# **Poster Abstract**

# 1. Jennifer AUSTEN, Jenna M. DITTMAR, Ruilin MAO, Hui WANG, Hui-Yuan YEH

**Institutions:** University of Reading; McDonald Institute of Archaeological Research, University of Cambridge; Gansu Provincial Institute for Cultural Relics and Archaeology; Gansu Provincial Institute for Cultural Relics and Archaeology; School of Humanities, Nanyang Technological University

**Title of Poster:** Evidence of Respiratory Infection from Rib Osteomyelitis in Late Bronze Age China

**Abstract:** Our study showcases a rare case of osteomyelitis in a skeleton from a late Bronze Age cemetery located at Mogou, Lintan County, Gansu Province, China, that was active between 1700-1200 BCE. An adult male (M995:R2) was found to have severe osteomyelitis in the right 6th rib, with observable large cloacae, sequestra, and bone destruction of a third of the cortical bone, causing internal exposure of the rib midshaft. The sternum and left 7th rib were also affected. Due to the rare expression of osteomyelitis in the ribs, occurring in less than 1% of modern osteomyelitic cases, the objective of this research is to describe the pathological changes present in this individual in order to better understand the symptoms that were experienced. Based on this assessment, this study postulates how this individuals' quality of life was affected by this chronic and debilitating condition.

#### 2. Tomomi NAKAGAWA

#### **Institution:** Okayama University

**Title of Poster:** Examination of Human Skeletal Remains with Traumas in Yayoi Period Focusing on the Kuma-Nishioda Site

**Abstract:** Traumas on human skeletal remains from the Yayoi period, when people started agriculture in the prehistoric Japanese archipelago, are examined. These traumas have been understood by some researchers as an evidence of warfare, because of its higher frequency compared to the preceding Jomon hunter-gatherer society, and its concentration in particular sites or regions.

In my poster presentation, I focus on the cases with traumas excavated from the Kuma-Nishioda site, Fukuoka Prefecture, in the Yayoi period. Particularly high frequency of trauma is observed in the skeletal remains from the site. I present the result of basic examination of the cases with traumas, and delineate the kind of tools that inflicted the injuries and the situation in which they were used.

#### 3. Akiko NAKAMURA

Institution: Nara National Research Institute for Cultural Properties

**Title of Poster:** Tracing the Construction Process of the Shangjing Palace Site, Bohai Kingdom

Abstract: This study aims to trace the construction process of the Shangjing site, one of the capital cities of the Bohai Kingdom (698-926AD) in northeast China, by analyzing the excavated roof tiles from this site. Some of them turned out to have

been produced in the same molds, based on the common impressions of surface damage of molds resulting from repeated use. These materials and their scanned three-dimensional images enabled us not only to understand the development of surface damage of the molds, but also to arrange the roof tiles chronologically in much finer scale. Based on this chronology, the building sequence of the palace area is traced; it is revealed that the residential areas for the king were constructed before the administrative institutions.

# 4. Hisashi NAKAO, Tomomi NAKAGAWA, Kohei TAMURA, Yuji YAMAGUCHI, Naoko MATSUMOTO, Takehiko MATSUGI

**Institution:** Department of Anthropology and Philosophy, Nanzan University; Okayama University; Tohoku University; Okayama University; Okayama University; Japan National Museum of History

Title of Poster: Prehistoric Violence in Japan

Abstract: This study investigates when and how prehistoric violence occurred in the Japanese archipelago. First, we show the rates of injured individuals based on exhaustive surveys of human skeletal remains from the Jomon to the Kofun period, suggesting that we can find relatively strong evidence for collective violence in some specific areas (i.e., the Kinki and Kyushu areas) in the middle phase of the Yayoi period. Next, we focus on the northern Kyushu area in the same phase and investigate how collective violence occurred in the area by looking at demographic dynamics based on the data of Kamekan burials. Our statistical analysis shows a positive correlation between the demography and the rate of injured individuals, which suggests that the demography is a possible cause of the collective violence in the northern Kyushu area in the middle phase of the Yayoi period.

#### 5. Takafumi NIWA, Haruhisa MIFUNE, Takekazu NAGAE

**Institution:** Nara National Research Institute for Cultural Properties; University of Toyama; University of Toyama

Title of Poster: Experimental Archaeological Research on "Lost Lead Casting"

**Abstract:** Experimental archaeological research results on Chinese bronze vessels are presented in this poster. A technique for producing a mold using a lead model, "Lost lead casting", has been presented in previous research as one method that was likely utilized for manufacturing Chinese bronze vessels. A number of experimental research studies have been performed applying this approach, but no detailed record has yet been published. In this study, a series of "Lost lead casting" experiments were carried out, and details were recorded which reveal that it is indeed possible to produce a mold using this method. We also performed scientific analyses to clarify the features that remain in molds as well as resultant experimental products.

#### 6. Wei SHENG

Institution: Hunan Provincial Institute of Archaeology

**Title of Poster:** A Preliminary Study of the Banzhu Culture - A Society in a Mountainous Area in South China from 1200BC to 900BC

**Abstract:** In 2013, Hunan Provincial Institute of Archaeology excavated the Banzhu site, which was near to the Li River in western Hunan province. We gained large numbers of remains from this excavation. And from 2017 to 2018, we conducted comprehensive research on these archaeological materials and brought up a new archaeological culture named "the Banzhu culture", which could be one typical case for understanding a society in a mountainous area in south China from 1200BC to 900BC.

## 7. Tetsuya SHIROISHI

### Institution: Tokyo Metoropolitan University

Title of Poster: Chicken of the Yayoi Period in the Japanese Islands

Abstract: In the past, chickens have been thought to have been introduced to the Japanese Islands during the Yayoi period. Chicken bones from the Yayoi period have been excavated at the Karako site in Nara, Japan. The author conducted an analysis on a bird-shaped soil product without neck. As a result, he thought that it was a replacement product for chickens that played a role as poultry for sacrifices in ethnic cases conducting rice farming. As research on these animal archaeological achievements and artifacts progresses, the existence of chickens in the Yayoi period gradually became visible. Therefore, we will report on the whole picture of chickens in the Japanese Islands of the Yayoi period.

### 8. Chunxue WANG, Dong WEI, Huiqiu SHAO

**Institution:** Research Center for Chinese Frontier Archaeology, Jilin University **Title of Poster:** New Evidence of Human Activities During the Transition Period from the Upper Paleolithic to the Early Neolithic in the Lop Nor Area, Xinjiang, China

**Abstract:** An integrated investigation in the Lop Nor area was carried out by a joint team during 2014-2017. Twenty-nine lithic localities were discovered. The radiocarbon dates of these sites were from 12706-13242 cal. yr B.P. to 10230-10175 cal. yr B.P., paralleling the transitional period from the late Pleistocene to the early Holocene. The stone assemblage includes cores, flakes, chunks, microblades and tools. The principal flaking technique is indirect percussion, but direct hammer percussion technique is also used. Most lithic artifacts are middle and small in size. Scrapers are the main tool type. By comparison, the technique of the microblade cores is very similar to the other sites in north China, and the microblade technologies belong to the same tradition. The culture is considered to be an example that illustrates the East-West communication and diffusion along the road during that time.

# 9. Fan YANG, Guiyun JIN

Institution: School of History and Culture of Shandong University

**Title of Poster:** The Analysis of Plant Remains of Jinzhai Site in Anhui Province **Abstract:** The site of Jinzhai is located in Jinzhai, Xiangou of Suzhou city, Anhui province, which belongs to the middle-late Dawenkou Culture and the early Longshan Culture in the middle Huaihe River. Systematic sampling from cultural units belonging to the late Dawenkou Culture for flotation and phytolith analysis were undertaken during the excavation in 2016. The results of analysis indicate that foxtail millet, broomcorn millet, and rice make up the main proportion of farming crops, with foxtail millet prevailing over broomcorn millet. Rice grains along with leaves and stems were taken back from the site. The harvesting time among those three crops are different, which may indicate the separation of spike and storage. In this case, de-husking was possibly processed before people ate those crops.

### 10.Bing YI

**Institution:** Department of Archaeology and Anthropology, University of Chinese Academy of Sciences

**Title of Poster:** Isotopic Investigation of Breastfeeding/Weaning Practices in Modern and Archaeological Populations in China

**Abstract:** Isotopic analysis of breastfeeding/weaning practices in modern and archaeological populations has become a hot topic in the fields of biomedical and bioarchaeological research for revealing the isotopic fractionation between mothers and infants and the social care for the children in modern and ancient populations. However, such studies are extremely scarce in China. Here the hair and fingernails from modern mother-infant pairs (n=7) were sampled to examine isotopic fractionation effects caused by the breastfeeding and weaning practices based on Chinese diets. In addition, one case study of isotopic analysis of serial sampling of human dentine (n=5) as well as bones (femora and ribs; with long and short turnover times) from the same individuals from the Late Neolithic (4500 BP) Gaoshan Ancient City site in the Chengdu Plain was undertaken, aiming to reconstruct the weaning practices and life histories of individuals.

#### 11.Hailin YI

#### Institution: Shandong University

**Title of Poster:** Zooarchaeological Research at the Site of Shalongka in Qinghai Province

**Abstract:** The site of Shalongka in Hualong County, Qinghai province, China, is located on the second terrace of a tributary of the Yellow River, including abundant remains of a microlithic culture, as well as the Yangshao, Qijia and Majiayao cultures. Over 700 animal bones were excavated by Qinghai Provincial Institute of Cultural Relics and Archaeology (QICA) in 2017, which were mainly from strata of the microlithic and Qijia cultures and comprised of snail, Phasianidae, pig, small deer, sika, cattle, goat, rabbit, Mustelidae, Felidae and Cricetidae. Animal bones were poorly preserved and weathered heavily, which to a certain extent reflects the more efficient utilization of animal bones and the more limited meat resources. Through preliminary research, it was a hunter-gatherer economy model in the microlithic culture period and a combination of crop planting, animal husbandry and hunting in the Qijia culture period. The site of Shalongka provided valuable materials for the zooarchaeological research of northwestern China from 8000B.P to 4000B.P.

#### 12.Bettina ZORN

#### Institution: Weltmuseum Wien

**Title of Poster:** The Approval of Digital Media Applied to the Sample of Rubbings from the WU Liang Shrine Presented at the New Gallery "Perception on China" at Weltmuseum Wien, AUSTRIA

**Abstract:** One show case in the new gallery at Weltmuseum Wien that opened on October 2017 highlights the history of the rubbings of the WU Liang Shrine as museum objects (the collection of Weltmuseum Wien), presenting them in a new form of interactive digital presentation. It is a way of enlarging and deepening knowledge of one specific object. This special sample explains the different scenes and gives the visitor a chance to study details. The poster will point out from a visitor's point of view some difficulties in the application being implemented in the new digital use by referring to a visitor's value analysis.