## The character, transformation, and consolidation of the Piast population in the 11th century in Greater Poland. The osteobiography perspective

For the Piast monarchy, the first half of the 11<sup>th</sup> century appeared to be a period of dynamic change in almost all major spheres: political, cultural, and social. In particular, this involved the consolidation of the newly established state structures, the Christianization initiated in 966, and finally the dynastic crisis and pagan reaction, culminating in a series of uprisings. Such weakened and facing numerous internal problems, in 1038 AD Piast domain fell victim to the Czech raid of Břetislav – an event which only further influenced Polish state's fate, sealing a new direction of its development.

The aim of this project is to determine the character, transformation and consolidation of the population of the Piast state in the 11<sup>th</sup> century in Greater Poland, by using the osteobiographical method – that is, the construction of life histories based on information "read" from bones and teeth. This takes advantage of the fact that individual elements of the human skeleton develop in a specific way and at a specific time, at different stages of an individual's life and depending on various factors, including environmental ones. The goal of the project and its basic concepts were formulated based on important questions that have long been posed by medieval archaeology, but which so far have not been answered unequivocally. Namely: Who were the inhabitants of the Piast state in the 11<sup>th</sup> century? Where did they come from, how did they live and how did they die?

To achieve this, both standard methods commonly used in biological anthropology and bioarchaeology will be used (including assessment of sex or age-at-death, occurrence of lesions of a pathological nature, reconstruction of stature etc.), but also specialized studies of carbon, nitrogen, oxygen, strontium and sulphur isotopes. These values will be used to determine the diet, origin and mobility of the studied individuals – that is, to identify those areas of life that are basically impossible to trace by other methods.

Obtained results will make an important contribution both to the development of Polish bioarchaeology and to a better understanding of the historical communities inhabiting the lands of modern Poland and their place in the broader context of European Middle Ages.