2nd Annual

B.A. NeRD
Bioarchaeologists’ Northeast Regional Dialogue Conference

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February 17th, 2012
University at Albany - SUNY

Hosted by
Departments of Anthropology and
Anthropology Graduate Student Organizations of the
University at Albany - SUNY and Syracuse University
About B.A. NeRD

The Bioarchaeologists’ Northeast Regional Dialogue (B.A.NeRD) Conference was established in 2010 to initiate dialogue among bioarchaeologists in the Northeast United States and to provide a semi-formal venue in which students and professors can present current research in subfields of biological anthropology including, but not limited to, human osteology, paleopathology, paleodemography, forensic anthropology, and taphonomy.

The 2012 conference is being held at the University at Albany – SUNY. It is hosted by the Department of Anthropology and Anthropology Graduate Student Organization of the University at Albany - SUNY and the Department of Anthropology of Syracuse University. It is funded by the Graduate Student Organizations of the University at Albany – SUNY and Syracuse University.

2012 Conference Committee
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<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00 – 10:30</td>
<td>Welcome Reception and Introduction (Refreshments served)</td>
</tr>
<tr>
<td>10:30 – 12:00</td>
<td>Session One</td>
</tr>
<tr>
<td>12:00 – 1:00</td>
<td>Lunch (Provided by AGSO of University of Albany – SUNY and Syracuse University)</td>
</tr>
<tr>
<td>1:00 – 2:00</td>
<td>Keynote Lecture</td>
</tr>
<tr>
<td>2:00 – 3:30</td>
<td>Session Two</td>
</tr>
</tbody>
</table>
About our Keynote Speaker

Kenneth Nystrom  
Assistant Professor of Anthropology at SUNY New Paltz

Dr. Nystrom is a bioarchaeologist with broad interests in paleopathology, population genetics, and the ritual use of the body. He is currently an assistant professor of anthropology at SUNY New Paltz. He received his doctorate in anthropology from the University of New Mexico in 2005 under his advisor, Dr. Jane Buikstra. Dr. Nystrom has published in a number of peer reviewed journals, including the *American Journal of Physical Anthropology*, *American Anthropologist*, and *International Journal of Osteoarchaeology*.

Keynote Lecture

1:00 – 2:00pm

Health, Identity, and Embodiment  
Kenneth Nystrom

The concept of embodiment is used in two distinct, but fundamentally related ways within bioarchaeology. On the one hand, it is used to structure the discussion of the health consequences of sociopolitical and economic processes. While embodiment has been most frequently articulated in reference to the analysis of today’s living populations, it also resonates with the biocultural examination of human health from skeletal remains. Embodiment also structures the consideration of how the physical body can be a political artifact, a scene of display of group affiliation or status, and a site of embodied agency. While these two manifestations of embodiment seem distinct, there is a fundamental convergence in meaning. They both entail the modification of the biological, be it physiological or anatomical, which reflect aspects of the social world. In this presentation I will discuss how embodiment has structured my analysis of the skeletal remains recovered from the Newburgh Colored Burial Ground.
A Disciplined Childhood: A Social Bioarchaeology of the Subadults of the Spring Street Presbyterian Church

Historical bioarchaeology is in a unique position to comment both on the structuring institutions of childhood and agency of children. Here I will explore this embodied dialectic using the subadults excavated from burial vaults of the Spring Street Presbyterian Church, New York City (1820-1843). The remains of the subadults (MNI 81) are well-preserved and present a picture of the health and activity of the church that is not necessarily reflected in the adult sample, which is likely composed of rural and international immigrants to the city. In particular, high rates of metabolic disease suggest that the subadults of the congregation were engaged with an urban, industrial city from a young age. Additionally, archival evidence suggests that the ideology of the abolitionist and activist church sculpted children’s lives, diet, and labor in this environment. By using embodiment theory to examine the remains of the children within the radical ideology of the church, we can begin to address questions of how structural ideologies impacted the ability of the children to exercise agency in their world.

A Case of Metastasized Prostate Cancer from the Historic Spring Street Presbyterian Church in Manhattan

In 2005, construction crews in New York City unearthed human skeletal remains from the burial vaults of the Spring Street Presbyterian Church. This radical abolitionist church, active from approximately 1811-1843, was comprised of a mixed-race congregation that was predominantly working class. One individual from this site exhibited lesions consistent with prostate cancer. Burial 9, the incomplete skeletal remains of an adult male, 40-44 years of age, has proliferative and lytic lesions on the os coxae, sacrum, and proximal third of the femora diaphyses.

When interpreting these lesions, it is important to consider the social and physical environment this individual lived in, so as to understand the morbidity and mortality of persons with such a condition. A biocultural approach to this case study will provide insight into the life of this individual in the context of nineteenth century New York City and the risks and realities of disease in this period. The purpose of this paper is to contribute to the relatively sparse literature on neoplasms in the archaeological record, and to suggest the potential for a biocultural analysis to enrich our understanding of disease in the past. Burial 9 provides a unique opportunity to study a relatively rare case of prostate cancer in an archaeological specimen and to better understand the effects of genetic and environmental factors on the development of prostate cancer.
The Onondaga Community College Poorhouse Excavation and Analysis

This presentation discusses the excavation methods and laboratory analysis of 71 discrete burials and commingled remains recovered during a six-month period between 2010 and 2011 at the site of a former poorhouse at Onondaga Community College (OCC) in Syracuse, NY. Several factors, such as winter weather conditions, time constraints, unmarked graves, and multiple episodes of construction that left many burials disturbed and/or commingled—presented unique challenges both to excavation and subsequent laboratory analysis of remains.

This bioarchaeological analysis of the OCC skeletons provides a glimpse into the social and biological stressors that may have affected the everyday lives of these individuals. Skeletal analysis of the remains indicates a predominately male sample population, with all age categories (infant, juvenile, young, middle and old adult) well represented. These individuals exhibited several pathological conditions including injury, periostitis, osteoarthritis, dental caries, as well as hematopoietic and congenital disorders. The archaeological and bioarchaeological analysis suggests these individuals were a marginalized group, with little, if any, access to health care, many of whom engaged in habitual and strenuous labor. This analysis provides a glimpse into the health and mortality of the poor from the turn-of-the-century upstate New York.

Stature and risk of death during the Black Death in London, A.D. 1348-1350

Preexisting health conditions are known to have affected an individual’s risk of dying during London’s Black Death. It follows that stature, being a summary measure of health throughout growth and development, would be associated with increased risk of mortality during the epidemic. A previous analysis failed to find any such relationship. In this study, we reanalyzed stature and mortality data from the East Smithfield Black Death cemetery using simpler and more appropriate analytical methods than the previous analysis. Fisher’s exact tests were used to examine whether growth during the Great Famine (1315-1322) resulted in shorter stature relative to those who were not growing during the famine, which would suggest it was a source of variation in stature among those that died during the Black Death. Results indicate that short stature increased risk of mortality during the epidemic. Those who were growing during the Great Famine were no more likely to be short in stature than those who were not, suggesting variation in stature among those in the East Smithfield Black Death cemetery was not the result of growth during the famine.
Session Two

2:00 – 2:20  
Jordan Karsten  
University at Albany - SUNY

Was The Transition To Agriculture Really That Bad For Us?: Reassessment of an Entrenched Paradigm

A large amount of bioarchaeological research has focused on the health consequences for populations undergoing the transition from a hunter gatherer subsistence strategy to one based on agricultural production. The theory that this transition was detrimental to human health pervades the bioarchaeological literature, with some authors even referring to the adoption of agriculture as a "catastrophe". Interestingly, no systematic, quantitative meta-analysis has ever been carried out. A large sample of published bioarchaeological case studies is examined using statistical analysis. The results indicate that while some aspects of oral pathology, such as dental caries, uniformly increase, all other skeletal lesions either fail to demonstrate any meaningful patterns or indicate improving health. This suggests that the theory regarding the transition to agriculture needs to be altered in a way that reflects the available data.

2:20 – 2:40  
Gary P. Aronsen, Sarah A. Brownlee and Nicholas F. Bellantoni  
Yale University

Preliminary analysis of human skeletal remains recovered from a mid-nineteenth century cemetery in downtown New Haven, CT.

In July 2011, construction at Connecticut’s Yale-New Haven Hospital was interrupted by the discovery of human skeletons. These remains were exposed via trench excavation, and lay under a large concrete foundation slab poured in the 1970s. Review of historical records and maps indicate that these remains are from a cemetery associated with New Haven’s first Roman Catholic Church, and with interments dating between the 1830s and the 1850s.

Four adult human skeletons were recovered, and a few associated artifacts were found. Many of the skeletal elements have some postmortem damage, but in general the remains are remarkably well-preserved. Two of the skeletons are female, one aged 25-35 years, and the other possibly 60-70. The other two are male, one also 25-35, and the other over 60. Both younger individuals have remarkably complete and unworn dentition, while both older individuals show antemortem tooth loss and extreme dental wear. The younger male shows marked calculus and periodontal disease, while the older male exhibits multiple healed fractures to the cervical vertebra and ribs, suggesting a significant (but ultimately survivable) trauma. All individuals show indications of manual labor such as compressed vertebrae, strong muscle markings (especially on the males), and arthritic changes to many different joints. Here, we present data on stature, ethnicity and occupational indicators, and describe ongoing work to identify and elucidate the place of these individuals in New Haven’s history and society. This work was supported by the Connecticut Office of State Archaeology and the Yale University Department of Anthropology.
Converting the living, contesting the dead: Evangelization, identity, and the ancestors

Christian mortuary rites and practices were considered an important component of the successful evangelization of native Andeans, but historical documents account long-term campaigns to eradicate native mortuary practices and the persistence of the ancestor cult long after the first efforts of Christianization. In this presentation, we discuss different interpretations of natives buried as Christians from different regions of the Americas, as well as the various native responses to evangelization efforts from the perspective of bioarchaeology. Drawing from postcolonial theory and interpretive archaeology, we investigate different native and Spanish strategies, including accommodation, mimicry, ambivalence, and hybridity, and briefly explore different dimensions of identity within this colonial context.

Interpretations from Cemetery and Skeletal Data: Sex differences in mortality in Albany, AD 1671-2010

As mortality rates drop in the twentieth century, there is also a growing differential in mortality rates between the sexes. These dramatic disparities do not appear to be universal prior to the twentieth century. This analysis investigates mortality in Albany, between 1671 and 2010, during which the city grew from a small rural area north of New York City into a thriving urban center, in order to determine if differences in mortality exist between the sexes during periods before the decline in death rates. The large time frame allows for the comparison of differences in mortality rates over three centuries. Two sample populations, headstone data from the Albany Rural Cemetery and skeletal records from the Albany Almshouse, are incorporated to capture the socioeconomic diversity of the city. Mortality is modeled using the Gompertz-Makeham model to compare demographic data across time and between the sexes. Results show patterns of low mortality in the twentieth century compared to data from the nineteenth and eighteenth centuries, which is consistent with increased standard of living in developed areas following the rapid industrialization and expansion of the nineteenth century. Unlike previous studies, there is no statistical difference between the eighteenth- and nineteenth-century mortality risks which suggests that either mortality rates did not increase in Albany in the nineteenth century or that mortality was always high. The only significant differences in risk of mortality between the sexes are in the twentieth century.