war objects (5%), 7) house (3%), 8) food (2%), 9) graphemes (1%), 10) environment (11%), and 11) abstract objects (1%). So, words from these groups of source domain are transferred by metaphor to medicine.

Examples for the paper are chosen from a treatise Elementary Course on Bones (Περὶ ὀστῶν τοῖς εἰσαγομένοις/Peri oston tois eisagomenois) which is one of 110 treatises of Corpus Galenicum. The treatise is considered one of the genuine works written by Galen, and it is the only anatomical work from the antiquity based on human material. Although human dissection was taboo in the antiquity and therefore anatomical knowledge was incomplete, Galen had access to human bones. This means he discovered what other physicians before him didn't know about, which lead to the formation of terminology. Anatomical terminology of bones is formatted from source domains mentioned above — like household objects e.g. κλείς/kleis 'key' clavicle, fauna e.g. κόκκυξ/kokkyx 'cuckoo' coccygeal bone, war objects e.g. θώραξ/thorax 'coat of mail' thorax, etc.

Eirini GIANNAKOU, Ourania KALOGERIDOU, Niki PAPAVRAMIDOU¹

Women in Medical Education: Female Students in the First Years of Operation of the Faculty of Medicine, Aristotle University of Thessaloniki, Greece

Women played a key role in medicine even since antiquity, though their role seems to change drastically over time. Their struggle to gain access to education is studied worldwide, while their admission to medical undergraduate studies is of special interest to us. This paper examines the presence of female students in the Faculty of Medicine, Aristotle University of Thessaloniki, during the first years after its foundation in 1942, taking into account social, financial and demographic factors that left their mark on that specific time period. 355 personal files of female students were located in the Historical Archive of the Faculty of Medicine during the first five years of its operation. The files were organized, documented in excel files and studied so as to extract valuable conclusions on the obstacles faced and the progress in the participation of women in science.

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Sergey GLYANTSEV

Doctor of Philosophy, Biology and Medicine, Professor Johann Paul Kremer — Auschwitz Physician, Executioner and War Criminal (Based on the Materials of J. P. Kremer's Diary)

The scientific career of Johan Paul Kremer (1883—1960s), a graduate of the Universities of Heidelberg and Berlin, Ph.D. in philosophy, biology and medicine, associate professor at Berlin University, developed successfully until he began to study the inheritance of acquired injuries. Colleagues criticized these studies and voted against his professors. For further career advancement, in 1932 Kremer joined the National Socialist German Workers Party (Nationalsozialistische Deutsche Arbeiterpartei), and then — in the SS (Schutzstaffeln). This allowed him to become a professor of Münster, but World War II was began and the 58-year-old Kremer was drafted into the SS-troops (Waffen-SS). Initially, he served as a surgeon in SS hospitals, and in 1942 he was sent to the Oświecimiu concentration camp (Konzentrationslager Auschwitz) located in Poland, where he served for about a year. His function as a camp physician included the selection of Jews brought to the camp from France and the Netherlands on able-bodied and to be destroyed in gas chambers. In total, as a "doctor" Kremer participated in the executions of about 10,000 people. But this seemed to Kremer not enough. He continued to collect observations of "hereditary" injuries and, as a morphologist, began to study dystrophy, taking fresh autopsy material for research from specially selected prisoners killed by a phenol injection in the heart. Previously, he interviewed prisoners, being interested in their weight before imprisonment and the length of their stay in the camp, intending to create their own research laboratory after the war and make the world happy with their discoveries. Kremer met the end of the war in Munster, where he taught at a local university and was horrified by the inhuman (according to him) bombing of the city by British and American aircraft. After the war, the British extradited Kremer to the Government of Poland. In 1947 the Krakow Tribunal sentenced him to 10 years in prison. However, the Poles considered it inhuman to hang the 64-year-old victim of the Nazi regime. The report considers the phenomenon of unconditional acceptance by a "man of science" of anti-human ideology, when a scientist becomes a killer, who justifies his behavior by serving the Fatherland and science. At the same time, as Kremer wrote in his diary, he could enjoy delicious food, classical music and the beauties of nature, sent to his relatives and friends objects selected from prisoners of the camp, and soap made from human fat, not understanding the

whole depth of his moral decline and not counting his acts immoral. Unfortunately, Kremer did not realize this even in a Polish prison, leaving which he continued to call himself not an executioner, but a victim. The historian's task is to awaken the conscience of our readers and listeners, preventing the appearance of such "cremers". Otherwise, the world around us may disappear. Forever and ever. And we are with him.

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Sergey GLYANTSEV

Lena Sidarenko and Cardiosurgery in Ukraine and Russia

In the history of cardiology and cardiac surgery in Ukraine and Russia there are few famous men who connected the two countries together. This is Vasily Obraztsov and Nikolai Amosov from Vologda, Nikolai Strazhesko from Odessa, Alexander Shalimov from Lipetsk and several others. Their equally famous colleague is Lena Sidarenko. She was born in Yevpatoriya (Republic of Crimea), worked in Kiev (Ukraine) and Tver (Russia), and ended her life in Zelenograd (Moscow region). After graduating from the State Medical Institute (Simferopol, Republic of Crimea), Sidarenko took up lung surgery, wrote a PhD thesis on surgery for pleural empyema of tuberculosis origin (1960), and almost simultaneously defended her doctoral dissertation on surgery for septal heart diseases (1961). Since 1962 for 16 years she headed the Department of Cardiovascular Surgery at the Institute of Thoracic Surgery in Kiev (Ukraine), where she developed heart surgery in children. In 1965 she was nominated for the Lenin Prize — the highest scientific award in the USSR. Introducing her student to Lenin Prize laureate, her teacher academician Nikolai Amosov wrote that in those years Sidarenko was the only one woman in the world who regularly performed heart surgery under extracorporeal circulation. Alfred Blalock from Baltimore, Robert Wallace from Mayo Clinic and Frank Gerbode from San Francisco dreamed of meeting her. Lena Sidarenko was the first in the country to analyze the causes of mortality after operations with cardiopulmonary bypass. In 1971 she represented Ukraine and the USSR at the XXIV Congress of the International Society of Surgeons in Moscow with an oral report in which she analised on the results of her heart operations in children

with congenital malformations and the lowest mortality rate in the country. In the late 1970s she moved to Tver (then Kalinin), where she founded and headed the Department of Cardiovascular Surgery at the State Medical Institute (now the Tver Medical Academy). Faced with a new job with difficulties organizing heart surgery, Sidarenko began to develop methods for the surgical treatment of vascular diseases. In the early 1990s Lena Sidarenko retired and moved to Zelenograd with her family, where she spent the last years of her life surrounded by her husband, son, daughter-in-law and grandchildren. She did not earn large posts and ranks, did not dream of an academic career. But she was a workaholic and entered the history of Soviet medicine as a pioneer in open heart surgery, the founder of large clinical schools in the field of surgery for congenital heart disease in Ukraine and Russia. Her students were Hero of Ukraine academician Gennady Knyshov, leader of Ukrainian pediatric heart surgeons Professor Mikhail Zinkovsky and leader of cardiovascular surgeons in the Tver region Professor Yuriy Kazakov. In 2019 the culture channel of Russian television showed a documentary film about Lena Sidarenko, whose authors compared her achievements with the flight into space of the first female cosmonaut Valentina Tereshkova. And although heart operations were performed on the ground, in the years when they were performed by Lena Sidarenko, their results were as unpredictable as a flight into space, and Sidarenko herself risked the same as Tereshkova. No wonder they say that every operation on the patient's heart leaves a mark on the heart of the surgeon.

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Periods of the History of Russian Surgery

In the history of Russia surgery we distinguish 7 periods. During the 1st period (XVIII century) the first hospitals, hospital schools, the university, medical-surgical schools and academies were opened; the first textbooks on anatomy and surgery were created, the training of medical surgeons began. In the 2nd period (1st half of the XIX century) teaching and study of surgery at the patient's bedside began; there was a clinical-anatomical direction in surgery; the first clinical surgical school was created and three phased teaching of surgery was

introduced. Anesthesia and antiseptics have expanded the capabilities of surgeons and transformation the specialty into an institute of social relations, indicating the 3rd period of its history (2nd half of the XIX century). The first surgical societies and journals were created and congresses of Russian surgeons were held. The 4th period (1st half of the XX century) began with wars and revolutions. The increased skill of surgeons led to the beginning of differentiation of surgery. A distinctive feature of USSR surgery was nervousness, and the clinical-anatomical direction was replaced by a clinical-physiological one. During the 5th period (1941—1945) field surgery was developed; academic surgery has arisen; endotracheal anesthesia was introduced as a result of which thoracic surgery had developed. The peak of the clinical-physiological direction that dominated in Russian's medicine until the early 1950s became the Joint ("Pavlovskaya") session of the General Meetings of the Academy of Sciences and the Academy of Medical Sciences of the USSR. A turn towards the anatomical-physiological or reconstructive direction in surgery occurred in the 2nd half of the XX century, when its institutionalization was completed. This period was the golden period of surgery and clinical surgical schools in Russia, and individual surgical specialties received the status of educational and scientific disciplines. At the end of the XX century new social upheavals occurred in Russia, culminating in the collapse of the USSR, the birth of a new country, and the introduction of market relations in surgery. Today we are witnessing the modernization and technologization of surgery, a decrease in the invasiveness of surgical procedures, and the transition from traditional to endoscopic, catheter, robotic, and hybrid technologies. Unfortunately, the flip side of these successes is a decrease in confidence in surgeons, the assertion among people of the opinion that the surgeon is a businessman for whom surgery is a business only. There is a departure from the anatomical-physiological direction, the concepts of the surgeon's morality, classic clinical school and clinical thinking are degrading, the confusion in the training of surgeons at the university level and postgraduate practice is growing. Thus, in the history of surgery in Russia as a social phenomenon from the XVIII century to date 7 periods can be distinguished. During this time surgery arose and developed as a profession, divided into specialties, became an educational and scientific discipline and turned into a social institution, and its main direction was the anatomical and physiological. Obviously, in the XXI century surgery in Russia will develop in the direction of further technologization and minimally invasiveness. I would only like to see in it that moral component that was laid by our great predecessors at all previous periods of its history.

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From Thirst to Threshold: Defining Diabetes in Early Twentieth Century China

In the past few decades, diabetes (diabetes mellitus) has become a major public health challenge in China. In addition to medical research, scholars have explored the implications of diabetes from social, economic, environmental, cultural, and political points of view. Diabetes has thus become a metaphor for the process of modernity and its social consequences in China and the world. Nevertheless, one essential question has seldom been looked into: what is diabetes? In the early 1900s, diabetes was defined by glycosuria and symptoms such as thirst, hunger, and polyuria, and arguably similar to the Traditional Chinese Medicine (TCM) concept of dispersion-thirst disease (Xiao ke bing). With the progress of endocrinology, Chinese medical professionals started emphasizing the hidden pathologic process in the pancreas and eliminating the "false" diabetes case with symptoms of thirst, hunger, polyuria but without the former pathologic change. The historical progression of the definition of diabetes in early twentieth century China at some extent represents a shift from a patient-centered, symptom-based understanding of the disease, to a quantitative, pathology-based diagnostic model. This study is part of the author's study on the history of diabetes in Twentieth century China.

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Comparative Analysis of the Contents of Jesuit Pharmacies Books Collections, in 18th Century

Introduction: The Society of Jesus was founded in September 1540. The Jesuits main activities included missionary, education, and health affairs. By 1556 the Society of Jesus had 46 colleges, and 200 years later — 669. The Jesuits also established pharmacies near their colleges and most of them owned libraries with various medical books.

The aim of study: The purpose of this work is to compare book collections owned by several Jesuits pharmacies and to evaluate which medical books were the most common.

Materials: In this work, the inventory of the Jesuit Pharmacy in Vilnius (dating from 1773 to 1774) was investigated. This document listed 405 pharmacy books and this data was compared with: 1) a collection of 43 books from the Jesuit Pharmacy in Uherské Hradiště (Czech) in 1774; 2) a list of 75 books from Cordoba (Argentina) pharmacy in 1767; 3) a list from Jesuit Pharmacy in Santiago (Chile) dating back to 1767.

Results: Each book collection owned by Jesuit pharmacies is unique. There is no trace of evidence that any common guidelines or specific instructions were given for Jesuit pharmacies which books are required to buy. Books of classics authors Hippocrates, Galen, Oribasius represented a small portion of the libraries' collection. More often pharmacies purchased works by Renaissance and Enlightenment authors. Each pharmacy had several Pharmacist's Basic Book — Pharmacopoeias. The most frequently mentioned were Pharmacopoeia Augustana, Moysis Charas Pharmacopea and Schroeder's Pharmacopoeia. In smaller libraries, such as Uherské Hradiště, there were one or two surgery and/or anatomy books. Meanwhile, the larger libraries in Santiago, Cordoba, and Vilnius contained more of these books. 18 anatomy and surgery treatises were owned by Jesuits' Pharmacy in Vilnius. Pharmacies also had chemistry and iatrochemistry treatises. The most frequently owned books: work of Oswald Crollius (1560— 1608) Basilica Chymica, and work of physician and chemist Nicolas Lemery (1767—1832). All pharmacies owned medical practice books. It might be that pharmacists were also involved in the diagnosis and treatment of patients. For example, they all had books written by Daniel Sennert (1572—1637), including Medicina practica. Also, all pharmacies owned the famous botanical work "Commentaries" on the Materia Medica of Dioscorides written by Italian author Andrea Mattioli (1500—1577).

Conclusion: Most Jesuit pharmacies had their own libraries that served their daily work and education. Pharmacy books collections included pharmacopoeias, manuals on drug manufacturing, medicine, chemistry anatomy and surgery. Spanish, Portuguese, Italian, French authors dominated in the collections of South American Jesuit pharmacies, but German authors represented a significant proportion books, as in Jesuit pharmacies of Europe.

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Medical Conflicts Between West and East — the Strange Case of Two Chinese Women in Portugal

In 1911, Portugal was going through the most agitated period of its political history — the implantation of the Republic — initiated by the revolt of 5 October on the previous year followed by severely repressed strike outbreaks months, radical reforms on education and ongoing separation between Church and State. On the backstage, the new regime is friable and fragmentation of the Republican Party into various factions undermine the successive governments. Curiously, without knowing it and certainly without wanting it, two Chinese women passing through Lisbon will find themselves involved in the events that will bring to the public opinion the various contradictions of this revolution, at the same time that its own country was also embracing it.

Despite the scientific medical advances in most areas, ophthalmic knowledge was still scarce and limited and blindness was a prevalent scourge in many countries at the early 20th century.

This article tells the untold history about Achus and Goé (at that time 29 and 31 years old, respectively), both born in Shanghai, who exercised "the healing of eye diseases". The two sisters traveled across all Asia and East Europe until Portugal where they carried out interventions in various locations. The fame of their healing methods quickly spread throughout the city of Lisbon and surroundings and then across the entire country.

At that time, there was only one public clinical establishment to treat blindness in Portugal, but without the necessary conditions for the purpose for which it was intended. Furthermore, there were very few doctors and medical students who wanted to specialize in this area. Nevertheless, the new government, which had a representative number of physicians, accuses the two Chinese of illegally practicing medicine, forbidding them to continue their business and, soon after, issues orders to expel the women from the country.

A wave of indignation soon travels across the country as hope shattered of curing countless of additional cases of existing blindness. The turmoil generated by their expulsion added to the disappointment with the new Constitution of the Portuguese Republic and with the republican promises of economic and social improvements.

What scientific medical knowledge did these two Chinese women had, where they learn it, what they effectively did performed to their patient's

eyes — were they a fraud or did they actually performed better than official medical doctors? Also, how was medicine in China at the beginning of the XX century?

These are some of the questions that the authors propose to answer in the present article.

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Modernist Culture — the Making of Modern Surgery

Surgeons have ever been nomad and their role in society has been constantly changing during all mankind history. Since grimy barber-surgeons to run-of-the-mill surgeons turned themselves into surgeon-apothecaries, general practitioners and eventually respectful scientists who can fuse their art on the basis of experimental science and claim it to be founded on rational principles.

This article aims to provide an answer to one simple question: How is modern surgery born?

Modernism emerged alongside radical challenges to traditional belief systems, the reorganization of society, new modes of visual display, and innovations in all scientific areas. This reflection focuses on the diverse inventions, new techniques and creative scientific thinking all over the world that responded to and inspired Portuguese surgeons. It explores such wide ranging subjects as world conflicts, art and publishing, intertwined with the continuous growth of scientific knowledge.

The present work is a kaleidoscope of medical concepts on the practice of surgery, in particular the historical settings from the first half of 20th century. It emphasises that understanding a disease and its particular treatment forms does not just include recounting explicit accounts of disease given by medical literature. It needs an holistic analysis of the social relations embedded in such concepts. By doing this, the authors propose to illustrate how modernist surgery rose from a relatively humble position in medieval life to being seen as one of the great achievements of modern culture. We examine how semiology entered surgery, how medical theory and surgical practices relate to social contexts.

Ming JIANG, Yi Yi Edna CHAN

Revolution in History of Chinese Medicine Education: the Hong Kong Baptist University Experience

Medical education, be it Chinese medicine (CM) or Western medicine, is in principle knowledge-intensive, which means students are expected to acquire a huge body of professional knowledge made up of facts and theories. However, knowledge alone may not be enough to enable students to deeply understand human life, which is immensely complex. The conventional teaching of the History of CM courses mainly focuses on introducing "what" had happened, which means describing the changes and development of CM in different dynasties with support of historical evidence, while lack of discussion of the academic thoughts underneath.

Taking the opportunity of the "334" education reform in Hong Kong, the History of CM course has been transferred into a general education course open to interested students of different disciplines in the university instead of a CM programme core course for CM major students only. The course curriculum, teaching, learning and assessment approaches were modified. Focus of the course has shifted from "what" had happened to "why" it happened. Students should know the "hows" and "whys" of life's phenomena. Changes and development of medical issues are examined under the social and historical context. Students are encouraged to think and point out the crux of specific CM issues under major epidemics, new philosophy or technology emergence, government policy or political challenges, etc.

The course also adopts the "assessment as learning" approach with no written examination. Different types of classroom activities, such as group discussion, debate, presentation are deployed for active learning.

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Bone External Fixation: at the Crossing Point of Latvia's and the World's Development

Introduction. The method of external fixation means transcutaneous bone fixation with Kirschner wires, Schantz screws or Steimann rods, which are fixed in a circular, mono or bilateral frame, surrounding the extremities. It is used primarily for the fixation of open fractures, their consequences caused limbs deformation correction, and as a method of temporary surgical treatment in the damage control orthopaedics protocol.

Aim of the study is to analyse the progress of the development of external fixation method in Latvia and the world over the last four decades, focusing on changes in the indications of the method, the modernisation of external fixation devices, the introduction of innovative technologies in the manufacture and use of external fixation devices, in order to predict further developments of this method.

Materials and methods. The study is based on a comprehensive analysis of literature, interviews of a recognised author of this method in Latvia, personal experience of study authors and archival materials of the Hospital of Traumatology and Orthopedics. The study method is a descriptive analysis of the available material.

Results. In the 1980s, Latvia, thanks to the contribution of the Academician Viktors Kalnberzs in the development of circular external fixation device (Kalnberz external fixation apparatus) and achievement of the Latvian Traumatology and Orthopaedics Research Institute (now — Hospital of Traumatology and Orthopaedics) incl. Laboratory of Biomechanics and Professor Haralds Jansons, was certainly the leading position in the world in the field of bone external fixation.

The analysis of the literature and Hospital of Traumatology and Orthopaedics statistics leads to conclusion that method of external fixation is currently used less frequently, the indications of which have changed significantly over a period of 40 years, but remains an indispensable method in case of complex fractures, its consequences and orthopaedic diseases surgical treatment.

In the last two decades in the world and Latvia orthopedics mark a trend in the method of external fixation as a temporary surgical treatment method prior to open reduction and internal fixation.

There are many significant innovations in the external fixation method (computer assisted deformation correction, use of 3D printers in the manufacture of the frames, etc.), but there are still no revolutionary developments — unilateral and circular frames are widely used in clinics.

Conclusions:

- 1.In the analysis of the development of traumatology and orthopaedics all over the world and in Latvia at the end of the 20th century and beginning of the 21st century, it can be concluded, that the external fixation is still indispensable method for the surgical treatment of complex fractures, their consequences and orthopaedic deformations.
- 2. The use of this method worldwide tends to grow, while in Latvia it has decreased significantly to the turn of the century, after which it has stabilised and is currently experiencing some positive dynamics.
- 3. The indications for the application of the external fixation method in Latvia have decreased over time, with an overall increase in the world. The current balance is considered to be optimal.
- 4. Innovations of the external fixation method evolutionary develop it, the Latvian tradition-based contribution to this process can be improved at this moment.

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Medicinal Plants in Art in Pauls Stradins Museum for History and Medicine Collection

This work is conclusion of research about depiction of medicinal plants on different mediums, in this case, iconographic sources and is part of Pharmacy Museum exhibition "Plantae medicae in Arte" or medicinal plants in art.

The aim of the work is to find out, count and analyze how often medicinal plants are depicted in compositions in such iconographic sources as postal stamps, postcards, envelopes and paintings in

Pauls Stradins Museum for history of medicine museum collection. Work involves analyzation of depicted plant meaning, whether they are a central figure, take symbolic place or serve as part of the composition, and which medicinal plants are depicted most often.

Research reveals that in Pauls Stradins Museum for history of medicine collection medicinal plant depictions can be found on hundreds of sources from different countries. Most often depicted plants are poppy and wild rose. Most of the plants depicted can be easily recognized, often when they take a central place, but there are cases when plants are depicted abstract or unclear, or they are in background as part of local flora.

The popularity of medicinal plants is clearly observed in different iconographic themes and from depicted plants, one can guess, which healing plans are most popular globally. There is a clear preference for using plants that are found locally in every given country, or serve deeper symbolic meaning. Some of the depicted plants — bay laurel and rose, have more remote symbolic meaning as they are popular symbolic element in the coat of arms, portraits and compositions.

In Pauls Stradins Museum for history of medicine collection, postal stamps, postcards, envelopes and paintings are only part of art items with depictions of medicinal plants, but information gathered here can easily be transferred to other forms of art.

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An Anonymous Writer of a 15th Century Newly Traced Greek Manuscript Found in a Personal Library in Macedonia, Greece: Medical-Philosophical Interest and Religious Fervour — Not Combined

Fertility and pregnancy, either in man or in (other) animals, had long been an issue of discussion and controversy in the Greek philosophical-medical thought since at least the 5th century BC. Both philosophy and medicine showed interest in the prerequisites and process of fertilization, trying to address questions such as heredity, multiple pregnancy, teratogenesis or why a child is born a female or a male. Interest will continue throughout the whole hellenistic and roman period and will not siege till the end of the byzantine period.

The Fall of Constantinople is considered to have put a stop to all philosophical or scientific research in the ottoman territory, at least for the first following centuries. Human capital in the fields of the letters and arts, science and philosophy, often fled to the West, evacuating a substantial part of the manuscripts that constituted the byzantine official and ecclesiastical libraries. Although not impossible, it might seem highly improbable that during these early ages of general retrogression as far as thinking is concerned there could be traced a personality that, most probably residing in Constantinople under ottoman control and having an ecclesiastical background, should get a keen interest in those matters and write a relevant treatise less than 20 years after the Fall.

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Ourania KALOGERIDOU, Niki PAPAVRAMIDOU

Pregnancy, Labour and Puerperium: a Perilous Trio. Reflections on Relevant Greek Inscriptional Data

But, say they, we, while they fight with the spear,

Lead in our homes a life undangerous:

Judging amiss; for I would liefer thrice

Bear brunt of arms than once bring forth a child.

[Euripides, Medea (trns. Aug. Webster), Cambridge University Press, 1868: vs. 245—248]

Nothing seems to have changed during at least 20 centuries since Euripides' heroine Medea was ready to choose between going to the war and bearing a child the former. This 9+ month phase proved to be the most dangerous one in the woman's life throughout the whole Antiquity. Inscriptional data come handy to explain why, despite the absence of organized family planning in Antiquity, population never succeeded in growing substantially until the beginning of the modern era.

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Axel KARENBERG

Max Nonne and Otfrid Foerster: Two German Neurologists During the Nazi Era

As part of a larger project dealing with neurology and neurologists during the Third Reich we are currently researching the biographies of German neurologists who continued to live in Germany between 1933 and 1945. Max Nonne and Otfrid Foerster, both internationally renowned scientists, serve as a model for illuminating the ambivalence and ambiguity of classifications like culprit, victim, follower, etc. as they are used so far by investigators. Nonne and Foerster learned to live with the political system, yet managed to exploit their room for manoeuver — each one in his very own way. The analysis of archival documents and contemporary publications yielded in both cases astonishing results.

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Axel KARENBERG

Who was a Nazi? German and Austrian Neorlogists During the "Third Reich"

When the German Neurological Society was re-established in 1950, 6 of 7 founding fathers were former members of NSDAP. 10 of the first 13 incumbent presidents (1950—1976) had joined the NSDAP, SA, or SS, two thirds of the German and Austrian honorary members had been related to the NS-system of the NS-ideology (1952—1982). The talk will discuss their formal involvement in NS health politics, but also their attitude towards eugenics and "euthanasia". In Germany, research-based suggestions by medical historians are needed now to decide how to face up to a difficult past, how to deal with awards and lectures bearing a "tainted" eponym and how to take prudent political decisions at large.

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Dzintra KAZOKA

Contrasts of the Morbid Art: Heroes and Details in Thomas Eakin's Two Masterpieces

Introduction. Thomas Eakins (1844—1916) was one of painters, who considered his interest in human body, anatomy, dissection and motion in direct relationship to his artistic output. He additionally studied anatomy, observed surgeries and used photography in his art practice to better understand the human body and enhance the realism of his paintings. "The Gross Clinic" (1875) and "The Agnew Clinic" (1889) remain the two most important American paintings relating to medicine. Both paintings symbolize a perfect union of art and medicine but the differences can be effectively seen by comparing these Thomas Eakins' works. This study was a focused literature review and specifically it aimed to gather evidence and insights on the similarities and differences of the heroes and details in two Thomas Eakins' paintings.

Material and methods: The review concentrated on researches and literature published in English about two Thomas Eakins' paintings: "The Gross Clinic" and "The Agnew Clinic". Literature searches were run using a number of relevant search historical, art and medical terms. Following a scan of results, more than 50 articles of literature were selected for review.

Results. "The Gross Clinic" represents the surgeon Samuel David Gross (1805—1884), demonstrating an operation for osteomyelitis of the femur in the surgical amphitheater in 1875. He was one of the most prominent surgeons of Thomas Jefferson Medical College in the United States. In a pyramidal geometry are included seven elements: Dr. Gross, the patient, assistants, the patient's mother, clerk, students (20 figures) and two people in the amphitheater entrance. In 1889 Thomas Eakins portrayed Dr. David Hayes Agnew (1818—1892), performing a mastectomy for students in the University of Pennsylvania's Medical Department. This painting depicts Dr. Agnew, the patient, several other doctors, the operating room nurse, the medical students (18 members) and the painter himself.

In both paintings surgeons are portrayed at moments of deep thoughtfulness. They are placed against a darker background with lighted high-domed forehead, furrowed brows and eyes that are averted from contact with anyone around them. Surgeons are turned away from their assistants but they significantly hold scalpels poised for imminent action. In "The Gross Clinic" the patient is completely covered up but there is obvious his thigh. Dr. Gross and is co-workers appear in a suits. In "The Agnew Clinic" the face and bare breast of the patient (woman) are visible. Dr. Agnew and his associates appear in lab coats. Dr. Gross's patient is

anesthetized with an ether-soaked cloth on his face. Dr. Agnew's patient benefits from an ether cone. Dr. Agnew and his assistants are visible without rubber surgical gloves. Dr. Gross's bright red blood colors the surgeon's fingers and scalpel. Dr. Agnew insisted that his hands and gown be free of blood. In both paintings are included several visible and invisible arms, hands and variously interested and disinterested observers. All of the medical heroes in the works express themselves by means of forms and interaction with others.

Conclusions. The differences between "The Gross Clinic" and "The Agnew Clinic" are in the expression of the heroes and their characters, the light and colors, number of the women, advanced ideas in sterilization and treatment of the patients. Both masterpieces provide a clear example of Eakins' interest in scientific study, art and medicine.

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Dzintra KAZOKA

Human Proportions in Paintings: Learning from Albrecht Dürer

Introduction. Albrecht Dürer (1771—1528), one of the greatest known artists of the Northern European Renaissance, was influenced by Leonardo da Vinci, Marcus Vitruvius and other significant classic aesthetic painters. He displayed figures of human body of different shapes and sizes in order to show their unique proportions and beauty. The aim of the study was to take a special look at the Dürer's figures and to describe some anatomical and anthropometrical proportions in paintings, according to review of the existing literature.

Material and methods. Data were collected from several articles and scientific publications in English in the PubMed, Scopus and medical history sources.

Results. There were four books ("Vier Bücher von menschlicher Proportion", 1528) that included Dürer's findings of the different human proportions and physiques (fat, thin, tall, short, baby, child and adult). In the first two parts author discussed the proper proportions of the human form. Book I included five differently constructed types of both male and female figures. All parts of the body were expressed in fractions of the total height. Book II explained the use

of a measuring stick which measured a sixth of the entire length in the human figure as realistically as possible. The third part (Book III) adjusted the proportions using mathematical rules (including the mathematical simulation of convex and concave mirrors), with examples of extremely fat and thin bodies, and demonstrated the previously determined body proportions changes in creation of the variations. There Dürer also illustrated human physiognomy. The fourth part (Book IV) showed the human figure in different movements.

Dürer's measurements were derived from the Vitruvian canon. All of relations (fingers to hand, hand to forearm, forearm to arm and all limbs in relation to the length of the body) he expressed as fractions of total body length. Dürer measured the distances between defined points on the human body and divided the body into six equal parts to produce a mathematical model. He used the head as the comparative yardstick for measuring the other parts of the body. His figures were methodically constructed with a compass and a ruler. There were used special geometric techniques and rectilinear grids to make more proportional and correctly drawn figures. He transformed the grids modifying heads and/or faces and simplified the complex structure of human body into several sections using geometric shapes (spheres, cylinders, cones, cubes, pyramids). This method or "piecewise" affine transformations included compression in one direction (stretching).

Conclusions. Dürer wanted to innovate the science of human proportions and his books were the first books to discuss the problems of comparative and differential anthropometry. His illustrations and drawings were marked by the maturity of mathematical and aesthetic theories. Materials of these four books, illustrated the multidisciplinary foundation of the art and science, served to remind us of our rich history of the human proportions in paintings.

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Dzintra KAZOKA, Mara PILMANE

From Historical, Traditional and Modern Scalpel: Guide to the Anatomical Dissections

Introduction. Medical education begins with the cadaveric dissections that have been used as the core teaching tools in anatomy for centuries. Nearly all medical students and clinicians remember the details of their first interaction with the human body and different instruments. One of the most common tools used in the anatomical dissections is scalpel. The modern word "scalpel" is derived from the Latin "scallpellus" ("incisor" or "cutter"). It is clear that the basic idea of the scalpel has remained the same for thousands of years: it is a sharp tool for cutting.

The aims of this study were: to describe the origins and evolution of the scalpel and to summarize this guiding information for the anatomical dissections.

Materials and methods. Data were collected from scientific publications and different articles in English in the websites, databases (PubMed, Scopus) and medical history sources.

Results. According to description in some sources, the scalpel is one of the oldest anatomical and surgical instruments. Some authors underline that it's difficult to say exactly when humans began making knives like scalpels specifically for anatomical and surgical purposes. The evidence of the use of blades in medicine has been found from the Mesolithic period about 10000 years ago. Several publications include the information that the first known description of a scalpel comes from the greek physician Hippocrates. His used specific term was "macairion" (a smaller version of a type of sword). The Romans named their version of the tool the "scallpellus" and it is very widely used term "scalpel" today. In the later period there were used the scalpels with one straight edge and the other a sharp, cutting blade. In the Renaissance in the 14th and 15th centuries began the real variation and specialization of the anatomical and surgical tools. For a few hundred years special scalpels with ornaments were very popular and these tools were used by barbers. The more artistic versions started to fade out of popularity in the late 19th century. In 1904 the modern surgical scalpel with a disposable blade was inspired by King Gillette's invention of the safety razor. In 1910 John Benjamin Murphy of Chicago perfected the specialized handle. In 1914 Morgan Parker, a 22-year-old engineer, made the combination technically efficient. He found an ideal way to join the blade and the handle that provided stability whilst still being able to exchange blades between uses. The scalpel was invented by the Bard-Parker Company. M. Parker presented his scalpel at the ACS Clinical Congress of 1915 in Boston, MA. The reception of the scalpel

encouraged him to take it to production. Over the following decades there have been additional performances. Several authors showed that the fundamental features (a handle, a cutting blade on a single edge and a sharp, straight point at the end) remain unchanged. The handles ("B.P. handles") are reusable and there are a variety of different blades with a standard shape and specific use. Today the scalpel is a highly standardized medical instrument. It is absolutely necessary for anatomical dissections and we follow to its` adaptions and changes, according to the evolution of modern technologies.

Conclusions. From different materials knives and reusable handles, the scalpel has become an important tool for medical education and practice. It is a general instrument with a long history and a special role for anatomical dissections.

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Crossroads of Latvian and German Pathologists in Three Centuries

Cooperation between Latvian (L) and German (G) medicine is reflected in papers of K. Ē. Arons (1983), J. Salaks (2011), A. Vīksna (2017), M. Pozemkovska (2018) but few papers are about collaboration between pathologists of both countries (V. Dērums,1970; H. Wegener,1993; V. Gordjušina, 2004; G. Ferber,1997; R. Kleina, 2001. This abstract is dedicated to the time from Virchow's visit to Latvia till our days including history of Baltic German doctors association.

Aim is to reflect contacts between Latvian and German pathologists during 3 centuries. For our research we have used available literature from L. and G. press.

The cooperation between L. and G. pathologists we may divide into 4 periods. 1st period include Russian Empire time till independence of L. in 1918. First pathology was started at Riga 1st hospital where from year 1883 worked such German pathologists as H. Kranhalss (1853—1910) and P. Präctorius (1867—1937). In this period R. Virchow was twice in Latvia (1877 and 1896) as the archaeologist at Āraiši where he had cooperation and friendship with earl Carl G. fon Zīverss. Professor visited X Congress of archaeology, leprosery, department of Pathology, art exhibition at gallery of Brederlosche etc. Interesting is fact that when professor R. Virchow celebrated his 80th anniversary he had got congratulations from 5 persons from Riga and Jelgava.

2nd period was time between 2 world wars (1918—1940) when academical traditions of pathology were developed by Baltic German Roman Adelheim (1881—1938), professor of L. University, director of 1st Pasteur's institute in Baltic countries (1914), a pathologist at Children and 2nd Hospital, the member of Academy of Sciences Leopoldina (1938). Scientific activities of professor were morphology of infectious diseases, toxicology and oncology. Pathologists published their articles in the main journals of Germany. 3rd period of L. and G. pathologists' collaboration (1940—1991) was Soviet time. Then contacts were mainly on private level with colleagues from Köln, Magdeburg, Rostock in the field of hematology and hepatology. This time was reflected by pathologist M. Brandt (Wege und Umwege der Sowjetmedizin, Berlin, 1957). 4th period involves years 1991 till 2020 after the restoration of the independence of Latvia. The brightest event in this period of cooperation was foundation of

Baltic—German doctor's association in 1991. It was time just after independence of Latvia when we needed advises, support with literature and devices. As 1st president of Baltic German Doctors association was pathologist Hans Herbert Wegener (1991—1999) there were organized 27 annual symposium. H. Wegener (1937) later was a member of the board. He had worked at Pathology Institute of Moabit and R. Virchow hospital in Berlin. He is the author of more than 60 articles. He was also president of Berlin Association of Nature and Resorts and member of board of Berlin Doctors Camera. He has organized continuing education of pathologists in Germany and in Baltic countries. With the support of H. Wegener on 2012 was founded IAP Baltic Division (presidents Prof R. Kleina and S. Isajev). Pathologists from Latvia emigrated to Germany but only Max T. Brandt (1890—1972), B. Press (1917—2001) and A. Kadeģis (1933—2012) had work at German institutes. Nowadays hundreds of medical students from Germany study in Riga. Cooperation between G. and L. pathologist and cytologists is going on in consultations, research and lifelong learning.

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Ramunas KONDRATAS

The Role of Vital Forces in Jędrzej Sniadecki's Theory of Organic Beings

During the latter half of the 18th and the beginning of the 19th century, major transformations took place in the perception of the natural world and in the definition of matter. From the late 1680's to the 1740's, mechanical natural philosophy was dominant, aided by the increasing acceptance and influence of Newtonian science. Natural phenomena were explained through the methods and assumptions of formal mathematical reasoning. Knowledge of the natural world was organized around a few basic principles or all-encompassing laws like mathematics or the physical sciences. There was no essential difference between living and nonliving objects.

By the mid-18th century, this mechanistic worldview was questioned by natural philosophers who saw in nature a great variety and complexity, a continuous movement, self-organization, constant transformations, sympathetic interactions, and change over time. Nature had a history. They saw a living world and living matter whose existence mechanistic principles and laws could not account for. Their interests centered on the fields of natural history, chemistry, medicine, the life sciences and their interconnections. These Enlightenment-era thinkers are called vitalists.

Vitalists clearly and sharply differentiated between living and nonliving matter. They saw living matter as containing an immanent and immaterial principle of self-organization or self-movement whose sources lay in active powers, which resided in matter itself. They "vitalized the world" with non-mechanistic vital forces, vital principles, sympathies, formative drives, and elective affinities. These vital forces or principles were the differential features that distinguished the living from the non-living.

In this paper I will examine how Jędrzej Sniadecki defined and classified vital forces and the role they played in his major scientific work The Theory of Organic Beings.

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Benjamin KUNTZ

Lucie Adelsberger (1895–1971): Emancipated Medical Doctor and Scientist in the Field of Allergology and Cancer Research — Survivor and Chronologist of Auschwitz

Lucie Adelsberger was born in Nuremberg on 12 April 1895. After finishing school, she began to study medicine at the nearby University of Erlangen in 1914, which she completed with a license to practice medicine in 1920. Her doctorate followed in 1923 with a thesis on "Digestive leukocytosis in infants". Lucie Adelsberger came to Berlin in 1921 and opened her own practice in 1925, where she mainly treated patients with allergic diseases. In 1925 she acquired the title of specialist for internal medicine, and in 1926 the title of specialist for paediatrics. Her scientific interest was also focused on allergies. From 1927 to 1933 she worked at the Robert Koch Institute (RKI) in the newly founded "Observatory for Hypersensitivity Reactions". She was one of the few women who conducted research at the RKI during the Weimar Republic. Lucie Adelsberger was scientifically interested, committed to professional politics and above all very emancipated. As a member of the German Medical Women's Association, founded in 1924, she fought for the equality of women in medicine.

After the National Socialists came to power, she continued to look after her patients — although it was no longer possible to invoice her services to the health insurance companies and despite the later withdrawal of her license to practice medicine. She resigned from the scientific societies of which she was a member in order to avoid being excluded. She turned down a job offer from Harvard, where she even spent a few days in the fall of 1938, because she did not want to abandon her old and sick mother, for whom she had not been granted a visa. After the death of her mother, Lucie Adelsberger was deported to Auschwitz on 17 May 1943. There she arrived on May 19 and was assigned the prisoner number 45.171. She had to work as a prisoner doctor in the "Gypsy and Women's Camp" of Birkenau under the infamous "Angel of Death", Josef Mengele. Due to the untenable hygienic conditions in the overcrowded camp barracks, Lucie Adelsberger fell ill with typhus after only a few weeks. In January 1945, she was among those who were sent on one of the infamous death marches when the Auschwitz camp was dissolved. She reached the Ravensbrück concentration camp and was freed by American soldiers in its subcamp Neustadt-Glewe on May 2. Lucie Adelsberger spent the following months as a "stateless person" in Amsterdam. During this time she wrote down her memories of Auschwitz and published a report in the "Lancet" entitled "Medical observations in Auschwitz concentration camp".

In October 1946 she emigrated to the USA, where she settled in New York as a medical doctor. She passed the American medical exams and took US citizenship. From then on she worked at the Montefiore Medical Center in the Bronx in cancer research and also published in this field. Lucie Adelsberger died at the age of 76 on November 2, 1971 as a result of metastatic breast cancer — in the same hospital where she herself had worked for almost 25 years.

Lucie Adelsberger has never returned to Germany. Her book "Auschwitz: a doctor's story", first published in German in 1956, is an important testimony to the Holocaust. This year, which marks the 75th anniversary of the liberation of Auschwitz and the end of the Second World War and the 125th anniversary of Lucie Adelsberger's birthday, is an appropriate occasion to remember a committed and emancipated female paediatrician, internist and allergologist.

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Martins LAIZANS

Superstitiosa Amuleta Reijcimus: Basilius Plinius and the Cure for Incubus

Basilius Plinius (~1570—1605) was a humanist and a poet from Riga, Livonia (contemporary Latvia). After becoming doctor medicinae in Wittenberg, he returned to Riga in 1604 where he was appointed the official city physician. The textual heritage by Basilius Plinius mostly consists of Neo-Latin didactic poetry on topics of the natural sciences (e.g., De Ventis ("On Winds"), De Venenis ("On Poisons") etc.). One work in his corpus stands apart from all his other texts as it is a thesis medica. This text De Incubo ("On the Incubus"; 1600 Wittenberg) is divided into two parts — Thesis (21 paragraphs) and Curatio (12 paragraphs) where the history of the name 'incubus', the ancient and medieval opinions on the phenomenon, and the cures for the incubus are described.

Theories on the nature, causes and cure for the incubus have been present since Aristotle. Already at the beginning of the 14th century Bernard de Gordon in his Lilium medicinae tried to get rid of the prevalent supernatural and superstitious explanations about incubus. Also Basilius Plinius in his work De Incubo where he refers to numerous ancient (Dioscorides, Oribasius etc.) and medieval (Paulus Aegineta, Avicenna etc.) authorities and treats the topic of incubus in a Galenic manner (e.g., incubus being caused by bad vapors that move from the stomach to the head), tries to avoid all explanations of incubus being a demon or other supernatural being. Basilius Plinius in his work attempts to treat this topic in a rational manner that was not self-evident in Early Modern times, as it was still quite often described as a demonic sexual assault.

Thus this paper will explore the ideas on incubus proposed by Basilius Plinius and will be compared with the conceptions on this phenomenon by other Early Modern physicians (e.g., Ercole Sassonia, Girolamo Capivaccio, Johannes Wier), showing the attempt to "reject superstitious amulets".

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Angelos LARISIS

The Life and Times of Ivar Asbjorn Folling

The region around the Baltic Sea has an abundance of history, but also many people that characterize it, with great breakthroughs in a variety of sciences, including medicine. Norway being an important part of this region, as it is shown by the relationships that have been formed and the continuous cooperation with Latvia and the rest of the Baltic States, takes great pride in being the homeland of one of the greatest scientist in experimental medicine of the 20th century. His name was Ivar Asbjorn Folling.

Asbjorn Folling was born on the 23rd of August 1888, in a village called Kvam, now part of Steinkjer. His family had a farm there and he spent the first years of his life in rural central Norway. After graduating from the Technical College of Norway in 1916, he moved to Oslo to study medicine. From there his life as a scientist begins. That was a life full of traveling around the world for research, many awards, but also hard work both as a professor and a researcher. But his greatest achievement came in 1934 when he discovered an unknown at the time disease that is now called phenylketonuria.

After this breakthrough more scientists wanted to work on this disorder. As a result we had the first successful treatment in 1950s by the German doctor Horst Bickel and the first diagnostic tests by the American microbiologist Robert Guthrie, in 1960s.

On the 21st century we know a lot more about Phenylketonuria (PKU), the genetics and the biochemical pathways behind the disease. Nowadays, most countries in the whole world have implemented programs in order to find people who are suffering from this disease and to successfully cope and deal with the symptoms, mainly of mental retardation.

This project, a result of bibliographic research, aims to combine information and materials that I was gratefully able to collect both from Norway and Greece in order to present some of the most important moments of the life and career of Asbjorn Folling. These moments are presented through visual materials some of them never before shown to the public.

It also aims to inform the scientific community about a disease which affects thousands of children around the world and it was the first example of how a genetic disorder can be the cause of mental retardation.

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Helene LAURENT

Trapped in Hospital. The Life Course of Refugee Psychiatric Patients in Finland after WWII

The paper examines the life history of psychiatric patients who were placed in the Rauha psychiatric hospital as refugees from the ceded parts of Finland during and after WWII. Finland lost 11 % of its surface area in the peace treaty in 1940 and over 400 000 Karelian refugees had to be resettled. The fate of the psychiatric patients of the ceded areas was sealed with a well-meaning legislation in 1940, according to which the state took over the hospital fees, but also decreed where the patients should be treated.

Most of the patients were placed in Rauha hospital, situated close to the eastern border. The refugees were usually settled to the south-western regions of the country and thus the contacts within the family were easily severed. The solution was very likely meant to be a provisional one, to solve a problem in a crisis and to secure the treatment of the patients who couldn't fend for themselves. However, as an unintended consequence of the legislation, the relocation of the psychiatric patients closer to their families became impossible. It was mostly due to the resentment of the municipalities being reluctant to take responsibility of the costs as well as to the stigma attached to the psychiatric diseases. Thus, the refugee patients stayed in the Rauha hospital until their death. The initial number was approximately 300, most of them suffering from chronic schizophrenia. The number decreased slowly due to the deaths of the patients, the last one passing away in 2016. Several of the patients had been in institutional care for more than 70 years.

This paper analyzes the life and hospital care of the longest surviving 40 patients with a help of their hospital records: their initial cause for entering the hospital, their social background, treatment and the development of their disease. The research material gives a rich perspective to the past: the changes in psychiatric care, both medical treatment as well as the attitudes towards the psychiatric patients over a time span of more than 80 years. The fate of these patients mirrors the vulnerability of psychiatric patients in a time of crisis, which is still true in the world today.

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Banting and Macleod: Egotism Against Humility and the Discovery of Insulin

Disputes about the priority of a scientific discovery are frequently reported in the history of science. Sometimes, the attitude adopted by scientists is egotism, self-attribution of the priority and devaluation of competitors. Opposite to egotism is humility.

JJR Macleod, Profesor of Physiology, University of Toronto (U of T) presented at the Annual Meeting of the Association of American Physicians in Washington DC, on May 1922, the results of the administration of pancreatic extracts (PE) in experimental and clinical diabetes. He summarized the procedures and results, giving credit to all the investigators: 1 — Elaboration of PE (Banting, Best, Collip, Macleod); 2 — Effects of insulin on depancreatized dogs (Banting, Best, Collip, Macleod); 3 — Insulin actions in healthy and hyperglycemic rabbits by various experimental procedures (Banting, Best, Collip, Macleod, Noble); 4 — Changes in hepatic and cardiac stores of glycogen in pancreatectomized dogs after the administration of insulin (Banting, Best, Collip, Macleod); 5 — Variations of the respiratory quotient by insulin in experimental and clinical diabetes (Banting, Best, Collip, Macleod) (Can Med Assoc J, June 1922).

In the summer of 1922, Macleod, working alone, demonstrated for the first time that insulin was present in pancreatic islets but not in the exocrine gland (J Metab Res, 1922).

At the International Congress of Physiology in Edinburgh (1923), in his Nobel lecture (1925) and in his book "Carbohydrate Metabolism and Insulin" (1926), Macleod vindicated the contributions of Gley, Zuelzer and Paulescu to the discovery of the antidiabetic hormone.

Banting was convinced that Macleod was stealing him the priority in the discovery of insulin and never accepted the relevance of his mentor. On the other hand, Macleod, in public and private scenarios, always gave credit to Banting for the initiative to test the hypothesis of the internal secretion of the pancreas, although insisted that the isolation of the PE's active substance and the investigation of its actions had been a collaborative endeavor of the research team of the U of T under his direction.

Influential friends and admirers of the IWW's hero FG Banting organized a campaign to support the priority of Banting and Best on the discovery of insulin. As a result, the U of T created the Banting and Best Chair of Medical Research, and the House of Commons provided a lifetime annuity to Banting for medical research. Macleod's role in the discovery was almost forgotten.

Banting's egotism was also demonstrated by his paranoia against Collip when the latter purified the PE in January 1922, as well as his late dislike of Best ("If they ever give that chair of mine to that son of a bitch, Best, I 'll roll over in my grave" (Bliss. J Hist Med, 1992)).

The document written by Macleod in September 1922 by request of the chairman of the Board of Governors of the U of T, entitled "History of the research leading to the discovery of insulin" was considered by the U of T as a "sensitive document" for over fifty years, and was not accessible until Best's death in 1978. Macleod explained his position about what he considered "the most unfortunate misunderstanding concerning questions of priority and the credit that should be given to those participating in the discovery of insulin".

In 1928 Macleod decided to accept the appointment as Regius Professor of Physiology at the University of Aberdeen.

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Banting and Best Did Not Discover the Antidiabetic Hormone

After the death of Frederick G. Banting in 1941, Charles H. Best invented an alternative version of the history of insulin discovery, with the main message that Banting and Best discovered insulin on their own in 1921 (M. Bliss, 1993).

Most experts in the analysis of the priority of scientific discovery consider two phases in the process: 1-disclosure, meaning the release of the pertinent report using accredited tools (books, journals, original patents); 2-validation, meaning the confirmation by other scientists of the originality and relevance of the discovery.

We performed a comprehensive survey of publications on the organotherapy of diabetes between 1889 and 1923 following the premises of the Priority Rule in Scientific Discoveries (R. Merton, 1957). Main data sources included: NLM (PubMed-History of Medicine on Syllabus archive); Berliner

Medizinhistoriches-Humboldt Universitätsarchiv; Secret State Archives-Prussian Cultural Heritage, Geheimen Staatsarchiv Preuβischer Kulturbesittz; Archival Collections, University of Toronto and Thomas Fisher Rare Books Library (FG Banting, CH Best and JJR Macleod Papers), and selected journals and books on the history of diabetes and insulin.

The search of the discovery of the antidiabetic hormone covered the following successive steps: 1 — demonstration of the pancreas as the source of the active principle (Minkowski, 1890); 2 — the pancreatic extract (PE) shows the biological effect on the animal model (Gley, 1900) and diabetic patients (Zuelzer, 1908); 3 — the active principle of the PE plays the main role on the regulation of carbohydrate, lipid and protein metabolism (Paulescu, 1920); 4 — the purification of the active PE allows the safe use in diabetic patients (Collip, 1922); 5 — the antidiabetic substance resides in the endocrine cells (Macleod, 1922); 6 — clinical trials confirms the therapeutic indication of the antidiabetic hormone (Campbell, Fletcher, Banting, 1922).

The experiments of the first publication of Banting and Best (J Lab Clin Med, 1922) were wrongly conceived, conducted and interpreted (F. Roberts, 1922). The US Patent Office rejected the application for insulin by the University of Toronto on April 10, 1922, in order to protect the rights of the patent for acomatol granted to G. Zuelzer on May 28, 1912. The first patents for pancreatic extracts suitable for the treatment of diabetes were granted to G. Zuelzer for acomatol (1908, 1909, 1912). N. Paulescu claimed to the President of the Nobel Commission that his work, published ahead of the publication of Banting and Best, had been stolen by the Canadian research group. The reply of the Nobel Institute was elusive (Paulescu, 1924). In their first article, Banting and Best wrongly quoted a substantial part of an important paragraph of Paulescu report, disqualifying two most relevant findings of Paulescu: reproductibility of the PE actions, and similar effects of the PE when injected through a central versus a peripheral vein (Banting & Best, 1922). Ian Murray, Scottish Profesor of Physiology and IDF cofounder, said: "Paulescu had succeeded in isolating the antidiabetic hormone of the pancreas. The work of Banting and Best may more accurately be construed as confirmation of Paulescu findings. There can be no doubt that pancrein and iletin were identical" (I.Murray, 1971).

Banting and Best did not discover the antidiabetic hormone. Investigations carried out in Europe between 1889 and 1921 were decisive in this discovery.

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E. Hedón and E. Gley, the Pioneers of the Siscovery of the Antidiabetic Hormone (1892–1900), Antedated Insulin (1922).

The demonstration in Strasbourg by O. Minkowski that pancreatectomy in the dog is a cause of diabetes mellitus (von Mering & Minkowski, 1890) has been the most important discovery in the history of this disease and the impetus for all the subsequent long work aimed at extracting the antidiabetic hormone (ADH) (R. Luft, 1989).

In 1923 the Scottish John James Rickard Macleod and the Canadian Frederick C. Banting received the Nobel Prize in Physiology or Medicine for the discovery of insulin in 1922, a decision that has been the subject of considerable controversy until today.

In 1891 and 1892, Emmanuel Hédon, professor of physiology at the University of Montpellier, described original procedures of two-stage pancreatectomy (partial and total exeresis) and subcutaneous transplantation of pancreatic fragments in the dog to support the basic principles of the theory of experimental diabetes. Influenced by the French Claude Bernard, Hédon injected paraffin into the excretory ducts of the pancreas responsible for acinar atrophy and sclerosis, and demonstrated that "the degenerated pancreas" did not induce diabetes, reaffirming the idea that the disease only occurred after the complete removal of the gland and that the digestive function of the gland was unrelated to the endocrine dysfunction of diabetes. For Joseph Pratt, professor of history of medicine at Harvard University: "Hedón has asserted that the internal secretion of the pancreas will remain a hypothesis until it is possible to isolate from the gland a substance, the injection of which will check completely the diabetes of a depancreatized dog" (Pratt, 1910).

Between 1890 and 1900, Eugène Gley, professor at the Sorbonne and at the Collège de France, conducted multiple experiments on pancreatectomized dogs, confirming the findings of Minkowski and Hédon on experimental diabetes. In addition, he prepared aqueous extracts of the "sclerosed pancreas", atrophic, without exocrine activity, that he injected by intravenous, portal and peripheral veins, to pancreatectomized dogs (technique of Hédon) with evidence of experimental diabetes, observing in the urine of these animals reduction of glucose and ketonic bodies, and clinical improvement (1900).

Gley had previously demonstrated that the regulatory function of the "anti-diabetic principle" of the pancreas extended to the liver: glycosuria by pancreatic removal did not occur if the liver was simultaneously removed (experiments on frog, 1891; furthermore, the injection of pancreatic extract into the pancreatectomized dog increased the liver glycogen content by 20% (1910)). In his book Carbohydrate Metabolism and Insulin (1926), JJR Macleod wrote: "He (E. Gley) prepared extracts from sclerosed remains of pancreas, and found them to diminish considerably the sugar in the urine of depancreatized dogs, and to alleviate all the other diabetic symptoms".

The discovery of the anti-diabetic hormone and the treatment of isolated clinical cases was the result of successive contributions by European researchers, initiated by Minkowski, Hédon and Gley in the last decade of the 19th century, and continued by others in the first decades of the 20th century. The final purification of the active pancreatic extract (acomatol, pancrein, insulin) made possible the general treatment of diabetes from 1922 onwards.

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Jewish Medical Practitioners in Medieval Muslim Territories: A Prosopography

The main aim of the research was to bring together all available biographical data on Jewish medical practitioners (physicians and pharmacists) in the Muslim world during the 9th—16th Centuries. The biographies (617) are based mainly on information gathered from the wealth of primary sources found in the Cairo Geniza (letters, commercial documents, court orders, lists of donors) and Muslim Arabic sources (biographical dictionaries, historical and geographical literature).

The study presents a clearer understanding and a more complete picture of the social, economic and intellectual aspects of medicine during that period in the Jewish communities, as well as their relations with their host societies. The practitioners came from various socio-economic strata and lived in urban as well as rural locations in Muslim countries. Various issues were studied: professional, daily and personal lives; successes and failures; and families; as well as the Jewish communities and inter-religious affairs. Moreover, their life stories teach us about medieval Arabic medicine, as practiced by Jewish physicians and pharmacists.

I approach the topic using the methodology of prosopography, i.e. a study that identifies and relates a group of persons within a particular historical context, or, in other words, a study of individuals belonging to the same field; building a collective biography (or multiple career-lines).

Altogether I was able, with the help of my research team, to build 507 biographies of Jewish physicians, followed by the biographies of 110 Jewish pharmacists (apothecaries, perfumers and druggists). One of the most interesting findings was the data regarding dynasties of Jewish practitioners. This phenomenon will be explained in the presentation, whereby 49 dynasties consisting of 144 Jewish practitioners will be revealed. I will discuss their role in the medieval Mediterranean in general and in the Jewish communities in particular.

Among many issues, I will present some information about the places of medical practice (home, courts, hospitals), the practitioners' professional education, their intellectual workshops (i.e., libraries), and their professional roles, for example: Head of Physicians.

Other findings that will not be discussed in the presentation are: everyday life and activity of Jewish practitioners with respect to moral aspects, fees, religious and inter-religious aspects of Jewish practitioners, their role in the leadership of their communities (Nagids and Head of the Jews), their place and share in charity activities, the high-ranking positions Jewish practitioners held, the issue of conversion to Islam, and famous Jewish scholars, authors, poets and diplomats, who were simultaneously medical practitioners.

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Competition and Compromise: the Scientization of Traditional Chinese Medicine

Although modern western medicine has become a main stream in China for decades, studies of medical anthropology and epidemiology show that when facing practical problems, traditional Chinese medicine (TCM) is not something can be simply removed. TCM works as a parallel system in hospitals, and TCM education is also an essential part of the official education system.

Is TCM a kind of science? In nowadays Chinese official documents and speeches, yes of course. Unlike the scientization of agriculture and industry, the scientization of TCM was not happened only in technological level, but also in ideological level. In order to propagandize the important of science without destroy TCM, from the time of Mao, the officials defined TCM a "science". That is to say, when TCM was hard to change, the concept of science would be changed.

This situation has special historical and social background. In China's modern history, we saw lots of movements, such as "1929 Nanjing TCM Ban" which tried to replaced TCM with western medicine but failed, and "Western Medicine Learning from TCM" started from 1955 to around 1984, which asked all doctors trained in modern western medicine to learn theories and techniques from TCM. Also, there're diseases believed by most Chinese people and can only explained by TCM. As a result, the scientization of TCM is never simply a matter of science. Instead, it's a process of competition and compromise of two knowledge systems, and can only be understood in cultural context.

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leva LĪBIETE

A description of syndromic cryptophthalmos by poet Daniel Hermann in "De monstroso partu..." published in Riga, 1596.

Cryptophthalmos is a congenital condition that is defined as a hidden eye behind the skin continuing from the forehead to the cheek and with no recognizable lid structures. The condition can be syndromic or isolated and it has quite a long written history. An isolated cryptophthalmos was mentioned in one brief sentence back in first century AD by the Roman author Pliny the Elder in his Natural History. The first description of syndromic cryptophthalmos is commonly attributed to German ophthalmologist Karl Wilhelm Zehender and his colleague Wilhelm Manz in 1872.

I argue that the first description of syndromic cryptophthalmos was given not by German medical doctors in 1872 but by Prussian poet and humanist Daniel Hermann (1543–1601) in "De monstroso partu..." or "About the monstrous birth: on August 18 of the year 1595 in the district of Ascheraden on the other side of the Duna in Livonia and on things that happen against the laws of nature. An ethical, natural and historical discourse."

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Asta LIGNUGARIENĖ

Contribution of Foreign Professors to the Development of the University Medical Studies in Kaunas During 1922—1940

University of Lithuania (from 1930 Vytautas Magnus University) opened in Kaunas in 1922 was the first national university of Lithuania that had a great impact on the intellectual structure of the society. Although historiography has sufficiently investigated the development of the university and its faculties, there is still a lack of comprehensive research and evaluation of the university scientific staff activities. The purpose of this paper is to review the educational activities of the first foreign professors working in the Faculty of Medicine and to evaluate their influence on the formation of scientific research.

The development of the Faculty of Medicine, in the beginning, was wide and rapid. Due to the lack of staff, it was necessary to invite experienced lecturers from foreign universities. Five foreign professors: H. Boit, J. Dzirne, K. Buynevich, E. Winteler, and E. Landau arrived in Kaunas in 1922—1924 from German, Swiss, Russian universities and created a multicultural atmosphere in the Faculty of Medicine. Besides the scientific and educational work, they had to organize clinical and theoretical departments. Prof. K. Buynevich issued Textbook of Internal Diseases, published 25 academic articles in Lithuanian, eight of his articles appeared in medical publications in Germany and France. The professor studied internal diseases, analyzed cases of simulation. Proceeding with the research he had started in the Russian Empire, he published an original theory on the formation of urine. Prof. Boit published seven academic articles in Lithuanian and German medical publications in three years. The subject of his research was the stirrers of biliary duct infection, he also promoted the surgery methods for treatment of lung tuberculosis and analysed results of prostate operations. Professor E. Landau came to Kaunas with many tools needed for histology studies and continued his research work in the field of neurohistology and histological techniques. Prof. E. Winteler's main research interests were cancer, rheumatism, geographical pathology (cerebral pathology) and cirrhosis of the liver. Most of the foreign professors who have been working in Lithuania for a longer time have formed schools and research fields of their own disciplines.

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The First Experimental Studies of Human Eggs' Fertilization Outside the Body in 1955–1966

The first fundamental experimental studies of human eggs' fertilization outside the body were conducted at the Crimean Medical Institute (CMI) (Simferopol, USSR) in 1955—1966. Professor B. Khvatov entrusted with graduate student G. Petrov to study this process at the Department of histology and embryology, CMI (1955). He received the eggs from the removed ovaries during the planned surgical interventions. The scientist was the first in the world to examine and describe the all stages of human egg fertilization and cleavage outside the body. The first publication was appeared in 1955: "On the issue of fertilization and cleavage of the human egg cell" (scientific session of the CMI), in 1958 — "Fertilization and the first stages of cleavage of the human egg outside the body (journal "Archive of anatomy, histology and embryology", № 1, Leningrad). In 1959, he defended his thesis: "The process of fertilization outside the body of eggs of some mammals and humans" (182 p., 71 photos). In 1966. G. Petrov made a report and published theses at the VII all-Union Congress of histologists and embryologists, made a sensational conclusion: "Data on fertilization and cleavage of human eggs in artificial conditions indicate the possibility of successful transplantation of embryos into the uterus after their cultivation for 2—3 days outside the body". In the article "Let happiness fly to them" of the regional newspaper "Krymskaya Pravda" 30. 09. 1962 the journalist wrote: "B. Khvatov assumes to extract the matured egg from the ovary operatively, to fertilize it outside the body... and to place the embryo in the uterus, which already ready for the embryo implantation. Then the development of the fetus will be in the usual, quite natural way." This is a description of a real IVF technique. There were 7 years left before the report of the embryologist R. Edwards (UK) on the development of the concept of fertilization "in vitro" at a conference in Cambridge, in 1969. The work was stopped for non-medical reasons. The recognition of Petrov's studies took place only at the XXVI conference of the Russian association of human reproduction (RAHR) in Moscow in 2016, where he was the first noted for his marits as a scientist who did the first IVF in the world. It is known, that R. Edwards in his Nobel lecture (2010), told about the research of G. Petrov in 1958 and 1964. The monograph about the IVF pioneers in the world "In-vitro fertilization the Pioneers History" (G. Kovacs et al., Cambridge University Press, 2018) was published to the 40th anniversary of the first IVF baby in the world. Chapter 21 is devoted to the research in the USSR and Russia and it begins with the words:

"The first report in the world about in-vitro cultivation of a fertilized and splitting human egg was the above-mentioned "On fertilization and embryonic fision of a human ovicell" (1955). A comprehensive article about the results of the study was published in 1958". A little earlier (2013) at the international conference of UARM, Prof. B. Lunenfeld (Israel), for the first time particularly noted the merits of the scientist: "Petrov (1955) is a pioneer in the field of embryo cultivation and successful transfer of a 2—3-day embryo into the uterine cavity". 7 scientific papers have been published on this problem. The first experimental studies of human eggs' IVF were conducted at the CMI in 1955—1966 and recognized by the international medical community.

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Lisetta LOVETT

Islands of Despair: Melancholy and Suicide in 18th Century Europe

Early eighteenth century England experienced an out break of moral panic due to an apparent increase in the suicide rate that led to the appellation abroad of the 'English malady'. In reality, the rate was similar to other European countries but this was not appreciated at the time. The law and church imposed severe punishment that included parading the dead body through the streets, confiscating all property of the deceased irrespective of whether there were any dependents and withdrawing funeral rites. Despite this intolerance, the public attitude was more lenient and many scholars such as Voltaire and De Montesquieu as well as some some churchmen took a more merciful line in certain circumstances. Overall European views varied considerably and swung to and fro between tolerance and significant disapproval during most of the Enlightenment.

This paper describes Giacomo Casanova's (1725—1798) personal experiences of suicidal thoughts at various times in his life and his changing attitudes towards the action of self-killing. It further describes the circumstances of his one determined attempt to kill himself whilst living in London and how an English aristocratic acquaintance whose brother had killed himself the previous year, prevented him. The incident demonstrates how 'no man is an island' (John Donne, Meditation 17, Devotions upon Emergent Occasions, 1624).

The paper discusses social attitudes towards suicide through also referencing descriptions given inhis Memoirs of acquaintances who committed suicide as well as highlighting some of the diverse views of contemporary philosophes. Casanova's melancholy is discussed in the context of medical theories and treatments of the time.

The paper concludes that like so many of the philosophes of his time, Casanova held ambivalent attitudes towards the act of self-killing and that treatment advice for melancholy was still rooted in the medical practices of antiquity.

This brief paper is based on a chapter in my book Casanova's Guide to Medicine: 18th century Medical Practice to be published later this year in the UK by Pen and Sword.

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Lisetta LOVETT

Medical Practice in the 18th Century According to Giacomo Casanova (1725–1798), Manqué Physician

Forget the stereotype! Giacomo Casanova's reputation as libertine has often eclipsed his talents as scholar, writer, linguist, mathematician and manqué doctor. As a young man he wanted to study medicine in Padua but was not allowed to by his mother and his guardian, abbé Grimani. However, his interest in medicine continued throughout his life. He took many opportunities to discourse with physicians who were up-to-date and there is evidence that he was familiar with the medical works of Professor Boerhaave of Leiden(1668—1738) one of the most respected physicians and medical teachers in early eighteenth century Europe. He was clearly impressed because he often referred with approval to physicians who had been pupils of the famous professor.

Fortunately for us, during his declining years, his physician advised he write his memoirs to combat melancholy, which he was by then prone to experiencing. At the time, he was librarian to Count Waldstein who appointed him in 1785 to look after his library at Dux. Thus, he wrote his memoirs, which are in French and consist of 3800 folio pages, organised into twelve bundles. Apart from being an impressive source of cultural and political history they contain a huge amount of information on medical matters. Casanova's descriptions of symptoms and treatments suggest that he was an informed observer of his own health and that of others. His comments reveal an understanding of ancient Greek medical theory and some limited familiarity with newer medical paradigms. A range of conditions are described that include the Pox to piles, gastritis to gout, scabies to smallpox. These descriptions provide another perspective on the lived experience of disease in the 18th century amongst people from all strata of society. They give us insights into the relationships between physicians and their patients, medical etiquette as well as prevailing medical theories and practices. These stories, alternately grim and amusing, bring alive the subject of 18th century medicine.

This short paper will focus on just a few of Casanova's personal experiences of disputes with medical practitioners in relation to either diagnosis or medical management. These experiences whilst illustrating Casanova's powers of observation, demonstrate the challenges a busy medical market place posed to the consumer at a time when the notion of medical ethics was in its infancy. In order to put these accounts into historical perspective, if time permits I will refer to other coeval historical sources as well as the current history of medicine literature.

This paper is based on my book Casanova's Guide to Medicine: 18th century Medical Practice to be published by Pen and Sword later this year in the UK.

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Samuel I URIF

Was Jane Seymour (1509–1537), the English Queen of Henry VIII Delivered by a Cesarean Section?

No direct evidence documents exactly how Jane Seymour gave birth on October 12, 1537. Several later commentators have raised cesarean birth as an option. This presentation explores known events around Jane Seymour's childbirth and probable cause of her death in accordance with present-day knowledge of obstetrics and whether or not a cesarean section could have been actually performed in sixteenth-century England. It appears almost certainly that there were no obstetrical indications that would have led the Queen's physicians to operate on her, a surgeon was not present at her delivery, cesarean section on a living woman was not regularly performed in England in 1537, puerperium events do not support surgery, and the existing pro-cesarean confirmation was politically motivated. Therefore, the most likely mode of Jane Seymour's delivery was vaginal rather than cesarean. Pulmonary embolism should be considered as the leading primary cause of Queen Jane Seymour's death.

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The Famine of 1695—1697 and its Impact on Eighteenth Century Interest in Demography and Public Health in Sweden

In 1695—1697, mostly due to unusually cold winters and rainy summers, the Swedish realm suffered a catastrophic famine. Finland was hit particularly hard, and it is estimated that one third of the population of the region perished during the famine. The diminishing resources forced large groups of people to roam around in search of anything edible, which in turn lead to the spread of contagious diseases in the severely weakened population.

Only around thirteen years later, the last plague epidemic of the Baltic Sea region arrived, again causing very high mortality. The spread of the epidemic was linked to the Great Northern War, and the war itself was also a heavy burden to the Finnish population in particular. The war ended in 1721.

The severe population catastrophes of the late seventeenth and early eighteenth century cast a long shadow on the Swedish realm, and the fear of new, similar demographic crises was a key factor behind the rise of interest in population statistics and public health. These topics became questions of enthusiastic scientific, societal and public discourse in the middle of the century. At the same time, the so-called Age of Liberty (1719—1772) saw a general rise of interest and investments in science, which was mirrored for example in the founding of the Royal Academy of Sciences in 1739. A decade later, 1749, the national population statistics office Tabellverket was founded. The Health Commission, dedicated to the prevention and control of disease epidemics, had already been established in 1737.

In my presentation I will shed light on the many ways the population catastrophes of the late seventeenth and early eighteenth century, especially the famine of 1695—1697, affected the great interest in demography and public health in Sweden during the latter half of the eighteenth century. By giving examples of contemporary texts that highlight these effects, I will trace the fears behind the many measures taken to prevent new crises.

The famine of 1695—1697 and the plague outbreak were often mentioned, more or less directly, in speeches and texts that discussed demographic conditions. They were also clearly present in the planning of administrative efforts and measures taken to improve public health, which included, for instance, inoculations to prevent smallpox epidemics and the establishment of government-regulated grain storages to alleviate the negative effects of poor crop years. The role

of weather in disease epidemics and other demographic patterns was also an area of great interest, and district physicians kept meticulous records of weather conditions, which they then compared to the characteristics of diseases and ailments present in local populations. These observations were reported to administrative officials and bodies such as the Health Commission and Tabellverket. The efforts to prevent new famines also included the introduction of improved agricultural methods and new plants such as the potato. Physicians, as well as the clergy and other educated groups, strived to educate and enlighten the public on health-related topics via speeches, pamphlets and books, and several societies dedicated to such educational purposes were established.

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Maria MALYSHKO

Regina Salomee Halpir Pilshtanova (1718—after 1763) Was the First Female Doctor from the Grand Duchy of Lithuania

Her life is known from the memoirs "Echo on St. Podana of the Prosperity of a Friend and the Life of Mego Adventures ...", which are now in the Krakow National Museum, and we know from the Belarusian translation of the works of Nikolai Khaustovich under the name "Maigot Life".

Salome was born in 1718 in the territory of modern Belarus, in the Novogrudok, the Grand Duchy of Lithuania.

At the age of fourteen, she was married to a German doctor, Jakub Halpir, and soon Salome left for Istanbul with him.

Here Salome and her husband settled well. Yakub was treated to know everything.

After a long illness, Salome had thoughts about leaving home, and after some time, together with her young daughter Constance, she went to Adrianople.

After Adrianople, Salome visited the cities of Bulgaria — Yambul, Tatars Pazardzhik, Filibe. In those days, this territory belonged to the Ottoman Empire. In Sofia, she entered the service of a doctor in the harem of Pasha Kyupru-Ulu.

Suddenly, Salome met her husband, who came here to be treated on mineral waters. He was accompanied by an Italian doctor, thanks to whom she learned to write prescriptions in Latin, and underwent a more or less systematic course of medical training. He handed over to Salome his books on medicinal herbs, a natural history scientific vocabulary describing diseases and medicines.

On the way to Russia, in Dubno (Ukraine), Salome got married a second time. Her chosen one was Jozef Pilshtyn — an officer whom she bought from Turkish captivity. At this time, Prince Mikhail Radziwill (Rybonka) arrived there. Pilshtyn entered the service of the great Lithuanian hetman, and when the prince decided to return to Nesvizh, he took his spouses with him, appointing Salome as court physician.

After a while, she planned to visit Petersburg with the aim of freeing familiar Turks from Russian captivity.

Salome liked the northern capital. Her medicinal abilities, as always, helped her to receive an appointment with Anna Ioannovna. Salome cured a girl who had been blind for a long time. The fame of miraculous healing quickly spread throughout St. Petersburg, and soon Rusetskaya was summoned to the palace. Salome was warmly received at the court and enjoyed the confidence of the

Russian Empress, who called her "My Light, Madam Doctor, Salomonida Efimovna" or "my friend" Poland and Silesia, Bulgaria and Moldova ... She visited, practicing medicine, in Lviv, Kamyanets-Podilsky, Bucharest, Iasi, Warsaw, Dubna, Khotyn. Over and over treated patients. After many years, our heroine again found herself in the city where her youth passed. She was already a mature woman, a knowledgeable doctor.

The treatment of patients was successful, including Turkish dignitaries, sisters of Sultan Aishe and Asm, his wife and concubine. After some time, Salome became the medicine of the Sultan's harem. In her memoirs, she writes that she plans to publish a "medicine book", in which she will set out her prescriptions and prescriptions for medicines, but her intentions have not come true.

The following medicines used by Salome are also indicated:

- Syropus violarum
- · Balsam kopaiba
- Elixir proprietalis
- Aqua plantaginis
- Rad. tormentilla, rad. caramphilat, rad. Bisztorta
- Lignum aloes and others.

The legacy of Salome Pilshtanova is the wealth of our history of medicine.

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The Origins and the Evolution of the Anti-Vaccination Movement

AIMS AND OBJECTIVES: To present the events of the Anti-Vaccination Movement from the first vaccine for smallpox to the global spread through the social media of the distrust in vaccines based on fears and anxieties.

MATERIAL AND METHODS: The review of the medical literature and the texts of the journalists of those times as well as the contemporary publications concerning the dangers of vaccination.

RESULTS: The Anti-Vaccination Movement has a long story beginning in France in 1763, in the times of variolation. The Italian Doctor Gatti introduced the variolation without taking any measures of quarantine for the inoculated persons, risking therefore the health of the Parisian population and finally resulting to the French Parliament's order to discontinue it. After the invention of the smallpox vaccine by Edward Jenner in 1799 the Vaccination Act of 1853 in Great Britain ordered mandatory vaccination but was immediately met with resistance and formation of several anti-vaccine organizations. Although the reactions were usually restricted and the new vaccines were very successful eliminating or almost vanishing severe diseases, the anti-vaccination movements never stopped.

In 1998, a research paper was published in the scientific journal "Lancet" connecting the Measles, Mumps and Rubella vaccine (MMR) with autism. The investigation was based on 12 children only and soon it was revealed that that the author, Andrew Wakefield had broken ethical codes, the paper was found to be fraudulent and was retracted. In spite of the scientific arguments, supporters of the conspiracy theory believe that there are no safe vaccines, as they contain toxic additives, although in 1999 US public health and medical organizations agreed to remove Thimerosal, a preservative containing mercury. This event, along with the vaccination-autism controversy constitutes the basis of the Modern Antivaxxer Movement. The organized anti-vaccination groups have a strong presence on social media and well-developed websites attracting people and contributing to the drop in vaccination rates. As a significant consequence of the falling vaccination rates, measles outbreaks occurred in several countries, reminding of past times.

CONCLUSIONS: The anti-vaccination movements supported by social media constitute a permanent thread towards the medical achievements of children's immunity because the decrease of the vaccination rates always leads to epidemics.

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Magdalena MAZURAK

Beyond Borders: A Surprising History of Ebstein's Anomaly and the Wilhelm Ebstein Monument

On June 28, 1864, Joseph Prescher was admitted to All Saints Hospital (Allerheiligen-Hospital) in Breslau. He suffered from dyspnea, cyanosis, cachexia and palpitations. Systolic murmur was present. Eight days later, Joseph Prescher died, and the next day, 28 year old dr. Wilhelm Ebstein M.D. performed the autopsy. One and a half years later (1866), he published his case report "Über einen sehr seltenen Fall von Insufficienz der Valvula tricuspidalis, bedingt durch eine angeborene hochgradige Missbildung derselben" (A very rare case of tricuspid regurgitation caused by a congenital defect). After World War II, the German town Breslau became the Polish town Wroclaw, and Allerheiligen Hospital changed its name to Jozef Babinski Hospital.

Wilhelm Ebstein was born on November 27th, 1836 in Jawor (formerly Jauer), a small town in the Lower Silesia region, to a German-Jewish family. At the age of 19, he started his medical studies at the University of Breslau, in the capital of Lower Silesia. After a few months of study in Breslau, he transferred to the medical school in Berlin, where he met the esteemed pathologist Rudolf Virchow. Wilhelm Ebstein graduated from his Berlin Alma Mater in 1859 and he began working at All Saints Hospital in Breslau. In 1874 he moved to Göttingen where he was offered a Chair of Internal Diseases. He died in 1912. Despite his distinguished career, he was seemingly forgotten in his own birthplace. There were no memory traces of a man whose name was immortalized in three medical eponyms: Ebstein Anomaly, Pel-Ebstein fever and Armanni-Ebstein cells.

In 2017, a Polish cardiologist wrote an article devoted to this German-Jewish doctor. It was published in the American peer-reviewed Texas Heart Institute Journal and was read in Belgium by an advisor of the Belgian Minister of Public Health. An international committee, chaired by Prof. Marian Zembala (Polish cardiac surgeon and former Minister of Public Health) was established. As a result of their collaborative efforts, an international conference devoted to Wilhelm

Ebstein and Ebstein's anomaly was organized in 2019 in Jawor. It was entitled: "From Jawor to Göttingen, from Lower Silesia to immortality. Tribute to Wilhelm Ebstein." A short documentary dedicated to the life-story and heritage of Wilhelm Ebstein was broadcasted. A bronze bust of Wilhelm Ebstein was unveiled in the Regional Museum of Jawor. The history of the life, work and legacy of Wilhelm Ebstein has come full circle. It has passed through borders and epochs.

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The Support of Healthcare Development in the North of Portugal by NORAD — a Successful Example of Bilateral International Health Collaboration

In the aftermath of the Carnation Revolution, new Portuguese governments faced several socio-economic problems that were hindering the democratic transition. Considering the Norwegian support to the independence movements of Angola and Mozambique, and the subsequent refugee crisis of about one million people to Portugal, the Norwegian Agency for International Development (NO-RAD) decided to open an exception to its aid policy. Although the focus of the foreign aid was for developing countries, NORAD decided to support Portugal after a request from the Portuguese government in 1976.

Due to the unwillingness to cooperate with the Norwegian commission visiting Portugal by working unions in the southern regions, the commission decided to fund the development of the health in the district of Vila Real in northern Portugal, where they found support from the local population and politicians.

In 1975, the district of Vila Real had some of the worst health indicators in Portugal and Europe. 58.5% of the deliveries were made without any medical assistance, and the infant mortality rate was 58.9/1000 live births.

On 2nd March 1979, the Portuguese and Norwegian government signed a cooperation agreement for the health sector. The agreement provided a 50 million Norwegian kroner financial grant and 50 million Norwegian kroner loan — the equivalent to 41,2 million euros in 2020 — for the: Reconstruction and expansion of Vila Real's Hospital; construction of health centers; establishment of 15 health extensions; a fellowship program; establishment of two departments of general medical practice.

During the period between 1979 and 1984, all the above objectives were accomplished. During that period, the cooperation also lead the creation of new referral systems between health centers and the hospital, several research projects on health and socio-economic conditions in the district, the creation of the first Institute of General Practice in Abel Salazar Biomedical Sciences Institute — University of Porto in Portugal in 1980 and subsequent integration of an undergraduate teaching program for general practice into the clinical curriculum for medical students.

The fellowship program supported 12 courses and seminars that underlined the importance of primary healthcare (PHC) to the development of the Portuguese health sector and four-week fellowship visits to Norway for 25 general

practitioners and nurses. Fellowship visits then extended for medical specialists from the Vila Real district. In 1983, a bilateral meeting was held in Norway with 6 Norwegian mayors and the governor of Vila Real, where they had the opportunity to share different perspectives on PHC in rural and urban Norway.

Anker and Borchgrevink wrote, "It is impossible to assess the impact of the Portuguese—Norwegian project on the health of the population of the Vila Real district." Thirty-five years later is possible to say that this project not only had a profound impact on the improvement of health indicators in Vila Real district but also on the development of PHC in Portugal and the development of our National Healthcare service. As mentioned by Anker and Borchgrevink, "during the short span of five to six years the evolution of primary health care in Portugal has developed to a degree which has taken other European countries decades to achieve. We hope the Vila Real health project may have contributed to this process."

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The Use of Geospatial Tools to Study and Control the Lisbon's Yellow Fever Outbreak in 1857

Although the most known example of the use of geospatial tools to study diseases spread in the 19th century is continuously connected with John Snow's Broad Street Pump study in 1854, the use of these tools can be tracked since 1798. At the beginning of the 19th century, geospatial tools started to be used by Medical Officers to control diseases, mainly for yellow fever and cholera control. These tools were deeply implemented in the United Kingdom by the 1840s, and it is possible to see the advanced level of analysis at that time with the "Report of the General Board of Health on the epidemic cholera of 1848 & 1849" published in 1850 by the Royal College of Physicians.

It is possible that the use of these tools then spread to the rest of Europe. One of those best examples was the use of spatial tools to the yellow fever control in Lisbon in 1857. The "Report of the yellow fever epidemic in Lisbon in the year of 1857" released in 1859 by the Portuguese Kingdom's Extraordinary Council of Public Health.

The outbreak had a profound impact on Lisbon's, affecting 7,94% of its population. Between the period of September 15th to December 31st, 1857 — from 13425 cases of yellow fever — 4812 people died, a fatality rate of 35.8%.

This report describes not only a detailed urbanistic plan of the city of Lisbon but also the hotpots of yellow fever incidence by Lisbon's neighborhoods and parishes. To process this data within a map, the council collected data on the number of deaths by Lisbon's parishes and streets. This map supported the analysis carried out on the rest of the report, namely the different hypotheses for disease spread and options for disease control and its future prevention.

The report included a detailed chronogram of the disease progression between 1855 and 1857, a summary of the meteorological conditions in Lisbon in 1857, and disaggregated data by age groups, civil status, gender, profession, number of deaths per month, mean of the disease duration, health services performance and vaccination status. The report also underlined the differences in hygiene conditions in different locations as an explanation for the disease outbreak in specific neighborhoods in Lisbon.

In conclusion, the use of geospatial tools started to be used as an important tool for disease control by national public health institutions since the 1840s in Europe, and these tools also played an essential role in the study and control of the yellow fever outbreak in Lisbon in 1857.

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Medical Items through the Iron Curtain's Sliding Doors

Medical knowledge exchange among Eastern-Western countries was enhanced immediately after the end of WW2 and apparently precluded during the Cold War years (1948—1989).

A chance for investigation is offered through the analysis of medical items and their legal patents. Even if it could seem unethical as related to life-saving tools, the patent certifies the validity of basic research and its practical applications, while protecting its masterminds. Non-drugs and drugs production licenses were allowed to cross the borders, according to the business market and governments' feasibility.

During the late ,50s of the XX century, in former Czechoslovakia an original medical device, namely soft contact lenses to cope with visual impairment, was developed by Otto Wichterle (1913—1998) and his team. He suffered a political purge by his country's government and a state enterprise sold the first hydrogel contact lenses patent to a USA corporation, allowing a sub-license to a private American company.

Even antibiotics industry was a fruitful field, offering interaction through the iron curtain's sliding doors; indeed health and welfare business are not always linked to any imposed ideological diktat. After WW2 years, the United Nations Relief and Rehabilitation Administration (UNRRA), according to the European Recovery Program (Marshall plan), planned to build penicillin factories both in Eastern and Western European countries, as it happened also in Italy. It is not surprising that during the Cold War years not every public research center and Stateowned antibiotic industry were supported by UNRRA, as it happened in Latvia.

Therefore intellectual property circulation beyond whatsoever ideology was allowed even under different by-laws and regulations.

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Medical Books: The Codex de la Cruz-Badiano

At the moment when Spanish colonizers arrive in the territory of what later they would call New Spain, a process of scientific exchange begins, religious and cultural between two worlds with conceptions of the world completely different. For a long time it was intended that, in this exchange, knowledge European scientist dominated without mixing with indigenous science or that it did not exist. It was until very recently it was recognized that an alloy of elements was formed aboriginal and European to constitute the medicine that was developed in New Spain; and that European medicine itself adopted certain elements of the New World for its science.

This paper defends that the Codex of the Cross-Badiano documents the miscegenation of the

indigenous medicine of New Spain influenced by European medical knowledge at an early time of colonization. Being also a sample of recognition made to indigenous healers of medical knowledge that they owned by the Spanish Crown and that were crystallized in this herbal.

The Royal College of Santiago Tlatelolco was founded on January 6, 1536 by friars of the San Francisco order. Headed by Friar Jacobo de Grado, in this place he they taught the principles of western culture to the children of noble natives belonging to the monarchy of Emperor Moctezuma. These "literate Indians" received European teaching and were able to speak and write Latin, Spanish and Nahuatl.

The plants New Spain medicinals had attracted attention in Europe, they were considered appropriate in many diseases and the traditional pharmacopoeia of Dioscorides and Galen had had to admit, along with other classics, the incorporation of New elements arrived from the new world. Probably based on these facts, Viceroy Antonio de Mendoza, assumed that a plant book Mexican medicines, reproduced with the illustrated technique of the Aztecs could serve of a dignified reminder for the King Carlos V.

An indigenous doctor named Martín de la Cruz, probably dictated in his native language the properties and uses of the therapeutic elements obtained from nature that were most used in medicine Mexican. A trilingual disciple of the Royal College of Santiago Tlatelolco, Juan Badiano, pass the text or words of Martín de la Cruz into Latin, while some third collaborators but who were probably native artists, with office of "tlacuilos", they painted, conserving glyphs and pre-Hispanic procedures, the same plants that are cited in the text. The result

was a medieval herbarium, which focused on the enumeration of remedies, their composition and the order in which they should be administered. The headings of the different sections of the chapters, always refer to diseases, so it is possible to identify the pictures pathologies that Martín de la Cruz recognized and the way in which he intended to solve problems.

This herbarium, whose true title is "Libellus de Medicinalibus Indorum Herbis", constitutes for the medical history of Mexico one of the most important and least contaminated sources of information. The Libellus documents the crossbreeding of medicine New Spain indigenous influenced by Europeans. This mix where it's hard distinguish "between indigenous and European attributes and their concepts on health and medical practices."

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Dulce O. AMARANTE DOS SANTOS

The King Duarte of Portugal: Advices and Recipes Against Plague (15th Century)

In the realm of Portugal, after the Black Death (1348—49) there are several outbreaks of plague during the 15th century. This fact had generated an interest on medical matters inside the royal court. The Portuguese prince and after king D. Duarte (1434—1438) had included in his personal library some titles on Medicine, such as Canon of Avicena, Book of Leper and so on. The King was worried about the health of the kingdom and accordingly his work is directed at offering advice about preserving health and his guidance concerning moderation in eating and drinking. He had compiled some advices and recipes (mezinhas in archaic Portuguese) against plague in his Book of Cartuxa or Book of Advices. He recommends quarantine for the healthy people flee from plague and avoid human contact. He registered the more everyday homemade medicines such as common pills and the pós do Duque (Duke's powders) and others designed to combat epidemic outbreaks. The most complex prescription for combating the plague is that of the badger powders, in two very similar versions. The badger is a medium-sized mammal that is part of the Portuguese fauna to this day and can be found in many other European countries. It has natural immunity to bee stings and snake venom.

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Medicine in Ancient Knidos

Since, in the ancient period, people did not have scientific and real information about health and diseases, they tried to improve their health and to cure diseases with the possibilities they had. According to the information obtained from ancient sources, people mostly focused on herbal treatments.

Medical centers, which started in the 6th century BC and became very famous in the following centuries, were established. These are Kos, Sicily, Knidos Medical Center and School. Founded in the 12th century BC, Knidos was one of the most important trade and cultural centers of the ancient period according to archaeological documents and findings. Owing the maritime trade, Knidos became the export center of wine, olive oil, almond, and raisins. In addition to consuming export products as food, health and treatment methods were also used.

The earliest investigations began with priests Kalliphon and his son Demoketes, who were the priests of Asclepius, the god of medicine and lived in Knidos in the 6th century BC. Euryphon and his student Herodicus, who were the most famous doctors of Knidos and Ancient Period, were important people who lived before the Hippocrates of Kos, investigated the causes of diseases and eventually created an important health and health teaching center. The pioneer physician Euryphon (500 BC?) and his method to determine the female infertility was very famous in Knidos and ancient Greece. Physician Herodicus (500 BC) recommended good diet and massage using beneficial herbs and oils, and his theories are considered the foundation of sports medicine. Ctesias (416 BC) of Knidos was a Greek physician who served as royal physician to king Artaxerxes II of Persia.

As a result of the researches, it is understood that the physicians from Knidos were more observant, and they gave importance to the classification, so they collected more records. In addition, with their rational approach, they achieved what the other physicians could not. Their achievements must have increased their respect and reliability. Thus, Knidos medical school strengthened their success.

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Evgeniya PANOVA

The Role of Independent Medical Community in the Development of Health Care institutions in Russia (1860–1917)

Since the 17th century the organization of medical care in Russia mostly belonged to state authority. The emergence of an independent professional medical community in Russia capable to be a significant social force began in the second half of the 19th century. The first and most obvious factor of its appearance was substantial growth of the number of students in higher medical educational institutions during the entire 19th century and, consequently, the number of certified Russian-speaking doctors. Graduates of universities' medical faculties started to be engaged in private medical practice what led to increase in the physicians' material welfare. The respected university professors who achieved outstanding results in medical science and teaching, such as N. V. Sklifosovsky, S. P. Botkin, K. A. Raukhfus, became the leaders of forming medical community and acquired high public authority allowing them to affect significantly on the development of health care in Russia.

The representatives of medical community used the following methods for development of health care institutions during 1860—1917 in Russia:

1) Fundraising.

A remarkable example is the activity of the professors of Imperial Moscow University (N. V. Sklifosovsky, A. M. Makeev, A. Ya. Kozhevnikov, etc.) to collect donations from merchants (V. A. Morozova, E. V. Paskhalova, M. A. Khludov, etc.) for the construction of the Clinical campus on Devichye Pole (1882—1890). According to the most conservative estimates, the amount of private donations is not less than the third of the total cost of the design, construction and equipment of the entire Clinical Campus.

- 2) Physicians' charity.
- A. Ya. Kozhevnikov donated about 16 thousand rubles for the creation of the Neurological museum at IMU (1891). The capital bequeathed by Kozhevnikov as well as funds raised by the members of the Moscow Society of Neuropathologists and Psychiatrists were used for the establishing of the Research Neurological Institute at IMU (1904—1913).
- S. P. Botkin bequeathed 20 thousand rubles on foundation of St. Petersburg Women's Medical Institute (1889).
- 3) Physicians' volunteer work for the organization of private educational medical institutions, clinics, health care public organizations (societies, unions).

The Union for fighting child mortality (1904), All-Russian society for the protection of mothers and children (1913) and others were founded by N. I. Bystrov, N. P. Gundobin, A. N. Shabanova, etc. These societies arranged consultations, ambulatories, sanatoriums. Joint efforts of pediatricians K. A. Raukhfus, D. A. Sokolov, A. A. Russov, with financial support of donators A. V. Morozov, S. V. Orlov-Davidov, B. G. fon Dervis, Peter Grand Duke of Oldenburg led to the foundation of hospitals for children in Moscow (1887, 1898) and St. Petersburg (1869, 1876).

Often physicians had to combine various forms of organizational efforts with fundraising. One of the plenty examples is the creation of Psychoneurological Institute by V. M. Bekhterev (1903—1907), where students of both sexes studied.

Independent medical community became a driving force of health care institutions' development in Russia during 1860—1917. The construction of Clinical Campuses in universities of Moscow, Kazan, Kharkov; the development of higher medical education for women; the organization of children's health care in Russia are only several examples of socially significant projects having realized with physicians' participation.

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The ALCMAEON Project: Designing a Digital Collection to Include Medical Museum in the Teaching of Medical Humanities and Promote Object-Based Learning Education Model

This paper presents the ALCMAEON project, funded by Erasmus+ program of the European Union. Five European universities are collaborating, aiming at the innovation of the teaching of medical history to medical undergraduate students with a new educational approach, that of object-based learning. Furthermore, better integration of historical, ethical and psychological components of medical humanities is sought.

The project represents an alternative model of medical history teaching, attempting to fill the gap between clinical practice and historical perspective of medical humanities with the use of historical scenarios and with the integration of historical proofs in specific educational contents. The project is currently developing a digital museum teaching platform with audiovisual material and digitalized collections of medical museums from Italy, Spain, Greece, the UK and Romania, in an attempt to promote the different traditions characterizing European medical history and bring medical museums in the university classroom.

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Cardiovascular Surgery in Sakhalin at the Turn of the Century (XIX—XX Centuries)

In the second half of the XIX century, Sakhalin, like the entire far East, was a sparsely populated territory of the Russian Empire, where natives mostly lived. The state of medical Affairs on the island fell sharply behind not only the European part of Russia, but also Siberia. Medical care was provided to the population in hospitals at military posts and prison districts. The Russian writer A. P. Chekhov wrote in the work "Sakhalin Island" (1890) that in those years there were 3 doctors and 5 paramedics working on the island, and "local hospital orders were at least two hundred years behind civilization". After Russia's defeat in the Russian—Japanese war (1904—1905), the development of medicine in Northern Sakhalin was carried out in a difficult political environment, due to the influence of the consequences of the civil war and the Japanese intervention. In the post-war period, the formation of health care in Sakhalin developed rapidly. Thus, in 1946—1950, the network of medical institutions and hospital beds increased 4 times, and the number of medical workers increased 7 times. 20 new hospitals and clinics were built, and their material and technical base was significantly strengthened. By the end of the 60s, the development of island surgery has reached the level of the latest achievements of domestic surgery, up to the performance of open heart operations. A great contribution to its development was made by the Honored doctor of the USSR, chief surgeon of the region A. V. Egorov (1926—1996). After graduating from the Bashkir medical Institute, 24-year-old Yegorov forever linked his life with Sakhalin. Having passed the way from the ship's surgeon to the chief doctor, the unique surgeon-inventor mastered and successfully performed complex intra-abdominal operations, operations on the brain and spinal cord. Head of the regional surgery (1964), A. V. Yegorov contributed to the increase in the capacity of surgical departments, the development of anesthesiological services, specialized types of surgical care in regional and district centers (urology, traumatology, neurosurgery, heart and vascular surgery). The first operations for heart defects on Sakhalin were performed by Egorov in 1966 with the participation of the Director of the Institute of circulatory pathology, Professor E. N. Meshalkin (Novosibirsk). Later, during cardiac operations, A.V. Egorov used a hole expander of his own design (AS № 387699, 1973). In 1969. he performed the first open-heart operation with artificial blood circulation in the far East (suturing a ventricular septal defect), and later performed a similar operation under General hypothermia. At the invitation of A. V. Egorov, since

1978, surgeons of the Alexandrovsk-Sakhalin regional hospital have mastered a new method of treating purulent diseases, proposed by Professor Ya. P. Kulik of the Blagoveshchensk medical Institute. For 10 years, surgeon L. A. Bogoslavsky successfully treated patients with osteomyelitis of the lower extremities by regional perfusion of the patient's blood. In a short period, Sakhalin medicine has become an advanced center for specialized types of medical care, and chief surgeon A.V. Egorov is the founder of cardiac surgery in Sakhalin, a pioneer of open heart surgery in the far East of the country. Our research has opened an unknown page in the history of Russian cardiovascular surgery in the far Eastern region, which is the most remote from the center of Russia.

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Latvian Volunteers in the International Brigades Health Services (Spanish Civil War, 1936—1939)

In 1921, Latvia regained its administrative and political autonomy and, on September 22, 1921, became a full member of the League of Nations.

The 1935 census shows a population of 1,905,330 people. Women, mainly due to the participation of men in the First World War, made up about 55% of the population. Latvia was the first European country with women's suffrage and women had fully entered typically male dominated occupations: in 1938, 30% of doctors were women. With regard to ethnic nationality, the 1935 census shows that 77% were of Latvian origin, 10% of Russian origin and over 4% Jewish. The rest of the population was composed of Poles, Germans and people from other Baltic regions. 74% of the doctors were Latvian and 10% (that is, 778 people) were Jewish.

When the Spanish Civil War broke out, some 35,000 young volunteers from all over the world headed for the Iberian Peninsula. Some of them came from as far away as Latin America, the Middle East, Asia and the USA, but most were European. Since Hiltler's rise to power, many of them had already emigrated from their home countries. Before the First World War, German universities were the place of choice to study medicine. After Hitler's rise in 1933, most medical students chose universities in Austria, Czechoslovakia, France or the United Kingdom. This also happened in other health specialties such as nursing or pharmacy.

The Latvian contingent of the International Brigades consisted of about 200 volunteers. 80% were industrial workers, drivers or farmers. The remaining 20 % were higher education graduates, mainly from the health sector.

Based on the data obtained from the Russian State Archive of Socio-Political History (RGASPI), we have traced the identity of these volunteers, their educational development before their arrival in Spain, their participation in the war field hospitals, as well as the path they followed when the Spanish Republic lost the war. In this communication we will also show the data regarding mortality and morbidity of Latvian volunteers in the International Brigades.

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The "Retirada" (Retreat) as told by a British Volunteer from the Spanish Medical Aid Committee, Rosita Davson

2019 marked the 80th anniversary of the entry of General Franco's troops into Catalonia, aided by Germany and Italy. Thousands of Spanish Republicans (about 475,000) headed for the French border to take refuge. France, that during the Spanish Civil War maintained a policy of non-intervention, decided to open its frontiers and confined the newcomers to refugee camps along the border. This episode is known as "La Retirada" and today you can see that several French municipalities have paid tribute to the exiled Spanish Republicans by naming different streets as "Avenue de la Retirada".

In this communication we will present you the first-person account of "La Retirada" from a document written by an English volunteer from the Spanish Medical Aid Committee (SMAC), located in the archives of the University of Warwick.

At the end of July 1936 (the war began on July 18, 1936), several anti-fascist organizations sent a request for support to Western democracies. Whilst the British government adopted a non-intervention policy, the working class, students, artists and British intellectuals publicly showed their support for the Spanish Republic. The Spanish Medical Aid Committee (SMAC), a health support organization, was created in London, and on August 23, 1936, the first volunteer contingent of doctors, nurses, medical students, drivers and administrators left Victoria Station for Spain. Among the latter was Rosita Davson, whose role in the organization was translator and interpreter.

Davson remained in Spain throughout the war and held various positions in the Unit. Her organizational skills, her knowledge of languages and her experience led the Committee to appoint her as its representative to the Government of the Spanish Republic, which in 1939 was located in Barcelona. When La Retirada began, Davson, as head of the SMAC in Spain, was in charge of organizing the evacuation of the hospitals, the English staff working in these hospitals and the medical equipment: medications, surgical tools, ambulances and autochirs. After crossing the French border, she was also in charge of locating some English nurses in the refugee camps.

In the elaboration of this communication we have used documents from the archive of the University of Warwick, as well as the reports about the English volunteers, located in Fund 545 of the Russian State Archive of Socio-Political History (RGASPI).

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Milana PETROVA

Contribution of Sergey Ivanovich Mitskevich to the development of healthcare in Yakutia

One of the most acute problems in Yakutia until 1917 was the state of healthcare. On September 1, 1906, the Feldsher School was opened. Its initiator was V.A. Wongrodsky, who became the director. At the beginning of the century, political prisoners were engaged in medical practice there.

Sergei Ivanovich Mitskevich left the greatest mark in the life of the Kolyma region. Despite the difficult living and working conditions, the doctor remembered this time with pleasure: an interesting, completely unexplored region, a peculiar way of life of the local population, and interesting medical and research work. S.I. Mitskevich worked as a district doctor and opened the first medical centers in Kolyma region.

Srednekolymsk is a city in the north-east of Yakutia. Before the revolution, this was a place of exile where the doctor, revolutionary S. I. Mitskevich, revolutionary, writer V. G. Bogoraz, Decembrist N. S. Bobrishchev-Pushkin, journalist I. V. Shklovsky were exiled.

In 1894 he was arrested and imprisoned in Butyrskaya, and then in Taganskaya prison, where he spent 2 years and 2 months in strict solitary confinement. In 1897, S.I. Mitskevich was exiled for 5 years to the Yakutsk region. He reached Olekminsk for almost 8 months. Here he spent a year working as a doctor in gold mines. Then he went to Srednekolymsk and was serving a political exile and worked as a doctor for 4 years for the half salary.

March 25, 1899 S.I. Mitskevich left Olekminsk with his bride O. N. Popova. The couple arrived in Srednekolymsk on May 15, 1899, after 37 days of travel. As a doctor, S.I. Mitskevich was forced to become a generalist: he performed eyelid surgery for trachoma and performed other operations; took birth; struggled with syphilis and leprosy; he performed dental treatment and provided psychiatric care, which was his main medical specialization.

Being in exile S. I. Mitskevich learned the Yakut language and spoke freely with local residents, studied life, living conditions of small ethnic groups of the North of Yakutia, was interested in their customs, beliefs, conducted scientific observations on the ethnography of Yakuts, Yukagirs, Lamuts.

After the expiration of the term of exile in 1902, S.I. Mitskevich decided to stay for another year to expedite the construction of the hospital building and the leper shelter. In 1902, the hospital was completed, but the stoves were not stacked due to the lack of a stove maker. In the spring of 1903 S.I. Mitskevich left

Srednekolymsk. The completion of the hospital and the shelter for lepers in 1904 was completed by the doctor E.P. Popov, political convict.

Name of S.I. Mitskevich was immortalized in the city of Srednekolymsk: the central ulus hospital bears his name, there is Mickiewicz Street, a memorial plaque on the wall of the hospital, the construction of which he supervised, is attached. There is a permanent exhibition in the museum of local lore, where his personal belongings and photographs are kept. Memory of S. I. Mitskevich persists in Moscow, Nizhny Novgorod, Kirov, Saratov and Yakutsk.

In such an amazing way Latvia and Yakutia intertwined in a vivid biography of S. I. Mitskevich.

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Milana PETROVA

Prokopiy Nesterovich Sokolnikov is the first doctor from the Sakha people

2020 is a special year for the healthcare of Yakutia. July 1 marks the 155th anniversary of the birth of the historical person, the first doctor of Yakutia, Prokopiy Nesterovich Sokolnikov.

He was destined for an interesting, but difficult, tragic fate. Prokopiy Sokolnikov was born in the village of Cherkekh of the Tattinsky ulus in the family of an influential person, the foreman of the clan. After graduating from the 4th grade of the public school in Churapcha in 1881, he began his studies at the Yakut gymnasium. He was forced to enter the Yakutsk Theological Seminary in 1887, then transferred to the Tomsk Theological Seminary.

- P. N. Sokolnikov, one of the first doctors from indigenous Yakuts, who graduated from the medical faculty of Moscow University, was in charge of the 4th medical department of the Yakutsk district.
- P. N. Sokolnikov from his student years absorbed progressive views on the social life of Russia and his small homeland the outskirts of the empire. District doctor P. N. Sokolnikov, in addition to medical activity, took an active part in the work of the society of doctors of the Yakutsk region, the first medical congresses and in the public life of the region, which at that time was very rich in

historical events. In 1913, the doctor P. N. Sokolnikov led the Yakut delegation participating in anniversary celebrations on the occasion of the 300th anniversary of the Romanov dynasty.

Archival information, memoirs of colleagues, his personal documents and data from historical studies of P. N. Sokolnikov convincingly show that he truly hastened to do good all his life. So, Prokopiy Nesterovich, who during the last year of his studies established contact with L. N. Tolstoy, at his request, accompanied the wives and children of the Dukhobors, exiled to the Yakutsk region, during their difficult journey, which lasted more than two and a half months. In the initial period of work in the homeland of P.N. Sokolnikov corresponded for three years with the great humanist, writer and public figure.

In 1902, P. N. Sokolnikov during a meeting with L.N. Tolstoy in Yasnaya Polyana received from him, as a token of gratitude, a photograph of the great writer autographed: "To dear Procopius Nesterovich Sokolnikov, in good memory from Leo Tolstoy".

Collegiate councillor, Knight of the Orders of St. Stanislav III degree and St. Anne III degree P. N. Sokolnikov left an unforgettable monument to his people — the Churapchinsky district hospital, built on his initiative and with direct participation, which now bears his name.

The doctor Prokopiy Sokolnikov was friends with many political exiles, enthusiastically met the February Revolution of 1917. Until the end of his life, Sokolnikov remained an active supporter of the idea of education, culture, and spiritual improvement of his native people. He died on December 10, 1917.

The famous Cherkekh Museum has an exposition about his life and work. The letters of Leo Tolstoy and the gift of the writer for the hospital — a washing machine — are still preserved. The streets in the villages of Ytyk-Kuel and Cherkekh are named in his honor. The Cherkekh hospital also has a Sokolnikov museum. The Cherkekh school has a Health School project, in the framework of which "Sokolnikov Readings" are held for schoolchildren. The school published a book about famous fellow countrymen, which included the research work of students, participants of the "Sokolnikov Readings".

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Combination of 3rd Non-Destructive Micro Tomography and Immunohistochemistry for the Characterisation of Human Bones from Middle Ages, Early and Late Modern Period: a Pilot Study

Bone quality encompasses correct architecture, porosity, and composition, including different hard tissue factors. There are specific studies about the bone quality in mediaeval skeletons, but they relate mainly to the distribution of different ion content (Rasmussen et al., 2017), diachronic changes in size and shape of bones, (Brzobohatá et al., 2016), dental and skeletal disorders (Novak et al., 2012), and osteoporosis (Maye, 2015). Thus, our aim was the research on the combination of hard tissue markers and 3D imaging indicators to reveal bone quality in human starting from the mediaeval period.

Materials and methods. Two human ulna from Middle Ages and humerus from Early Modern Period obtained during archeologic excavations (1983—1985) in the Saint George castle of the Order of the Brethren were used simultaneously to the two control ulna from the late Post Modern period (property of the Institute of Anatomy and Anthropology). Bone measurements and 3D pictures were done by ZEISS Xradia 510 Versa X-Ray Microscopy, while tissue were detected for osteocalcin (OC), osteopontin (OP), osteoprotegerin (OPG), Runt-related transcription factor 2 (RunX2), matrix metalloproteinase 2 (MMP2), tissue inhibitor of matrix metalloproteinase 2 (TIMP2), basic fibroblast growth factor (bFGF), transforming growth factor beta (TGFB), bone morphogenetic protein 2/4 (BMP2/4), Interleukin 1 (IL-1), Interleukin 10 (L-10), human beta defensin 2 (def2), apoptosis.

Results revealed variations in bone volume from 28.82 - 33.85 (%/0.5cm³), trabecular thickness from $180,85\pm20,71$ to $222,26\pm29,01$ µm, and thickness of cortical bone from 3320,23 to 3555,34 µm. The diameter of pores was the most variable and showed from $313,12\pm91,60$ to $447,79\pm105,71$ µm even within the frame of one Age.

The bones of Middle Ages showed from very occasional to occasional number of positive tissue factors structures. Early Modern Period demonstrated an absence of apoptosis, BMP2/4, TIMP2, RunX2 in the bone, while the number of OC, OP, OPG, MMP2, bFGF, TGF β , IL-1, IL-10 and def2 positive osteocytes varied from few to moderate. Finally, the two controls showed totally opposite distribution of the tissue factors. So, one bone demonstarted few to moderate number of almost all factors, except RunX2 and IL-1, but the other possessed

occasional to few number of OC, OP, OPG, MMP2, TGF\(\textit{B}\), BMP2/4, IL-10, and def2 with an increase of TIMP2 until the numerous positive structures, and the lack of IL-1 and RunX2. Interestingly, 3D imaging revealed ununiform growth of bones.

Conclusions. The bones of Middle Ages demonstrate the common degradation and cant be representatives for the evaluation of bone homeostasis of that time. Early Modern Period bones and controls of Post Modern period are similar with different bone factors expression, thus differences here may indicate the individual changes rather than the century changes. The bone architecture doesn't show statistically significant century differences between bone volume, trabecular thickness and cortical thickness, while variable diameter of pores seems again to characterises the individual bone structure. Finally, 3D imaging excellently reveals the growth disordered zones in bones starting from the Middle Ages.

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Emergence of Higher Medical Education for Women in Russia in 1860–1910

In the second half of the 19th century, a revision of traditional views on the role of women in social life began in Russian intellectual circles. The issue of higher education for women was openly voiced for the first time in December 1867, during the first congress of natural scientists, when E.I. Conradi made a presentation stating the need of opening educational courses for women.

The problem of increased emigration of Russian women in order to obtain higher education attracted the attention of Russian medical community and the government. The first four-year higher medical courses for women were opened in 1872 at the Imperial Medical and Surgical Academy St. Petersburg under the name of advanced courses for midwives. The Academy was administered by the Minister of War D.A. Milyutin. The courses were funded by voluntary contributions and tuition fees. In 1876, advanced midwives' courses were renamed to women's medical courses and the fifth year was added to the curriculum. As a result, the courses were equated to the main program of the Academy.

In 1877, the Russo—Turkish war began. Approximately a half of students of female medical courses went to the war front. The rest of women had decided to finish their education. On 7 of February 1878, graduates received certificates from the Chancellery of the Nikolaev military hospital, certifying that they had finished their studies at medical courses, yet without indicating their medical degree. Until 1883, female doctors practiced informally, being completely dependent on the authorities.

The work of the first female doctors was of particular importance in surgical and gynecological care of women, in the fight against the spread of syphilis and other diseases. Female patients who could not attend a doctor of opposite sex due to religious beliefs finally could get help from a qualified female specialist.

In 1881, D.A. Milyutin left his post, and the War Ministry did not consider it necessary to support women's courses at the Academy. In 1882, women's medical courses were abolished. January 4, 1883, the women who have completed education in female medical courses were assigned the title of a midwife in the report of the Minister of Internal Affairs. The name was changed to "doctor of women and children" on February 18. It was replaced with the title of "female doctor" only in 1896.

The cessation of female medical courses was only a temporary hindrance to medical education for Russian women. In a short period of time sympathy groups

raised an amount of 700,000 rubles to support functioning of the new medical courses. On September 14, 1897, Russian medical community succeeded in creating the Women's Medical Institute in St. Petersburg, which became the first institution of such kind in Russia. In 1906, medical departments were opened at the Higher Women's Courses in Moscow and Odessa. 1909 is the year of foundation of the Moscow Women's Medical Institute. In 1910, the Kharkov Women's Medical Institute was opened.

Overall, it may be said that higher medical education for women in Russia was developed from the ground up owing to the support of Russian intellectual community and educational and career aspirations of Russian women in the context of economic and social changes in the country. After many years of struggle for the right to study medicine Russian women not only got access to higher medical education, but also changed public attitude to the role of women in society.

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Gioachino Rossini and His Relation with Two Famous Urologists: Jean Civiale and Auguste Nelaton

Introduction & objectives: To present the relation between the great music composer and two of the most famous surgeons and urologists of those times, Jean Civiale (1792—1867) and Auguste Nélaton (1807—1873), as well as to attribute to his health problems the key for the mystery of his voluntary end to a fabulous career.

Methods: The review of many sources on the History of Opera and certain biographies of Gioachino Rossini combined with medico-historical sources.

Results: Gioachino Rossini (1792—1868) composed his first opera at the age of 18 and his last at 37. This early retirement at the peak of his universal fame gave birth to several reasons, with most probable an acute form of depression combined with a tormenting venereal disease, as a result of his early life, when he had been infected with gonorrhea. Despite all kinds of palliative therapies, the disease had become chronic with many episodes of re-infections due to new adventures (obesity, smoke and alcohol abuse). Chronic urethritis with purulent liquid and reduced urinary flow occurred because of cicatricial urethral strictures. In 1843 his friends arranged an appointment with the most famous of European urologists, Jean Civiale in Paris and he underwent urethral dilation and catheter placement, (all these endoscopic approaches lasting for a whole month) aiming to the establishment of effective drainage of the urinary bladder. In 1868 a rectal cancer was diagnosed and Auguste Nélaton performed a pioneer operation in St Louis Hospital. A second look operation was soon considered necessary and was performed again by Nélaton. Due to complications created possibly by an incompletely sterilized lancet, the patient's situation resulted to peritonitis and death.

Conclusions: Rossini met the two French surgeons and urologists during two different periods of his life and had been patient of both in Paris. Civiale (the inventor of lithotriptic removal of stones) and Nélaton, (also a brilliant general surgeon and inventor of the homonymous probe), on the other side, had treated several celebrities and leaders and were recognized as the best of their times.

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Patients in University Hospital for the Mentally and Nervously III in Dorpat, 1881–1895

Rapidly increasing mental hospital population during the 19th century raised questions and concerns among contemporaries and is a topic of interest for scholars today. Concurrently with anti-psychiatrist movement in the 1960s and 1970s, Michel Foucault, Andrew Scull and other scholars started to suggest that not all who were institutionalised were necessarily mentally ill and asylums became instruments of social control. In addition, later studies showed how gender and social class of the patient influenced admission, diagnosis and discharge.

On the basis of a case study of the University of Dorpat psychiatric hospital, which was located in the Livonian Province of the Russian Empire, I will present two hypotheses. Firstly, this institution was not used as a means of social control, at least not to the extent implied by early social historians of psychiatry. Secondly, gender and class were equally important variables when considering patients' admission and prognosis, and cannot be viewed separately from each other. To test these hypotheses, I have created a database based on the first patient admission registry book of the hospital, dating from 1881—1895. During this time there were 2184 hospitalisations, some patients were hospitalised more than once. Both upper and lower-class patients were admitted, making it possible to analyse the relationship between institutionalisation of patients and their socio-economic status and gender.

This paper brings new insight into the debate on institutionalisation of the mentally ill in the 19th century. The source material has not been studied before and my research will add to the current knowledge regarding Europe-wide practices of hospitalisation of the insane, providing an Eastern-European perspective.

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Syphilis Issue and Fight with Prostitution in 1890s Tartu

Syphilis was one of the most common infectious diseases of the 19th century, and it was closely linked to prostitution, especially in the cities. The struggle against both scourges had been for centuries, but in the the turn of the 19th and 20th century was the culmination of the spread of both syphilis and prostitution in many European countries, including Russian Empire. In 1895, the Russian Ministry of the Interior began preparations to convene an All-Russian Congress Against Syphilis. Tartu city doctor dr. Ströhmberg will write a presentation for Congress in which he will give his vision of what needs to be done to combat syphilis and other sexually transmitted diseases. What's better, he also gives an overview of the situation in Tartu.

An All-Russian Conference Against Syphilis was held in St. Petersburg, at the Medical Office of the Ministry of the Interior, from January 15 to 22, 1897. The request to convene a congress had been submitted to the emperor by the Minister of the Interior on March 16, 1895 and the organizing work began. Hundreds of doctors from all over Russia took part, and the Baltic provinces were also well represented. A lot of work in preparation was organized by Livonian Doctors' Days, each time with almost (or more than) a hundred participants from Livonia, St. Petersburg and elsewhere. Meetings were published in "St. Petersburger medicinische Wochenschrift" special editions.

The morning of the second day of the VII Livonian Doctors' Days in Cesis in 1895 was dedicated to the fight against syphilis. It was decided to publish a separate brochure to present their views on the fight against syphilis. For that brochure, dr. Ströhmberg compiled an overview of the situation in Tartu.

In 1851, all Russian cities were required to establish medical-police committees for supervision of prostitution. The most important task of the committee was to establish lists of public women. The second most important task was a medical examination of the women on the list by a city doctor. The city doctor was also responsible for checking the venereal diseases of factory workers and prisoners. Registered prostitutes were to be treated without fee in city the hospital. This was the order of the Ministry of the Interior in 1851. No funds were allocated to execute the order and there were great difficulties in complying with this request. In Central Russia provinces, where the hospitals were owned by local governments, progress was made. In areas of Poland where the hospital was in private hands, no. There were city hospitals in the Baltic provinces, but the money for free

treatment was distributed only to sexually and mentally ill people. The money for treatment was provided by the provincial treasury. Unfortunately, in Tartu, which belongs to the Livonian Governorate, only patients from the rural municipalities of the Livonian Governorate were treated free of charge. Those who came from further afield had to pay for themselves and hope that the home municipality will reimburse the bill.

City doctor Ströhmberg dealt extensively with prostitutes and took it to heart. One of the biggest victories for a city doctor was a separate reception point for public women with veneral diseases, with a medical department with 20 seats. The house, originally planned to fight cholera, was bought for 5,000 rubles from a former brothel owner, and there had previously been a brothel.

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Mariablanca RAMOS DE VIESCA

The Thinning Diet in Classical Antiquity, from Hippocrates to Galen's Medical Practice

Different theories coming from Hippocratic times persists and are present in Galen's work, which became a definitive factor in the configuration of Hippocratic tradition through Roman medicine. The distintive physiological theories, the clinical analysis, the conception of diseases, the drug prescription in Galen's medical tradition reflects his sophisticate knowledge. The thinning diet is a demostrative example of this.

The thinning diet was indicated in chronic diseases without any other pharmacological treatment, with very good results. The diet was useful in kidney, chronic breathing difficulties, joint diseases and pain. Loss of weight has a direct effect in thinning each humour in the body and, consequently, act on promotion and recuperation of health. Any body which was full of thick, sticky, and cold humours, will be benefied by food with sharp and cuttine faculties.

The aim of this document is to analize the uses and indications of the thinning diet, and also to have a general overview of its components, vegetables, meats, fruits, and their physiological mechanisms. The promotion of an ideal of slender figures, both for women and men, was a characteristic of grecoroman culture and a prelude for the healthy body modern conception.

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The USSR in the International Hygienic Exhibition in Dresden in 1930: Healthcare as "Soft Power"

This paper aims to study the participation of the USSR in the 1930 International Hygienic Exhibition in Dresden (preparation of the Soviet pavilion and the work of the exhibition) in the context of Soviet and German history, as well as the perception of the Soviet exposition by the German press and evaluation of the display by Soviet officials. The study is based on archival materials from the fund of People's Commissariat of Health of the RSFSR in the State Archive of the Russian Federation (GARF, F. A482): correspondence of the People's Commissariat of Health regarding the preparation and conduct of the exhibition, orders, minutes of meetings, reports, clippings from the German press.

Organizers of the exhibition in Dresden conceived it as a cultural and scientific event. The aim was not to cover the entire healthcare industry but to emphasize hygiene, especially personal hygiene, and physical education. However, already in June 1929, the People's Commissariat of Health of the RSFSR planned the participation at the International Hygienic Exhibition in Dresden in 1930 as "a demonstration of the success of socialist construction in the years after October and a grandiose sweep of the five-year plan," which should "play a huge political role and have a serious impact not only on the proletarian masses but also to the radical circles of the intelligentsia in the West."

Preparation of the Soviet pavilion carried on against the background of the change in leadership and policy of the People's Commissariat of Health of the RSFSR, but the dismissal of N.A. Semashko and the appointment of M.F. Vladimirskiy as People's Commissar did not have a noticeable effect on the ideological content of the Soviet exposition.

The prominent Soviet artist, designer, and architect Lazar Lissitzky (El Lissitzky) was appointed artistic director of the Soviet pavilion at the Exhibition in Dresden. Deputy Director of State Institute of Social Hygiene I. D. Strashun was a Director of the Soviet pavilion.

The 1930 International Hygienic Exhibition in Dresden exposed the difference in the political and scientific agendas of different countries. If Germany organized an exhibition to demonstrate its scientific and technological superiority in the field of hygiene, the USSR used hygiene only as an instrument of political propaganda in the international arena.

German press praised the artistic design of the Soviet pavilion, noting the role of Lazar Lissitzky. At the same time, German newspaper observers did not

believe the charts of mortality and morbidity rates in the USSR and concluded that the USSR demonstrated non-existent achievements. Recent historical studies confirm these suspicions.

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Destiny of a Scientist, University, Region: Historical and Medical Parallels 100 Years Later

In the system of medical education moral and ethical image — building of a doctor and a researcher turns out to be one of the priorities. This process is not possible without the engagement of the students with the history of medicine and culture. In this aspect, medical university should be considered not only as a unique school for the formation of general, professional and acmeological culture of a physician, but as a specific spiritual value, which plays a crucial role in the regional development.

Among those researchers who study the culture of the region are mainly economists, sociologists, political scientists, philosophers and cultural scientists. However, it is also necessary to study the historical and medical aspects that would emphasize the role of the "educated public opinion" in the socio-cultural development of the region, including historical and biographical studies of prominent figures in the medical academic science.

The Krasnodar Territory, known since the 18th century as a historical and territorial region of the Kuban, is a special cultural entity, distinguished not only by its natural and geographical conditions, but also by the mentality of the people, cultural traditions, way of life and, of course, the peculiarities of its development, that had the effect upon the social and cultural development of the whole country.

A hundred years ago there was neither higher medical education nor the teaching staff in the Kuban. The foundation of higher medical schools in the Kuban became possible thanks to the migration of prominent doctors and scientists during the revolution and the Civil War. As a result there were quite a number of the representatives of national medical science known to the world community in the region, who contributed to the foundation of the Kuban State Medical University. These are such scientists as N. F. Melnikov-Razvedenkov — the first rector of the medical university, full member of the Academy of Sciences of the USSR, academician N. N. Petrov, corresponding member A.I. Smirnov and academician G.N. Speransky.

The further development of the university is associated with the following scientists, doctors and teachers: academician of the USSR Academy of Sciences A.A. Shalimov; academicians of the Russian Academy of Sciences M.G. Chandaloy, S.G. Drozdov, E.K. Ginterom, B.A. Lapin. Their professional traditions were maintained by such scientists and academicians of the

RAS as V. A. Porkhanov and A.A. Kubanova; corresponding members of the RAS P. A. Galenko-Yaroshevsky, A. T. Bykov, R. I. Sepiashvili, S V. Orlov and many others. Taking into account the long period of training doctors from many countries of the world, we can confirm that graduates of the Kuban State Medical University work on all the continents of the globe.

The activities of the Medical university is clearly seen through the prism of the fates of the representatives of academic science. Being the phenomenon of the regional culture of the Kuban, the Kuban State Medical University performs its educational functions, that, in turn, determines the strategy of the whole region.

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Yi REN

Dialogue Between Medicine and Architecture: Buildings in Sainte Marie Hospital (1907–1951)

With the example of Sainte Marie hospital, this study looks to the evolving interactions between medicine and architecture: the major shifts from the pavilion type hospital to the block type hospital, resulted from new medical methods and new technologies in construction.

The Sainte Marie Hospital was founded in 1907 by the French Jesuits in the center of the French Concession in Shanghai. After the First World War, the French government increased investment in the hospital to transform it into a famous modern medical center. The Sainte Marie Hospital is the close cooperation between the French government and the Catholic Mission.

This study is relying on a large amount of the Sainte Marie hospital's never used archives, first-hand material on the history of French Concession, and detailed fieldwork including photographic surveying and data gathering. Historical archives, old maps and photographs are used as the basic material for our analysis on the scientific history of a medical institution to answer a new question: concern of the emergence of special economic, political and social history of hospital buildings.

When it was founded, Sainte Marie hospital was favor of being hygiene and pleasant, so it is designed to be small separate pavilions. This can be showed by the relatively small size of the buildings, and the open space between the pavilions, which allowed ventilation and sunlight though large windows when needed. The origin of this style could be traced back to the end of the 18th century in France. The idea that hospital architecture played a role to in patients began to appear. As putrid air was considered to be an essential factor for infection and contagion, forward-looking doctors and architects considered that it was crucial to preserve patients from being affected. The hospitals were designed to create the maximum ventilation and isolation of the wards composed of separate buildings in parallel, this architecture style remained for nearly a century. From 1880 to 1930, the hygienism triumphed, the isolated architecture was radicalized because of the pavilion system.

From 1930s, the hospital's path to modernization was complex and paradoxical: the search for economic rationality but also for comfort; shift from assistance to technology; humanization and gigantism at the same time! We saw the use of concrete and birth of the hospital blocks. A new Saint Vincent pavilion, seventy meters long and fives stories high, was opened for use in 1935. The

modern, reinforced concrete building, which architecturally elegant and sober. By showing an image as big and safe house, this new construction convinced the citizens that their chances of healing there was as good as at home. It was adapted to modern hygiene changes. To the advances of therapeutics and even the architecture, the building was fully compliant with: huge room without partitions, wide windows which brought the maximum light, balconies around the building which allowed the patients to better enjoy the sun.

Architecture is closely connected to environmental, economic, social, cultural, and political factors. The construction of Sainte Marie Hospital is an important support of Shanghai modern architectural style and historical culture. It recorded the activities of Jesuit missionaries and lifesaving activities by French and Chinese doctors, reflected the complex social cultural implications and the relationship between powers, and witnessed China's modernization.

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António Plácido da Costa (1849–1916): Physician, University Teacher and the Timelessness of the Invention

António Plácido da Costa was born in Covilhã, an inland village in Portugal. Of humble origins, young Plácido was taken to live the coastal city of Porto, due to his father's job. During his school years, he was trained for the priesthood, and even attended a seminary in Cambrai (France), where he obtained a vast humanistic education and learnt rhetoric. At the time of the Franco—German War (1870—71), he returned to Portugal, where he enrolled in the Porto Medical Surgical School (1874—75), which would later become the Medical Faculty of the University of Porto (FMUP). As a medical student, he was particularly interested in medical microbiology, a field on which he later became a pioneering teacher. He completed his medical studies in 1879 and for the next two years worked as an assistant to Pedro Adriano Van der Laan, a prestigious ophthalmologist and undisputed authority in that field. During that time, Plácido showed his high intellectual standing and creative power, especially through his research on clinical cases of corneal pathologies. He designed and built a new diagnostic instrument — the astigmatoscope or keratoscope. This instrument, as well as others of his conception and design, was introduced through the journal Periódico de Oftalmologia Prática (1880, 1881). Julius Hirschberg (1843—1925), ophthalmology professor of Berlin, was the first to recognise the originality and worth of Plácido da Costa's invention. Plácido's disk was then manufactured and began to be used in clinical practice, and it was mentioned in every medical treaty. Though adapted by means of modern technologies, the keratoscope or Plácido's disk, continues to be the staple instrument to diagnose corneal conditions.

Back in Porto, Plácido opened his own eye clinic and became a faculty member on the Porto Medical Surgical School (1883), where he lectured on histology and ophthalmology at a time before the institutional recognition of these fields and in the first years of their official inclusion in the curricula. He was a tenured professor in the physiology department (1894—1916), designing and developing several instruments which complemented his teaching activity as well as his research.

Plácido's intelligence, eloquence, creativity and ingenuity, together with his scientific method, his contribution to medicine though the design and development of medical instruments, and his mastery of scientific photography may be confirmed through the artefacts and documents making up the collection of the "Maximiliano Lemos" Museum of Medical History of FMUP. In fact, there is no eye clinic today that does not use Placido's disk on a daily basis. It is therefore essential to remember the contemporary relevance of some pages in the history of Portuguese Medicine, which are true landmarks in the world History of Medicine and of all Science.

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The First Human Anatomy's Book in Spanish: Libro de la Anathomía del Hombre Written By Bernardino Montaña De Monserrate in 1551

Bernardino Montaña de Monserrate (1480—1558) was professor of anatomy at the University of Valladolid, court physician to King Charles V of Spain. He wrote the first human anatomy's book in Spanish, Libro de la anathomía del hombre, printed in Valladolid, Spain in 1551. Although Valverde de Hamusco's Historia de la composicion del cuerpo humano published in Rome in 1556 is often credited with presenting anatomical knowledge in Spanish and along with Vesalian's illustrations for the first time in Spain, in fact both honours belong to Montaña de Monserrate's Libro de la anathomía del hombre, which was written on the basis of Galens anatomical viewpoints and its content was arranged topographically, all with a view to surgical Even though Montañas book's was no breakthough in the field of human anatomy, the real value of it was his pioneering use of Castilian (old Spanish) to in a human anatomy book of his incorporation of numerous terms taken from popular speech. Libro de la anathomía del hombre is a rare book hardly know by anatomists or even historians and the medical community at large people.

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Medical Women in Antiquity

In Ancient Egypt males dominated the medical field but women, highly socially respected, could also exerce that profession. They enjoyed equality under social and civil law and greater freedom of choice, could own land, businesses, become priestesses and scribes. They got training and resources available in the larger temples and scribal schools, being one for female doctors located at Neith's Temple in Sais (Lower Egypt Nile Delta). This earliest ancient goddess worshiped in Egypt protected physicians and parturient women during later epochs. Feminine symbols linked soon with the healing powers were 'the knot of Isis' resembling an ankh. Associated with this temple-school, Pesehet (ca. 2500 BC), a pioneering female doctor known by name in Old Kingdom, was 'Lady Overseer of Female Physicians', but it is unclear whether she was a practicing physician or a teacher.

Herodotus and Diodorus refer that father's functions passed to his children to succeed him, indicating intra-familial transmission of knowledge. A physician's handbook might imply that his daughters were included within his professional life, but not as official apprentices or attendants. The role of female medical practitioners, however, had probably more to do with female networks in a society of relatively strict gender separation. Nurses might have been the women attendants helping during birth itself, being the history of obstetrics inextricably linked with midwifery and with collaboration of highly specialized professionals, who ensured women's health during pregnancy and after, even though the costomary term for them is unknown.

On the other hand, for the Hippocratic Corpus' writers, men, more rational than women, without rational research to practice medicine, dominated the profession of physicians. Greek women, regarded as highly sexual beings not having political rights, in charge of raising the children and producing the families clothes, were controlled by men in all stages of their lives. Celibacy was bad for a woman's health and problems with the wandering womb were thought to affect the woman's organism, causing symptoms of irrationality (hysteria), only restored by sexual intercourse and pregnancy.

During the more tolerant Hellenistic era, the continuous tradition of freedom, education and equality of Egyptian women influenced the women's position in Greek society, allowed to be educated and praised in public for their intellectual feats. Research and training would take place in the Alexandria medical school, at the Museion, and Herophilus disapproved the Hippocratic wandering womb

that was fixed. Women doctors offered specializations beyond gynecology and obstetrics and iatromea or midwives, being Artemis considered the first, received some further medical training.

The famous doctors' children, male or female, would also follow the medical profession, continuing the family tradition. Among them stand out Agnodice, the first female physician to practice legally in 4th century BC in Athens, Pantheia and Auguste, both physician's wives, Aurelia Alexandria Zosime, Metilia, Anthiochis of Tlos, cited by Galen, Aspasia, quoted by Aetius on gynecology, Metrodora who wrote Concerning the Feminine Diseases of the Womb.

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The Transmission of Indian Medicinal Plants in the Mediterranean World in Classical Antiquity: Continuity and Transformation

Since the 6th and 5th centuries B.C.E., observations on the Indian flora were an important part of Greek literature. Evoking the myth of the Golden Age, the writings depicted India as a fertile land, rich in exotic plants. At the time of the Corpus Hippocraticum (5th century B.C.E.) trade between India and the Mediterranean passed through the Near East. The Corpus Hippocraticum mentions various Indian medicinal plants whose names reveal their Indian or Median and Persian origins. Only after Alexander the Great's eastern campaigns were Indian plants introduced directly into the Mediterranean area and came to be more accurately known. The main source of the information on Indian medicinal plants featured in the Historia plantarum of Theophrastus were the botanical observations found in the accounts of the historians who traveled east with Alexander in his military advance. Many of the Indian plants in the Historia plantarum are described again, with variations and additions, in the De materia medica of Dioscorides and in the Naturalis Historia of Pliny the Elder, both written in the Roman Empire period. Compared to Theophrastus, these later authors not only featured more eastern species, but they also devoted more space to Indian tropical plants. This was the period in which direct trade between Rome and India flourished and the importation of spices, which were mostly used as medicines, reached its height. As scholars encountered these new exotic plants, they analyzed and described their growth and their interaction with the environment, classified them within the botanical-pharmacological system and deepened how they cured diseases in human body. In the description of Indian plant species, a real knowledge of the plants was often lacking, being mostly known only as commercial products. Though they had no doubts about the eastern origin of these plants, often they did not know where exactly the plants came from. The places whence they were imported were often mistaken for the area where they grew. In any cases, Indian plants were integrated into the botanical-pharmacological system and came to be part of the Mediterranean pharmacopoeia. Described accurately by the same standards used for Mediterranean and Near Eastern plants, they shared, on the basis of common characteristics, the same classification criteria. However, in the descriptions of the medicinal properties of these plants and their use in the cure of illnesses there were no explicit references to Indian medicine. Certain similarities between Indian and Greek medicine and correspondences between the properties

and the uses of some Indian plants in the ayurvedic and mediterranean tradition could suggest the transmission of Indian medical knowledge to the Mediterranean World. The study of Indian plants and their presence in and assimilation into the Graeco-Roman world is an important tool to deepen the knowledge of cultural interactions, as well as specifically medical, between the Mediterranean World and the East.

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Dr. Jonas Basanavičius (1851–1927) and His Nervous Disease

Doctor Jonas Basanavičius (1851—1927) was a Lithuanian physician, major political figure, a scholar. During his lifetime, Basanavičius suffered from numerous symptoms related to the nervous system.

The aim of this study was to review the descriptions of Basanavičius' neurological symptoms, his interpretation of these symptoms, and to reveal the treatment methods in the light of the clinical knowledge and practice of the time. We analyzed Basanavičius' autobiography "The Chronicle of My Life and the History of a Nervous Disease" (1851—1922) and the historical records of his contemporaries. Medical terms, diagnoses and treatment methods were analyzed in the context of the historical period and compared to how the terms are used today.

In his autobiography, Basanavičius reflected on his life events and realities of the time in Lithuania and Europe. He also meticulously depicted and analyzed the symptoms of his nervous system disease. Basanavičius suffered from various episodic ailments — headache, insomnia, deafness, olfactory and gustatory impairments, cardiac arrhythmias, leg pain, paraesthesias, and urinary disorders, most of which he generally attributed to neurasthenia, a "novel" disease of that time. Basanavičius's complaints and symptoms, depicted in chronological order, show how the disease developed and was affected by his personal life and historical context events.

Basanavičius' autobiography can be regarded as a case study of a variety of symptoms, identified as neurasthenia by the doctor himself. Clinical viewpoint and details render it a rich source of the medical knowledge and practices of the time.

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Juris SALAKS

The First Healthcare Building in Latvia in the Style of Functionalism

Aleksandrs Klinklāvs (1899—1982) was the most successful architect of the interwar Latvia. He graduated the 2nd non-classical secondary school of Saint-Petersburg. He was very impressed by the ballet of the Mariinsky theatre in Saint-Petersburg, and took dance classes at a private ballet school in addition to studies in his secondary school.

After Latvia gained independence, Alexandrs Klinklāvs returned to Riga in 1920, where he served two Gods at once. He became a ballet dancer at the Latvian National Opera and a student of the Faculty of Architecture of the University of Latvia. Learning from the leading European architects, he embraced functionalism deep in his soul and became one of the main proponents of this style in Latvia's interwar architecture.

Having graduated from the university in 1930, he become supervisor of the engineering department of the Latvian Red Cross. Before the war, he supervised the construction of a great number of healthcare facilities in Latvia. Klinklāvs became the author of over 40 projects, including many buildings designed for healthcare purposes, which earned him a reputation of "an architect of healthcare facilities".

The Hoffmann-La Roche (Roche) office building in Riga, Miera street 25 belongs to the early period of Klinklāvs's creative work. Roche selected the architect based on the style he was preaching, his rigorous commitment to functionalism and rationalism of Bauhaus architecture. This coincided with the new trends in Roche's architectural identity. Stylistically, the Riga building will closely echo Salvisberg's design of the Roche headquarter office building in Basel (Switzerland).

The building design was approved on May 2, 1931. Klinklāvs was commissioned to design the office, laboratory and warehouse to be located in the same building. The building construction commenced on 29 May 1931 and completed on 1 August 1932. Total cost for construction was 300,000 lats.

The exterior of the building was decorated with 335 sq. m of ceramic tiles manufactured by the German-based Siegersdorf company. The Roche building was the first functionalist style healthcare building in Latvia. It established the most advanced technologies of the time.

In September 1940, the building was nationalized by the Soviet authorities and until 1991 it was the Sanitary & Epidemiological Station of the Soviet Military in Baltic's. After restoration of independence of Latvia in 1991, the building was used by Latvian State institution — Road Traffic Safety Directorate. Roche was able to return it property in 2015. Reconstruction process, including lifting parts of the building for 57 cm was done during 2018—2020. Inauguration of the restored Roche building in Riga will take place in August 26, 2020 and will part of the ISHM 47-th Congress in Riga.

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Juris SALAKS, Kaspars ANTONOVIČS

Soviet Physicians Visit to the 9th International Pediatric Congress in Montreal (1959)

Objectives: To examine of the group report of a delegation of pediatricians from the Soviet Union to the USSR Minister of Health on a business trip to Canada to participate in the 9th International Pediatric Congress in Canada.

Materials and methods: General methodological approaches to historical and medical research with the use of the problem-chronological method

Results: The International Pediatric Association (IPA) was formed in Paris in 1910 by a group of European pediatricians who assembled for the First International Congress of Pediatrics in Paris in 1912. The 9th Congress of the IPA took place in July 19—25, 1959 in Montreal. A group of 15 Soviet pediatricians on leadership of the Professor Michael Maslov, president of the society of the children physicians of Leningrad, have visited the 9th IPA Congress in Montreal.

The business trip included visits to other cities in Canada. The first stop was in Ottawa where the Soviet delegation visited pediatric clinic of the Medical Faculty of the University of Ottawa, and also arranged meetings in Parliament and the Senate.

In Toronto, special attention of the delegation was attracted by the fact that in the pediatric clinic of the Faculty of Medicine of the Toronto University there is no breastfeeding and nutrition of children, both infants and premature babies, is excluded.

The Montreal Congress brought together over 1,600 delegates from 70 countries and over 700 guests. The USA was especially richly represented. The attention to the Soviet delegation is evidenced by the fact that already on the first day of the delegation's stay in Montreal, a meeting with the press was organized and a large interview with prof. Maslov. In addition, a television program was organized in the form of an interview with professors M. Maslov, prof. Y. Dombrovskoy (Moscow) and prof. A. Biezins (Riga).

The program of the congress included 36 sections in which 528 scientific reports were presented. 14 reports were presented by the Soviet delegation and two of them were accompanied by a demonstration of medical films (A. Biezins, A. Tour). The program of the congress included visits of medical establishments in Montreal, including the the largest mother and child centre in Canada and one of the most important pediatric centres in North America, and the famous stress laboratory of prof. Hans Selye. An extensive social program allowed the delegation to establish professional contacts with colleagues from many countries, especially from the USA.

Conclusions: The participation of the Soviet pediatricians in the 9th International Congress of Pediatricians in Montreal and visits to the pediatric clinics in Ottawa and Toronto were well organized and held at the highest professional and political levels. This is the merit of the professional recognition of the head of the delegation, prof. Maslov, personal supervision of the visit by the Minister of Health of the USSR and in the responsiveness and understanding of the Canadian colleagues. The conclusions of the delegation are critical in relation to the development of present Soviet pediatrics and propose specific actions to improve the situation in the country. The appearance of such a frank and non-ideological report to the minister can be explained by the international authority of prof. Maslov and it fits into the concept of the "Khrushchev thaw" in the field of humanitarian and professional foreign relations.

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Shifra SHVARTS

The Mass Campaign to Eradicate Ringworm Among the Jewish Community in Eastern Europe, 1921–1939

Between the years 1921 and 1938, 27 600 children were irradiated during a mass campaign to eradicate ringworm among the Jewish community in East Europe (Poland, Lithuania, Latvia). The ringworm campaign was the initiative of the American Jewish Joint Distribution Committee together with the Jewish health maintenance organization OZE (The Society for the Protection of Jewish Health). We describe this campaign that used x-rays to eradicate ringworm and its mission to enhance public health among Jewish communities in Eastern Europe during the period between the world wars. We discuss the concepts behind the campaign, the primary health agents that participated in it, and the latent medical ramifications that were found among children treated for ringworm, many years after treatment —pathologies that can be linked to the irradiation they received as children. Our research is based on historical archival materials in the United States, Europe, and Israel.

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Shifra SHVARTS

The T.T.T. Project — Professor Moshe Prywes and the Health Promotion Campaign Among Jewish Immigrants in North Africa

The North African T.T.T. Project designed to eradicate primary contagious diseases among the Jewish community of North Africa, enabling North African Jews to immigrate to Israel in an improved health state. The 'triple-T' stood for T for tuberculosis, T for trachoma and T for tinea or ringworm. The T.T.T. Campaign constituted the main thrust and the crown achievement of preparations for the immigration of North African Jews to Israel in the first years after state-hood.

Teams of doctors, nurses, public health professionals and social workers established scores of clinics and health centers that conducted check-ups and surveyed the student body in the Alliance Jewish school system and the Talmud Torahs operating in North African Jewish communities. Teams operated in every location within access. Even treatment and medical rehab camps were established. The young physician behind this endeavor was Dr. Moshe Prywes.

The paper will discuss the birth of the T.T.T. project and the role of Prof. Moshe Prywes in its first years of operation.

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Reflection of Dermatology and Venereology in Arts and Skin as a Tool for Expression Over Time

The echo of medicine and illness in arts has been studied over centuries. On the other hand, dermatology and venereology is a medical field where very much is seen just by looking at the patient and big part of the diagnostics up to now is visual. This has led to the portrayal of skin and sexually transmitted diseases in paintings and other forms of art, syphilis being the most commonly illustrated sexually transmitted disease throughout art history. Apart from the wide spectrum of syphilis symptoms, erysipelas, leprosy, various nevi, genetic dermatoses, alopecia and various forms of acne and rosacea have been displayed.

Artworks have also been turned into a great tool for education — as example serving the Yale Center of British Art alongside Faculty of Yale, offering the same opportunity to other schools, who teach from original works of art. Enhancing Observation Skills is a program for medical students used to enhance their observation and communication skills through studying artworks.

From ancient history up to today skin itself has been used as a canvas for individuals' personal artistic vision — ancient body paints, tattoos, piercings, contemporary body paintings, as well as patients with such conditions as acne, psoriasis, vitiligo, eczema, urticaria recently embracing their skin condition with makeup on social media.

Last but not least — with medicine and particularly dermatology evolving, esthetic dermatology has become a large player where the approach to patients wishes requires lots of practical skills and an artistic touch, and possibly the results of it in close future will be seen in art pieces.

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The Role of the Memorial Room-museum of Doctor F. P. Haass

"Children, charity, compassion, health, sainthood, good" are the first associations that arise when it comes to Dr. Fyodor Petrovich Haass. The memory of the Holy Doctor of Moscow lives in the names of hospitals, schools, streets, libraries. There is a resurgence of interest in the life and work of the Holy Doctor nowadays, new facts have come to light.

In the year of the 235th anniversary of the outstanding humanist and doctor, with the support of activists and public organizations, on September 18, 2015, "The Memorial Room-Museum of Doctor F. P. Haass" was opened on the basis of the Institute of hygiene and health of children and adolescents that is located in Moscow, Maly Kazenny lane, house 5, building 5.

In 1844 upon Dr. Haass' initiative the Police Hospital was opened in M. Kazenny Lane. Muscovites called it The Hospital of Haass. During his life about 30000 patients have been treated there.

The historical period associated with the life of Dr. Haass in Russia is adopted for the date on which the renovation and rehabilitation of the interiors, the formation of exhibits and funds of the museum have taken place.

The museum consists of the office of Dr. Haass and the Hall of Dr. Haass, where the main exposition of the museum is located, it was built in accordance with the periods of life and professional activity of the doctor.

The main museum exhibits include: the desk, at which Dr. Haass worked (original); candlesticks and an inkstand that belonged to the last chief medical officer of this hospital, Dr. A. Sinev, and as the ways of lighting had already changed at that time, there is a hypothesis that these candlesticks have been preserved from the time of Dr. Haass. The exhibits of that time are also presented: a set of medicines in a box (the late 19th century, Ferrain); a mortar of the 19th century; a pharmacy scales of the 19th century; medical literature of that time — "Modern Military Hygiene with Prescriptions" written by Revolat E.B., dated 1803. The museum section of the "prison ministry" of the doctor is represented by the icon of the modern icon painter A.N. Akimov's "Hierarch Filaret of Moscow with a dweller" – which depicts Hierarch Filaret, Metropolitan of Moscow, and St. Doctor Haass and the shackles against which the doctor spoke out.

Museum tours are conducted by the Institute staff by prior arrangement. Since the opening of the museum it was visited by 1140 people: students, including future doctors and nurses, schoolchildren, clergy of both the Orthodox and the Catholic Church, employees of scientific medical institutions, citizens willing to get acquainted in detail with the life of an outstanding ascetic and philanthropist.

A significant event was a visit to the museum by the Congregation for the Causes of Saints from the Vatican, under the leadership of the Beatification of Dr. Haas Process Poster Fr. Germano Marani, SJ.

There is a monument in the courtyard of the estate — a bust of Dr. F.P. Haass, created by A.N. Andreev in 1909, with the motto by which the Holy Doctor was guided in his life engraved on it – "Hurry up to do good".

In the courtyard of the former Police Hospital children's holidays "At the monument to the Kind Grandpa Haass" have been held annually since 2009 in order to continue the traditions of the early 20th century.

Let the words of the Holy Doctor "Hurry up to do good" sound in all languages. "Beeilt Euch, Gutes zu tun". "Спешите делать добро". "Dépêchez-vous de faire le bien".

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Polish Traces of Great Nobel Prize Winners in the Field of Physiology and Medicine

On 27 November 1895 Alfred Nobel signed in Paris his famous last will providing for a part of his legacy to be bequeathed to the author of a breakthrough discovery in physiology or medicine.

The first prize in this field was awarded in 1901 to Emil von Behring for his work on serum therapy, especially its application against diphtheria, by which he opened a new road in the domain of medical science and thereby placed in the hands of the physician a victorious weapon against illness and deaths.

Both Emil von Behring and the other Nobel Prize winners described in this study — Paul Ehrlich (1908), Gerhard Domagk (1939), Tadeusz Reichstein (1950), Konrad Emil Bloch (1964), Andrew Victor Schally (1977) and Günter Blobel (1999) were born in the territory of Poland. Although one of them — Andrew Victor Schally — was born in Vilnius, the present capital of Lithuania, it should be remembered that in the years 1922—1939 Vilnius was within the territory of the 2nd Republic of Poland as the capital of the Voivodeship of Vilnius. Moreover, his father, General Kazimierz Schally was born in Nowy Sącz and considered himself to be a Pole in spite of his Austro-Hungarian and possibly Swedish and French background. Though Schally is referred to as an American biochemist and physiologist, his Polish origin cannot be denied, especially, since apart from his place of birth, he is also known to have completed his secondary education, among others, in Warsaw.

The subject and simultaneously the aim of this study is, on the one hand, to present links joining these well-known and sometimes, surprisingly, practically unknown Nobel Prize winners with Poland and, on the other, to point to numerous objects related to them. What seems to be of least importance is the analysis of the influence which their life and work have had on the history of medicine confirming their obviously being an integral part of it.

The study will take you on a unique and fascinating journey following the footsteps of the Nobel Prize winners having Polish links.

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Evgeny Nikanorovich Pavlovsky (1884–1965) and the Zoological Institute of the Academy of Sciences of the USSR

The achievements of Evgeny Pavlovsky in the field of medical parasitology are so essential that his figure continues to attract the attention of both historians of medicine and zoology. The Zoological Institute of the Academy of Sciences (ZIN AS) of the USSR was an integral part of his life; he has been associated with it for about 4 decades. Our task is to reveal the role played by the Zoological Museum (ZM) and ZIN AS of the USSR in the life of the scientist and to understand what influence he had on the development of the Institute. Several main periods may be distinguished.

The first period (1924—1930) is the work of E.N. Pavlovsky in the "Permanent Commission for the Study of Malarial Mosquitoes." It was founded in 1924 at the ZM but remained independent as other Commissions of the Academy. Since 1895 ZM was "the central institution in the Empire for the studying of the animal kingdom, mainly of Russia." The commission included some employees from the Museum: A.A. Shtackelberg, N.V. Nasonov, A.P. Semenov-Tian-Shansky, but also people who did not work there, including non-residents. The work was based on the Museum's experience in collaboration with scientists in the provinces. A practical direction of the work of the Commission was essential for the new authorities. In the Conclusion of Figatner's Commission in 1929 it was stated that nobody tried to "modify the activities of the Museum in the direction of approaching the tasks of socialist construction". Work of the Malarial Commission partly covered this flaw: "It should be noted, however, that it is stimulated mainly by the energy of a person who does not belong to the Museum's employees: prof. E.N. Pavlovsky".

The second period (1930—1942) — E.N. Pavlovsky is a senior zoologist of the Institute, the head of the Department of Parasitology. The Commission joined the ZM, which was renamed in 1931 into the Zoological Institute during the reform of the Academy of Sciences in 1929—1934. The draft of the Regulations of the ZM in 1930 states that "there are two permanent commissions associated with the ZM: malarial and helminthological". Soon it was converted to the Department of Parasitology. In the 1930s the most important concepts of ecological parasitology were developed within the walls of the ZIN. Pavlovsky actively used the expeditionary capabilities of the academic institute: from 1928 to 1936 he took charge of more than 40 parasitological expeditions, 2/3 of them were connected with the Academy of Sciences.

The third period (1942—1962): E.N. Pavlovsky — Director of the ZIN AS USSR. The circumstances under which E.N. Pavlovsky became the director of the ZIN became known during our recent work on the history of the Institute in wartime. Before the war, S.A. Zernov, director since 1930, asked to be relieved of his duties as a director (he died in 1945). He was not immediately released due to the wartime. He wrote Pavlovsky a letter with a request to replace him. The approval took a long time, as the Presidium of the Academy of Sciences was evacuated to Kazan. In autumn 1942, Pavlovsky was appointed acting director and only on September 29, 1943 he was confirmed in this position. Thanks to Pavlovsky Tajikistan was elected as the place of the evacuation of the whole ZIN. In the 1940s—1950s the parasitology school of E.N. Pavlovsky has developed at the Zoological Institute.

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Tatiana SOROKINA

Folk and Traditional Medicine: Terminology Problems

In our days three types of medicine are known: folk healing, traditional medicine and scientific medicine. But sometimes understanding of distinctions between folk healing and traditional medicine and their nature are rather different: from the opinion that it is a distinction without a difference up to certainty that it is scientific medicine that is really 'traditional' (because it is habitual), that's why all other kinds of medicine should be refer to 'non-traditional'.

However every one of these three types of medicine has specific peculiarities — different philosophical bases and sources, methods and remedies, features of development and spreading, figures and training.

Folk healing is the earliest historically. It emerged alongside the emergence of humans. Folk healing has no any philosophical bases and includes a combination of means and methods, developed on the basis of empirical experience throughout the history of mankind. It was a collective activity of a wide range of clan members — a truly folk healing, and absorbed both rational knowledge and irrational ideas based on a distorted worldview upon powerful and incomprehensible Nature.

Folk medicine is a universal phenomenon that existed across nations and throughout all periods of mankind history. Proven over time rational methods and vast empirical experience, folk healing gave grounds for traditional medicine and, ultimately, for scientific medicine.

The concept of traditional medicine is more specific and historically younger. There are three systems of traditional medicine that have survived to the present day: Chinese, Indian (Ayurveda) and Tibetan.

Any type of traditional medicine has at its core a philosophical or religious doctrine, organically intertwined with empirical experience of folk healing of a particular ethnos. No traditional medicine is possible without a philosophical vision of man (microcosm) in the surrounding world (macrocosm). Traditional medicine develops along the lines of a well-established national tradition; it makes it stable, with little or no change throughout centuries and even millennia. This is not to say that traditional medicine is unable to spread to other parts of the world, yet it is always more effective and viable at home. Far from the cradle of ethnic tradition it may undergo certain transformation and, ultimately, is doomed to perish.

Scientific medicine rests on a scientific experiment, the one that tests empirical knowledge, scientific and philosophical ideas by means of scientific experiment, and creates experimentally verified concepts and theories.

Scientific medicine with its methods is not traditional, and not stable, — it is changeable and international. Consequently, its modern alternative (for example, zhen-jiu method) cannot be referred to as 'non-traditional' one; — it is these so-called 'non-traditional' methods (acupuncture, moxibustion, massage, hypnosis, phytotherapy, etc.) are the parts of traditional medicine.

What then is the non-traditional medicine? In the first place, it is scientific medicine. In China there are both traditional Chinese and non-traditional scientific medicine. They are taught in different medical schools, but are practiced in close interaction. Medicine in China stands today 'on its both feet'.

Fruitful interaction between folk healing, traditional and scientific medicine paves the way to more effective treatment and prevention of diseases, keeping the balance of man and the environment.

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Ivan Shuvalov and Creation of Imperial Moscow University

For many decades foundation of Moscow State University was closely connected with only one name of Mikhailo Vasilyevich Lomonosov (1711—1765); at the same time a valuable contribution to this great deed made by Ivan Ivanovich Shuvalov (1727—1797) had been absolutely fallen into oblivion.

The Imperial Moscow University (now Lomonosov Moscow State University — MSU) was established on January 25 (12), 1755 by the decree of Empress Elizaveta Petrovna (1741—1761) — the daughter of Peter the Great.

The credit for creating an idea of this University and its foundation should be given to titular chamberlain and cavalier Ivan Ivanovich Shuvalov, a philanthropist, who also founded the Academy of Arts (1757) and the Kazan Gymnasium (1760).

In 1754, while the Imperial Court was staying in Moscow, it approved Shuvalov's proposal to establish a University in this capital — 'because this city was located in the middle of the state, and because life in Moscow was cheap'.

Upon his return to St. Petersburg, Shuvalov sent Lomonosov a draft report to the Senate on the University establishment, asking for his opinion, because he 'not only saw European universities, but also studied in them for several years'. Soon Lomonosov presented to Shuvalov one and a half pages of his thoughts on the structure of the future University — three faculties (of Law, Philosophy and Medicine), 12 professors (three of them at Faculty of Medicine — professors of Chemistry, Natural history and Anatomy), and a gymnasium.

On July 19, 1754, Count Peter Ivanovich Shuvalov — Ivan Shuvalov's uncle — presented to the Senate 'a report by titular chamberlain and cavalier Ivan Ivanovich Shuvalov and his project on establishment of the University in Moscow for noblemen and commoners, and two gymnasiums — one for nobles and the other — for commoners, except for serfs …'. It was approved, and some month later — on January 12 (25), 1755 on Tatyana's name Day — Ivan Shuvalov submitted 'The decree on the establishment of Imperial Moscow University' to Empress Elizaveta Petrovna for her signature. It was a present to his mother Tatiana on her Day. Since then, St. Tatiana is the patroness of Moscow University, and January 25 is not only the birthday of the first Russian University, but also the birthday of Russian higher medical education.

The University opened its doors on April 26, 1755, in the building at the Red Square, where there used to be a pharmacy" (now the State Historical Museum is situated at that place).

Thus, the de facto founder of Moscow University was Ivan Shuvalov — the author of its project, its patron and first curator, who did a lot to organize the learning process, invite professors, create a public library, a printing house, etc. But in the XX century his role had been fallen into oblivion.

Nowadays, in recognition of Ivan Shuvalov's services, in 2005 — the year of the Moscow State University 250th anniversary, a monument was erected to him in front of the new building of the MSU Fundamental Library.

As to the Great Russian scientist Mikhailo Lomonosov, he left Moscow in December 1730, when he was 19 years old; at the period of foundation of Moscow University he lived in St. Petersburg. But he did take part in the discussions on the project of the University in Moscow (named after him only in 1940). He also did a lot for creating a structure and management system of another educational institution — St. Petersburg University (opened in 1819 — 54 years after his death).

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Medical Education at Peoples' Friendship University of Russia

Peoples' Friendship University — now Peoples' Friendship University of Russia (RUDN University) — was founded on February 5, 1960 in order to prepare specialists for developing countries of Asia, Africa and Latin America which became independent in 1950s—1960s. It had been financed by the USSR Government, and at that time it was the first and unique international University in the world.

From the very beginning Peoples' Friendship University had been created as classical University. Initially it consisted of Preparatory faculty and 6 main faculties, among them the Faculty (now Institute) of Medicine has always been the largest. In our days there are 10 faculties, 16 institutes, 14 scientific and educational centres at the University, including the University clinical and diagnostic centre.

Studding at Preparatory faculty for one academic year foreign students learned Russian language and main medico-biological subjects to be ready for medical education in Russian.

In 1960 there were 539 foreign students from 59 countries and 57 home students from different regions of the Soviet Union at Peoples' Friendship University. Among them there were 101 medical students (94 foreign from 35 countries and 7 home ones).

Year by year the University has gained world-wide recognition. By the end of 1970 the number of students increased up to 3,500 international and 500 home students; currently there are more than 33 thousand students and medical residents from 157 countries at RUDN University, including the representatives of over 500 nationalities from Asian, African, Latin American, European and North American states. They are taught by 2,800 members of the academic staff, including over 600 Doctors of Science and 1,400 PhDs, who realize 472 programs of various levels including 74 programs in foreign languages.

Institute of Medicine (IM) realizes 5 programs (Medicine, Dentistry, Pharmacy, Nursing, Economics and Management in Public Health) both in Russian and in English. It consists of 46 departments, Faculty of Medical Long Live Learning (with 42 departments) and Simulation training centre (one of the best in Russia), with over 1000 academic staff members who train over 7 thousand students and medical residents from different countries, and thousands upgrading their professional level. IM staff members develop fundamental research in

Genetics, Histology and Embryology, Chronobiology, Microbiology, study new remedies, social and tropical infectious diseases, new technology and methods of diagnostic and treatment of chronicle, surgical and oncological diseases. Medical students fulfill scientific research, present their papers at International scientific conferences, and win in sport competitions and international events in Russia and abroad.

RUDN University actively cooperates with UNESCO, and in 2010 it was awarded the UNESCO Gold Medal for its achievement in training specialists for developing countries of the world.

In our days RUDN University is a global international educational and scientific centre, well-known both in Russia and abroad. It has extensive and strong international ties with universities of more than 90 countries, and ranked among the leading universities of the world: QS WUR — 392; GreenMetric — 41; RUR — the 8th among 74 leading Russian Universities, and — the 3rd in quality of education. Over 150 thousand RUDN University alumni, including more than 6,000 PhDs and Doctors of Science, work in over 180 countries of the world.

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Anna STOCHIK

The First Woman Professor at the University of Geneva — Lina Solomonovna Stern

Lina Solomonovna Stern was born on August 26, 1878 in Libava, the Province of Courland (now Liepaja, Latvia) in a bourgeois large family. In 1898 she entered the University of Geneva (UNIGE) Medical faculty and 4 years later made her first report at the Congress of Swiss Naturalists. Her work "Study of the So-called Internal Secretion of the Kidneys" was published in 1902, and for the dissertation "Physiological Study of Ureter Contractions" (1903), she was awarded a university prize. After receiving the doctor's diploma (1903), Lina served as an assistant at the Department of Physiology, UNIGE. In 1906 she was given the title assistant professor, and in 1917 — the title professor and the position of the head of the Department of Physiological Chemistry, deliberately created for her. By that time Stern had already published 40 original works on biological oxidation and became world famous and yet her designation was unprecedented! Not only the first female professor at UNIGE, but also the first female head of a university department. Since 1904, Stern conducted joint research on oxidative processes in tissues with Federico Battelli. They discovered: dehydrogenases, catalase systems, oxidides and pnein, the interconversion of malic and fumaric acids and the appearance of citric acid, giving the start to study of tricarboxylic acid cycle, which was completely deciphered in 1937 by Hans Krebs. Stern found that such substances as curare, methyl violet, sodium ferrocyanide cause no excitation unless injected directly into the brain, they don't reach the brain from the blood stream. She reported this phenomenon at the Geneva Medical Society meeting in 1921, and was the first in the world to call "this hypothetical mechanism, which allows some substances to pass through and stop the penetration of other substances, to be a blood-brain barrier." From 1925 to 1948 L.S. Stern headed the Department of Normal Physiology of the 2nd Moscow State University. From 1926 to 1930, she headed the Department of Physiology and Biochemistry of the Medical-Biological Institute and in 1929 she became the scientific director of the Institute of Physiology of the People's Commissariat of Education (later — the USSR Academy of Sciences). She organized and headed: the Biochemical Department of the I.I. Mechnikov Institute of Infectious Diseases (1926), the Department of Age-related Physiology of the Central Research Institute Motherhood and Infancy Protection (1930—1935). In 1934, Stern became the first woman who received the title of "Merited Scientist of the RSFSR". She developed methods: electropulse therapy for ventricular

fibrillation, suboccipital administration of streptomycin in tetanus, intra-brain injection of potassium phosphate in traumatic shock. In 1939 L.S. Stern became the first woman academician of the USSR Academy of Sciences. She was a member of: the German Academy of Naturalists Leopoldin-Carolina, the Central Council of VARNITSO, the Presidium of the All-Union Society of Physiologists and others. 11/14/1944. L.S. Stern was among the first 60 academicians — founders of the USSR Academy of Medical Sciences. In 1948 she was arrested in the "case" of the Jewish Anti-Fascist Committee. In prison, she wrote a treatise on cancer. In 1960 The University of Geneva awarded her the title "Doctor Honoris Causa". L.S. Stern died on March 7, 1968 at the age of 90.

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History of Joint Replacement in Latvia

In early 1960s the ideas of joint replacement started to become real in Latvia, thanks to Viktors Kalnberzs, who was the head of Institute of Traumatology from year 1959 to 1994. The first hip replacement surgery in Latvia was completed on 10 May 1962, performed by Konstantin Sivash, well-known Soviet surgeon. In our work, we would like to demonstrate the development of joint replacement surgery in Latvia and Hospital of Traumatology and Orthopaedics.

- 4.07.1962 V. Kalnbērzs replacement of the femoral head with Smith-Petersen prosthesis.
- 21.10.1963 first unipolar Zude hip prosthesis
- 15.10.1974 V. Kalnbērzs first elbow joint replacement surgery.
- 1980 V. Kalnbērzs used bone cement.
- 1990 Latvian Institute of Traumatology and Orthopaedics in Riga received first modular prostheses.
- 28.11.1985 Ivan Gerchev (Bulgaria) first uncemented knee joint replacement in Riga.
- 11.06.1986 N. Rydell (Sweden) performed first cemented knee arthroplasty.
- 1988 Kristaps Keggi first hip replacement surgery in Riga. After that international partnership between Institute of Traumatology and Orthopaedics and Yale University (USA) was started.
- 1989 first nurses from Riga went to Yale to take participation in educational program. This collaboration for nurses and doctors continued till 2010. Programme is re-established from 2019.
- 1987 department of joint replacement surgery was founded in Latvian Institute of Traumatology and Orthopaedics. K. Kalnbērzs became a head of this department.
- 4.06.1990 V. Burdigins (Russia) first total femur replacement surgery in Latvia.
- 7.12.1994 J. Matisons first shoulder arthroplasty
- 21.12.1992 P. Studers defended first thesis about hip joint replacement in Latvia "Total hip replacement surgery technique improvement in treatment of posttraumatic and orthopaedic diseases". In 2014 his theses defended S. Zēbolds, followed by S. Zadorožnijs and V. Gončars in 2019.
- 1995 First waiting list for government paid arthroplasty surgery. One of the initiators was V. Zatlers, director of State Hospital of Traumatology and Orthopaedics.

- The period between 1997 and 1998 was very important for the history of joint replacement uprising in Latvia. Arthroplasty register was established that time. Latvian Association of Knee and Hip arthroplasty was founded by A. Lacis and K. Kalnberzs. First joint replacement surgeries were performed in other Latvian hospitals.
- International training course about knee joint replacement and its intraoperative and postoperative complications was started in 2003 by V. Zatlers.
- In 2003 first knee arthroplasty using navigation system was used in Riga 2nd Hospital.
- Since 2010 national Arthroplasty register is part of EFORT (European Foundation of National Associations of Orthopaedics and Traumatology)
- Since 2012 all arthroplasties completed in Hospital of Traumatology are registered in arthroplasty register.

Nowadays joint replacement surgery is being performed in 12 hospitals. In 2018 for the first time total amount of surgeries done per year was more than 5000. Hospital of Traumatology and Orthopaedics still is leading arthroplasty centre in country.

Arthroplasty remains one of the most effective procedures in orthopaedics and it is constantly developing. The history of modern Latvian joint replacement is being written right now and we ought to keep a track of progress. Following the changing needs, it is essential to improve our work today and tomorrow.

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Was the Donor of the First Heart Transplant Actually Brain Dead? A Contribution to the History of Brain Death Concept

More than fifty years ago, the first heart transplant performed by Christiaan Barnard in Cape Town, South Africa resulted in the re-evaluation of death and introduction of brain death concept into clinical practice. According to the common knowledge of medical history, the donor of the first heart transplant was a 25-year-old brain-dead victim of a car accident. In order to test whether the donor was actually brain dead, a careful examination of the original scientific publications and a search for additional data related to the first heart transplant was performed. The most important results of the study are as follows: a) brainstem reflexes of the donor have not been referred, though their importance had been known by Barnard; b) the donor was doubtlessly breathing spontaneously from admission until disconnection from the ventilator; c) declaration of donor's brain damage being 'lethal' could be biased; d) neither brainstem herniation nor serious brain injury indicating brain death has been described in the autopsy report; e) the donor's heart was paralysed with potassium; f) using the vital organ of a heart-beating, non-brain dead patient for transplantation is compatible with Christiaan Barnard's character and views supporting active euthanasia; g) the original medical documents are not available, despite the cult of Barnard's first heart transplant in Cape Town. Taken together, these data suggest that the donor of the world's first heart transplant was not brain dead and if so, may have died of involuntary active euthanasia.

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Forgotten People in Latvian Pharmacy — Tamāra Klimoviča

The Latvian pharmacist Tamara Klimovica (Tamāra Klimoviča, 1927—2010) was one of the key persons in Latvian pharmacy during the Soviet times and the first decade after the independence. She was born in Riga, studied in the 3rd and A. Saulietis elementary schools and in N. Draudzina 7th secondary school but later in the Faculty of Chemistry at the Latvian State University. There were two main study areas in pharmacy at that time: practical pharmacy and industrial pharmacy. Klimovica chose the practical pharmacy programme because graduates could work in pharmacies, laboratories and as forensic chemistry specialists. She graduated the Latvian State University in 1951 but got a diploma of the Riga Medical Institute because a Practical pharmacy programme became an integral part of the Riga Medical Institute (established in 1950). Her teachers, e.g., J. Maizite, E. Svirlovskis, V. Skilters were reputable pharmacists and scientists with a rich teaching and scientific experience both in Russian and European universities and different pharmaceutical institutions.

After graduation she started her work in a big on-call pharmacy No 139 in Jelgava. (During Soviet times all pharmacies had numbers) At that time the General Pharmacy administration (GAP) had 4 local departments in Riga, Cesis (later merged with Riga department), Daugavpils and Liepaja and these departments did inventories in pharmacies and other pharmaceutical companies. Klimovica became an inspector at the Riga department in 1952. In 1954 she became a senior inspector, a deputy director in 1956 and a director of the GAP in 1961. She held this position till 1992 (at that time the GAP was reorganised into the republican company "Pharmacy".

Both in that times and after the restoration of independence of the Republic of medicines shortages were essential problem. Even essential medications were centrally received only once a year. Klimovica was excellent manager and this talent helped her solve medication shortages problem at least partly. There was a big medication shortage in the begging of 1990s that was partly because of Yeltsin's embargo. Latvia could not receive medications from the Russia and had also very limited financial resources. Klimovica together with the Minister of Welfare T. Enins and the first President of the restored Latvian Medical Association I.Krastins with a help of Latvian Physician and Dentist association and the Latvian Medicine Fund went to Canada and the USA to meet representatives of governments, Wold Bank, pharmaceutical companies, "Project Hope". There was

also Latvian exiles financial support and finally Latvia could solve medication shortages problem at least partly.

According to memories of pharmacists who worked with Klimovica she was firm but fair, never humiliated a pharmacist in the presence of others but talked individually and always kept high pharmacy standards asking the same from other pharmacy specialists. During the Barricades in 1991 she supported declared restoration of independence of Latvia from the Soviet Union. From 1992—2004 she worked in the pharmaceutical company Schering. She has received "Life-long achievements in pharmacy" award in 2003 (Pharmacists' Society of Latvia) and several awards during Soviet period.

Although she was an essential person in Latvian pharmacy there is very limited information left about her life and work both in the Latvian Archive and the Pauls Stradins Museum for History of Medicine as well as in the press.

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The Institutional Pasts of Photographs by Paulis Cīrulis (1917—1991)

The Rīga Stradiņš University (RSU) History Museum houses the significant holdings of Paulis Cīrulis (1917—1991), a long-standing photographer of the Riga Medicine Institute (RMI, currrently RSU) and the head of the RMI's Laboratory of Photography and Cinematography. Additionally, by the end of the 1950-s — for more than 30 years, he worked as a staff photographer for Padomju Mediķis [Soviet Doctor], an official newspaper of the RMI. The Museum's holdings of the roughly 100,000 works by Paulis Cīrulis constitute an important part of visual testimonies of the history of the Latvian academic medicine under the Soviet rule.

Mostly the institutional framework was decisive and directive and a photographer had to succumb to the communist doctrine as Soviet-photography was more often considered an instrument of politics. Apart from education and research process images, significant photographic efforts were directed at documenting the activities of RMI amateur societies and sports teams, as well as various institutional daily life traditions and public celebrations. The visual paradigm, concerned with progress and innovation, projected its subjects into the future. Photographs operated not only simply with its visual content but were entangled in a system of obligations and values. For instance, so-called a wall nespaper or placard newspapers were used as a means of dissemination official state information and in this context photographs were instrumentalized as efficient vehicles for propaganda. These remnants of the past certainly cannot be condemned as worthless now that they are stripped of their original context and function. Because of its subjection to communist ideology, the visual heritage of the Soviet period is still subject of current heated political debate.

Recently there has been a movement to create a new type of heritage studies, regarding the socialist era Baristaitè and Lukošiūtė (2002) suggest the term 'a complex matter', that seeks to discuss questions of legacy and reception, how a society deals with the physical reminders of the complicated past of socialism. Working with photogrphs by Paulis Cīrulis the Soviet social and political implications are present. How the Museum shall conceptualise the study of the past and its role in the present? How the Museum shall deal with the Soviet heritage and tell the story to contemporary audience? By examining the Paulis Cīrulis collection, this paper discusses new strategies on ways of dealing with the Soviet heritage embracing innovative museological, educational and artistic practices.

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Borys TKACH

Podilsky Doctors Society — One of the First Scientific Medical Societies on the Territory of Ukraine

The activities of medical societies that emerged in the middle of the nineteenth century in the large university cities of the Russian Empire, are sufficiently covered in many writings of historians of medicine, not to mention the societies of physicians of peripheral cities, namely the Society of Podillian Doctors, which played a large role in the development of the medi- the western part of the empire.

According to the charter, the Society took care of monitoring the development of medical sciences and putting their achievements into practice, studying and improving the sanitary and hygienic condition of the Podilskyi province, creating a professional library and medical museum, providing financial assistance to doctors who have lost their lives health with deterioration of health, publishing activities for the publication of scientific and popular works. Taking care of the public good, the members of the Society adopted a program of medical and topographic surveillance in the region.

The main printed organ of the Society were the annuals of scientific works "Materials to the Topography and Medical Statistics of Podillya", 5 volumes of which were published in Polish in Warsaw in 1860—1865. These editions present articles, intelligence and reports, documents on the history of the region's medicine, about the struggle of local doctors from the Middle Ages with the plague, cholera, tuberculosis, about the everyday conditions of poverty at different times, etc.

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Stepan Rudansky – the Great Poet, Doctor and Humanist

The article deals with the life and creative journey of the famous poet, doctor and humanist Stepan Rudansky, who became the first full-time doctor of Yalta county, founder of Yalta city hospital, medical library and started a spa business in Crimea.

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Maie TOOMSALU

Friedrich Bidder

Georg Friedrich Karl Heinrich Bidder was born on 28 October (9 November NS) 1819 at the manor of Treppenhof in Livonia (Vipe village on the right bank of the Daugava River, Jekabils district, Latvia) as the son of a bailiff. In 1828 took up studies of medicine at the University of Tartu (Dorpat). He graduated from the Faculty of Medicine on 24 (12) April 1834 with a doctoral dissertation on obstetrics, Graviditatis vi medicatice. On application by the University, the Emperor allowed him to remain at the service of the Faculty of Medicine, and he was sent to continue his education abroad.. The results of studies of nerve anastomoses of the head were summed up in Tartu (Dorpat) in 1836 under the title Neurologische Beobachtungen (Käbin, 1982, p.40). After his return from abroad, he was employed as a prosector. In 1836 he became Professor Extraordinary and in 1842 Professor in Ordinary of Anatomy — this means Head of the Department of Anatomy. Bidder was Head of the joint Department of Physiology and Pathology and from 1860—1869 of the independent Department of Physiology.F. Bidder's first research papers dealt with the histophysiology of the retina and the functional significance of the cones (1839, 1841). In 1842 F. Bidder published jointly with A. W. Volkmann, and thereafter independently, his results of sympathetic nervous system research, which morphologically and experimentally confirmed its functional autonomy and introduced the concept of the neuron. In 1847 F. Bidder proved the integrity of the ganglion cell and the berve fibre in the sympathetic nervous system. He was put forward to the authorities of the Russian Empire for a prize.

In 1857 F. Bidder and C. v. Kupffer generalised the results of embryogenetic studies of structural elements of the spinal cord. In their numerous morphophysiological studies on the unity of structure and function established the embryogenesis, structure and function of the vegetative nervous system, cytoarchitectonics of the spinal cord, laid foundation to the concept of neuroglia (first describred by R. Virchow), differentiated between the ganglion cells, introduced the concept of the neuron. The Paris Academy of Science awarded the authors the Montioni Prize.

In these years F. Bidder also published the results of his research in lymph circulation, diuresis, innervation of blood vessels and several other areas of physiology. In 1846 they resulted in the discovery and description of "Bidder's organ" in amphibians' secretory system and in 1852 in the discovery of a complex of ganglion cells in frog's heart on the border between the atrium and the ventricle, which became known as Bidder's knot. Particularly important among F. Bidder's

papers are those on the role of digestive juices in metabolism. Digestive juices and Metabolism (1852). In an extremely interesting experiment F. Bidder and C. Schmidt introduced in dogs' stomachs hollow sounds through which gastric juice could flow out. During meals the amount of gastric juice increased. Then, however, an original change was made in the experiments: instead of feeding the dogs, food was only placed in their range of vision. The amount of gastric juice increased even then. This led to the discovery of the psychomotor reaction. Bidder's student Philip Ovsyannikov later was, the teacher of Ivan Pavlov, who understood the importance of the experiments carried out in Tartu (Dorpat). F. Bidder died on 10 August (22 August NS) 1894 in Tartu (Dorpat).

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Jean-Pierre TRICOT

C. de Duve, Nobel Prize Winner in 1974 and Other Nobel Prize Winners

Christian de Duve (1917—2013) shared in 1974 the Nobel Prize for Physiology and Medicine (NPPM) with the Americans Albert Claude and Georges Palade, for their discoveries concerning the structural and functional organizations of the cell".

De Duve graduated as MD in 1941, obtained his PhD in 1945 and became master in chemistry in 1946. He was appointed as professor of biochemistry in Louvain in 1955 and at the Rockefeller universty of New-York in 1962.

Until the beginning of the fifties his research work was concetrated upon insulin (the hepatic action of insulin) and glucose (re-)discovery of glucagon. His first papers were published in the ,Archives internationales de pharmacodynamie et therapie, edited by the 1938 winner of the NPPM C. Heymans.

He was able to realize some important research thanks to his specific skills at analyzing the action of insulin, at purifying penicillin, at rediscovering glucagon and last but not least at discovering some new intracellular partcles; the digestive bodies he called lysosomes and peroxisomes.

During his whole career de Duve kept in touch with a lot of winners of the NPPM: he trained in biochemistry in the labs of Carl and Gerty Cori, Earl Sutherland and Hugo Theorel. and at the Rockefeller university he worked together with the American Albert Claude also withe the American of Romanian origin Georges Palade.

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The 1st Congress of Healing Art (1920) and the Foundation of the ISHM

It was only from 1870 on that in the world the first chair for the History of Medicine was created in Paris. THerafter, at the end of the 19° centry, a lot of medico-historical treatises were published in Europe and in the USA.

From 1900 on several national societies for the History of Medicine were founded in Europe. During the 27° International Congress of Medicine in London in 1913 a motion was carried by famous medical historians, prof. Wellcome (GB), prof Südhoff (D) and prof Wickersheimer (F) with the wish to set up an International Federation of all this societies and in 1914 (the 400th anniversary of the birth of Vesalius) an analogous proposal was adopted. All this efforts were interrupted by the first World War.

In 1919 prof Blanchard from Paris and prof Tricot-Royer from Antwerp united their endeavours to create an International Society. Unfortunately Blanchard died during the same year. A first International Congress for Healing Art was held in the Medical House of Antwerp in 1920 without specific topics, but with 191 participants from 10 different countries attended it. At this event Tricot-Royer obtained the support from the French professors Jeanselme and Ménétrier to create officially the International Society for the History of Medicine the followingh year at the second congress in Paris in 1921. Tricot-Royer became the first president of the new society.

During the first years there was some reticence to accept German members, but in1925 prof Südhoff became the first German member. Very famous names during the first years of the existence of the ISHM were, beside the founding members, the Italian prof Giordano, the Romanian prof Gomoiu and the two first French general secretaries, prof Laignel Lavastine and prof Guiart.

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Yesim Isil ULMAN

A Short and Familiar History Artificial Intelligence, a Historical Perspective into Bioethics

Artificial Intelligence (AI) means replication of human cognition and intelligence with computer systems, resulting in machines that can do things that require a specific form of intelligence, like the ability to perceive and represent changes in their environment and to plan its functioning accordingly (UNESCO COMEST Robotics, 2017:4). This has inspired benefiting from AI for preventive, diagnostic, prognostic and surveillance in medicine. It has also potential to be used in detection of disease, management of chronic conditions, delivery of health services, drug discovery, and so on.

However the use of AI in medicine has got to answer who is responsible, how to validate AI outputs in decision-making difficulties, what inherent biases might be in the data used, how to ensure the protection of sensitive data, how to secure public trust in the development and use of AI technology, sense of dignity and social isolation in care situations, what roles and skill-requirements are needed, what about the malicious uses, and the like (Nuffield Council, AI&Healthcare, 2018). This issue brings on the need in setting up AI in medicine based on ethical principles with regards to transparency and compatibility with the public interest, while stimulating and driving innovative scientific technology.

Although there have been groundbreaking achievements in the implementation of artificially intelligent system into medical and scientific use recently, the search of humans for automated systems has a long journey back into the past. This paper aims to have a look at the short, but familiar history of AI as well as considering ethical principles and values in this context in view of its benefit to mankind through a historical perspective into bioethics.

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Concerning the History of Teaching Medical Police at Ukrainian Universities in the First Half of the 19th Century

The Universities of that time functioned in accordance with the charters. The Charter of the Imperial Kharkov University was approved in 1804. Each Professor had to read several major (compulsory) academic disciplines. Among those academic disciplines there was no medical police. At the same time, Universities could introduce additional teaching subjects. If there was no Professor, a lecture was entrusted to adjuncts. The University opening in Kharkov took place in 1805. From the same year, the adjunct L. Vannoti (1771—1819) announced lecturing not only in the main subjects of teaching — in anatomy, physiology, forensic medicine, but also in additional academic discipline, namely medical police. However, in 1805—1808 there was not a single student. In 1809—1810 there were only two students at the Faculty of Medicine, and finally in 1811—9. Since 1811, the same subjects were taught by Professor Ivan Dmitriyevich Knigin (1773—1830), from 1826 to 1835 Professor Alexander Savvich Venediktov (1799—1882), in 1835—1837 adjunct Ivan Fedorovich Leonov (1809—1854). In 1835, a new Charter was adopted and entered into force in 1837. The Charter provided for medical police teaching as the main discipline. In 1837—1843, baron, Professor Robert Dabelow (1810—?) lectured on medical police, in 1844 — adjunct Ivan Afanasyevich Sviridov.

The Imperial University of St. Vladimir in Kiev, where the medical faculty was opened in 1841 was the second University in Ukraine with a medical faculty. The Charter of the University was adopted in 1842. It provided for teaching medical police as a compulsory (main) academic discipline. Professor Ivan Fedorovich Leonov was the first teacher of medical police in 1842—1853.

Thus, with the beginning of the functioning of the medical faculty in Kharkov in 1805, the medical police became the subject of teaching, but as an additional discipline. Only since 1837 it was part of the main academic disciplines at the Imperial Kharkov University. At the University of Kiev, medical police have been one of the main subjects of teaching since 1842. The teachers of the medical police in Ukraine in the first half of the 19th century are listed above for the first time.

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Development of Professional Rehabilitation Training System in Latvia

When Latvia regained its independence, significant changes were made to the Latvian health care system, especially to rehabilitation sector — a system of medical rehabilitation services was established instead of sanatorium / health resort treatment. The most important of these changes was the provision of professional training for the main occupations of rehabilitation service providers and the specialization of doctors in rehabilitation. From 1993 to 2000 Rīga Stradiņš University (RSU) prepared and accredited study programs in physiotherapy (1993), occupational therapy (1995), prosthetic / orthotic (1997), audio and spech therapy (1998). Between 1995 and 1996, a modified residency training for rehabilitation doctors was organized and, since 1997, social workers have been trained at RSU.

It is important to mention the establishment of the Faculty of Rehabilitation at RSU in 1995, additional qualification program of graduates of Latvian Academy of Sports Medicine in 1996—1997, as well as joint project of NRC Vaivari, Daugavpils City Council, Daugavpils Regional Hospital and RSU in Daugavpils, that created physiotherapy programs in Daugavpils.

Consequently, after the restoration of independence, during the first ten years study programs were prepared in all the major professions required for the provision of multiprofessional rehabilitation services.

In addition, the professional activities of these rehabilitation professionals in health care have also created a steady demand for rehabilitation services from other medical professionals and the general public.

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Development of Physical and Rehabilitation Medicine Doctors Specialty in Latvia

In the field of rehabilitation, the two main strategic directions for reducing the functional limitations caused by diseases are rehabilitative and currative. Most direct work with patients through thrapys in the rehabilitation process is provided by therapists of various professions, the rehabilitation doctor plays an important role in providing internal coordination of the rehabilitation process, responsible for diagnostics, invasive procedures, pharmacotherapy, and overall responsibility for outcomes.

Until the restoration of independence the specialty of rehabilitation doctor did not exist and when starting to organize the Latvian rehabilitation services system, the health care system faced a significant shortage of physicians with the necessary qualifications.

An important step was the creation of a modified residency in rehabilitation in 1995—1996 with the assistance of Andrejs Kiršteins and Ēriks Puriņš, a Latvian rehabilitation doctors living in the United States. It is also noteworthy the long-standing refusal of physical medicine physicians to include in the rehabilitation specialty.

However, significant changes in the specialty of rehabilitation physicians are related to Latvia's inclusion in the Physical and Rehabilitation Medicine Section of the European Union of Specialized Medical Societies and Board (UEMS PRM Section & Board) since 2001 — Aivars Vētra and Anita Vētra. RSU Doctor Honoris Causa Prof. Črt Marinček from Slovenia played a major role in this initiative and also assisted her colleagues from Lithuania and Estonia in this field. Being a member of this association has made it possible to significantly change the only residency program for rehabilitation doctors in Latvia according to the Europen Training Requirements (ETR) requirements, to certify NRC Vaivari as a European training center and to offer new doctors.

Currently, preparation of Latvian Physical and Rehabilitation Medicine doctors in the RSU residency program meets all requirements of ETR. The main training bases are NRC Vaivari, Riga Eastern Clinical University Hospital and Children's Clinical University Hospital.

PRM medical services are mainly available in Riga, Jurmala, Jelgava, Valmiera, Liepaja and Ventspils, but in Latgale and many places outside the major cities, the availability of PRM medical services is problematic. The high average age of PRM physicians in Latvia is also a concern. The prolonged transition from

the USSR period to the independent state of Latvia as a European Union state rehabilitation system has also caused a break in research and training of academic physicians, and during the last twenty years only four rehabilitation specialists have received a doctor's degree in medicine.

Consequently, Latvia's involvement in the UEMS PRM Board & Section has significantly changed the training of rehabilitation physicians and is in line with ETR requirements, but significant improvements are needed in the organization of PRM physicians' work to ensure greater accessibility and more focus on research activities.

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Carlos VIESCA-TREVIÑO

Galen Concepts on the Ars Medica

Ars Medica or techné iatriké constitutes the most powerful historical personification of Medicine conceived in the Greco Roman world. It is also an irrefutable fact that Galen represents the ultimate achievement of medical knowledge and reflective thinking on what is the essence of medicine in this same period. Among the Galen books there are a group, as are the Ars Medicinalis, the Protreptico, the De constitutione de artis medicae ad Patrofilum, dedicated to discuss and determine what is the very essence of medicine.

Medicine is considered as an art, and not only a speculative discipline, it needs to pass from theory to act and in this way constitutes a creative art and also has a telos, a finality, which is the knowledge of man as healthy, as sick and as neutral, but also iside the limits of nature (physis). Then, medicine needs know not only the human body and its functions, but its possibilities for the enhacement of its nature, for the preservation of health and for the treatment and cure of its illnesses. Medicine is a techné, an ars. And these terms implies a theoretical dimension, a practical involvement and the knowledge of why to do this or that,

In this paper, We expose the main Galen concepts on the constitution and characteristics of the Art of Medicine, its Hippocratic inheritance and the symbolic importance of this.

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Michael WILING, Nils HANSSON

Excellence in Pharmacology with a Focus on International Prizes, 1900–2020

The word excellence is omnipresent in medicine, but how is it defined? Scientists have developed different scientometrical approaches to measure it, for instance by calculating impact factors for scientific journals or the Hirsch indices for individual researchers. Such numbers play roles in the scientific community. The public, however, is more interested in scientific awards. With an emphasis on the Nobel Prize, this talk critically discusses prizes as a parameter for excellence. How is excellence and prestige in medicine defined and produced in a Nobel Prize context? And more in general: What are the motives and functions of prizes?

Drawing on sources from the Nobel Prize archive (categories physiology or medicine and chemistry) and secondary literature, we will go beyond the Nobel laureates and pinpoint nominees and nominators in pharmacology to explore the networks behind the prize. In the last part of the presentation, we will go beyond the Nobel Prize and present first prize pattern results from studies of other major prizes in pharmacology from the 1950s onward.

Pharmacology occupies a special position in Baltic history and Nobel history. The Baltics were central to the development of pharmacology: the first laboratory for experimental pharmacology was founded in Dorpat (now Tartu) in Estonia in 1860. In Nobel Prize history, pharmacology is important not only because pharmacologists, compared to other medical disciplines, are overrepresented among the laureates, but also because of the large number of nominees in the field. We found that pharmacologists or scientists with strong ties to pharmacology focus accounted for 314 of the 5110 nominations in the category Physiology or Medicine from 1901 to 1953. The laureates and nominees in pharmacology is in terms of age (50+), gender (predominantly male), and nationality (European/ North America) similar to the entire "Nobel population". A prominent scholar in this group is John Jacob Abel (1857—1938), nominated 17 times in the category Medicine and six times for the Nobel Prize in Chemistry. Educated by Oswald Schmiedeberg in Strasbourg, Abel established the department of pharmacology at the Johns Hopkins University in 1893. Due to his influence in the field in the United States, he is repeatedly referred to as the "father of American pharmacology".

Prizes play a central role in boosting the scientific reputation of individual researchers. They enable us to reconstruct and analyze trends in pharmacology and medicine over time. Looking back at the now almost one hundred and

twenty-year history of the Nobel Prize, it can be seen that the Nobel Prize in physiology or medicine is mainly awarded for basic research. Here, pharmacology occupies a special position, partly because it was established a few years before the first award ceremony in 1901, partly because pharmacologists were strongly active in the field of basic research, but also on a clinical level. In conclusion, pharmacologists were presented in Nobel nominations as already highly respected scientists with a comprehensive reputation and at the same time as broad-based innovators in a new research area, who both had a fundamental effect but were also pioneering through individual achievements.

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Yiwei YAN

In the End it was Infection: Opthalmologic Diseases at Early Missionary Hospitals in China

From the mid-19th century onward, some mission boards of protestant churches in Europe and the United States began to set up hospitals in China. Despite their small size and limited resources, these hospitals managed to carry on and attract more and more Chinese patients. A major part of patients were those who suffered from eye conditions, particularly so in the early stage of the missionary undertakings. Using the diseases statistics in the hospital annual reports, this paper counts the proportion of ophthalmologic patients in the clinics and the percentage of the most common eye disorders, with the results shown in the form of tables and charts. Analysis shows that eye illnesses then were mostly infectious diseases, including "ophthalmia", conjunctivitis, trachoma, and leucoma and opacity of the cornea. Blindness was frequently caused by trachoma and the ophthalmic symptoms of smallpox, syphilis, tuberculosis and gonorrhea. The rampage of such diseases was a consequence of low living standards and a severe lack of medical resources.

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Giorgio ZANCHIN

Lancet and Art. Antonio Scarpa (1752–1832) Scientist and Aesthete

Pupil of Morgagni, Scarpa graduated in Padua and was professor of Anatomy and Surgery in Modena and later Pavia. A brilliant surgeon, he was also a prominent and successful scientist, as attested by eponyms such as Scarpa's foramina; Scarpa's ganglion; Scarpa's triangle. Among his works we remember De structura fenestrae rotundae auris (1772), Memoria chirurgica sui piedi torti congeniti (1803), Sull' aneurisma.. (1804), Sull' ernie (1809). Of specific interest to neurology are Anatomicae disquisitiones de auditu et olfactu (1789), recounting the discovery of the ganglion of the vestibular nerve, and the Tabulae neurologicae (1794), a scientific treatise accompanied with highly precise yet aesthetically elegant engravings. The beauty of these offers us a glimpse of Scarpa's complex personality, a man of difficult temperament, bordering on misanthropic. His biographer Monti described him thus: "This great, severe old man with a magnetic gaze, who gave no confidence to anyone, .. who worked quickly and was insensitive to the cries of his patients.. was as indecipherable as the Sphinx, cold as death, and relentless as fate." Yet he nearly compensated for his coarse character harboring a deep artistic sensibility, which his biographer likes to trace to his birthplace: "... his innate good taste, a frequent trait of people from the Veneto, where every small place is rich with artistic treasure, ...made him into a great connoisseur of the arts ...". And that is how the steely surgeon turned out to be a refined collector who over the years, as he himself put it, acquired a "collection of paintings from the greatest Masters of all the Italian schools", including the famous Saint Sebastian of Mantegna. We will revisit the figure of Antonio Scarpa, scientist and aesthete.

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Uldis ZARINS

Écorché. Anatomical Body Models in Medical and Art Education Throughout the Centuries

What is an écorché? An écorché is a human or animal depiction stripped of its skin. The skinned figure, usually in the form of a plaster cast, wax or marble sculpture, allows studying the arrangement and shape of muscles, veins, and joints.

While there are écorchés of animals, especially of skinned horses, the great majority of écorchés are depictions of the human male figure. Their creation often resulted from collaborations between doctors and artists. The figures are usually shown in animated poses to express muscle tension and often include decorative elements such as columns, plinths, and pedestals.

The first écorchés appeared in the Renaissance period, essentially as drawings and chalk sketches made by authors like Michelangelo and Leonardo Da Vinci. However, the popularity and widespread use of these anatomical figures came later at the end of the 18th and throughout the 19th century. In this period of rapid scientific development in Europe, écorchés became compulsory tools in artistic training.

Previously, they were considered more like art chamber pieces (much like the human skull at that time) with an added dimension of *memento mori*, the reminder of everyone's unavoidable death. Along with antique book collections, an écorché was an additional symbol of an educated person – you would occasionally see one in their studies.

The esthetical depiction was as significant as anatomical precision, with compositions often becoming idealized or even canonical. It was a time of Neo-classicism, the movement in the arts that drew its inspiration from the Classical art and culture of Ancient Greece and Rome. It was a rather complex task to render the correct anatomy and at the same time not to be too naturalistic and lose the esthetic dimension.

By looking at various écorché examples, we will see how the tradition of representation has developed over time. What is the place of écorché today? Professionals from seemingly unconnected fields such as medicine and visual arts may look at écorché from entirely different angles. In my view, écorché is an excellent example of a multidisciplinary phenomenon.

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Daqing ZHANG

A Study on the Manchu Anatomy and its Original Translation Manuscripts

The article compares the Manchu Anatomy with its original manuscripts, Thomas Bartholin's Neu-verbesserte kunstliche zerlegung des menschlichen (1677), and Dionis'L'Anatomie de l'Homme, which are kept in the medical library of Peking University. Both of original manuscripts were collected by Bao Jianqing in Denmark, 1936. When he was visiting Copenhagen University, Professor Asmussen, a professor of physiology at the university of Copenhagen, sent him a photocopy of "Manchu Anatomy". Professor Bao, as an anatomist, did never know the Manchu Anatomy, and decided to research its original translation manuscripts. Prof. Bao graduated from Beijing Medical College in 1917. In 1920, he has studied in the institute of biology at the university of Berlin, the institute of biology at the Wilhelm institute in Berlin, and the institute of physiology and biology at the national university of Denmark. From 1936 to 1945, he was the dean of Peking University Medical School, and wrote the Outline of Histology and Embryology. Prof. Bao published a paper on the comparing the Dionis and Bartholin's anatomy with the Manchu Anatomy in the Bulletin of Anatomy (Chinses) in 1962. Based on the research of Prof. Bao and other researchers, the paper compares the different versions of the Manchu Anatomy and the anatomy of Dionis and Bartholin and find also compares the of the complete records of the imperial case, and finds that the different versions Manchu Anatomy have obvious differences from title to content. This paper holds that the study of different versions is helpful for us to understand the circulation and influence of the Manchu Anatomy.

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Jinbo ZHAO

The Nobel Prize of Lobotomy — What Were We Correcting?

Today we are required not to discriminate against psychotic. But throughout history the public had rejected them subjectively. From ancient time due to the shallow understanding, psychotics were seen as demon invaded then got executed such as witch hunt at middle age. Until 18th century inspired by Phrenology and natural sciences people finally understood that the brain is the center of consciousness, treated psychotic more rationally by imprisoning. Into the contemporary era industrial revolution has brought technological advancement, people initially used opioid drugs stabilizing psychotic with ineffective outcome. At 1935, John Fulton's report confirms removing anterior lobes of chimpanzees can achieve good calming effect, António Moniz put the theory into practice on humans then invented lobotomy, It won the Nobel Prize in 1949. In 1945 Dr. Freeman refined this operation and invented ice-pick lobotomy, which easier and more widespread in the world. Till 1950, chlorpromazine leaded antipsychotics entered s new drugs using era. Also due to its severe side effects, lobotomy clearly lost market quickly. At end of 20th century lobotomy officially stepped down from the stage of history.

Today, mainstream public opinion mostly think lobotomy not only destroyed human brain but also its soul. But at history, mental illness also destroyed countless families. Psychotics can't fulfill their obligations as a citizen, or even disturb the social order, thus treated differently. People's inherent fear causes the psychotics to be arrested and their family consider them a burden. The emergence of Lobotomy reflects the courage and exploration of humans to overcome disease, and at the same time brings hope to those psychotics. But when increasing the number of patients undergoing surgery, this operation with congenital deficiency and lack of complete scientific cognition exposed all its shortcomings in the spotlight. Although it corrected the patient's social ability, it deprived the patients of his right to vent their emotions. As for the side effects of surgery, it was not until 1960 that the hospital had a legal obligation to warn patients what they might lose through surgery. Dr. Moniz was awarded the Nobel Prize for sympathizing with patients and coming up with a solution for mental surgery. Then what made it controversial was that people at the time regarded it as a way to elimination of different individuals.

The popularity of Lobotomy has historical necessity. As the level of scientific research in related fields is still in its infancy, scholars blindly worship

authority and ignore opposition. The capitalist economic crisis of 1929—1933 was originally a natural habitat for extreme thought. The WWII created psychotics and overwhelmed their own medical systems. Lobotomy has even been politicized, and it has become the embodiment of the race between U.S. and USSR to penetrate the academic world in the early Cold War. But the root cause is the fear of human when facing unknown, greater focus on problem-solving outcomes, less collateral damage. In correcting the social behavior of psychotics, deprived of their physical emotional rights.

This Nobel Prize is two-sided, not only the positive and negative sides, but also the natural science and social science sides. We not only see its contribution to neurosurgery development, but also that it has caused philosophical thinking about the trade-offs between patient rights, efficacy and side effects.

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Zetao ZOU

Integration, Adaptation And Modernization: Jiang Ivceng with the Earliest Design of Medical University in Modern China

By analyzing the design plan of Jiang Lvceng (蔣履曾?-?) and his medical university, this paper intends to present the reform prospect of medical education under the influence of social and medical modernization in China and even the whole east Asian world. In the discussion of this paper, we will not only see the familiar "China's response to the west" narrative, but also realize the diversification and long-term transformation of medical education in modern China, as well as its deep integration with political change, medical tradition and social network.

Jiang studied surgery at Kyoto medical university for seven years. Like other Chinese medical students studying abroad in the late Qing dynasty, Jiang was soon recognized by the government for his outstanding professional qualifications and status as an overseas student, and directly participated in the core work of the transformation of modern Chinese medical system. In 1907, Jiang was appointed as the health officer of the Jingshi university(京師大學堂), the earliest university in China and the highest institution in China at that time, which inspired him to reform medical education in China.

But passion alone is not enough to build a successful medical university. Jiang was fortunate enough to meet sheng Xuanhuai (盛宣懷1844—1916), one of modern China's most prominent commercial bureaucrats. Sheng Xuanhuai trusted Jiang very much, and they exchanged views on setting up charity hospitals and developing medical education frequently.

In 1910, Jiang submitted to Sheng Xuanhuai a 80-page document entitled "measures for the establishment of a medical university in China" (《謹擬醫科大學辦法》), which systematically elaborated his plan for the establishment of the first medical university in China based on years of accumulation of medical studies in Japan and observation of the progress of medical education in various countries. Methods for the preparation of medical university is a manuscript of Jiang, which is only one copy in existence. It is in the personal archives of Sheng Xuanhuai in Shanghai library. Previous scholars, unable to see the precious manuscript, knew nothing about Jiang and his medical university design. But in fact it is a can not be ignored important Medical education program: it is not only the earliest offered to give up the relatively low levels of "Medical College" and to build a high level "Medical

University", as well as from its purpose, to personnel training, equipment management, and other aspects completed for the Medical University of comprehensive construction.

After reading Jiang's method of constructing a medical university, we can clearly see that Jiang's medical education experience and his medical ideas have deeply influenced the educational orientation of this medical university. In conclusion, there are three key words in the design of this medical university: integration, adaptation and modernization. This paper will focus on these three key words and observe the history of medical education transformation in China from Jiang's case.

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Alexander ZUBRITSKY

Boris Fyodorovich Malyshev — a Well-known Kyrgyz Pathologist (09.06.1892—04.07.1966)

B. F. Malyshev was born in St. Petersburg in a noble family. Mother: E. A. Malysheva came from the Smirnov-Bashkirov family, who tragically died in a fire in St. Petersburg in July 1908 and was buried in the village of Kostroni. Father: F. S. Malyshev, who came from a merchant family, banker-shareholder, passionate bibliophile, owner of a collection of ancient icons and engravings. There were 8 children in the family, including Boris. His sister Nina (1897—1991) graduated from the Women's Medical Institute in St. Petersburg and in 1923 married a Latvian surgeon, oncologist, and the future academician and founder of the Museum of the History of Medicine in Riga P. I. Stradyn (1896—1958), who later raised four children. In 1910 Boris graduated from the gymnasium with a gold medal and in the same year entered the Medical and Surgical Academy, from which after 2 courses he was expelled for participation in student unrest, and in 1913 entered the 3rd course of the medical faculty of the Dorpat University, which graduated with a gold medal in German in 1915. The life of B.F. Malyshev regarding his career is complex and contradictory due to the different interpretation of the facts. In 1915 he volunteered to be sent to the front zauryad-doctor, and in 1916 gets into German captivity, but he miraculously manages to escape from captivity and, when returned to Russia, got a job as a privat-docent at the Department of Pathology of the Medical Faculty of Kharkov University. In 1919, under Tsaritsyn he switched to the side of whites and served as a doctor in Wrangel's army. According to other sources, he served in the Red Army from 1919 to 1922. In 1935 he was awarded the degree of Candidate of Medical Sciences in the totality of scientific works without defending a dissertation. After the murder of S.M. Kirov, he and his family in the spring of 1935 were sent for 5 years from Leningrad to the Karaganda correctional and labor camp (Atbasar village, Karaganda region). After his deportation to the city of Frunze, he for the first time in the Republic organized pathological and anatomical and forensic medical services, and from 1941 to 1966 is as the Head of the Pathology Department of the Kyrgyz State Medical Institute, and concurrently the Head of the Pathology Department of the Frunze Clinical Hospital. His research interests were pathoanatomic studies of goiter, silicosis, echinococcosis, tuberculosis, neoplasms, diseases of the cardiovascular system, infectious diseases of humans and animals, gynecological diseases, diseases of the blood, nervous system, bone pathology, shock conditions, and others. He was distinguished by such remarkable features of the Russian intelligentsia as infinite kindness, modesty, generosity, attention

to people, the desire to help everyone — the door was never closed to his office, he had an unusually deep and extensive knowledge, amazing efficiency, personal charm, brilliantly lectured, was very punctual: he always came to work at the same time. In 1962, he was awarded the title of professor without defending a doctoral dissertation for successes in the development of medical science and in honor of his 70th birthday, and in 1965 he was rehabilitated. Among his interests and hobbies, he was fond of floriculture and theater. He died in Frunze (now Bishkek) at the age of 74 from an acute, extensive myocardial infarction and was buried in the Northern cemetery of Bishkek.

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Alexander ZUBRITSKY

Nikolai Nikolaevich Anichkov — the Largest Russian Pathologist, Scientist and Educator (03.11.1885—07.12.1964)

It is intended to collect and systematize biographical data on Professor N. N. Anichkov in accordance with the questionnaire I have developed. Born in St. Petersburg in the family of the Director of the gymnasium. Nikolai graduated from the 3rd classical gymnasium and the Imperial Military Medical Academy (IMMA) with gold medals. While studying at the IMMA, Nikolai showed a penchant for research activities. In 1912, he defended his dissertation for a doctor's degree in medicine on the topic "On inflammatory changes in the myocardium (to the study of myocarditis)," for which he was awarded the M. Rudnev Prize by the Society of Russian Doctors. During the war in 1914—17, he served as a senior doctor of the field military sanitary train. In 1920—64 — Head of the Pathology Department at the Institute of Experimental Medicine. From 1946 to 1952 — President of the AMS of the USSR. N. N. Anichkov's main scientific interests were military pathology and medicine, various types of hypoxia, the study of diseases of the cardiovascular system, reticuloendothelial system and autogenic infections, the pathogenesis of atherosclerosis, metabolic pathology, oncomorphology and pathomorphology of the nervous system in infections. He first described the specialized myohistiocytic myocardial cells, later called "Anichkov cells", involved in the construction of rheumatic granuloma. He discovered the leading importance of lipids, mainly cholesterol, in the morphological and pathogenesis of atherosclerosis, which is recognized in the USA and other countries as one of the 10 most important discoveries in medicine. The theory of the atherosclerosis pathogenesis, created by him as an infiltration-combination theory, was of major importance for scientific and practical medicine. The scientist showed for the first time that the basis of atherosclerotic lesions of the arteries is the infiltration of cholesterol into the vessel wall. He followed in detail and studied the stages of development, progress and regression of atherosclerotic plaques. Atherosclerosis was first presented as a systemic disease caused by various, often combined risk factors: lipid metabolism disorders, hypertension, etc. It was found that hypertension is a stronger risk factor for people over 45 years of age than hypercholesterolemia. He and his students first studied the relationship between impaired myocardial blood supply and the occurrence of arrhythmias. Thus, his works laid the foundations for the pathogenesis of the most important diseases of the heart and blood vessels. He was also one of the founders of the doctrine on the reticuloendothelial system and autogenic infections. Author of more than 260 scientific papers, including several monographs. He had various awards. His mottos was "Without morphogenesis there is no pathogenesis". Died in St. Petersburg at the 80th year of life from repeated myocardial infarction. Buried at the Bogoslovskoe cemetery in St. Petersburg. The atherosclerosis laboratory at the Institute of Experimental Medicine was named after him and 2 memorial plaques were installed. In memory of the largest scientist by the European Atherosclerosis Society for outstanding research in the field of atherosclerosis, an annual prestigious Anichkov Prize was established with the awarding of a bronze medal with the image of N. N. Anichkov and a cheque for 10,000 euros.

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Alexander ZUBRITSKY

Questionnaire Portrait of the Outstanding Russian Pathologist-ophthalmologist Professor Alexander Vladimirovich Ivanov

This work has the aim to collect and systematize the biographical data for Professor Ivanov according to the questionnaire I have developed. He was born on September 14, 1836 in the city of Kursk in a family of philistines. After graduating from the Kursk gymnasium and the Imperial Moscow University in 1859, he was sent on a scientific trip abroad to Germany and Austria to study the

normal and pathological anatomy of the eye. Arrival in 1967 in St. Petersburg at the Department of Ophthalmology of the Medical and Surgical Academy, headed by E. A. Junge, was marked, with his assistance, by the defense of the doctoral dissertation on "Materials for normal and pathological anatomy of the lens" and awarding to him of the degree of doctor of medicine in the same year. From 1867 to 1969 he worked as a resident in the Eye Department of the Kiev Military Hospital. While working at the Department of Ophthalmology of Kiev University of St. Vladimir, he was given the title of Extraordinary, and then an Ordinary Professor and at the same time was appointed to the position of Head of the Eye Department of the Kiev Military Hospital. However, due to the exacerbation of the tuberculosis process in the lungs, he travels to France for permanent residence (1876—80). Professor Ivanov's scientific interests for his relatively short but bright life focused mainly on the normal and pathological anatomy of the eye. The unique pathoanatomical studies carried out concern all the membranes and tissues of the eye, and thoroughly studied the pathological anatomy of trachoma and the pathohistological structure of flicten developing on the mucous membrane of the eye and cornea in tuberculosis-allergic keratoconjunctivitis and he proved that the main element characteristic of this disease, is a nodule, consisting of a round-cell lymphocytic infiltrate with an admixture of cells of epithelioid and plasma types, a structure similar to a tubercular tubercle is found, but without caseous decay and the presence of a pathogen. In the historical aspect, the anatomical pattern of the iris, the anterior chamber angle in humans, birds and some animals was studied in detail, and the structural features of the ciliary muscle ("Ivanov's muscle") were described, depending on its function with different refraction of the eye, cystic retinal changes in the dentate muscle at the extreme periphery of the fundus, which is currently important for explaining of the pathogenesis of the retina detachment in patients with myopia, a network of nerve plexus with the nodes of nerve cells in the choroid, which are still important to explain the neurohumoral disorders and the pathogenesis of glaucoma. Professor of Heidelberg University, a well-known pathologist in the eye area, O. Becker praised the work of A. V. Ivanov and said in his lectures that he alone did more for the pathological anatomy of the eye than all other researchers combined. He was distinguished by such traits as a brilliant expert in the pathological anatomy of the eye, an experienced teacher, a good lecturer, and an excellent practical doctor. He is the author of 24 scientific papers published mainly in the foreign press in German, including three manuals. He died on October 27, 1880 in the city of Menton (France) at the age of 44 years from pulmonary tuberculosis complicated by pulmonary hemorrhage. He was buried in the cemetery of Menton.

Alexander ZUBRITSKY

Questionnaire Portrait of the Widely known Russian Scientist-pathologist, Akademician of the Academy of Medical Sciences of the USSR, Professor Nikolai Alexandrovich Kraevsky (17.09.1905–17.05.1985)

This work has the aim to collect and systematize the biographical data for Professor Kraevsky according to the questionnaire prepared by me. Born in the Pankovo estate of the Krasninsky district of Smolensk province in the family of a zemsky doctor. At the age of three, Nick was moved to Moscow, where his family settled in the church house of Serebryany Lane, and for the possibility of living in this house, his father, who was then a full-time doctor in one of the city hospitals, was obliged to treat clergy and parishioners of this church. After initial training under the guidance of his mother, he enrolled in one of the Moscow gymnasiums, but after 1917 various school reforms began, which did not contribute to obtaining a full-fledged secondary education, and, despite this, in 1922 he graduated from the 75th unified labor school, and when entering the university, social status acquired special importance, so he was not accepted to Moscow University, since in the column "social origin" he wrote "from the nobles". In 1924 he entered the Medical Faculty of Leningrad University, and a year later transferred to Moscow and in 1928 graduated from this faculty in the 1st Moscow State University. In 1937 he was awarded the degree of candidate of medical sciences on the totality of works without thesis defense, and in 1942 his the Doctor's thesis on the theme "Lungs in Rheumatism" was defended. Active participant in World War II: participated in the creation of specialized frontline brigades, which under his guidance and direct participation studied the issues of pathological anatomy in the wounds of the chest, thighs, transfusion complications, secondary bleeding in the wounded, with shock, as well as the problem of so-called fatal trauma and one of the first conducted a study on the causes of death on the battlefield, and participated in the identification of corpses of Hitler and Goebbels and later claimed that on the basis of the totality of all objective data of the study of Hitler's corpse and the collected testimony, the identification of the person was complete. Therefore, all modern publications about the post-war movements of the main fascist figure and meetings with him of various persons in different countries are pure lies and idle fabrications. Organizer and Head, Department of Human Tumour Pathology, Institute of Experimental and Clinical Oncology of AMS USSR, etc. Created the doctrine about the pathology of transfusiology, leukemia and other diseases of the blood system, and suggested the classification of hematopoietic diseases (1955). Awarded the Lenin Prize in Science and Technology for his work in the study of radiation pathology, etc.

Academician-Secretary of Biomedical Sciences Department, member of Presidium of the Board of the All-Union Society of Pathologists, member of various scientific councils, editorial of several journals, etc. Author of about 200 scientific works, including 11 monographs and a number of manuals. His works are devoted to hematology, pathology of combat trauma, radiation pathology, rheumatism, oncomorphology, etc. Distinctive feature: Goodwill, availability, personal modesty, cheerfulness, persistence, and was never a member of Communist Party. Hobbies: Motorist, hunter. Died in Moscow on 80th year of life from myocardial infarction. Buried at Donskoe cemetery of Moscow.

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Aistis ŽALNORA

The Issues of Anthropology, Racial Ideology and Medicine in a Book "Siegfried Immerselbe atsinaujina" (1934) by Ignas Šeinius

Ignas Šeinius (1889—1959) was a Lithuanian—Swedish diplomat, public figure and novelist. He was born in Šeiniai, Širvintų district, about 50 km away from Vilnius, the capital of Lithuania. In 1907—1908 he took training higher courses as a teacher in Kaunas. In 1912—1915 he studied philosophy in Moscow. During the WWI years Šeinius moved to Sweden, where he spent most of his life before WWII and after the war, working as a diplomat. From the year 1920 to 1927 with minor breaks he served as representative of a Lithuania in Sweden and Scandinavia. In 4 th decade he spent several years in homeland Lithuania. During WWII he moved to Sweeden again, and lived there until the end of the life.

In his short period from 1932 to 1940 spent in Lithuania, Kaunas he served in various positions related to culture. In 1934 his little known novel "Siegfried Immerselbe atsinaujina" (Siegfried Immerselbe rejuvenates) was created. The book should be distinguished as a very early example of polemics targeted towards German racist ideology. Moreover, it's also an interesting primary source for the research on the reflections of ideas of interwar racial anthropology and medicine. The main character of the story Siegfied Immerselbe, an anthropologist and the director of the "Museum of the New anthropology" serves as an example of the Nazi scientist, which has a strong belief in racial superiority of Germans. However, he faces the problem of becoming less and less productive due to his old age. That causes threat to his scientific career and position. Because of that reason Immerselbe determines himself to dangerous experiment of rejuvenation.

The essence of the experiment was a hormone injection form young person to the older one in order to rejuvenate him. However, an unforgivable error occurs, since the hormones which had to be injected to Immerselbe appears to be taken from a Jewish girl. A scandalous experiment causes significant transformations in the profesor's physical body as well as in the mindset. Though the story is constructed as fantasy and satire it was based on real names, medical techniques and real experiments that took place of the interwar period. The idea

of the experiment was created as mixture of the concepts of Eugen Steinach (1861—1944) and Sergey Voronoff (1866—1951). It also has similarities with that day concepts on blood types and racial identity. In order to understand full context, the analysis of that day discoveries in hormone therapy, imunology and genetics should be added. In a broader sense the story of Immerselbe represents an important part of interwar racial anthropology, medicine and social engineering discourse.

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