In this report, I would like to present you the library of the pharmacy of Vilnius University, where the list of books was compiled during 1773-1774. I would also like to discuss the contents of this library and the opinions, questions, and interpretations of the role this library might have played in the academic community and in the training of pharmacists.

First of all, some historical facts:

1. The Jesuit College (founded 1570) in Vilnius was officially reorganized into a university (Alma academia et universitas Vilnensis societatis Iesu) on April 1, 1579, by the privilege or charter signed by Stephen Bathory, the King of Poland and Grand Duke of Lithuania. A specific fact was that the University was established with two rather than four – as was a usual practice – faculties. The Faculties of Law and Medicine were missing.

2. The University pharmacy was established in ca.1600. Here you can see what the building of the former University pharmacy looks like. The importance of the pharmacy was not limited to providing the local population with medicines – it was also a scientific institution providing education to pharmacists.

3. In 1773, the Pope Clement XIV in his bull stated that the Jesuit Order was disbanded. After this decree, the Educational Commission established by the Parliament took the administration of the educational system over from the Jesuits. In 1773-1774, a detailed registry of the property of the University – including its pharmacy - was compiled. This document is stored at the Manuscript Department of Vilnius University, and is the object of this study.

4. In 1781, the Faculty of Medicine was established.

Vilnius University Pharmacy was the largest pharmacy in the Jesuit province of Lithuania. The aforementioned registry dated 1773 was written in Polish and contained the description of the complete property pf the Pharmacy – buildings, furniture, drug manufacturing stools, dishes, equipment, books, carriages, etc. The aim of this report is to
present a survey of books stored in the pharmacy of Vilnius University. This registry shows that the library of the pharmacy had 405 books.

The list of these books is 17 pages long. In this slide, you can see the book registry of Vilnius University Library. My first task was to identify the books. The author’s name and a fragment of the book title are given in the registry. Unfortunately, several books could not be identified. Identification of the books was conducted using the world’s largest database of publications – the WorldCat.

The majority of the books were in Latin, a few were in German, and 13 books were in Polish. Over a dozen of books were on subjects other than medicine – a few books were on religion, a few - on history, and a few were works of fiction.

The library had treatises on botany, medical practice, and iatrochemistry, pharmacopeias, and writings by Classical, Byzantine, and Arabian authors. A very interesting fact is that the library had writings by leading authorities in the fields of anatomy and surgery.

The library contained writings by over 170 various authors. The majority of these writings were by German university professors and famous physicians of that time; there were also authors from the Netherlands and France, and a few authors were from Spain and England. 66 books were registered without indicating their authors’ names. Most commonly, the library had one or several most renowned books by one author, or collections of writings.

The list of books in the registry did not follow any system – be it the content of the books, the alphabet, or any other system. For instance, when several copies of the same book were listed, one copy could be found at the top of the list, and the other – at its bottom.

The library lists writings by the following writers of the Antiquity: Galen, Hippocrates, Theophrastus, Dioscorides, and Celsus. Of the latter author’s writings, his famous De medicina is mentioned. This book had 521 editions published in 9 languages. The list also included writing of the Byzantine author Oribasius and several Arabian authors – Avicenna (Ibn Sina) and Mesua. However, books by Classic authors comprised only a small part of the library. The majority of the books were written in the 16th and 17th centuries. A significant part of books were by iatrochemists or Paracelsians. However, the library had only one work of Paracelsus, a great reformer of medicine and the initiator
of this trend - *Kleine Hand und Denck Bibel*, written in German and focusing on philosophy.

In the 17th century, Paracelsus’ ideas and philosophy of chemistry were propagated by such authors as Jan Baptista van Helmont, 1577-1644, Oswald Crollius (1560-1608), and Daniel Sentert. Their writings were stored in the library of the pharmacy. The collection of writings by Daniel Senert – a professor in medicine at Wittenberg University – was the most abundant – as many as 10 copies of his *Medicina practica*, and such books as *De scorbuto traktatus*, *De febribus*, etc. Senert won recognition as one of major thinkers of his day through his attempt to give chemistry an atomistic grounding. His aim was to unite experience, reason and the best authorities, both ancient and modern. His influence was felt in Germany until the 19th century.

The library also had books on practical chemistry, and textbooks on chemistry, including *Tyrocinium chymicum* – which is considered to be the first textbook on chemistry. This book was written by Jean Beguin (1550-1620) - a French physician, iatrochemist, and a Paracelsian. Also listed in the registry was the textbook *Praxis chymiatrica* by Johannes Hartmann (1568-1631) – a German author who was also the first professor of chemistry in Europe. The textbook presents collections of prescriptions and drug manufacturing technologies. The library of the Jesuit pharmacy had three copies of this book and also a fourth book by Hartmann – *Disputationes chymico-medicae* 1611.

The library also had books written by the “French Paracelsians”, as Lazare Riviere - the first to hold a chair in chemistry at Montpellier, and Franciscus Sylvius (Frans De Le Boe), (1614-1672) – a professor at Leiden who popularized the study of chemistry in the late seventeenth century.

In addition to iatrochemists’ writings, the library had many books on alchemy, such as *De metallorum transmutatione* by Daniel Georg Morhof – a teacher of poetry at Kiel University, and later – a professor of history, an Italian natural philosopher della Porta’s book of secrets *Magia naturalis*, etc.

A very interesting fact is that the library had about 20 writings by leading authorities in the fields of anatomy and surgery. Such knowledge is not required for pharmacists. Why did the pharmacy have these books? It is likely that the library served other functions - not only educating and training pharmacists.
Among the well-known texts of anatomy and surgery in the library were the *Opera chirurgica* by the French surgeon Ambroise Paré (1510 – 1590); the *Encyclopaedia Chirurgica Rationalis* by the physician and surgeon as well as follower of Paracelsus Johann Doläus (1651-1707); the *Pentateuchos cheirurgicum* by Hieronymus Fabricius ab Aquapendente (1537-1619) - one of the most famous Italian anatomists of the Renaissance period, the founder of modern embryology, and the teacher of William Harvey; the *Culter anatomicus* by the German anatomist and Tom Bartholin’ student Michael Lyser (1626-1659), which became one of the most popular textbooks of anatomy in Europe at that time; the *Tabulae anatomicae* by the Italian anatomist and contemporary of Andreas Vesalius Bartholomeo Eustachi (1500-1574); and, possibly, William Harvey’s (1578 –1657) *Exercitationes de generatione animalium*

Among the well-known medical texts are several popular pharmacopeias and dispensatories.

The first in the list was *Pharmacopée Royale Galénique et Chymique*, first published in 1676, written by Charas Moyse (1618 -1698) - a pharmacist and a professor of medicine of Jewish origin who worked in France, England, the Netherlands, and Spain. The second entry was a dispensatory by Valerius Cordus (1515 - 1544), published over a century earlier – in 1546. This was the first official pharmacopeia that the Nuremberg authorities assigned a young gifted botanist and physician to compile. The third book in the list was *Pharmacopoeia augustana reformata*, written by a pharmacist, a manor physician, Professor Johann Zwelfer; the library had the first edition of the book, published in 1652. The author was a Paracelsian and a supporter of the use of compounds of animal and chemical origin - including substances such as antimony and mercury – in medicine. Further on we can see that the pharmacy had *Lemery's Pharmacopee Universelle* (published in 1697) by a famous French chemist, pharmacist, and a professor of medicine Nicolas Lemery (1645-1715), also *Dispensatorium pharmaceuticum austriaco Viennense*, and several similar publications.
In general, it should be said that the Jesuit-owned University pharmacy had a rich library. The library contained various writings on medicine – disease diagnostics and treatment, philosophy of medicine, anatomy, surgery, manufacturing of medicines, chemistry, alchemy, iatrochemistry, botany, mineralogy, etc. A significant part of the books were written by professors from Protestant universities. The library contained abundant works written by followers of both Galen and the reformist Paracelsus. Thus, the Jesuits did not seem to have any ideological prejudices when buying books. Responsible people from the Jesuit colleges and pharmacies individually decided what books to purchase, because the comparison of registries of pharmacy libraries in Vilnius and Uherskem Hradišti (Czech Republic) showed that they all were compiled in an original manner. Vilnius University library had books that were not necessary for a pharmacist’s practice – i.e. books on surgery, anatomy, therapy, and disease diagnostics; in fact, such books were nearly more numerous than those necessary for a pharmacist’s practice. Who read, who studied these books? The list of books was compiled at the time when the University did not yet have the Faculty of Medicine – the Faculty was established 7 years later. However, basics of medicine were taught in other subjects, e.g. in a subject called “Physics”. Were these books used in an academic process? At that time, physicians practiced in the city, and a barbers’ guild operated. Did they use this valuable library? What relationships did the Jesuit pharmacy have with secular practitioners? These questions remain unanswered. A historian P. Rabikauskas wrote that University pharmacists were also skilled physicians. Some authors state that the Jesuits ignored medicine and not only showed no effort to establish the Faculty of Medicine in Vilnius, but in fact deliberately interfered with its establishment. Vytautas Bogušis - a researcher of the history of Vilnius University – published an opposite hypothesis stating that the Jesuit library could serve as a non-formal physician training center. More arguments are required to confirm this hypothesis, yet it should be admitted that the Jesuits in Vilnius devoted significant attention and finances to literature on medicine.