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Publication Date

2015

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A BIOARCHAEOLOGICAL STUDY OF GROWTH, AGING, AND LIFESTYLE IN MEDIEVAL RURAL ITALY

Stahl Field Report 2015

Archaeological Research Facility, UC Berkeley

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The Medieval Burials at Villamagna

While there is good deal of historical and archaeological research on the later Medieval period in Europe, including Italy, bioarchaeological studies of Medieval Italy have focused primarily on high status individuals and particularly, the ravages of the Black Death. There has been little large scale study of the biological signatures of growth, aging, and activity patterns in Medieval Italian skeletal remains. The study of differential patterns of everyday experience (as examined by multiple indicators of metabolic stress indicators, levels of activity, disease prevalence, diet, etc.) across age, sex and status groups can tell us much about life experience and the formation and variability of social identity Medieval Italy.

Villamagna was a rural Italian village (occupied from the Roman period, 141AD through the Late Medieval Period, 1498AD) with a central burial ground; individuals from the monastic cloister as well as common villagers are represented in the excavated skeletal sample. Importantly, the site is the largest Medieval cemetery in Italy, with n=499 skeletons excavated primarily from c.1350-1498, with excavations conducted at the site between 2006-2010 under the direction of Elizabeth Fentress and Caroline Goodson. There is detailed geospatial information on the complex intercutting earthen burials and preliminary information on associated grave goods and funerary treatment styles. The human remains from Villamagna are ideal to examine questions related to health, mortality, and lifestyle in a rural Medieval Italian community. In the summer of 2015, we began a collaborative project together with Caroline Goodson (Birbeck College, UCL), and Francesca Candillo and Alfredo Coppa (La Sapienza University of Rome).

The bioarchaeology work will contribute substantially to our understanding of the Villamagna population, particularly as people living in an agricultural estate farmed by lay villagers who were free and semi-free. We are looking to primarily contribute bioarchaeological information to aspects of daily life in a rural village for which we have otherwise limited data available from textual sources and other archaeological indicators. Some of the questions we're asking include: How do age- and sex-related patterns of health and lifestyle differ among those buried in "higher status" areas of the cemetery and/or with grave goods? How does diet differ along these lines, and what do these patterns indicate on aspects of childhood and aging for those in a rural Medieval Italian community? What were the patterns of growth like for this community? What was their daily life like? Was work strongly aligned along gendered behavior? This is also a time of great change and turbulence - with the peak of the Black Death at the time of cemetery use (though without evidence of Plague pits) and three earthquakes, which shook southern Italy on 9 September, 1349. We are interested how the bioarchaeological data may reflect this

time of catastrophe in and around the rural village, and perhaps explore the factors that would have led to abandonment of the site.

As part of our 2015 Summer Project we collected preliminary data to refine the demographic data from the cemetery (age and sex profiles). We also began a collecting pilot data related to early childhood stress and growth including dental enamel hypoplasia and vertebral canal size and asymmetry, and data on pathology including degenerative joint disease in the spine, metabolic pathologies, and dental caries. Preliminary analyses show a significant number of individuals with dental and skeletal pathology. Dental enamel hypoplasia appears present in over 50% of the sample, further analysis will be made of sex- and age-related, and mortality patterns. Similarly, preliminary statistical analyses demonstrate that smaller transverse canals in both thoracic and lumbar vertebrae are associated with earlier age-at-death, while anterior-posterior canal measures are not. An important implication of these findings is that stress likely occurred later in childhood and into early adolescence, instead of in infancy and early childhood.



Figure 1. A view of the cemetery during excavations (image Caroline Goodson: <http://www.dayofarchaeology.com/dealing-with-the-dead-of-villamagna-medieval-italy/>)



Figure 2. Dental enamel hypoplasia, adult from Villamagna



Figure 3. Vertebral pathology, showing fusion and osteophytic change, adult Villamagna.



Figure 4. Dental caries, adult Villamagna