

## **The way to a man's past is through his stomach - paleoparasitological analysis of the Early Modern Period cemetery at Lubelska 72A Street, Chełm (East Poland)**

Many aspects of everyday life in the past are difficult to characterise, especially those related to hygiene, as they are rarely described in written sources and problematic to reconstruct based solely on archaeological artefacts. However, there are some recently developed tools based on the interdisciplinary approach that can be used. Paleoparasitology is one of such tools; it studies parasites preserved at archaeological sites. Based on the presence of specific parasite species, it is possible to reconstruct little-known behaviours of people in the past, e.g. diet or personal hygiene.

The aim of this project is to **reconstruct the diet and hygiene of inhabitants of Chełm (East Poland) in the Early Modern Period (16<sup>th</sup>-19<sup>th</sup> century) through paleoparasitological analysis** of soil samples derived from the cemetery at Lubelska 72A Street. **The main hypothesis of the project is that there was a change in human diet and hygiene behaviour which will be observable in time.**

In order to answer the main hypothesis and many specific questions, soil samples will be collected from the surface of the human bones. Human remains will be later analysed in order to gather data regarding age and sex of individuals. Based on **microscopical analysis of soil samples**, it will be determined what parasite species were present among inhabitants of Chełm. Some species are rarely observed under the microscope, so that **ELISA tests** (The enzyme-linked immunosorbent assay) will also be conducted in order to confirm presence of parasites like *Giardia lamblia* and *Entamoeba histolytica*. They are commonly referred to as 'Pharaoh's Curse' because of the symptoms they cause.

**The subject of this project was chosen because** there is a gap in knowledge regarding everyday life of common people in the Early Modern Period. Artefacts, art and written sources described only **ectoparasites** (parasites living on the skin of individuals). Contrarily, history of **endoparasite** infections (parasites living inside individuals) might be reconstructed only based on paleoparasitological analyses, which are rarely conducted in Poland. Results will allow reconstructing e.g. what kinds of meat and vegetables were eaten, what was the quality of water and how the process of food preparation may have looked like. Such information are difficult to obtain by other, more commonly used, methods. It is an opportunity to conduct the first larger scale paleoparasitological analysis in Poland of material derived from a cemetery. It will allow collecting information regarding single individuals, which will be later used to reconstruct information concerning different age and sex groups.

The **most important results of the project** will be obtaining new data regarding parasites in Poland in the Early Modern Period. Based on the presence of parasite eggs, it will be possible to establish the diet of the inhabitants of Chełm and if they took care of the personal hygiene, for example by washing their hands. Due to the number of analysed samples, it will be possible to observe differences between age and sex groups, which might indicate different social roles and behaviour. It will be determined whether these aspects of life have changed over time.