For archaeology, cemeteries have always been one of the main sources of information about the people who inhabited Europe (and not only!) in the past. For decades, burial studies have provided insight into the rituals and beliefs of prehistoric communities. The investigation of cemeteries has also become an arena for the development of collaboration between archaeology and many other scientific disciplines. It has become standard for archaeologists and physical anthropologists to work together, reconstructing not only the material culture associated with burial practices but also determining the rules governing funeral rituals in relation to age, gender, and even specific ailments and illnesses of the deceased. Modern archaeological research offers immense possibilities for inferring information about living people based on what they chose to preserve in burial-related rituals. Anthropological and archaeological studies are complemented by research capabilities developed within biology, chemistry, and physics.

The project "Tracing Blood and Social Ties: Integrating aDNA, Isotope Analysis, and Kinship Studies in a Research on the Bronze Age Cemetery at Nižná Myšľa (Slovakia)" aims to fully utilize contemporary analytical methods in studying the population buried nearly 4000 years ago in the Nižná Myšľa cemetery. This archaeological site, unique in scale in Europe, includes not only a burial site but also the remains of two strongly fortified settlements from the Early Bronze Age. The population inhabiting them, known as the Otomani-Füzesabony culture, left a significant mark on the development of not only the areas now within the borders of Poland, Slovakia, Hungary, and Romania but also other regions of Central and Northern Europe during the first half of the 2nd millennium BC. At the height of its development, local communities maintained extensive contacts, enabling them to acquire key resources of their era—copper and tin for bronze production, as well as amber and gold used to create spectacular ornaments.

The Nižná Myšľa cemetery is one of the largest known sites of its kind in Bronze Age Europe. Its characteristic feature is a row arrangement and a long duration, reflected in the immense number of graves containing skeletal remains. Over several decades of archaeological research, a total of 782 individuals' remains have been discovered on the cemetery. This quantity and the excellent preservation of the skeletons offer unique research opportunities. The project aims to understand the genealogy, rules of kinship, formation of social relationships, as well as the origin and degree of mobility of individuals buried in the cemetery.