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HISTORY OF ACADEMIC NEUROLOGY IN LATVIA

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INTRODUCTION

Reviewing the history of neurology, its development and the remarkable driving forces behind it, we pay attention to the educational system, which mostly has determined the development of this science in Latvia during different periods of time. Regarding the education system associated with neurology, attention should be paid to the Department of Neurology and Neurosurgery of the Rīga Stradiņš University, which is the only department of its kind in Latvia, and which has defined the structure of neurological education in Latvia and its development directions during a long period of time.

The Department of Neurology and Neurosurgery of the Rīga Stradiņš University is one of the units directed to organization of a qualified pre-diploma and further education in neurology and neurosurgery, preparation and implementation of study programmes, involvement in the practical work of neurology and neurosurgery clinics, practising doctor internship, administration of the student and resident researches, administration of doctoral studies, promotion of research and internship of the department staff (Anonīms, 2014).

ACADEMIC NEUROLOGY IN LATVIA AFTER THE FIRST WORLD WAR

Despite the fact that Rīga Stradiņš University received its current name and legal status only in 2002, when the Constitution of Rīga Stradiņš University was approved by the Parliament of the Republic of Latvia (Saeima), the dawn of Rīga Stradiņš University and medical education were founded already in 1919 when the Latvian University (since 1923 — University of Latvia) was opened, which was the first institution of higher education in the Republic of Latvia. Since 1919, the University included the Faculty of Medicine, where many students from the University of Tartu started their studies, as it gave them the opportunity to obtain the profession they wanted in Rīga (Vīksna, 2011; Anonīms, 2014;).

At first, the establishment of the Nervous Disease Clinic at the Faculty of Medicine of the University of Latvia was difficult, but having overcome the difficulties in 1920, the Department of Nervous Diseases and Psychiatry was founded. Studies took place at the Rīga's First Hospital, where the only nervous disease hospital department in Latvia was located, and at the Rīga War Hospital (Anonīms, 1927; Vētra *et al.*, 2010; Vīksna, 2011).

A significant turning point was moving the department to the new premises at the Rīga's City Second Hospital (presently — Pauls Stradiņš Clinical University Hospital premises) in 1928. The new premises gave more opportunities to perform clinical tuition of the students and to promote research, which was then focused on *tabes dorsales*, peripheral nervous and muscular diseases, and brain pathohistology (Rudzītis, 1938; Vētra *et al.*, 2010; Vīksna, 2011). In the later years, for various reasons the department moved from Rīga City First Hospital premises to the Rīga City Second Hospital and back again, as well as to the Rīga City Seventh Hospital. At the early dawn of the department, a student research society was founded where young neurology specialists could participate actively (Fig. 1). At present, the Department of Neurology and Neurosurgery is lo-



Fig. 1. Meeting of the members of Nervous Diseases Society of the Rīga Medicine Institute (1950). Chief of the society (in the centre) Fjodors Slusarevs (Bērziņš, 2015).



Fig. 2. Professor Edvards Kalniņš (Logina *et al.*, 2000).

cated at the P. Stradiņš Clinical University Hospital, where the Neurology Student Society is still active (Viksna, 2011; Logina *et al.*, 2000).

In 1920, at the dawn of the Nerve and Psychiatry Department of the Faculty of Medicine, it was led by psychiatrist, Professor Hermanis Buduls. In 1923, he was replaced by private Associate Professor E. Kalniņš, a student of the professor of Tartu University Vladimir Chizhs, who had read lectures on nervous diseases at the Faculty of Medicine of the University of Latvia since 1921 (Vētra *et al.*, 2010; Viksna, 2011). Moreover, in 1924, E. Kalniņš was elected as associate professor and the Chief of the Nervous Disease Clinic, and in 1928 — as a professor (Fig. 2).

Significant promoters of neurology science were students of Professor Edvards Kalniņš — Jānis Vilde and Teodors Upners. Jānis Vilde replaced E. Kalniņš and in 1939 became the Chief of the Department (Viksna, 2011). Jānis Vilde is known also for writing the first study book in neurology in Latvian, *Diseases of the Nervous System*, which was used by medical students as well as by doctors. Teodors Upners was one of the first university lecturers who tutored a course of eugenics to medical students. Teodors Upners has left his marks in history with his research about thiophene intoxication induced effects to the brain (Vētra *et al.*, 2010; Viksna, 2011).

ACADEMIC NEUROLOGY IN LATVIA AFTER THE SECOND WORLD WAR

In the development of neurology and its potential during different periods of time, the Second World War had great influence, as many professors and staff became refugees. Several changes were made by the Soviet regime that started after the war, which was harsh on unwanted people. It is highly possible that the contribution of the excellent neurologists, such as Jānis Vilde and Teodors Upners, in the development of neurology in Latvia would have been greater had not the Soviet regime turned against them due to their so-called anti-soviet actions (Vētra *et al.*, 2010; Viksna, 2011)

ACADEMIC NEUROLOGY IN LATVIA IN THE SOVIET PERIOD

However, it cannot be said that under the Soviet power no development took place in the science of neurology and its practical implementation. Although the medical education organisation structure had changed and the Rīga Medicine Institute was founded, replacing the Faculty of Medicine, from the education content point of view significant changes were not made (Fig. 3).

As remarkable promoters of the development of neurology many Soviet period neurologists are to be mentioned. Among them, Aleksandrs Penciks was a very active and talented scientist and was Chief of the Department since 1956. He was one of the first neurologists who introduced electroencephalography in Latvia. Moreover, under his guidance Ģertrūde Eniņa and Juris Bērziņš developed into excellent scientists and tutors (Vētra *et al.*, 2010; Viksna, 2011; Bērziņš, 2015).

A remarkable contribution was given by Associated Professor Feņa Lisica, as she was the first chief of the neuropathology course at the Faculty of Doctor's Specialization and Internship, which was formed in 1962 (Figs. 4 and 5) (Vētra *et al.*, 2010).

Feņa Lisica, as the chief of the department, was replaced, in 1972, by Professor Juris Bērziņš who was the head of the neurology course up to 1992. The whole generation of mentioned neurologists consider themselves as professor Bērziņš students. Under his leadership several studies about diseases of the peripheral nervous system, particularly about compression neuropathy origin and treatment, were conducted (Vētra *et al.*, 2010; Bērziņš, 2015).

Professor Juris Bērziņš specialised in peripheral neuropathy and spine diseases, degenerative central nerve system diseases, parkinsonism, and neuromuscular diseases, for more than 30 years. He is Chief of the Board of the Latvian Neurologist Association and a member of Parkinsonism Panel, an International and European Neurologist association member, an International Pain Study association and European Pain Study Federation member, and a member of Lat-



Fig. 3. Pre-war patron Kristaps Morbergs donated the house at 12 Padomju Boulevard to the University of Latvia, where the Rīga Institute of Medicine started its work (Anonīms, 2014).



Fig. 4. In the centre: Feņa Lisica together with Latvian regions neurologists (1962). (Personal photo archive of the Department of Neurology and Neurosurgery).



Fig. 5. Feņa Lisica together with students during an anatomy class. (Personal photo archive of the Department of Neurology and Neurosurgery).

vian Spine Diseases Association. Moreover, in 1992, J. Bērziņš was awarded the degree of habilitated doctor of medical sciences and in 2001 he was a State Professor emeritus. Moreover, for the contribution made he was awarded with the Three-Stars Order (Fig. 6) (Bērziņš, 2015; Vētra, 2010).

After the death of Professor A. Penciks in 1973, Ģertrūde Eniņa became head of the department. Professor Ģertrūde Eniņa developed ultrasound diagnostic criteria for cerebrovascular diseases and peripheral nervous system diseases. She studied stroke epidemiological data and risk factors of stroke. She also conducted research on the clinical effectiveness of medication in neurology and was the author of many scientific monographs, and academic books. Professor Ģertrūde Eniņa is also a bearer of the Tree-Stars Order and in 2009 she was awarded for her life-long contribution in medicine (Fig. 7) (Vētra, 2010; Bērziņš, 2015).

CURRENT ACADEMIC NEUROLOGY IN LATVIA

A significant period started after the Soviet regime with the independence of the Republic of Latvia. Although this time period is not very long in comparison to the history of neu-



Fig. 6. Dr.med.habil. Professor Juris Bērziņš (Bērziņš, 2015).



Fig. 7. Annual award for life-long contribution in medicine to professor Ģertrūde Eniņa. The professor is together with President of Latvia Valdis Zatlers (2009). (Photo archive form the President homepage (Anonīms, 2010)).

rology in general, many excellent neurologists have already proved themselves during this time. These specialists include Egils Vītols, Andrejs Millers, Ināra Logina, Evija Miglāne, and Viktorija Ķēniņa. Professor Guntis Karelis worked at the Department of Neurology and Neurosurgery from 2009 till 2013, conducting research on neuroinfections. He is continuing his academic work at the Department of Infectology, Rīga Stradiņš University (Bērziņš, 2015).

The research of Professor Egils Vītols on neurasthenia-induced acroparesthesia and pathogenesis of spinal column dynamic load neurological syndrome provided significant contribution to the general development of neurology. Moreover, he was the head of the department from 1994 to 2004 (Fig. 8) (Vētra, 2010; Bērziņš, 2015). After 2004, Andrejs Millers became head of the department and has remained in this post until today (Vētra, 2010).

Professor Andrejs Millers formed a stroke unit and brain circulation research centre at the P. Stradiņš Clinical University Hospital. During the last eight years, Professor A. Millers has accomplished great work to promote qualification of neurologists in Latvia. A. Millers is vice-president of the Latvian Multiple Sclerosis Association, a member of International and European Neurologist association, mem-



Fig. 8. Professor Egils Vītols (Bērziņš, 2015).



Fig. 10. Professor Ināra Logina (Bērziņš, 2015)



Fig. 9. Assoc. Professor Andrejs Millers (Bērziņš, 2015)



Fig. 11. Dr. med. Evija Miglāne.

ber of the board of the European Multiple sclerosis treatment and research association, Latvian Neurologist Association Parkinsonism and Multiple Sclerosis Panel member, and Latvia's representative to the European Neurologist Federation Association. He specialised in brain circulation disorders, neurodegenerative diseases as well as in parkinsonism and multiple sclerosis areas (Fig. 9) (Vētra, 2010; Bērziņš, 2015; Anonīms, 2015).

Associated professor Ināra Logina made a major contribution, as under her administration important studies on peripheral nervous system were conducted to establish immunological aspects of pathogenesis of inflammation and demyelinating polyneuropathies, its association with viral agents, as well as other clinical aspects of polyneuropathies of other origin. Ināra Logina is an associated professor of the Rīga Stradiņš University Department of Neurology, Chief of the Latvian Pain Research Association, member of the Board of the Latvian Neurologist Association, chief of the Polyneuropathy Panel, member of the Neuromuscular and Neuroinfection Panel, member of the International and European Neurologist Association, member of the National Poliomyelitis Liquidation Committee (Fig. 10) (Vētra, 2010; Anonīms, 2015; Bērziņš, 2015).

One of the remarkable neurologists of this period is medical doctor Evija Miglāne, who specialised in diagnostics and treatment of cerebrovascular diseases. Evija Miglāne is Chief of the Neurology Department at the Pauls Stradiņš Clinical University Hospital and is also actively taking part in the administration of the stroke unit and education of younger colleagues. Evija Miglāne is the Chief of the Latvian Neurologist Association, as well as a member of International and European Neurologist Association (Fig. 11) (Vētra, 2010; Anonīms, 2015; Bērziņš, 2015).

The contribution of the lecturer Viktorija Ķēniņa in the development of neurology and education of students and interns is also important. She is a Chief of the Latvian Neuroimmunologist Association, a member of Latvian Neurologist Association and also member of the board of the Latvian Neuroimmunologist Association. V. Ķēniņa specialised in diagnostics and treatment of autoimmune and inflammable nervous system diseases, diagnostics and treatment of the peripheral nervous system pathologies, primary and secondary prophylaxis of stroke as well as in diagnostics and treatment of neuromuscular diseases (Fig. 12) (Vētra, 2010; Anonīms, 2015; Bērziņš, 2015).

All the above mentioned events and persons have left a major impact on the development of neurology in Latvia, and



Fig. 12. Dr. med. Viktorija Ķeņiņa.

as a result neurology in Latvia has developed to a level that complies with high European standards.

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