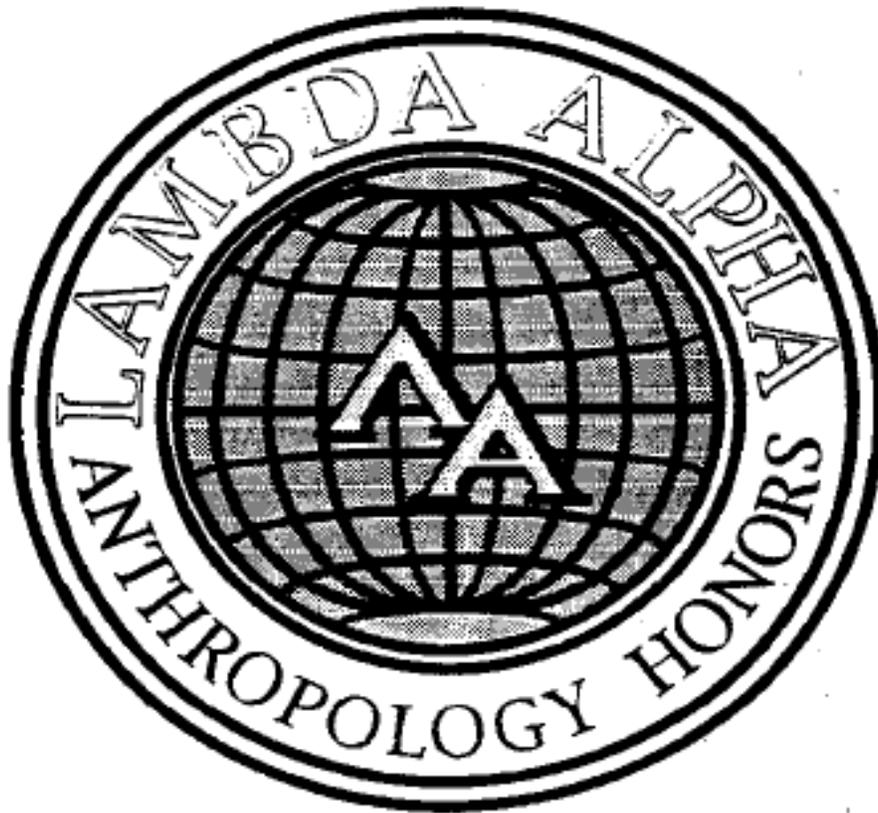


**11th Annual  
Lambda Alpha Symposium  
Wichita State University**



**Abstracts  
107 Devlin Hall  
April 18, 2009**

**Sponsored by Alpha Chapter of Kansas, and the WSU  
Department of Anthropology**

**Kyle Ackerman: Neanderthals and Their Relation to *Homo sapiens*** Ever since Neanderthals were first discovered many questions about their relationship to *Homo sapiens* have been asked. Their place in human evolution still remains a controversial subject. Morphological differences have been a main argument against any relation between the two species. However, some individuals have been found that are considered by some to be transitional forms that prove that there was interbreeding while *Homo sapiens* spread throughout Europe. Recent genetic studies on Mitochondrial DNA have looked to solve this problem, but problems with sample size have held back genetic studies from putting forth any definitive answers.

**Shannon Arney: A Historical Review of Environmental Archaeology** Environmental archaeology is best defined by its history. The development of the discipline began in the early 1900's as an ecological approach to archaeology. Julian Steward and Leslie White greatly impacted the approach, causing a split known as neoevolutionism and neofunctionalism. Through these splits an interdisciplinary ecological approach emerged which remains a crucial element of environmental archaeology. By the mid 1900's environmental archaeology had become a discipline that, from the beginning, was integrated with the natural sciences. Not only has it been positively affected by interdisciplinary work, but environmental archaeology also proves to be beneficial to other sciences, especially ecology. It aids in the understanding of current ecosystems and landscapes, which in turn is beneficial to environmental restoration projects. One of its greatest contributions is to natural resource management, advocacy and policy making.

**Troy Belford: "The Omu: An Asmat Tradition" (An Anthropological Film)** An omu is a ritual object made by the Asmat. The Asmat live in the alluvial tidal swamp on the western side of New Guinea Island, in an area also known as Irian Jaya and Papua, Indonesia. This film presents the tradition of carving an omu as it was observed in the village of Pupis during the summer of 2007.

**Jelena Brezjanovic-Shogren: The Garifuna of Belize** The Garifuna people are one of three groups living in the six districts of Belize. According to historical accounts they originate from shipwrecked African slaves who were brought to the Caribbean island of San Vincent circa 1625 that intermingled with the native Arawak and Carib groups and forming so called Black Caribs or Garinagu, as we know them today. During the seventeenth and eighteenth century the British relocated them by pushing them south to Roatan, and later to Belize, Honduras, and Guatemala. In Belize there are six Garifuna villages. Barranco is the only village in Toledo district, with a population of around 105 people. They are all bilingual speaking the official English language and their native Garifuna language which incorporates a variety of languages including African, Dutch, English, Fon, French, Portuguese, Spanish and Q'eqchi Mayan. Their religion also reflects a syncretism of Christianity and African religions.

**Lindsay Charles: Sex Estimation from Crania** Many studies have been performed regarding developing an effective method for sex determination using qualitative analysis of the human skull, and certain traits have been deemed more reliable in aiding in this determination. This paper seeks to establish which traits are the most reliable in a given population, keeping in mind that different traits express different degrees of sexual dimorphism depending on the population. For this experiment, 20 adult skulls from the Wichita State University Biological Anthropology Laboratory Cadaver Collection were analyzed to develop a formula to help in visual assessment. Traits were weighted based on how reliable they were in sex determination, and individuals were given a score of +2, denoting a highly masculine trait, to -2, denoting a highly feminine trait, for each of the nine traits analyzed. The score of each trait was multiplied by the weight to determine a class number. An index of sexualization was developed by dividing the sum of the class numbers by the sum of the weights. This method proved to be effective in all cases, and 85% reliable when considering the criterion for indeterminate sex identification. If there is a substantial collection of skulls for any given population, it is believed that this method would be useful, given the observer first establish which traits are reliable and especially sexually dimorphic to that particular group.

**Rachel Stephanie Dellovechio: Cranial Suture Closure** Is it possible for two different methods that estimate age based on cranial suture observations to yield similar results? Using Todd and Lyon's (1925) ectocranial suture method and Meindl and Lovejoy's (1985) ectocranial suture method, twenty crania from the Wichita State University Biological Anthropology Cadaver Collection were observed. Both methods of observation were then compared to determine if they produced similar scores and age estimation results. Results showed not only variation between the methods, but within the methods themselves. This variation does not indicate that one method is specifically better than the other, more rather that one is possibly more defined. However, no matter how defined a method may be, variation still exists within every method, therefore as many possible methods for age estimation must be employed to determine age at death.

**Jerry Elmore: What Are We Doing Here? Site 41\_NU-54 and the 2009 Field Season.** Site 41-NU-54 is the third site from the Lower Nueces River Valley 60 km<sup>2</sup> survey area determined to be a base camp, or a semi-permanent/permanent habitation, associated with a network of smaller hunting camps and quarries. All known base camps exhibit substantial artifactual diversity with large amounts of lithic, ceramic, faunal, and floral materials already having been recovered. Previous surveys and excavations conclusively demonstrate that 41-NU-54 (Fort Lipantitlan) is a multi-component site representing occupations related to the south Texas Archaic, Late Prehistoric, and Historic periods. The focus of the 2009 field season will be on this site's Late Prehistoric (AD1000-1750) component. Objectives for the 2009 season are: 1) determining the size and boundaries of the 41-NU-54 Late Prehistoric component; 2) determining if transitions (Archaic → Late Prehistoric → Historic) between periods at 41-NU-54 were connected or disjointed; 3) determining the purpose and configuration of 41-NU-54 if it was a base camp; 4) conversely, determining the purpose and configuration of 41-NU-54 if it was not a base camp; 5) conducting a comprehensive intra-site analysis of 41-NU-54 using GIS/GPS, stratigraphic, and photographic data; 6) determining the paleotopography of the Davis Area (an

unsurveyed section of 41-NU-54) using coring and stratigraphic analysis; and 7) determining resource procurement and usage patterns at 41-NU-54. This presentation will provide a concise overview of past research concerning 41-NU-54 while examining each of the 2009 objectives.

**Shannon Kraus: I See Dead People: The Spiritualist Movement and its Advancement of the 19th Century Women's Suffrage Movement** In the late 1800s, the spiritualist movement gained momentum within the United States through many mediums and clairvoyants who claimed to have the ability to see and communicate with the dead. Many of these mediums were women who, tired of their inability to procure a voice within their society, used this movement to project themselves into the mainstream of society. Looking at the history of the spiritualist movement in the United States, the oppression and frustration connected to the traditional roles of women can be examined and defined through the practice of seances and trancing and the ways in which they were viewed within their own communities.

**Jennifer Ledford: Entrapment in the Noose: Evidence of Cause of Death by Hanging** When examining skeletal scenes in nature, forensic anthropologists may encounter difficulty determining the cause of death of the individual. This could especially be the case where the skeletal elements as well as associated cultural items have been scattered throughout the area. In specific anthropological cases where death by hanging is in question, cause of death may have to be inferred from evidence at the scene. When specific cultural items and skeletal remains were discovered at a scene from the Middle Tennessee area, questions arose as to how common a cervical vertebra entrapped in a noose provides anthropologists with unambiguous evidence of cause of death by hanging. This presentation will present three remarkable skeletal cases, from three different states where cause of death by hanging was determined by this evidence. These three cases support the argument for the thorough processing of skeletal crimes scenes, especially in cases where bone and culturally relevant associations are scattered among natural and extraneous debris.

**Nick Macaluso: Stone Ties: Continuing to Define the Pratt Complex** This paper will present a short archaeological history of the Pratt Complex, and to display the findings of my analysis of the archaeological materials held at the institutional collections of Wichita State University, the University of Kansas, and the Kansas State Historical Society. Thus the material assemblages from the thirty-five sites currently held in these three collections are described by using photographs of representative artifacts, maps for both spatial and source reference, and graphs developed, from this analysis, to statistically compare the lithic and ceramic inventories held at these three institutions. Ultimately it is hoped that by identifying and comparing the material frequencies observed at each of these sites, the criteria of what actually constitutes a Pratt complex site can be established. It is further intended that these same criteria be used as a benchmark for evaluating and classifying other archaeological sites in the region as they relate to the assemblages of the Pratt complex.

**Michelle L. Maynor: Applying sexing and aging techniques to Wichita State University Biological Anthropology Lab Juvenile Material**

Juvenile skeletal collections are scarce throughout the United States. The collections that do exist are not necessarily of documented individuals. Therefore many studies on juvenile skeletons are conducted in the blind and may not be useful when applying methods to unknown individuals. Methods developed and tested on documented collections are not only valuable but also critical to biological anthropologists. The intent of this study is to reevaluate the age and sex of the Wichita State University – Biological Anthropology Lab (WSU-BAL) juvenile remains. However, because of minimal research conducted on documented individuals, reliance upon blind studies is necessary. All of the juvenile skeletons analyzed in this study are undocumented and on loan to the university. There are a total of 18 individuals sufficiently preserved for data collection and analysis. All 18 are believed to be Native American, based on the context where they were found. This study was also conducted to compare different aging and sexing techniques. The methods were applied to every individual as applicable. Bone ages and dental ages were used to age as well as to sex the individuals. Sex estimation was also conducted with mandibles and pelvic bones, if present. While this study may reflect the juvenile collection at WSU-BAL, it does not reflect the skeletal biology of any one specific population.

**Moore-Jansen, Peer H., Elayne N. Pope, Laura Bennett: Human Remains from a controlled Vehicular Fire Investigation**

The study of human remains is often associated with a number of confirmed and unconfirmed observations stated throughout the professional literature. Controlled experiments remain a key to further addressing the current interpretations and inferences made about the effect of fire on human corpses. The present study reports on an investigation of two human corpses aged in a motor vehicle before being set on fire at the Skeleton Acres Research Facility at the Wichita State University Biological Anthropology Laboratory. Two human cadavers of different size and weight were placed in a small sedan and subsequently they were ignited. The fire was observed and recorded for the duration, and photographic and other documentation of the fire were maintained. Subsequent observations were made of the skeletal remains of both individuals. Findings pertaining to size and weight of the cadaver and the length and temperature of the fire are presented. Additional findings addressing general questions and sometime misconceptions about the effect of fire are also reported. This includes the documentation of gunshot wounds to the skull, delamination of the cranial diploe, and a presentation of general burn patterns.

**Amelia Norton: Comparing Environmentalism in the U.S.S.R and the United States**

This paper discusses how environmental choices impact the development or destruction of an ecosystem. The smallest choice including flipping on the light can transform any ecosystem within months. In reality resources are required for life, but a balance can be attained. Using the United States and the U.S.S.R to explain the impacts of ignorance ecologically will sum up the general view of countries whose only goal is money. Through all human control and manipulation, the world has become dirty and hazy. The mindset of a culture's public is

definitively different from the mindset of a culture's government. All of the problems that result from human interference and ignorance derive from our lack of interest in the future and our selfish outlook on life.

**Elizabeth Perez: Effects of Physical Stress on the Femur and Humerus Based on Subsistence Patterns and Physical Terrain.** It is thought that past changes in subsistence patterns can be demonstrated by site-specific alterations of the human skeleton. This study examines the effects of physical stress on the femur and humerus based on subsistence patterns and physical terrain of different prehistoric societies. The results of this study are based on an accumulation of published literary works. Test results suggest there are significant skeletal changes in both men and women with increases in bone size and robusticity for groups that have adopted agriculture.

**David Reed: Morphological Variation in the Human Femur** There are numerous ways in which the femur can be examined in order to determine sex. Though most of the techniques have proven reliable, each value of a given variable is unique to a certain population. Several popular methods are discussed and explored using the Wichita State University cadaver collection. With the figures obtained through examination, these methods can be validated or disproven.

**Katie Ritter: Herbs, Health and Medicine in Belize.** While traveling with the Anthropology department, a group of students stayed in a Q'eqchi' Mayan village in south-central Belize. While there I became interested in their medicinal health practices and particularly in herbs and plants used to treat illnesses. In order to find out what the plants were, how they were used, and if people believed that they worked, I spoke with the local H'men (a local Maya healer) and other villagers. This paper reviews the findings I was able to glean from this first brief visit.

**Gregg Schwendner: Archaeology and Papyrology: Early Christianity in Late Antique Egypt** The University of Michigan's excavations at Karanis (Kom Aushim) 70 years ago yielded a considerable number of papyri and ostraca, only a few of which are Christian. The first text is a single page of a papyrus codex, containing remnants of the Greek text of Psalms 32 and 33 (P.Mich. inv. 5475 c). The codex format and the date militate in favor of a Christian rather than a Jewish origin, although there may have been some Jews (to judge by nomenclature alone) in Karanis at this time. The context in which it was found can refine this date in two ways. The text of Psalms 32-33 was found together with number of fragments of Greek literature, all date to the third century or earlier. Second, documentary finds and coins hoards from the same insula point to a date between 260-300 CE.

**Carol Shallue: An Application of Cranial Epigenetic Variants to the WSU-BAL Skeletal Collection for the Verification of their Accuracy in the Determination of Group Affiliation in Smaller Osteological Collections** An analysis of Cranial Epigenetic Traits as found in the Wichita State University Biological Anthropology Lab (WSU-BAL) Skeletal collection, in order to assess the degree of relevance (if any), they have in determining group affiliation among a

small, multiple-group population. A total of 27 crania of known group affiliation were taken from the WSU-BAL cadaver, forensic, and archaeological collections and scored on the presence or absence of 17 epigenetic traits.

**Krystal Teixeira: Avian Osteology: An Ostrich Osteology Web-Site.** An introduction of a website in avian osteology in association with the Wichita State University Biological Anthropology Laboratory Web Site.

**Kristen Waymire: Hamas: Dynamics of Gender Ideology** The West has often approached Hamas as monolithic and static. However, careful analysis reveals that the movement is flexible and fluid. Hamas actually provides its own discourse that offers an ever changing framework of identity formation. By one merely labeling the group as a "terrorist" organization, the potential for comprehensive analysis is not only undermined but is reduced to focusing on the group's actions and doctrinal aspects of its charter. Although some scholars have begun serious in-depth studies and research into the Islamic Resistance Movement as a dynamic group within a broader context of socio-economic and cultural factors influenced and generated by the Nakba and subsequent Israeli occupation, the gender ideology of Hamas as well as other Islamic movements has been greatly ignored. Not only has the gender ideology of Islamic movements been sketchy but that also the women militants and their role(s) have been neglected in the study of Islamic movements.

**Brent Weeks: Contrast of Cultures in Belize - Mayan and Garifuna Comparisons** For such a small country, Belize is comprised of many diverse cultural and ethnic groups. This presentation will highlight a comparison of two of those groups, the Mayan and the Garifuna, based on visits and observations made over the last four years with the Wichita State University's 597T Anthropology in Belize class.