

BIOLOGICAL KINSHIP PATTERNS IN AN EARLY MEDIEVAL GRAVEYARD OF THE RHEINLAND AS PART OF THE FRANKISH KINGDOM

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The Frankish kingdom included vast areas of western Europe and has undergone intense archaeological examination. Ancient DNA studies on the other hand have not been performed so far. Here I present an interdisciplinary project regarding an early medieval graveyard of the Rhineland in northwestern Germany. We are using the archaeological record for chronological placing and interpreting social status; perform osteological analyses with focus on age estimation and identification of non-metric traits; and analyse genome-wide aDNA data to determine biological sex and kinship, as well as the broader ancestry patterns observed with contemporary and present-day genetic data. First, we reconstruct close genetic multigenerational kinship patterns among individuals, portraying the exploitation of the cemetery by a continuous population throughout its 400 years of usage. Second, we demonstrate a relatively high degree of genetic diversity as seen in ancestry profiles in these samples. Third, we compare genetic kinship patterns with kinship patterns obtained by non-metric traits, which have been traditionally used in anthropometric research. Finally we interpret our results in light of comparison with contemporary patterns observed in East-Central Europe.

Keywords

Archaeogenetics, Early medieval north-western Germany, Population genetics, Kinship analyses, Physical anthropology

Note/comment