REVIEW

Prof. dr Đorđe Joannović, a corresponding member of Serbian Royal Academy, Dean, pathologist and the first Serbian oncologist, one of the world pioneers of the study of autoaggression, the founder and builder of the Institute of Pathology, the most tragic personality in the one-century-long history of the Faculty of Medicine (151 years since birth and 90 years since death)

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Summary

Đ. Joannović’s greatest scientific achievements, in addition to his participation in the discovery of autoaggression in medicine, were in the field of experimental oncology and pathological morphology of tumors. He was the first oncologist-scientist in Serbia. Đ. Joannović’s death occurred in the night following the incident and humiliation experienced in Petar Živković’s cabinet. It was certainly a big emotional blow, a disappointment, and shock for Dj. J. Like old Serbs who used to die for their honor, he committed suicide.

Keywords: Faculty of Medicine, Institute of Pathology, Đorđe Joannović, University of Belgrade

Cite this article as: Kanjuh V, Radojević Škodrić S, Davidović L, Lalić N. Prof. dr Đorđe Joannović Medicinska istraživanja 2023; 56(2):1-16 10.5937/medi56-42826
The family comes from Metohija from where they first moved to the village of Beodra (today a settlement within Novo Miloševo) at Banat district and then to Vienna. Father Hariton was a lawyer and a senator, and he managed the estate of the Viennese baron Sina. Mother Marija’s maiden name was Vlahović. The elder brother Simeon was born in 1869. He was engaged in consular affairs and it is him Đorđe Joannović (Đ. J.) was very attached to. Simeon lived in Beodra while Đ. J. was in Belgrade (1-4, 8, 15).

Đ. Joannović was born on June 16, 1871 in Vienna. Đorđe and Simeon were brought up in the spirit of the old Serbian tradition. They had talent for music – Đorđe played the violin and Simeon played the piano. Đ. J. had never got married and had no children. He believed that “science was asking for the whole person”. Z. Levental, a cardiologist and internist from Belgrade, the author of the text on Đ. J. in Yugoslav Medical Encyclopedia published in Zagreb, especially researched Đ. J.’s social life. He claims that he has reliable evidence that Đ. J. loved women. Đ. J. lived in one room in his Institute of Pathology.

Đorđe Joannović was a “typical boy born in Vienna”. This is where he completed his primary and secondary school and the Faculty of Medicine. He was promoted to a doctor of general medicine on July 1, 1895, at the age of 24. He got a job at the Institute of Pathology of the Faculty of Medicine in Vienna. In 1896 he became a lecturer, and then an assistant professor in 1904, an associate professor in 1910, and a full professor in 1919. At that time, Vienna was one of the centers of world medicine, along with Paris, Berlin, London, Padua, Budapest and St. Petersburg. Đ. J. was a Serb with the highest university title in the world at the time (Figure 1).

Oncology and pathology in Vienna were on the highest possible scientific level. They had a famous pathologist Karl von Rokitansky (1804-1878) who held the humoral direction in pathology, in contrast to Rudolf Virchow in Berlin, who advocated cellular pathology. Rokitansky was the rector of the University of Vienna and the president of the Austrian Academy of Sciences. He performed about 30,000 autopsies!

His student and successor Richard Paltauf (1858 – 1924) was Pasteur and Koch’s student. He was Joannovic’s superior, who collaborated with him from 1895 to 1920. Richard Paltauf, Karl Sternberg and Đ. J. established the recognized “Vienna School of Experimental Oncology”. Đ. J. also collaborated with Pick, Paltauf’s student, in his scientific papers, as well as with the famous German pathologist Karl Aschoff. (16, 20)

D. J. knew the Nobel laureates Paul Ehrlich, well-known as a researcher of humoral immunity and the inventor of Salvarzan and Neosalvarzan (anti-syphilis drugs), and Ilya Ilyich Mechnikov, who discovered phagocytosis.1 He also greatly appreciated the Serbian academician Vladan Đorđević, and he wrote about his honorary PhD thesis and was the author of his obituary when he died.

Đ. J. could have taken over the institutes and chairs of pathology in Innsbruck and Prague from Vienna. He even had invitations to come to the USA. Because of his noble patriotism, and a wish to help Serbia and Serbian people, he accepted the invitation to come to Belgrade at the age of 49. Also, he could have succeeded his teacher Paltauf who died in 1925, but he decided not to return to Vienna.

**D. JOANNOVIĆ’S ARRIVAL IN BELGRADE (1920).**

**THE ESTABLISHMENT OF THE FACULTY OF MEDICINE THE UNIVERSITY OF BELGRADE (1920).**

**THE CONSTRUCTION OF THE INSTITUTE OF PATHOLOGY (1926)**

Following the end of the First World War, Vojislav Subotić (1859-1923) (surgeon), Milan Jovanović - Batut (1847-1940) (hygienist) and Drago Perović (a Serbian

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1When talking about the results of Tsar Nicholas II Romanov’s reign, White Russian emphasized that during his time Russia had the first two Nobel laureates: Ilya Ilyich Mechnikov in Paris and Ivan Pavlov in St. Petersburg (he discovered conditioned reflexes and dealt with higher nervous activity). After their death, he also wrote obituaries about them.
professor of anatomy at the Faculty of Medicine in Zagreb) were supposed to establish the Faculty of Medicine in Belgrade. However, Prof. Drago Perović soon withdrew due to illness.

The first two members of the triumvirate then invited Đ. J., a full professor of pathology at the Faculty of Medicine in Vienna to come to Belgrade. He accepted the invitation, so in 1920, the Faculty of Medicine of the University of Belgrade was founded (Figure 2).

Đ. J. founded the Institute of Pathology and the Department of Pathology in 1922, where he was the first headmaster or director. He gave his first lecture to students in 1923. He was the most popular professor both among students and among his colleagues. After a professional trip around the world in order to get to know various institutes of pathology, Đ. J. established the Institute of Pathology in 1926 (Figure 3).

His associates were: Dimitrije Tihomirov (initially the only assistant, who after World War II went to New York, USA), teachers Ksenofon Šahović (his successor as the director of the Institute, later an academician of SASA), Marija Višnjić Frajnd and Živojin Ignačev. The following associates stayed at the Institute for a short time: Dragoslav Miletić (later professor of pathology in Skopje and Priština), Melnikov, K. Putilin, D. Stanulov, Miletta Magarašević, Vladimir Spužić (later the dean and an academician of SASA), Aleksandar Simić, Sveta Dimitrijević and others (5, 9, 18).

Đ. J. was the dean of the newly founded Faculty of Medicine in Belgrade for four years (1922/23, 1925/26, 1927/28 and 1928/29) and a vice dean for three years (1923/24, 1926/27, 1929/30) (32-34).

As Đ. J. came to Serbia from the defeated Austria-Hungary, many professors from victorious France and England, the so-called “Serbian current” (professors Milošanović, Antić, Kostić and others), caused certain difficulties for him in his work. (25, 26, 51)

**DORĐE JOANNOVIĆ’S NUMEROUS SOCIAL AND MEDICAL FUNCTIONS OUTSIDE THE FACULTY OF MEDICINE AND THE INSTITUTE OF PATHOLOGY**

In addition to major responsibilities at the Dean’s Office of the Faculty of Medicine and the Institute of Pathology (i.e. extensive student teaching, education of younger associates, scientific development in the fields of experimental oncology and pathology), Đ. Joannović had numerous other functions (21, 22, 27, 39, 47):

- the founder and the first president (until his death in 1932) (Figure 4) of the Yugoslav Society for the Fight against Cancer (September 27, 1927 in Belgrade) - the
Đ. Joannović’s greatest scientific achievements, in addition to his participation in the discovery of autoagression in medicine, were in the field of experimental oncology and pathological morphology of tumors. He was the first oncologist-scientist in Serbia.

In the field of pathological morphology of tumors, a German pathologist Prof. Rudolf Virchow (1821-1902) (48, 49), the author of the revolutionary book “Cellular Pathology” in 1858 and the “father of pathological anatomy”, had already achieved great success. (7, 12).

Virchow discovered leukemias: myeloid leukimia (with enlarged spleen) and lymphoid leukemia (with enlarged lymph nodes). He distinguished them from leukocytosis and pyemia. He noticed the local occurrence of cancer and the occurrence of local and distant secondary tumor nodes - metastases. Moreover, he noticed that sarcomas spread hematogenously (he noted pulmonary metastases without the involvement of pulmonary lymph nodes). Enlarged left supraclavicular lymph node is named after him as a site of metastasis of the stomach and ovarian cancer. He described psamoma (Virchow’s tumor). He specified the terminology of certain tumors according to histogenesis: myxoma, myoma, myosarcoma, angioma, lymphangioma, neuroglioma, teratoma, etc.

Đ. Joannović investigated branchiogenic carcinoma (originating from remnants of gill arches), cystic tumors of the neck, calcification and ossification of skin atheroma, the formation of a tumor due to irritation, the multicentric origin of a tumor in an organ, etc.

In experimental oncology, he investigated tumor growth in vivo and in vitro (in tumor tissue cultures). He observed that tumor growth was promoted by the following: castration, splenectomy, rice in the diet. Toluylenediamine intoxication, small doses of morphine, cocaine and quinine, and oats in the diet slowed it down.

He carried out immunological cancer therapy using fermentative extracts from tumor tissue (tumor tissue scraps) from patients themselves.

As indicators of successful immunological treatment of cancer in experimental animals, he marked the following: histopathological finding of lymphectasia, accumulation of plasma cells, and proliferation of connective tis-

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Figure 4. The front page of the 47th issue of the journal “Cancer” published by the Serbian Society for the Fight Against Cancer from 2003. The picture was made according to Đ. Joannović’s photo at an older age.

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2Today, in 2022, the director of the Institute of Oncology in Belgrade, Prof. Danica Grujičić, is fighting for a new building for the Institute because of its ever growing needs.
sue with sequestration of groups of cancer cells and their degeneration (13, 29).

Bearing in mind that cancer could be destroyed when erysipelas occurred over skin cancer, Đ.J. by analogy, used bee venom in cancer therapy. He also researched the effects of radiothorium on cancer.

UNDERSTANDING THE ETIO-PATHOGENESIS OF CANCER BY Đ. JOANNOVIĆ COMPARED WITH CURRENT (2022) KNOWLEDGE

Đ. Joannović believed that the following three things were important in the etio-pathogenesis of cancer: disposition, local changes, and general metabolic disorders. Apart from this, “chronic irritations”, the presence of scattered embryonic cells in tissues where they did not normally belong, and the age of the patient were also of some importance. Of course, these last three factors do not always result in cancer (24, 28, 31).

Cancerology has progressed remarkably since the time of Đ. Joannović. Some essential things concerning the etio-pathogenesis of cancer have been discovered, which promises that cancer will be defeated in the 21st century. The figure which shows that 23% of all deaths are accounted for by cancer will disappear.

Today we know that cancer is a disease of the genes of the individual cell. Mutagenic factors (carcinogenic chemicals, ionizing radiation, oncogenic viruses) lead to mutations of normal cellular genes; proto-oncogenes or tumor suppressor genes (important for cell differentiation and division). Executive proteins, encoded by mutated - cancer genes, change about 100 characteristics of a normal cell.

Cancer cells become immortal. The basis for their immortality includes the following:

1. Action of telomerase enzyme on chromosomal telomeres (“caps” at the ends of chromosomes, which preserve their integrity) preventing their shortening after cell division. When telomeres critically shorten, the cells enter in senium and die. Cancer cells still have the enzyme telomerase, which normal cells have lost during early life;

2. Absence of apoptosis (programmed cell death – “suicide”). Namely, the cells already have a built-in system of caspase enzymes, and when they receive a “molecule of death” from the organism, these enzymes cut the DNA of the cells. In this way, excessed and damaged cells of the organism are removed. The process of killing cells is carried out silently, cell remains are phagocytosed and everything passes without an inflammatory reaction and fibrosis. Cancer cells, therefore, do not undergo apoptosis.

The initial cancer cells have to break through the normal “immunological surveillance”. Then, there is favoring one cancer cell clone, which shows uncontrolled proliferation and invasion of the surrounding normal tissue with its destruction (infiltrative - destructive local growth).

Then, certain cancer cells show a potential to metastasize, i.e., through lymphatic, hematogenous and in other ways, they go to the distant parts of the body, creating secondary cancer nodes, i.e. metastases.

Finally, the so-called “cancer disease of the organism” seems to lead to cachexia - emaciation when the organism is literally skin-and-bones.

Today, in addition to surgical, radiation and chemotherapy, there are also successful attempts of immunotherapy based on prior knowledge of the genetic characteristics of cancer cells and the organism.

D. JOANNOVIĆ’s PAPERS ON GENERAL AND SPECIAL PATHOLOGICAL MORPHOLOGY

With his first paper “On the origin of plasmocytes” Đ. J. attracted the attention of the international scientific community. At the time, nothing was known about the origin of plasmocytes. Đ. J. concluded that plasmocytes arose from lymphocytes (adventitial and degenerated). Many years later, scientists know that they arise from B lymphocytes and that they create antibodies, i.e., participate in humoral immunity.

Đ. Joannović investigated the staining of microorganisms in pathological tissues. He dealt with liver diseases. As an assistant, he participated in the Competition in research of the pathogenesis of icterus and his paper (book) was awarded by the Belgian Royal Academy of Medicine. Some of his experimental research on icterus (“toluylendiamine icterus” disappears after splenectomy) became the basis of today’s therapy of hemolytic anemias by splenectomy.

He dealt experimentally and postmortem with pathological morphology of tetanus as well as its prophylaxis. He also investigated anaphylactic shock, problems of transplantation and explantation (tissue culture), and nutrition pathology.

PAPERS BY D. JOANNOVIĆ (GEORGES JOANNOVICS) WRITTEN IN VIENNA IN GERMAN AND FRENCH BEFORE HIS ARRIVAL IN BELGRADE IN 1920

PAPERS BY Đ. JOANNOVIĆ WRITTEN IN VIENNA IN SERBIAN, GERMAN AND FRENCH BEFORE HIS ARRIVAL IN BELGRADE IN 1920 AND AFTER HIS ARRIVAL IN BELGRADE (1920 – 1932)


4. Јоанновић Ђ. Однос између узрока болести и процеса одрављења (The relationship between the cause of illness and the healing process). Предавање приликом свечаног отварања Патолошког института у Београду, на дан 22.апрila 1926. године. Београд, Загреб, Аућбама, Софија: Медицински преглед 1926; 1: 2-5. (Први чланак у првом броју интернационалног Медицинског прегледа.)


11. Јоанновић Ђ. О животу и раду др Владана Ђорђевића (About the life and work of Vladan Djordjević, MD). Српски архив за целокупно лекарство 1931., 2: 155 – 63.
In the last third of the 19th century, medicine was dominated by the dogma “The human organism never creates substances against itself”. The dogma was particularly advocated by the Nobel laureate Paul Erlich (1854-1915) (40), an immunologist. By analogy with vaccination, he wanted to induce immunity against cancer by injecting weakened cancer cells into the patient. He also researched autoaggression, but rejected the possibility that the body’s immune system attacked healthy tissues of the human body. He called it “Horror antitoxicum” = “fear of antitoxin”. Silverstein (44) spoke of need for recognition: autoimmunity versus “Horror antitoxicum” (4, 13).

William B. Coley is considered the be the “father of tumor immunotherapy”; in 1893, he used bacteria and bacterial lysates in the treatment of tumors. Ehrlich’s student Ernest Witebsky (43) demonstrated that chronic thyroiditis was caused by autoimmunization. Pfeiffer and Merrill (42) confirmed that autoantibodies played a role in the pathogenesis of diffuse glomerulonephritis.

Đ. J. noted that soldiers with head surgeries and brain injuries from firearms sometimes had severe headaches and died. At their autopsies, numerous foci of softened brain tissue (encephalomalacia) were discovered, both near and far from the healed brain injuries.

He also investigated this experimentally in three groups of white rats. In the first group, he traumatized rats’ heads and brains with frequent blows to the head. Rats in the second and third group were injected parenterally at the beginning of the traumatization and whole time respectively with rat brain tissue emulsion. He obtained the same necropsy findings in all the groups of white rats. Based on these observations in humans and animals, he phenomenally concluded the following:

“The same elements of the brain, which as a result of trauma are the source of decay products, are later susceptible to the activity of these decay products”.

Today it is clear that decay products of the brain stimulate our immune system to create autoantibodies against them, but also against such substances (antigens) in healthy brain cells. This then leads to new foci of brain softening (28, 29).

Đ. J. tried to apply this newly discovered original etiopathogenetic concept to the therapy of certain diseases – superficial carcinoma of the skin in humans and tuberculous granulomas in guinea pigs. He injected disintegrated cancerous or granulomatous tissue (the products of their “dissolution”) or digested Koch bacilli under the skin of the same people or guinea pigs.

In tuberculous granulomas, he observed an increase in phagocytosis of Koch bacilli in granuloma cells, which then facilitates repairing processes.

D. J. even had his own drug “Joannin” (38) - the old tuberculin for treating tuberculosis.

Also, he treated dermatoses: Trichophyton tonsurans with its “flakes” as well as psoriasis with its squamas (40, 41, 43). He wrote two important original papers where he described research in humans and animals:


2. Joannović Dj. (in the original it is written incorrectly: Jovanović). New views on the origin and treatment of certain diseases. Experimental studies. Serbian archive for all medicine, November and December 1920; XXII (11-12); 445 – 55 (Figure 6). The papers were printed in Serbian with an error in the author’s name, i.e., instead of D. Joannović it was written D. Jovanović (which, by the way, often happens, as proofreaders change the surname believing the original one is a mistake, as it is a rare surname; this is why they must be warned not to do that). Also, the title of the paper is general and unattractive, so it did not arouse the attention of readers. The authors of this paper about D. J. knew that these papers by D. Joannović exists but, due to the above-mentioned circumstances, it was difficult to find them while browsing the volumes of the Serbian Archives.

These two cited papers on autoaggression are the most important scientific discoveries of Đ. Joannović. Because of them, he is one of the pioneers of the world study of autoaggression, together with Noel Fissenger, M. Massugi (41) and others.

Noel Fissenger stated that a snake could have autoantibodies against its own venom after a self-bite. Also, he stated that animals and humans could produce autoantibodies against their own sperm. In both cases, however, these are products that are normally excreted from the body. For him, liver cirrhosis is also an autoaggressive disease.

M. Massugi (41) believed that autoaggression was involved in the pathogenesis of glomerulonephritis and liver diseases.

Today we have many other proofs that autoaggression and autoimmune diseases exist. We know of apoptosis. In case of autoaggression, the autoimmune bodies created on decay products (“debris”) in the body act on diseased tissue as well as on healthy tissue that has antigens as damaged tissue.

We treat their sources of decomposition with products of tissue decay, i.e., damaged tissue but damaging healthy tissue as well. It is like the Latin proverb “Clavus clavo eicere” says (“One nail drives out another”) (V. Kanjuh).

Levental (28, 29) described D.J.’s process of autoaggression as follows: “Đ. Joannović discovered the phenomenon of sensitivity of tissues and cells to their own
decomposition products. These products, combined with other noxes, significantly increase and accelerate destruction processes of the altered tissue. If we translate the part of the sentence “combined with other noxes” into the language of modern immunology, then, in fact, we are talking about the creation of autoantibodies against the decay products of tissues (“scraps”), which act on both diseased and healthy tissue.

It is surprising that little is known about the papers of Đ. J. on autoaggression, both in native Serbia and abroad especially?

**THE TRAGIC END OF Đ. JOANNOVIĆ ON JANUARY 28, 1932**

After the assassination of Croatian deputies in the Assembly, ethnic, religious and armed local riots in the country, King Aleksandar I Karadžorđević, decided to take all power into his own hands. He established his monarchist dictatorship on January 6, 1929, in the Kingdom of Serbs, Croats and Slovenes. Slobodan Jovanović and others dissuaded him from that idea in vain. The king announced that “from now on, there is no mediator between me and
He had to find a firm personality to be the executor of his dictatorship, and he found it in general Petar Živković, whom he appointed the president of the Ministerial Council (Figure 7).

Živković was the captain, who in 1903 unlocked the door of the Court and let Apis and other conspirators in. They murdered Aleksandar Obrenović and Queen Draga and threw their corpses from the balcony into the courtyard. Borislav Mihajlović-Mihiz, a literary critic cynically said: “We had it, we threw it away”. Živković supported the movement of Draža Mihailović.

During World War II in exile in London, Živković supported the movement of Draža Mihailović and the Yugoslav Army in homeland. Borislav Mihajlović-Mihiz, a literary critic cynically said: “We had it, we threw it away”. Nevertheless, he was a little jealous of Draža, believing that the refugee Government glorified him too much, he immediately promoted him to the rank of general, proclaimed him the commander of the Yugoslav army in the Fatherland and the minister of the army and navy).

He never married and was accused of homosexuality, but this was rejected at the trial. He was guilty, among
other things, for murdering 39 communists. The international public condemned it with an Appeal against “white terror” on December 1, 1929. Albert Einstein was also a signatory of the Appeal.

He died in Paris in 1947, still in exile. After World War II (1946), he was sentenced by the new authorities to death in absentia with the group of Draža Mihajlović.

In 1932, students of the Faculty of Medicine in Belgrade, leftists and rebels, organized the annual St.Sava student Ball.

They said that the patron of the Ball, King Aleksandar, was welcome, but not his radical right-wing president of the Council of Ministers general Petar Živković. He was furious and called Đ. Joannović to his cabinet. He allegedly told him: “You old fool, how can you not calm down your rebellious students?” and, even worse, he slapped him. All red with humiliation, Đ. Joannović ran out of the cabinet and went to his room at the Institute of Pathology where he lived. The lights in his room were on all night. The bed remained untouched, as he didn’t sleep that night. On the morning of January 28, 1932, he was found hanging from the window handle, the loop was a cord for pulling the curtain. He sat down in an armchair and pushed it away. It was found hanging against the wall on the floor. At that moment he was 61 years old and at the peak of his scientific creativity.

SUICIDE OR MAYBE EVEN MURDER?

Đ. Joannović’s death occurred in the night following the incident and humiliation experienced in Petar Živković’s cabinet. It was certainly a big emotional blow, a disappointment, and shock for Dj. J. Like old Serbs who used to die for their honor, he committed suicide.

Investigating the case, the author of this text heard from the late Prof. Marija Višnjić Frajnd, Đ. J’s associate, that “a lot of ash was found in his fireplace in the morning”. This means that he burned some of his documentation (what? and why?) and it strongly suggests suicide (1-3).

However, Dr M. Kovačev, Đ. J’s cousin (1-3), a gynecologist and obstetrician in Novi Sad, presents certain indications in his books, which, according to him, point to murder (10, 11, 23, 24):

- one evening before Đ. J.’s death, the suicide of a famous scientist Pirke and his wife in Vienna was discussed. Đ. Joannović said that he could not imagine a cultured and famous scientist could do such a thing; therefore, he expressed his negative attitude towards suicide;
- a few days before his death, his friends visited him, and he had a long pleasant conversation with them, which by no means predicted a tragedy;
- suicides usually leave a “farewell letter”, in which they explain why they decided to take the fateful step. No farewell letter was found in this case;
- Đ. J. told his brother Simeon: “No matter where and no matter how I die, you should know that I am here”, and pointing with his hand to the right pocket of his jacket, he also said: “I have put a letter here in which you will find everything of interest.” That letter was never found; this indicates that someone threatened him for something;
- his brother Simeon and the Council of the Faculty of Medicine demanded an autopsy, but it was not done;
- the police report on the investigation of the circumstances of the death has been lost;
- there is no evidence that the pollution test (ejection of suspended seeds) and the expertise of changes on the loop of the cord due to suspension were attempted;
- Đ. J. was not politically committed, but he loved all his students, both Ornas (nationalist students) and communists. He was on good terms with King Alexander. The injured General Petar Živković’s vanity who was probably satisfied by humiliating and slapping Đ. J., so it is hard to doubt that on the same night he faked his suicide and then covered everything up;
- at the time, Dr G. Stanulov worked at the Institute of Pathology and later became a professor of internal medicine at the Faculty of Medicine in Novi Sad. He said to the author of the text that the eventual murderer might be a “cadaver master” (a worker who arranges corpses after autopsy) who was primitive, rebellious and caused trouble, so that Đ. J. was inevitably often in conflict with him. However, that primitive man certainly did not know the technique of sophisticated suicide performed by Đ. J. It is known to forensic medicine, but laymen understand hanging as the situation in which a body should hang. On the other hand, Đ. J. was a tall, big and strong man and he would certainly have defended himself against an attempt of assassination;
- from Belgrade, two telegrams were sent by the Council of the Faculty of Medicine to his brother Simeon in Beodra about the tragic event, but he did not receive them; allegedly, the Post Office in Beodra was
ordered not to send telegrams from Belgrade to the addressees;
- the housekeeper, who brought Đ. J. tea in the morning and who saw him hanged, alerted the rest of the staff of the Institute. The corpse was immediately transferred to another room, and in front of his room where the tragedy happened, a gendarme was constantly standing, not allowing anyone to enter the room;
- when accompanying the coffin from Belgrade to Beodra, the crown of the Court was not seen, but the representative of the Court was present;
- after Joannović’s death, it was gossiped that his successor Ksenofon Šahović (K. Š.) had something to do with his death (but there is no evidence) and that he had “stolen” Đ. J.’s scientific papers (which is also not true because the author of this paper knows papers of both Đ. J. and K. Š. well, and they have absolutely no similarities).

Figure 8. Đordje Joannović on his deathbed in 1932 after suicide or murder. (Figure courtesy of Dr Nada Kovačev Šljapić, professor of pathology at the Faculty of Medicine in Novi Sad, Đ. Joannović’s cousin).

Never before had Belgrade seen such a large and sad procession (Figure 8). The Serbian Patriarch Varnava approved a funeral service for Đ. Joannović, although the Serbian Orthodox Church opposed it due to suicide (out of reverence for the great scientist or he did not believe it was suicide). A procession of 2,000 students paraded past the bier, as they wished to show that they were not guilty of Đ. Joannović’s death, as it was rumored. Mustafa Golubić and the communists organized protests against the Government because of this mysterious death (50, 54-65).
After his death, numerous commemorations and articles about Đ. J. followed, including obituaries and in memoriam 54-65.

In the dean’s chain of the Faculty of Medicine in Belgrade there is also a medallion with the image of Đorđe Joannović.

Today, the Institute of Pathology of the Faculty of Medicine bears his name: “Prof. Đorđe Joannović”, and there is a bust of him in the hall of the Institute.

As an illustration of pathologists’ eternal memory of this man, we will quote nine lectures that were held at different time intervals.

NINE LECTURES ON Đ. JOANNOVIĆ, WHICH SHOW PATHOLOGISTS’ ETERNAL MEMORY OF HIM


2. Kanjuh V. 60 years since the death of Serbian Royal Academy correspondent member Djorde Joannović. Today’s view of his life and scientific work. XI meeting of the Department of Medical Sciences SASA. Belgrade, October 28, 1992.

3. Kanjuh V. 60 years since the death of Đorđe Joannović, founder of the Institute of Pathology at the Faculty of Medicine in Belgrade. Institute of Pathology. Belgrade, November 2, 1992.


5. Kanjuh V. Đorđe Joannović’s contribution to medical science. Scientific gathering dedicated to the work and personality of Đorđe Joannović (on the occasion of the 70th anniversary of his death). Organizer: Prof. Dr. Teodor Kovač (Novi Sad). Academy of Medical Sciences SMS. Belgrade, December 17, 2002.

6. Kanjuh V. 70 years since the death of Đorđe Joannović. I meeting of the Department of Medical Sciences of the SASA. Belgrade, January 29, 2003.


8. Kanjuh V. Radojević Škodrić S. Dr Đorđe Joannović - founder of the Institute of Pathology. Lecture at the 46th symposium “Aspirations and innovations in medicine” Med.fak. Univ. in Bgd. Dec. 13 2017 as part of the Mini Symposium “Celebration of 95 years of the Institute of Pathology Dr. Đorde Joannović”.


V. Kanjuh, as the president of the Yugoslav (Serbian) Society of Pathologists, introduced a permanent Memorial Lecture dedicated to Đ. J.

The General Hospital in Zrenjanin bears his name and has a bust of him in its park.

The primary school in Novo Miloševco also bears his name. The house where his brother Simeon lived, as well as the grave of Đ. J. are in relatively good condition.

The Cancer Society of Serbia issued a postage stamp with his image (6,14).

At the Celebration of 80 years of the fight against cancer in Yugoslavia and Serbia, Đ. J. was the first to receive the Gold Plaque of the Yugoslav Society for the Study and Treatment of Cancer and the Serbian Society for the Fight against Cancer on December 10, 2007 “For a great contribution to the work of the Society and the development of oncolgy in Serbia”. The President of the Society Prof. Slobodan Ćikarić presented the Plaque to V. Konjuh for safekeeping.

There are encyclopedic references about Đ. J. written in Zagreb’s Yugoslav Medical Encyclopedia (28) as well as in Stanojević’s National Encyclopedia in Serbia (58). In the upcoming seventh book of the Serbian Encyclopedia (letter J), V. Konjuh prepared a text on Đ. J.

Đ. Joannović is the holder of 14 domestic and foreign awards.

CONCLUSION ABOUT THE LIFE, WORK AND SIGNIFICANCE OF DJ. JOANNOVIĆ

Đ. Joannović was a full-time professor of pathology at the Faculty of Medicine of the University of Vienna - a city that at the time was one of the world’s medical capitals. He was, therefore, at the time a Serb with the highest university medical title of all the Serbs in the world. Out of noble patriotism, ignoring that he could run an institute of pathology in Europe or in the USA, he came to Belgrade to help Serbia and the Serbian people in 1920.

He participated in the triumvirate for the establishment of the Faculty of Medicine in 1920 and in 1926 he opened the newly built Institute of Pathology, which was significant on a world scale. He was the dean four times and a vice-dean three times. He is the author of numerous papers in the field of experimental oncolgy and pathological morphology and one of the pioneers of the world’s study of autoagression in medicine.

With his tragic death (suicide or murder) Serbia lost the best and most deserving Serbian medical teacher and scientist in the first third of the 20th century, who was 61 years old and in full scientific creativity when he died. Đ. Joannović is the most tragic figure in the 100-year-long tradition of the Faculty of Medicine in Belgrade.
“We lost the wing that lifted us up”, M. Ivković (53) wrote in the text “Instead of a Preface” for the D. Joannović’s Memorial book.

We, Serbs, are proud of our scientific giants: Nikola Tesla, Ruder Bošković, Milutin Milanković, Mihajlo Pupin... We can safely and with a clear conscience, add one more Banatian to the list - Djojde Joannović.

He came to help us - and what did we do to him!

At the celebration of the 95th anniversary of the Institute of Pathology “Prof. Drđe Joannović”, academician V. Kanjuh and prof. S. Radojević Škodrić held a lecture – to the memory of D. J. The dean at the time, academician N. M. Lalić (24), a pioneer of cardio-diabetology in Serbia and Republic of Srpska, said of D. Joannović: “We hope that such a cruel conflict between the Executive Political Authority and the Autonomy of the University will never happen again.” The current dean prof. L. Davidović, a world-recognized vascular surgeon, a foreign member of the Russian Academy of Sciences, gave a significant place to D. Joannović when organizing the celebration of the 100th anniversary of the Faculty of Medicine.

We, his successors in pathology of the third and fourth (current) generation, V. Kanjuh and S.Radojević Škodrić, and his successors as deans, N. M. Lalić and L. Davidović, owe him respect and eternal memory.

DIXIMUS ET SERAVIMUS ANIMAS NOSTRAS
WE SAID AND SAVED OUR SOULS

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NOTE: The authors would like to thank Dr Snežana Kanjuh for help with test logistics, English translation and image selection.
**Sažetak**


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**Primljen:** 10.04.2023. | **Revizija:** 18.05.2023. | **Objavljen:** 30.05.2023

**Medicinska istaživanja 2023; 56(2):17-30**