GENERAL

The Vitor Archaeological Project (VAP) hosted its seventh IFR field school between June 21 and July 24, 2015. During this season, students participating in the VAP field school conducted laboratory analysis of materials excavated from a Ramada-affiliated cemetery during the 2012 and 2014 seasons, as well as materials from a Wari Millo site. Our project represents the first systematic and multidisciplinary evaluation of La Ramada and Wari occupations in Vitor from 500 AD -850 AD. The Ramada tradition has previously only been studied from a handful of ceramics from mortuary contexts, and while Wari occupation has been documented in neighboring valleys, our research focuses on the largest administrative center so far identified in the region.

VAP project students examined, documented, and photographed human skeletal remains, ceramics, textiles and other artifacts from these unique Ramada and Wari sites. The laboratory season was organized into three hands-on teaching modules that included osteology, ceramics, and textiles. During this season we continued with the developing of the biological and cultural profile of these cultural traditions in the valley. The research conducted with the students is the basis of two manuscripts that we expect to be published in 2016. In addition, three participating students engaged in specific bioarchaeological projects. Dr. Lozada and Dr. Haydon will further mentor these participants at U of C in order to produce a paper to be presented, and then published.

LABORATORY MODULES

Osteology module (Professor: Maria Cecilia Lozada, assisted by Kristie Sanchez)

Each student analyzed the skeletal remains excavated from the Ramada and Wari Millo sites. This examination included several levels of analysis. The first stage of analysis consisted of recording data on the age and sex for each individual, as well as the documentation of skeletal markers of health and trauma. The second stage required each participant to interpret these data within the biological and cultural context and produce basic osteobiography of the studied
skeletons. This module was complemented by lectures by Sanchez on different bioarchaeological topics.

*Ceramics (Professor: Hans Barnard)*

In this module, the ceramic sherds found on the surface during the site survey, as well as by excavations of domestic and funerary contexts were studied and recorded. Students learned how to create technical drawings and prepare a standardized written description of each sherd. Data were digitized in an Excel spreadsheet (description) and Adobe Illustrator files (drawings). Several digital photographs were also made of each sherd. Together with the paper trail these records enable future analysis and publication of the ceramic finds, which are expected to be rendered unavailable for research. Next to recording, petrological thin-sections of a representative sample of the ceramics were prepared. This entailed fixing a thin slice of the sample to a glass object slide and grinding this down to a predetermined thickness (0.03 mm). At this thickness the slides can be studied in plane- and cross-polarized light, which enables the determination of the mineral inclusions, indicative of the geological region of production, as well as technological aspects of the pottery production process.

*Textile analysis (Professor: Alan Coogan, advised by Michele Hayeur Smith)*

Textile analysis was another module that was critical to our interpretation of the site, as Ramada textiles have not been fully investigated. Students analyzed textile pieces uncovered from burial pits excavated in 2012 that were used to produce the mummy bundle. Students participating in this module learned the basics of systematic textile analysis by examining and describing the composition and structure of fabrics from the La Ramada cemetery. At the end of this module, students were able to identify and describe different weaving methods, indicate if the textiles were new or worn, and identify the types of fiber used in the textile.

*Community outreach (Lozada, Barnard, and Coogan)*

All members of the VAP field school participated in programmed community outreach initiatives, a practice that was initiated in previous seasons. This year, students developed workshops for a selected group of students from the “Instituto Educacional Víctor Raúl Haya de la Torre” secondary school and taught them about basic aspects of the archaeological and bioarchaeological research that we conduct in the valley. The selected group of Peruvian students used this learning platform to develop science posters to compete with other schools in the region. As in years past, field school students participated in a volleyball match with their varsity team. The VAP team lost the match, but in the process solid bonds of friendship were created.

**RESULTS:**

**Bioarchaeology**

The skeletal collection studied in 2015 revealed important information about the lives of the Ramada people. Specifically, we observed patterns of interpersonal violence between adult males and studied the patterns of trophy head construction. In regards to the trophy heads, we found that the locations of the perforations in the frontal bone and the partial removal of the occipital appear to be similar in all trophy heads, suggesting some uniformity of practice. In terms of trauma, adult females exhibited rib fractures, while children did not exhibit signs of visible trauma, suggesting that head hunting and physical conflict were practices limited to adult
males and females. Interestingly, we also identified a severe case of arthritis and a unique case of ankylosing spondylitis in an adult male skeleton. Regarding burial patterns, we found that Ramada tombs were collective in nature, and that there was no selective practice when burying individuals in each pit. As of now, is unclear if such funerary contexts include extended social, or biological units. We intend to conduct aDNA studies, as well as strontium isotopic analysis of selected samples in order to identify the geographical origins of trophy heads, and individuals recovered at this site.

As the majority of these contexts were disturbed in the past, grave goods were limited in number. Non-decorated ceramics dominate our small collection. These plain ceramic vessels are globular and exhibit one or two spouts, and their microscopic features suggest significant differences in manufacture when compared to Wari assemblages. Additional artifacts such as spoons, necklaces, baskets and gourds were also examined in terms of manufacture, and style. As this is the first systematic study of the Ramada tradition, this material is being carefully documented, illustrated and curated for our publications and future comparative analysis.

Textile analysis

The students analyzed approximately 110 textile specimens. Most of the specimens were composite textiles, that is, textile artifacts having features such as borders, seams, decorations or repairs. We intend to seek permission to export textile samples for radiocarbon dating, strontium isotopic analysis, dye analysis and x-ray fluorescence analysis. Key statistics that summarize the types of fibers and the weaving methods in the collection will require additional time and effort to compile, but preliminary analysis suggest a unique pattern of textile production and consumption that may reflect that La Ramada textile tradition is a hybridization of both Nazca and Huari.