

**Graduate Student Research Symposium**  
Graduate Students in Anthropology  
February 2, 2018



- 9:00 Light breakfast
- 9:30 **Caitlin Vogelsberg** “Continuing Exploratory Spatial Data Analysis of Undocumented Border Crosser (UBC) Deaths in the Southern Arizona Desert”
- 9:45 **Marcela Omans** “The Remaking of Chinatown in Latin America”
- 10:00 **Lisa Bright** “Paupers, Indigents & Undesirables: The Bioarchaeological Imprint of Immigration & Structural Violence in Historic California”
- 10:20 Break
- 10:35 **Kelly Kamnikar\* and Amber Plemons** “New approaches to juvenile age estimation in forensics: Application of transition analysis via the Shackelford et al. method to a diverse modern subadult sample”
- 10:50 **Nikki Klarmann** “Within These Walls: A Report of 2017 Test Excavations on Structures at Morton Village”
- 11:05 Break
- 11:25 **Nerli Paredes Ruvalcaba** “The impact of maternal work and received recommendations on infant-feeding practices: A pilot study among Zapotec peoples of Oaxaca, Mexico”
- 11:40 **Susan Kooiman** “Fish Stew and Acorns, Too: Fresh Perspectives on Cooking and Diet in the Precontact Upper Great Lakes”
- 12:00 Lunch
- 1:00 **Chantal Tetreault\* and Sara Tahir\*** “Hijabi Homeland”
- 1:20 **Melissa Chavarria** “Autism Spectrum Disorder (ASD): Disease Conceptualization and Parental Roles in Puerto Rico”
- 1:35 **Jodie O’Gorman** “A Prelude to: Migration, Ritual, and the Dead”
- 2:00 Break
- 2:20 **William Lovis** “Exploring the Evolutionary Landform History and Cultural Use of Sleeping Bear Point, Sleeping Bear Dunes National Lakeshore, Michigan”
- 2:40 **Joseph Hefner** “Bioarchaeological evidence for the lives of Africans in Medieval London”

**PRESENTATION ABTRACTS**

**9:30 Caitlin Vogelsberg “Continuing Exploratory Spatial Data Analysis of Undocumented Border Crosser (UBC) Deaths in the Southern Arizona Desert”**

The purpose of this research was to examine the geospatial properties of deceased migrants recovered from southern Arizona to potentially aid in both the investigative and identification processes. Therefore, a combination of exploratory spatial data and GIS analyses was conducted on several demographic variables of identified UBCs (n = 1051). Spatial autocorrelation analyses—including Moran’s I and Local Indicator of Spatial Association (LISA) cluster maps—for the variables of recovery year, sex, and nationality or country of origin revealed significant positive spatial relationships for each. As the majority of individuals examined at the PCOME are young, Mexican males, further tests were conducted on nationality which also resulted in statistically significant positive spatial autocorrelation and areas of spatial clustering. Furthermore, clusters of recoveries from both the beginning and second half of the study period (2001-01/2017) were visualized using LISA cluster maps and express an east-west movement of case locations. These results may indicate that route choice, as seen through death and recovery location, is also patterned via a person’s sex, country of origin, and when they crossed. This supplements other anthropological, sociological, and criminal justice research on the topic and provides further information to the study of international migration along the United States-Mexico border.

**9:45 Marcela Omans “The Remaking of Chinatown in Latin America”**

While Chinatowns have long been seen as sites of exclusion and marginalization, in the modern era they are being remade into transnational gateways for new immigrants and capital, as well as cosmopolitan beacons in the global city. This shift is especially apparent in Chinatowns because of the People’s Republic of China’s rise as not only a political but also economic powerhouse, rivaled by only the United States in many aspects. While there has been an abundance of work done on this across the Western world, there has been little done on Chinatowns in the global south. Latin America presents an interesting region to view this phenomenon because of its positionality not only within the global south, but also because of the long time hegemonic presence of the United States in the region. As such, Latin American Chinatowns are localized spaces in which to observe not only the growing Sino-Latin American relationship, but also the transnational remaking of global cities. This reshaping is seen in the simultaneous building and promotion of a distinct Chinatown and the embrace of the local community (if only nominally) and the capital and other economic opportunities they provide.

**10:00 Lisa Bright “Paupers, Indigents & Undesirables: The Bioarchaeological Imprint of Immigration & Structural Violence in Historic California”**

Between 2012 and 2014 the remains of 1,004 individuals were exhumed from the historic-era (1875-1925) Santa Clara Valley Medical Center Cemetery in San Jose, California. During the late nineteenth and early twentieth centuries, Santa Clara County was a rapidly expanding agricultural and technological boom area. California statehood in 1850, and the discovery of gold at nearby Sutter’s Mill, resulted in rapid population expansion. Most of the migrants and immigrants did not strike it rich, resulting in a large population of low socio-economic individuals requiring aid from the local and state governments. This study examines the health of the most at-risk and least documented segment of the historic Santa Clara Valley population: indigents, paupers, and immigrants.

Gender, ethnicity, and socio-economic status play a role in creating the time and place specific vulnerability responsible for health related inequality. Historically the reformation of social welfare policies led to an increase in structural inequality and this pattern of social violence leaves observable and quantifiable biological impacts on the body. The use of structural violence as an interpretive biocultural framework promotes balanced integration of empirical studies of skeletons and social theory to interpret the skeletal data.

**10:35 Kelly R Kamnikar, Nicholas P Herrmann, and Amber M Plemons “New approaches to juvenile age estimation in forensics: Application of transition analysis via the Shackelford et al. method to a diverse modern subadult sample”**

Dental development is one of the most widely utilized and accurate methods available for estimating age in subadult skeletal remains. The timing of tooth growth and development is regulated by genetics and less affected by external factors, allowing reliable estimates of chronological age. Traditional methodology focused on comparing tooth developmental scores to corresponding age charts.

Using the Moorrees, Fanning, and Hunt developmental scores, Shackelford and colleagues embed the dental development method in a statistical framework based on transition analysis. They generated numerical parameters underlining each ‘stage’ and age-at-death distribution, and applied them to early modern humans and Neanderthals. We use the same methods on two subadult samples (n=1699), representing modern individuals that may become part of the forensic record. We assess the probability coverage of the Shackelford et al. method derived from MFH standards as it applies to all available dentition.

Results indicate promise as the age range at 90% and 95% confidence levels include the chronological age of almost every individual tested. The maximum likelihood point estimates were separated by quartiles, and the median MLE ages were compared to chronological age. From ages 2 to 12, the MLE and chronological ages were not significantly different, but differences increased at age 13, as previously shown. We

adjusted the numerical parameters underlying the stages for developing teeth based on the combined sample, and results from testing with a modern forensic sample will be presented. This study shows that the Shackelford et al. method is applicable and accurate when aging subadults.

**10:50 Nikki Klarmann “Within These Walls: A Report of 2017 Test Excavations on Structures at Morton Village”**

During the Summer of 2017, test excavations were conducted at the Morton Village site in the central Illinois River valley to expand the dataset on the site’s architectural and spatial organization. These excavations were conducted as part of the author’s doctoral dissertation project which focuses on better understanding the spatial relationship between the Oneota and Middle Mississippian occupants at the village, using the theoretical viewpoint of coalescence. Ceramic attributes and architectural styles have typically been used to differentiate between Oneota and Middle Mississippian contexts at the village. Although material culture provides a valuable line of evidence for examining coalescence, the analysis of the site’s spatial organization will allow an innovative and finer contextualization of the distinctions and the merging of material culture. This paper reports the findings of these test excavations and provides initial interpretations of the spatial distribution of the differing architectural styles across the site.

**11:25 Nerli Paredes Ruvalcaba “The impact of maternal work and received recommendations on infant-feeding practices: A pilot study among Zapotec peoples of Oaxaca, Mexico”**

The increase of biomedicine and the introduction of infant formula have influenced infant-feeding practices within Indigenous communities in Mexico. This study explored infant-feeding practices among Zapotec peoples in Oaxaca. Methods: Eight mothers ages 19 to 38 with infants of three years of age or younger were recruited. Interviews were conducted on infant-feeding practices, and recommendations mothers received from biomedical practitioners and family members. Results: All mothers breastfed, and stated breastfeeding was ideal for infant-feeding. However, four mothers introduced formula soon after birth because of work or because of recommendations from biomedical staff in private health-care clinics. Mothers were likely to follow recommendations from their mothers regarding the introduction of water, tea, or preparing infant formula with herbal tea. Preparing infant formula with herbal tea is perceived as a way to counter the negative effects of formula on infants’ stomachs, as compared to breast milk. All mothers followed biomedical recommendations for introducing solid foods. Conclusion: Mothers perceive breastfeeding as ideal; yet, work and biomedical advice may influence the introduction of formula. Even though biomedical recommendations seem to influence traditional infant-feeding, mothers may still follow recommendations from their mothers if such practices are perceived as having a positive effect on infants’ health.

**11:40 Susan Kooiman “Fish Stew and Acorns, Too: Fresh Perspectives on Cooking and Diet in the Precontact Upper Great Lakes”**

Chemical analyses of adhered and absorbed food residue from pottery can provide unique insight into ancient food practices. Carbonized food residue from 30 pottery vessels from the Cloudman site (20CH6) on Drummond Island off the Upper Peninsula of Michigan were sampled and subjected to stable carbon and nitrogen analysis. The results reveal consistent  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  levels in vessels from the Middle Woodland (AD 1 – AD 500/600), early Late Woodland (AD 500/600 – AD 1000), and late Late Woodland (AD 1000 – AD 1600) periods. Stable isotope assays on residue from all vessels, regardless of temporal affiliation, fall within measured ranges of high trophic-level freshwater fish, such as pike, lake trout and whitefish. Fifteen pottery samples were also subjected to lipid residue analysis, the results of which indicate intensive nut processing throughout all time periods. However, the frequency of fish lipids in these samples was low. The results suggest unexpected continuity in some resources cooked at the site over an extended period of time, while also highlighting the advantage of employing multiple methods to assess past diet.

**1:00 Chantal Tetreault and Sara Tahir “Hijabi Homeland”**

Recent violent attacks upon and politicized championing of *hijabis* have placed the image of the headscarf-wearing Muslim woman at the center of contested meanings of the American homeland. This paper analyzes emerging semiotics of *hijabi*-homeland intersections. The buildup to and fallout since the 2016 U.S. presidential election have focused the national gaze to the *hijabi* woman as metonymic symbol for all Islam, creating a surfeit of cultural and political meanings. Among other imagery and political theater, this paper confronts the “hijabi homeland” by analyzing the appropriation and re-appropriation of the flag headscarf in political protests, the media, and in online memes. Intense support and intense criticism of Saba Ahmed, founder and president of the Republican Muslim Coalition, appearing on Fox News in 2016 in a flag hijab to protest Trump’s call to close mosques, depicts the *hijab* as over-determined symbol that supports or condemns American sovereignty, depending on the beholder. In denouncing Ahmed’s appearance, fashion designer/blogger/activist Hoda Katebi, herself a hijabi Muslim, argued that the “American flag represents oppression, torture, sexual violence, slavery, patriarchy, and military & cultural hegemony for people of color around the world” and to “keep your flag off my *hijab*.” Meanwhile, artist/activist Shepard Fairey designed a poster of a flag adorned *hijabi* woman, which became an iconic image of the women’s march on Washington. By engaging these conflicting and conflating rhetorical stances, we examine the ways that representations of the American homeland(s) and American hijabis are increasingly politically inter-connected.

**1:20 Melissa Chavarria “Autism Spectrum Disorder (ASD): Disease Conceptualization and Parental Roles in Puerto Rico”**

Autism Spectrum Disorder (ASD) is a broad category encompassing a wide variety of developmental delays, social-interactional differences, and sensory sensitivities. While this set of illnesses may present serious challenges to parents of affected children, little is known about parental understandings and experiences of the illness. This study explores how ASD parents in Puerto Rico conceptualize autism and consider how these conceptualizations may be rooted in dominant biomedical and sociocultural paradigms, and as well as how they are impacted by the local socio-economic context. This study consists of preliminary dissertation fieldwork, which included participant-observation at ASD-focused educational facilities and community events, and semi-structured interviews with 50 ASD parents, extended family, treatment providers, and ASD community organization members. Data analysis is in progress as interviews are coded for subject-specific and general thematic narratives. Preliminary results indicate ASD parents construct complex personal narratives of autism that are further complicated by the overarching unstable political and socio-economic situation of contemporary Puerto Rico. This demonstrates how ASD parents and community members both construct and work within complex conceptualizations of autism and how ASD parents must navigate a difficult medical, educational, and legal system in order to gain access to limited resources for their ASD children.

**1:35 Dr. Jodie O’Gorman “A Prelude to: Migration, Ritual, and the Dead”**

Migration of human populations is an ancient and persistent part of the history of humankind. In the past, as in the present, migration continues to be a solution to human problems that carries with it some degree of increased risk and challenges for group and individual security and identity. Vulnerability resulting from migration choices, and practices to mitigate risks of that vulnerability, vary between historically situated populations and within groups by age, gender, and other elements of identity. In this paper, cross cultural practices of mitigating risk associated with migration are examined with particular attention to the use of ritual practices. Ritual practices of the Oneota tradition (ca. 1000-1600 CE) involving the dead and the spatial aspect of those practices within the context of migration events are examined.” The preceding is an abstract for a paper I hope to give at the SAA meeting in April. At the Graduate Student Symposium, I will present the analysis to date.

**2:20 William A. Lovis, G. William Monaghan, and Alan F. Arbogast “Exploring the Evolutionary Landform History and Cultural Use of Sleeping Bear Point, Sleeping Bear Dunes National Lakeshore, Michigan”**

We present the results of interdisciplinary research into the evolution and activation cycling of sand dunes at Sleeping Bear Point, Sleeping Bear Dunes National Lakeshore Michigan. The case study is contextualized within larger models of coastal dune

research, and related to human use of Sleeping Bear Point and the taphonomy and policy management of such coastal sites under Federal management. We synthesize the information related to the cultural affiliation, timing and changing environment of late precontact human occupation at site 20LU115 on Sleeping Bear Point.

**2:40 Dr. Joseph Hefner “Bioarchaeological evidence for the lives of Africans in Medieval London”**

Medieval London (12th-16th centuries AD) was the largest and wealthiest city in Britain, and for the first time since the Roman period, it was deeply connected to Continental Europe, the southern Mediterranean, to powerful maritime economies such as Portugal, and increasingly, because of institutions such as the East India Company, to newly explored territories across the globe. These complex and often opaque relationships increased long-distance population mobility, a trend identified in scholarship, because it typically involved White European elites or employees of powerful institutions whose activities were documented. However, research examining primary sources from the 1500s identified a number of individuals with Black (predominately African) ancestry working and living in London, many connected with the Royal Household. For a number of individuals, sources show they had come from southern Spain and west Africa as a consequence of the Tudor maritime economy. Crucially, in contrast to other countries in Europe, they would have been legally free, as slavery was not recognized by English law. Our current research is the first to employ the macromorphoscopic method to determine the ancestry of a random sample of 150 individuals selected from several monastic and lay cemetery populations excavated from the City of London, including St Mary Spital and the East Smithfield Black Death assemblage. This research aims to provide new evidence for the lives of Black people in London prior to the 16th century, a century which has been the focus of much historical scholarship. The data provide a temporal depth to population diversity in Medieval London, and through osteobiographical case-studies, enable the life-experience of Black Londoners to be set against the perspective of the primary sources.