



# Medieval Burials and the Black Death

A Report on Badia Pozzeveri, Italy

Bioarchaeology Field School

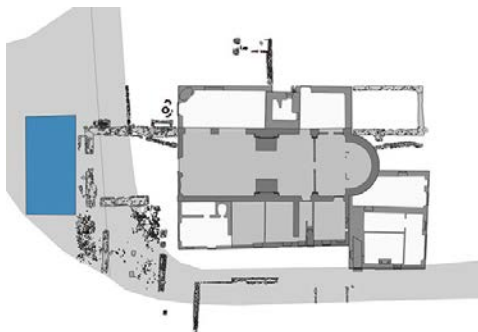
Summer 2015

During the summer of 2015, I was given the opportunity to participate in the Ohio State University/Università de Pisa in Medieval Archaeology and Bioarchaeology at Badia Pozzeveri, Italy. Under the direction of Dr. Clark Larsen and Dr. Giuseppe Vercellotti from OSU and Dr. Gino Fornaciari from the Università de Pisa, we were able to continue and expand previous excavations conducted at the site. This included exposing human burials dated to the middle ages, the renaissance and modern times.



### **THE EXCAVATION**

The entirety of the field school students were assigned to one of four different areas (2000, 3000, 5000, and 6000) at the church of ‘San Pietro a Pozzeveri.’ I was fortunate to be assigned to area 6000, which is located opposite of the old facade of the church and was at one time the churchyard. As a new area, this provided an excellent opportunity, as someone with no prior field school experience, to work through and understand the initial steps it takes to expose a previously undisturbed area. The first task for area 6000, before we excavated, was the removal of loose dirt and excess sand on the surface. After this task we had realized that the area, at its



current level, contains three components; US 6001, US 6002, and US 6003. The center of the area (US 6002) contained the upper interface of a large pre-modern drainage system. The largest concentration in the rest of the area (US 6001 and US 6003) included scattered and fragmentary bones, which confirmed the presence of a previous cemetery area. Since US 6002 had the most recent modifications to the upper interface, we began our work there. For the first

couple of weeks, we used pick axes and shovels to remove around five feet deep of back fill. The purpose of this large extraction of fill was due to the fact that we were looking for the cut of the 20<sup>th</sup> century trench. According to historical documents, in the early 20<sup>th</sup> century the church members cut through the medieval burials to build a drainage system that delivered water away



from the building. Due to this construction, many medieval burials were destroyed or cut through to provide space. After the drainage system was not needed anymore, they covered the space using fill from a cemetery nearby and this unfortunately resulted in having the fill of US 6002 contain numerous out of context bones and pottery. After we had exposed the cut and full expansion of the pre-modern trench we filled out context sheets and took pictures of the area. For the remainder

of the field school we excavated smaller portions of US 6001 and US 6003. The main focus was on exposing a supine burial that was located between two lithic walls. This burial had some initial difficulty when exposing, due to the extensive amount of unrelated bones that had been placed on top of the burial. As a result, we were forced to decide exactly what part of the skeletal remains were from the burial and which ones were not. Once the full skeleton had been uncovered, we proceed with photographing the area and completing skeletal context sheets. After

this was finished, we slowly worked to extract the remains from the ground; starting with the extremities and working our way in. The process of extraction included wrapping the bones in geo textiles. It was crucial that we tried our best not to break any of the bones, so that future analysis and





examination could be made possible. The last week of the field school, we extended the south section of area 6000 by removing two feet of the parking lot cement. Once we leveled this newly exposed area to match the rest of area 6000, we were surprised to find a broken slab of rock that measured around four and a half feet. This was the first lithic tomb for area 6000 and provides the first evidence of burial integration between the

rich and the poor. Unfortunately, the field school season ended before we were able to fully excavate the tomb, but hopefully future research will provide more insight into this subject.

## **LABS AND LECTURES**

In addition to the hands on experience in the field, we participated in many lectures and labs. Our first two lectures occurred during the second week of the field school. The first was given by Dr. Antonio Fornaciari and encapsulated the basic concepts of stratigraphy and the stratigraphy composition of an archaeological site during the medieval age. Later that week we heard from Dr. Sharon DeWitte on the Bioarchaeology of the Black Plague. She began the lecture by explaining her current research in East Smithfield, London and how cemeteries in East Smithfield provide an excellent example of a purposeful cemetery built just for Black Death victims. Then she continued by exploring the ongoing research on Pre and Post Black Death trends. This included going into the developing reasons as to why the Black Death was able to be so deadly in such a small amount of time and how contrary to popular thought, the Black Death killed discriminately by targeting older adults and frail



people of all ages. Another interesting lecture was from a group of Italian anthropologists who

run a 3D printing company. They explained the functionality of using 3D scanning and printers and the more in depth details that they are able to produce compared to a normal photo. The final couple lectures were by the directors, Dr. Larsen and Dr. Fornaciari, and expanded on the discovery and current research surrounding Çatalhöyük, the agricultural impact on human evolution, and the recent paleopathology work involved with the 'Medici Project.'



The 'Medici Project' is a paleopathological project carried out by a team of experts, to study 49 tombs of some of the Medici family members (16th-18th centuries). This project uses a wide range of disciplines such as funerary archeology, paleonutrition, parasitology, immuno-histochemistry, molecular biology, and identification of



ancient pathogens.

Everyone in the field school participated in three different types of labs; osteology lab, GIS lab, and material lab. The two days in osteology lab were spent becoming familiar handling human remains. We spent both days going through all the bones in the body and then cleaned the human remains that were uncovered in the previous year's excavation. It was fascinating to analyze medieval remains and recognize certain health issues that were prevalent during that time

period. During the material lab, I spent an afternoon cleaning pottery shreds that were collected, either from previous years or the current year, and then I was assigned to categorize the collection of pottery into their respected groups. The final lab was on the functions and usage of GIS. We were taught the proper way to use a total station and catalog geometric points from skeletons. With this data we converted the points from a geometric plane to a geographical plane.

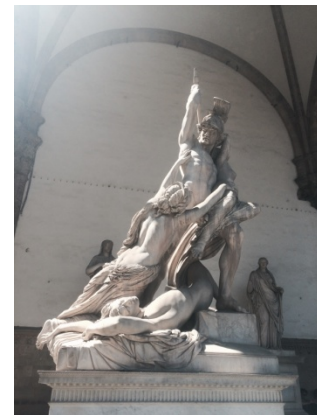
In addition to georeferencing the skeletal remains, we were able to place each skeleton from the archaeological site to its correct position on a computer model. This was partnered with a lecture that discussed archaeological data acquisition, geographic projections and datums, and the functionality and purpose of GIS.

### **FREE TIME**

Between burial extraction and the data acquisition, the amount of allotted free time was limited to just the weekend. This provided a perfect amount of time to take small side trips and experience the



growing culture and history of local cities. I was fortunate enough to have been able to go hiking in the Cinque



Terre national park, explore a medieval festival in Altopascio, and walk through the famous San Lorenzo Market in Florence, and then visit the city of Lucca with its Renaissance walls encircling its historic

city center and its cobblestone streets. I was also blessed to have been able to spend three days encapsulating the essence of Rome. On this short trip to Rome, I strutted through the Foro Romano like an emperor and roamed the Colosseum like an ancient gladiator preparing to fight. Overall, this has made my love for learning about the past to grow and I now have a greater respect for professional archaeologists, as well as a better understanding of their methodologies. Additionally, I want to thank the AIA Waldbaum Field School Scholarship Selection Committee for supporting my work this summer and for their continuing support that allows archaeologists to do amazing work.