

Life, death, origin and diaspora of the medieval Jewish community of Via Orfeo in Bologna

The anthropological study of burials (more than 400) at the medieval cemetery in Via Orfeo conducted by the Laboratory of Bioarcheology and Forensic Osteology, directed by Prof. Maria Giovanna Belcastro of the Department of Biological, Geological and Environmental Sciences is part of the cooperation between Alma Mater Studiorum University of Bologna, Superintendence of Archaeology, Fine Arts and Landscape for the metropolitan city of Bologna and the provinces of Modena, Reggio Emilia and Ferrara, and the Jewish Community of Bologna.

The study will focus on examining many of the biological characteristics of the buried individuals using an integrated approach combining morphological, microbiological, molecular and tomographic analyses in order to retrace the history and life of the community in question.

The demographic composition of the group will be reconstructed, as well as the state of health, diet, any specialisation in terms of work activities, aspects related to funerary rituals, and the geographical origin linked to any relocation from other areas of Europe. To achieve these results, the Laboratory of Bioarchaeology and Forensic Osteology will examine the aspects that involve piecing together the skeletal remains in order to proceed with reconstructing the biological profile (evaluation of the age and gender of the buried), health and nutritional status by examining all bone and dental alterations and pathologies, and of the work activities they carried out during their lifetime. The state of preservation of the buried will be analysed from a taphonomical point of view so as to detect any intentional changes made to the postmortem burials. Microbiological and molecular tests will be conducted on dental tartar to establish the oral microbiota and integrate paleopathological and dietary data. For this purpose, researchers from the Department of Pharmacy and Biotechnology of the University of Bologna and of the Department of Biology of the University of Florence will be involved. Nutritional status data will be supplemented by the study of stable isotopes (carbon and nitrogen) and, for aspects related to the possible origin of the group under examination from other geographical areas, a series of analyses will be conducted on stable isotopes (strontium and oxygen) and ancient DNA. To this end, researchers from other Italian Universities (University of Florence) and European Universities (University of Cambridge and University of Dublin) will be involved.

Computed tomographies and microtomographies will be performed as part of a collaboration with the Department of Physics and Astronomy (UNIBO), thanks to which the remains of the buried will be reconstructed virtually, thus allowing the anthropological study to be enhanced and expanded at different levels of



investigation. The mortal remains buried in the cemetery of Via Orfeo will then be returned to the Jewish community to honour the memory of this medieval community. To conclude, the data will be collected and entered into a geodatabase, which will provide not only a tool for managing excavation and laboratory information but also significant support for analysing the context, by developing plans generated through thematic visualisations.

The resulting integrated study model, which combines the information gathered from historical and documentary sources and archaeological and biological data, along with the cooperation of the Jewish community of Bologna, is unique in its kind. The study of the cemetery in Via Orfeo - which is unprecedented in Italy and almost unparalleled in Europe - and the reconstruction of the life of its community gives the city of Bologna the opportunity to retrace an important part of its history and, more generally, offers food for thought so that our society can increasingly move towards inclusive models of coexistence.

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