



## The work of a German oncologist Ferdinand Blumenthal in the Kingdom of Yugoslavia, 1933–1937

Rad nemačkog onkologa Ferdinanda Blumentala u Kraljevini Jugoslaviji od 1933. do 1937.

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**Key words:**  
history of medicine; medical oncology; neoplasms; yugoslavia.

**Ključne reči:**  
istorija medicine; onkologija; neoplazme; jugoslavija.

### Introduction

After the adoption of racial laws in Germany, the well-known German oncologist Ferdinand Blumenthal (Figure 1), one of the founders of cancer research in Germany, left the Third Reich and arrived in Belgrade in October 1933. The German oncologist working in Yugoslavia between the wars is interesting for the history of the development of Yugoslav cancer research, which at the time was still in its infancy.



*Ferdinand Blumenthal*

**Fig. 1 – Ferdinand Blumenthal.**

### Blumenthal: one of the founders of cancer research in Germany

Ferdinand Blumenthal was born into a German Jewish family in Berlin on June 5, 1870. He studied medicine in Freiburg, Strasbourg, Zurich and Berlin, and completed his doctorate in 1895 in Freiburg after publishing his research under the title *Über den Einfluss des Alkalis auf den Stoffwechsel der Microben* (The Influence of Alkali on the Metabolism of Microbes). He started as an internist at the *I. Medizinischen Universitätsklinik der Charité* (First Medical Clinic, Charité University Hospital) in Berlin and also conducted research in physiological chemistry and bacteriology. At the beginning of his career, he wrote several studies on putrefaction, cholera, diphtheria and was particularly known for his studies on tetanus, nondiabetic glycosuria and pathological changes in urine. He completed his residency at Friedrich Wilhelm University in Berlin in 1899 and in 1905 he became an associate professor there<sup>1-3</sup>.

In the meantime, his research interests were focused on cancer after the first cancer research and treatment center at Charité opened in 1903. This department later became a separate research institute, and for the next three decades Blumenthal played a leading role in its development and also served as an administrator and researcher. His research interests were two-fold: the development and metabolism of cancer cells and the treatment of cancer. He received international recognition in 1910 when he published *Die chemischen Vorgänge bei der Krebskrankheit* (Chemical Processes in Cancer)<sup>4,5</sup>.

He began at the institute as the head of its laboratory from 1903 to 1907, was named a co-director in 1917 and from 1923, he served as the institute's director. In later writings, his colleagues and his biographers placed a particular emphasis on his management skills during World War I, which he used to secure financial stability and continuity of research through donations and private investments. Under his leadership, the institute served as a role model not only in Germany but also in international medical circles, particularly due to being able to provide centralized treatment and care and the inclusion of an outpatient department. He used his authority in the field of cancer treatment to promote the establishment of independent cancer treatment centers, an interdisciplinary approach and multimodality treatment, thus pioneering the approaches and methods later accepted in cancer treatment. He was also an advocate of follow-up treatment for cancer patients<sup>4-6</sup>.

In 1919, Ferdinand Blumenthal became the Secretary-General of the *Deutschen Zentralkomitees zur Erforschung und Bekämpfung der Krebskrankheit* (German Central Committee for Cancer Research), a predecessor of the *Deutsche Krebsgesellschaft* (German Cancer Society), and was an editor of the *Zeitschrift für Krebsforschung* (Journal of Cancer Research), which was at that time a renowned journal in the field. His book *Ergebnisse der experimentellen Krebsforschung und Krebstherapie* (Results of Experimental Cancer Research and Cancer Therapy), published in 1934, presented an overview of the state of cancer research. By the time the book was published, however, he was already in exile in the Kingdom of Yugoslavia<sup>2,4</sup>.

### Arrival in the Kingdom of Yugoslavia

The global economic crises of 1929-1933 had serious political consequences in Germany, including the rise of political right and the appointment of Adolf Hitler, the leader of the Nazi party, as a German chancellor in January 1933. He then eliminated his partners in the government, banned all political organizations in the country and seized control of the government after the death of German president Hindenburg in 1934<sup>7</sup>. Shortly thereafter, discrimination began against the political opponents, primarily on the Left, but also followed by discrimination of the Jews. The Nazi's pronounced anti-Semitism turned into a violent pogrom, which later became known as the Holocaust. The violence had been preceded by an aggressive anti-Semitic campaign in the German media, which spurred the emigration of a large proportion of the wealthier Jewish population, including Blumenthal and his family<sup>8</sup>. He left Berlin in the early spring of 1933 and initially settled in Switzerland, still hoping to return to Germany. When he was forced into retirement by the Prussian Ministry for Science, Art, and Education in September 1933, it was obvious that returning to Germany would be impossible, and he went instead to Belgrade in October 1933<sup>4</sup>.

Earlier, in April 1933, a Belgrade medical journal *Medicinski pregljed* (The Medical Review) wrote that due to persecution in Germany, a large number of Jews, many of

them scientists and more liberally oriented people, would have to leave Germany. Ferdinand Blumenthal, a well-known cancer researcher, oncologist, and director of the University Institute for Cancer Research in Berlin was among them<sup>9</sup>. In May 1933, the Faculty of Medicine at the University of Belgrade invited him to come and work in Belgrade, and soon elected him professor<sup>10</sup>. Blumenthal had visited Belgrade before his October 1933 move, and had met with Radenko Stanković, Minister of Education as well as Vladimir Petković, Rector of the University of Belgrade and Richard Burian, Dean of the Faculty of Medicine. During these meetings, he was given an offer to open a separate Institute for Oncology which would deal with cancer research and treatment. *Politika* and *Vreme*, the most influential Belgrade daily newspapers, reported extensively on the well-known cancer expert's visit. The articles also mentioned that Blumenthal would be named a honorary professor at the Faculty of Medicine and that Blumenthal himself had stated he would not be entering private practice<sup>11</sup>. He also announced his intention to follow in the footsteps of Prof. Đorđe Joannović, the recently deceased founder of the Institute for Pathology in Belgrade<sup>\*</sup>. In his first public appearance in Belgrade, Blumenthal praised the Belgrade medical institutions, singling out in particular Đorđe Joannović, whom he considered to be a world-class scientist<sup>12</sup>. After being forced into retirement in Germany, Blumenthal finally arrived in Belgrade in October 1933<sup>13</sup>.

### Work in Belgrade

Blumenthal's time in Belgrade (1933-1937) was characterized by the internal political turmoil and the external political context of fascism on the rise in Europe. In the mid-1930s, after the assassination of the King Aleksandar Karađorđević in Marseille in 1934, in a complot evidently supported by fascist Italy, Yugoslavia was leaning towards

\* Đorđe Joannović was born in Vienna, where he completed primary and secondary school. His family originated from the village of Beodra (modern-day Novo Miloševo) in the Banat. He graduated in 1895 from the Faculty of Medicine in Vienna. He was elected Assistant Professor there in 1904, and was named Associate Professor of Pathology in 1910, and Full Professor in 1919. Although he was the Head of the Pathology Department of the Vienna General Hospital, he left Austria out of a desire to help the newly established Kingdom of Serbs, Croats and Slovenes. He was an active participant in establishing the Institute of Pathology in Belgrade and founded the study of oncology and experimental pathology in Serbia. He was elected as a corresponding member of the Serbian Royal Academy of Sciences, elected to three terms as Dean of the Faculty of Medicine and served as president both of the Serbian Medical Society and the Yugoslav Medical Society. He was also a member of the German and Czech Oncology Committee for the Prevention of Cancer and served in the editorial boards of numerous medical journals, among other activities. He died during an attack by gendarmes on the Faculty of Medicine on January 28, 1932. He clashed with gendarmes who had entered the Faculty while trying to protect his students who were protesting. The exact circumstances of his death are unclear. He was buried in a cemetery in Beodra.

Germany and Italy, particularly during the government of Milan Stojadinović (1935–1939). The Germany's growing political and economic influence led to an increase of anti-Semitism in a part of society and in some of the media, primarily at the right-wing end of the political spectrum, whose rise across Europe was a consequence of the worldwide economic crisis. In public discourse in the Belgrade periodicals from this period, behind verbal disavowals of anti-Semitism, there was an anti-Semitic discourse accompanied by stereotypes of Jewish racial characteristics as well as accusations that the appearance of anti-Semitism within society was a consequence of the Jews' own behavior. In the conservative, nationalist press, anti-Semitism was at first hidden by an insistence on distrust towards foreigners. Over time, it became increasingly more open, it led to an increase in anti-Semitic discourse among the ruling circles, and the results of this were the 1939 anti-Semitic decrees, which came into effect in 1940, concerning the Jewish population's right to education (*numerus clausus*) and limited trade rights, and the first internment camps for left-wing political opponents in Višegrad and Bileća<sup>13</sup>. The decrees came during the time when Blumenthal was no longer in Yugoslavia, but the entire climate that led to their enactment essentially defined the scope and possibilities for Blumenthal's time in Belgrade as well as being one of the reasons for his departure.

When Blumenthal arrived in Belgrade from Switzerland in 1933, the Belgrade newspapers praised him in numerous articles and editorials, stating that his arrival was a significant event for Yugoslav medical science. As had been previously agreed, Blumenthal was expected to establish in Belgrade an institute for cancer research modelled on the institute he had headed in Berlin. He was also expected to centralize and systematize cancer research in the Kingdom of Yugoslavia, stimulate scientific research on the disease and train physicians and students. He was granted a temporary position at the Institute of Physiology within the Faculty of Medicine and was given a permission to bring along one of his assistants from Berlin. At the end of 1933, one of his first tasks was to represent the Kingdom of Yugoslavia at the First International Cancer Congress in Madrid, which became known in 1935 as the International Union against Cancer (and from 2010 as the Union for International Cancer Control)<sup>11, 13–15</sup>.

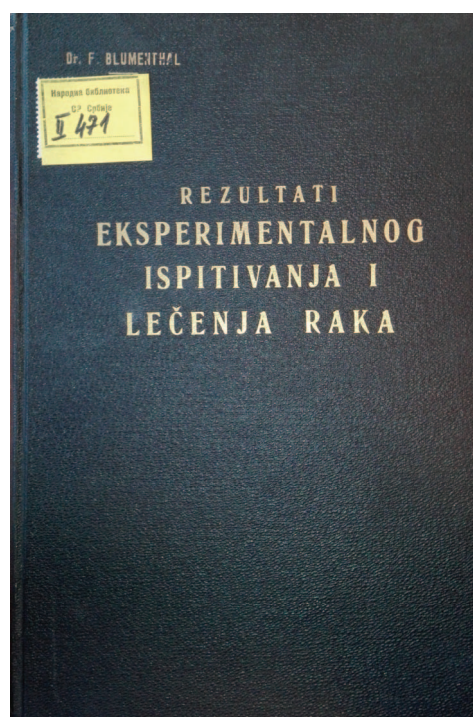
Blumenthal's professional engagement in Belgrade began with a formal introductory lecture at the Institute of Physiology on November 9, 1933. Standing before the professors and students from the Faculty of Medicine, he expressed in Serbian his gratitude to the Yugoslav government, the University of Belgrade, and the Faculty for inviting him to Yugoslavia. He expressed a great pleasure at being in Belgrade, and that it was a great honor to continue the work of Đorđe Joannović, a world-renowned scientist, whose work was "highly recognized" in scientific circles<sup>13, 16</sup>.

Throughout 1934 and 1935, Blumenthal led a special cancer infirmary within the *Interna propedeutička klinika* (Propaedeutic Clinic for Internal Medicine) where he received patients twice a week. According to the Dean's annual report, 132 patients were examined between October 1,

1934 and July 1, 1935, of whom 64 were new cases. Patients were given advice on treatment and free medications, or they were sent for surgery and radiation. In a report for the next academic year, Blumenthal examined 207 patients of whom 66 were new cases<sup>13</sup>.

During the academic year 1934/1935, he held lectures at the Faculty of Medicine in both German and French. The topics of his lectures were "The Issue of Surgery and Radiation in Cancer Treatment," "Dietary Basics for Cancer Patients," "The Etiology and Biology of Malignant Tumors," and "Diagnostic and Therapeutic Methods in Cancer Treatment and their Critique"<sup>17, 18</sup>. In addition to these, Blumenthal held several noteworthy lectures in Europe between 1934 and 1936 at the medical training courses in San Marino, Lugarno, Milan, Brussels, and Athens, among other places, which usually dealt with the advancement in the diagnosis and treatment of cancer. Blumenthal again represented Yugoslavia as one of the keynote speakers at the Second International Cancer Congress held this time in Brussels in 1936, which attracted around 500 doctors from 42 countries<sup>13, 19</sup>.

During his time in Belgrade, Blumenthal published two papers in *The Medical Review*: "Introduction to Experimental Cancer Research" in 1933 and "Basic Principles for Diagnosis of Cancer" (co-authored with Dr. Lazar Stanojević) in 1936<sup>20, 21</sup>. Stanojević translated Blumenthal's book "Results of Experimental Cancer Research and Cancer Therapy" as *Rezultati eksperimentalnog ispitivanja i lečenja raka* (Figure 2), which was published in 1937 by Geca Kon Publishing House in Belgrade. As stated in the introduction of the Serbian translation, this book was the basis for his lectures at the University of Belgrade<sup>22</sup>.



**Fig. 2 – The book about the cancer research and therapy written by Ferdinand Blumenthal and translated into Serbian thanks to dr Lazar Stanojević.**

### Disputes and departure from Belgrade

At the same time, Blumenthal's stay in Belgrade was marked by various intense and increasingly frequent challenges. Although disputes in professional circles resulting from his role and position could in part be explained by competitiveness in the professional community, with an increasingly fascist-leaning public, more openly anti-Semitic challenges were raised in the discourse on the right. Soon after he arrived to Yugoslavia in autumn of 1933, *Lekar* (Doctor), a medical journal, published an article harshly criticizing the outpouring of "enthusiasm" for everything coming from abroad, and in particular that "various foreigners with exotic names had been enthusiastically accepted" and were seen as "messiahs"<sup>23</sup>. Soon after, the magazine *Život i rad* (Life and Work) published a defense of Blumenthal, advocating for the dismantlement of the local "pond-scum" and stating that Yugoslavia should be honored to host a scientist of such stature, while also pointing out that Blumenthal had been one of the top scientists in highly-competitive Germany. The piece published in *Lekar* made use of an anti-foreigner discourse that was a characteristic of the hidden anti-Semitism of the time, but these kinds of writings were not typical for the expert, professional publications. However, this kind of increasingly open anti-Semitic discourse was a characteristic of right-wing, nationalist publications like the newspaper *Narodna odbrana* (The People's Defense), which was produced by an organization of the same name, and one of the editors was Velibor Jonić, the future Minister of Education in Milan Nedić's collaborationist government. Starting in 1935, *Narodna odbrana* launched a campaign against Blumenthal, claiming that the University of Belgrade had lost its "national character" because preference was being given to the foreigners instead of to the "spiritual and moral values of our people." The newspaper lamented the fact that lectures at the University of Belgrade were held in German, and that students were allegedly forced into taking their exams in German to get better grades. Furthermore, while renouncing open support for Hitler's anti-Semitism in principle, the author of the article argued that "our university has welcomed with open arms every Jew the Führer of the Reich had banished from a strong, powerful, and cultured Germany"<sup>13, 24, 25</sup>.

Blumenthal resigned from his professorship at the Faculty of Medicine on December 21, 1936, effective February 1, 1937. It is assumed that this decision had something to do with attempts to produce an experimental cancer treatment drug, which had garnered negative reactions within the medical profession<sup>13</sup>. At the time of his resignation, *Politika* dedicated a farewell article to him, expressing regret at the departure of such an "established scientist." The newspaper also pointed out that Blumenthal had been invited to Yugoslavia because there had been no such expert in experimental cancer research, and this was why he had been chosen to teach at the faculty, create a laboratory, establish an ambulatory unit for patient treatment, organize a system to fight cancer, train Yugoslav doctors, and so on. According to the newspaper, three years of work had not been enough to real-

ize all these plans, primarily due to the prevailing conditions in medical circles. The newspaper also stated that, over the previous three years, Blumenthal had not only held his regular lectures at the faculty, but had also accepted all invitations from outside the university to hold lectures and training sessions. Blumenthal himself, however, claimed his departure was due to his three-year term as professor expiring and that his stay in Belgrade had been a pleasant one. He wished his colleagues and students success in their further endeavors and in continuing the work started by Đorđe Joannović, the greatest Yugoslav researcher in the field<sup>26</sup>.

The anti-Semitic attacks on Blumenthal did not end there. At the end of 1936, when it was publicly announced that Blumenthal would be stepping down from his position at the university and leaving Yugoslavia, the anti-Semitic *Otađbina* (Fatherland), the mouthpiece of Dimitrije Ljotić's fascist organization *Zbor*, bitterly attacked Blumenthal as "a son of the Chosen People" who had left Yugoslavia when they "had to pay taxes." In an article openly belittling Jewish persecution under the Third Reich in its description of Blumenthal's arrival in Yugoslavia, it was claimed that he had received "unlimited resources," which were, as the article put it, "the richest cream of our humble surroundings." The renowned scientist was dubbed a "fairytale-comedian," and his medicine "worthless garbage," from which he had earned over half a million dinars, while not paying a single dinar in taxes<sup>27</sup>. This article was just one of the characteristically anti-Semitic attacks in the press, in which the stereotype of Jews being associated with money and tax evasion was applied to actual circumstances in order to ethically discredit Blumenthal and the work he did in Belgrade.

### Life after Yugoslavia

Blumenthal's life after leaving Yugoslavia became something of an odyssey. He first moved to Vienna, but after the German annexation of Austria in March 1938, he was arrested by the Gestapo and spent three months in prison. Afterwards he returned to Yugoslavia and made several unsuccessful attempts to emigrate to Great Britain. Then he accepted an invitation from Albania, and left Yugoslavia once again in January 1939, but his time in Albania was to be short-lived. Due to the looming threat of an Italian invasion and his experience with the Gestapo, he decided not to stay in Tirana, and left shortly after he arrived. He then went to Estonia, which was later occupied by the Soviet Red Army in 1940 after spheres of interest had been divided between Germany and the Soviet Union according to the 1939 Molotov–Ribbentrop Pact. Nevertheless, he remained there until Germany invaded the Soviet Union in June 1941. The Soviet authorities arranged for Blumenthal and his family to be transferred to Kazakhstan, but on July 5, 1941 their train was attacked by the German air force and Blumenthal was killed in the attack<sup>4</sup>.

### Conclusion

In the development of various branches of medicine in interwar Yugoslavia, the advancement of the Yugoslav, and

consequently, Serbian medical profession was contributed to the physicians who had been educated and built their professional careers outside Serbia, such as Đorđe Joannović and Richard Burian, Dean of the Faculty of Medicine. Within this context, Ferdinand Blumenthal's time in Belgrade should be considered a short historical episode that contributed to the improvement of cancer research and treatment in

the Kingdom of Yugoslavia. The most important contribution Blumenthal gave to future generations of students in the Kingdom of Yugoslavia, however, was his book *Results of Experimental Cancer Research and Cancer Therapy* (published after his departure), which provided an overview of the current state of research in the field.

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Received on October 7, 2017.

Revised on November 23, 2017.

Accepted on November 24, 2017.

Online First November, 2017.