THE BEGINNINGS OF PHARMACY EDUCATION AT VILNIUS UNIVERSITY

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Pharmacists in Lithuania began to receive formal higher education in pharmacy and pharmacology at the end of the 18th century. Until then, pharmacists were trained under the apprenticeship system. They were granted government privileges but were not considered craftsmen so could not form guilds like the barber-surgeons. They were considered merchants and had to pay taxes to the government for the drugs they sold.

Formal higher education for pharmacists in Lithuania began at the University of Vilnius and was closely tied to the study of medicine and chemistry. Vilnius University, founded in 1579, was the only school of higher education in the Grand Duchy of Lithuania, which included all of present-day Belarus and most of Ukraine, stretching from the Baltic to the Black Sea. It is one of the oldest and most famous schools of higher education in Central and Eastern Europe. For a long time, until the establishment of Moscow University in 1755, it was the easternmost European university and the northernmost Catholic university. Until the dissolution of the Jesuit Order in 1773, it was a Jesuit university.
For various reasons (competition with the University of Cracow, low priority for the Jesuits), the medical faculty at the university was not established until 1781. The Natural History Department was also established in that same year. At first, there were no separate *materia medica* courses. Information about pharmacy was provided in natural history and chemistry courses.

The first professor of natural history was a Frenchman from Lyons – Jean Emmanuel Gilibert (1741-1814). He received his medical degree from Montpellier University (1763); practiced medicine and collected medicinal plants in the countryside surrounding Lyons; and taught anatomy, surgery, and botany at the Lyons medical college (College de medicine de Lyon). In Vilnius, in his natural history courses, he devoted a lot of time to botany, especially the collection and study of medicinal plants. In the Medical Faculty [Collegium medicum] courtyard he established a small botanical garden featuring medicinal plants and herbs. He also took charge of the University Pharmacy, established by the Jesuits around 1600, and conducted some experiments on the healing properties of some of the local medicinal plants. He is called by some “the father of Lithuanian botany” because he was the first to scientifically study and describe, using the Linnaean system, the flora of Lithuania.

Unfortunately, Gilibert’s stay in Vilnius was short – only three years. He left Vilnius in 1784 and two other professors arrived who would continue pharmacy education. They were the Italian Joseph Sartori from Turin, who taught chemistry, and the Hungarian Joseph Langmayer (1750-1810) from Vienna, who taught the practice of medicine, which included pathology and *materia medica*. From the fall semester of 1785, Sartori taught a separate pharmacy course. It met for 2-3 hours per week for two months. It was part of the chemistry course attended not only by medical students but by Vilnius pharmacist as well, who only had apprentice training. The course must have been particularly hard for them, and one wonders what they learned, because it was taught in Latin and higher education was not necessary then to become a pharmacist. In fact, pharmacy as a profession was looked down on by the sons of the noblemen because it did not need any higher education.
This situation changed somewhat in 1798, when the Pole Jedrzej [Andrew] Sniadecki (1768-1838) took over the courses in chemistry and pharmacy and taught them in Polish. By that time, the Lithuanian gentry was very much Polonized. Sniadecki was a very good chemist and physician. He received his medical degree from the University of Pavia (1793) and specialized at the Universities of Edinburgh and Vienna. He was well-acquainted with the work of the famous chemists of the time – Fourcroy, Lavoisier, Guiton de Morveau, Bertholet, Joseph Black and others. In his pharmacy course, he acquainted his students with the scientific basis of pharmacy in chemistry and physics, with the healing properties of medicinal plants or pharmacognosy, with various dosage forms and how to prepare them, with the writing of prescriptions. Medical students who took his course did their practical work at the University Pharmacy. Sniadecki noticed the diuretic properties of calomel and was among the first to write about them. He taught his chemistry and pharmacy course until 1803, when the university underwent a major re-organization and he was assigned to the new Faculty of Physics and Mathematics to teach only chemistry.

In this major university re-organization, the Medical Faculty was planned and re-structured by the famous German physician and pioneer of public health Johann Peter Frank (1745-1821). A separate Department of Pharmacy and Pharmacology was established in 1807 and, until the university was closed by a special decree of Tsar Nicholas I in 1832 for supposedly the university students’ participation in the Polish-Lithuanian uprising against Russia in 1830, its head and only professor was Johann Friedrich Wolfgang (1775-1859). He was a Vilnius University graduate: a master’s degree in pharmacy in 1801 and a doctorate in 1807. In 1804, he became the head of the University Pharmacy, where he established new laboratories and did scientific research and in 1810 he became a professor and chair of the Department of Pharmacy and Pharmacology. He was very hard-working and prolific: the author of about 110 scientific publications, 64 of which were related to botany, especially medicinal plants. He also published on pharmaceutical technology and pharmacology.
Wolfgang was also very influential in the development of pharmaceutical literature. He helped establish a Pharmacy Section of the Vilnius Medical Society, which was founded in 1805 and was the first purely medical society in Eastern Europe. In 1819, at the initiative of Wolfgang, the Pharmacy Section began publishing the *Annals of Vilnius Pharmacy* [Pamietnik farmaceutyczny Wilenski], an early pharmaceutical periodical in Europe and the first of its kind in the Russian Empire. The Pharmacy Section, together with the Vilnius Medical Society, also published the journal *Medicine, Surgery and Pharmacy* [Dziennik medycyny, chirurgii i farmacyi]. Both of these journals published many articles about the medicinal plants of Lithuania, their use in the treatment of numerous diseases, and about the preparation, testing and application of new pharmaceutical preparations.

The university’s Department of Pharmacy and Pharmacology played a crucial role in the education of pharmacists in Lithuania because after the last partition of the Polish-Lithuanian Commonwealth (1795), Lithuania became part of the Russian Empire and subject to its laws. In all of the cities of the Russian Empire there were medical boards that controlled all of the health institutions, including pharmacies. Pharmacists had to have educational qualifications or pass a special examination before a university commission. By a decree of the tsar in 1807, all pharmacists and pharmacy assistants were considered part of the educated classes and were relieved from paying part of the taxes that they paid as merchants.

After the closure of the university in 1832, the medical faculty continued for 10 more years as the Medical-Surgical Academy (the tsar’s armies needed physicians). Pharmacy and pharmacology were taught by Wolfgang’s students.