

“Archaeology: The Discipline of Things ...and People, Places, Animals, and Times”

UCD School of Archaeology Research Day,
Friday 9th December 2016, 9am-6pm

Venue: L143 William Fry Theatre, UCD Sutherland Law
School Building, University College Dublin

Programme and Abstracts



Lectures (20 mins) and Poster presentations (3 mins) from UCD School of
Archaeology researchers and their colleagues



Programme

8.30-8.45am	Arrival and Registration
8.50-9am	Opening Welcome: Prof Orla Feely, UCD Vice President for Research, Innovation and Impact
Session 1	<i>People and their Buildings</i>
9.00-9.20am	(Re)constructing early medieval roundhouses: entangling yourself in history, archaeology, ethnology and experimental archaeology Prof Aidan O'Sullivan, Brendan O'Neill, Dr Eileen Reilly,
9.20-9.40	Newtown Trim Cathedral, Co. Meath, and the origins of Gothic architecture in Ireland Prof Tadhg O'Keefe
9.40-10.00	Social Memory as an Architectural Construct? The Church and Rome in Byzantine Crete Dr Amanda Kelly
10-10.15	Session Discussion
10.15-10.45	Tea/Coffee Break
Session 2	<i>People, their Places and Landscapes</i>
10.45-11.05	Archaeological Excavations at Tlachtga: 2014-2016 Dr Stephen Davis; Cathy Moore; Mick Drumm; Chris Carey (University of Brighton)
11.05-11.25	The Lands at Dowth: archaeological survey and excavation, 2014-2016 Dr Stephen Davis, Dr Clíodhna Ní Lionáin, Knut Rassmann

11.25-11.45	Out of Africa: Research opportunities at candidate World Heritage Sites in Kenya Dr Claire Cave
11.45-12.05	Interdisciplinary Research at Satsurbliia Cave, Georgia: Combustion Features, Speleothems and the Last Glacial Maximum Dr Mareike C. Stahlschmidt, Ron Pinhasi
12.05-12.25	A Multiscale Landscape Approach to the Production of Axes and Shetland Knives in Neolithic Shetland Prof. Gabriel Cooney (University College Dublin), Dr. William P. Megarry (Queen's University Belfast), Dr. Rob Sands (University College Dublin)
12.25-12.45	Session discussion
12.45-1.45pm	Lunch
Session 3	<i>People, their Things and their own Bodies</i>
1.45-2.05	The chronology and distribution of the Iron Age mirrors in Britain and Ireland. Dr Jun'ichiro Tsujita
2.05-2.25pm	Maori polished jade weapons: practical use and social functions Dr Alan Peatfield
2.25-2.30	HARA: Human-Animal Relationships in Archaeology - World Views of Hunter-gatherers in Northern Europe (POSTER PRESENTATION, 3 MINUTES) Dr Maja Pasaric and Dr Graeme Warren
2.30-2.35	Physical anthropological methods in the identification of unknown young migrant victims (POSTER PRESENTATION, 3 MINUTES) Dr Daniel Gaudio, Prof Ron Pinhasi
2.35-2.40	ANCIENT TEETH: An integrative analysis of shifting trends in dental traits in human populations from Neolithic to

	<p>Iron Age. (POSTER PRESENTATION, 3 MINUTES) Dr Beatriz Gamarra^{1,2}, Robin Feeney², Ron Pinhasi¹. ¹School of Archaeology, University College Dublin, Ireland. ²School of Medicine, University College Dublin, Ireland.</p>
2.40-3.00pm	Session Discussion
3.00-3.30pm	Tea/Coffee Break
Session 4	<i>People, their Plants and Animals</i>
3.30-3.50pm	<p>Foodways in Neolithic Ireland Dr Meriel McClatchie¹, Amy Bogaard², Sue Colledge³, Nicki Whitehouse⁴, Rick Schulting², Phil Barratt⁵, Rowan McLaughlin⁶ 1 School of Archaeology, University College Dublin 2 School of Archaeology, University of Oxford 3 Institute of Archaeology, University College London 4 School of Geography, Earth and Environmental Sciences, University of Plymouth 5 Cognition Institute, University of Plymouth 6 School of Geography, Archaeology and Palaeoecology, Queen's University Belfast</p>
3.50-4.10pm	<p>Plants and people in Neolithic Scotland Dr Rosie Bishop</p>
4.10-4.30pm	<p>The molecules of meals: the impact of organic residue analysis on Irish archaeology Dr Jessica Smyth</p>
4.30-5pm	Final discussion
5-6pm	<p>Tour of Ardmore Archaeology Laboratories, viewing of Posters from sessions, and informal Christmas Wine Reception</p>

Abstracts

SESSION 1: PEOPLE/BUILDINGS

(Re)constructing early medieval houses: entangling yourself in history, archaeology, ethnology and experimental archaeology

Aidan O'Sullivan, Brendan O'Neill, Eileen Reilly,

This paper will explore the reconstruction of an early medieval roundhouse (c.AD 700) at the UCD Centre for Experimental Archaeology and Material Culture (CEAMC) at the School of Archaeology, University College Dublin. It will investigate how experimental archaeology enables us to make a material reading of sometimes obscure texts, and provides challenges to our normative understanding of the archaeological record, while worrying us too about our incautious uses of ethnological sources. We can certainly use a range of historical, archaeological and folklife sources to try and understand how houses were built, organised and used in practical terms, while scientific testing enables us to explore aspects of light, smoke, heat, humidity and other environmental factors. However, most attractive of all is the capacity to challenge our own views of "what houses were like, or what household life was like in the past" and to glimpse how houses acted in social, ideological and gendered terms.

Newtown Trim Cathedral, Co. Meath, and the origins of Gothic architecture in Ireland

Tadhg O'Keeffe

The medieval town of Trim was home to various monastic communities, among them the Victorine canons who served as the chapter of a cathedral that was newly built just outside the town at the start of the thirteenth century. In this lecture I explore the context of the foundation of this cathedral, and argue that its church, one of the first Gothic buildings in Ireland, offers us a glimpse of what was possibly the earliest work of Gothic architecture in Ireland, the long-destroyed Abbey of St Thomas the Martyr in Dublin.

Social Memory as an Architectural Construct? The Church and Rome in Byzantine Crete

Dr Amanda Kelly

My paper questions whether the early Church effectively used the Roman landscape of Crete as a palimpsest for its own political devices whereby the stamp of ecclesiastical architecture over imperial foundations, served to obfuscate the older traditional presence in that exact location, or if the demolition or adaptation of pagan structures served simply to replenish diminishing supplies of raw building material while their ground plans provided sturdy platforms for ecclesiastical foundations".

Session 2: PEOPLE/LANDSCAPES

Archaeological Excavations at Tlachtga: 2014-2016

Dr Stephen Davis; Cathy Moore; Mick Drumm; Chris Carey (University of Brighton)

Following on from a large-scale remote sensing project in the area of Tlachtga, Hill of Ward, Athboy this paper presents the emerging results of three seasons of excavation. Tlachtga is one of very few quadrivallate ringforts within the Irish landscape, and has long been considered both a 'Royal Site' (e.g. Herity 1993) and a possible óenach site (e.g. Raftery 1994). Over three seasons to date we have investigated a series of enclosure elements, identified through geophysical survey: in 2014 we examined the outer ditches of Tlachtga itself, along with the small 'Southern Enclosure' and part of the much larger 'Great Enclosure' overbuilt by the present monument; in 2015 we concentrated on the 'Great Enclosure' with some focus on the junction between Tlachtga and the Southern Enclosure and in 2016 we targeted the central mound as well as the inner circuit of Tlachtga and a group of possible entrance features to the east. Through our excavations to date we are beginning to understand the evolution of the site through time, and its place within the corpus of both hilltop enclosures and ringforts. This paper will present preliminary results of these excavations and attempt to place the site in its wider geographic and temporal context.

The Lands at Dowth: archaeological survey and excavation, 2014-2016

Dr Stephen Davis, Dr Clíodhna Ní Lionáin, Knut Rassmann

Since 2012 UCD School of Archaeology and collaborative partners at Devenish Nutrition have been involved in remote sensing surveys at the Dowth Estate, comprising c. 20% the core area of the Brú na Bóinne WHS. In 2014,

collaboration with the Romano-German Commission provided a step-change in these surveys: using a 16-sensor geophysical rig, the previously monument-centred geophysical surveys were expanded to true landscape scale. Renewed survey in 2016 alongside some manual surveys means that almost the entirety of the estate has now been subject to high-resolution geomagnetic survey (in excess of 100 ha). These surveys constitute by far the largest survey yet undertaken within the WHS and have proved transformative. They reveal significant previously unrecorded archaeology from a range of time periods in addition to many thousands of potential archaeological features.

The project has also seen two seasons of excavation at a large mound, located in an imposing position overlooking the Boyne. The preliminary results of these excavations will be discussed in the context of our ongoing surveys.

Out of Africa: Research opportunities at candidate World Heritage Sites in Kenya

Dr Claire Cave

A Memorandum of Understanding (MoU) has recently been agreed to between UCD and Pwani University (PU), Kenya. The MoU enables UCD staff and students (undergraduate, MSc and PhD) to perform field work in Kenya and PU students and staff to spend time at UCD. The fieldwork areas in question include a UNESCO Biosphere Reserve and two candidate UNESCO World Heritage sites i.e. Tsavo Parks and Chyulu Hills Complex and the Historic Town of Gedi. The MoU offers research opportunities at the two heritage sites, one a vast savanna national park, the other a 13th century Swahili town, as well as cultural exchange and knowledge transfer between PU and UCD.

Interdisciplinary Research at Satsurbliia Cave, Georgia: Combustion Features, Speleothems and the Last Glacial Maximum

Dr Mareike C. Stahlschmidt, Ron Pinhasi

Satsurbliia cave has a rich Upper Paleolithic sequence that includes human occupation prior and after the Last Glacial Maximum, a time period of harsh climatic conditions. The Last Glacial Maximum is a research foci for exploring relations between climate change and human behaviour. Our interdisciplinary project aims to (1) reconstruct climate by investigating speleothems using metagenomic analysis in combination with a U-series dated carbon and oxygen isotope time-series and to (2) explore fire use and site maintenances practices

as a proxies for human behaviour by investigating combustion features with micromorphology and Fourier-Transform-Infrared spectroscopy. Initial results will be presented.

A Multiscale Landscape Approach to the Production of Axes and Shetland Knives in Neolithic Shetland

Prof. Gabriel Cooney (University College Dublin), Dr. William P. Megarry (Queen's University Belfast), Dr. Rob Sands (University College Dublin)

The Shetland Archipelago at the very north of Scotland contains one of the best preserved Neolithic stone tool quarries in Western Europe. Recent fieldwork by the North Roe Felsite Project (NRFP) has considerably advanced our knowledge of this quarry landscape and the production of polished stone axes and knives. The NRFP is exploring this landscape on a range of scales from regional geological survey and prediction using multispectral satellite imagery, to the intrasite distributions of artefacts and debitage, and targeted survey of quarry pits. While felsite dykes are present throughout the region, evidence for quarrying is only visible at certain sites. Excavation has shown that quarrying methods and intensity of extraction differs between workshops. These differences appear counter intuitive with more extensive and labour-intensive extraction visible in what appears to be a more remote quarry area. The process of felsite extraction, and the possible local and regional transportation networks used for its distribution, are discussed. Using landscape modelling techniques the situation of the quarries in their landscape are explored with particular focus on the visual and spatial relationship between the quarry pits and their landscape, and between the quarry landscape and the wider region.

Session 3: PEOPLE, THINGS, and their own BODIES

The chronology and distribution of the Iron Age mirrors in Britain and Ireland.

Dr Jun'ichiro Tsujita

During the 1st century BC to 1st century AD, the bronze mirrors might be divided into three phases. At the final phase, early 1st century AD, on the one hand, the bronze mirrors did not distributed around southeastern England, on the other hand, the production and distribution of bronze mirrors continued

around central and western England and Wales. It might be the result of difference of response to 'Romanization' of southeastern region.

Maori polished jade weapons: practical use and social functions

Dr Alan Peatfield

The pre-colonial Maori culture of New Zealand was also pre-metal. Like many early Pacific cultures they were mostly sedentary hunter-horticulturalists. Their most precious substance was nephrite jade, called pounamu. In ethnographic accounts from the 19th century, Maori defined jade as being to them as gold was to the “white man”. Among the most remarkable pounamu artefacts which commanded the greatest social prestige are the hand-clubs, called patu mere; made of polished jade, and 35-40 cms long, they are taonga, treasures of the Maori people. As colonisation is less than 200 years old, the Maori still maintain a “living memory” of the manufacture, practical use and social and symbolic functions of the artefacts; thus they offer an interesting potential analogy for prehistoric polished stone tools and weapons. In the current resurgence of Maori identity the patu mere are not just repositories of memory, but are actively entangled in social and symbolic expression. In this presentation I shall discuss the antique patu mere held in the British Museum, and shall contextualise them within ethnographic and modern discourse.

Introducing HARA: Human-Animal Relationships in Archaeology - World Views of Hunter-gatherers in Northern Europe” (POSTER PRESENTATION, 3 MINUTES)

Dr Maja Pasaric

The poster introduces the newly commenced Marie Sklodowska-Curie funded research project “Human-Animal Relationships in Archaeology - World Views of Hunter-gatherers in Northern Europe”. The project aims to provide new perspectives on human interactions with animals in Northern Europe in the ethnographic present and the archaeological past. This includes an analysis of ethnographic materials from NE Russia, contextual analyses of archaeological materials from Latvia, Denmark and France and new experimental archaeological approaches to artefacts manufactured from animal remains. HARA focuses on how animal remains, particularly artefacts manufactured on

animal remains and animal iconography reflect and construct human-animal relations.

Physical anthropological methods in the identification of unknown young migrant victims (*POSTER PRESENTATION, 3 MINUTES*)

Dr Daniel Gaudio, Prof Ron Pinhasi

Objective of this IRC project is to explore and develop innovative anthropological sexing methods for subadults and establish a method for the determination of geographic origin useful during the process of identification on migrants. 3D digitization and geometric morphometric approaches will be employed in order to increase accuracy useful in subadult sex estimation. Geographic origin will be determined using ancient DNA analysis by SNP genotypes that will be compared with existing databases of known populations. The present project wishes to provide useful methods that may be used concretely during the identification process of migrant victims.

ANCIENT TEETH: An integrative analysis of shifting trends in dental traits in human populations from Neolithic to Iron Age. (*POSTER PRESENTATION, 3 MINUTES*)

Dr Beatriz Gamarra^{1,2}, Robin Feeney², Ron Pinhasi¹.

¹School of Archaeology, University College Dublin, Ireland.

²School of Medicine, University College Dublin, Ireland.

The transition to an agriculture lifestyle is one of the most important events in human evolution, resulting in significant biological, cultural and health changes. The objective of the present project is to characterize the changes in dental traits of past European populations and the factors influencing these transitions, integrating data from several multidisciplinary approaches. These will include: 1) High-resolution μ CT data of upper molars from an unstudied Hungarian time-series; 2) Characterisation of internal and external dental morphology trait changes through morphometric methods; 3) Stable isotope analyses to infer these populations' diet; 4) Ancient DNA techniques for sexing individuals and subsequent study of sex differences in morphology and dietary regimes through time. The project is a collaboration between UCD Schools of Archaeology and Medicine.

Session 4: PEOPLE, PLANTS AND ANIMALS

Foodways in Neolithic Ireland

Dr Meriel McClatchie¹, Amy Bogaard², Sue Colledge³, Nicki Whitehouse⁴, Rick Schulting², Phil Barratt⁵, Rowan McLaughlin⁶

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The Neolithic period in Ireland witnessed enormous changes in the types of plant foods being produced and the work involved in their production. Several new crops were introduced – emmer wheat became the dominant crop, with evidence also for barley (hulled and naked) and flax. Recent studies have shed much light on the timing and nature of these new ways of farming and living (McClatchie et al. 2014; Whitehouse et al. 2014; McClatchie et al. 2016). This paper will explore current archaeological evidence for the creation of foods, the dietary and social importance of cereals, and potential avenues for future research.

Plants and people in Neolithic Scotland

Dr Rosie Bishop

To what extent were crop and wild plant use strategies in Neolithic Scotland determined by climate and environment, or was there an element of local selection of particular plants within Neolithic subsistence strategies in Scotland? This paper will discuss the variability of the evidence for Neolithic plant use across Neolithic Scotland through an inter-site comparison of the archaeobotanical evidence for cultivation and wild plant use, and will consider the possible factors influencing the selection of particular plants in Neolithic subsistence strategies. The presentation will also highlight the challenges in identifying different plant subsistence strategies given the patchiness of the archaeological record and the disparities in the preservation and dating of different assemblages.

The molecules of meals: the impact of organic residue analysis on Irish archaeology

Jessica Smyth

Details of daily life such as food and drink can be difficult to capture in the past, especially on an island with a temperate climate and covered mainly by acidic soils: plant remains will only survive through charring or water-logging, whilst animal bone frequently dissolves unless calcined. At the molecular level, however, a host of biochemical and isotopic signatures can survive, indicating what past communities ate and drank. The most robust of these biomarkers are lipids, commonly found absorbed into the clay matrix of pottery vessels—the residues of meals sometimes many thousands of years old. This paper details the results of a recent programme of molecular and compound-specific stable isotope analysis on lipids from Irish Neolithic and Early Medieval pottery vessels, providing unparalleled insights into the diet, and food procurement and processing activities of our past farming communities.