

## **Abstract**

This research deals with the verification of the biological kinship of individuals with known genealogical data. It is divided into two main parts: a) theoretical introduction to detect biological relationship at skeletal remains; b) practical verification of the biological kinship of individuals within genealogically documented sample and the anonymous sample. Genealogically documented sample consists of the remains of thirty seven members of related Andres, Cvrček, Vávra, Palma and Mizera families in the range of four generations in the years 1895 – 2006. The biological kinship is verified using several approaches: analysis of skeletal non-metric traits, analysis of non-metric dental traits, and assessment of morphological and metric similarities of frontal sinuses (*sinus frontalis*). Certain pathological conditions on the skeleton are taken into account as well. The degree of similarity between individuals from genealogically documented sample, recorded on the basis of skeletal non-metric traits, is further compared with the degree of similarity between randomly selected individuals from the early medieval Frankish necropolis Cherboug-Notre-Dame (7th – 11th centuries). It also investigates the influence of consanguineous marriage (inbreeding) on the degree of similarity of individuals in other generations as compared to normal families and offspring similarity to his parents from a gender perspective.

**Key words:** kinship analysis, skeletal non-metric traits, dental non-metric traits, paranasal sinuses