

**DEVELOPMENT OF OPHTHALMOLOGY IN
SLOVENIA AND UNIVERSITY EYE HOSPITAL
IN LJUBLJANA (1890–2010)
At the 120–th anniversary of the University Eye
Hospital in Ljubljana**

**RAZVOJ OFTALMOLOGIJE U SLOVENIJI I KLINIKE ZA
OČNE BOLESTI U LJUBLJANI (1890.–2010)**

U prigodi 120. obljetnice Klinike za očne bolesti u Ljubljani

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SUMMARY

Slovenian ophthalmology developed much at the same time as in the rest of the Central Europe). The first Slovenian ophthalmologist was Dr Ludvik Grbec (1805–1880). The first Slovenian eye department was established within the Ljubljana civil hospital in 1890, and initially counted 34 hospital beds. Under Dr Emil Bock, the department grew to 120 beds by 1916 and saw a number of surgical procedures performed (mainly cataract operations). Dr Bock also founded a department for the treatment of ocular tuberculosis in children. From 1920 to 1958, the department was resumed by Dr Leopold Ješe, a pioneer of Slovenian ophthalmology, the first professor of ophthalmology at the Ljubljana University Faculty of Medicine (1945), author of the first ophthalmology textbook for students (Ophthalmology, 1946), and the father of Slovenian ophthalmological terminology. This article describes the development of ophthalmology in Slovenian hospitals to this day, especially in the Ljubljana Eye Hospital. It remembers the most prominent figures and professional, educational,

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and scientific achievements. Now in 2010, Slovenia has over 130 ophthalmologists, two departments teaching ophthalmology (within Ljubljana and Maribor University Faculties of Medicine), an internationally recognised ophthalmology specialisation programme, and influential research work published in various journals indexed by Science Citation Index.

Key words: *history of ophthalmology, 19th – 21st century, ophthalmologists, Ludvik Grbec, Emil Bock, Leopold Ješe, Ljubljana Eye Clinic, Slovenia*

INTRODUCTION

The Department of ophthalmology of the University Medical Centre Ljubljana or the University eye hospital is the central Slovenian institution for the treatment of eye diseases which principally admits patients from central Slovenia, and more complicated cases from the entire country as well. In 2010 it celebrates 120 years of presence and 65 years of the Cathedra for Ophthalmology of the Faculty of Medicine at the University of Ljubljana. Let us look at the Department's and Cathedra's path so far, its accomplishments, protagonists and everything that has shaped this institution in the course of 120 years. Since sight is such an important sense, physicians have always paid special attention to eye diseases and certain basic ophthalmological understandings have emerged in the course of the history of mankind. The study of the eye goes back to the Babylonians and Egyptians. Hippocrates was familiar with the eye anatomy and physiology as well, and Ptolemy laid grounds for refraction and warned about the important role of the eye lens. In the Middle Ages it were principally the Arabs who studied it. The first glasses were made by Salvino degli Armati in the 14th century. In the 17th century the development of ophthalmology was influenced by A. Maître Jean, B. Daca da Valdes, R. Bannister and J. Ray. In the 18th century the most studied eye diseases were the grey star (C. St. Yves, J. C. van Loder) and glaucoma (J. Platner, W. Cheselden). When the ophthalmoscope was invented in 1851 (H. L. F. Helmholtz), some new operative techniques started to be practised [1]. Ophthalmology was not a part of surgery anymore, but it became an independent science. Throughout the entire 20th century, numerous new research and operative methods have been introduced.

BEGINNINGS OF OPHTHALMOLOGY AMONG SLOVENIANS AND THE FIRST OPHTHALMOLOGICAL DEPARTMENT IN LJUBLJANA

The beginnings of professional treatment of eye patients in Slovenia go back to the beginning of the 19th century, when the first clinically edu-

Figure 1 – The first Slovenian Ophthalmologist Dr. Ludvik Grbec (1805–1880). (Photo Collection of the Institute of the History of Medicine, of the Ljubljana Faculty of Medicine)

Slika 1. Dr. Ludvik Grbec (1805.–1880.), prvi slovenski oftalmolog (iz zbirke Inštituta za zgodovino medicine MF UL)



cated physicians came to Ljubljana. Before that, the so-called “cataract piercers” travelled all around Carniola and did their work in fairs.

In 1800, a surgeon and master of ophthalmology Ferdinand Tschernitsch (Černič), who had a reputation of a good ophthalmologist and an expert for the operation of grey star, moved to Ljubljana. Ludvik Grbec (1805–1880), MD, the first Slovenian clinically educated ophthalmologist who studied in Vienna and specialized in ophthalmology there with professors Anton Rosas (1791–1855) and Friderik Jaeger (1784–1871), lived and worked in Ljubljana as well, most probably from 1832 to 1835. After 1835 he moved to Vipava, and then to Idrija, where he became a physician to the miners. (Figure 1) The next ophthalmologist who worked in Ljubljana was the surgeon and eye doctor Ljudevit Jenko (1841–1912), MD. He studied in Vienna and opened a private practice in 1877. Among other, he also worked in Istanbul and Idrija [2].

The development of the Eye hospital in Ljubljana is an important constituent of the history of ophthalmology in Slovenia. When the need for specialist treatment of eye diseases occurred in the first Civilian Hospital at Ajdovščina in Ljubljana, the first eye department with 34 beds in three rooms was established in 1890 [3]. The position of the head physician was taken by Emil Bock (1875–1916), MD, who specialized in ophthalmology



Figure 2 – Dr. Emil Bock (1875–1916) was founder of the first Eye department among Slovenians and led it from 1890 until 1916. (Photo Collection of the Institute of the History of Medicine, of the Ljubljana Faculty of Medicine)

Slika 2. Dr. Emil Bock (1875.–1916.), utemeljitelj i prvi predstojnik očnog odjela u Ljubljani (1890.–1916.) (iz zbirke Inštituta za zgodovino medicine MF UL)

in Vienna and in 1886 already became an assistant professor for ophthalmology in Vienna. (Figure 2) In the spring of 1895 an earthquake completely destroyed the civilian hospital in Ljubljana. The construction of a new hospital that started before the earthquake enabled the new Land Hospital for Ljubljana (located at what is nowadays Zaloška cesta 2) to be opened in autumn of the same year. The eye department, now with 61 beds, was also transferred there, to the separate building of the pavilion no. 5. (Figure 3) In 1912 the department was additionally expanded to 118 beds. At the time it had a large and modern operating room, research rooms, a dark room and patient facilities. Even the instruments were state-of-the-art at the time. Around 7,600 patients were treated in the first ten years; Emil Bock, MD, performed around 500 grey star operations in the same period, and he also introduced the radium treatment of eye diseases. The children's ward was overfilled with little patients suffering from ocular tuberculosis – scrophulosis. [4,5] (Figure 4)

After his sudden death, the successful work of Dr. Bock, who was the department head in the period 1890–1916, was continued by Albert Botteri (1879–1955), MD, also educated in Vienna, who reorganized the department, introduced modern diagnostics and conservative and operative treatment. In 1919 he was appointed a private lecturer in Prague and he took over the lectures in eye anatomy from the anatomist Prof. Janez Plečnik (1875–1940) in Ljubljana. In 1920 he was appointed professor in

Ljubljana as well. However, immediately after that he took the offer to establish an University eye hospital in Zagreb and became an ophthalmology professor at the faculty of medicine there. Consequently, he left Ljubljana in 1920 [6]. (Figure 5)

After the end of the World War I and Slovenian independence from the Habsburg Monarchy, one of the most notable Slovenian ophthalmologists, Dr. Leopold Ješe (1886–1958), became the head of the eye department in 1920. He was an excellent eye surgeon who brought contemporary operative techniques to Slovenia. As early as 1930 he operatively treated retinal detachment and in 1936 he performed the first intracapsular gray star operation [7]. He was also important for the development of Slovenian ophthalmological terminology: in 1918 he wrote the first list of eye diseases in Slovenian, and in 1920 he published 655 Slovenised German, Latin and Greek ophthalmological terms in the journal *Liječnički vjesnik* [8]. (Figure 6) In 1940 the eye ward had 136 beds and employed 4 physicians [9].

After the World War II, when the Faculty of Medicine became complete, the eye department was renamed into the University eye hospital and the head physician Leopold Ješe became the professor of ophthalmology. Gradually, ophthalmology progressed more and more. The first Doctor of Science in ophthalmology, Dr. Stane Stergar, introduced a more efficient treatment of toxoplasmosis; his fields of interest were blindness and visual impairment, keratoplasty, cryoextraction of grey star, intrabulbar foreign bodies, and in 1953 he established a hospital for ocular tuberculosis in Jezersko [10]. Professor Stane Novak introduced laser treatment of the eye diseases, and Professor Gorazd Kolar was focusing on diabetic retinopathy. After 1983 the University eye hospital introduced additional tested methods, state-of-the-art conservative and surgical therapy: computer perimetry, refractometry, intraocular lenses, vitrectomy, and irradiation of malignant eye tumours [11].

In 1959 Professor Carmen Dereani Bežek (1911–2008) became the head of the University eye hospital, and managed it until 1972. She graduated medicine in 1935 in Zagreb, specialized in ophthalmology in Graz and in 1938 brought new operative approaches to the eye department. In 1945 she became an assistant, in 1955 assistant professor and in 1965 associate professor of ophthalmology at the Faculty of Medicine in Ljubljana [12]. During her management the University eye hospital hired several ophthalmology residents and the department had four faculty members at the time. In 1956 Professor Carmen Dereani Bežek estab-



Figure 3 – The Building of the first Eye department among Slovenians at Ljubljana civil Hospital in 1895. Initially it had 34 hospital beds and until 1916 it was expanded to 120 beds. (Photo Collection of the Institute of the History of Medicine, of the Ljubljana Faculty of Medicine)

Slika 3. Očni odjel bolnice na Zaloškoj cesti 2 (1890.–2012.) (iz zbirke Inštituta za zgodovino medicine MF UL)

lished the Department for orthoptics and pleoptics at the eye hospital, the first in Yugoslavia at the time, where they started treating children with strabismus as early as in their first months, which was a novelty and a valuable improvement in the prevention of visual impairment and strabismus [13]. The department management was taken over by the head physician Tone Žel. Ophthalmologists Velena Petrovič, Aleksander Švarc and Marta Šavelj introduced the new medicamentous therapy, Milena Jeruc performed operations of the lacrimal sac (external dacryocystorhinostomy), head physician Professor Stanko Strnad and later Professor Branka Stirn Kranjc modernized operative methods for strabismus and congenital grey star, and introduced new operative and medicamentous approaches for the treatment of children's eye diseases in cooperation with the paediatrician and assistant Dr. Ana Hawlina.



Figure 4 – Patients from the Eye department with nurses at Ljubljana civil Hospital Garden in 1915. (Photo Collection of the Ljubljana Eye Clinic)

Slika 4. Bolesnici očnog odjela sa sestrama milosrdnicama u vrtu ljubljanske Civilne bolnice (iz zbirke Očesne klinike u Ljubljani)

Between 1972 and 1983, the head of the Department for ophthalmology of the University medical centre was Professor Stane Stergar (1915–1998), who was the first in Slovenia to perform keratoplasty in 1952 and defended his doctoral thesis as the first ophthalmologist in Slovenia. He has also introduced many novelties in the field. Ophthalmologists Vinko Kristl, Silvo Kavčič and Borut Hrovatin have in the 1970s and the 1980s performed extractions of intrabulbar magnetic metal foreign objects at the eye hospital. New departments have emerged due to the fast development in the field. In 1973 a new surgical department was opened at the University Medical Centre Ljubljana with state-of-the-art microsurgical equipment. At the time the head of the department was assistant professor Jože Videnšek, who performed the first implantation of an intraocular lens (IOL) in 1983. Grey star and retinal detachment surgery were also performed by the ophthalmologists Vinko Kristl, head physician Ciril Zupan, Borut Hrovatin, Savo Vidovič, Mateja Blažič Maležič, MSc, and Marjeta Vrevc Eleršek. The latter was also the head of the contact lens outpatient clinic. Milica Kolar Boljka, head physician Marija Zupan, Professor Branka



Figure 5 – Professor Albert Botteri (1879–1955), led Ljubljana Eye department from 1917 to 1920. Later on he was founder of the Zagreb Eye clinic and led the Cathedra of Ophthalmology at Zagreb Faculty of Medicine. (Photo Collection of the Institute of the History of Medicine, of the Ljubljana Faculty of Medicine)

Slika 5. Prof. dr. Albert Botteri (1879.–1955.), predstojnik ljubljanskega očnog odjela 1917.–1920., zatim utemeljitelj Očne klinike u Zagrebu i predstojnik katedre za oftalmologiju pri Medicinskom fakultetu (iz zbirke Inštituta za zgodovino medicine MF UL)

Stirn Kranjc and assistant professor Barbara Cvenkel worked at the glaucoma outpatient clinic. Professor Gorazd Kolar, assistant Irena Brovet Zupančič, MSc, and assistant professor Erik Ankerst worked at the department for special research methods in ophthalmology, while the assistant professor Jože Videnšek and assistant Primož Logar performed ultrasound diagnostics and vitreo-retinal surgery.

Between 1983 and 1993 the head of the University eye hospital was Professor Gorazd Kolar (born in 1934), who in 1959 graduated medicine in Ljubljana and specialized in ophthalmology in Essen and Düsseldorf, primarily in the technique of fundus photography. Since 1972 he performed fluorescein angiography of the eye and studied diabetic retinopathy. With 24 doctors with additional specializations abroad, he upgraded and encouraged the expert development of the eye hospital. They established the department for laser therapy and laser interventions and a Polyclinic department. An education centre was created at the eye hospital and it was visited by Slovenian and foreign ophthalmologists. They have introduced new and innovative techniques of gray star operations under the guidance of the head physician assistant Vladimir Pfeifer, MSc. The ophthalmologists assistant Primož Logar, assistant professor Mojca Globočnik Petrovič and Xhevati Lumi performed vitreo-retinal proce-

dures. Professor Brigita Drnovšek Olup performed oculoplastic procedures and founded the first Department for oculoplastic and reconstructive eye surgery in Slovenia; head physician Davorin Sevšek and assistant Mirna Šilih Štabuc, PhD, practised laser treatments, and head physician Aleksandra Kraut, MSc, practised diagnostics and therapy of uveal diseases. New neuro-ophthalmological research and new treatment methods were introduced by Professor Marko Hawlina. Clinical group research work was revived, and its results were presented in numerous international meetings and published in professional literature [14].

Between 1993 and 2002 Dr. Peter Dovšak was the head of the University eye hospital. He focused all his efforts into detailed preparations and organising the construction of the University eye hospital's new building at the location of the former military hospital in Zaloška 28 in Ljubljana. On January 18, 2001 the new building of the University eye hospital was opened at that location [15]. (Figure 7) Three sections of the eye hospital, A, B and C, were renovated inside of the old building, and sections D and E were built anew. The renovated eye hospital is equipped with up-to-date medical equipment of the highest quality. The University eye hospital nowadays consists of the following departments: Department for eye surgery, Department for eye diseases, Children's department,

Figure 6 – Professor Leopold Ješe (1886–1958) was a pioneer of Slovenian ophthalmology, led Eye department from 1920 to 1958 and was the first Professor of ophthalmology at the Ljubljana Faculty of Medicine (1945). (Photo Collection of the Institute of the History of Medicine, of the Ljubljana Faculty of Medicine)

Slika 6. Prof. dr. Leopold Ješe, pionir slovenske oftalmologije i oftalmološke terminologije (iz zbirke Inštituta za zgodovino medicine MF UL)





Figure 7 – New location of the Eye Clinic from 2001 at Zaloška str. 28 in Ljubljana. (Photo Collection of the Ljubljana Eye Clinic)

Slika 7. Nova lokacija Očne klinike, otvorena 2001. na Zaloškoj cesti 28 u Ljubljani (iz zbirke Očne klinike u Ljubljani)

Department for functional diagnostics, Unit for neuro-physiological diagnostics, Department for orthoptics and strabology, Department for oculoplastic surgery, Department for glaucoma, Department for laser, Outpatient clinic for diabetic retinopathy, Outpatient clinic for refractive surgery, Outpatient clinic for contact lenses, Outpatient clinic for the blind and visually impaired and low vision therapy, Advisory outpatient clinic and General eye outpatient clinics [16]. The surgical section has five operating rooms, and the sixth operating room is intended for laser operations and other ophthalmological interventions. A part of the University eye hospital, together with the neuro-physiological unit is dedicated to research activities.

Operation procedures are high-quality, and the learning process of experts is continuous. In 2002, Professor Brigita Drnovšek Olup took over as the head of the University eye hospital. In the period between 2002 and 2009, the University eye hospital continued great prosperity and international affirmation. In 2005 it received accreditation EBO (European Board of Ophthalmology) for a European teaching hospital. In 2008, it received ICO (International Council of Ophthalmology) award to create a learning centre for Eastern Europe. In this period, physicians who specialised ophthalmology at the University eye hospital Ljubljana began to perform specialized tests in the context of EBO, which has become a tradition. On examination in Paris they always achieve excellent results. In the meantime hospitals' physicians achieved 9 master and 4 doctoral degrees.

There have been introduced new surgical techniques, including their own innovations in the field of laser therapy of skin lesions and lacrymal ways. There were organized also international workshops. They introduced a new treatment of senile macular degeneration with biological agents. University eye hospital also received recognition and awards for good organization and operation and organized several international meetings. Professor Marko Hawlina was elected Chairman of Executive Committee EBO in 2009. Professor Brigita Drnovšek Olup was in 2009 the first woman elected for president of European Society of Ophthalmic Plastic and Reconstructive Surgery (ESOPRS) by taking office in 2011. In 2009, when she became the medical director of the University Medical Centre Ljubljana Professor Branka Stirn Kranjc took over the University eye hospital and it continues its tradition. A large extent of the eye hospital activities takes place on the tertiary level, enabled by the state-of-the-art equipment and above all the specialized knowledge of its employees. At the moment there are 179 employees at the hospital, among them 8 doctors of science and 13 MSc, 3 professors, 2 assistant professors, one scientific advisor and 4 head physicians. Due to development in the field, expansion of programs, new activities, introduction of outpatient clinic operating work and, finally, due to the educational program and research work, it was determined that the present number of specialists is insufficient and that new staff is needed. (Figure 8)



Figure 8 – Laser Eye Surgery at Ljubljana Eye Clinic in 2005. (Photo Collection of the Ljubljana Eye Clinic)

Slika 8. Zahvat laserom na Očnej klinici u Ljubljani 2005. (iz zbirke Očne klinike u Ljubljani)

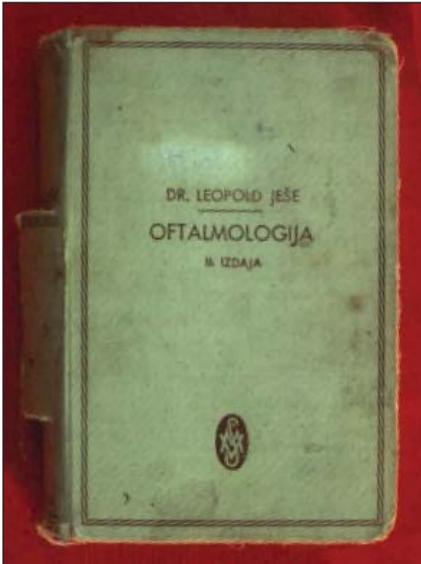


Figure 9 – Cover page of the first ophthalmology textbook in Slovene for students (Ophthalmology, 1946). It was written by Professor Leopold Ješe, the founder of the Slovenian ophthalmological terminology. (Photo Collection of the Institute of the History of Medicine, of the Ljubljana Faculty of Medicine)

Slika 9. Naslovnica prvega slovenskog udžbenika za očne bolesi "Oftalmologija", prof. dr. Leopolda Ješea iz 1946. (iz zbirke Inštituta za zgodovino medicine MF UL)

The Cathedra for Ophthalmology at the Faculty of Medicine in Ljubljana was established in 1945, contributing a lot to the development of ophthalmology. Specialized education of ophthalmologists has begun within its framework. Nowadays there are around 130 specialists and residents of ophthalmology in Slovenia, who are gathered in the Slovenian Society of Ophthalmology (with several sections) at the Slovenian Medical Association.

The first ophthalmological book was written by Jakob Žnidaršič in 1880 (*Oko in vid*), and Leopold Ješe wrote the first textbook for the students of medicine and dental medicine in 1946, in 1953 (*Ophthalmology*) and for nurses in 1953 (*Oculism*) [17]. (Figure 9)

In cooperation with the University eye hospital in Ljubljana the eye departments gradually developed in regional hospitals throughout Slovenia: in Maribor, Celje, Murska Sobota, Novo mesto, Izola and Nova Gorica. In 1919, the Otorhinolaryngology-ophthalmology department was established in Maribor with 60 beds. After moving to the present facilities, an independent Department for eye diseases and Department for otorhinolaryngology were created in 1943 [18]. The first ophthalmological outpatient clinic in Celje was opened in 1927; the Otorhinolaryngology-ophthalmology department was established in 1936 in “Gizela’s hospital“, and the independent department was opened in 1959 [19]. In 1930 temporary rooms for anti-trachoma laboratory were arranged in Murska

Sobota, and a year later as much as 96% of Prekmurians was examined. The eye department in Murska Sobota was opened in 1964, and since 1988 it has been located in the new facilities in Rakičan [20]. The eye department in Novo mesto was created in 1972. The eye department in Piran was established in 1960 as a subsidiary of the hospital in Koper, and in 1988 it moved to the new facilities in Izola. The first outpatient eye clinic in Nova Gorica was opened in 1964; in Šempeter pri Novi Gorici in 1965. Along with these departments, there are 15 more specialized ophthalmological outpatient clinics in Slovenia [21].

CONCLUSION

There are slightly more than 130 active ophthalmologists servicing 2 million inhabitants in Slovenia, which does not cover the needs, even though ophthalmologists are continuously educated. In academic cooperation with Ljubljana, the second university medical centre with its own medical school, teachers and assistants was established in Maribor in 2004. In the last 15 years Slovenian ophthalmologists have published more than 80 articles in journals indexed by the SCI. Other eye departments and private practices in Slovenia follow that trend as well, they are well educated and they exercise substantially uniform and modern tenets.

The Slovenian ophthalmological profession is capable for the most demanding therapeutic and diagnostic procedures, working in interdisciplinary cooperation with many institutions, clinical and base, in the country and abroad. They are regional leaders in many fields, and are one of the rare institutions in the world where 100% of planned gray star operations are performed with phacoemulsification with small incision, which enables the majority of operations to be performed as outpatient procedures. With more than 15,000 operations per year, it means reducing hospitalizations by several thousand.

Slovenian academic ophthalmologists – teachers use up-to-date teaching approaches with students who successfully gain research experience as well as clinical knowledge. Residents are also educated abroad via scholarships of the European Society of Ophthalmology (SOE), they actively present their works in congresses and are important participants in works published in Slovenian and foreign journals. They have also developed clinically directed experimental laboratories, which, modelled after leading Western eye hospitals, generate knowledge in the Ljubljana University eye hospital for the development of the new therapeutic possibilities, e.g. using

stem cells. The University eye hospital received high grades in 2005 from the inspectors of the *European Board of Ophthalmology* as an educational institution and it was the first institution accredited as an ophthalmological education centre in the new EU countries. In 2009 the *European Board of Ophthalmology* was presided by Professor Marko Hawlina, an ophthalmologist from Ljubljana. Along with the representatives of the European professional associations, hosting four European symposiums and congresses of the *European Association for Vision and Eye Research (EVER)*, taking place in Portorož three years in a row since 2007; all tell us about the reputation of the ophthalmology in Slovenia. A lot of work has been done and ophthalmology among Slovenians is awaiting its bright future with confidence [22].

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POVZETEK

Slovenska oftalmologija se je razvijala v koraku s srednjeevropsko stroko. Prvi slovenski zdravnik oftalmolog je bil Ludvik Grbec (1805–1880), prvi slovenski oftalmološki oddelek pa je nastal leta 1890 v ljubljanski civilni bolnišnici in je na začetku štel 34 bolniških postelj. Njegov razvoj je med leti 1890 in 1916 vodil dr. Emil Bock, ki je oddelek razširil na 120 postelj, opravil veliko kirurškega dela (predvsem operacije sive mrežnice) ter ustanovil otroški oddelek za zdravljenje očesne tuberkuloze – škrofuloze. Dr. Leopold Ješe, ki je vodil oddelek od 1920–1958, je bil pionir slovenske oftalmologije, prvi profesor oftalmologije na ljubljanski medicinski fakulteti (1945), prvi pisec učbenika za študente (*Oftalmologija*, 1946) in utemeljitelj slovenske oftalmološke terminologije. Članek popisuje tudi razvoj oftalmologije do današnjih dni tako na ljubljanski očesni kliniki kot tudi v ostalih slovenskih bolnišnicah, obravnava vodilne osebnosti oftalmologije ter strokovno, pedagoško in znanstveno raziskovalno delo na tem področju. Slovenija ima leta 2010 nad 130 oftalmologov, dve katedri za oftalmologijo (na ljubljanski in mariborski medicinski fakulteti), dobro vodeno in medn-

arodno priznana specijalizacija iz oftalmologije ter odmevno raziskovalno delo, objavljeno v različnih strokovnih revijah, ki jih indeksira Science Citation Index.

Ključne besede: Zgodovina oftalmologije, XIX.–XXI. stoletje, oftalmologi, Ludvik Grbec, Emil Bock, Leopold Ješe, Očesna klinika Ljubljana, Slovenija.

SAŽETAK

Slovenska oftalmologija razvijala se usporedno sa srednjoeuropskom strukom. Prvi slovenski liječnik-oftalmolog bio je Ludvik Grbec (1805.–1880.), prvi slovenski odjel za očne bolesti s 34 kreveta ustanovljen je 1890. u Civilnoj bolnici u Ljubljani.

Od 1890. do 1916. pod vodstvom dr. Emila Bocka odjel se proširio na 120 postelja, a izdvojen je i dječji odjel za liječenje očne tuberkuloze – škrofuloze. Od brojnih kirurških zahvata na oku, dr. Bock je bio posebno uspješan u operiranju sive mrežnice.

Dr. Leopold Ješe vodi odjel od 1920. do 1958, pionir je slovenske oftalmologije, prvi profesor oftalmologije na ljubljanskom Medicinskom fakultetu (1945.), prvi pisac udžbenika za studente ("Oftalmologija", 1946.) i utemeljitelj slovenske oftalmološke terminologije.

U članku se dalje opisuje razvoj do današnjih dana tijekom kojeg se u ljubljanskoj Očnoj klinici, kao i odjelima u ostalim slovenskim bolnicama prakticira vrhunska praktična oftalmologija te pedagoška i znanstvenoistraživačka djelatnost. Godine 2010. u Sloveniji djeluje 130 specijalista-oftalmologa, dvije katedre za oftalmologiju (na medicinskom fakultetu u Ljubljani i Mariboru), dobro organizirana i međunarodno priznata specijalizacija iz oftalmologije te zavidan znanstvenoistraživački opus objavljen u raznim stručnim revijama indeksiranim u "Science Citation Index".

Ključne riječi: povijest oftalmologije, XIX.–XXI. stoljeće, oftalmolozi, Ludvik Grbec, Emil Bock, Leopold Ješe, Očna klinika Ljubljana, Slovenija