

# The Human Osteological Collection of Vilnius University

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**Abstract.** This article briefly presents the history of the human osteological collection stored at the Faculty of Medicine of Vilnius University. The birth of such collection can be traced back to the mid-19<sup>th</sup> century (1855) with the establishment of the Museum of Antiquities. Until the mid-20<sup>th</sup> century, human skeletal remains were gathered sporadically and selectively, by collecting either skulls or long bones. Since the late 20<sup>th</sup> century, the policy of selection has changed and nowadays the collection consists of systematically assembled anthropological material of scientific value. The assemblage currently comprises more than 9.000 skeletal remains dating back from the Mesolithic to the Late Modern Era.

**Keywords:** osteological collection, research collection, anthropology, Vilnius University, Lithuania.

## Vilniaus universitete saugoma žmonių osteologinė kolekcija

**Anotacija.** Straipsnyje trumpai pristatoma Vilniaus universiteto Medicinos fakultete saugomos žmonių kaulų kolekcijos istorija. Kolekcijos kaupimo pradžia siejama su 1855 m. įsteigtu Senienų muziejumi. Iki XX a. vidurio kolekcija buvo pildoma sporadiškai ir selektyviai, t. y. renkant arba kaukoles, arba ilgusius kaulus. Nuo XX a. vidurio pradėti sistemaiškai kaupti ir saugoti visi mokslinę vertę turintys žmonių palaikai. Šiuo metu kolekciją sudaro daugiau nei 9 000 skirtingai išlikusių individų skeletų, kurie datuojami nuo mezolito iki XIX a.

**Reikšminiai žodžiai:** osteologinė kolekcija, tyrimų kolekcija, antropologija, Vilniaus universitetas, Lietuva.

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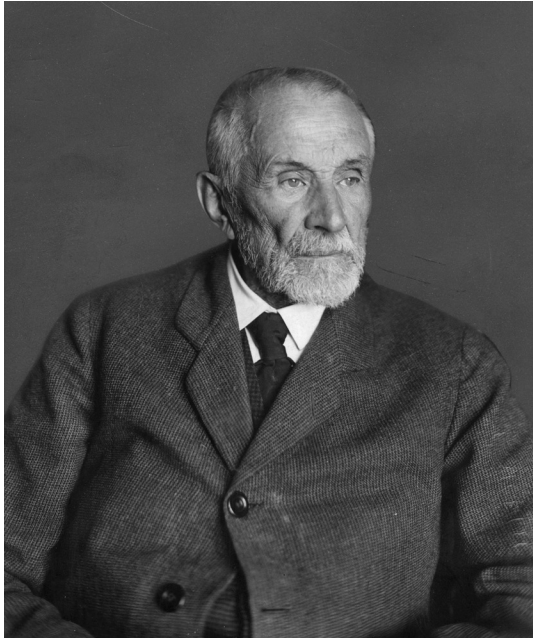
“While the bioarchaeology and its new developing techniques in identification extensively relies on human skeletal reference collections, collections derived from archaeological excavations though lacking the type of crucial documentation are accompanied by details of site location, cultural context, and related mortuary data” (Ubelaker, 2014, p. 5633). Once limited to straightforward approaches of counting bones, measuring skulls or long bones, assessing sex or age at death, we are now armed with hundreds of possibilities – aDNA, stable isotopes, radiocarbon dating and many more – for answering important questions related to the past, thus research collections, be it human or animal, can serve this purpose. The history of Vilnius University human skeletal research collection spans more than 150 years. Starting with more or less sporadic assembling of skulls and long bones during the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century, it can now be defined as a valuable human skeletal research collection representing Lithuania and the Baltic region of Europe.

## From the 19<sup>th</sup> century to World War II

The origin of human osteological collection in Lithuania dates back to the late 19<sup>th</sup> century, when the Anatomy Museum was established by merging the items of the former Museum of Antiquities and the human remains belonging to the Department of Anthropology of Vilnius Stephen Bathory University. At the beginning, due to the past European tradition’s influence, only skulls were collected, by famous anthropologists like Julian Talko-Hryniewicz (1850–1936), Michał Reicher (1888–1973), Witold Sylwanowicz (1901–1975), and Karol Kosiński (1887–1940). Unfortunately, the primary sources describing the history of this collection are scarce and the only remnants consist of the inventory book of the Department of Anatomy (Reicher, 1920), the inventory book of the Museum of Anthropology and Prehistory (Hryniewicz, 1920a), two articles by Adam Wroczek (1926), and Julian Talko-Hryniewicz (1920), and the skull collection itself.

The Museum of Antiquities in Vilnius was established by historian and avid archaeologist count Eustachy Tyszkiewicz on May 11, 1855 at the premises of the closed Vilnius University (Rindzevičiūtė, 2011). It was the first public museum in the former Grand Duchy of Lithuania and is considered a predecessor of the National Museum of Lithuania, even though only a handful of items from the Museum of Antiquities ended up at the National Museum (*Lietuvos nacionalinis muziejus*). Together with the Vilnius Temporary Archaeological Commission (1855–1865) the museum was the most prominent cultural and scientific institution displaying many historical items that reminded of the old Grand Duchy of Lithuania – it served a romantic nationalistic purpose of Lithuanian nobles and formed its position as the center for cultural heritage guardianship in the Northwestern region of Imperial Russia (Keršytė, 2012). The museum collection rapidly grew to over 67.000 items in 1865 by absorbing large collections of zoological specimens and minerals, of engravings, maps and atlases, libraries of various Catholic churches and monasteries, Oriental art, as well as various donations from local nobles (Būčys, 2001; Matulytė, 2004; Gričius, 2005; Būčys, 2010; Stašaitis, 2017). However, after the failed January Uprising in 1863, tsar Alexander II took a particularly strict russification policy – the museum was nationalized and reorganized, with almost all items being relocated to St Petersburg and the Rumyantsev Museum in Moscow, leaving only a small fragment of it in Lithuania (*Lietuvos nacionalinis muziejus*).

World War I, known as “The Great War”, affected people all over the world. In Lithuania it had two major impacts: The Declaration of Independence on February 16, 1918, and the loss of Vilnius, that was eventually incorporated into Poland in 1922. During the turmoil of the war, all the remaining archaeological exhibits from the Museum of Antiquities were threatened or even vanished (*Lietuvos nacionalinis muziejus*; Hryniewicz, 1920b), and in the Great Retreat in 1915 the old museum inventory book was moved to Russia. To save the collection from complete scattering, a part of it was taken to the Lithuanian Central Museum, and another part to Vilnius University Library (Hryniewicz, 1920b). Other valuable remaining items were saved by famous Polish-Lithuanian anthropologist professor Julian Talko-Hryniewicz (Fig. 1). Julian Talko-Hryniewicz was born in a Polish family of noble descent in Lithuania in 1850. He studied medicine at St Petersburg and the University



**Fig. 1.** Professor Julian Talko-Hryniewicz. Photo courtesy National Digital Archive, Poland.

**1 pav.** Profesorius Julijonas Talko-Grincevičius. Nuotrauka iš Nacionalinio skaitmeninio archyvo, Lenkija

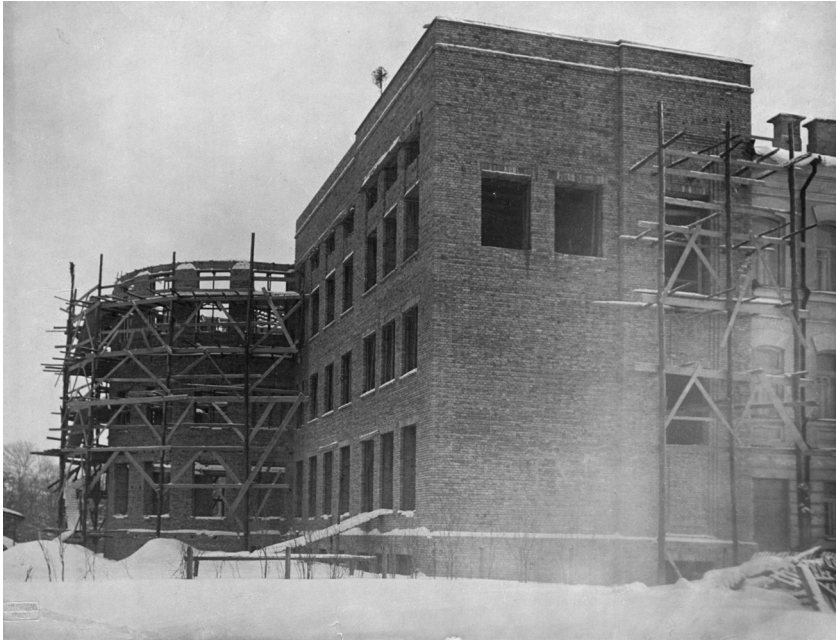
of Kyiv, where he graduated (Spudy, 2007). Later on, he started his professional and scientific activity in the Russian Empire and in Krakow (Poland). Dissatisfied with his only professional activity as a doctor, Hryniewicz additionally conducted anthropological research, part of which is related to Lithuania; this is reflected in his 1893 scientific publication “Physical anthropology of the population of Lithuanian and Russian citizens” (Machlański, 2010).

In the spring of 1920, during the wars and political cataclysms, and only a year after the foundation of Stephen Bathory University, Hryniewicz initiated the establishment of the Department of Anthropology and Prehistory (Wroczek, 1926) which served as a haven for exhibits from the Museum of Antiquities; the newly formed collection included several long bones and 300 skulls derived from different cemeteries and burial mounds in Rochaczewski (Poland), Bychovec (Belarus), Grodno (Belarus), and Białystok (Poland) (Hryniewicz, 1920a, p. 20), while the entire exhibition was subdivided by different time periods, with a total number of 5767 archaeological items (Hryniewicz, 1920b). Thanks to the professor, five spacious halls, two transitional rooms and other auxiliary rooms in the former Masalski Palace, in the

premises of Stephen Bathory University (now Pilies Street 11) were conceived as a new museum (Wroczek, 1926). Unfortunately, the premises were suitable neither for the Department of Anthropology and Prehistory nor for the museum: in the wintertime they were dreadfully cold and some of the halls were constantly flooded. As the result of these ongoing problems and the arising question of security in the context of the Bolshevik attack of 1920, it became clear that the place would be insecure in case of any war action. On May 1, 1920, all artefacts were transferred to a safer location near the Gates of Dawn (*Aušros Vartai*), Vilnius.

Hryniewicz contributed to Lithuanian anthropology by much more than saving items of the Museum of Antiquity. Trained as medical practitioner, he dominated early 20<sup>th</sup> century anthropology in Lithuania. His immense interest in the past resulted in a selective collecting pattern, specifically skulls, which at the time were of more general interest, more abundant, and comparatively easy for transportation and storing. The assembling and analysis of skulls began earlier than his appointment at Stephen Bathory University. At the beginning of the 20<sup>th</sup> century he analyzed skulls excavated in Kaunas and Šiauliai region, such as those from the 2<sup>nd</sup>–4<sup>th</sup> century Lauksvydai, Visdėrgiai, and Titvydiškiai archaeological sites (Česnys, 2002). Most likely, according to professor Gintautas Česnys, these skulls ended up in the Jagiellonian University at Krakow (Poland) (Česnys, 2002, p. 278). Hryniewicz actively conducted his research on cases of trepanation discovered in Vilnius and its province (Hryniewicz, 1921). This well-known phenomenon was common in many ancient civilizations and could be attributed to a treatment related to intracranial diseases, the release of pressured blood buildup from an injury, or even the desire to drive out evil spirits that caused headaches. Skulls with signs of trepanation discovered near Vilnius Gediminas’ Castle examined by the scholar were linked to a *postmortem* trepanation, which he associated with magical healing powers when a small piece of skull, usually round-shaped, was worn as an amulet (Hryniewicz, 1920b). The exact current location of the trepanned skulls analyzed by Hryniewicz is still an open question. Over a one-year period, before his departure in June 1920, Julian Talko-Hryniewicz amassed 330 skulls, 243 of which later ended up in the Department of Anatomy (Wroczek, 1926).

After professor Hryniewicz left Vilnius, paleoanthropological research at Stephen Bathory University seems to have been partly forgotten. The new head of the department, professor Michał Reicher, was in charge of



**Fig. 2.** The construction of Anatomicum in 1928. Photo courtesy VU Library, Manuscript Department F97-12.

**2 pav.** Anatomikumo statybos 1928 metais. Nuotrauka iš Vilniaus universiteto bibliotekos Rankraščių skyriaus, F97-12

the teaching, research work, and also the museum. At that time the Department of Anatomy was situated in Naugarduko Street (Pavilonis, 1997). It is known that on the ground floor there was a teaching room where museum exhibits were stored; therefore, we presume that the skull collection might have been kept there as well (Trzebiński, 1931, p. 30). However, new premises were desperately needed in order to provide better conditions for teaching and research. It took almost ten years (1925–1934) to build a new *Anatomicum* that was initiated by Reicher (Reicher, 1925). In 1934, the new three-story north wing building was finally completed in M. K. Čiurlionio Street 21, where the Faculty of Medicine of Vilnius University is still located (Fig. 2).

The most remarkable works of professor Reicher were studies in soft tissue, embryology, comparative anthropological analysis of the Karaites people, and osteological investigation and facial reconstruction of the Grand Duke of Lithuania and later king of Poland Alexander Jagiellon (1461–1506), Barbara Radziwiłł (1520/23–1551), and Elizabeth of Austria (1526–1545); these remains were accidentally found after the flood in the Cathedral Basilica of St Stanislaus and Ladislaus in 1931 (Žalnora and Miežutavičiūtė, 2011). In the period of 1920–1939, Vilnius was expanding and was constantly under construction. We believe that the development of the city and the rescue excavations led to the growth of the osteological collection, especially at the end of the 1930s (Table 1). Contrary to Julian Talko-Hryniewicz's skull collection which was a selective gathering due to the cases of trepanation, Reicher and his colleagues tended to collect every well-preserved skull found at excavation sites. The old inventory book of the Department of Anatomy testifies the involvement of Stephen Bathory University anatomists in the excavations related to construction works (Reicher, 1920). The analysis of the inventory book of the Department of Anatomy and the press of that time suggest that professor Reicher and other anatomists were mainly interested in craniological findings. Summarizing the excavations carried out by the Stephen Bathory University Faculty of Medicine in interwar Vilnius and its surroundings, it is clear that the skull collection of the Department of Anatomy contains finds from J. Jasinskis, Z. Sierakauskas, Pranciškonai, Turgus, Šv. Ona Streets, and Tauras Hill. Meanwhile, a large part of the excavation material, as well as the findings themselves, were handed over to the then Stephen Bathory University's Department of Forensic Medicine and other investigators. In 1928 and 1930 two mass graves of Napoleon's soldiers were discovered in Lithuania. While nowadays bioarchaeology keeps documenting the lives and gruesome deaths of the *Grande Armée*, and each such case gains worldwide attention, the fate of the remains



**Table 1.** Human remains found during archaeological excavations in Vilnius and its surroundings in the Interwar Period.*1 lentelė. Žmonių palaikai, rasti archeologinių kasinėjimų metu Vilniuje ir jo apylinkėse tarpukariu*

YEARS	PLACE	FINDS	STORAGE	REFERENCE
1920	St Johns' Church Crypt, Vilnius	330 skulls	243 skulls included in the collection	Wroczek A. Zakład Antropologii w Uniwersytecie Stefana Batorego w Wilnie. <i>Przegląd antropologiczny</i> , 1926, t. I, p. 108
1927	A. Mickevičius Street, Vilnius	Mass grave of unknown context	Transferred to the Department of Forensic Medicine of the Stephen Batory University	Wykopalka na ul. Mickewicza. <i>Dziennik Willenski</i> , 1927, nr. 112
1928	District of Vilnius, around Nemenčinė, Slanimas and others	Unknown	Unknown	Szkelety powstancow. <i>Dziennik Willenski</i> , 1928, nr. 125
1928	Franciscan Church, Vilnius	Commingled human remains	Reburied in Rasos cemetery	Szkelety powstancow. <i>Dziennik Willenski</i> , 1928, nr. 125
1928	Feet of Castle Hill, Vilnius	The participants of the January Uprising (1863)	Reburied in Antakalnio Soldiers' Cemetery	Szkelety powstancow. <i>Dziennik Willenski</i> , 1928, nr. 125
1928	Maliniškės Village	A mass grave of Napoleonic period	Unknown, but recorded in the inventory book	Odnalezienie starego cmentarzyska. <i>Dziennik Wilenski</i> , 1928, nr. 238.
1929	Vilnius Streets of St Nicholas (Šv. Mykolas), St Magdalene, Bishops, Franciscans, St Anne (Šv. Ona, now Maironis), St Ignatas, Market (Turgaus), Radomska (this street no longer exists), St Jacob (Jokūbo) and Mėsinių; Literatai square, Tauras Hill; Smorgonys (now Belarus)	78 skulls from Smurgainys	Unknown	Reicher M. 1920. Zakład Anatomii Prawidłowej USB: <i>Księga inwentarzowa</i> , p. 165–300
1930	Tauras Hill, Chopin Hill (Sierakauskas Street) Vilnius	Unknown	Unknown	Reicher M. 1920. Zakład Anatomii Prawidłowej USB: <i>Księga inwentarzowa</i> , p. 250–300
1930	Turgeliai Village	A mass grave of Napoleonic period	Unknown	Cmentarzysko z czasow Napoleonskich pod Turgeliami. <i>Słowo</i> , 1930, nr. 126
1930–1932	Jasinskis Street, Vilnius	800 skulls	Included in the collection	Reicher M. 1920. Zakład Anatomii Prawidłowej USB: <i>Księga inwentarzowa</i> , p. 250–300
1931	Franciscan Church, Vilnius	Burials in the garden of the Franciscan Church	Unknown	Odkopanie cmentarzysko. <i>Dziennik Wilenski</i> , 1931 m. nr. 202
1932	Tauras Hill, Akmenu, Sierakauskas Streets, Vilnius	Unknown	Unknown, but recorded in the inventory book	Cmentarzysko przy ul. Kamennej. <i>Dziennik Wilenski</i> , 1932, nr. 149; Profanacja szatko. <i>Słowo</i> , 1932, nr. 155
1933	Užupis Street, Vilnius	Unknown	Unknown, but recorded in the inventory book	Stare cmentarzysko przy ul. Zagrezecznej. <i>Kurjer Wilenski</i> , 1933, nr. 138
1934	St Anne's Church, Vilnius	Unknown	Transferred to the Department of Forensic Medicine	Szczałki ludzkie znalezono na ul. Sw. Anny. <i>Dziennik Wilenski</i> , 1934, nr. 218

discovered in 1928 and 1930, though possibly brought in the Department of Anatomy at that time, is unknown. The year 1928 was memorable from another aspect – the remains of the supposed participants of the 1863 January uprising were found in T. Kosciuškos Street, at the foot of Gediminas' Hill. It is unclear how researchers at the time reached this conclusion, as the Department of Anatomy did not examine them. Unfortunately, today we have no publication that would summarize the paleoanthropological research carried out in the period of 1920–1939. Nevertheless, until 1939, the osteological collection, by then comprising over 3,000 skulls, was one of the largest in Poland and Europe (Reicher and Sylwanowicz, 1956).

When World War II started in 1939, Stephen Bathory University was reorganized. The possessions at the university were declared property of the Lithuanian State and most of the university staff left to Poland (Sylwanowicz, 1968). In 1939–1940, the inventory of the former Department of Anatomy was partly moved to Poland and to Kaunas. When the department was headed by professor Jurgis Žilinskas (1885–1957), part of the inventory, namely books, were returned to Vilnius (Sylwanowicz, 1968). It is unknown how exactly the turmoil of WWII might have affected the osteological collection, but based on the number of remaining skulls (over 2000) and the inventory book, the damage of the osteological set was minimal.

## The Soviet Period

During the Soviet Occupation, especially during the 1950s and 1960s, social, cultural, and academic life was strongly controlled. Concerning the human osteological collection stored at the Faculty of Medicine in Vilnius University (former Stephen Batory University) some restrictions emerged as well. According to Gintautas Jurgis Česnys (1940–2009) (Tutkuvienė and Žalgevičienė, 2019, p. 162), an official order led the dean of the Faculty – professor Salezijus Benignas Pavilionis (1919–1998) – to remove the entire skull collection due to the set being “racist”. Luckily, professor Pavilionis refused to obey and decided to cover the cabinets storing the skulls with posters on human evolution (Fig. 3). Therefore, the collection which contained the first exhibits has been preserved until now.

Professor Pavilionis encouraged anthropologist Česnys to resume studies on skulls. The modernization of the anthropological collection began with the gathering of human bone sets that were scattered in various museums and institutions in the 1970s. For example, the skull set that eminent physician Jonas Basanavičius (1851–1927) personally collected during many archaeological surveys in the 20<sup>th</sup> century was transferred to the Faculty of Medicine in 1973 (registration in the cranial inventory made by professor Česnys in 1973). At first, it belonged to the Lithuanian Science Society (1907–1940), later the National Museum gained the ownership, but now for almost fifty years the remaining twenty skulls out of a (hypothetical) few hundred ones are part of the permanent human osteological collection in Vilnius University. Moreover, at that time archaeologists and anthropologists started to collaborate more actively. For this reason, the collection was revived and began to grow constantly. Contributors such as archaeologists Vytautas Urbanavičius, Adolfas Tautavičius, Mykolas Michelbertas, and Vytautas Kazakevičius provided human osteological material to professor Česnys for anthropological analysis at the Department of Anatomy, Histology and Embriology. Not only skulls were gathered, but long bones from archaeological sites such as pre-historic Plinkaigalis and Pumpurai or historic Obeliai and Gėluva were also collected and stored. Sex assessment, age estimation and even some facial reconstruction (Fig. 4) were carried out for every human burial found during archaeological investigations. Thus, this enabled Česnys to develop his own scientific areas of interest, mainly craniology, paleodemography, and ancient population history of Lithuania and the Eastern Baltic area (Jankauskas, 2010).

Although seen from an outdated perspective of “ethnogenesis” and typology, those samples served and still serve as a basis for studies on biological history of past Lithuanian populations, e.g., insights into genetics and migrations, secular changes in body stature, peculiarities of dental status and disease, and paleodemography. The works on “ethnogenesis” achieved another goal: not only anthropologists or archaeologists, but also the society in



**Fig. 3.** Professor Pavilionis (on the left) together with the Minister of Health Boris Petrovski and his wife (USSR) in the Department of Anatomy, Histology, and Embryology. In the background, skull cabinets covered up with posters. Photo courtesy VU MF.

**3 pav.** Profesorius Pavilionis (kairėje) ir SSRS sveikatos apsaugos ministras Borisas Petrovskis su žmona Anatomijos, histologijos ir embriologijos katedroje. Antrame plane matyti kaukolių spintos, uždangstytos evoliucijos plakatais. VU MF nuotr.



**Fig. 4.** Reconstruction of a Neolithic woman buried together with a fetus. Photo by Daumantas Liekis.  
**4 pav.** Neolito moters, palaidotos kartu su naujagimiui, rekonstrukcija. Daumanto Liekio nuotr.



general were accustomed to the study of “risky” scientific problems during the Soviet years. It is no coincidence that so many popular articles have been written on ethnic anthropology; a large number of craniology studies were also performed in foreign countries to compare results with Lithuanian skull material, e.g. the data were collected in Moscow, Leningrad (now Saint Petersburg), Minsk, Tallinn, Riga, Białystok, Warsaw, Krakow, Poznan, Stockholm, and Copenhagen (Tutkuvienė, 2005). This allowed to determine not only the change of the anthropological type of the Lithuanian population over 10.000 years, but also the secular changes of the most important demographic indicators, such as life expectancy, peculiarities of reproduction, and their connections with the development of economy and culture (Tutkuvienė, 2005). A wide range of analyses of human bone material led to creating an image of the origins and anthropological type of the Lithuanian nation, comparing it with analogous data of other nations. In 1975, Česnys also involved Irena Balčiūnienė, a professional odontologist, to conduct the first extensive odontological survey of past and modern Lithuanian populations (Česnys, 2001).

As a result of the aforementioned activities, two fundamental anthropological studies were published in 1987 and 1988 (Volkaitė-Kulikauskienė, 1987; Česnys and Balčiūnienė, 1988). Both of them are based on human osteological and odontological material from the collection and still remain the most extensive studies of the inhabitants of Lithuania. By almost the end of Soviet Period, Gintautas Česnys and Rimantas Jankauskas decided to start collecting complete human skeletons. Hence, the collection was enriched with 1152 well-preserved individuals from the 14<sup>th</sup>–17<sup>th</sup> century Alytus burial ground, marking a new phase for the human osteological collection.

## **1990 – present**

The collapse of the Soviet Union was a breakthrough in many fields. Access to the latest scientific literature, advanced methodology, and various studies allowed a more comprehensive analysis of human osteological material. New ideas and the recovery of complete skeletons enabled professor Rimantas Jankauskas to pay much more attention to paleopathology and population studies. Trauma, tuberculosis, treponematosi, metabolic disorders and endocrine disturbances, skeletal dysplasias, tumors, dental diseases and other topics were studied, while numerous publications received international interest (Jankauskas and Gerhards, 2012). Collaboration with foreign colleagues is essential in this field, therefore the osteological collection was successfully included in the international Global History of Health project (Steckel and Rose, 2002), and was examined for research with the Anthropology Department of the University of Central Florida (Holder et al., 2017; Piličiauskas et al., 2017; Whitmore et al., 2017) and the Max Planck Institute (Giffin et al., 2020). This clearly proves that the human osteological collection in Vilnius University can provide significant data related to certain disease development in the past, or reveal some topics that are still not equally covered in some regions or time periods. The collection experienced a wind of change too, i.e. for many years cremated human remains from archaeological sites were only stored, but had never been properly itemized. Since 1994 the inventory of cremated human remains has commenced. The collection provided material for five doctoral dissertations and even some master’s theses, which explored topics such as children physical development, health status, paleodemography, traumas, diet, and mobility in past populations (Šreikienė, 2004; Palubeckaitė, 2005; Jatautis, 2018; Kozakaitė, 2018; Simčėnka et al., 2020). As bioarchaeology is becoming established in present-day Lithuanian archaeology, the importance of this human osteological collection increases even more.

## **The collection today**

The collection has faced new challenges in the 21<sup>st</sup> century. Due to the large volume of the collection, several problems emerged. Based on personal communication with former curators of the human osteology collection, it was unclear what the real number of the individuals stored in the depositories was, as usually this number varied between 10.000 and 15.000 skeletonized human remains. Some doubts about the application of sex assessment





**Fig. 5.** Postcranial skeletal collection. *Photo by VU MF.*

**5 pav.** Postkranijinių skeletų kolekcija. *VU MF nuotr.*

and age estimation methods also arose, as past researchers used the skull as the most reliable element for sexing, and the pelvic bone was systemically ignored. Additionally, disregarding other morphological features used to assess the biological sex of an adult, past researchers used archaeological data to distinguish a “male” or “female” individual, thus clearly clashing with recent attempts to consider gender as opposed to biological sex. Researchers strongly advise to consider the possibility of shifting from biological to cultural identity in the past (Hollimon, 2011). Lastly, another problem could be summed up in terms of scientific significance of the collection, i.e. the entries in the inventory books clearly demonstrate doubtful cases duly added to the collection, such as: “skeleton from 13<sup>th</sup>–17<sup>th</sup> century” (a far too wide chronology), “accidentally found skull” (unknown context), or “sex is unknown, so the skull is eliminated from the collection” (postcranial skeleton is still present, while the skull was eliminated – therefore one element of the “whole” individual is missing). Cases like these needed to be re-evaluated and decision to be taken on which individual skeleton or assemblage from a specific burial ground should be reburied and which part of the collection could still serve scientific purposes.

The project “Osteological Material as a Source for Lithuanistic Research: Knowledge, Systemization, and Access” (“OSTLIT”), funded by the Research Council of Lithuania, was launched in 2018. Its main goal can be described as a re-evaluation of the collection, i.e. eliminating single skeletons without contextual information or of a far too wide chronology; additionally, each individual was analyzed applying standardized methods for age-at-death and sex estimation (Buikstra and Ubelaker, 1994), including detailed and objective descriptions of pathological lesions (Aufderheide and Rodrigues-Martin, 1998; Ortner, 2003; Brickley and Ives, 2008). Standardized methods highly recommend that preservation of a skeleton be recorded first, as this has implications on what pathological conditions may be recorded or missed (Mitchell and Brickley, 2017). Thus, each bone coming from every single individual was evaluated as “well-preserved”, “partially preserved” or “poorly preserved”. It should be highlighted



**Fig. 6.** Skull collection from the 19<sup>th</sup> century. *Photo by VU MF.*

**6 pav.** XIX a. kaukolių kolekcija. *VU MF nuotr.*

that even poorly preserved skeletons from a single population were kept. Recent work has demonstrated that human skeletal remains may be partial and poorly preserved due to underlying pathological conditions (Brickley and Buckberry, 2015) and the exclusion of poorly preserved skeletons may lead to the loss of significant information on demographic trends or diseases and their patterns. As such, results from investigations that exclude poorly preserved remains will be biased (Mitchell and Brickley, 2017).

Today the collection can be divided into four major subgroups: cremains, skeletonized remains, skulls, and paleopathological cases.

**Cremains** (cremated remains) come from 145 archaeological sites. The majority of these cremains are dated from the 5<sup>th</sup> to the 12<sup>th</sup> century. While analytical techniques to explore the nature of cremated bone have been developed over many years, this project only focused on recording the exact number of available graves (individuals?). The sex assessment and age determination were a major problem due to the fragmented nature of burnt bones – only the measurements and weight of cremains were taken.

**The skeletal collection** consists of 9498 skulls and 6080 postcranial skeletons – the majority of these bones comes from the 16<sup>th</sup>–18<sup>th</sup> century and is mostly represented by materials found in Vilnius (59 burial grounds) and other regional towns or villages (156 burial grounds) (Fig. 5). Material from additional 125 burial grounds could be dated to the Iron Age. Overall, the chronology is marked by the first inhabitants of modern Lithuanian territory (Mesolithic-Neolithic) and the Industrial Revolution (late 19<sup>th</sup> century). A special part of the collection consists of 19<sup>th</sup> century disarticulated remains belonging to soldiers of Napoleon's Great Army and well-preserved remains of soldiers from the Imperial Russian Army.

**Skull collection**, consisting of 1558 skulls from the 19<sup>th</sup>–20<sup>th</sup> century (Fig. 6). It is an integrated part of the Vilnius University osteological collection. Gathered around the end of the 19<sup>th</sup> and the first half of the 20<sup>th</sup>



century, the skulls are left without a clear context, though cases of syphilis, traumatic injury, or trepanation may serve as unique material for future studies.

**Paleopathological cases** serve as a unique teaching material. Obtained from commingled graves, these bones are subdivided into several major categories, such as specific and non-specific infectious diseases, trauma, metabolic disorders, etc.

## Conclusions

The Department of Anatomy, Histology, and Anthropology of Vilnius University houses a considerably large number of human skeletal remains for both study and education, which come from different geographical areas and socio-economic background. The process of augmenting this important collection is not yet complete, as new material selected by context, time period, and overall preservation is still entering the assemblage either as a research or teaching aid. Our collection, representing a unique bio-cultural heritage for the Baltic region, will clearly serve as a powerful tool for students and scholars involved in future bioarchaeological studies.

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## Vilniaus universitete saugoma žmonių osteologinė kolekcija

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Santrauka

Žmonių osteologinės kolekcijos kaupimo pradžia gali būti siejama su pirmojo viešojo muziejaus – Vilniaus senienų muziejaus – įsteigimu Lietuvoje. Senienų muziejus, įkurtas 1855 m. gegužės 11 d. Vilniaus laikinosios archeologijos komisijos ir grafo Eustachijaus Tiškevičiaus iniciatyva, sukaupe išpūdingą 67 000 radinių ir istorinių vertybių kolekciją, kuri romantizavo buvusios Lietuvos Didžiosios Kunigaikštystės laikus. Senienų muziejaus veikla nutrūko po nesėkmingo 1863 m. sukilimo. Tuo metu caras Aleksandras II, suintensyvėjęs rusinimo politikai, liepė reorganizuoti muziejų; dalis vertingų eksponatų buvo išvežti į Sankt Peterburgą ar Maskvos N. Rumiancevo muziejų, likę radiniai bei vertybės buvo išsklaidyti.

Pirmojo pasaulinio karo suirutė sukėlė dar didesnę maišatį – 1915 m. rusų „didžiojo atsitraukimo“ metu į Maskvą išvežta ir muziejaus kolekcinių vertybių inventoriaus knyga. Kolekcijos likučius ėmėsi gelbėti lenkų antropologas ir gydytojas Julijonas Talko-Grincevičius (Julian Talko-Hryniewicz). 1920 m. tuometiniame Stepono Batoro universitete įsteigiama Antropologijos ir priešistorės katedra, į kurią pateko apie 300 kaukolių iš skirtingų kasinėjimų, vykdytų Baltarusijos ir Lenkijos teritorijose, ir archeologiniai radiniai iš buvusio Senienų muziejaus. Naujai kaupiama kolekcija buvo įkurdinta Masalskių rūmuose. Tačiau dėl netinkamų sąlygų – patalpos buvo nešildomos ir nuolatos užpilamos – ir vis įtemptesnės karo padėties Vilniaus mieste visas turtas buvo perkeltas į saugesnes erdves prie Aušros vartų. J. Talko-Grincevičiaus nuopelnas yra, kad jis ne tik išsaugojo dalį vertingų muziejaus radinių, bet ir atliko svarbių antropologinių tyrimų, pavyzdžiui, tyrė II–IV a. kaukoles iš Šiaulių ir Kauno apylinkių; ypatingo tyrėjo dėmesio susilaukė po mirties trepanuotos kaukolės, rastos šalia Gedimino kalno.

1920–1939 m. Antropologijos katedrai vadovavo kitas žymus to laikotarpio antropologas Michalas Reicheris (Michał Reicher). Šio tyrėjo dėka prie tuometinio Medicinos fakulteto pastato, esančio dabartinėje M. K. Čiurlionio g. 21, iškilo naujas anatomikumo priestatas. Šiuo metu kolekcija ir antropologijos laboratorijos ten ir yra įsikūrusios. Vilniaus miesto plėtra ir su tuo susiję kasinėjimai lėmė osteologinės kolekcijos turtėjimą, ypač 1930 m. pabaigoje. M. Reicheris ir jo kolegos buvo linkę paimti kiekvieną gerai išsilaikiusią kaukolę, rastą kasinėjimų vietose, tad tai buvo atsvara J. Talko-Grincevičiaus selektyviai kauptai kaukolių kolekcijai. Šiuo laikotarpiu osteologinė kolekcija pasipildė dar 3 000 kaukolių.

Naujas kolekcijos etapas siejamas su profesoriaus Gintauto Česnio veikla. Profesorius, daugiausia dėmesio skyęs kraniologijai, taip pat aktyviai bendradarbiaudamas su archeologais, pradėjo rinkti ir ilguosius kaulus. Dabartinė kolekcija yra neįsivaizduojama be didžiulio profesoriaus Rimanto Jankausko indėlio tiek į kolekcijos atnaujinimą, tiek į naujos bioarcheologijos mokslo krypties populiarinimą Lietuvoje.

2018 m. pradėjus vykdyti projektą „OSTLIT“, kolekcija buvo iš naujo peržiūrėta ir įvertinta. Šiuo metu kolekciją sudaro daugiau nei 9 000 skirtingai išlikusių individų skeletų, kurie datuojami nuo mezolito iki XIX a. Atskirą kolekcijos dalį sudaro kremuoti palaikai, istorinė kaukolių kolekcija ir paleopatologinių atvejų kolekcija. Visos jos yra nuolat pildomos.