PONTIFICIA UNIVERSIDAD CATÓLICA DEL PERÚ - PUCP
FIELD SCHOOL PROGRAM IN PERU
BIOARCHAEOLOGY PROGRAM – HUMAN OSTEOLOGY PROJECT
2014 SEASON

GENERAL INFORMATION

Course:	Bioarchaeology in San José de Moro (beginner)
Location:	Chepén, La Libertad, Perú
Time period:	One month/4 weeks
Number of hours:	180 hours.
Professors:	Prof. **Elsa Tomasto (PUCP)**
Associated Professor:	**Dr. Luis Jaime Castillo (PUCP), Dr. Richard Sutter (Indiana-Pardue Forth Wayne U.)**
Professor's Assistants:	Mellisa Lund Valle
Coordinator:	**Julio Saldaña** *(jmsaldana@pucp.pe)*

SUMMARY

San Jose de Moro is a small village located on the Jequetepeque valley of the north coast of Peru. The modern town sits on top of one of the most important Pre Columbian cemeteries and ceremonial centers of the Moche or Mochica culture.

Since 1991, a multidisciplinary team of researchers from PUCP and other Universities from all around the world have been conducting excavations in San Jose de Moro and other sites of the region. These investigations, headed by Dr. Luis Jaime Castillo, have recovered some of the largest collections of burials dug in Peru, which allow us to address the customs and traditions of the Moche, as well as their political and social complexity. The most outstanding discoveries of the San Jose de Moro Archaeological Program (SJMAP) have been a series of elite chamber tombs

containing the remains of the Mochica priestesses, some of the most complex female burials found in Peru. At Cerro Chepén and San Ildefonso, both monumental fortresses, settlements and ceremonial centers dating to the same Late Moche period as SJM, research focuses in mapping and excavations of standing architecture, 3D modeling using advanced photogrammetry methods, paleoethnobotanical studies, etc.

As part of the PASJM Field School, the Bioarchaeology Field School students will have the unique experience of taking part in the investigation process at one of the most complex and important archaeological sites on the Peruvian north coast. The routine bioarchaeological work begins with the careful recording of skeletons at the field, but this is only the initial part of the process. A bioarchaeologist spends a lot of time at the laboratory, reconstructing, describing and recording the traits on the bones that will give information about the biological profile and osteobiography of each individual, in order to understand the whole population. According to this, in this field school bio-beginners will be trained on the basics of the discipline: a deep and thoroughly knowledge of the human skeleton. With a dynamic combination of laboratory practices and lectures, the students will learn the morphological characteristics and normal variation of each bone that forms the human skeleton and the traits that allow the construction of the biological profile. Also they will be acquainted with some of the methods that the discipline uses to construct osteobiographies. At the end of the season, and depending on the advances and needs of the excavation areas, the bio-beginners will participate as assistants in the recording and recovering of human remains.

OUTCOMES

By the end of the program the BFS will be able to:

1. Carry out the preventive conservation of human bone
2. Identify complete and fragmentary elements of the human skeleton
3. Identify and describe the traits used to construct biological profiles from bones
4. Identify and describe trauma in human bone
5. Learn the basics of archaeological excavation and registering of burials in the field

REQUIREMENTS

The program accepts graduate and undergraduate students in the fields of anthropology, archaeology, biological sciences, medicine and related fields. No previous field work experience

or previous knowledge of human osteology is required. All pedagogic material will be provided by the program; nevertheless students can bring their textbooks and tools if they want to. A laptop will be needed for the preparation of reports. No knowledge of Spanish is required since all educational materials and activities will be conducted in English.

METHODOLOGY

Since a thoroughly knowledge of the human skeleton is the basic of the discipline, the Bio-beginners will work with fragmentary human bones from the very start, participating actively in the preventive conservation of skeletons excavated in previous seasons or those that will be excavated in this one. These practices will be alternated with lectures that will explain the characteristics of each bone, its normal variation and diagnostic traits. With the dynamic combination of lectures and practice, in a short time the students will be ready to lay fragmentary skeletons in a correct anatomical position and perform reliable bone inventories.

By the second week a series of lectures referring to the construction of biological profiles and osteobiographies will be offered. The students will be organized in groups and three skeletons will be assigned to each group in order to describe the skeletons, establish their sex and age at death and identify some pathologies and anomalies. As a culmination of the learning process, each group will make the comparative analysis of the assigned funerary contexts, combining information from the bones with the field information that is kept in our archives. The information recovered and elaborated by the BFS students will become part of the archives and publications of the PASJM.

Evaluation will be continuous. There will be four quizzes orientated to the identification of bone fragments. Also a written report about the assigned funerary contexts will be required. The report should contain information regarding the state of preservation of the skeleton, biological profile, pathologies, traumas or other anomalies, archaeological context and an interpretation based on all this information. Since bioarchaeologists have to work in continuous dialogue with other specialists, the general attitude and ability to work under pressure will also be evaluated.

This learning experience will be guided by leading Peruvian professionals from the Pontificia Universidad Católica del Perú who have ample experience in archaeological and forensic investigation in Peru and also have participated in international forensic missions.

SCHEDULE OF ACTIVITIES

The following schedule is a general guide. All the issues will be studied, but the order may vary, depending on the learning idiosyncrasy of the group.

Date	Quiz	Lecture	Field Trip / Others
Tue 2		General introduction Bone and related tissues The skull: parts, sutures, frontal, parietal bones, occipital, temporal bones Preventive conservation of human remains	
Wed 3		The sphenoid, small bones of the skull and face, maxilla, mandible and zigomatic bone	
Thu 4		The human dentition	
Fri 5			
Sat 6	1		
Mon 8		The ribs and vertebrae, the sternum	
Tue 9		The scapular and pelvic girdles	
Wed 10			Visit to Cerro Chepén
Thu 11		The limbs	
Fri 12		Excavation techniques	
Sat 13	2		
Mon 15		Sex estimation, stature	
Tue 16		Age estimation	
Wed 17			Visit to San Ildefonso
Thu 18		Paleopathology and trauma	
Fri 19			
Sat 20	3		
Mon 22		Biological distance	
Tue 23		Forensic anthropology	
Wed 24		The study of mummies	
Thu 25		DNA, Chemical studies in bone	
Fri 26	4		Delivery of final reports
Mon 28		End of Field Season	

EVALUATION

Final Grade for the Course is based on 100 points. Grading scale: A (90-100%); B (80-89%); C (70-79%); D (60-69%); F (0-59%).

Assignment	Point Value	Course Percentage
Quizzes	40	40%
Ability to work under pressure	10	10%
Final report	50	50%

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