

# Did the Plague impact sub-Saharan Africa before 1899?

**1<sup>st</sup> Interdisciplinary Workshop**

**All  
scholars  
and  
students  
welcome**

**April 22-23, 2016  
Blair Hall 206**



With support from:

- Lyon G. Tyler Department of History • Reves Center for International Studies •
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**GLOBAFRICA**

Reconnecter l'Afrique : l'Afrique subsaharienne et le monde avant l'impérialisme européen

ANR ANR-14-CE31-0015

## **Schedule and Abstracts**

### **ABSTRACTS**

(ORGANIZED FROM SESSION I TO VI)

#### **I – Introductory remarks**

##### **1. Gérard Chouin – glchouin@wm.edu**

###### **Preliminary Reflections on Plague in Medieval Sub-Saharan Africa**

After reevaluating the chronology of the occupation of Ghana's earthworks, I recently suggested that their abandonment in the 14th century could be an indicator of rapid societal collapse and transformation. Such an event would be consistent with the catastrophic demographic impact of the Black Death pandemics that decimated many parts of the Old World during the same period. Lacking records similar to those known in other parts of the world, we need to lay out the foundation of a research strategy that will be multi-disciplinary and comparative. The retrieval of ancient DNA (aDNA) of the vector of the plague has proven possible in Europe, and this should be attempted in sub-Saharan Africa. A review is also needed of the large body of dispersed archaeological, anthropological, artistic, and textual evidence for a period that remains poorly understood. In spite of many challenges, the Black Death hypothesis needs to be explored further. Since historians globally underline the dramatic impact this pandemic had on medieval societies everywhere, it is crucial to assess whether or not its impact was also felt south of the Sahara. Could plague have affected the particular way Africa participated in the making of the early modern world?

#### **II – Genetic and Paleogenomic approaches**

##### **1. Monica Green – monica.green@asu.edu**

###### **Putting Africa on the Black Death Map: The Genetics Narrative of *Y. pestis* from the Perspective of Medieval History**

Our knowledge of the history of plague—the disease caused by *Yersinia pestis*—has developed in hitherto unthinkable ways since the late 1990s. Much of this work has been driven by new developments in molecular genetics, both with respect to new phylogenies of *Y. pestis* drawn from comparisons of modern isolates (both partial and whole-genome) and because of stunning work in archaeogenetics (aDNA). It has been genetics, more than anything else, that has put Africa on the map in terms of the history of plague prior to the Third (mid-19th century) Pandemic. The confusing conflation of the different Antiqua strains in Devignat's 1951 typology was cleared up by Achtman's work (Achtman 1999; Achtman et al. 2004), with the result that Africa has clearly come into its own as a crucial site of plague history. To date, aside from the mysterious "Angola" strain (whose provenance is murky), only two isolates from sub-Saharan Africa (SSA) have been fully sequenced (Chain et al. 2006, Morelli et al. 2010; cf. Cui et al. 2013 and Johnson et al. 2015), though these have now been supplemented by SNP, PFGE, and MLVA analyses of 61 isolates from Uganda (Respicio-Kingry 2016). No *Y. pestis* aDNA from

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anywhere on the continent, at any period, has yet been retrieved. But in anticipation that further research in those areas is on the horizon, what can the field of History offer in the meantime? The present paper will summarize my “discovery” as a historian of the implications of the new genetics from the perspective of medieval Europe, my own field of specialization (Green 2014). A necessary opening question is, if (as the genetics currently suggests) there are strains of *Y. pestis* in SSA that are closely related to a strain found in 14th-century Europe (cf. Green 2014, Bos et al. 2016 [version 02]), how could SSA have previously escaped our notice? A second urgent question is what route(s) *Y. pestis* took to create the reservoirs in Central Africa where the 1.ANT strains are now found. Did it move up the Nile Valley, across the Sahara, or along the East African coast? While there are many additional questions that will have to be explored by Africanist historians and archeologists, Africa’s experiences with *Y. pestis* in Antiquity (and possibly even before?) as well as in the late Middle Ages/early modern period demand that we take seriously the task of making Africa part of our map of a global Middle Ages.

### 2. Harkins, Kelly M. – kmharkin@ucsc.edu

#### **Detecting ancient plague in sub-Saharan Africa: a paleogenomic approach**

Unlike any other data source, ancient pathogen DNA that persists within archaeological human remains can provide direct access to the genetic signatures of past infection. These data not only present an opportunity to identify the causative agents of ancient epidemics but also provide insight into infection dynamics, human-pathogen coevolution, and disease transmission at timescales that are otherwise unobservable. Recent work on ancient *Y. pestis*, the causative agent of plague, exemplifies the methodological advances made in the field of paleogenetics following the adoption of next-generation sequencing (NGS) techniques. At present, multiple reconstructed genomes of ancient *Y. pestis* – isolated and enriched from human remains spanning the Bronze Age to the 19th century Europe – confirm that ancient lineages of *Y. pestis* caused historically and archaeologically recorded pandemics that spread across much of Europe and northern Africa, such as the Plague of Justinian, the Black Death, as well as recurrent waves of disease thereafter. The discovery of *Y. pestis* DNA in Bronze Age Eurasians further illuminates the genetic changes that led to the extreme virulence and bubonic plague forms noted only in later centuries, and pushes back the data of *Y. pestis* origin by over 3,000 years. An outstanding question remains whether or not *Y. pestis* infected sub-Saharan African communities before the historically documented introduction in the late 19th century. To address this hypothesis, we build on the strong methodological foundation of this previous work. Here I discuss our research design, namely the methods to isolate, enrich and sequence ancient DNA from archaeological human remains excavated from prehistoric Sub-Saharan Africa. I will present preliminary “shotgun” NGS data for over 30 individuals acquired for the project to date, including those for comparison, from sites in medieval France, Algiers and Nigeria, historic Ghana, and ancient Nubia. I will also discuss the major challenges and pitfalls in interpreting and authenticating ancient DNA data, as well as where we go from here.

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### 3. Hendrik Poinar – [poinarh@mcmaster.ca](mailto:poinarh@mcmaster.ca)

#### **A tale of many cities: Screening for the presence of pathogens in archaeological samples and the capture, sequencing and tales plague genomes tell.**

[With Stephanie Marciniak, McMaster University; Ana T. Duggan, McMaster University; Katherine Eaton, McMaster University; Jennifer Klunk, McMaster University]

Confounding factors challenge the molecular investigation of disease in antiquity, primarily the scenario where various evidentiary sources (e.g., bioarchaeological, archaeological, or historical evidence) do not provide a consensus or indicate the association of a specific pathogen with a given burial context. Without such a priori knowledge, it is critical to integrate a molecular capture strategy capable of screening for multiple pathogens at once to prioritize candidates for downstream analyses. I will talk about the use of an in-solution RNA baits set designed to detect 1,152 pathogenic species of human importance (via targeted enrichment coupled with high-throughput sequencing). We used these to help screen putative victims of infectious disease for the presence of *Yersinia pestis*, the causative agent of plague. Previously verified human pathogens (e.g., *Yersinia pestis*, Hepatitis B virus) functioned as positive controls (“known pathogen”) to test the specificity and sensitivity of the baits set. “Unknown pathogen” samples (n=28) comprised various types (e.g., bones, teeth, mummified tissue) and diverse contexts (e.g., ancient Rome, medieval Europe, North America). Analyses show excellent performance in detecting the minute pathogen fraction of the molecular constituents (less than 1% alignable pre-capture reads in most cases, compared to 10-30% post-capture). Further work on recovering low abundance pathogenic taxa within dynamic ancient DNA extracts is crucial to paleopathological applications focused on the complexity of synergistic disease interactions in diverse archaeological contexts. I will talk about how the recent detection, capture and reconstruction of additional, *Yersinia pestis* genomes from victims of “Plague of Provence” has shed light on the issue of plague persistence and possible reservoirs in Europe for some ~350 years. The phylogenetic tree of the plague-causing pathogen *Yersinia pestis* has expanded immensely in the last five years with the addition of ancient draft genome sequences, which have allowed facets of the history of this disease to be explored in ways that were previously impossible.

### III – What do Written Sources Say?

#### 1. Marie-Laure Derat – [ml.derat@gmail.com](mailto:ml.derat@gmail.com)

#### **Christianity and Black Death in Fifteenth Century Ethiopia**

Many Ethiopian written sources refer to pandemics shaking the kingdom and causing thousands of deaths. Chronicles, lives of Saints abounds of scattered notations on the need to bury the victims of these pandemics with a particular process. The Saints embody figures of miraculous healing and the reading of hagiographic texts dedicated to them, during mass services, provide hope to the victims of these pandemics. But on the basis of these testimonies, it is often impossible to identify what disease was the cause of the pandemic.

Recent researches on plague invite scholars to enlarge the chronology and the geography of the Black Death. If according to the commonly admitted chronology, the Black Death occurred in

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Western Europe from 1347-1350, it is now evident that outbreaks of the Black Death occurred in Western Europe but also in other part of the world, especially in Near and Middle East, long after the mid-14th century. For example in Egypt, the historical sources show outbreaks of the plague during the 15th century, with regular waves, in 1403, 1407, 1430, 1460 and after. The Egyptian model is particularly useful to read and interpret the historical documentation concerning Ethiopia at the same period, since Ethiopia had commercial, diplomatic, religious relationships with Egypt but also with all the regions bordering the Red Sea. Moreover, the introduction in the Ethiopian liturgy and in the magical-religious practices of a hagiographic text related to the Black Death – the life of St. Roch (1350-1378/79) – suggests that some pandemics described in Ethiopian written sources relate well plague. Through the use of amulets, containing copies of the holy life of St. Roche, the Ethiopians tried to find ways to protect themselves from this particular epidemic.

### 2. Gérard Chouin – glchouin@wm.edu

#### **Written sources and the invisibility of the plague in Sub-Saharan Africa: Reflections on the way forward**

I will offer a preliminary survey of possible internal and external sources of African history that could be explored for evidence of plague, excluding material from Ethiopia. This will serve as an introduction for a discussion aimed at delineating a strategy to make the most of a category of sources that presents many challenges. One such challenge, already often discussed with reference to medieval Arabic sources, is the polysemy of words used for plague. Another issue is the absence of written mention of plague in the Western Sahel in the 14th century, at a period when plague was dramatically affecting North Africa. For instance, how can we explain the invisibility of the plague in the travel writings of Ibn Battuta, the celebrated Moroccan traveler who is one of the most commonly used external sources of the history of Western Sahel for the mid-14th century? I will lay down the principles of a road map I suggest we follow in the next few years, as we proceed to systematically re-read available written sources for the period 1400–1880.

## **IV – Plague and Changes in Regional Settlement Patterns**

### 1. Fauvelle, François-Xavier – François-xavier.fauvelle@univ-tlse2.fr

#### **Why and how did most African Islamic sites disappear in the 15th century?**

Archaeological evidence from North and West Africa, the Horn of Africa and the East African coast, suggests that a sharp decline in intensity struck commercial relations between medieval African polities and the main centers of the Islamic world. The effect of this decline was the depopulation of large areas and sometimes the complete abandonment (to the point of disappearance) of once major urban sites. But what was the cause of such a phenomenon? This dramatic political and demographic event may have been provoked by the irruption of plague in sub-Saharan Africa, as is suggested by Gérard Chouin. Although undocumented until now in these regions, the Black Plague is an interesting working hypothesis, if only because it reverses the usual perspective by asking: why would the Black Plague have not struck sub-

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Saharan Africa if we are to admit (which we definitely should) that sub-Saharan Africa was well-connected to the Islamic world where the illness was at its worst?

Despite this, and without completely ruling out the possibility of the plague's role in the sudden decline of flourishing African polities and the disappearance of major archaeological sites in the 15th century, I think they are better explained by a complex process involving historical actors (both external and regional) and taphonomic factors.

### 2. Daphne Gallagher – daphne@uoregon.edu

#### **Identifying Plague Epidemics in the Archaeological Record: Site Abandonments and Social Transformations in 14th-16th century CE Mali and Burkina Faso**

[With Stephen Dueppen]

Based upon archaeological data, many sites in the central West African savanna were either abandoned or reduced in size between the 14th and 16th centuries CE. Explanations for these changes have tended to focus on the effects of climate change (increasing aridity), political transformations, and religious conversion. More recently scholars have suggested that the spread of black plague into West Africa may have contributed to these changes. If the black plague had similar mortality rates as those caused by contemporary plague epidemics in Europe, the Middle East, and North Africa, the reasons for these abandonments and the driving factors and/or societal responses to these other events should be re-examined. In this paper we address the methodological challenges inherent in linking abandonments with the effects of epidemics through the examination settlement pattern data from recent archaeological research at sites in Burkina Faso and Mali, with a particular emphasis on the Mouhoun Bend region of western Burkina Faso.

### 3. Gérard Chouin – glchouin@wm.edu

#### **The abandonment of earthworks and settlements sites in the forest belt of West Africa: update on on-going research**

In this paper, I present the conclusions of archaeological work conducted in June–July 2015 at Ile-Ife, within the framework of the Ife-Sungbo Archaeological Project. The focus was the ancient embankment system of the city Ile-Ife, and specifically a section of the system located on Federal lands at Ita Yemoo and previously excavated by Frank Willett in 1962–3 (largely unpublished). The main purpose was to ascertain the stratigraphy of the site and the chronology of the earthworks system, vis-à-vis the potsherd pavements found at this site in association with bronze and terracotta objects belonging to the Classical Period/Florescence Era. Excavations enabled us to document the construction of a 19th century ditch and banks system and to recover a much earlier level sealed with a potsherd pavement dating to the 12–13th century. Between this pavement and the level corresponding to the 19th century bank, a thick level composed of a dark, rich organic soil seems to indicate a period of abandonment that must have taken place at some point in the 14<sup>th</sup> century. Evidence points toward a re-occupation of the site in the early modern period. I will also introduce another set of monuments which will be the focus of field research in the summer 2016.

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### V – Plague in the Art: tantalizing evidence vs ethical dilemmas

#### 1. Blier, Suzanne – [blier@fas.harvard.edu](mailto:blier@fas.harvard.edu)

##### **Historicizing Disease at Ancient Ife: Evidence for the Plague and other Diseases**

In this paper I look at the shared artifactual, ritual, and oral historical evidence for the presence of the plague at ancient Ife, mythical homeland of the Yoruba in Southwestern Nigeria. This evidence ranges from historical art forms (principally figures) dating to the 14th century, 18th-19th century carved stone reproductions of ancient works, and early-to-mid twentieth century ritual practices that link to this early era. Oral histories at Ife today also speak about a era of great disease that preceded European arrival and was characterized by plague-like conditions involving the skin that caused massive death. Similar pox-like skin imagery is painted on historical sculptures linked to the god Obatala, an historic deity who is identified in important ways with both early Ife history and the treatment of serious illnesses. Modern Obatala temple wall paintings also feature these forms and as such figure in this as well. While part of my discussion is necessarily conjectural, the combination of these diverse forms of secondary evidence, plus the primacy of depictions of various kinds of disease in ancient Ife art (from rickets to elephantiasis) offer support for the possibility that the plague had an important impact on this site and its later history.

#### 2. Kristina Van Dyke – [kristinavandyke@gmail.com](mailto:kristinavandyke@gmail.com)

##### **West African Figurative Terra Cottas and the Plague**

So-called “Djenne” terra cotta figures represent a vexing conundrum for the study of disease in Africa. Given the fact that the vast majority of figures were looted, we have little hope of understanding their context or dating them in a reliable way. Yet, the remarkable range of symptoms the figures exhibit suggest they bear witness to the arrival and spread of diseases that historians are eager to document. This paper will explore whether/how they can be useful to research about the history of disease in West Africa. Leveraging a database of more than 1,000 images of figurative terra cotta sculptures likely produced between the 11th and 17th centuries in the Inland Niger Delta and beyond, it considers the representation of health and illness in the corpus. In particular, it examines whether some figures may show symptoms of the plague and considers other possible explanations for those symptoms. The presentation also raises questions about how works depicting illness might have functioned in relation to rapidly occurring catastrophes like the plague and smallpox as well as chronic conditions like polio and schistosomiasis.

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### VI – African religions and the plague: anthropological and linguistic approaches

#### 1. Sanford, Mei Mei – [mesanf@wm.edu](mailto:mesanf@wm.edu)

##### **The Drop of Oil that Puts Out the Fire: The Orisa Sopona, Moral Knowledge, and Responsibility in the Age of AIDS and Biowarfare**

According to a Yoruba proverb, "...the leaves with which we poison arrows are the same that we use to cure the wound of the arrow." The religion of Sopona, the Yoruba orisa (deity) of epidemic disease and healing understands illness and healing to be intertwined processes. The presentation explores Sopona's contemporary relevance. Sopona's influence, rather than dwindling with the decline of smallpox with which he was once most associated, has now expanded to include malaria and AIDS. Sopona religion continues to be viable not only because it has much to say about the etiology of particular diseases, but because it foregrounds questions of moral choice and responsibility in contemporary problems, such as public health issues and military use of pathogens.

#### 2. Sandro Capo Chichi – [Sandro.capochichi@hotmail.fr](mailto:Sandro.capochichi@hotmail.fr)

##### **Bubonic plague in the Bight of Benin before 1899? Clues from the West African deity Sakpata**

Sakpata is a deity worshipped by the Gbe-speaking people of West Africa and by their Yoruba-speaking neighbours under the related name *Ṣoṣoṣo*. Although associated with the spread and cure of diseases as a whole, it has recently been primarily associated with smallpox, its name sometimes being used in European languages to designate this disease only. However, we found that indigenous traditions reported in ethnographic literature suggest the deity has been associated since the distant past not only with smallpox but also with another disease. We also found that the evidence recorded both in this literature and in our ongoing fieldwork in the Republic of Benin among Sakpata/*Ṣoṣoṣo* priests since December 2016 suggests that the other disease anciently associated with the deity is most likely bubonic plague. Using comparative linguistics, we will attempt to provide a tentative relative chronology of the spread of both diseases among the Gbe and Yoruba speaking people. According to it, Sakpata/*Ṣoṣoṣo* would have first spread from the Proto Gbe speaking people to their Proto Yoruba neighbours as a word associated with bubonic plague. It would then have spread from Yoruba speaking people to Gbe speaking people along with smallpox.



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### SHORT BIOGRAPHIES OF CONTRIBUTORS, PANEL CHAIRS AND DISCUSSANTS

(IN ALPHABETICAL ORDER)

#### **BLIER, Suzanne – Contributor / Discussant, Art History, History**

Suzanne Preston Blier (Ph.D. 1981 Columbia) is Allen Whitehill Clowes Professor of Fine Arts and of African and African American Studies, Harvard University. She is an historian of African art and architecture in both the History of Art and Architecture and African and African American Studies Departments. She also is a member of the Institute for Quantitative Social Science. Her first book *The Anatomy of Architecture: Ontology and Metaphor in Batammaliba Architectural Expression* (Cambridge University press; paperback, Chicago University Press, 1987) won the Arnold Rubin Prize. Her second book, *African Vodun: Art, Psychology, and Power* (1995) received the Charles Rufus Morey Prize. Other books include: *African Royal Art: The Majesty of Form* (1998), *Butabu: Adobe Architecture in West Africa* (2004 NY Times, Holiday Selection), and *Art of the Senses: Masterpieces from the William and Bertha Teel Collection* (Editor 2004). Most recently she has published: *Art and Risk in Ancient Yoruba: Ife History, Power and Identity c.1300 (1914 -Cambridge University Press)* which received the 2015 Prose Prize in Art History and Criticism.

#### **CAPO CHICHI, Sandro – Contributor, Linguistics, Gbe languages of West Africa**

Sandro Capo Chichi is a PhD candidate in Linguistics at the University of Paris VII-Paris Diderot, France. He specializes in the study of Gbe languages of West Africa and their interaction with history and culture. He also does research on other African language families, such as Afro-Asiatic, and occasionally on non-African languages, such as Japanese. His case studies in theoretical phonology and morphology are respectively set in the framework of Government Phonology and Distributed Morphology, aiming to formulate generalizations that are independent of any particular language or language group.

#### **CHOUIN, Gérard – Organizer / Contributor, History and Anthropology, Medieval to Modern West Africa**

Gérard Chouin received his MA (Maîtrise) and Mphil (DEA) in African History from the University of Paris-I, Panthéon-Sorbonne in 1992 and 1993 respectively. He served six years as a lecturer at the University of Ghana, and at the University of Cape Coast before joining a PhD program in Anthropology/Historical Archaeology at Syracuse University as a Graduate Fellow. In 2009, he completed his dissertation on the history and archaeology of Southern Ghana, and subsequently accepted an appointment as Director of the French Institute for Research in Africa (IFRA-Nigeria) at the University of Ibadan from 2010 to 2013. He came to William and Mary to teach and research medieval to modern histories of Africa.

In partnership with Dr. Adisa Ogunfolakan and the A. G. Leventis Natural History Museum at Obafemi Awolowo University of Ile-Ife, south-western Nigeria, he leads a team of scientists in the framework of the IFE-SUNGBO Archaeological Project (2015-2018), which focuses on the history of urbanization in the West African tropical forest belt during the first and second millennia AD, with a central focus on the growth and collapse of earthworks systems. He is also

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a team leader in the ANR-funded project GLOBAFRICA (2015-2018) with a research axis exploring the possible spread of the first and second plague pandemics in sub-Saharan Africa.

### **COOPER, Ann – Panel Chair, History, Colonial History, West Africa, plague**

Ann Cooper is the Digital Archivist for the Special Collections Research Center in Swem Library here at William & Mary. Her current research interests include archival ethics for international digitization partnerships in African archives and collections. Before realizing that archives were the right path for her, Ann was a History professor. Her research revolved around the crucial role of African medical workers in the French colonial "Native Medical Service" in West Africa. The Native Medical Service complemented the colonial administration in areas it was not able to adequately assert its power; this was especially apparent in times of epidemic outbreak. Ann earned her MA & PhD in African History at the University of Texas at Austin (2010) with a dissertation titled, "Public Health, the Native Medical Service, and the Colonial Administration in French West Africa, 1900-1944." Ann also holds a Master's of Science in Information Science -- Archives and Records Management from the University of North Carolina at Chapel Hill (2015).

### **DERAT, Marie-Laure – Contributor, History, Medieval and Early Modern Ethiopia**

Marie-Laure Derat is an historian, studying the Medieval Kingdom of Ethiopia. She is directrice de recherches at the CNRS in France, posted at the Institut des Mondes Africains (Paris), a research unit of the CNRS and the University of Paris I Panthéon-Sorbonne. Since 2009, she is leading with Claire Bosc-Tiessé an archaeological and historical program on the site of Lalibela, a monumental complex of rock-hewn churches excavated at the turn of the Twelfth and Thirteenth Century reputed as the capital city of the Ethiopian Kingdom at that time. She is editor in chief of the electronic journal *Afriques. Débats, méthodes et terrains d'histoire* promoting history of Africa in a pre-contemporary periodical approach.

Recent publications include "La femme éthiopienne de Moïse dans l'Histoire des églises et des monastères d'Égypte et l'histoire universelle d'al-Makīn", in *Figures de Moïse*. D. Aigle & F. Briquel Chatonnet (dir.), Paris, De Boccard, 2015, p. 249-279 ((with Seignobos R.) ; "The Lalibela Rock Hewn Site and its Landscape (Ethiopia) : An Archaeological analysis", *Journal of African Archaeology*, 12 (2) 2014, p. 141-164 (with Bosc-Tiessé C., Bruxelles L., Fauvelle F.-X., Gleize Y., Mensan R.); *Gabriel, une église médiévale d'Éthiopie. Interprétations historiques et archéologiques de sites chrétiens autour de Meshala Māryām (XVe-XVIIe siècle)*, Paris, De Boccard, 2012 (with A.-M. Jouquand). *Le domaine des rois éthiopiens : espace, pouvoir et monachisme (1270-1527)*, Paris, Publications de la Sorbonne, 2003.

### **FAUVELLE, François-Xavier – Panel Chair / Contributor, History, Archaeology, Ancient and Medieval Africa, Horn of Africa, Southern Africa, Morocco, West Africa**

François-Xavier Fauvelle is an Africanist historian and archaeologist. He is Senior Researcher at the CNRS, affiliated with the University of Toulouse, France. He was the head of the French Center for Ethiopian Studies in Addis Ababa, Ethiopia and is now the director of TRACES in Toulouse, one of the leading international laboratories in archaeology. His research focuses on the history and archeology of ancient and medieval Africa. His geographical focus is on southern Africa, the Horn of Africa, Morocco (where he leads a French–Moroccan program of

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excavations at Sijilmâsa) and West Africa. He is the author or editor of 15 books and the author of around a hundred academic articles. His most recent book is *Le Rhinocéros d'or: Histoires du Moyen Âge africain* [The Golden Rhinoceros: History of the African Middle Ages] (Paris: 2013), which received the Grand Prix du Livre d'histoire (the main French award for academic history books) in 2013.

### **GALLAGHER, Daphne – Contributor, Archaeology, Medieval and Early Modern Africa, West Africa, Mali, Burkina Faso.**

Daphne Gallagher (Ph.D. 2010 Michigan) studies the relationship between socio-economic systems and agricultural practices over the past two millennia in West Africa. In particular, her archaeological research addresses colonial and post-colonial narratives on traditional agriculture through the study of long-term trajectories of land use and settlement patterns. In addition to directing a regional survey near the Gobnangou escarpment in southeastern Burkina Faso, Dr. Gallagher addresses these topics through collaboration as a paleoethnobotanist on projects throughout the West African savanna/sahel (Senegal, Mali, Burkina Faso and Nubia).

### **GREEN, Monica H. – Panel Chair / Contributor, History, Medieval Europe, History of Medicine and Global Health**

Monica H. Green is Professor of History at Arizona State University, where she teaches medieval European history and the history of medicine and global health. She has held fellowships from, among others, the Radcliffe Institute for Advanced Study at Harvard, the John Simon Guggenheim Foundation, All Souls College, the Institute for Advanced Study in Princeton, and most recently, the American Academy of Berlin. She has published extensively on various aspects of medieval medical history and recently edited the volume *Pandemic Disease in the Medieval World: Rethinking the Black Death* (2014). She is interested in bringing new work in genetics and bioarchaeology into dialogue with traditional historical work in documentary sources, and is now expanding her work into the field of global health history, which uses the narratives of infectious diseases ranging from leprosy to HIV/AIDS to tell of common threats to health that humans have shared the world over. Her talk at the GlobAfrica Plague Workshop will explore the historical and genetics evidence that might help track plague's routes into sub-Saharan Africa in the pre-modern period.

### **HARKINS, Kelly M. – Panel Chair / Contributor, Palaeogenomics, Africa**

Dr. Kelly Harkins is currently a National Science Foundation SBE postdoctoral research fellow at the Human Paleogenomics Laboratory at the University of California Santa Cruz in the departments of Anthropology and Biomolecular Engineering. Her research uses modern and ancient DNA in phylogenomic reconstructions to examine the evolutionary history of infectious diseases. She received her PhD from Arizona State University in 2014, with a focus on the molecular bioarchaeology of pre-Columbian tuberculosis and leishmaniasis. Dr. Harkins' current work synthesizes bioarchaeological, molecular and ecological evidence to examine the origins and dispersal of *T. cruzi*, and illuminate the processes associated with the emergence of Chagas disease in the Americas.

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### **JONES, Joseph – Discussant, Biological Anthropology, Africa and America**

Joseph Jones (Ph.D., 2015, UMassAmherst) is a biological anthropologist at the department of Anthropology, William & Mary, and a researcher on the African Burial Ground Project. His latest work focuses on early life lead exposure of enslaved African New Yorkers via laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) of dental enamel. With its high inorganic content, enamel provides a stable chemical record of an individual's diet, nutrition and pollution events, which in turn reflect political, economic and cultural factors.

### **MCINTOSH, Susan Keech – Discussant, Anthropology, Archaeology of the West African Sahel**

Susan Keech McIntosh holds advanced degrees from Cambridge University (M.A.) and the University of California at Santa Barbara (Ph.D.). Since 1981 she has taught at Rice University, where she is the Herbert S. Autrey Professor of Anthropology. Her research has focused on the archaeology of the West African sahel and sudanic zones along the Niger and Senegal rivers in the period from 500 BCE to 1900 CE. In addition to four major monographs on field research in Mali and Senegal, and over 80 other publications on West African archaeology, she co-edited *The Way the Wind Blows: Climate, History, and Human Action* (Columbia U. Press, 2000) and edited *Beyond Chiefdoms: Pathways to Complexity in Africa* (Cambridge University Press, 1999). In the face of massive looting of terracotta statuettes from Middle Niger sites, she became involved in issues of archaeological heritage and cultural property and was appointed by President Clinton to two terms (1996-2003) on the Cultural Property Advisory Committee. She has also served as a member of the Archaeology Panel at NSF and was a Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford. Her current research focuses on the emergence of large-scale, complex societies in Africa, the impact of climate and environmental change on human society in the past, and the politics of archaeology and archaeological representations of the past. She serves on the editorial boards of numerous journals is a past president of the Society of Africanist Archaeologists.

### **NORMAN, Neil – Panel Chair / Discussant, Anthropology, West Africa**

Neil Norman is Associate Professor of Anthropology at the College of William and Mary. His research involves systematic excavations, archival research, and oral history projects aimed at accumulating evidence to address why people aggregated into large towns during the African Iron Age (in the Republics of Benin, Tanzania, and Djibouti) and how they contoured social relations, expressed political authority, and rendered value as they were drawn into global spheres of exchange. More recently, he has addressed these themes on diasporic sites in Mobile, Alabama and Williamsburg, Virginia. His research has been funded by National Science Foundation, Fulbright-Hays, Paul Mellon Foundation/ACLS and recognized by a Society for Historical Archaeology with the Outstanding Dissertation Prize. He has published in: *American Anthropologist*, *African Archaeological Review*, *International Journal of African Historical Studies*, *Journal of World Prehistory* and is currently preparing a manuscript entitled: *Vodun Economics: Historical Archaeology of the Hueda Kingdom for the University of Alabama Press* and has co-edited the volume *Archaeologies of Anxiety for Springer Press* (2015).

## Schedule and Abstracts

### **POINAR, Hendrik – Contributor, Molecular evolutionary genetics, Molecular biology, Paleogenetics, Plague**

Hendrik Poinar is an evolutionary geneticist who develops and employs novel enrichment and sequencing strategies to access ancient genomes from fossil remains, in order to reconstruct their evolutionary history. He completed his PhD at the University of Munich, was an EMBO fellow at Cancer Research UK, a postdoctoral fellow at the University of Oregon and a Junior Group leader at the Max Planck Institute for Evolutionary Anthropology in Leipzig, before becoming a Canada Research Chair in Paleogenetics at McMaster University in 2003.

Poinar received his B.S. and M.S. degrees from California Polytechnic University, San Luis Obispo in 1992 and 1994 respectively before earning a Ph.D. in 1999 from the Ludwig Maximilians University of Munich, after which he was a postdoctoral researcher from 2000 to 2003 at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany.

Dr. Poinar's current interests lie at the interstitial spaces of research streams which integrate history, evolutionary genetics, biochemistry and mathematical modelling into a more consistent approach to disease origins and the tempo and mode of disease dynamics. Dr. Poinar is interested in understanding how pathogens emerge and evolve in new hosts as this is central to their control. A pressing question currently bother him is how a new pathogen will evolve if it cannot be immediately eradicated? Will it evolve to become more or less harmful? To understand this fundamental evolutionary process, he likes to track pathogen evolution in 'real time' and in a natural setting. This is difficult to achieve in the case of most bacteria because their evolutionary rates are so low that changes in virulence cannot be measured over the few years that humans can generally carry out experiments. Critically, 'ancient DNA' provides this essential time-series information and in doing so can transform our understanding of microbial pathogenesis. We will develop novel molecular and bioinformatic tools which will take advantage of challenging data from an exceptionally novel set of experiments in which temporally sampled bacterial genomes from past epidemics (and modern clinical settings) are reconstructed and used to measure natural selection, attenuation and virulence.

### **POPE, Jeremy – Panel Chair / Discussant, History, Ancient and Medieval History, Nubia**

Jeremy Pope (Department of History, The College of William & Mary) is a Nubiologist who trained in two separate doctoral programs at Johns Hopkins University, the first in African History and the second in Near Eastern Studies. His area of research specialization is in the histories of Kush and Egypt during the 9th through 4th centuries BCE. His first book, *The Double Kingdom under Taharqo: Studies in the History of Kush and Egypt, c. 690-664 BC* (E. J. Brill, 2014) examines the administration and political economy of a state that stretched from tropical Africa to the Mediterranean coast while maintaining alliances farther afield with the kingdom of Judah and the Levantine city-states. For the GLOBAFRICA project, Jeremy is currently investigating late antique and medieval authors' claims that the Justinianic Plague not only affected the populations of Nubia but actually originated there before spreading northward during the sixth century CE. These documentary sources will be compared with DNA analysis of human dental pulp from contemporaneous burials excavated by Bogdan Żurawski's recent archaeological mission to the Fourth Cataract region.

## Schedule and Abstracts

### **SANFORD, Mei Mei – Contributor, Religious Studies, West Africa, Yoruba religion**

Mei-Mei Sanford received her doctorate in Religion and Society from Drew University. She was a Fulbright Fellow in Nigeria. She is the co-editor of *Osun across the Waters: A Yoruba Goddess in Africa and the Americas*, and the author of numerous essays and articles about Yoruba religions and arts in Nigeria and the Diaspora. She teaches in the Africana Studies Program at the College of William and Mary.

### **VAN DYKE, Kristina – Contributor, Art History, West African terra cottas**

Kristina Van Dyke is an independent scholar who is currently researching terra cotta figures produced in the Inland Niger Delta of Mali between the 11th and 17th centuries. In May, she will open an exhibition at the Philadelphia Museum of Art entitled, “Look Again: Contemporary Perspectives on African Art.” She was recently co-curator, along with Frederic Cloth, of “Kota: Digital Excavations in African Art,” an exhibition presented at Pulitzer Arts Foundation in St. Louis where she was Director from 2011 to 2015. Prior to that, she was Curator for Collections and Research at the Menil Collection. Van Dyke has taught at the University of Houston, Rice University, and Washington University and received fellowships from the Brown Foundation, Andy Warhol Foundation, Center for Curatorial Leadership, and National Arts Strategies. In 1999, she received her M.A. in Art History from Williams and in 2005, received her PhD from Harvard University where she wrote her dissertation on the concept of objects in oral cultures in Mali.