



# Archaeology at Cambridge

2012–2013







# Contents

<b>About us</b>	<b>1</b>
Introduction: the McDonald Institute and Archaeology at Cambridge	1
Division of Archaeology	3
Cambridge Archaeological Unit	4
The Museum of Archaeology and Anthropology	6
Faculty of Classics	7
Institute of Continuing Education	7
Members	8
Senior McDonald Fellows	9
McDonald Research Fellows	9
Visiting Scholars	10
Postgraduate Students	11
<b>Laboratories</b>	<b>14</b>
Material Culture	14
Grahame Clark Zooarchaeology	16
George Pitt-Rivers Bioarchaeology	18
Glyn Daniel Archaeogenetics	20
Dorothy Garrod Isotope	22
Charles McBurney Geoarchaeology	24
<b>Research Grants</b>	<b>26</b>
<b>Research Highlights</b>	<b>28</b>
Asia	28
Africa	30
Middle East	32
North and South America	33
Europe and Russia	34
<b>Events and Outreach</b>	<b>43</b>
Seminars and Conferences	43
Discussion Groups	44
Prehistory Day and Science Day	45
• P • I • T • O • T • I • Exhibition	46
Who Cares? Britain's Overseas Missionary Heritage Today	46
Personal Histories Project	47
Access Cambridge Archaeology	47
<b>Publications</b>	<b>49</b>
Cambridge Archaeological Journal	49
McDonald Institute Monographs	50
Archaeological Review from Cambridge	51
Members'/Fellows' Publications	51
Postgraduate Students' Publications	59

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## Introduction: the McDonald Institute and Archaeology at Cambridge

GRAEME BARKER (*Director*) & JAMES BARRETT (*Acting Director - Michaelmas Term & Deputy Director*)

Our annual *Archaeology at Cambridge* illustrates the work of archaeologists in the McDonald Institute for Archaeological Research, the Divisions of Archaeology and Biological Anthropology within the Department of Archaeology & Anthropology, the Cambridge Archaeological Unit, the Museum of Archaeology and Anthropology, the Faculty of Classics, the Fitzwilliam Museum and the Institute of Continuing Education. The pages to follow illustrate the highlights of our combined research activity in 2012–2013. The year's report is being published a few months later than usual because, like the rest of Cambridge, and indeed virtually the entire UK Higher Education sector, the Institute's staff (and especially our Publications Manager Dora Kemp, who produces the report) were heavily involved in preparing materials for the national research evaluation exercise (the Research Excellence Framework or REF, spanning the period January 2008–December 2013).

The McDonald Institute serves as the research arm of the c. 20 staff archaeologists (mostly University Teaching Officers) in the Division of Archaeology, is the institutional base for over 70 Research Fellows and (this year) almost 40 Visiting Scholars, and through its active programme of lectures, conferences, publications and grants it also provides an interdisciplinary hub for the wider community of over 50 archaeologists based in other institutions at Cambridge. It was an eventful year, with conferences including topics as varied as 'Creativity in the Bronze Age', 'Life on the Frontiers of Imperial Polities', and

'Soil Micromorphology' (a research field pioneered by Professor Charles French, Head of the Division of Archaeology). Professor Mary Beaudry of Boston University gave the McDonald Annual Lecture on 'Food, Materiality and the Aesthetics of Dining' and Professor Christopher Henshilwood of the Universities of Bergen and Witwatersrand (also the Colenso Fellow at St John's College, Cambridge) gave the R.R. Inskeep Memorial Lecture on the 'Behavioural Evolution of *Homo sapiens* in Southern Africa'.

A new cohort of early career researchers enlivened the life of the institute. Dr Robyn Veal began a McDonald Anniversary Fellowship studying fuel and fire in the Roman world, and the new insights these give about woodland management and the Roman economy in general. Dr Alice Samson started a British Academy Postdoctoral Fellowship on creolization and inter-island relations in the indigenous Caribbean, her first fieldwork season with us resulting in the discovery of extraordinary prehistoric art in the caves of the tiny island of Mona island between Puerto Rico and the Dominican Republic. Dr Matthew Davies, who held a Research Fellowship in East African Archaeology with the British Institute in East Africa, was awarded a Leverhulme Trust Early Career Fellowship for research on the social and landscape archaeology of eastern Africa. Dr Kevin Lane joined the Institute as a researcher on the Leverhulme-funded One River Project studying the history of human–environment interactions in Peru, and Dr Frederick Baker began a new European-funded project on Alpine Rock Art in cooperation with Dr Christopher Chippindale and Professor Charles French. Dominic Powlesland of the Landscape Research Centre was appointed Field Archaeologist in Residence for work on 3D imaging in archaeology.



The McDonald Annual Lecture given by Professor Mary Beaudry of Boston University.



Many congratulations are due to McDonald Fellows moving to new posts. Dr David Orton takes up a European Research Council postdoctoral position at the Institute of Archaeology in London, Dr Giedre Motuzaitė Matuzeviciute begins new posts at the Department of Archaeology at Vilnius University and at the History Institute of Lithuania, Dr Xinyi Liu has been appointed to a tenure-track position at Washington University in St Louis and Dr Susanne Hakenbeck has been appointed to a Lectureship in Historical Archaeology at Cambridge.

We also said a very fond farewell to Liz Farmar, secretary to the Deputy Director and the Managing Committee and a mainstay of the Institute's publications, who retired after 15 years of invaluable service; and to Rebecca Burtenshaw our Receptionist (a position held jointly with the Division of Archaeology), who has moved across the river to Politics and International Relations. We celebrate the achievements in rock-art studies and many other areas of archaeology of Dr Christopher Chippindale, who took early retirement at the end of September from his position as Curator of the British and European collections in the Museum of Archaeology and Anthropology. We welcome Emma Jarman, our new receptionist, and Deborah Smethers who is helpfully providing temporary cover of Liz's former duties. A fundamental change came with the retirement of Dr Kate Pretty. Alongside her enormous other contributions to the University including serving as Principal of Homerton College and Pro-Vice-Chancellor for outreach, life-long learning and international strategy, she was also the McDonald family's representative on the Institute's Managing Committee, its recent Chair, and a guiding hand since the Institute's foundation in 1990. We thank her for her contributions and wish her well for her new life in Scotland. Sadly we lost one of our Senior Fellows, the eminent zooarchaeologist Professor Tony Legge, who died suddenly in February 2013 after a brief illness. Tony was an enormous support for all the PhD students working in the Grahame Clark Zooarchaeology Laboratory, and they and the rest of us enjoyed his famously outrageous wit as well as the quite delicious sausage rolls he made every year for the Institute's Christmas party. He was also a mainstay of Archaeology open events to the general public, as a mean spear thrower (see p. 45). He is very sorely missed.

Lastly, the Institute was physically transformed this year, with a major renovation of the ground floor undertaken during the summer to improve the capacity and functionality of both the seminar room and social space. The work was completed to schedule just in time to welcome the new academic session and the challenges and opportunities it will bring for Cambridge's large and diverse archaeological community, a community that is global in its interests, engaged in the study of the entirety of the human past from first beginnings to the last century, works right across the humanities–science spectrum of the discipline, and is inclusive in its interdisciplinary outlook.



DORA KEMP



DORA KEMP



DORA KEMP

*The ground floor of the McDonald Institute's Courtyard Building was transformed between June and October 2013. The new, wider seminar room features a moveable acoustic wall and state-of-the-art technology. The central lobby now has a dedicated receptionist's office and a custom-built bookcase to display publications by members of the Institute. The refurbished coffee room includes a new bar and separate kitchen area. (Top) Remodelling underway; (middle) looking into the seminar room and (bottom) looking out of the seminar room with the acoustic wall folded away.*



## Division of Archaeology

CHARLES FRENCH

I would like to welcome our two new University lecturer appointments from September, 2013 – Dr Susanne Hakenbeck as The Trinity Lecturer in Historical Archaeology and Director of Studies for Archaeology and Anthropology at Lucy Cavendish College, and Dr Hrach Papazian as the Herbert Thompson Lecturer in Ancient Egyptian Language. Ben Davenport and Emma Jarman have also taken over as our new Graduate Administrator and Receptionist, respectively. At the same time, we also say a fond farewell to two long-serving Professors – Nicholas Postgate and John Ray – who will both always be remembered for their attention to detail and salient wit! I am also delighted to report that Dr Elizabeth DeMarrais was promoted to University Senior Lecturer and Dr Simon Stoddart was appointed to a Readership.

The Cambridge Archaeological Unit (CAU) has continued to weather the economic downturn admirably. It has undertaken a number of extensive excavation projects, for example in advance of the University's North West Cambridge development where the Division conducted its Part IIA Training excavation. The CAU has also completed some huge post-excavation analyses and publication manuscripts for sites such as Mucking in Essex and the first ten-year phase of investigations at the Over and Whittlesey Hanson quarries. A number of significant new excavation and landscape research

monographs have been produced including the publication of *Colne Fen, Earith* (see pp. 4–5).

There are a number of successes by former graduate students including the award of a Lectureship in Chinese Archaeology to Dr Yijie Zhuang at University College London; the award of a CNR research position to Dr Federica Sulas in Cagliari, Sardinia, and postdoctoral research positions for Dr Christopher Stimpson at Oxford University, Dr Suzanne Pilaar-Birch at the Joukowsky Institute, Brown University, and Dr Lauren Cadwallader and Dr Sandy Pullen as Research Associates on the One River Project in the McDonald Institute; and Dr Andrew Woods was appointed to a Curatorship of Numismatics at York.

Successful PhD completions this year included: Stephanie Aulsebrook, Marina Baralle, Lauren Cadwallader, Risa Carlson, Jennifer French, Lindsay Friedman, Cleanthe Paine, Suzanne Pilaar-Birch, Hazel Reade, Jane Sanford, Christos Tsirogiannis and Yijie Zhuang. Christos Tsirogiannis was the winner of the ARCA's award for Art Protection and Security. Mary Price won the Glyn Daniel Award for the best undergraduate dissertation and Enrico Cioni received the Anglia Prize for his overall distinction performance in his BA in Archaeology.

I would like to thank all staff, and especially all the administrative and technical support staff, for keeping Archaeology in fine fettle and good humour over the past year.



*Students excavating two Bronze Age ring-ditched enclosures as part of the Part IIA Training excavation at North West Cambridge.*

DAVE WEBB





PAUL BAILEY/SKYHIGH, MOSAIC-ED BY DAVE WEBB

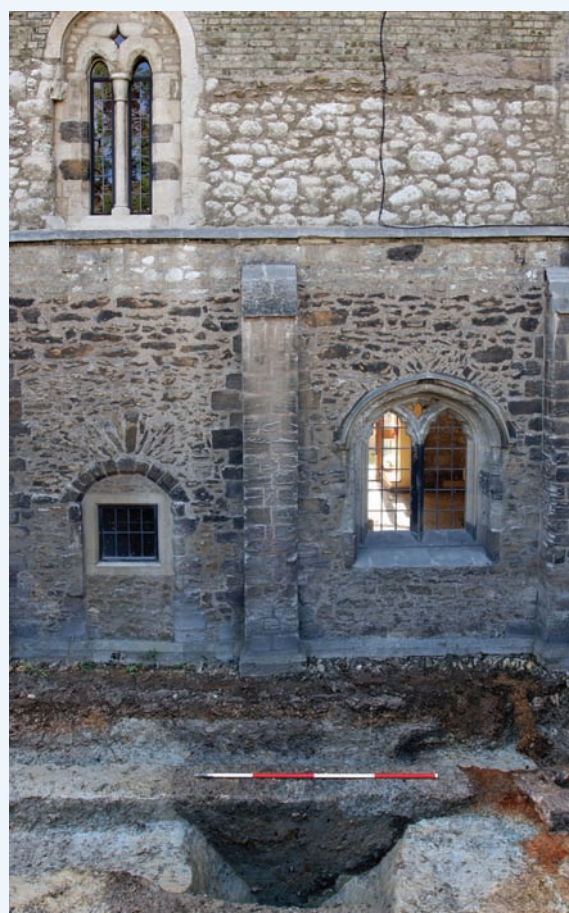
## Cambridge Archaeological Unit

CHRISTOPHER EVANS

Over the last year the brunt of the Unit's energies was directed towards the commencement of the University's North West Cambridge campus-expansion programme. With the first two sites seeing 13.6 ha of excavation along a gravel ridge on the city's west side (west of the Observatory and running north to opposite Girton College), this was a huge-scale enterprise. It involved a 25-strong team for six months and generated more than 50,000 finds. Aside from the incidental recovery of Palaeolithic and Neolithic flintwork, as witnessed in four ring-ditch monuments and three paddock-enclosures, the ridge's main colonization occurred during the Middle Bronze Age. Two separate Late Bronze/Early Iron Age 'open' settlements were also dug. While little later Iron Age material was present, almost the entirety of the area was covered by Roman settlements (associated with four roads/trackways and five cemeteries). The project is providing unparalleled insights into Cambridge's 'hinter-landscape'. We will return to work there later this year.

*Aerial photograph of North West Cambridge excavations.*

Investigations continued during the extensive renovation programme at the School of Pythagoras in the grounds of St John's College. First built as a high-status residence in the late twelfth century, it evidently originally lay adjacent to a navigable branch of the Bin Brook and the channel's deposits were sampled. Of the pre-School sequence, the area was first settled in Roman times and a metalled trackway, as well as ditches and pitting, were recovered. By the Late Roman era it was used as an inhumation cemetery and six skeletons were excavated (with much disarticulated human bone occurring residually in later contexts). Also within the city, trenching in front of the University's Judge Business School (opposite Fitzwilliam Museum) revealed still another early cemetery – this time of medieval date.



DAVE WEBB

*School of Pythagoras, St John's College, with Roman ditch extending beneath its foundations.*



Featuring in last spring's Prehistoric Society newsletter, *Past*, there was still more work on a major cursus complex at Hanson's Manor Farm Quarry at Milton Keynes and this saw the excavation of a long mortuary enclosure. Unfortunately, like the rest of the monuments there, it proved to have few artefacts (e.g. very decayed antler picks) and no human remains. Of the Unit's other large-scale quarry projects, the last four months have seen major campaigns at both Eye, Cambridgeshire, and at Broom in Bedfordshire.

The summer marked the conclusion of our Ham Hill, Somerset fieldwork. Jointly undertaken with the University of Cardiff, this saw the completion of the hillfort's interior excavations, with further inhumations recovered from pits and quantities of 'loose' human bone from the square enclosure there (associated with Glastonbury pottery). In addition to the exposure of two further Iron Age roundhouses, an Early Neolithic pit cluster was also present. Investigations also continued on the fort's rampart trenches. Most importantly, we returned to, and expanded, the trench along its northwestern perimeter. This revealed the box stone-revetments of its final Late Iron Age elaboration and, also, an entranceway within its Middle-period layout. Indeed, the results proved so spectacular that English Heritage provided a grant to allow a further month's excavation on the rampart.

As to the Unit's major publication initiatives, our collaborative Spong Hill summary/chronology volume has recently been issued (see p. 50), as well as the first of our Colne Fen, Earith books (prehistory); its Roman-phase companion will appear shortly. With the latter two featuring in the Unit's *Archaeology of the Lower Ouse Valley* series, its next issue, concerned with Barleycroft Farm/Over's fieldwork – *Twice-crossed River* – has now been completed and will be published next year.

*(Top) Manor Farm, Milton Keynes, looking east along the mortuary enclosure.*

*(Middle) Ham Hill, looking south across the hillfort-interior area.*

*(Bottom) Ham Hill, the northwestern rampart trench.*





## The Museum of Archaeology and Anthropology (MAA)

CHRIS WINGFIELD

It has been a year of celebration, marking the museum's 100th year on Downing Street alongside its shortlisting as a finalist for the Art Fund Prize for Museum of the Year 2013. It has also been a year of consolidation, following MAA's redevelopment and reopening in May 2012, which has nevertheless witnessed activity of an unprecedented pace and scale, with new exhibitions, gallery developments and teaching taking place alongside staff changes.

The South Lecture Room, made available to the museum by the Division of Archaeology outside the main teaching period, hosted *P.I.T.O.T.I.* a digital multimedia rock-art exhibition in March. This was followed in April by *The Cultured Rainforest*, which explored human engagements with the rainforest in Borneo over 50,000 years. Between July and September, the space also hosted *My Hair*, an installation by the artist and writer Michael McMillan accompanying the larger exhibition at the Fitzwilliam Museum, *Origins of the Afro Comb: 6,000 Years of Culture, Politics and Identity*. MAA's main exhibition of the year, *Chiefs & Governors: Art and Power in Fiji*, opened in June in the Li Ka Shing Gallery.

The museum's permanent archaeology galleries also saw changes during the year. The Cambridge Archaeology gallery became home to the Arbury coffin due to its overwhelming popularity amongst visitors following closure of the *Gifts and Discoveries* exhibition. Also in response to visitor feedback, an iPad app was developed for the gallery's wall of Cambridge Archaeology.



Visitors exploring MAA's Cambridge Archaeology gallery.

The World Archaeology Gallery, thanks to a grant from the DCMS / Wolfson Fund, saw the installation of remote controlled LED lighting and the refurbishment of its Edwardian cases. In April these became the venue for *Creativity in the Bronze Age – a Response*, featuring the work of seven contemporary craft artists exploring Bronze Age Europe. The museum hosted an inaugural meeting of its Archaeology Advisory Group in February, which it hopes will contribute to future developments in this gallery.

MAA's teaching collection in the Keyser workroom was more popular than ever before, hosting large numbers of student practicals during term, as well as an Archaeology Open Day and a Sutton Trust summer school. A pilot project, prompted by the fact that the contents of the teaching collection have been the same since 1993 (well before the current first-year students were born!), set about evaluating how well it meets current teaching needs, and suggested changes that we hope to implement in the future.

Dr Chris Wingfield was appointed as Senior Assistant Curator in Archaeology from December, a temporary appointment that was subsequently confirmed on a permanent basis. At the end of the year, Dr Christopher Chippindale took early retirement from his post as MAA's other Senior Assistant Curator in Archaeology.

*Archaeology demonstrations at MAA's Gala Weekend in May, celebrating 100 years on Downing Street and the museum's shortlisting in the Art Fund Prize for Museum of the Year 2013.*





## Faculty of Classics

MARTIN MILLETT

The Classical Archaeology group ('D Caucus') in the Faculty of Classics had another successful year, marked by several staff changes. Dr Ioannis Galanakis took up his post as lecturer in Aegean Prehistory, and Dr Alessandro Launaro was appointed to the lectureship left vacant on the retirement of Henry Hurst. Dr Sussane Turner was appointed as curator of the Museum of Classical Archaeology, and Jennie Thornber to the post of Education and Outreach Officer in the museum. Dr Lacey Wallace joined the caucus as a research associate working with Martin Millett, and Astrid van Oyen was elected to a Research Fellowship at Homerton College.

Through the generosity of Dr Lisa French, the full archive of the excavations at Mycenae has been donated to the Faculty where it will be curated and used as the basis for future research projects.

There was a well-supported series of research seminars, which included presentations by Kim Bowes (American Academy at Rome), Dominic Powlesland (Landscape Research Centre, Yedingham) and Jane Hjarl Petersen (Copenhagen). A range of books was published by members of the caucus including: Nigel Spivey *Greek Sculpture* (CUP); Caroline Vout *Sex on Show: Seeing the Erotic in Greece and Rome* (British Museum Press); and Paul Johnson & Martin Millett *Archaeological Survey and the City* (Oxbow).

A range of fieldwork projects continued with further geophysical surveys in Kent (in collaboration with Kent County Council), and survey and excavations in Italy. At Aldborough, the large-scale survey of the Roman town continued with the survey work undertaken in collaboration with LP Archaeology and the Landscape Research Centre. Exceptionally clear magnetometry results from the northern part of the town and from the suburbs are transforming our understanding of the site.



GPS survey in progress on the Roman town at Aldborough, North Yorkshire.

## Institute of Continuing Education (ICE)

GILLIAN CARR & SUSAN OOSTHUIZEN

The Institute of Continuing Education (ICE) offers part-time University of Cambridge awards in Historic Environment and Archaeology at first-, second- and third-year undergraduate levels. Academic leadership in Archaeology is provided by Dr Gillian Carr, and in Historic Environment by Dr Susan Oosthuizen, both Senior Lecturers and both affiliated to the Division of Archaeology.

University of Cambridge awards offered by the Institute include Certificate, Diploma and Advanced Diploma courses. ICE also offers non-accredited short weekly courses, weekends, and online courses at first-year undergraduate level. The Institute is an enthusiastic contributor to the Festival of Ideas, offering annual lectures in Archaeology and Historic Environment, and an annual field-visit led by Dr Oosthuizen.

The Advanced Diploma is a research-based course, in which students undertake a project under individual supervision. Notable Advanced Diploma projects completed in 2012–2013 included, in Archaeology, an analysis of whether Roman Cambridge was a *vicus* or a *civitas* capital of the Catuvellauni; in Historic Environment, projects included an economic analysis of the late Anglo-Saxon Dorset landscape, a post-medieval landscape history of March, Cambridgeshire, and analysis of the effects of management by St Albans Abbey on the Hertfordshire landscape.

Courses in Archaeology, Heritage Studies and Anthropology in the Madingley Weekly Programme (a series of five-week non-accredited courses) included *Lock 'em Up!*, involving studies of historical internment using archaeological, heritage-related and historical fieldwork; and *Apparitions: Ghosts, Angels and Demons in Modern Britain*. In Historic Environment, introductory courses in field archaeology were offered in two formats: one was traditionally taught, using field visits. The second was experimental in teaching method, successfully combining PowerPoint presentations and Google Streetview to offer five 'virtual' field visits.

In 2012–2013 the first entirely online, short, non-accredited courses were offered to groups of students drawn from Britain, Europe, the Middle East, Australia and the Americas. In Historic Environment, they included *The Medieval Village Landscape, 1000–1500* (Dr Oosthuizen), and *Googling the Earth*, designed and taught by Dr Ulla Rajala.

Finally, a healthy number of weekend courses continue to be offered in Archaeology, Anthropology, and in both landscape and garden history/archaeology. Dr Carr and Dr Oosthuizen were respectively involved in *Dealing with the Dead*, and *The Medieval Fenland*, and *Medieval Villages, Pastures and Fields*.



## Members

- **Dr Martin Allen** (*Fitzwilliam Museum*)  
Later medieval English coins and tokens
- **Dr Sally-Ann Ashton** (*Fitzwilliam Museum*)  
Egyptology
- **Prof. Graeme Barker** FBA  
(*McDonald Institute for Archaeological Research/ Division of Archaeology*)  
Landscape archaeology (Mediterranean, arid zone, tropical); expansion of modern humans; transitions to farming
- **Dr James Barrett**  
(*McDonald Institute for Archaeological Research/ Division of Archaeology*)  
Medieval archaeology and historical ecology
- **Dr David Barrowclough** (*Wolfson College*)  
Social construction of 'island' identities; prehistoric ritual and monumental art in Malta
- **Dr Ian Baxter**  
(*Institute of Continuing Education*)  
Heritage and tourism
- **Dr Katherine Boyle**  
(*McDonald Institute for Archaeological Research*)  
Archaeozoology; environmental archaeology; palaeobiogeography; European prehistory
- **Dr Rebecca Bridgman** (*Fitzwilliam Museum*)  
Islamic pottery
- **Dr Marcus Brittain**  
(*Cambridge Archaeological Unit*)  
Interaction of landscape, memory and identity within non-literate societies
- **Dr Matt Brudenell**  
(*Cambridge Archaeological Unit*)  
Later prehistory
- **Dr Judith Bunbury** (*Department of Earth Sciences*)  
Geoarchaeology in Egypt
- **Dr Lucilla Burn** (*Fitzwilliam Museum*)  
Greek vases and terracottas, and the Classical tradition
- **Dr Gillian Carr**  
(*Institute of Continuing Education*)  
The archaeology and heritage of WWII, specifically the German occupation of the Channel Islands
- **Craig Cessford**  
(*Cambridge Archaeological Unit*)  
Medieval and later urban archaeology
- **Dr Christopher Chippindale**  
(*Museum of Archaeology and Anthropology*)  
Rock art, especially Australian
- **Dr Elizabeth DeMarrais** (*Division of Archaeology*)  
Archaeological theory; Andean archaeology; settlement patterns
- **Alison Dickens**  
(*Cambridge Archaeological Unit*)  
Standing buildings and the development of urban centres
- **Christopher Evans**  
(*Cambridge Archaeological Unit*)  
British archaeology; Nepal; China; Cape Verde
- **Prof. Charles French**  
(*Division of Archaeology*)  
Landscape interpretation; soil micromorphology; scientific rescue archaeology
- **Dr Ioannis Galanakis** (*Faculty of Classics*)  
Greek prehistory
- **David Gibson**  
(*Cambridge Archaeological Unit*)  
Neolithic and Bronze Age
- **Dr Catherine Hills** (*Division of Archaeology*)  
Anglo-Saxon England; Europe in migration and early medieval periods
- **Henry Hurst** (*Faculty of Classics*)  
Pre-Neronian Nova Via, Rome
- **Dr Liliana Janik** (*Division of Archaeology*)  
Archaeological theory; visual cognition in rock art
- **Prof. Martin Jones** (*Division of Archaeology*)  
Archaeobotany; environmental archaeology; early agriculture
- **Mark Knight**  
(*Cambridge Archaeological Unit*)  
Prehistoric and wetland field archaeology
- **Dr Alessandro Launaro** (*Faculty of Classics*)  
Archaeology and history of the Italian countryside (c. 200 BC–AD 100)
- **Dr Sam Lucy** (*Newnham College*)  
Anglo-Saxon archaeology
- **Dr Augusta McMahon**  
(*Division of Archaeology*)  
Mesopotamian archaeology and history, complex society, site biography
- **Prof. Martin Millett** FBA (*Faculty of Classics*)  
The social and economic archaeology of the Roman world
- **Dr Preston Miracle** (*Division of Archaeology*)  
Palaeolithic and Mesolithic Europe; zooarchaeology; ethnoarchaeology; palaeoanthropology
- **Prof. Henrietta Moore**  
(*Division of Social Anthropology*)  
Gender, livelihood strategies, social transformation and symbolic systems in Africa
- **Dr Philip Nigst** (*Division of Archaeology*)  
Palaeolithic archaeology
- **Dr Tamsin O'Connell**  
(*Division of Archaeology*)  
Diet and nutrition in past and present human populations; stable isotope techniques
- **Dr Susan Oosthuizen**  
(*Institute of Continuing Education*)  
Landscape and field archaeology especially Anglo-Saxon and medieval
- **Prof. Robin Osborne** FBA  
(*Faculty of Classics*)  
The iconography of 'everyday life' scenes on Athenian pots; the Classical Body
- **Dr Hratch Papazian** (*Division of Archaeology*)  
Egyptology
- **Dr Cameron Petrie** (*Division of Archaeology*)  
South Asian studies
- **Dr Adrian Popescu** (*Fitzwilliam Museum*)  
Ancient coins and medals
- **Prof. Nicholas Postgate** FBA  
(*Division of Archaeology*)  
Assyriology; social and economic history of Mesopotamia
- **Dr Kate Pretty** (*Homerton College*)  
Public archaeology; early medieval archaeology
- **Prof. John Ray** FBA  
(*Division of Archaeology*)  
Texts in demotic Egyptian; decipherment of scripts and languages; history of writing
- **Dr Jane Renfrew**  
(*Lucy Cavendish College*)  
The uses of plants by prehistoric man; ancient agriculture; food and wine in antiquity
- **Dr John Robb** (*Division of Archaeology*)  
Neolithic Europe; archaeological theory; symbolism and agency
- **Dr Marie Louise Stig Sørensen**  
(*Division of Archaeology*)  
Bronze Age Europe; archaeological heritage studies; archaeological theory
- **Dr Kate Spence** (*Division of Archaeology*)  
Archaeology of ancient Egypt; urbanism and built environment; social history; art
- **Dr Nigel Spivey** (*Faculty of Classics*)  
Etruscan art and archaeology; Greco-Roman art; the anthropology of art
- **Dr Jay Stock**  
(*Division of Biological Anthropology*)  
Evolution of human variation; bioarchaeology; hunter-gatherer adaptations; origins of agriculture
- **Dr Simon Stoddart** (*Division of Archaeology*)  
Later European prehistory; landscape archaeology; complex societies; island communities
- **Dr Simon Timberlake**  
(*Cambridge Archaeological Unit*)  
Bronze Age; archaeometallurgy; experimental archaeology
- **Professor Andrew Wallace-Hadrill** FBA  
(*Faculty of Classics*)  
Roman studies
- **Dr Chris Wingfield** (*Museum of Archaeology and Anthropology*)  
Senior Assistant Curator of Archaeology
- **Dr Martin Worthington**  
(*Division of Archaeology*)  
Akkadian language, literature and medicine



## Senior McDonald Fellows

- **Dr Robert Anderson**  
(*McDonald Institute for Archaeological Research*)  
History of museums and history of science
- **Janine Bourriau**  
(*McDonald Institute for Archaeological Research*)  
Egyptology and ceramics
- **Prof. Dilip Chakrabarti**  
(*McDonald Institute for Archaeological Research*)  
Ancient India
- **Dr Harriet Crawford**  
(*McDonald Institute for Archaeological Research*)  
Mesopotamia and Persian Gulf
- **Dr Corinne Duhig**  
(*McDonald Institute for Archaeological Research*)  
Osteoarchaeology
- **Prof. Norman Hammond** FBA  
(*McDonald Institute for Archaeological Research*)  
The origins, florescence and decline of Maya civilization in Mesoamerica
- **Prof. Barry Kemp** FBA  
(*McDonald Institute for Archaeological Research*)  
Egyptology; the Amarna project
- **Prof. Tony Legge**<sup>†</sup>  
(*McDonald Institute for Archaeological Research*)  
Zooarchaeology
- **Prof. William McGrew**  
(*McDonald Institute for Archaeological Research*)  
Modelling the evolutionary origins of human behaviour, especially material culture
- **Prof. Sir Paul Mellars** FBA  
(*McDonald Institute for Archaeological Research*)  
Palaeolithic and Mesolithic archaeology; palaeoeconomy; palaeoenvironmental studies
- **Dr Joan Oates** FBA  
(*McDonald Institute for Archaeological Research*)  
Mesopotamia and Syria, especially Tell Brak
- **Prof. Lord Colin Renfrew** FBA  
(*McDonald Institute for Archaeological Research*)  
Keros Project
- **Dr Colin Shell**  
(*McDonald Institute for Archaeological Research*)  
2D and 3D geophysical survey; airborne remote sensing
- **Prof. Anthony Snodgrass** FBA  
(*McDonald Institute for Archaeological Research*)  
Boeotia Project
- **Dr Ghanim Wahida**  
(*McDonald Institute for Archaeological Research*)  
Lithics from Jebel Barakah, Abu Dhabi Emirate
- **Prof. Ann Wintle**  
(*McDonald Institute for Archaeological Research*)  
Luminescence dating

## McDonald Research Fellows

- **Dr Britt Baillie** (*Department of Architecture*)  
Conflict in Cities and the Contested State
- **Dr Frederick Baker** (*Research Associate*)  
PITOTI Project; Alpine Rock Art and the Origins of Cinema; Post-conflict Archaeology
- **Dr Rachel Ballantyne** (*Research Associate*)  
Ecological Correlates of Viking Age State Formation
- **Dr David Beresford-Jones** (*Research Associate*)  
Origins and Intensification of Agriculture
- **Dr Elizabeth Blake**  
(*Research Associate, Wolfson College*)  
Emergence of Modern Behaviours, Soundscapes, Stone-tool Technology
- **Dr Roger Bland** (*British Museum*)  
Department of Portable Antiquities and Treasure
- **Dr Mim Bower**  
(*Research Associate*)  
Ancient DNA, Horse Domestication and Animal Husbandry in Prehistory
- **Dr Michael Boyd**  
(*Stavros S. Niarchos Research Fellow*)  
Keros Project
- **Dr Sandra Brunnegger**  
(*Research Fellow, St Edmunds College*)  
Latin America
- **Rev. Dr David Clark** (*Independent Scholar*)  
Byzantine Architecture, Religion and Symbolism
- **Dr Carlo Colantoni** (*Research Associate*)  
Kilise Tepe Project
- **Dr Anna Collar** (*Independent Scholar*)  
Religious Networks in the Roman Empire
- **Dr Lídia Colominas-Barberà**  
(*Research Associate*)  
Iron Age and Roman Animal Husbandry in the Mediterranean Basin
- **Dr John Creese**  
(*Research Associate*)  
Iroquoian Personhood and the Body
- **Dr Emanuela Cristiani**  
(*Marie Curie Postdoctoral Fellow*)  
Mesolithic–Neolithic Technology
- **Dr Matthew Davies**  
(*BIEA/McDonald Institute Fellowship*)  
Late Stone Age to Early Iron Age of East Africa
- **Dr Lucy Farr**  
(*Research Associate*)  
TRANS-NAP: Cultural Transformations and Environmental Transitions in North African Prehistory
- **Dr Peter Forster**  
(*Murray Edwards College*)  
Population Genetics
- **Dr Helen Geake**  
(*Finds Adviser, Portable Antiquities Scheme*)  
Anglo-Saxon Archaeology; Metal Detectorists
- **Dr Susanne Hakenbeck**  
(*Research Associate*)  
Hybrid Identities: Pastoralists and Farmers in Early Medieval Hungary
- **Dr Harriet Hunt**  
(*Research Associate*)  
Food Globalization in Prehistory (FOGLIP) Project
- **Dr Sacha Jones**  
(*Research Associate*)  
TRANS-NAP: Cultural Transformations and Environmental Transitions in North African Prehistory
- **Dr Sheila Kohring** (*Division of Archaeology*)  
Later European Prehistory; the Construction of Knowledge through Technological Practices
- **Dr Kathelijne Koops**  
(*Research Fellow, Homerton College*)  
Primate Research
- **Dr Kevin Lane**  
(*Research Associate*)  
One River Project, Río Ica, Andes
- **Dr Jacob Lauinger**  
(*Donnelley Research Fellow, Corpus Christi College*)  
Assyriology
- **Dr Graeme Lawson**  
(*Independent Scholar*)  
Archaeomusicology
- **Dr Carenza Lewis**  
(*Research Associate*)  
Landscape History; Medieval Settlement Pattern; Access Cambridge Archaeology
- **Dr Emma Lightfoot**  
(*Adrian Research Fellow, Darwin College*)  
Climate Change and the Globalization of Agriculture
- **Dr Diane Lister** (*Research Associate*)  
Food Globalization in Prehistory (FOGLIP) Project
- **Dr Xinyi Liu**  
(*Research Associate*)  
Food Globalization in Prehistory (FOGLIP) Project
- **Dr John MacGinnis**  
(*Independent Scholar*)  
Mesopotamia and Eastern Anatolia
- **Dr Holly Miller**  
(*Division of Biological Anthropology*)  
Primate Research
- **Dr Giedre Motuzaitė Matuzevičiūtė**  
(*Research Associate*)  
Pioneers of Pan Asian Contact (PPAC): Broomcorn Millett Project
- **Dr Anna Muthesius**  
(*Independent Scholar*)  
Byzantine, Islamic and Near Eastern Silk Weaving
- **Dr Giuseppina Mutri**  
(*Marie Curie Postdoctoral Fellow*)  
Human Adaptational Patterns to Arid Environments in North Africa
- **Dr Magdalena Naum**  
(*McDonald Institute Fellowship*)  
Medieval Migration in the Baltic Sea Region





## McDonald Research Fellows

(cont.)

- **Dr Rune Nyord**  
(Wallis Budge Fellow, Christ's College)  
Conceptions of the Body in the Nag Hammadi Texts
- **Dr David Orton**  
(Research Associate)  
Ancient DNA, Cod and the Origins of Commercial Trade in Medieval Europe
- **Dr Sara Owen**  
(Research Associate, Classics)  
Greek Colonization and the Archaeology of European Development
- **Dr Caroline Phillips**  
(Division of Biological Anthropology)  
Primate Research
- **Dr Ronika Power**  
(Division of Biological Anthropology)  
Analysis of Human Remains from Prehistoric Libyan Garamantes Civilization
- **Dr Alex Pryor**  
(Research Associate)  
Human Occupation of Marginal Environments in the Palaeolithic
- **Dr Ryan Rabett**  
(McDonald Institute Fellowship)  
Early Human Diversity: Behavioural Modernity in Inter-regional Perspective
- **Dr Gethin Rees**  
(Faculty of Divinity)  
Buddhism and Donation; Rock-cut Monasteries of the Western Ghats
- **Dr Guillaume Robin**  
(Marie Curie Postdoctoral Fellow)  
Art and Death in Neolithic Europe
- **Dr Alice Samson**  
(British Academy Postdoctoral Fellow)  
Creolization, Materiality, Settlements, Inter-island Relations, Indigenous Caribbean
- **Dr Colin Shaw**  
(Research Associate)  
Assessing the Correspondence between Behaviour and Skeletal Morphology in Pleistocene and Holocene Hominins
- **Dr Laurence Smith**  
(Independent Scholar)  
Suakin Project
- **Dr Pamela Jane Smith**  
(Independent Scholar)  
History of Archaeology
- **Dr V. Pía Spry-Marqués**  
(Independent Scholar)  
Zooarchaeology
- **Dr Rhiannon Stevens**  
(Senior Research Associate)  
Detecting Pregnancy and Lactation using Bone Collagen Nitrogen Isotopes: a 'Proof of Concept' Study

- **Dr Fiona Stewart**  
(Research Associate)  
Primate Research
- **Dr Christopher Stimpson**  
(Research Associate)  
Zooarchaeology and Biological Conservation
- **Dr Sian Thomas**  
(Research Fellow, Selwyn College)  
Patterns, Modes and Forms of Survival of Native Egyptian Law after the Roman Conquest
- **Dr Emanuele Vaccaro**  
(Marie Curie Postdoctoral Fellow)  
Late Roman and Early Medieval Settlements in Italy
- **Dr Anne de Vareilles**  
(Research Associate)  
Archaeobotany
- **Dr Robyn Veal**  
(McDonald Anniversary Fellow)  
Environmental Archaeology and Charcoal Analysis
- **Dr Isabelle Vella Gregory**  
(Research Fellow, Christ's College)  
Mediterranean Prehistory
- **Dr Dacia Viejo Rose**  
(British Academy Postdoctoral Fellow)  
The War-time Destruction of Cultural Heritage and its Post-war Reconstruction
- **Dr Yanfu Zu**  
(Mongolia and Inner Asia Studies Unit)  
The Silk Road Project
- **Dr James Cockram** (National Institute of Agricultural Botany, Cambridge)  
Food Globalization in Prehistory (FOGLIP) Project
- **Dr Chiara De Cesari** (Independent Scholar)  
Heritage Studies; Sociocultural Anthropology of Palestinian Heritage and Memory Politics
- **Dr Margarita Díaz-Andreu García** (University of Barcelona)  
History of Archaeology, Identity and Prehistoric Art
- **Dr Rebecca Farbstein** (Independent Scholar)  
Technological Analysis of Palaeolithic Art and Material Culture
- **Dr Francesca Fulminante** (NIAS, Netherlands)  
Mediterranean State Formation
- **Dr Jamie Hampson** (University of the Witwatersrand)  
Rock Art and Heritage
- **Dr Robert Harding** (Independent Scholar)  
Early Historic India; Archaeology of Indian Religions
- **Dr Jason Hawkes** (University of Aarhus)  
Nepal: the Surkhet Valley Project
- **Prof. Christopher Henshilwood** (Universities of Bergen and Witwatersrand; Colenso Fellow St John's College, Cambridge)  
South African Archaeology

## Visiting Scholars

- **Dr Jo Appleby** (University of Leicester)  
Cremation and the Body in the British Bronze Age
- **Prof. Lise Bender Jørgensen** (NTNU)  
Creativity and Craft Production in Middle and Late Bronze Age Europe
- **Prof. Nicholas Beaudry** (University of Quebec at Rimouski)  
Late Antique Archaeology; Investigation of the Episcopal Quarter of Byllis, Albania
- **Dr Richard Bussmann** (Institute of Archaeology, UCL)  
Ancient Egyptian Sealings
- **Dr Dawei Cai** (Jilin University)  
Animal and Plant Domestication and Dispersal
- **Dr Helen Chappell** (English Heritage)  
Bone Chemistry
- **Dr Chris Hunt** (Queen's University, Belfast)  
Human–environment Interactions
- **Dr Louise Iles** (Department of Public Health and Care, Cambridge)  
African Iron Production and Ethnoarchaeology
- **Dr Hongen Jiang** (Chinese Academy of Sciences, Beijing)  
Food Globalization in Prehistory (FOGLIP) Project
- **Prof. Robert Kelly** (University of Wyoming)  
Archaeology, Ethnology and Ethnography of Foraging Peoples
- **Dr Sabine Laemmel** (Independent Scholar)  
Ancient Egyptian Pottery
- **Dr Luca Lai** (University of South Florida)  
Shifts in Economic Practices in Central Mediterranean Prehistory
- **Dr María José López Grande** (University of Madrid)  
Egyptian Pottery



## Visiting Scholars (cont.)

- **David McOmish** (*English Heritage*)  
British Archaeology
- **Dr Karen van Niekerk** (*University of Bergen*)  
Zooarchaeology
- **Roger Palmer** (*Air Photo Services*)  
Aerial Photography
- **Dr Bihua Pan** (*Fudan University*)  
Settlement Archaeology
- **Dr Jacke Phillips** (*School of Oriental and African Studies, London*)  
Suakin Project
- **Dr Nellie Phoca-Cosmetatou** (*Independent Scholar*)  
Human Evolution; Human Settlement and Subsistence across Southern Europe
- **Dr Ulla Rajala** (*Academy of Finland*)  
Crustumerium, Italy; Romanization of a Faliscan Town
- **Dr Keir Reeves** (*Monash University*)  
Heritage Tourism
- **Dr Manon Savard** (*University of Quebec at Rimouski*)  
Epipalaeolithic/Early Neolithic Subsistence Strategies in Southwest Asia
- **Dr Krish Seetah** (*University of Central Lancashire*)  
Osteoarchaeology
- **Dr Julia Shaw** (*Institute of Archaeology, University College London*)  
Archaeology of Indian Religions, especially Buddhism and Brahmanical Traditions
- **Dr Anna Stevens** (*Independent Scholar*)  
Amarna Project
- **Dr Marc Vander Linden** (*University of Leicester*)  
European Prehistory
- **Dr Lucy Walker** (*Independent Scholar*)  
Landscape Archaeology; Troina Project, Sicily
- **Dr Rong Wang** (*University of Fudan*)  
Archaeological Science, Restoration and Conservation of Cultural Relics, particularly Ancient Jade
- **Dr Hai Zhang** (*Beijing University*)  
Ancient Landscapes

## Postgraduate Students

### PhD Students (2012–2013)

- **Kelly Accetta** (*Division of Archaeology*)  
Thresholds of the God: Inscribed Doorways and the Creation of Sacred Space in Ancient Egypt
- **Craig Alexander** (*Division of Archaeology*)  
Neolithic Decisions: Central Mediterranean
- **Ruth Allen** (*Faculty of Classics*)  
Mythological Imagery on Engraved Roman Gemstones
- **Pablo Alonso González** (*Division of Archaeology*)  
Nation Building and Cultural Heritage in Cuba
- **Christopher Andrews** (*Division of Archaeology*)  
What Were the Human Responses to Climate Change During the Younger Dryas in Northwest Europe?
- **Daniela Arroyo Barrantes** (*Division of Archaeology*)  
Tell Majnuna: Pottery Production and Feasting at the Outset of Urbanism in Mesopotamia
- **Stephanie Aulsebrook** (*Division of Archaeology*)  
Political Strategies and Metal Vessels in Mycenaean Societies
- **Amy Bahé** (*Division of Archaeology*)  
Demotic Ostraca from Deir el Bahri in the British Museum
- **Marina Baralle** (*Division of Archaeology*)  
Functional Analysis of the Ceramics at the Site of Borgata, Northwestern Argentina
- **Jennifer Bates** (*Division of Archaeology*)  
Social Organization and Change in Bronze Age South Asia: a Multi-proxy Approach to Urbanization, Deurbanization and Village Life through Phytolith and Macrobotanical Analysis
- **Sebastian Becker** (*Division of Archaeology*)  
Traditions in the Making: a Study of Motifs and Design Strategies in Bird Representations of Bronze and Early Iron Age Europe
- **Monique Boddington** (*Division of Archaeology*)  
Truth and Archaeology: Justification in Archaeology
- **Kira Bonomo** (*Division of Archaeology*)  
Coastal Promontory Forts: the Vikings and Changing Land–Sea Boundaries
- **Kathryn Boulden** (*Division of Archaeology*)  
Investigating the Early Neolithic Agricultural Landscapes of Southern Britain Through Soil Micromorphology and Faunal Isotope Analysis
- **Christina Bouthillier** (*Division of Archaeology*)  
A 'Peripheral' Place in a 'Dark' Age: the Iron Age Ceramics of Cilicia
- **Megan Bowe** (*Division of Archaeology*)  
Making Place, Marketing Pasts: Tracing War Destruction and Reconstruction on the Urban Landscape in Lübeck and Rostock, Germany
- **Lauren Cadwallader** (*Division of Archaeology*)  
Investigating 2000 Years of Dietary Change in the Lower Ica Valley, Peru, Using an Isotopic Approach
- **Risa Carlson** (*Division of Archaeology*)  
Tracing the Shoreline Through Time in Alaska
- **Ben Cartwright** (*Division of Archaeology*)  
Weaving the World: Can 'Communities of Practice' Created by Spinning and Weaving Highlight the Intangible Nature of Identity Construction in Viking Age Atlantic Scotland
- **Giandaniele Castangia** (*Division of Archaeology*)  
Symbols and Landscapes: the Meaning of the Sardinian Nuraghi through Time and Space
- **Letizia Ceccarelli** (*Division of Archaeology*)  
The Sacred Space, Topography and Ritual of Sanctuaries of Latium in the Republican Period
- **Emma Chapman** (*Division of Archaeology*)  
Children and Child Burial in Medieval England
- **Sarah Clegg** (*Division of Archaeology*)  
Flexibility and Fluctuations: Capacity Systems in Early Mesopotamia
- **Elizabeth Cohen** (*Division of Archaeology*)  
In What Way Does the Use of Ottoman Heritage in Greece Help Our Understanding of Different Heritage and the Heritage of the 'Other'?
- **Franca Cole** (*Division of Archaeology*)  
Ritual in Practice: Funerary Ceramic Use as an Indicator of Identity in Neolithic and Metal Age North Borneo (1000 BC to AD 800)
- **Kate Connell** (*Division of Archaeology*)  
Lithic Representativeness of Cultural Change at Haua Fteah Cave, Libya
- **Jessica Cooney** (*Division of Archaeology*)  
The Child in the Cave: the Contribution of Non-adults to the Creation of Cave Art and Community in the Upper Palaeolithic
- **Eleri Cousins** (*Faculty of Classics*)  
Reconsidering Religion at Bath
- **Samantha Cox** (*Division of Archaeology*)  
Growth and Development of Sexual Dimorphism in the Pelvis





## Postgraduate Students (cont.)

- **Aaron Critch** (*Division of Archaeology*)  
Exchange, Authority, and Identity: Ring-money Production in the Viking Age Earldom of Orkney
- **Hannah Cutler** (*Division of Archaeology*)  
Neanderthal Landscapes in Britain: Spatial Coordinate Data of Bifacial Type-fossils
- **Matthew Dalton** (*Division of Archaeology*)  
The Materialisation of New Kingdom Egyptian Conceptions of Space in Domestic Living Surfaces at Amara West
- **Tessa de Roo** (*Division of Archaeology*)  
The Viking Sea from A to B: Charting the Nautical Routes from Scandinavia to the British Isles in the Early Viking Period
- **Bela Dimova** (*Division of Archaeology*)  
A Post-colonial View of Thrace (8th–4th Centuries BC): Exploring Difference and Identity Between Anthropology, Archaeology and the Classical World
- **Sarah Evans** (*Division of Archaeology*)  
Geometrically Engraved Bones in Upper Palaeolithic Western Europe: Socialising Material Engagement
- **Kathrin Felder** (*Division of Archaeology*)  
Girdle-hangers in 5th- and 6th-century England: an Archaeological Contribution to the Anthropological Perspective on Material Culture
- **Renate Fellingner** (*Division of Archaeology*)  
The Legal and Economic Independence of Women as Portrayed in Two Theban Archives from the Ptolemaic Period
- **Jennifer French** (*Division of Archaeology*)  
Populating the Paleolithic: a Palaeodemographic Analysis of Upper Palaeolithic Hunter-gatherer Populations in Southwest France
- **Lindsey Friedman** (*Division of Archaeology*)  
You are What You Eat: Changing Diet Over the Jomon–Yayoi Transition in West Japan
- **Pedro Goncalves** (*Division of Archaeology*)  
Holocene Landscape and Environmental Changes in the Capital Zone of Egypt
- **Tina Greenfield** (*Division of Archaeology*)  
Feeding Empires: the Political Economy of a Neo-Assyrian Provincial Capital Through the Analysis of Zooarchaeological Remains
- **Kathryn Hall** (*Division of Archaeology*)  
Landscape Change and the Mesolithic–Neolithic Transition in Southern England
- **Claire Halley** (*Division of Archaeology*)  
Building Chaco: Architecture, Performance and Culture Formation
- **Tiago Hermenegildo** (*Division of Archaeology*)  
Dietary Dynamic of Human Populations in the Amazon Basin Since the Holocene
- **Erell Hubert** (*Division of Archaeology*)  
Symbolic Objects in Moche Everyday Life and the Expansion of the Southern Moche State
- **Amna Jabeen** (*Division of Archaeology*)  
Constructing the Human Form in the Upper Palaeolithic Engravings from France
- **Penelope Jones** (*Division of Archaeology*)  
Shifting Rains and Failing Crop? An Isotopic Analysis of Climate Change, Crop Water Stress and Agricultural Resilience in the Greater Indus Region, 3000–1500 BC
- **Maikel Kuijpers** (*Division of Archaeology*)  
Early Bronze Age Metalworking Craftsmanship: an Inquiry into Metalworking Skill and Craft Based on Axes in the North-Alpine Region
- **Hyun Kyung Lee** (*Division of Archaeology*)  
The Post-conflict Response from the Republic of Korea (South Korea) to the Built Heritage of the Japanese Occupation
- **Minghao Lin** (*Division of Archaeology*)  
The Early Practice of Oxen Ploughing in China
- **Eduardo Machicado Murillo** (*Division of Archaeology*)  
Agricultural Intensification in the Amazon Basin: Drained Field Agriculture in the Huirico Settlement System, Llanos de Moxos – Bolivia
- **Patrizia Macri** (*Division of Archaeology*)  
Etrurian–Hellenic Cultural Contact in Basilicata
- **Sarah Musselwhite** (*Division of Archaeology*)  
Immigration in Late Egyptian History: a Bioarchaeological Approach
- **Skylar Neil** (*Division of Archaeology*)  
Physical and Ethnic Boundaries in Late Archaic Etruria
- **Sayantani Neogi** (*Division of Archaeology*)  
Geoarchaeology Investigations of Indus Settlements in the Plains of Northwestern India
- **Shawn O'Donnell** (*Division of Archaeology*)  
Prehistoric Subsistence and Human–Environment Interactions in Northern Island Southeast Asia using Plant Macro- and Microfossil Analyses
- **Ester Oras** (*Division of Archaeology*)  
Practices of Wealth Depositing in the 1st–9th Century AD Eastern Baltic
- **Russell Ó Riagáin** (*Division of Archaeology*)  
Colonialism, Continuity and Change: the Settlement Pattern in the Medieval Irish Sea Zone
- **Astrid van Oyen** (*Faculty of Classics*)  
Rethinking *terra sigillata*: an Archaeological Application of Actor-Network Theory
- **Danika Parikh** (*Division of Archaeology*)  
The Social Organization of the Indus Civilization through an Analysis of Ceramic Production and Distribution in Northwest India
- **Paul van Pelt** (*Division of Archaeology*)  
Soil Micromorphology, Geochemistry and Magnetic Susceptibility Studies at Sesebi, Kerma, Dokki Gel, Sai Island and Gebel Barkai
- **Georgina Peters** (*Division of Archaeology*)  
The Spatial Organization of Iron Age Hillforts in Britain
- **Van Pigtain** (*Division of Archaeology*)  
The Position of Greenlandic Norse within the Scandinavian North Atlantic Diaspora
- **Suzanne Pilaar Birch** (*Division of Archaeology*)  
The Fauna of Vela Špilja on the Island of Lošinj, Croatia: Taphonomy, Ecology, and Subsistence
- **Leanne Philpot** (*Division of Archaeology*)  
Understandings of Africa: Societal Influences on the Display and Interpretation of African Objects in the British Museum
- **Catalin Popa** (*Division of Archaeology*)  
Uncovering Group Identity in the Late Iron Age of South-east Europe
- **Elizabeth Pratt** (*Division of Archaeology*)  
“So, when exactly was prehistory...?": Investigating Local Perceptions, Engagement, and Attachment to Prehistoric Heritage in England
- **Amy Prendergast** (*Division of Archaeology*)  
A Palaeoclimatic Framework for the Early Human Occupation of North Africa: Isotopic Analysis of Molluscs
- **Hannah Price** (*Faculty of Classics*)  
The Roman Forum: a Conceptual History from Caesar to Mussolini
- **Natalia Przelomska** (*Division of Archaeology*)  
Flowering Time Genetics of Foxtail Millet (*Setaria italica*) and its Potential Impact of Food Security
- **Mauro Puddu** (*Faculty of Classics*)  
Beyond Romanization and Indigenization: Funerary Practices and Social Interpretation in 2nd-century BC to 3rd-century AD Sardinia
- **Rosalind Quick** (*Faculty of Classics*)  
Investigating Social and Cultural Change: a Contextual Analysis of Assemblages at Selected Sites in Roman Britain
- **Hazel Reade** (*Division of Archaeology*)  
A Palaeoclimatic Framework for the Early Human Occupation of North Africa: Oxygen Isotopic Analysis of Faunal Teeth
- **Wannaporn Rienjang** (*Division of Archaeology*)  
Relic Cult Practices in Gandhara: Investigating the Role of Relics in Ancient Pakistan and Afghanistan
- **Calum Robertson** (*Division of Archaeology*)  
Clan, Clanship and the ‘Forgotten’ Diaspora: the Creation of Identities In and Around the Clan Museums and Centres of Scotland



## Postgraduate Students (cont.)

- **Jane Sanford** (*Division of Archaeology*)  
Shipping Sheep – A Zooarchaeology of Greek Colonisation
- **Mark Sapwell** (*Division of Archaeology*)  
Changing Pictures: Examining the Active Role of Art in the Changing Ideas of Late Mesolithic to Early Bronze Age Peoples of North Europe
- **Nicholas Soderberg** (*Faculty of Classics*)  
The Emergence of Cretan Palatial Society: an Architectural Perspective
- **Yingwen Tao** (*Division of Archaeology*)  
Assessing 'Cultural Landscape' in the Chinese Context: Modernity, Multivocality and Minority Heritage Designation in Guizhou
- **Ana Tavares** (*Division of Archaeology*)  
State, Individual, and Society: an Architectural Perspective on Early Interactions with Particular Reference to the Planned Settlements of Heit el-Ghurab and Khentkawes at Giza, Egypt
- **Helen Taylor** (*Division of Archaeology*)  
Investigating Socio-economic Transformations in Highland Southwest Iran During the 5th Millennium BC: the Stein Collection in the British Museum
- **Sean Taylor** (*Division of Archaeology*)  
Prehistoric Landscape Change on a Cycladic Island: the Late Quarternary Soil Record and Terrace Systems
- **Christos Tsirogiannis** (*Division of Archaeology*)  
Unravelling the Hidden Market of Illicit Antiquities: the Robin Symes-Christos Michaelides Network and its International Implications
- **Olga Igorevna Vinnivhenko** (*Division of Archaeology*)  
The Influence of Aramaic on Neo-Assyrian
- **Dominic Walker** (*Division of Archaeology*)  
The Socio-political Museum: Collaboration, Transdisciplinarity and Public Engagement
- **Rosalind Wallduck** (*Division of Archaeology*)  
Mesolithic and Mesolithic–Neolithic Social Continuity and Change in the Iron Gates
- **Brittany Walsh** (*Division of Archaeology*)  
Birds as Proxies for Environmental Change in the Late Quaternary of North Africa: the Avifauna from the Haua Fteah Cave (Cyrenaica, Libya)
- **Yiru Wang** (*Division of Archaeology*)  
The Origins of Domestic Sheep and Goats in China

- **George Watson** (*Faculty of Classics*)  
Die and Coin Production Systems in Southern Asia Minor, AD 193–276
- **Andrew Woods** (*Division of Archaeology*)  
Currency of the Ostmen: Money and Economy in Viking-Age Ireland
- **Guohua Yang** (*Division of Archaeology*)  
The Changing Attitudes and Approaches to the Uses and Development of Chinese Heritage
- **Yijie Zhuang** (*Division of Archaeology*)  
Geoarchaeological Investigation of Pre-Yangshao Agriculture, Ecological Diversity and Landscape Change in North China

## MPhil Students (2012–2013)

- **Ting An** (*Division of Archaeology*)  
London's Chinatown: Whose Heritage?
- **Eve Avdoulos** (*Division of Archaeology*)  
Approaches to Managing 'Sacred' Places: Hagia Sophia and the Blue Mosque in Istanbul, Turkey
- **Nicola Bennett** (*Division of Archaeology*)  
Defining the Link between Non-metric Traits and Variations in Stature and Bone Robusticity: an Osteoarchaeological Investigation of an Anglo-Saxon and Medieval Assemblage
- **Ava Childers** (*Division of Archaeology*)  
Moving Forward—The Legacy of Troy's Gold 1966–2012: a Precedent Left Behind?
- **Harrison Childs** (*Division of Archaeology*)  
The Economics of Third Intermediate Period and Late Period Egyptian Metal Statuary
- **Roeland Decorte** (*Faculty of Classics*)  
Rethinking the Minoan Order
- **Ningning Dong** (*Division of Archaeology*)  
Exploring Animal Husbandry at Iron Age Danebury: an Oxygen Isotope Analysis in Animal Teeth
- **Hannah Eastham** (*Division of Archaeology*)  
The 'View' of Heritage: Looking at Both Sides of a Wall at Herculaneum
- **Hilary Grant** (*Division of Archaeology*)  
Guardians and Gatekeepers: Mecca Meets the British Museum
- **James Halladay** (*Faculty of Classics*)  
Political Painters? Readings of Peisistratid 'Propaganda' in Archaic Attic Vases
- **Ben Hinson** (*Division of Archaeology*)  
Thothrekh and Isenkebe: Two Case Studies for Perceptions of Early Childhood in Late Pharaonic Egypt
- **Zenobia Homan** (*Division of Archaeology*)  
Comparative Palaeography of Nuzi, Aššur and Nippur in the 14th–13th Centuries BCE
- **Daniel Hunt** (*Division of Archaeology*)  
A Microscopic Use-wear Analysis of Indus Seals
- **Barbora Janulikova** (*Division of Archaeology*)  
Social Complexity in Early Egypt: Statistical Analysis of the Early Dynastic Cemetery of Turah
- **Mannat Johal** (*Division of Archaeology*)  
Evaluating Continuity and Disjuncture in Gandhara's (Pakistan) 6th–7th Century CE Landscape
- **Cynthia Larbey** (*Division of Archaeology*)  
Towards a Quantification and Spatial Analysis of Parenchyma Plant Remains
- **Piers Litherland** (*Division of Archaeology*)  
Landscape and Human Activity in the Valley of the Kings: Geology, Construction Techniques and their Implications in the XVIIIth Dynasty
- **Sabrina Papazian** (*Division of Archaeology*)  
Tourism at Erebuni: the Neglected 'Birthplace' of Yerevan, Armenia
- **Mojdeh Pourhamzeh** (*Division of Archaeology*)  
A Study of Tablet I of Babylonian Poem of the Righteous Sufferer
- **Melissa Sharp** (*Division of Archaeology*)  
Socio-functional Implications of Ceramic Spatial Distribution: Mitanni Pottery from Domestic Contexts at Tell Brak, North-east Syria (2nd millennium BC)
- **Dilpreet Singh** (*Division of Archaeology*)  
Group Dynamics and Factional Motivations in the Construction of Aksumite Stelae
- **Charles Sturge** (*Faculty of Classics*)  
Inter-site Relations and Political Structure of the Plain of Argos in the Late Bronze Age
- **Marianne Tames-Demauros** (*Division of Archaeology*)  
Representations of Landscapes in Egyptian Mortuary Contexts: Changing Environmental Awareness Through Time?
- **Yiyun Tan** (*Division of Archaeology*)  
Reframe Guqin and Its Music as Heritage in the Chinese Context
- **Ligia Trombetta Lima** (*Division of Archaeology*)  
Adaptation of Foxtail Millet (*Setaria italica*) to New Environments: a Genetic Study of an Ancient Crop
- **Bastiaan van Dalen** (*Division of Archaeology*)  
The Classic Maya: Visibility of Art and Ideology at Maya Plazas
- **Kimberley Watt** (*Division of Archaeology*)  
Institutional Architecture in Amarna





## Material Culture Laboratory

JOHN ROBB & ELIZABETH DEMARRAIS

The Material Culture Laboratory provides postgraduates, postdoctoral researchers, and staff a base for research on material culture and serves as a forum for theoretical discussions concerning all aspects of the material world. The laboratory had a busy schedule of meetings, guest lectures and discussion groups during the 2012–2013 year. Bi-weekly meetings, held every other Friday during term, involve presentations by lab members in an informal setting, allowing time for discussion and feedback. PhD students and postgraduates shared their research on topics ranging from Iron Age colonial encounters in Bulgaria to Iroquois mortuary practices in North America. Other topics of interest included art, cognition, social landscapes, technology, identity and heritage.

During 2012–2013 PhD students and postgraduates involved in the lab's activities included Sebastian Becker (bi-weekly meeting members' talks), John Creese, Astrid van Oyen and Ben Cartwright (Thinking About Things (TAT) discussion group), Ester Oras (Monday afternoon special events) and Danika Parikh (who created a webpage for the lab).

The TAT discussion group is an ongoing forum for discussion of recent theoretical perspectives on material culture. Readings are drawn from a range of disciplines including art history, material culture studies, architecture and anthropology.

Special events during the year included seminars by Dr Kostalena Michelaki (University of Arizona), Dr Helen Geake (Portable Antiquities Scheme) and Dr Marie Louise Stig Sørensen (Archaeology).

In May 2013 the lab organized a workshop at the McDonald Institute, welcoming colleagues from other faculties within the University engaged in thinking about material culture. The aim was to compare and contrast ideas and approaches to material culture across different disciplines. Short presentations from researchers in English (Jason Scott-Warren speaking on texts as material culture), History (Ulinka Rublack speaking on what historians can learn from experiments with Early Modern costume), Classics (Robin Osborne speaking upon the materiality of Classical art) and Archaeology (Elizabeth DeMarrais speaking upon crafting activity and social process) pointed to a range of shared investigative strategies, but also some distinct starting points and research objectives. The success of this event has inspired us to plan a follow-up workshop in Michaelmas term, as well as to invite some of the original guests back for further debate.



SHEILA KOHRING



SHEILA KOHRING



SHEILA KOHRING

*Architecture (megalithic tomb, Brittany, France), technology (Bell Beakers, Britain) and art (rock art, Mississippi Valley) are all topics studied by members of the Material Culture laboratory.*





GUILLAUME ROBIN

*John Robb using XRF equipment to analyse areas of a rock-cut collective tomb in Sardinia in order to determine whether the surfaces were originally painted.*

Two years after its opening, the Material Culture Laboratory is becoming established as a venue for discussion and collaboration among like-minded researchers and students. Allocated desk space, as well as hot-desking, provides a location in the Division for students and researchers. Access to computer hardware and software, photography equipment, digital microscopes, and a library of core texts on material culture are also available to support research.

One piece of equipment that laboratory members made good use of was the recently purchased X-ray fluorescent analyser (XRF) machine. This piece of equipment has the capability to quantify and qualify nearly any element from magnesium to uranium. With training from Louise Butterworth, Research Technician in the George Pitt-Rivers Laboratory, researchers used the XRF machine to analyse the chemical composition of many different types of material culture including bronze sculptures from Britain, stone axes from Australia, Late Neolithic rock art in prehistoric tombs in Sardinia, and Viking Age silver in Scotland. Determining the chemical composition of artefacts can answer many questions such as where the artefacts or their source materials were originally from, and how they compare with other similar artefacts from other areas. In the case of rock art it can also be used to identify areas which were once painted but now the pigment is

invisible or poorly visible to the naked eye. This new equipment opens up exciting opportunities for future research on material culture.

*The following funding sources are gratefully acknowledged: AHRC, Division of Archaeology, European Commission (EC FP7), Gates Cambridge Trust, McDonald Institute for Archaeological Research, Social Sciences and Humanities Research Council of Canada, SRIF (Strategic Research Infrastructure Fund), Wellcome Trust.*

#### STAFF

Dr Elizabeth DeMarrais (*Laboratory Co-Director*)  
 Dr John Robb (*Laboratory Co-Director*)  
 Dr Sheila Kohring (*Laboratory Manager*)

#### Postdoctoral Researchers

Dr Michael Boyd  
 Dr John Creese  
 Dr Isabelle Vella Gregory  
 Dr Guillaume Robin  
 Dr Rune Nyord  
 Dr Alice Samson

#### PhD Students

Sebastian Becker	Eduardo Machicado Murillo
Ben Cartwright	Ester Oras
Jessica Cooney	Danika Parikh
Aaron Critch	Catalin Popa
Bela Dimova	Mark Sapwell
Kathrin Felder	Helen Taylor
Erell Hubert	Astrid van Oyen





## Grahame Clark Zooarchaeology Laboratory

PRESTON MIRACLE

The Grahame Clark Laboratory witnessed major achievements, but also losses during the academic year of 2012–2013. Included in the achievements are: Suzanne Pillaar-Birch who was awarded her PhD for her dissertation 'Human Adaptations to Climate Change and Sea Level Rise at the Pleistocene–Holocene Transition in the Northeastern Adriatic' and took up a postdoctoral position at Brown University in January 2013; Christopher Stimpson who was appointed to a postdoctoral position at Oxford University, and Katherine Boyle who was elected Fellow at Homerton College. The loss was the premature death of Professor Anthony 'Tony' Legge, Senior Research Fellow in the McDonald Institute, on 4 February 2013. Tony made huge and lasting contributions to the development of archaeology during the last half century; his impact on the shaping and professionalization of zooarchaeology was particularly significant. The Grahame Clark Laboratory for Zooarchaeology had the particular privilege and pleasure of enjoying on a daily basis Tony's company, knowledge, wit, humour and humanity during the last nine years of his life. We miss him dearly.

Preston Miracle continued with ongoing projects in Bosnia and Croatia. Although there was no digging at Rastuša Cave (Bosnia), geoarchaeological work was carried out in November 2012 by Dr Giovanni Boschian (University of Pisa) and Katarina Gerometta (PhD student, Zagreb University), while a detailed map of the cave was made by David Bandi (Trieste). Preston made a preliminary sort of the faunal remains in Banja Luka in November, and continued with detailed analyses in Zagreb in November and December. In Croatia he returned for post-excavation work at Vela Spila (Korčula Island, Croatia) in September 2013, while his



*Planning and sampling at Žukovica Cave, Korčula Island, Croatia.*

PRESTON MIRACLE



*Jessica Rippengal teaching section drawing to sixth-formers in Saffron Walden.*

MUSEUM OF SAFFRON WALDEN

team tested the small cave of 'Žukovica' on the northern coast of the island. 'Žukovica' has produced to date a very interesting sequence of Neolithic and Mesolithic layers, and the deposits continue deeper. The site promises to provide a very interesting comparison to Vela Spila, and we will continue work at the site in 2013–2014.

Jessica Rippengal resumed her fieldwork with Access Cambridge Archaeology in May and supervised on two excavations within the outer bailey at Clare Castle, Suffolk, with Managing a Masterpiece using volunteers and one in Saffron Walden with sixth formers as part of a project with the local museum to learn more about the castle there.

Ryan Rabett continued with work at Tràng An, Vietnam, including preparation of a bid for World Heritage status under UNESCO in 2013 (see p. 29). Ryan also co-led (with Dr Nellie Phoca-Cosmetatou) a preliminary fieldwork season summer 2013 in Kefalonia, Greece. This project is examining the extent and nature of the Palaeolithic occupation of the island, and the team includes Dr Sacha Jones (McDonald Institute), Dr Pierluigi Pieruccini (University of Siena), Professor Dimitris Papanikolaou and Professor Maria Triantaphyllou. Results from the 2013 season go a substantial way to confirming the heretofore supposed Middle Palaeolithic occupation of the island.



*Ryan Rabett, Sacha Jones and Pierluigi Pieruccini examining lithic artefacts at Mouna, on the southern coast of Kefalonia.*

NELLIE PHOCA-COSMETATOU



Christopher Stimpson had a short-term postdoctoral position analysing vertebrate fauna recovered by the Trảng An Archaeological project, returned to the Sarawak Museum (Borneo) to conduct knowledge transfer and training activities (a project funded by the Higher Education Innovation Fund), and then took up a two-year postdoctoral project in Oxford (Palaeodeserts Project). He also covered much of the zooarchaeology teaching while Preston Miracle was on sabbatical leave in Michaelmas 2012. David Orton finished his work with James Barrett on the medieval fish trade, and took up a postdoctoral post early in 2013 at University College London working on Marc Vander Linden's EUROFARM project. We wish both of them the best of luck for the future!

Lidia Colominas Barberà has started ancient DNA analyses on cattle metacarpals from the Roman city of Empúries (Catalonia) under the supervision of Dr Mim Bower (see p. 36). In September 2013, she co-organized a Scientific Meeting in León (Spain) on the topic 'The Romanization in the Iberian Peninsula: a Zooarchaeological Perspective', and she has published a substantial monograph with British Archaeological Reports based on her dissertation.

Vida Rajkovača (Zooarchaeologist, CAU), in addition to her usual commercial faunal work for the CAU, worked on large-scale excavations at the North West Cambridge Site (see p. 4). Excavation results document prehistoric and Romano-British occupation, while her work on the animal bone assemblages provides a new picture of a Roman rural settlement on the outskirts of Cambridge. She was also involved in analysing faunal remains from Carenza Lewis' Access Cambridge Archaeology excavations. In March 2013 she attended the Professional Zooarchaeology Group's meeting in Salisbury, and in April 2013 she presented the paper 'Heritagescapes' (based on a 'Cultural Heritage and the Reconstruction of Identities after Conflict' case study from Bosnia) at the annual 'Heritage' conference in Cambridge.

We offer hearty congratulations to Rosalind Wallduck who submitted her PhD dissertation in October 2013 on the taphonomic analysis of Mesolithic and Neolithic postmortem body manipulation in the Danube Gorges, Serbia.

Tina Greenfield (4th year, PhD) is in the final phases of writing her PhD dissertation 'Feeding Empires: the Political Economy of a Neo-Assyrian Provincial Capital Through the Analysis of Zooarchaeological Remains'. This past year she also worked at Ziyaret Tepe (Turkey) and Tell es-Safi (Israel), and travelled to the autonomous region of Kurdistan in northeastern Iraq to analyse faunal remains from Qalaat Lokan (Rowanduz area) and Gird-i Dasht (Soran area). She also coordinated a Bioarchaeology workshop and zooarchaeology in Erbil, Kurdistan as part of a new initiative between Boston University, the US State Department and the University of Mosul. In December 2012 she helped organize the conference 'The Provincial Archaeology of the

*Yiru Wang  
working on  
archaeological  
materials from  
Qinghai.*



Assyrian Empire' (Cambridge), and she presented papers at conferences in Cambridge (UK), Chicago (USA) and Haifa (Israel). Brittany Walsh returned from maternity leave in January 2013 and immediately presented a collaborative 'Fauna of Haua Fteah' poster at the 'Unravelling Human Origins Conference' in Cambridge. Since then she has been sorting through the faunal material from Haua Fteah Cave, Libya under the TRANS-NAP Project, and identifying bird remains from the site. Minghao Lin is starting his third year of PhD research on the use of cattle as draft animals in Chinese (pre)history; he studied modern and archaeological cattle remains from many sites in northern China in the summer of 2013. Yiru Wang (3rd year PhD) has continued her research on the domestication of sheep and goats in western China. She has developed morphological criteria for distinguishing between closely related wild caprine species through work on modern skeletons curated at the National Museum of Natural History in Paris, the Staatssammlung für Anthropologie und Paläoanatomie München (SAPM), and Museum für Naturkunde Berlin. She applied these results to archaeological materials from sites near Qinghai, China in the summer of 2013, and her preliminary results indicate that the process of sheep domestication c. 4000 BP in Qinghai may have involved local wild argali sheep (*Ovis ammon*) as well as already domesticated sheep imported from regions to the west.

*The following funding sources are gratefully acknowledged: British Academy, Cambridge Overseas Trust, Clare Hall, Downing College Travel Fund, European Commission (EC FP7), European Research Council, Gates Cambridge Trust, Leverhulme Trust, Margaret Munn-Rankin Fund, McDonald Institute for Archaeological Research, Social Sciences and Humanities Research Council of Canada (SSHRC), St John's College, Trinity Hall, Wenner-Gren Foundation.*

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Jessica Rippengal (*Zooarchaeology and Chief Technician*)

#### Postdoctoral Researchers

Dr Jo Appleby	Dr Ryan Rabett
Dr Katherine Boyle	Vida Rajkovača
Natasha Dodwell	Dr V. Pía Spry-Marqués
Prof. Tony Legge*	Dr Christopher Stimpson
Dr David Orton	

#### PhD Research Students

Ningning Dong	Minghao Lin	Rosalind Wallduck
Paul Ewonus	Van Pigtain	Brittany Walsh
Tina Greenfield	Suzanne Pilaar-Birch	Yiru Wang





## George Pitt-Rivers Bioarchaeology Laboratory

MARTIN JONES

The laboratory continues to support research into early food, economic plants, and the environmental context of human subsistence. Current research draws on macrofossils and microfossils, and includes growing numbers of multiproxy analyses requiring close liaison with the other laboratories. We continue to conduct archaeobotanical research in many time periods in many parts of the world.

In Europe, our research spans from the Palaeolithic to the Viking Age. David Beresford-Jones, Alex Pryor and Cynthia Larbey are examining Palaeolithic macrofossils, with a particular interest in the roots and tubers emerging as a significant part of Palaeolithic subsistence. We have been augmenting the reference collections for these resources, and assembling a photographic data base. Work on the Upper Palaeolithic site of Dolní Věstonice II has produced new insights into plant use by ancient hunter-gatherer communities. Alex also attended excavations run by Dr Philip Nigst at the Epigravettian site of Korman V this summer, using floatation to recover a new assemblage of charred remains from a hearth and associated cultural layer at this site.

Moving forward to historic Europe, Robyn Veal, Anne de Vareilles and Rachel Ballantyne have undertaken Roman and medieval research. Robyn's research is described on page 38. Anne's work has been in



PENNY JONES

*Penny Jones at Rakhigarhi, an Indus civilization urban settlement in northwestern India.*

conjunction with the extensive rescue excavations of the Cambridge Archaeological Unit (see pp. 4–5). Rachel has concluded the project 'Ecological Correlates of Viking Age State Formation'. Analyses of charred plant macrofossils and charcoal at The Brough of Deerness, Orkney and Avaldsnes, Norway are now in preparation for publication, with complimentary phytolith and stable isotopic analyses undertaken in the George Pitt-Rivers and Dorothy Garrod laboratories by Alice Williams and Emma Lightfoot. This research has generated important botanical data sets that address the emergence of Viking Age centres of power in the North Sea region. Rachel has also continued Roman archaeobotanical investigations for the Portus Project, Italy, in collaboration with Evi Margaritis, Robyn Veal and Martin Jones, and Thwing, North Yorkshire, in collaboration with Martin Millett.

In South Asia, our research has largely been conducted in the context of Dr C.A. Petrie and Dr R.N. Singh's *Land, Water, Settlement Project*. Jennifer Bates has been exploring plant macrofossils and phytoliths from Indus civilization villages. Funding from NERC for 20 radiocarbon dates was obtained in order to date charred rice, millets and tropical pulses from the earliest levels of two of the sites. Banana phytoliths were also found, adding to growing phytolith evidence for Indus banana exploitation. She is joined on the project by new lab member Penny Jones, who is relating the growing body of agrarian



*Shawn O'Donnell and colleagues coring for pollen on Palawan Island, Philippines.*





GIEDRE MOTUZAITĖ MATUZEVICIUTE

*Catherine Kneale, Xinyi Liu and Martin Jones discussing flotation strategies, on site in Inner Mongolia.*

evidence to patterns of climate, as revealed through stable isotopes. Thanks to the cooperation of our colleagues in Asia and America, she has assembled an important corpus of grain material for analysis.

Further to the east, in Southeast Asia, Shawn O'Donnell has conducted two months' palaeoecological sampling and botanical survey on Palawan Island at Ille Cave on a project co-directed by Cambridge alumni Dr Victor Paz (University of the Philippines, Diliman) and Dr Helen Lewis (University College Dublin); and in the Kelabit Highlands, Sarawak, Malaysian Borneo on sites associated with the Cultured Rainforest Project (2007–9).

In central Asia and China, Xinyi Liu and Giedre Motuzaitė Matuzevičiute (FOGLIP and PPAC projects, see p. 28) have conducted flotation in Kyrgyzstan, Kazakhstan, Inner Mongolia and Tibet, to collect archaeological plant remains in order to better understand the earliest episodes of food globalization.

As well as managing this wide range of activities in the lab, Louise Butterworth continued the curation of our herbarium and seed reference collections, so that they encompass world economic plants in addition to the current strengths in cereals and northwest European flora.

*The following funding sources are gratefully acknowledged: AHRC, Avaldsnes Royal Manor Project, British Academy, Darwin College Cambridge, Dorothy Garrod Trust, ERC, Evans Fund, Leverhulme Trust, McDonald Institute for Archaeological Research, NERC, Newton Trust, R&E Bennet Scholarship Fund, Ridgeway Venn Fund, Smuts Fund, University of Oslo.*

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Louise Butterworth (*Research Technician*)  
Anne de Vareilles (*Cambridge Archaeological Unit*)

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Dr David Beresford-Jones  
Dr Xinyi Liu  
Dr Giedre Motuzaitė Matuzevičiute  
Dr Alex Pryor  
Dr Robyn Veal

#### PhD Research Students

Jennifer Bates  
Kate Connell  
Penny Jones  
Shawn O'Donnell

#### MPhil Research Student

Cynthia Larbey

#### Research Assistant

Alice Williams



*Banana phytolith from Burj, a village site in northwest India (scale = 10 µm). Phytoliths are the silica remains of plants after they have decayed.*





## Glyn Daniel Laboratory for Archaeogenetics

MARTIN JONES

The main focus of research in the archaeogenetics laboratory is on questions relating to the origins and spread of agriculture in the human past. Laboratory members are working on these topics through a variety of projects which involve many inter-institutional and inter-disciplinary collaborations.

Martin Jones, Harriet Hunt, Diane Lister and Catherine Kneale, together with laboratory visitors and project students, are undertaking the genetic research that is a major strand of the Food Globalization in Prehistory project (see p. 28), aiming to elucidate the routes and causal mechanisms that drove the spread of cereal crops across Eurasia.

This year Dr Hunt significantly advanced our work on foxtail millet, through our collaborations with Unilever (and collaborative support of the PhD research of Natalia Przelomska) and with NIAB (National Institute of Agricultural Botany). Dr Lister has taken forward studies of barley and wheat, and the interface between genetic studies and the archaeobotanical record, which is proving to be of particular interest in relation to the naked grained versions of each cereal, assisted in the case of wheat by Anubha Pathak's visit to the lab.

Historic DNA studies have progressed, with Dr Lister demonstrating the successful use of the KASP SNP genotyping platform on grains up to 200 years in age. This is a significant step forward in the accurate typing of SNPs in non-viable material.

Through working with graduate and undergraduate students, we were able to deepen our analysis of foxtail millet (Ligia Trombetta-Lima), extend our crop archaeogenetics studies to buckwheat (Mary Price) and taro (Ligia Trombetta-Lima) all supervised by Dr Hunt.

Alongside our work on crops, Dr Mim Bower's group including Lidia Colominas-Barberà and Visiting Scholar Raquel Matoso-Silva continues their important archaeogenetic research into domestic animals including cattle (see p. 36) and Thoroughbred horses (see p. 40).

The lab has hosted visiting scholars from around the world for collaborative research projects. Dr Hongen Jiang (Graduate University of the Chinese Academy of Sciences, Beijing) visited for six months funded by a Gerda Henkel Stiftung award. He worked with Drs Hunt and Lister on genotyping cereals from



DIANE LISTER



DIANE LISTER



DIANE LISTER

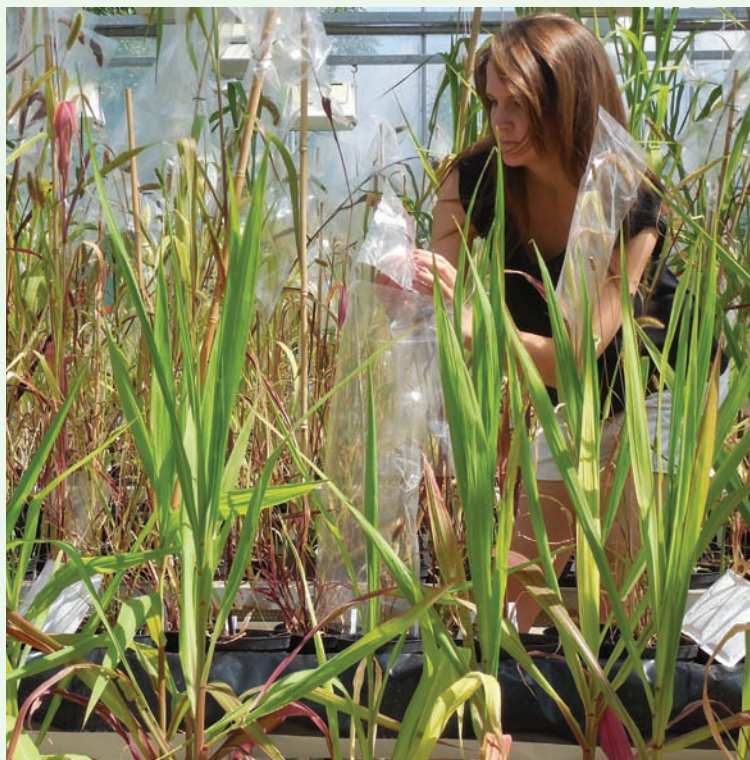
*Ethnic Tibetan women, near Xiahe, Gansu Province, China: (top) winnowing and (middle) bagging up naked barley, and (bottom) making haystacks after the barley harvest. Naked barley is an important staple throughout the Tibetan Plateau.*





NATALIA PRZELOMSKA

*A snapshot of flowering stalk diversity in Eurasian foxtail millets.*



NATALIA PRZELOMSKA

*Cambridge-Unilever PhD student Natalia Przelomska working with foxtail millet landraces in the greenhouse.*

cemetery sites in Xinjiang up to 4000 years old. Dr Elena Malinovskaya (Kuban Experimental Station, Vavilov Research Institute, Russia) visited for three weeks funded by a Royal Society International Joint Projects award. She worked with Dr Hunt and Natalia Przelomska on setting up experimental work on flowering time as an adaptive trait in foxtail millet, using samples from five germplasm banks, including the Vavilov collections. Anubha Pathak (Banaras Hindu University, Varanasi), worked with Dr Lister on the relationship between spherical-grained free-threshing wheats found in India today and in the archaeobotanical record in China, using both genetic and archaeobotanical methodologies.

*The following funding sources are gratefully acknowledged: BBSRC (Biotechnology and Biological Sciences Research Council), China Scholarship Council, European Research Council (ERC), Gerda Heckel Foundation, Isaac Newton Trust, Royal Society, Spanish National Research Council (CSIC), Unilever.*

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Dr Harriet Hunt (*Assistant Director*)  
Catherine Kneale (*Research Technician*)

#### Postdoctoral Researchers

Dr Mim Bower  
Dr Diane Lister

#### PhD Research Student

Natalia Przelomska

#### MPhil Research Student

Ligia Trombetta-Lima

#### Affiliated Researcher

Lidia Colominas-Barberà

#### Visiting Scholars

Dr Hongen Jiang (*Chinese Academy of Sciences, Beijing*)  
Elena Malinovskaya (*Vavilov Research Institute, Russia*)  
Raquel Matoso-Silva (*University of Lisbon*)  
Anubha Pathak (*Banaras Hindu University, Varanasi*)



## Dorothy Garrod Isotope Laboratory

TAMSIN O'CONNELL

Year by year, the breadth of research undertaken in the Dorothy Garrod Isotope Laboratory continues to grow, with projects across Europe, North Africa, Central Asia and South America, spanning from the Palaeolithic to the medieval period.

In the second year of her project on interactions of nomadic-pastoralists and farmers in early medieval Hungary, Susanne Hakenbeck enjoyed productive research trips to Budapest to collect bone and tooth samples. She has developed her research on migration in the early medieval period through a collaboration with colleagues at the University of Padua. Maurizio Marinato, a PhD student at Padua, visited the lab in April and May to undertake isotope analysis on a group of late antique and Lombard cemeteries in northern Italy. Suzanne organized a very successful two-day interdisciplinary conference on the 'End of Empire: Life on the Frontiers of Imperial Polities' in December 2012.

Across the Mediterranean, a number of collaborations have seen members of the lab working on the diet of Neolithic and Bronze Age humans in Malta, Sardinia and Italy (Tamsin, Louise Butterworth, Dr Luca Lai and Dr Maryanne Tafuri, in collaborations with Drs Simon Stoddart and John Robb). Several lab projects focus on trade and exchange: a characterization of foods at the Imperial Roman port of Portus (under the auspices of the Portus Project, led by Prof. Simon Keay at Southampton), as well as medieval cod-trading patterns across the

North Sea (with Dr James Barrett and Dr David Orton) and the origins of cereals at the medieval Norwegian site of Avaldnes (Dr Emma Lightfoot with Dr James Barrett and Dr Rachel Ballantyne).

Work across Asia has continued through the research of Xinyi Liu, Emma Lightfoot and Giedre Motuzaitė Matuzevičiūtė. Xinyi has been comparing the isotopic signals in human and plant remains across China, focused towards the question of when Fertile Crescent crops were first adopted in east and central Asia, and why? Through analyses of animal and human remains, Emma has been exploring the impact of climate on the spread of crops across Eurasia in prehistory. Giedre has worked on human skeletal material from Kyrgyzstan, Kazakhstan and Altai (Russia), with the aim of exploring the dietary transition from Neolithic fishers to Bronze Age pastoralists in the prehistoric societies of Central Asia.

In Africa, research has been focused on two projects centred in Libya. Amy Prendergast and Hazel Reade finished the isotopic component of the Haua Fteah Project led by Graeme Barker, developing long-term local climate records of the site based on mollusc shells and animal teeth. Ronika Power has been working as part of the Trans-Sahara project, headed by Prof. David Mattingley at the University of Leicester, together with Dr Marta Lahr of the Leverhulme Centre for Human Evolutionary Studies, and Dr Tamsin O'Connell. Over the last year, Ronika has successfully characterized the carbon and oxygen isotope profiles of the Garamantes, a civilization in the central Libyan Sahara (1000 BC–AD 1500), and is now in the process of combining isotopic analyses and osteological data from the Garamantes and several comparative populations from Nubia and Egypt. Fieldwork has taken her from the depths of the basement of the Natural History Museum in London to the wilds of the Turkana Basin in Kenya.

Studies in South America ranged from the coastal plains of Peru to the Amazonian Basin. Lauren Cadwallader has begun examining the viability of reconstructing past climate reconstruction using oxygen isotopes of individual tree rings from the huarango tree (*Prosopis limensis*), a keystone species of the Peruvian south coast which was once abundant in the region. After fieldwork in Peru and lab work in the Department of Plant Sciences, the initial results are promising. Trisha Biers has combined osteology with isotopic analyses, in her study of the Moche period human remains from the pyramid of Dos Cabezas in northern Peru. These individuals were part of a warrior-cult but appear to also have been eunuchs suggesting a dual identity in the Moche royal court. Both Trisha and Tiago Hermenegildo continue research into prehistoric Amazonian diet. In a region where preservation of all organic remains can be very



Dr Ronika Power microscribing an ancient Egyptian skull in the Duckworth Collection, Cambridge.

RONIKA POWER



poor, isotopic data are giving clear indication of a wide variation in plant resource use by humans.

Focusing on the science underpinning isotopic analyses, Tamsin O'Connell has continued to work on the isotopic link between diet and the body. In a shift from humans this time, she is working on controlled-feeding studies of rescued chimpanzees, in collaboration with Dr Caroline Phillips of Witswatersrand University, South Africa, and the Fundacion Mona in Girona, Spain. The exciting fieldwork is complete, and now the hard work of lots of faecal analyses follows! Alex Pryor has continued to work on analysis of errors introduced by calibration of isotopic data, in collaboration with Prof. John Lister from the Department of Applied Maths and Theoretical Physics in Cambridge, culminating in the development of an online error-calculation programme. Helen Chappell is developing computational models of the stability of the metals strontium, uranium and thorium in the biominerals hydroxyapatite, calcite and aragonite. The aim is to understand the effects of the burial environment on chemical signals within archaeological bone, teeth and shells, with significant implications for isotopic studies of migration and uranium-series dating.

This has been another year of global dissemination of our research, with lab members presenting their work at conferences, seminars and workshops in the UK, USA, Germany, Greece, Jordan, China and India, including the UK Archaeological Sciences in Cardiff, the World Archaeology Congress, Jordan, the PAGES young scientists' meeting in Goa, the International Sclerochronology Conference in Bangor, Wales, the Medieval Congress in Kalamazoo, Michigan, the 2013 Anglo-American Conference of Historians on Food in History, and the Croatia at the Crossroads conference in London. Lab members continued their outreach work in multiple ways, through exhibits for Science Day and the Festival of Ideas, and guided outreach visits for the Sutton Trust and other charities.

On top of the research successes, it has been a great year of personal and professional achievement for lab members. Three PhD students, Lauren Cadwallader, Hazel Reade and Amy Prendergast, submitted their theses. After their vivas, Lauren and Hazel took up postdoctoral positions in Cambridge and the University of Cantabria respectively. Amy's viva is in October, and in 2014 she will move to the Johannes Gutenberg University Mainz, Germany, to take up a Humboldt Research Fellowship. Helen Chappell will continue as a lab associate when she moves to take up a MRC Career Development Fellowship in the Biominerals Group, MRC HNR Cambridge, in November 2014. Giedre Motuzaitė Matuzevičiūtė has moved to a postdoctoral fellowship in Vilnius University at the Department of Archaeology,



LAUREN CADWALLADER

#### *Huarango sampling in San Pedro (Ica Valley).*

working on the steppe route of the spread of agriculture across Eurasia. Xinyi Liu was appointed as an Assistant Professor at Washington University in St Louis, beginning in autumn 2014. Susanne Hakenbeck is changing roles, but happily not leaving the lab, as she has been appointed Lecturer in Historical Archaeology here in the Department of Archaeology and Anthropology.

*The following funding sources are gratefully acknowledged: AHRC, Brazilian Government, Conchological Society for Great Britain and Ireland, Darwin College, European Commission (EC FP7), European Research Council, Gates Cambridge Trust, Leverhulme Trust, McDonald Institute for Archaeological Research, NERC, Newton Trust, Past Global Changes-International Geosphere-Biosphere Programme, Quaternary Research Association, Rae & Edith Bennett Travelling Scholarship Fund, Royal Society, Santander Universities Travel Fund, Society for Libyan Studies, University of Oslo, Wellcome Trust.*

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Dr Susanne Hakenbeck

Dr Emma Lightfoot

Dr Xinyi Liu

Dr Giedre Motuzaitė Matuzevičiūtė

Dr Ronika Power

Dr Alex Pryor

Dr Rhiannon Stevens

#### **Visiting Scholars**

Dr Helen Chappell

Dr Luca Lai

Dr Maryanne Tafuri

#### **PhD Research Students**

Kate Boulden

Lauren Cadwallader

Tiago Hermenegildo

Amy Prendergast

Hazel Reade





## Charles McBurney Geoarchaeology Laboratory

CHARLES FRENCH

### News and people

This past year has seen a number of visiting scholars and research students engaged in the life of the laboratory in addition to the resident cohort of Cambridge MPhil and PhD students. These included Ivana Ozan from the University of Buenos Aires, Dr Carlos Cardineau from the University of Madrid, Dr Ruth Shahach-Gross from the Weizmann Institute in Israel, Dr Ravindra Singh from Banarus Hindu University in Varanasi, India. Dr Richard Macphail from University College London (UCL), has also given a number of invited micromorphological research seminars to the lab members and archaeological science students of all levels.

There are several pieces of good news from graduate and former graduate students from the laboratory. I am very pleased to say that Clea Paine has now been successfully awarded her PhD, and Sayantani Neogi has submitted her PhD thesis for examination. Several former lab members have new positions such as Dr Yijie Zhuang who has been appointed to a lectureship in Chinese Archaeology at UCL, and Dr Federica Sulas who has been awarded an Italian CNR postdoctoral fellowship at the University of Cagliari in Sardinia. In addition, Gary Marriner has been appointed as the Geoarchaeology Technician on the ERC-funded, UCL-based, EUROFARM project of Dr Marc Vander Linden's.

Tonko Rajkovača has continued to be involved as the consultant archaeologist on behalf of Ove Arup Partners International Ltd for the Corridor X E75/80 motorway route through southern Serbia. Tonko has also been involved with teaching and fieldwork in Bosnia through the Tempus project BIHERIT: 'Curricular Reform of Heritage Sciences in

Bosnia and Herzegovina' with Professor Predrag Novakovic (Ljubjana) along with the laboratory director, Dr Preston Miracle, David Redhouse, Gary Marriner and Sean Taylor.

Laboratory members have attended a number of geoarchaeological and micromorphological workshops and conferences around the world, such as the DIG13 conference in Basel Switzerland. The major event of the year was the Laboratory hosting the 25th Annual Soil Micromorphology Working Group workshop and conference in May (see *AEA Newsletter* 121, 10–11), with some 45 practitioners here from around the world.

### Project news

Twelve geoarchaeological and micromorphological reports have been completed by the lab director for a number of unit projects such as at Ham Hill in Somerset, as well as for other Cambridge research teams at the late Roman town of Sofiana in Sicily (with Dr E. Vaccaro), the slave-trading settlement of Alcatrazes in Cape Verde (with Dr M.L.S. Sorensen and Chris Evans), the late Roman settlement of Podere in Tuscany (with Dr E. Vaccaro), the fourth- to third-century BC settlement of Col di Marzo in Etruria (with Dr S. Stoddart and Saskia Volhard-Dearman), and the Neolithic sites of Zecovi and Kočičevo in Bosnia. Geoarchaeological project investigations entered a second season in the Ica River valley of southern Peru, the River Nociara valley and the Sofiana area of south-central Sicily and in the Sana River valley in Bosnia, as well as new geoarchaeological investigations begun on the island of Santiago, Cape Verde, and Malta. A selection of findings follow.

### *The Ica valley of southern Peru*

The second season of fieldwork for the Rio Ica or One River Project that is funded by the Leverhulme Trust has entered the sample excavation and sampling phase in the



*Augering a peat bog in the high southern Andes of Peru with Rob Scaife, Kevin Lane and Buzz Nanavati.*

CHARLES FRENCH



highlands and coastal to Samaca areas of the Ica valley (see p. 33). Two upper tributary valleys of the Ica above Sangayaco were investigated at c. 3800–4500 m. Here, peat bogs fed by natural springs dominate the valleys with evident recent erosion gully formation. At a similar height of c. 3850 m but at the break of slope between the high pampa and top of the Sangayaco valley, a large peat bog area was observed that was associated with a stone-boulder-built dam and a number of stone-walled enclosures for stock (as yet of unknown age). Upslope of the dam there was a 2.5 m deep waterlogged organic sequence which was intensively sampled for palynological analysis and radiocarbon assay, which should provide a long-term vegetative record for the exploitation of the high pampas in the last 2000–5000 years. Much further downstream and to the southwest, the upper Samaca, Ullaja and lower Callango basins have experienced massive erosion and up to 10 m of incision from the 1998 *el Niño*, but this has afforded us an excellent window of investigation into the Holocene valley floor sequence. We are now proceeding to the analytical stage of investigations in this project to provide sequences of Holocene environmental change between the Pacific coast, Samaca and the highland region related to the cultural sequence.

#### **Alcatrazes, Cape Verde**

Geoarchaeological reconnaissance fieldwork and subsequent micromorphological analyses have revealed a quite consistent sequence in the lower part of the Ribiera de Baia valley of southern Santiago island in the vicinity of Alcatrazes, Cape Verde (see also p. 31). The lower river valley contains a number of palaeo-channels indicative of a former braid-plain immediately inland of the present-day tidal embayment. The discovery of waterlogged basal deposits in one of the palaeo-channels in the floodplain, which accumulated prior to AD 1200, offers the possibility of providing a dated vegetational, erosion and soil sequence which will make a significant contribution to the environmental history of the islands. Significantly there are good indications of pre-fifteenth-century AD disruption of this landscape which tantalizingly hint at pre-slave trade human presence in Cape Verde.

#### **Sofiana, Sicily**

Further investigation of the River Nociara basin to the north of the late Roman to early medieval town of Sofiana in southern Sicily has observed a number of substantial Roman building projects including a stone road identified in two places downstream buried beneath c. 2.5 m of alluvial fine sandy clay aggradation, and a stone-built integrated system of dam, cistern, spillway and drainage tunnels about 5 km downstream from Sofiana. These structures indicate major water-control engineering works associated with this river, and over half of the valley fill sequence potentially being of post-Roman age (see p. 38).

*A Roman water tunnel on the northern bank of the River Nociara gorge built as part of a major hydraulic engineering system downstream from the late Roman town of Sofiana, Sicily.*



CHARLES FRENCH

#### **Malta**

The first reconnaissance for the FRAGSUS ERC-funded project took place earlier in September with Drs Caroline Malone, Chris Hunt and Alistair Ruffell from Belfast and Drs Simon Stoddart and Jay Stock from Cambridge, accompanied by Dr Tony Pace from Heritage Malta. A series of small valleys exiting to the sea were targeted by Dr Chris Hunt for initial GPR and borehole survey to ascertain the best preservation areas for palaeo-environmental sampling, and future work to investigate the pre-alluvial and pre-terrace buried soils. Initial investigations suggest that the palaeo-environmental potential is promising, but earlier-mid Holocene buried landscapes may only exist on the narrow floodplain margins.

*The following funding sources are gratefully acknowledged: AHRC, British Academy, European Commission (EC FP7), Hanson Aggregates/Cambridge Archaeological Unit, Leverhulme Trust, McDonald Institute for Archaeological Research, Ove Arup Partners International Ltd, UKIERI/British Council and the Benavides family.*

#### **STAFF**

Dr Charles French (*Laboratory Director*)  
Tonko Rajkovača (*Chief Research Technician*)

#### **PhD Research Students**

Kate Boulden	Eduardo Machicado	Paul van Pelt
Matt Dalton	Sayantani Neogi	Miranda Semple
Pedro Goncalves	Clea Paine	Sean Taylor
Katie Hall		

#### **Visiting Scholars**

Dr Carlos Cardineau (*University of Madrid*)  
Dr Ivana Ozan (*University of Buenos Aires*)  
Dr Ruth Shahach-Gross (*Weizmann Institute, Israel*)  
Dr Ravindra Singh (*Banarus Hindu University*)





## DM McDonald Grants and Awards

The Institute supports field projects and other research initiatives of the University of Cambridge's archaeologists through its annual grants from the DM McDonald Grants and Awards Fund. In 2013, grants totalling £151,725 were awarded to 32 projects ranging widely in time and space, many of which are highlighted in this report.

### Projects

- **Craig Alexander**  
*Neolithic Social Ties, Exchange and Craft Specialism in the Tavoliere*
- **James Barrett**  
*The Oppland Ice Patch Project*
- **David Barrowclough**  
*Blick Mead*
- **Marcus Brittain**  
*Mursiland Heritage Project*
- **Lauren Cadwallader**  
*Environmental Change in Second-millennium Peru*
- **Gillian Carr**  
*Lost in the Landscape: Nazi Camps on British Soil*
- **Lidia Colominas Barberà**  
*Cattle Genetic Selection Using Nuclear SNPs*
- **John Creese**  
*Wendat Smoking Practices*
- **Emanuela Cristiani**  
*Late Pleistocene and Early Holocene Foragers of Montenegro*
- **Matthew Davies & Henrietta Moore**  
*Marakwet Community Heritage Mapping Project, Kenya*
- **Chris Evans**  
*Cape Verde 1st Phase*

- **Charles French**  
*Geoarchaeological Reconnaissance of the River Sava*
- **Susanne Hakenbeck**  
*Pastoralists and Farmers in Early Medieval Hungary*
- **Liliana Janik**  
*Rock Art of Northern Russia*
- **Kathelijne Koops**  
*What Drives Tool Use in Chimpanzees?*
- **Luca Lai**  
*Animal Husbandry in Nuragic Society*
- **Alessandro Launaro**  
*Interamna Lirenas and its Territory Through Antiquity*
- **Emma Lightfoot**  
*Carbon Isotopic Variation within an Individual*
- **Tamsin O'Connell**  
*The Diet-body Isotope Fractionation in Chimpanzees*
- **Adrian Popescu**  
*Noviodunum Project*
- **Ryan Rabett**  
*Human Biogeography in Pleistocene Kefalonia*
- **Colin Renfrew**  
*Keros Island Survey*

- **Alice Samson**  
*The Materiality of Early Creolization in the Caribbean*
- **Colin Shaw**  
*Upper Limb Morphology of Native American Fur Traders*
- **Laurence Smith**  
*Suakin Project*
- **Simon Stoddart**  
*Frontiers of the European Iron Age*
- **Simon Stoddart**  
*The Limits of Etruria Project*
- **Emanuele Vaccaro**  
*Framing Late Roman and Early Medieval Settlements and Economies in Italy*
- **Robyn Veal**  
*Forest Exploitation in Province and Empire*

### Conferences

- **Gillian Carr**  
*Islands of War, Islands of Memory*
- **John Robb & Guillaume Robin**  
*Central Mediterranean Prehistory Day of Studies 2013*
- **Pamela Jane Smith**  
*Personal Histories of Time Team*



Locations of research projects awarded grants in 2012–2013.



## Research Grants

- **Prof. Graeme Barker**  
*Cultural Transformations and Environmental Transitions in North Africa* (EC FP7, European Research Council)
- **Prof. Graeme Barker**  
*The Cyrenaica Prehistory Project: Renewed Fieldwork at the Haua Fteah* (Society for Libyan Studies)
- **Dr James Barrett**  
*Ancient DNA, Cod and the Origins of Commercial Trade in Medieval Europe* (Leverhulme Trust)
- **Dr James Barrett**  
*Avaldsnes Royal Manor Project* (University of Oslo)
- **Dr James Barrett**  
*The Ecological Correlates of Viking Age State Formation* (Isaac Newton Trust and University of Oslo)
- **Dr James Barrett**  
*Fish Bone Archaeology* (The Fishmongers' Company)
- **Dr David Beresford-Jones**  
*One River Project* (Alberto Benavides Ganoza)
- **Dr Gillian Carr**  
*Legacies of Terror and Occupation* (Netherlands Organisation for Scientific Research)
- **Dr Emanuela Cristiani** (Dr Preston Miracle)  
*Technology of the Last Foragers and First Farmers in the Balkans* (EC FP7, Marie Curie)
- **Prof. Charles French**  
*Changes in Ancient Land and Water Use Along the Río Ica, South-central Andes* (Leverhulme Trust)
- **Prof. Charles French**  
*3D Acquisition, Processing and Presentation of Prehistoric European Rock-art (PITOTI)* (EU Collaborative Project)
- **Dr Helen Geake**  
*Finds Advisor: Medieval and Modern Artefacts* (Portable Antiquities Scheme)
- **Prof. Martin Jones**  
*CASE Studentship: Identification of Flowering Time in Genes in Foxtail Millet and its Potential Impact on Food* (BBSRC and Unilever)
- **Prof. Martin Jones**  
*Food Globalization in Prehistory* (EC FP7, European Research Council)
- **Prof. Martin Jones**  
*Origins and Spread of Agriculture in Southern Spain and Northern Morocco* (Consejo Superior de Investigaciones Científicas)
- **Prof. Martin Jones**  
*Origins and Spread of Agriculture in the Southwest Mediterranean Region* (EC FP7, European Research Council)
- **Prof. Martin Jones**  
*Pioneers of Pan-Asian Contact: Early Farmers and the Trail of Broomcorn Millet* (Leverhulme Trust)
- **Prof. Martin Jones**  
*The Vavilov Institute and Cambridge: Insights from Historic Crop Resources* (Royal Society)
- **Dr Carenza Lewis**  
*The Cambridge Community Heritage Project* (AHRC)
- **Dr John MacGinnis**  
*Ziyaret Tepe* (Rausing Charitable Trust, Brennan Foundation and Ziyaret Tepe Archaeological Trust)
- **Dr Augusta McMahon**  
*Creating and Resourcing the City in Fifth- to Fourth-millennium BC North Mesopotamia: Tell Brak Archaeological Project* (British Academy and BARDA)
- **Dr Augusta McMahon**  
*Early Urbanism and Industry: the Tell Brak Archaeological Project, Syria* (Isaac Newton Trust)
- **Dr Preston Miracle**  
*Curricular Reform of Heritage Studies in Bosnia & Herzegovina* (EC Tempus)
- **Dr Henrietta Moore and Dr Matthew Davies**  
*African Farming Systems: an Interdisciplinary Pan-African Perspective* (British Academy International Partnership & Mobility Scheme)
- **Dr Giuseppina Mutri** (Prof. Graeme Barker)  
*Human Adaptational Patterns to Arid Environments in North Africa* (EC FP7, Marie Curie)
- **Dr Philip Nigst**  
*Exploring the Middle and Upper Palaeolithic of the Western Ukraine* (The Leakey Foundation)
- **Dr Philip Nigst**  
*Neanderthal and Modern Human Adaptations in Eastern Europe (NEMO-ADAP)* (EC FP7 MC European Reintegration)
- **Dr Philip Nigst**  
*Neanderthal and Modern Human Adaptations in Eastern Europe* (Isaac Newton Trust)
- **Dr Cameron Petrie**  
*The Rise and Transformation of the Earliest Village Societies in Highland Iran* (Isaac Newton Trust)
- **Dr Cameron Petrie**  
*Climate, Environment, Human Adaptation and Civilisation in Ancient South Asia: Land, Water and Settlement* (British Academy International Partnership & Mobility Scheme)
- **Dr Cameron Petrie**  
*Bannu Archaeological Project Publications* (British Museum)
- **Prof. Nicholas Postgate**  
*Kilise Tepe Archaeological Project* (AHRC)
- **Dr Ryan Rabett**  
*The Tràng An Project* (Xuan Truong Enterprise)
- **Prof. Colin Renfrew**  
*Keros Island Survey* (British Academy)
- **Prof. Colin Renfrew**  
*Becoming Human: the Emergence of Meaning* (John Templeton Foundation)
- **Dr John Robb**  
*Economic Change and Cultural Transformation in Central Mediterranean Prehistory* (Isaac Newton Trust)
- **Dr John Robb**  
*Medical Anthropology of Prehistoric Europe: a Cultural History of Variation, Illness and Death* (Wellcome Trust)
- **Dr Guillaume Robin** (Dr John Robb)  
*Art and Death in Neolithic Europe* (EC FP7, Marie Curie)
- **Dr Alice Samson**  
*The Materiality of Early Creolization in the Caribbean, AD 1000–1550* (British Academy)
- **Dr Colin Shaw and Dr Jay Stock**  
*Assessing the Correspondence between Behaviour and Skeletal Morphology in Pleistocene and Holocene Hominins* (Dann Cushing)
- **Dr Marie Louise Stig Sørensen**  
*Creativity in the Bronze Age* (AHRC/HERA)
- **Dr Marie Louise Stig Sørensen**  
*Forging Identities: the Mobility of Culture in Bronze Age Europe* (EC FP7, ITN)
- **Dr Anna Stevens**  
*Excavating the Amarna Cemetery: Life, Death and Beyond* (British Academy)
- **Dr Rhiannon Stevens**  
*Cultural Innovation in the Palaeolithic* (Royal Society)
- **Dr Simon Stoddart**  
*The Etruscan Frontier* (Thriplow Charitable Trust)
- **Dr Simon Stoddart**  
*Diet and Insularity in the Maltese Islands* (Isaac Newton Trust)
- **Dr Simon Stoddart**  
*Lismore Landscape Project* (Historic Scotland)
- **Dr Simon Stoddart**  
*Fragility and Sustainability in Restricted Island Environments (FRAGSUS)* (EC FP7, European Research Council)
- **Dr Emanuele Vaccaro**  
*Economics, Adaptation and the End of the Roman Empire* (Leverhulme Trust and Isaac Newton Trust)
- **Dr Emanuele Vaccaro**  
*Land Estate and Economies in Late Antiquity: the Philosophiana Project* (British Academy)
- **Dr Dacia Viejo Rose**  
*Cultural Violence/Violence Against Culture* (British Academy)



## Food Globalization in Prehistory (FOGLIP)

MARTIN JONES (*Division of Archaeology*)

Our project explores the ways in which Eurasian farmers made connections across vast distances in the millennia prior to the Silk Road. We bring together archaeogenetics, archaeobotany and isotopic studies, and collaborate with quaternary scientists, archaeologists, zooarchaeologists and plant geneticists in China, Japan, Russia and Kazakhstan.

Our genetic research on broomcorn and foxtail millet is progressing fast, the latter particularly in the context of our collaboration with Unilever on research into flowering time genes. We have also been moving forward with our studies of barley and wheat, and particularly towards a better understanding of the origins of small-grained wheats that appear in East Asia and South Asia in prehistory. Members of the team have conducted archaeological fieldwork, and collection of skeletal and macrofossil evidence, from selected sites in Romania, Kyrgyzstan, Kazakhstan, India and China. Joining our group were visiting members from China, Russia, and India including: Dr Hongen Jiang (Graduate University of the Chinese Academy of Sciences, Beijing) and, Dr Elena Malinovskaya (Kuban Experimental Station, Vavilov Research Institute, Russia), Anubha Pathak (Banaras Hindu University, Varanasi, India). During 2013, we gave 22 open lectures on FOGLIP research in nine countries across Europe, Asia and America. In addition, together with our Unilever colleagues, we have set up and held an International millet workshop, bringing together participants from China, Russia, America and Europe.

*The project is funded by the European Research Council, with additional support from the McDonald Institute for Archaeological Research, Darwin College Cambridge (the Adrian Fellowship), the Royal Society (collaboration with the Vavilov Institute in St Petersburg), the British Academy (collaboration with Chinese Academy of Social Sciences) and Unilever, Gerda Henkel Stiftung and Chinese Scholarship Council (for graduate student and visiting scholar support).*

## Pioneers of Pan-Asian Contact (PPAC)

MARTIN JONES (*Division of Archaeology*) and  
GIEDRE MOTUZAITĖ MATUZEVIČIUTE (*McDonald Institute*)

This three-year project, closely allied to the FOGLIP project (see this page), has sought specifically to scrutinise and find new evidence for the prehistoric trail of broomcorn millet across Asia. In 2013, the project reached its conclusion with much more robust understanding, both of the earliest securely dated *Panicum* macrofossils, and a more detailed biogeographic understanding of millet consumption through stable isotope analysis of human and animal skeletal material.

When the idea of the research was first conceived, *Panicum miliaceum* was a fast-declining cereal, marked by an intriguing and enigmatic prehistory. Not only has some of that enigma been resolved, but the crop itself and its potential as future food has been better realized. Earlier this year, the UN-based Food and Agriculture Organization (FAO) recognized the birthplace of millet cultivation (Aohan, Inner Mongolia) as a Globally Important Agricultural Heritage System (GIAHS). Leaders in Aohan local government this summer invited core researchers from our group to a symposium in celebration of that FAO recognition, and to acknowledge and discuss the role of studying the past in better preparing for the future.

*The project is funded by the Leverhulme Trust, with additional support from the McDonald Institute for Archaeological Research. Richard Staff of the Oxford Radiocarbon Accelerator Unit, had a critical role in making the carbon dating of single millet grains a reality.*



Xinyi Liu and Giedre Motuzaitė Matuzevičiute addressing 500 local government workers in Aohan, Inner Mongolia on the uniqueness and value of their agricultural heritage.



Giedre Motuzaitė Matuzevičiute collecting millet landraces in north China.



## Tràng An Project, Vietnam

RYAN RABETT (*McDonald Institute*)

In 2012–13 Ryan Rabett was closely involved with the Tràng An Landscape Complex's bid for World Heritage status following formal submission in February 2012. In August 2013 he appeared before the Vietnam National Commission for UNESCO, Ministry of Culture, Sport and Tourism reporting on the nomination, and with a senior Vietnamese colleague, led presentations on the park's archaeological heritage during UNESCO's field evaluation in August. He has also worked subsequently as a consultant in formulating archaeological resource management protocol for the park's Management Plan.

A brief fieldwork season was also undertaken in Tràng An in November 2012 with the principal aim of extracting a lowland sediment core, which would provide a detailed palaeoenvironmental picture of conditions either side of the Mid-Holocene sea-level high-stand. With the assistance of local geologists and the Xuan Truong Enterprise a c. 10 m core was extracted from a site on the periphery of the park, which was already known to contain deposits spanning the Holocene. The principal analysis will be carried out in Belfast by David Simpson through a six-month postdoctoral position funded by Xuan Truong Enterprise.

*The project is funded by the McDonald Institute for Archaeological Research and Xuan Truong Enterprise, Ninh Binh, Vietnam.*



*Sediment coring work on the alluvial plain immediately outside the Tràng An massif (visible in the background).*

RYAN RABETT

## Cultural and Symbolic Violence

DACIA VIEJO ROSE (*McDonald Institute*)

This project, now in its second year, is a British Academy postdoctoral fellowship looking at cultural violence and violence against culture as manifest in the uses of cultural heritage. In spring 2013 Dacia Viejo Rose was Visiting Fellow at the Genocide Studies Centre, Yale University and at the Department of Spanish and Portuguese of the School of Arts and Sciences, New York University. During these residencies Dacia was able to use a variety of archives and learn from researchers at these institutions working on a range of case studies. In particular she focused on Guatemala and Korea as well as continuing her work on Spain. Research at the United Nations Archives in New York revealed some early 'behind the scenes' diplomatic negotiations involving cultural property. Work at NYU's Tamiment Library made it possible for Dacia to include a further dimension to her work on the visual frontlines of the Spanish Civil War through their collection of materials from the Abraham Lincoln Brigades. During her time in New York a Security Council Resolution was passed on Mali establishing the United Nations Multidimensional Integrated Stabilization Mission in Mali. This was the first resolution of its kind to include support for cultural preservation and Dacia was able to interview the Under-Secretary-General for Field Support regarding this development. On returning to Cambridge Dacia has continued with this work, looking in particular at the Demilitarized Zone separating North and South Korea as a site in which a conflict, cultural, and natural heritage are central elements in the tense dynamics of both division and dialogue.

*The project is funded by the British Academy and the McDonald Institute for Archaeological Research.*



*A divided bridge at the Demilitarized Zone separating North and South Korea.*

DACIA VIEJO ROSE



## Suakin Project, Sudan

LAURENCE SMITH (*McDonald Institute*)

Study of the Red Sea port of Suakin, by project members including Dr Laurence Smith, Michael Mallinson (Mallinson Architects) and Jacke Phillips (SOAS), under the Sudanese National Corporation for Antiquities and Museums and the Red Sea State, comprised excavation of Beit Khorshid Effendi (BKE) forecourt and post-excavation work. Excavation revealed two structures preceding BKE. The earlier survived only as a short stretch of coral-built wall. The long, relatively narrow, rooms of the second structure indicate it may have been a magazine for storing off-loaded goods. Probably when building or extending BKE, the structure was demolished to its lowest course and the area levelled. Later activity included digging small pits, a ditch, and burning fires. Samples for soil-micromorphology study of strata and coral plaster surfaces were obtained from a test-pit in BKE, and excavation southwest of the Shafa'i Mosque. Considerable progress was made in recording small finds from the current and previous seasons. In addition to imported and indigenous ceramics, study focused on the blown glass, nineteenth-century glass medical bottles and military accoutrements, together with further wood conservation and recording. A pottery sequence for the hand-made ceramics was constructed. Whilst still incomplete, the records now provide an overall picture of life at Suakin throughout its excavated levels, from eleventh to late nineteenth century. A UNESCO-funded workshop on Suakin was organized by Katherine Ashley of Mallinson Architects in April. It resolved an action plan for the future protection and development of Suakin, the new Suakin museum and coral buildings.

*The project is funded and supported by McDonald Institute for Archaeological Research, Fondation Max van Berchem, British Institute in Eastern Africa, Cambridge University Foreign Travel Fund, and Red Sea State and Ministry of Tourism, Antiquities and Wildlife, Sudan.*

## Marakwet Community Heritage, Kenya

MATTHEW DAVIES (*McDonald Institute*) and

HENRIETTA MOORE (*Division of Social Anthropology*)

This is a community archaeology and heritage project in Marakwet, northwest Kenya. The Marakwet community has long been studied by outside scholars, yet the community has rarely been given the opportunity to be involved with this research or to engage with its results. Now in its third year our work has instead focused on local training and capacity building. We have established a local research team who have mapped and collected related historical data across the Marakwet landscape. The data collected relate to many aspects of Marakwet life and heritage; from daily farming practice, to the social geography of kinship, social organization, ceremony and myth, as well as more conventional archaeology. The local team use combinations of GPS, digital photography, digital film, audio-recording, questionnaires and note-taking and these are combined in a complex multi-scalar GIS. We expect this data to form the basis of an online archive which will provide the community with the knowledge and the space to discuss the role of the past and culture/heritage in the negotiation of its own future within Kenya's ethnically charged present. As part of the Marakwet project we have established a network of scholars interested in rural African farming systems. The aim of this network is to share knowledge across projects and disciplines so as to produce a more holistic approach to rural development. We see the long-term perspective of archaeology as key to this process with the network linking scholars from archaeology, social anthropology, history, geography and environmental science.

*The project is funded by the British Academy, the McDonald Institute for Archaeological Research and the British Institute in Eastern Africa. The project is an international collaboration between Cambridge, Kenya (The British Institute in Eastern Africa, Kenyatta University, National Museums of Kenya), Nigeria (University of Ibadan) and South Africa (University of Witwatersrand). [www.farminginafrica.wordpress.com](http://www.farminginafrica.wordpress.com).*



*Forecourt at Beit Khorshid Effendi showing the walls of a second-phase structure with blocks in the foreground.*



*The Marakwet research team, September 2013.*





Excavations in the Haua Fteah cave showing (on the right) Trench M being excavated at a depth around where Modern Human jaws were found in the 1950s and (below) excavations of a new trench at the side of the 1950s Deep Sounding.

### The Cyrenaican Prehistory Project, Libya

GRAEME BARKER (McDonald Institute)

A small team was able to return to Libya in September 2013 to continue the investigation of the deep prehistoric occupation sequence discovered by Dr Charles McBurney in the 1950s in the Haua Fteah cave on the coast of Cyrenaica, northeast Libya. The sediments in his Deep Sounding (8–14 m below the present ground surface) are dominated by fine reddish clay-silts that formed in a humid moist environment, almost certainly during the globally humid Marine Isotope Stage 5, dated to 130,000–74,000 years ago. We found few signs of human activity, though McBurney found evidence of significant occupation just below the depth we reached. For much of the time the part of the cave where the Deep Sounding is located would have been very boggy, and it is likely that people usually made their camps further back into the cave. Further up the sequence, we were able to excavate our new trench (Trench M) down to near the depth where McBurney found two mandibles of archaic *Homo sapiens* in sediments which we have now dated to 73,000–65,000 years ago, a period of considerable climatic instability (MIS 4). We found traces of a hearth and burnt stone flakes just above the mandible depth, and our phytolith and micromorphological analyses of sediments here indicate that grass was being burnt in the cave about this time – were people cleaning out bedding?

*The Cyrenaican Prehistory Project has core funding from the European Research Council (Advanced Investigator Grant 230421 'TRANS-NAP': Cultural Transformations and Environmental Transitions in North African Prehistory) and the Society for Libyan Studies.*

### Finding Alcatrazes, Cape Verde

MARIE LOUISE STIG SØRENSEN (Division of Archaeology) and CHRISTOPHER EVANS (Cambridge Archaeological Unit)

This project aimed to find the abandoned site of Alcatrazes, one of the two late fifteenth-century founding settlements on Cape Verde. The other founding settlements, Cidade Velha, became a thriving slave transshipment centre, but Alcatrazes was officially abandoned in AD 1525. Prior to the survey, the only clue to the location was the *Church of Nossa Senhora da Luz* at the bay of Alcatrazes, built in the late fifteenth to early sixteenth century and apparently in continued use ever since (as shown by our earlier investigation of the church). This suggests that there remained a population in the area, although probably not forming village-like settlements. The field survey enabled an extensive investigation of the area around the church, the Alcatrazes Bay area generally, and accessible parts of the river valleys that run into the bay. 14 sites were identified, test excavations conducted, and a palaeoenvironmental survey carried out. The main aim was to find the 'lost' town of Alcatrazes and to generate a model of land use for this part of the island. The survey would make it possible to investigate the impact Alcatrazes' apparent 'failure' had on subsequent local settlement activities and to contrast that to the history of Cidade Velha. This, if successful, would be of substantial importance for research into the rise of Luso-African traditions. The programme succeeded on all accounts. The results are a substantial and important contribution to the early history of Cape Verde, finding the lost town and tracing the emergence of a Luso-African settlement dynamic and material culture adds to existing text-based accounts of the islands history. The work also, however, demonstrated not only the possibility but also the importance of further research in the area.

*The project is funded by the National Geographic Society.*



Excavation at Site 3, Alcatrazes Bay, Cape Verde, showing the discovered remains of a Luso-African homestead dated to after the abandonment of the founding settlement. This is the first discovery of a site of this type.



## The Ancient City of Amarna, Egypt

BARRY KEMP (*McDonald Institute*)

The past year saw excavations at the South Tombs Cemetery at Amarna brought to completion, over two seasons totalling 15 weeks. The excavations are part of a joint project with researchers from the Universities of Arkansas and Southern Illinois that seeks to reconstruct the life experiences of the people of Amarna through the integrated study of their physical remains and burial practices, set against the backdrop of previous research into urban life at Amarna. The excavations focus partly on the retrieval of human remains – 400 individuals in total – and of burial goods. Recent highlights include several painted coffins, and a mud coffin for a child. But we are jointly interested in the patterns that give nuance to how the cemetery was used, such as the tendency for multiple burials to cluster in one part of the site. Are these family burials, or was this area in use when many people were dying at once? These issues will be explored as we move towards publishing the research in full.

*The excavations were funded by National Geographic, the British Academy/Albert Reckitt Archaeological Funds, the King Fahd Centre (University of Arkansas) and the Amarna Trust, with conservation supported by the Thriplow and Aurelius Trusts, and the Fitzwilliam Museum. See [www.amarnaproject.com](http://www.amarnaproject.com) for more information.*



ANNA STEVENS

*A mud coffin for a child from the Amarna cemetery.*

## Byzantine Churches of Jordan, Syria, Lebanon and Iraq

DAVID L.C. CLARK (*McDonald Institute*)

Archaeological and architectural research on ecclesial complexes in Jordan, Iraq, Lebanon and Syria continues to reconstruct their spatial significance for liturgical praxis, their placement within the urban environment and landscape, and their theological implications on the local Christian church. These church structures housed the social and liturgical life for religious communities and local, ordinary people and their cultic behaviours. In spring 2013, Dr Clark concentrated his field investigations only to Beirut, central Lebanon and Jordan, owing to the unfortunate, political instability in Syria.

The research data is beginning to give evidence to a far greater regional diversity of styles than previously held. The churches exhibit a variety of architectural forms and spatial patterns that cross the ancient political and ecclesial boundaries. The placement and movement of main liturgical symbols such as altar and ambo, presider's chair, and baptismal font in relationship to the assembly reveal an evolving spatial pattern with particular theological implications of order and hierarchy, restricted visibility and accessibility to the assembly.

*The project is funded by the Borger Trust, Hinze Foundation, and supported by the McDonald Institute for Archaeological Research.*



DAVID L.C. CLARK

*Isovist analysis of Phase III, Ancient Aila Church, Jordan.*



## One River Project, Río Ica, Andes

DAVID BERESFORD-JONES (*McDonald Institute*) and CHARLES FRENCH (*Division of Archaeology*)

This project, whose members include Drs Lauren Cadwallader, Kevin Lane, Sandy Pullen; Rob Scaife and Fraser Sturt (Southampton University); and Jonas Berking (FU Berlin), studies cultural development and its inter-relationship with changing environment along the Río Ica in southern Peru, from its headwaters in the alpine tundra (+4000 m), to the river mouth in the coastal desert. The only reliable source of water here is highland rainfall and this interdependency between highlands and coast provides the common thread between investigations combining archaeological excavation, survey, GIS, geoarchaeology and archaeobotany.

This year we excavated a Preceramic shell midden L-1 (c. 5000 BC) at the river estuary, alongside a detailed survey of the river mouth and adjoining shoreline and *lomas* fog-meadows, each of which provided specific resources for its ancient fisher-hunter-gatherer inhabitants. This work suggests great shifts in the local estuarine ecology as a consequence of marine transgression and changes in shoreline morphology, which may have driven a move towards greater sedentism, agriculture and settlement further inland.

By the Late Intermediate Period (AD 1200–1450) this process had culminated in extensive irrigation on the coast, and vast terracing systems in the highlands. Concurrent excavations at Samaca (at 250 m asl) and Sangayaico (at 3800 m asl) are revealing the gradual accumulation of that hydraulic landscape. The wealth of material culture recovered in stratigraphic association at these sites will allow us to explore coast–highland interactions through GIS work by Leanne Zeki.

*The project is funded by the Leverhulme Trust and the Benavides family.*

*Sandy Pullen, Fraser Sturt and George Chauca excavating a Preceramic shell midden at the mouth of the Río Ica.*



DAVID BERESFORD-JONES

## Power and Personhood in Eastern North America

JOHN CREESE (*McDonald Institute*)

This project explores the development of Iroquoian modes of embodiment and personhood during the period between AD 1400 and 1650 in eastern North America. Analysis of clay smoking pipes in the Royal Ontario Museum and University of Toronto collections was completed during two research trips in November 2012 and May 2013. Smoking pipes were important objects used in the creation and maintenance of social bonds in Iroquoian societies. The ‘life-cycle’ of pipes, from their production, use, display, exchange and recycling into new objects was caught up in wider cycles of accumulation and fragmentation through which persons and institutional entities were structured and changed. Artefact biographies of pipes at the fifteenth-century Keffer site demonstrate the intimate entanglements of pipes and pipe smoking with personal identity and relational-affective exchange at the site. Ceramic petrography and chemical analysis (LA-ICPMS) conducted at the Field Museum, Chicago, illustrate that smoking pipes at the site were far more variable in elemental composition than pottery vessels, suggesting diverse origins for the pipes and pipe-stem beads deposited at the site. Additional chemical studies of pipe clay composition from neighbouring sites in the region are ongoing, and should help to elucidate the scale and nature of pipe exchange.

*The project is funded by the McDonald Institute for Archaeological Research, and a Social Sciences and Humanities Research Council of Canada Postdoctoral Fellowship.*

*Effigy smoking pipe from the Thompson-Walker site, Ontario, c. AD 1630–1650. Such objects were ‘technologies of attachment’ through which reciprocal relationships between humans and non-humans were cultivated.*



© ROYAL ONTARIO MUSEUM, DEPARTMENT OF WORLD CULTURES



## Ancient Caribbean Creolizations

ALICE V.M. SAMSON (*McDonald Institute*)

This project investigates long-term processes of cultural and material innovation within pre-Columbian communities in the Dominican Republic, Puerto Rico and the small islands in between. A centre of pre-Columbian interaction, innovation and complexity, this inter-island setting was also a hub of indigenous resistance to Spanish domination in colonial times. The project adopts an inter-island, regional perspective on the emergence of places and identities in the pre-Columbian and early colonial Caribbean, linking quotidian and extraordinary practices in settlements, caves and ceremonial sites across the region.

Multi-sited settlement excavation and a boat and pedestrian survey of two tiny Caribbean islets, once densely populated pre-Columbian centres, comprised the first fieldwork season from May to August 2013. This fieldwork established the durability and extent of a network of coastal settlements as well as the existence of hitherto undocumented rock art and extractive activities in the region's caves.

Future work includes the development of a long-term collaborative fieldwork programme to protect the vulnerable heritage of the Dominican Republic, as well as in summer 2014, a full survey of Mona island's caves to establish the relationship between the subterranean and terrestrial realms of this rocky outcrop and its regional role in the heart of the indigenous Caribbean.

*The project is funded by the British Academy and the McDonald Institute for Archaeological Research.*



ALICE V.M. SAMSON

*Archaeology students excavating at the site of Boca de Nisibón, eastern Dominican Republic.*

## Ziyaret Tepe, Turkey

JOHN MACGINNIS (*McDonald Institute*)

In the past year research continued on the site of Ziyaret Tepe in southeastern Turkey, a provincial capital of the Neo-Assyrian empire founded by Ashurnasirpal II in 882 BC and abandoned after the empire collapsed at the end of the seventh century. The overall strategy at the site is to combine geophysical survey with targeted excavation in order to recover as complete a picture as possible of the layout and life of the ancient city. The 2012 field season was very productive. On the high mound work concentrated on investigating the Middle Assyrian phase of the palace; a small cuneiform tablet detailing a delivery of textiles came from a pit cut into this phase. In the lower town the resistivity survey mapped an area in the northwestern sector where a rise in the topography suggests the existence of a substantial structure. Meanwhile excavations were conducted on an area of low-status housing and on an area inside of the southern city wall. Lastly, in order to more fully elucidate the constructional history of the major administrative complex one room was excavated down to the natural, revealing evidence for four building phases and yielding in the process a number of clay bullae with cylinder seal impressions.

*The project is funded by a broad range of contributions coordinated by the Ziyaret Tepe Archaeological Trust.*



ZIYARET TEPE ARCHAEOLOGICAL PROJECT

*Cuneiform tablet from the palace (left) and clay bulla with seal impression from the lower town administrative building (right), Ziyaret Tepe, Turkey.*



## The Invisible Etruscans?

SIMON STODDART (*Division of Archaeology*)

Most studies of the Etruscan world focus on the conspicuous consumption of the descent group, expressed through death. Work on the northern frontier of Perugia has uncovered the lived experience of the other side of this equation: the relatively impoverished community at the limits of the reach of the city. House structures and accompanying open courtyards (fourth–third century BC) preserved a relative wealth of data for living conditions, recovered simply by applying a methodology of systematic recovery of botanical, faunal and micromorphological samples. Provisional results by Finbar McCormick (Queen’s University Belfast) appear to show the small contribution of sheep and pig meat to the diet, suggested by the steps taken to extract even marrow from the bones and to supplement poor cuts of domestic meat with better cuts from wild animals such as deer. Initial studies by Jacob Morales (University of Las Palmas de Gran Canaria) of c. 4000 litres of sediment recovered by Jennifer Bates (University of Cambridge) indicate a prominence of wheat and grape, supplemented by beans, barley and other plants. These dietary indicators were caught in drainage sumps between house and courtyard structures as well as preserved around the hearths under roof collapse in the buildings themselves. This picture of poverty should not, however, be overstressed since there were some drinking vessels decorated with painted figures, bronze tokens of wealth (*aes rude*) and even some Etruscan graffiti. All this evidence suggests a relationship with the urban centre of Perugia, even if it might have been substantially to extract the best cuts of meat, woollen products and cheese for the use of the elite.

*The project is supported by the Gaslini Foundation, the Province of Perugia, the cities of Gubbio and Perugia, the British Academy, a University of Cambridge Humanities Grant, Queen’s University Belfast, the European Commission, the Thriplow Trust, the Soprintendenza per i Beni Archeologici dell’Umbria, and the McDonald Institute for Archaeological Research.*

## Rock Art of Northern Russia

LILIANA JANIK (*Division of Archaeology*)

This project is investigating the prehistoric rock art of the White Sea region in northern Russia. During this research season we were able to determine the elevation of the Besove Sledki carvings thereby tightening their chronology based on the isostatic movement of the White Sea and water-level fluctuations in the estuary of the Vig River. Furthermore, by studying the superimposition of the images, we were able to establish the relative chronology of the carvings and the creative process of rock-art making. In particular the swan depictions are interesting as they are very similar to the images found around Late Onega 220 miles to the south indicating a possible link between the two regions. In addition, the most unusual depictions, interpreted as small fur-bearing animals, have been closely analysed since such representations are rare in North European rock carvings or paintings, and are not present at any of the other 14 locations of White Sea rock art. They indicate a change in the focus of what was being depicted, and hence in the visual narrative captured in the carvings.

We also witnessed alterations in the way the responsibilities over local heritage are being transformed, devolving from the Russian federal structure to the individual Republics and local regions. The White Sea carvings are now firmly on the tourist route to the Solovets Islands, more generally known as the Gulag Archipelago, featured in subsequent BBC TV programmes, and attracting a good number of both Russian and international tourists. While monitoring the creation of tourist facilities over a number of years, we were able this year to follow the process of the take-over and accessioning of the Zalavrug and Besove Sledki rock carvings by the local Museum (Belomorsk) from the Federal government.

*The project is funded by the McDonald Institute for Archaeological Research.*



*The Sardinian shepherd’s flock in August 2012 in the setting sun with shepherd’s puppies (inset).*

JAMIE CAMERON & PATRICIA DUFF



*Mark Sapwell and Katarzyna Szczesna making charcoal rubbings of the Besove Sledki rock carvings.*

LILIANA JANIK



## Nomads and Farmers in Early Medieval Hungary

SUSANNE HAKENBECK (*McDonald Institute*)

The Huns have long been considered the prime movers responsible for bringing about the demise of the Roman Empire. Late Roman authors created a dichotomy between the settled Roman population and the nomadic lifestyle of the Huns and other barbarians. Agriculture is equated with civilization, and the absence of agriculture and of a settled lifestyle can therefore only be a sign of barbarism. Historical and archaeological interpretations have, until recently, upheld this distinction, using rigid notions such as 'Asiatic skull types', or 'Hunnic material culture' to identify ethnic groups and seeing migrations as explanations for social change. By focusing on subsistence practices and socio-economic choices, rather than on external attributes, this research seeks to develop an alternative to such rigid ethnic classifications. A study of the expressions of identity in burial practice together with evidence from stable isotope analysis enables us to examine what people did as well as how they were perceived by others.

In the second year of this project the focus was on data collection and processing. Dr Erzsébet Fóthi (Natural History Museum Budapest) was exceptionally generous in providing access to collections. I returned from two



SUSANNE HAKENBECK

*Modified skull of a child, early medieval Hungary.*

research visits to Budapest with samples from several of the most significant early medieval skeletal series in Hungary. Preliminary results confirm the strength of an approach that aims to reconstruct lifetime dietary histories of individuals by analysing tissue types (bone, dentine, enamel) that provide different time windows into an individual's life.

*The project is funded by the McDonald Institute for Archaeological Research and by Synthesys (an EU-funded project creating an integrated European infrastructure for natural history collections).*

## Roman Cattle Selection, Catalonia

LIDIA COLOMINAS-BARBERÀ and MIM BOWER (*McDonald Institute*)

One of the most significant changes in livestock practices linked with the Roman expansion is the presence of larger cattle in the new territories under Roman control from the first century AD onwards. Although there is ample evidence for a change in the physical appearance of cattle, traditional zooarchaeological methods have failed to explain this sudden change. This project aims to shed light on this issue by combining a zooarchaeological study with ancient DNA.

Ancient DNA analyses are currently being performed to characterize mitochondrial genetic type and phenotypic traits of 26 cattle from the Roman city of Empúries (Catalonia). The mitochondrial DNA will provide evidence about the origins of these animals. Genes associated with coat colour, meat quality and animal health will provide evidence of selection for economically valuable qualitative traits, such as traction, transport or meat. Thus, these analyses will allow us to provide the first evidence about the hypothesis that these larger cattle were selected for phenotypic traits and then transported throughout the Empire.



LIDIA COLOMINAS-BARBERÀ

*Cattle metacarpals from the site of Empúries in chronological order showing their different sizes and shapes.*

*The project is funded by the McDonald Institute for Archaeological Research and 'Programa Nacional de Movilidad de recursos humanos de Investigación, Ministerio de Educación y Ciencia'.*



## Hoarding in Iron Age and Roman Britain

ROGER BLAND (*British Museum*)

Dr Bland is Principal Investigator for a three-year project *Crisis or continuity? Hoarding in Iron Age and Roman Britain with special reference to the 3rd century AD*. This is a collaboration with Professors Colin Haselgrove and David Mattingly of the University of Leicester. Dr Eleanor Ghey and Dr Adrian Chadwick have been recruited as research assistants and a third is due to start in summer 2014.

Some 340 Iron Age and 2700 Roman hoards are currently known, the great majority of them being coin hoards, a greater concentration than anywhere else in the Roman Empire. The aim of the project is to understand better why they were deposited (and not recovered). To what extent does the conventional interpretation that these were buried as a response to external threat or internal unrest hold up to scrutiny or should we be looking at other reasons, such as votive deposition?

We will develop an online data base of all hoards of the Roman period in Britain and analyse the findspots using GIS and fieldwork.

*The project is funded by the AHRC.*

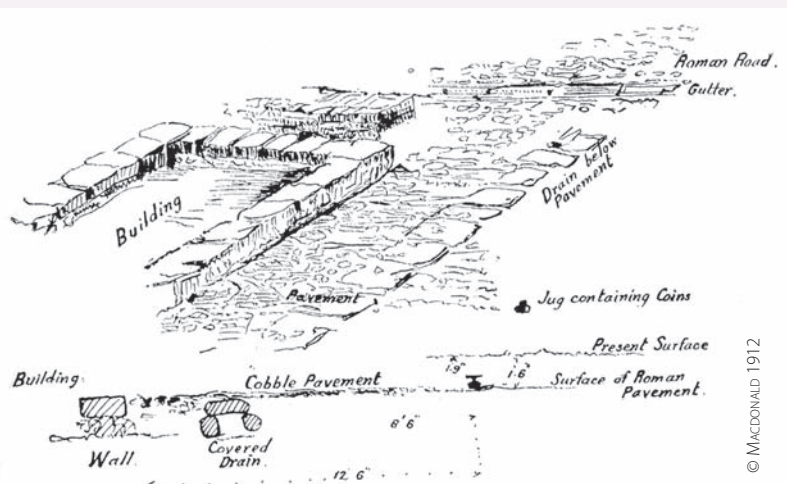
## Neanderthals and Modern Humans in Central and Eastern Europe

PHILIP NIGST (*Division of Archaeology*)

The aim of this research is to contribute to a better understanding of Neanderthal and modern human adaptations to changing environmental conditions. To achieve this we are conducting surveys and test-excavations at Middle and Upper Palaeolithic sites in western Ukraine. Currently, we focus on the large loess areas for primarily two reasons: (1) the rather high palaeoenvironmental resolution of the region's long loess-paleosol sequences, and (2) the abundant archaeology embedded in these sequences.

The Middle Dniestr Valley Survey Project, directed by Philip Nigst and Larissa Koulakovska (Museum of Archaeology, Institute of Archaeology, Kiev) conducted seven weeks of fieldwork (Jul–Sept 2013). We excavated at the Upper Palaeolithic site of Korman 9 and at the Middle Palaeolithic site of Neporotovo 7 (both discovered during survey in July 2012). Preliminary analysis at Korman 9 suggests a Late Glacial occupation. For a more detailed environmental reconstruction, pollen and geoarchaeological samples have been collected and are being processed. The work at Neporotovo 7 focused on the geological setting of the Neanderthal occupations at the site. The Transcarpathian Palaeolithic Project, directed by Philip Nigst and Vitaly Usik (Museum of Archaeology, Institute of Archaeology, Kiev), continued excavations at the Early Upper Palaeolithic sites of Beregov I and Korolevo II. At both sites we are working on a better understanding of the chronostratigraphic position of the assemblages to evaluate hypotheses on the appearance of modern human behaviour in the region.

*The project is funded by the Leakey Foundation, a EC FP7 Marie Curie Career Integration Grant, the Max-Planck-Society (MPI EVA, Department of Human Evolution, Leipzig), the Isaac Newton Trust and the McDonald Institute for Archaeological Research.*



© MACDONALD 1912

*Findspot of the hoard of 162 Roman gold aurei excavated at Corbridge in 1912 showing the location of the jug containing the coins.*



NEMO-ADAP PROJECT

*Excavation at the Upper Palaeolithic site Korman 9, Ukraine.*



## Fuel Economics in the Ancient World

ROBYN VEAL (*McDonald Institute*)

Environmental economics in the ancient world is a developing research area. Fuel as an economic entity has not been studied much beyond wood identification. This research examines ancient forest exploitation and sustainability through charcoal analysis. New methods are being employed to measure charcoal burn temperatures, as well as woodland cropping strategies. Results are being synthesized with economic modelling in order to understand fuel and timber consumption more holistically in any ancient economy. A current major area of focus is the wood consumption of Rome and Londinium. Material from Rome and surrounding areas (including Portus, Castelporziano, Gabii and Villamagna) has revealed much charcoal relating to the burning of construction timber, including evidence for the use of the 'wattle and daub' construction technique in the Imperial period. At Morgantina (Sicily), charcoal conserved by Princeton excavators from the pre-Classical (c. 950 BC) to post-Roman eras is shedding light on the rate and timing of the substantial deforestation of central Sicily. In Sardinia, work has been completed on Bronze Age Nuraghic occupation, and within Britain, data from the University of Reading's Silchester excavation, is contributing to the examination of landscape exploitation from the Iron Age to the Late Roman period. Complementing the research, a conference was held at the British School at Rome in March entitled: 'Fuel and Fire in the Ancient Roman World'. The proceedings are being prepared for publication. The desire to foster full environmental recovery in excavation in Italy in order to facilitate deeper environmental economic analyses has led to the initiation of a new 'Association for Environmental Archaeology in Italy' seminar series with the sponsorship to date of the AEA, the BSR and the American Academy in Rome.

*The project is funded by the McDonald Institute for Archaeological Research. The conference was sponsored by the British School at Rome through a private donor to the Rickman Fund, and the Oxford Roman Economy Project.*

## The *Philosophiana-Sofiana* Project, Sicily

EMANUELE VACCARO (*McDonald Institute*)

Since 2009, the *Philosophiana* project has studied the landscape archaeology of central Sicily, the island's breadbasket. Focusing on the large Roman to medieval urban-style settlement at Sofiana, near the Villa del Casale at Piazza Armerina, and its hinterland, the project combines intra- and extra-site survey, geophysics, new excavations, geoarchaeology, palaeobotany, zooarchaeology and advanced ceramic study to shed light on settlement and economic patterns of first-millennium AD inland Sicily. New excavations since 2012 have been carried out in parallel with environmental and bioarchaeological studies to address settlement transformations in the *longue durée* and the diverse interactions between local communities and the cultural landscape. Understanding the impact of the late Roman to early medieval expansion of *Philosophiana* on the environmental context is of primary concern. In 2013, excavation was continued in the 'monumental' area where a long urban sequence dating from the first to twelfth century AD was revealed. The rich associations of ceramics and animal bones from a series of late Roman and medieval assemblages will be used to shed light on changes in diet and culinary practices. In 2013, the project also began to tackle the eastern environs of Sofiana where a large pottery workshop developed in the eighth and ninth centuries AD. New data from the craft-working district reveals the sophistication of ceramic production at early medieval Sofiana and the site's involvement in a complex network of local and sub-regional economic connections, supported by the production of a previously unknown class of globular amphorae. Organic residue analysis from consumption sites will be used to identify the amphora-borne foodstuffs.

*The project is funded by the Leverhulme Trust, the McDonald Institute for Archaeological Research, the Faculty of Classics (University of Cambridge), the British Academy Small Research Grants, the Cambridge Humanities Grants and the Comune di Mazzarino. The project is a collaboration between the Universities of Cambridge, Pennsylvania and the Università di Messina.*



*(Left) Modern billhook for cutting roundwood: identical to ancient versions found in Pompeii, AD 79. (Above) Cross-section of a deciduous oak twig (Gabii, 1st century AD).*



*New excavations at the early medieval ceramic workshop near Sofiana, Sicily.*



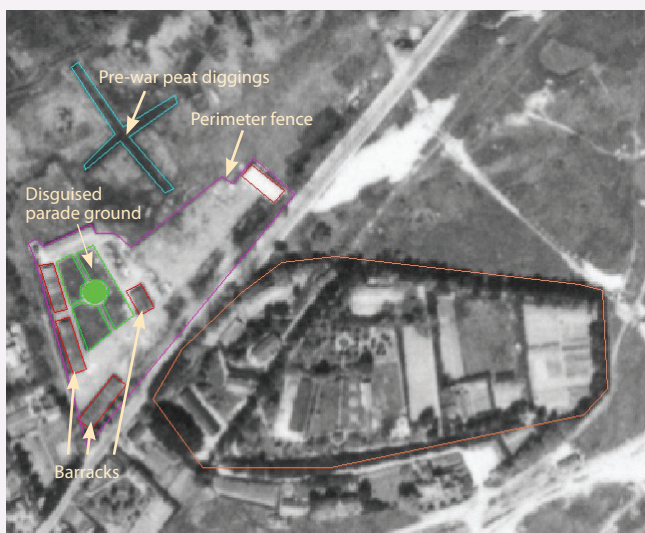
## Lost in the Landscape: Nazi Camps on British Soil

GILLIAN CARR (*Institute of Continuing Education*)

In 2013, the desk-based assessment of Lager Wick was completed. Situated within Grouville Marsh on the largest Channel Island of Jersey, Lager Wick was a forced labour camp in use from 1942–1944, during the German occupation, and housed French North African and Spanish Republican workers. A series of high-resolution aerial photographs have revealed a number of interesting features. Photos from April 1944 show evidence that a number of barrack huts were destroyed by fire, as confirmed by contemporary diarists. The true nature of the camp also appears to be disguised. The arrangement of the huts around what appears to be a parade ground disguised as an ornamental garden suggests that the occupying German forces were concealing from Allied aircraft the true extent of the network of forced and slave labour camps in the Channel Islands. The aerial photos have also contradicted eyewitness testimony, which had previously suggested that no barbed wire – or any system of perimeter enclosure at all – was employed at the camp. However, the photos indicate (barbed) wire post-removal, leaving sizeable holes, by October 1944, after the camp was dismantled. Barbed wire stakes are also still visible inside the site.

The post-war biography of the site involves a period as a place for grazing cows followed a spell as the parish rubbish dump, before being turned into the wetland nature reserve it is today. Geophysical survey and excavation are planned for 2014.

*The project is funded by the McDonald Institute for Archaeological Research.*



NATIONAL COLLECTION OF AERIAL PHOTOGRAPHY

*Aerial photograph of Lager Wick, Jersey, April 1944, interpretation (annotation) by Peter Masters.*

## Beyond Hierarchy: the Archaeology of Collective Governance

SUSAN OOSTHUIZEN (*Institute of Continuing Education*)

This research explores the interplay between tradition and innovation in cultural change as Roman Britain evolved into Anglo-Saxon England. It does so by applying economic theory on common property – the governance and exercise of common rights – to agricultural landscapes. The economic exploitation of fields, pastures and other non-arable resources is an expression of property rights that is frequently recorded in the landscape. Such monuments provide a physical, hermeneutic – if partial – record not only of entitlements to land based on individual and collective property rights, but also of recursive relationships in the double helix of governance and social structure. The contextualization of early medieval landscapes in the *longue durée* from c. 3000 BC to AD 1100 indicates that the collective governance of arable and pastoral agricultural production originated in traditional, prehistoric forms of social organization rather than the Anglo-Saxon ‘invasions’.

Current research has two foci, one wide and one narrow. I am in the early stages of developing a research project on the archaeology of prehistoric common property regimes in South Africa, discussed with colleagues at the Universities of Stellenbosch and the Western Cape during a visit in April 2013. A site for future fieldwork has been identified in the Eastern Cape. Work based on the micro-analysis of regional landscapes continues to focus on the Cambridgeshire peat fens. The edition (with Dr Frances Willmoth) of a translation by Professor Edward Miller of the thirteenth-century extents of the fenland manors of the Bishop of Ely will be published in 2014, and a monograph on collective governance of the Anglo-Saxon fenlands is in preparation.



SUSAN OOSTHUIZEN

*The pound for trespassing cattle at Coveney represents the exercise of ancient rights of common pasture across the Cambridgeshire peat fens.*



## Ancient DNA, Horse Domestication and Animal Husbandry in Prehistory

MIM BOWER (*McDonald Institute*)

This year has seen the initiation of ancient genomics work on Roman cattle in Spain (see p. 36) and prehistoric horse populations. As part of the Horse Domestication in Iberia Project, funded by the Portuguese Science Foundation, in collaboration with Dr Cristina Luis (University of Lisbon), we are screening ancient DNA in a range of horse skeletal material from Portugal, Spain and North Africa, in order to study the genetic relationships between these populations in the past. Our research material stretches from as early as 17,000 BP to the fourteenth and fifteenth centuries AD, and includes bones and teeth from cave deposits to settlements.

Our historic Thoroughbred horse genetics work received considerable attention from the media. Using a range of archaeological science methods, including ancient DNA, we validated the identity of the skeleton of the famous race horse Eclipse (1764–1789) and demonstrated that 1880 Epsom Derby winner Bend Or (1877–1903) was in fact swapped as a yearling with a similar horse called Tadcaster. We identified which historic mare introduced the key racing-performance gene to elite modern Thoroughbreds, and exonerated early General Studbook records, which, prior to our work, were considered highly inaccurate in their recording of Thoroughbred maternal bloodlines.

*The famous historic Thoroughbred horse Bend Or (or Tadcaster, as he should now be renamed).*



HULTON ARCHIVE/GETTY IMAGE

Our Leverhulme Trust-funded project studying the spread of the chariot in Asia in the second and first millennia BC was completed in 2012. We showed that Eurasia was a major refuge for wild horse populations during the last Glacial Maximum, that living European domestic horse populations arose largely from horses from central Asia and that prehistoric and historic human movements, through trade and warfare, left a distinctive stamp in the genes of our modern-day domestic horses. We presented our results to the world's leading horse genome research teams at the Dorothy Havemeyer Foundation, Horse Genome Workshop (July 2013).

*The projects are funded by the Portuguese Science Foundation, the Leverhulme Trust, Horserace Betting Levy Board, Isaac Newton Trust and the McDonald Institute for Archaeological Research.*

## PITOTI Project

CRAIG ALEXANDER and FREDERICK BAKER (*McDonald Institute*)

This ambitious £2.9m project, involving over 30 scientists from across Europe, uses the latest technology to produce images in the third dimension and explore their shape and significance using advanced graphic technology, shape analysis and digital synthesis. This project aims to produce both a portable, field-ready, high-resolution 3D scanner for use on rock art, epigraphy and bas-reliefs and an integrated system for the analysis and presentation of the 3D data produced by that scanner. The integrated system will include algorithms for the automatic classification of images as well as tools allowing in-depth analysis of the surfaces and extensive manipulation of the 3D data in a visual 3D environment.

Valcamonica, in the Italian Alps, was chosen as our test site: it has at least 120,000 petroglyphs, making it the largest rock-art site in Europe. We have been working at the site since March 2013 and have, to date, amassed a good set of baseline 3D scans that will be used as reference data against which to test the prototypes of the new scanner. These scans have been generated with Structured Light Scanners, Terrestrial Laser Scanners, camera-carrying UAVs and a light aircraft. Some results of this scanning project were presented in a multimedia digital rock-art exhibition in Milan and Cambridge (see p. 46).

*The project is funded by the European Union as part of Seventh Framework Programme and is a collaboration amongst the McDonald Institute for Archaeological Research, the University of Nottingham, Bauhaus-Universität Weimar, Technische Universität Graz (TUG), Fachhochschule St. Pölten, Centro Camuno di Studi Preistorici and ArcTron 3D GmbH. [www.3d-pitoti.eu](http://www.3d-pitoti.eu)*



CRAIG ALEXANDER

*Graduate students from TUG fly an octocopter UAV at Bedolina in Valcamonica.*



## Cambridge Community Heritage (CCH)

CARENZA LEWIS (*McDonald Institute*)

This project was funded by AHRC to develop research collaborations between the University of Cambridge and community groups in eastern England. The CCH team comprised nine university researchers specializing in Archaeology, History, Heritage and Public Engagement, led by Dr Carena Lewis. In 2012 community groups were invited to approach CCH with their ideas for projects exploring aspects of their heritage, which CCH team members helped groups develop into realistic submissions to the Heritage Lottery Fund's 'All Our Stories' fund. 90% of the CCH groups were successful (compared to 50% nationally), with each group receiving up to £10,000 from the HLF to run their community heritage project. In 2013, the CCH team helped 27 groups run these projects, including local historical societies, church groups, traveller communities, schools, football clubs, women's groups and military regiments.

CCH projects involved more than 4000 members of the public and ranged widely in subject and approach. Archaeological fieldwork took place around Ashwell (Herts.) and Wormingford (Essex) with excavation projects in Fenland, Meldreth, Toft, West Wickham and Wimpole (Cambs.), Foxearth (Suffolk), Gaywood (Norfolk), Saffron Walden (Essex), Sharbrook and Shillington (Beds.). Oral history projects were completed by Cambridge United Football Club, The Royal Anglian Regiment Museum, Freudian Slips, One Voice for Travellers, Ely Wildspace, the Suffolk Horse Society and Shirley Primary School. Local history projects focused on Rattlesden, Hildersham and Tilty, with a historic building project in Pirton and the creation of a heritage trail in Sturmer. Information on these projects can be found on Access Cambridge Archaeology's website [www.access.arch.cam.ac.uk](http://www.access.arch.cam.ac.uk).

*The project is funded by AHRC.*



*Test-pit digging in Meldreth, Cambridgeshire.*

## Late Pleistocene and Early Holocene Foragers of Montenegro

EMANUELA CRISTIANI (*McDonald Institute*)

In 2013, our investigations focused on Vrbička Cave where previously both Late Pleistocene and Early Holocene levels were excavated. Marmot (*Marmota marmota*) remains, of which many have cutmarks from butchering, dominate the faunal assemblage in the Pleistocene levels of the cave and possibly point to a specialized hunting camp. Two AMS dates put this occupation to c. 27–23 kya cal. BP. This is the first secure evidence of Late Glacial Maximum occupation of the Dinaric Alps and suggests that human hunting of small game, as part of the Broad Spectrum Revolution, can be dated to the Gravettian period in this part of Mediterranean Europe.

During the 2013 fieldwork season, a Late Mesolithic layer was clearly defined in the site's stratigraphy and is now AMS-dated to c. 9 kya cal. BP. A perforated pharyngeal tooth of a carp family fish (see photo insert) was found in this layer. This is the first such ornamental bead in southeast Europe outside the Danube Gorges area, and points to likely contacts between Late Mesolithic foragers from the area and those inhabiting the Montenegrin mountains. Fragments of *impresso* Early Neolithic ceramics were found in the layer that covered the Late Mesolithic levels.

*The project is funded collaboratively by the McDonald Institute for Archaeological Research in Cambridge, Cardiff University, Centre for Conservation and Archaeology of Montenegro in Cetinje, National Museum and Centre for Culture in Nikšić and Faculty of Philosophy in Belgrade, Serbia.*



*Excavation at Vrbička Cave, Montenegro and ornamental Cyprinid pharyngeal tooth found in the Late Mesolithic layer.*

## 3D Imaging from Photography

DOMINIC POWLESLAND (*McDonald Institute*)

As an initiative to promote strong links between ‘academic’ and ‘field’ archaeology, the McDonald Institute recruits a professional archaeological practitioner to spend one term at the Institute to conduct research that would not be possible within the context of their regular fieldwork. In 2013 Dominic Powlesland joined us to develop a field guide on 3D imaging from free range photography. 3D imaging derived from surface modelling monuments and archaeological sites using high-density laser scanners has been possible for almost 20 years. The costs in terms of hardware, software and time required to generate and manipulate laser-scanned 3D models remain very high. In the past five years improvements in digital cameras, desk-top computers, and computer-based photogrammetry mean that it is now possible to produce high-resolution 3D digital models with the same degree of accuracy as those created using laser scanners for a fraction of the cost and time. These 3D models offer the opportunity when manipulated on a standard computer to radically enhance the quality and information managed within the

archaeological excavation record. The methods, which require relatively small numbers of high-quality digital photographs taken from multiple positions can reveal detail that would otherwise be very difficult to record. The resulting 3D models can be manipulated using an internet browser and published as 3D pdf files, for viewing on almost any computer (<https://www.repository.cam.ac.uk/handle/1810/245225> - 24Mb).

This approach to archaeological recording has the potential to revolutionize the way in which excavation evidence is presented and provide access to a more dynamic view of the archaeological process. The method can be applied at almost any scale from the recording of complex but very small artefacts, excavated surfaces, features and structures as well as landscapes photographed from kites, drones or aircraft. Most importantly the method does not require extensive training in photography or a detailed understanding of photogrammetry but does rely on good practice if the results are to be widely useful. Thus the field guide which will be published on the internet is designed to be used by all archaeologists rather than survey specialists alone.



*3D image of an excavated trench through the defences of a Late Bronze Age/Early Iron Age at Roulston Scar, North York Moors National Park, North Yorkshire.*

DOMINIC POWLESLAND

## Exchange in the Neolithic Tavoliere

CRAIG ALEXANDER (*McDonald Institute*)

The Tavoliere, a relatively flat expanse south and west of the Gargano peninsula, was home to the earliest farmers in Italy. There are at least 560 – and perhaps more than 800 – settlement sites, the earliest dating to before 6000 BC. This makes the Tavoliere one of the densest areas of Neolithic settlement in Europe. This project researches Neolithic social ties, exchange and craft specialization in the Tavoliere using evidence from chemical analyses of ceramics and clay sources. It is directed by Craig Alexander (McDonald Institute), Keri Brown (Manchester Institute of Biotechnology) and Robert Tykot (South Florida) in collaboration with Dr Italo Muntoni of the *Soprintendenza per i Beni Archeologici della Puglia*. Project members are conducting in-field pXRF analyses of ceramics collected by field-walking, ceramics

from museums/official storage facilities and samples of raw clay gathered from local sources. The pXRF analyses show us the trace-element composition of the ceramics and the clays – important clues in understanding both raw material sourcing strategies and exchange patterns. All data are georeferenced at the point of collection and all information is integrated into a GIS data base.

During June 2013 we undertook our first three weeks in the field with the assistance of student volunteers from the UK and Italy. We collected more than 400 samples from 12 field-walking sites along with samples from 6 clay sources. The collections of the Foggia museum were also analysed.

*The project is funded by the McDonald Institute for Archaeological Research and the British Academy - Albert Reckitt Archaeological Fund.*



## McDonald Annual Lecture

● **21 November** MARY BEAUDRY (*Boston University*) - Gastronomical Archaeology: Food, Materiality, and the Aesthetics of Dining

## RR Inskeep Memorial Lecture

● **4 June** CHRISTOPHER STUART HENSHILWOOD (*University of the Witwatersrand, South Africa and University of Bergen, Norway and Colenso Fellow, St John's College Cambridge*) - Tracing the Behavioural Evolution of *Homo sapiens* in Southern Africa

## McDonald Institute Seminars

- **10 October** MAGDALENA NAUM (*McDonald Institute*) - Guests, Refugees, Colonists: Medieval Migration in the Baltic
- **11 October** ANA BELÉN MARIN (*LCHES*) - Neanderthal and Modern Human Subsistence in Serbia
- **17 October** GILLIAN CARR (*Institute of Continuing Education*) - Erasing the Sins of the Grandfathers? An Exploration of the Rejection of WWII Resistance Heritage in the Channel Islands
- **24 October** ROBERT HARDING (*FAMES*) - Trade and Religion: Christians, Muslims and Jews in Medieval Kerala
- **31 October** DAVID ORTON (*McDonald Institute*) - Making it Count: From Ancient Animal Remains to Contemporary Conservation
- **14 November** RONIKA POWER (*McDonald Institute*) - From the Cradle to the Grave: Child, Infant and Foetal Burials in the Egyptian Archaeological Record from the Early Dynastic Period to the Middle Kingdom (c. 3300–1650 BC)
- **28 November** KATHELLJNE KOOPS (*Division of Bioanthropology*) - Ecology of Technology: Do Environmental Factors Influence the Use of Technology by Wild Chimpanzees?
- **23 January** GIUSEPPINA MUTRI (*McDonald Institute*) - People and Ideas in Movement: the Role of the Backed-bladelets-based Lithic Complexes in the Late Pleistocene/Early Holocene Economy of North Africa
- **30 January** GUILLAUME ROBIN (*McDonald Institute*) - New Approaches to Neolithic Tomb Art in Europe: Recent Research in Ireland and Sardinia
- **6 February** DAVID McOMISH (*University of Glasgow*) - Archaeology and the Common Good: Developing a Network for Integrated Landscape Research
- **20 February** ROBYN VEAL (*McDonald Institute*) - Examining Forest Exploitation in Province and Empire from the (Archaeological) Ground, Up
- **27 February** MICHAEL BOYD (*McDonald Institute*) - Performance and Fields of Action in Mycenaean Mortuary Practices
- **6 March** EMANUELA CRISTIANI (*McDonald Institute*) - The Meeting Point of Two Different Bone-tool Traditions and the Spread of the Neolithic in the Balkans
- **13 March** CHRISTINE HASTORF (*University of California, Berkeley*) - Working with the Community: the Inauguration of a Community Museum in Bolivia 2012

● **24 April** CHRISTOPHER STIMPSON (*McDonald Institute*) - Avian Zooarchaeology at the Great Cave of Niah, Sarawak

● **30 April** GONZALO ARANDA-JIMENEZ and MARGARITA SANCHEZ-ROMERO (*University of Granada*) - The Multiple Faces of Funerary Rituals: Bronze Age Societies in Southeastern Iberia

● **13 May** LISE BENDER JØRGENSEN (*NTNU, Department of Archaeology and Religious Studies, Trondheim, Norway*) - What's New about Bronze Age Textiles? Reflections on How the Bronze Age Peoples of Europe Used Creativity and Know-how in the Making of Textiles and Garments

● **14 May** MATTHEW DAVIES (*McDonald Institute*) - Historical Ecology and Applied Agro-archaeology in Eastern Africa

● **22 May** ALEX PRYOR (*McDonald Institute*) and CYNTHIA LARBY (*Division of Archaeology*) - Parenchyma, Plant Processing and Plant Consumption at Dolní Věstonice II

● **29 May** RONG WANG (*University of Fudan*) - The Preliminary Study on the Weathering Mechanism and Conservation of Chinese Ancient Jades (from Neolithic to Han Dynasty)

● **12 June** ALEX WILSHAW (*Division of Bioanthropology*) - The Lithic Technologies of the Nakuru-Naivasha Basin and Surround, Central Rift Valley, Kenya: Quantitatively Assessing and Addressing Variation in the LSA

## Garrod Research Seminars

### Division of Archaeology

- **11 October** DAVID LEWIS-WILLIAMS (*University of the Witwatersrand*) - Ethnography and Rock Art: the Southern African San Case
- **16 May** MELISSA GOODMAN ELGAR (*Washington State University*) - Space and the Dynamic Mind: Is Neolithisation Evidence for Changes in Situated Cognition?

## Conferences and Workshops

- **6–8 December** The End of Empire: Life on the Frontiers of Imperial Polities
- **7 March** PITOTI: Archaeology, Digital Heritage and Rock Art
- **22–23 March** Who Cares? Britain's Overseas Missionary Heritage Today (2nd Workshop)
- **5–7 April** Islands of War, Islands of Memory
- **10–11 April** Creativity: an Exploration Through the Bronze Age and Contemporary Responses to the Bronze Age
- **13 April** Heritage Scapes
- **4 May** Religious Materialities: Exploring the Role of Material Culture in Religious Mediation
- **9–11 May** 25th Anniversary Workshop Meeting of the International Soil Micromorphology Working Group
- **20–22 September** Frontiers of the European Iron Age (*Magdalene College*)



## Discussion Groups

The **African Archaeology Group** (AAG) was set up in 2008 to revive the African Seminar previously established by Dr John Alexander. Its aims are to discuss current research programs and results of Cambridge archaeologists working in Africa, to hold seminars by Africanist speakers, to bridge University departments and research bodies interested in Africa's past, and to maintain the tradition of Cambridge's long-standing involvement in African archaeology.

**Contact:** Matthew Davies (md564@cam.ac.uk); Shadia Taha (st446@cam.ac.uk); Laurence Smith (ls101@cam.ac.uk).

The **Americas Archaeology Group** is open to anyone interested in archaeological and anthropological research projects throughout the Americas. Presentations are given by research students, postdocs, visiting scholars and lecturers from the UK and overseas institutions. Meetings are usually held Monday afternoons in the McDonald Seminar Room. A trip to the pub tends to follow for lively, informal discussions. All are welcome!

**Contact:** Erel Hubert (eh385@cam.ac.uk).

The **Ancient Near Eastern Seminar Series** attracts speakers from the UK and overseas institutions and offers a focus for the wide range of Assyriological and Ancient Near Eastern archaeological projects across the University, builds links with other research centres and offers a chance for all to see the work that is being carried out in this large and important field of research.

**Contact:** Kathryn Stevens (krs45@cam.ac.uk).

The **Archaeological Field Club** (AFC) provides a range of lectures, site trips and other events to broaden the knowledge of, and further enthuse, those with an interest in archaeology.

**Contact:** David Kay (dkk27@cam.ac.uk); Tomos Evans (tle24@cam.ac.uk).

The **Art Group** provides a forum for the exchange of ideas about visual art, including prehistoric as well as contemporary art. Alongside presentations focusing on prehistoric art of the world, we will also consider how our existing understanding of contemporary art influences the way we look at and construe interpretations of prehistoric imagery and vice versa.

**Contact:** Liliana Janik (lj102@cam.ac.uk); Jess Cooney (jbc35@cam.ac.uk); Sarah Evans (sce25@cam.ac.uk).

The **Asian Archaeology Group** (AsAG) aims to provide a forum for new research and discussion for those working in the field of Asian archaeology. We have talks every other week that cover the Asian continent in all its diversity – from megaliths in Borneo and minarets in Turkmenistan to phytoliths in India and starch grains in China!

**Contact:** Penny Jones (pjj25@cam.ac.uk); Jennifer Bates (jb599@cam.ac.uk).

The **Egyptian World Seminar Series**, supported by the Mulvey Fund, continues to present recent research and discussions regarding Egyptology. It attracts speakers from around Britain and the EU who cover all aspects of Egyptology as anthropology, archaeology, philology and museum studies.

**Contact:** Rune Nyord (rn321@cam.ac.uk); Renate Fellinger (rf296@cam.ac.uk); Ana Tavares (at630@cam.ac.uk); Barbora Janulikova (bj253@cam.ac.uk).

The **Garrod Research Seminars** represent the Department of Archaeology's main series of invited scholarly lectures. Each year they relate to a specific theme.

**Contact:** Charles French (caif2@cam.ac.uk); Graeme Barker (gb314@cam.ac.uk).

The **George Pitt-Rivers Lunchtime Seminars** are generally given by researchers based in or around the University of Cambridge. They are primarily aimed at researchers working in the archaeobotany, genetics and isotope laboratories in the McDonald Institute, but cover a wide range of topics.

**Contact:** Kate Boulden (kjb66@cam.ac.uk).

The **Heritage Research Group** is made up of graduate students, academics, heritage practitioners and other interested parties. In addition to helping organize the annual Cambridge Heritage Seminar (a successful international conference), the main focus of the Heritage Research Group is its seminar series. The seminars aim to bring together researchers from diverse disciplinary backgrounds, whose projects cover a wide range of topics within the broad field of heritage.

**Contact:** Leanne Philpot (lp303@cam.ac.uk).

The **Later European Prehistory Group** welcomes everyone interested in the European Neolithic, Bronze and Iron Ages. The group provides an informal and friendly setting for the exchange of ideas, dissemination of research results and the discussion of current topics of interest. Professionals, students and academics are invited to contribute.

**Contact:** Bela Dimova (bd283@cam.ac.uk).

The **Medieval Archaeology Group** meets to discuss recent research on historical archaeology from the fifth to fifteenth centuries AD.

**Contact:** Susanne Hakenbeck (seh43@cam.ac.uk).

The **PalMeso Discussion Group** for all things Palaeolithic–Mesolithic has continued to attract guest speakers from all around Britain, as well as providing a forum for Cambridge MPhil and PhD students to present the results of their own research in a relaxed atmosphere.

**Contact:** Chris Andrews (cja51@cam.ac.uk); Sarah Evans (sce25@cam.ac.uk).

**TAT (Thinking About Things)** is an informal fortnightly meeting which takes place in the Material Culture Laboratory. TAT hopes to capture a spirit of enquiry and to create a community of like-minded individuals, postgraduate students and postdocs, who are trying to come up with ways to make social sense of the material worlds they are studying.

**Contact:** Ben Cartwright (bhjc2@cam.ac.uk); John Creese (jlc75@cam.ac.uk); Astrid van Oyen (av360@cam.ac.uk).

The **Zooarchaeology Discussion Group** showcases zooarchaeological and osteoarchaeological studies undertaken in the Institute.

**Contact:** Preston Miracle (ptm21@cam.ac.uk).



**Prehistory Day** (27 October 2012)

The climate was often adverse in prehistory and 'Prehistory Day' 2012 was an apt reconstruction. Members of the McDonald Institute and the Division of Archaeology braved the elements to welcome hardy visitors to the Cambridge Archaeological Unit on an unusually frozen and blustery autumn day.

Participants were able to thaw out near smelting fires and a clay oven between attempting to 'hunt' using a spear thrower and bow and arrow, reconstructing Bronze Age artefacts, watching a deer skinned with a flint knife and subsequently cured, and producing their own rock art and pottery. The finds room provided a welcome retreat from the rain while they learnt about how archaeologists process their discoveries.



*Thawing out by the bread oven.*



*Tony Legge teaches a young hunter how to use a spear thrower.*

**Science Day** (16 March 2013)

Staff and students did their best to encourage the next generation of Archaeological Scientists with their contribution to Cambridge University's annual Science Festival. Participants aged 0–90 poured through our doors to enjoy the hands-on activities on offer.

They were serenaded by the music of the past. Or at least they learnt about the first ever musical instruments and some people were able to produce some interesting sounds! They moved on to investigate zooarchaeology, identifying species from their skeletons and determining whether animals had died of natural causes or under the huntsman's knife. Many tried flotation to recover plant remains and studied their finds under the microscope. Others learned how archaeologists reconstruct past landscapes and diets using the chemicals found in teeth, bones and hair. Digging through the past via a multi-layered model excavation kept many children interested for hours.



*Model excavation.*



*Examining a human skull.*

SARA HARROP

SARA HARROP

DORA KEMP

DORA KEMP



## • P • I • T • O • T • I • - Digital Rock Art in Ancient Europe

FREDERICK BAKER (*McDonald Institute*) & CHRISTOPHER CHIPPINDALE (*Museum of Archaeology & Anthropology*)

• P • I • T • O • T • I • is a multimedia digital rock-art exhibition which was held at Triennale di Milano (October 2012) and the Museum of Archaeology and Anthropology, Cambridge (4 March–4 April 2013). It explores the links between the world of archaeology and the world of film, digital humanities and computer vision. The word *pitoti* comes from the Lombard dialect and means ‘little puppets’, a local name for the carvings created by the residents of Valcamonica, Italy thousands of years ago, predominantly in the Iron Age. ‘*Pitoti* are aliens, but aliens like ourselves’, says Dr Chippindale. This exhibition takes these carvings as a starting point and has filmed, photographed, animated, and re-presented them in the twenty-first century with new digital graphic technologies. ‘What the figures cannot do and do not do is move: there were no film cameras or animation studios in prehistoric times. But with our film, cameras and animation studios, today we can take the metaphor literally. If these figures are like stills from a cartoon, we can animate them and create a cartoon. If they are moments frozen from a narrative, we can tell a full story with them’, explains Dr Baker. This playful injection of digital technology allows you to navigate the 70 km Valcamonica valley, projected onto a whole wall, with a video game joystick, or interact with a digital rock face through a touchscreen, moving the figures around in mini multiplayer games.

## Who Cares? Britain’s Overseas Missionary Heritage Today

CHRIS WINGFIELD (*Museum of Archaeology and Anthropology*)

While the missionary past is frequently regarded with an increasingly ambivalent attitude in Britain, histories of mission remain a matter of widespread interest in other parts of the world, where the remains of early missions are frequently recognized as significant heritage sites. This poses a set of complex questions about ‘who cares’ most about material that derives from British overseas missionary activity in the past, as well as who cares for it in the present, both at historic mission sites overseas and at museums in Britain. This AHRC funded networking project set out to explore the contemporary issues that arise around material that derives from British Christian missions in Africa and the Pacific.

Over the course of nine months, three workshops brought together scholars and curators with representatives of British missionary organizations, as well as heritage organizations in Africa and the Pacific, to explore the ways in which different stakeholders engage with and care about the material heritage of mission today. The first workshop in Edinburgh was timed to coincide with the opening of *Dr Livingstone, I Presume?*, an exhibition by National Museums Scotland commemorating 200 years since the birth of David Livingstone, arguably the most famous of all British missionaries. The second workshop, held at the McDonald Institute in March addressed the significance and fate of material held in Britain that derives from missionary



Frederick Baker and Christopher Chippindale at the • P • I • T • O • T • I • exhibition in Milan.

The exhibition attracted 20,000 visitors in 4 weeks in Milan, and 1830 in two weeks in Cambridge and was featured by ITV news and *The Guardian*.

The exhibition was funded by the European Union, MAA, the McDonald Institute for Archaeological Research, Centro Camuno di Studi Preistorici and St Pölten University of Applied Sciences in collaboration with the Virtual Systems Lab at the Bauhaus University Weimar. [www.pitoti.org](http://www.pitoti.org)



Sagale Buadromo, Director of the the Fiji Museum and Tarisi Vunidilo, Secretary General of the Pacific Islands Museum Association talking about ‘Thomas Baker’s Shoes’ – the remains of a missionary killed and allegedly eaten in Fiji in 1867, still on display in the Fiji Museum.

encounters. The final workshop, which had a focus on the Pacific, was held at the Sainsbury Research Unit in Norwich, and was timed to coincide with the opening of the *Chiefs and Governors: Art and Power in Fiji* exhibition at MAA.

This project is funded by the AHRC, under its Care for the Future strand.



## Personal Histories Project

PAMELA JANE SMITH (*McDonald Institute*)

The Personal Histories Project invites influential figures from the sciences, humanities and the arts to explore the stories behind their careers. We are a very popular volunteer and student-run project that organizes public events, personal interviews and film and digital-skills training workshops to pursue our goal of collecting life histories for archival and educational purposes.

For a selection of our student-produced free history-of-science films, please visit the University of Cambridge's Streaming Media Service <<http://www.sms.cam.ac.uk/collection/750864>>, our Vimeo page <<https://vimeo.com/personalhistoriesproject/videos>> or view and 'like' the Personal Histories Facebook page.

Since 2010, there have been over 20,000 downloads of Personal Histories films in over 105 countries. The memories of dozens of known figures such as Mick Aston, David Attenborough, Jane Goodall, Robert Hinde, Henrietta Moore and Colin Renfrew have been preserved.

On 28 November 2012, York University Professor Martin Carver, long-serving, brilliant Editor of the leading archaeological journal, *Antiquity*, entertained his audience with tales of his life as an army officer, academic and freelance archaeologist with specialities in archaeological practice and Protohistoric Europe.

On 11 February 2013, stage and film actor, Tony Robinson, appeared before a capacity audience of school and university students and members of the public to describe his childhood in the theatre and then 20 years of television involvement in *Time Team*, a programme which inspired thousands to become involved in British archaeology. The film of his conversation with the audience is available at <<http://vimeo.com/63573378>>.

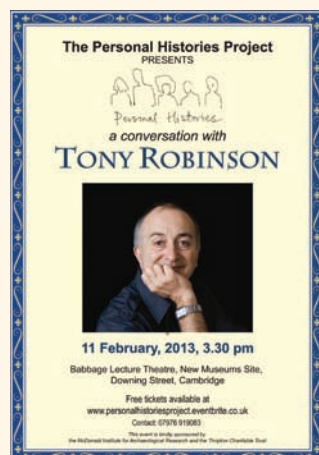
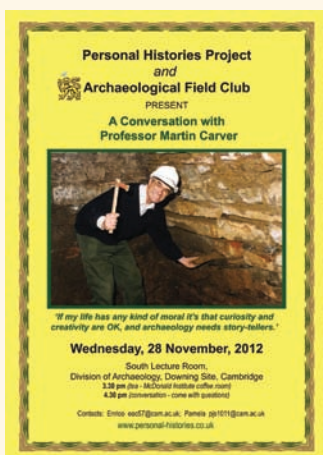
*The project is funded by grants and donations from the McDonald Institute for Archaeological Research, the Thriplow Charitable Trust, John Pickles and Pamela Jane's late husband Thurstan Shaw. For more information contact Jamie Cameron <[jac255@cam.ac.uk](mailto:jac255@cam.ac.uk)> or Pamela Jane Smith <[pjs1011@cam.ac.uk](mailto:pjs1011@cam.ac.uk)>.*

## Access Cambridge Archaeology

CARENZA LEWIS (*McDonald Institute*)

2012–13 was an exceptionally busy year for Access Cambridge Archaeology (ACA), directed by Dr Carenza Lewis which included the first of three years of a programme of Higher Education Field Academies (HEFA) for schools as well as two other major projects, Cambridge Community Heritage (see p. 41) and Managing a Masterpiece. Catherine Ranson and Clemency Cooper continued in full-time roles as archaeological supervisor and administrator respectively, with Jessica Rippengal (Division of Archaeology) and Jenni French (Peterhouse College, Cambridge) providing part-time support for excavation supervision and written report assessment. In addition, other graduate and undergraduate students have been involved as volunteers on summer fieldwork and winter courses, with Alex Pryor (McDonald Institute) making a major contribution to fieldwork on a range of ACA activities. Sue Poll (McDonald Institute) coordinated the Discovery Day programme, and Claire Halley (former PhD student, University of Cambridge) taught 'A' Level Archaeology at Suffolk One College in Ipswich.

The Higher Education Field Academy (HEFA) programme was scaled up again thanks to funding from the Cambridge Admissions Office (WPPF). A total of 521 students attended 14 HEFAs for 3 days each, with the WPPF monies thereby providing 1563 learner days, involving students from 49 schools, accompanied by 86 school staff. This represents a doubling of provision compared with 2011–12. This is a real triumph, as the loss of Aimhigher (ACA's former partner in the HEFA programme) deprived the HEFA programme of its support in promoting HEFA within schools. In response to this, in 2012 ACA devised and set up a system of Beacon Schools for HEFA, in which key schools agree to liaise with target schools in tessellated territories local to them to ensure that as many students as possible who will benefit from HEFA are able to take part. This has worked remarkably well even in its first year as testified by the highest ever number of filled HEFA places. The HEFA programme in 2012–15 is focusing on school students in the upper 20% of the ability spectrum, with the aim of raising participant aspirations to attend top universities. The structure and content of Day 3 has been revised and expanded and now includes an academic lecture on the background to the HEFA excavations whose content can be used by students when preparing their written assignments. This past year has seen a marked rise in the number of students submitting written assignments, rising from 39% in



Personal Histories Project posters 2012–13.



HEFA students excavating a test pit in Willingham, Cambridgeshire.

CATHERINE RANSON



2011–12 to 68% in 2012–13: this appears to reflect (1) the impact of the new additions to the HEFA course structure especially on Day 3; (2) the success of the Beacon School system in coordinating additional sessions supporting writing up; and (3) the commitment shown to HEFA by the high-achieving students who attend. HEFA participation can be seen to significantly raise students' confidence in their education, and bolster their confidence in their intentions and aspirations. After HEFA, 77% of students felt more confident about trying something new; 82% felt more positive about staying in education after Year 11; 83% felt more positive about going to university, and 89% felt they knew more about what life at university would be like. In significant numbers, a step change was achieved, with students changing their mind entirely about whether to consider going to university.

A number of new settlements were drawn into the HEFA programme: Stapleford (Cambs.), Walberswick (east Suffolk), Daw's Heath (south Essex), Great Amwell (south Herts.), and North Warnborough (Hampshire). HEFA excavations also took place in villages where ACA had previously carried out test-pit excavations as part of other, non-HEFA, projects, Swaffham Bulbeck (Cambs.) and Long Melford (Suffolk). Highlights in 2013 included the first discovery in Essex of significant quantities of Saxo-Norman Thetford ware, which was found in two pits near the church at Manuden (Essex). Essex rural settlements tend to produce no material of this date, so this is a significant discovery. It was therefore interesting to also find Thetford ware associated with a post hole in a test pit excavated in 2013 at Long Melford. This lies very close to the Essex border in Suffolk and had also previously produced no material of this date. Another particularly interesting discovery was in Walberswick, where, unusually, all the test pits produced medieval pottery, with no sign of any later medieval decline.

ACA's other main school programme, indoor Discovery Days aimed at 10- to 14-year-olds, was coordinated by Sue Poll. In total, 134 learners, plus school staff, attended 7 Discovery Days. Elsewhere, a second cohort of GCSE students at Mildenhall College completed archaeological excavations as part of their GCSE in History. A total of 244 learners have now completed their GCSE 'History Around Us' controlled assessment, using their excavated data to explore and contextualize the development of the historic settlement. Their experience left 81% of learners more pleased to be studying History GCSE than they had been before they took part in the excavations. Across all attainment levels, almost all students matched or bettered their target grade. Overall the controlled assessment was the highest scoring unit within the GCSE. At Suffolk One

College in Ipswich, Claire Halley continued her successful involvement with A Level Archaeology, instigated by ACA, seeing her first cohort through the second year of their course.

ACA's community archaeology activities included the Heritage Lottery Fund-funded Managing a Masterpiece programme. Projects included test-pit excavations in Nayland (Suffolk); field-walking at Goldingham (Essex) and two larger excavations at Clare Castle (Suffolk). The test pitting at Nayland provided striking evidence for the extent to which the settlement flourished in the later medieval period, bucking the trend otherwise observed from test-pit excavation across the region for significant contraction at this time. Field-walking by volunteers revealed evidence for Mesolithic activity and a slight concentration of medieval pottery coinciding with a spread of oyster shell which may hint at the site of settlement associated with the medieval manor of Goldingham. In May 2013, a nine-day excavation at Clare Castle was so successful that a further five-day excavation was funded in the autumn. The aims of the excavations were to provide a context for human remains previously found during twentieth-century construction work on the site; to assess the extent of surviving archaeological remains where the Victorian railway cut across the castle bailey; to establish whether any remains of documented medieval gardens survive east of the bailey; and to identify and characterize any archaeological features in the scheduled southern part of the inner bailey. The excavations involved nearly 150 volunteers, and revealed five *in situ* inhumations from a medieval cemetery surviving under the former railway line; a substantial ditch or pit containing a series of twelfth- to fourteenth-century fills including very unusual ornately decorated Mill Green ware jug whose only known parallel is from London; and the foundations of a large stone building along the south side of the bailey which was built in the twelfth century and demolished in the sixteenth. Large amounts of medieval painted window glass found overlying these may come from this building or another one nearby, but attest to the high status of the buildings in this area, interpreted as a chapel, church or hall. No evidence was found for medieval gardens, and it is inferred that if these were present in the excavated area, they have been destroyed by more recent landscaping. Another major community project in 2012–13 was Cambridge Community Heritage (CCH), funded by AHRC to support 27 groups researching aspects of their local or group heritage (see p. 41).

Almost 2000 people took part in hands-on archaeological activities run by ACA in 2013 and the number of test pits excavated has now topped 1500 (see reports in *Medieval Settlement Research*). More information on ACA's activities and excavations is available at [www.access.arch.cam.ac.uk](http://www.access.arch.cam.ac.uk).



*(Left) Volunteers from ACA's September excavations at Clare Castle (Suffolk), with the castle motte in the background and the trench containing three burials, structural remains and a pit overlain by railway ballast in the foreground.*

*(Right) A HEFA student holds a late medieval copper alloy decorative fitting from a test pit in Manuden (Essex).*





## Cambridge Archaeological Journal

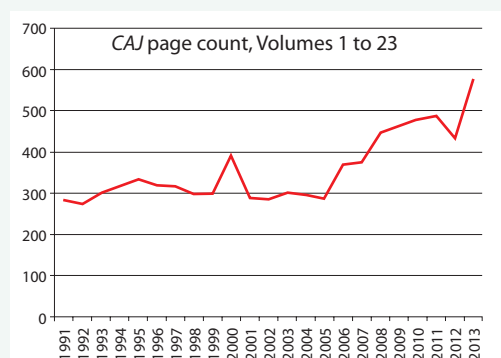
JOHN ROBB

2013 was marked by continued growth for the *Cambridge Archaeological Journal*. Most strikingly, we published more archaeology than ever, reaching a record extent of 576 pages. As ever, articles cover a huge range of topics, from the philosophical aspects of human cognitive evolution (as in John Barrett's 'The archaeology of mind: it's not what you think') to the personhood of Bronze Age weapons, South African rock art, seventeenth-century ritual shoe deposition, and Andean crafting traditions. The high page count for 2013 continues a trend which began in 2006 with the far-reaching decision to move from two to three issues a year; this seems to have triggered a feedback loop in which the more we publish, the more good scholars recognize *CAJ* as a good venue for their publications. In a journal landscape which is increasingly crowded with narrowly defined journals, we have been benefiting from our profile as one of the few journals willing to publish full-length articles on a wide range of themes and theoretical ideas as long as the archaeology is sound and interesting and the article speaks to theoretically minded generalists.

The other major developments in 2013 were organizational. Liz Farmer, the journal's secretary, retired in April, after serving with the journal since 1999 (*CAJ* vol. 9). It goes without saying that Liz is missed on both a professional and personal level! Fortunately, by a happy accident, this coincided closely with the move in April to the Scholar One online editorial management system. The Scholar One system streamlines the work flow substantially and has helped cope both with the increasing work flow and with Liz's departure. We also went over to a Firstview system in which articles are published online with a DOI as soon as a final text goes through production, which can be a number of months in advance of print publication. This has proven quite attractive to authors.

2014 promises to be another bumper year, with interesting special sections lined up on bioarchaeology and the agency of the dead (June) and cosmology and landscape design in the Americas (October). We will also be talking seriously with Cambridge University Press about expanding to four annual issues, possibly beginning from 2015.

The journal team comprises John Robb (Editor), Katherine Boyle (Book Reviews) and Dora Kemp (Production Editor).



### Vol. 22, No. 3, October 2012

- Imitation, Artificiality and Creation: the Colour and Perception of the Earliest Glass in New Kingdom Egypt BY CHLOE N. DUCKWORTH
- Public Ritual and Urbanization in Central Mexico: Temple and Plaza Offerings from La Laguna, Tlaxcala BY DAVID M. CARBALLO
- Pyramidologies of Egypt: a Typological Review BY ROBIN DERRICOURT
- The Domestication of Personhood: a View from the Northern Iroquoian Longhouse BY JOHN L. CREESE
- Civic and Household Community Relationships at Teotihuacan, Mexico: a Space Syntax Approach BY SHAWN G. MORTON, MEAGHAN M. PEURAMAKI-BROWN, PETER C. DAWSON & JEFFREY D. SEIBERT
- Animal Figurines from Neolithic Çatalhöyük: Figural and Faunal Perspectives BY LOUISE MARTIN & LYNN MESKELL

### Vol. 23, No. 1, February 2013

- The Archaeology of Mind: It's Not What You Think BY JOHN C. BARRETT
- Material Scaffolds in Numbers and Time BY KARENLEIGH A. OVERMANN
- Birds, Burials and Sacred Cosmology of the Indigenous Beothuk of Newfoundland, Canada BY TODD J. KRISTENSEN & DONALD H. HOLLY JR
- The Spirit of the Sword and Spear BY MARK PEARCE
- Brain Disorder and Rock Art BY ROBERT G. BEDNARIK
- Temporality and the Transition to Cremation in the Late Third Millennium to Mid Second Millennium BC in Britain BY JO APPLEBY
- Ritual, Recycling and Recontextualization: Putting the Concealed Shoe into Context BY CERI HOULBROOK
- The Cognitive Implications of Controlled Fire Use by Early Humans BY TERRENCE TWOMEY

### Vol. 23, No. 2, June 2013

- The Use of White Marble in the Central and Upper Adriatic Between Greece and Rome BY FABRIZIO ANTONELLI & LORENZO LAZZARINI
- Recognizing Complex Cognition through Innovative Technology in Stone Age and Palaeolithic Sites BY LYN WADLEY
- Not 'Just Another Brick in the Wall?' BY DANNY ROSENBERG
- Pollution Concepts and Marriage for the Southern African Iron Age BY GAVIN WHITELAW
- Intersecting Generations: Burying the Old in a Neolithic Hunter-fisher Community BY FREDRIK FAHLANDER
- From Illustration to Social Intervention: Three Nineteenth-century Xam Myths and their Implications for Understanding San Rock Art BY J.D. LEWIS-WILLIAMS
- The Performance of Building and Technological Choice Made Visible in Mudbrick Architecture BY SERENA LOVE
- The Empowerment of Imagery: Stone Warriors in the Borders BY JAVIER RODRIGUEZ-CORRAL
- Architecture, Materialization and the Duality of Structure: a Maya Case Study of Structurally Shaped Innovation BY KEVIN R. SCHWARZ



## McDonald Institute Monographs

JAMES BARRETT (*Series Editor*), DORA KEMP (*Publications Manager*) & LIZ FARMAR (*Administrator*)

The McDonald Institute is committed to publishing new perspectives and ground-breaking research in the field of archaeology. We are proud to publish academic monographs of the highest quality across a range of subjects, ranging from excavation reports to conference proceedings and the history of linguistics.

### Recent reviews of McDonald Monographs

*Being an Islander: Production and Identity at Quooygrew, Orkney, AD 900–1600*,  
edited by James H. Barrett

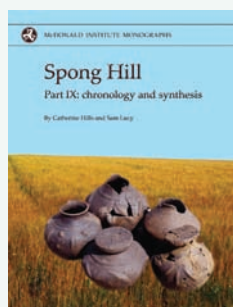
*“an in-depth archaeological research report of the best type ... Being an Islander really does manage to be that rarest of things, a text combining both the micro and macro perspectives to good effect ... and the grand narrative that tells the site’s story is present too”*  
Joe Flatman (English Heritage), *International Journal of Nautical Archaeology* 42.2 (2013)

*“a very attractively produced excavation monograph ... which should be read widely”*  
Julian D. Richards (University of York), *Antiquity* 87 (2013)

In 2012–13 the major focus of the McDonald Institute Publications team was three substantial excavation reports by members of the Division of Archaeology and the McDonald Institute. *Spong Hill* by Catherine Hills and Sam Lucy was completed and launched at a seminar at the Society of Antiquaries of London and also at a reception and dinner at Newnham College, Cambridge. *The Settlement at Dhaskalio* on the excavations at Keros, Greece led by Professor Colin Renfrew and Dr Michael Boyd was launched at the Archaeological Society in Athens during a 5-hour set of talks to hundreds of Greek archaeologists. Finally the first volume of

Professor Graeme Barker’s Niah Cave project in Borneo, *Rainforest Foraging and Farming*, is nearing completion with a second volume to follow early in 2014.

The McDonald Institute’s website was updated to the current University of Cambridge housestyle and now includes a more streamlined monograph catalogue ([www.mcdonald.cam.ac.uk/publications/mcd-books](http://www.mcdonald.cam.ac.uk/publications/mcd-books)). The newly redesigned ground floor of the Institute’s courtyard building contains a dedicated book display area which, for the first time, allows us to present all of our publications to date.



### *Spong Hill, part IX: Chronology and Synthesis*

by Catherine Hills and Sam Lucy

Hardback | £59/US\$118 | ISBN 978-1-902937-62-5 | xvi + 424 pp. | 286 × 220 mm | 166 ills. | 70 tables | 6 appendices | May 2013

*Spong Hill*, with over 2500 cremations, remains the largest early Anglo-Saxon cremation cemetery to have been excavated in Britain. This volume presents the long-awaited chronology and synthesis of the site. It gives a detailed overview of the artefactual evidence, which includes over 1200 objects of bone, antler and ivory. Using this information, together with programmes of correspondence analysis of the cremation urns and the grave-goods, a revised phasing and chronology of the site is offered, which argues that it is largely fifth-century in date. The implications of this revised dating for interpretations of the early medieval period in Britain and further afield are explored in full.



### *The Settlement at Dhaskalio*

edited by Colin Renfrew, Olga Philaniotou, Neil Brodie, Giorgos Gavalas & Michael J. Boyd

Hardback | £80/US\$160 | ISBN 978-1-902937-64-9 | xxxii + 800 pp. | 286 × 220 mm | 570 figs. | 16 colour plates | 92 tables | DVD | August 2013

This is the first volume in the series ‘The Sanctuary on Keros: Excavations at Dhaskalio and Dhaskalio Kavos, 2006–2008’. Here the findings are presented from the well-stratified settlement of Dhaskalio, today an islet near the Cycladic island of Keros, Greece. The volume begins with a discussion of the geological setting of Keros and of sea-level change. The excavation and finds (excluding the pottery, discussed in later volumes) are fully documented, with consideration of stratigraphy, geomorphology, organic remains, and the evidence for metallurgy. It is concluded that there was a small permanent population of around 20, increased periodically by up to 400 visitors who would have participated in the rituals of deposition occurring at the Sanctuary at Kavos, situated opposite, on Keros itself, for which the detailed evidence will be presented in Volumes II and III.



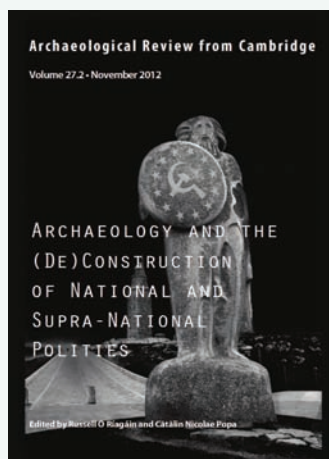
## Archaeological Review from Cambridge

GENERAL EDITORS 2012–13: DANIKA PARIKH,  
KATIE HALL & W. PAUL VAN PELT

The *Archaeological Review from Cambridge* is a bi-annual journal of archaeology run on a non-profit, voluntary basis by postgraduate students at the Division of Archaeology. In the past academic year, *ARC* celebrated its thirtieth anniversary and released two highly-successful issues, both of which sold out very rapidly. The November 2012 issue, *Archaeology and the (De)Construction of National and Supra-National Polities*, edited by Russell Ó Riagáin and Catalin Popa, examines the relationship between archaeology, national identity, transnationalism and authority. The April 2013 issue, *Archaeology and Cultural Mixture*, edited by W. Paul van Pelt, evaluates the conceptual and methodological diversity of archaeological studies of cultural mixture.

*ARC* is also pleased to announce the themes of our next two issues this upcoming year: in November 2013, *Humans and Animals*, edited by Kathryn J. Boulden and Sarah Musselwhite, investigates the symbiotic nature of human–animal interactions and the social role of animals in daily life. In April 2014, *Social Network Perspectives in Archaeology*, edited by Sarah Evans and Kathrin Felder, explores the unique challenges that materiality, the spatial and temporal scales, and the fragmentary nature of the archaeological record pose on reconstructing social networks in the past.

More information about all issues, subscription rates and instructions on how to contribute to the journal can be found on the *ARC* website at: <http://www.societies.cam.ac.uk/arc/>.



## Members'/Fellows' Publications

### MARTIN ALLEN

- 2012 The administration, profits and output of the Berwick mint under English control. *Numismatic Chronicle* 172, 157–9.
- 2012 A lead striking of the Henry II Cross-and-Crosslets (Tealby) coinage from Thetford. *Numismatic Chronicle* 172, 133–5.
- 2012 The mints and moneyers of England and Wales, 1066–1158. *British Numismatic Journal* 82, 54–120.
- 2012 (with A. Daubney). A sixteenth-century hoard of silver coins from Bardney, Lincolnshire. *British Numismatic Journal* 82, 230.
- 2013 Coins, tokens and jettons, in *Under the Oracle. Excavations at the Oracle Shopping Centre Site 1996–8: the Medieval and Post-medieval Urban Development of the Kennet Floodplain in Reading*, eds. B.M. Ford, D. Poore, R. Shaffrey & D.R.P. Wilkinson. (Thames Valley Landscapes Monograph 36.) Oxford: Oxford University School of Archaeology, 431–6.
- 2013 'Coins and jetton', in *Huntingdon Street St Neots: from medieval suburb to early 20th century household*, by C. Cessford & A. Dickens. *Proceedings of the Cambridge Antiquarian Society* 102, 94.
- 2013 (with S.C. Briggs). The Bene't Street, Cambridge, hoard of gold and silver coins of Elizabeth I, James I and Charles I. *British Numismatic Journal* 83, 207–13.
- 2013 (with E. Simons). Jettons and trading tokens, in *Under the Oracle. Excavations at the Oracle Shopping Centre Site 1996–8: the Medieval and Post-medieval Urban Development of the Kennet Floodplain in Reading*, eds. B.M. Ford, D. Poore, R. Shaffrey & D.R.P. Wilkinson. (Thames Valley Landscapes Monograph 36.) Oxford: Oxford University School of Archaeology, 161–3.
- 2013 (ed. with J. Naylor & P. Walton). Coin register 2013. *British Numismatic Journal* 83, 276–312.
- 2013 (ed. with E. Ghey & J. Naylor). Coin hoards from the British Isles 2013. *British Numismatic Journal* 83, 263–75.

### SALLY-ANN ASHTON

- 2013 *6000 Years of African Combs*. Cambridge: The Fitzwilliam Museum.
- 2013 (ed.). *Origins of the Afro Comb*. Cambridge: The Fitzwilliam Museum.

### FREDERICK BAKER

- 2012 (with C. Chippindale). *PITOTI. Digital Rock-art from Prehistoric Europe: Heritage, Film, Archaeology*. Milan: Skira.
- 2012 (with M. Kren & C. Chippindale). Pitoti: Eine Bewegungsanalyse der prähistorischen Felskunst von Valcamonica anhand von Animation und Grafik. *Mitteilungen der Anthropologischen Gesellschaft in Wien (MAGW)* 142, 1–28.
- 2012 *Pitoti – Interactive Interface, Technosensual*. Vienna: Edition Monochrome.

### GRAEME BARKER

- 2012 (with P. Bennett, L. Farr, E. Hill, C. Hunt, G. Lucarini, J. Morales, G. Mutri, A. Prendergast, A. Pryor, R. Rabett, T. Reynolds & M. Twati). The Cyrenaican Prehistory Project 2012: the fifth season of investigation of the Haula Fteah cave. *Libyan Studies* 43, 115–36.
- 2012 (with M.G. Campana, D.L. Lister, C.M. Whitten, C.J. Edwards, F. Stock & M.A. Bower). Complex relationships between mitochondrial and nuclear DNA preservation in historical DNA extracts. *Archaeometry* 54, 193–202.
- 2012 (with L.L.S. Lloyd-Smith). The prehistoric funerary archaeology of the Niah Caves, Sarawak (Malaysian Borneo), in *Sacred Darkness: a Global Perspective on the Ritual Use of Cave*, ed. H. Moyes. Boulder (CO): University Press of Colorado, 249–62.
- 2013 (with M.B. Richards). Foraging–farming transitions in Island Southeast Asia. *Journal of Archaeological Method and Theory* 20(2), 256–80.



Members'/Fellows' Publications (cont.)

**GRAEME BARKER** (cont.)

- 2013 (with A.L. Prendergast, M. Azzopardi, T.C. O'Connell, C. Hunt & R.E. Stevens). Oxygen isotopes from *Osilinus turbinatus* as a proxy for sea surface temperature in the central Mediterranean: a case study from Malta. *Chemical Geology* 345, 77–86.
- 2013 (with V.M. Warmuth, A. Manica, A. Eriksson & M.A. Bower). Autosomal genetic diversity in non-breed horses from eastern Eurasia provides insights into historical population movements. *Animal Genetics* 44(1), 53–61.
- 2013 The Neolithisation of northeastern Africa: reflections on knowns, unknowns, and unknown unknowns, in *Neolithisation of Northeastern Africa*, ed. N. Shirai. (Studies in Early Near Eastern Production, Subsistence, and Environment 16.) Berlin: ex oriente, 249–56.

**JAMES BARRETT**

- 2013 (with O. Nehlich & M.P. Richards). Spatial variability in sulphur isotope values of archaeological and modern cod (*Gadus morhua*). *Rapid Communications in Mass Spectrometry* 27(20), 2255–62.
- 2012 (ed.). *Being an Islander: Production and Identity at Quoygrew, Orkney, AD 900–1600*. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research. And chapters therein: Introduction: the study of island societies, 1–10; Viking Age and medieval Orkney, 11–24; Quoygrew and its landscape context, 25–46; The Quoygrew sequence, 47–96; Ecofact recovery and patterns of deposition, 97–102; The maritime economy: mollusc shell, 103–14; The maritime economy: fish bone, 115–38; Fowling: the bird bone, 155–60; Feeding the livestock: the stable isotope evidence, 199–206; Local availability and long-range trade: the worked stone assemblage, 207–28; The metal finds and their implications, 245–54; Interpreting the ceramics and glass, 255–74; Being an islander, 275–91.

**DAVID BARROWCLOUGH**

- 2013 Local history, the nation's future: the current state of local history studies in England, the case of Cambridgeshire. *Hyangtomunhwa [Research for Local History & Culture]* 28, 3–40.
- 2013 The first date for a projecting basal-looped spearhead of Type 9B, Variant A. *PAST The Newsletter of the Prehistoric Society* 75, 6.
- 2013 The identification of a later Bronze Age hoard at Barway, and consideration of the association between metalwork and causeways. *Proceedings of the Cambridge Antiquarian Society* 102, 29–36.
- 2013 (with C.L. Morrison). *Ely: the Hidden History*. Stroud: History Press.

**DAVID BERESFORD-JONES**

- 2013 (with P. Heggarty). South America, Andes: archaeology, in *The Encyclopedia of Global Human Migration*, eds. I. Ness & P. Bellwood. Malden (MA) and Oxford: Wiley-Blackwell, 410–16.
- 2013 (with P. Heggarty). South America, Andes: linguistics, in *The Encyclopedia of Global Human Migration*, eds. I. Ness & P. Bellwood. Malden (MA) and Oxford: Wiley-Blackwell, 401–9.

**ROGER BLAND**

- 2012 The Treasure Act and Portable Antiquities Scheme in England and Wales. *Art and Cultural Heritage Law Newsletter (American Bar Association)* (Winter) 4(1), 1–6.
- 2013 (with S. Moorhead & P. Walton). Finds of late Roman silver coins from Britain: the contribution of the Portable Antiquities Scheme, in *Late Roman Silver: the Traprain Treasure in Context*, eds. F. Hunter & K. Painte. Edinburgh: Society of Antiquaries of Scotland, 117–66.
- 2013 Response: the Treasure Act and Portable Antiquities Scheme. *Internet Archaeology* 33, <http://intarch.ac.uk/journal/issue33/>.
- 2013 What happened to gold coinage in the Third Century AD? *Journal of Roman Archaeology* 26, 263–80.
- 2013 Hoarding in Britain: an overview. *British Numismatic Journal* 8, 224–48.

**MIM BOWER**

- 2012 (with B.A. McGivney, M.G. Campana, J. Gu, F. Stock, D.G. Bradley, D.E. MacHugh & E.W. Hill). The genetic origins of speed in the Thoroughbred horse. *Nature Communications* 3, 643.
- 2013 (with M.G. Campana & P.J. Crabtree). Ancient DNA for the archaeologist: the future of African research. *African Archaeological Review* 30(1), 21–37.
- 2013 (with M. Whitten, R.E.R. Nisbet, M. Spencer, K.M. Dominy, A.M. Murphy, R. Cassidy, E. Barrett, E.W. Hill & M. Binn). Thoroughbred racehorse mitochondrial DNA demonstrates closer than expected links between maternal genetic history and pedigree records. *Journal of Animal Breeding and Genetics* 130(3), 227–35.
- 2013 (with V.M. Warmuth, A. Manica, A. Eriksson & G. Barker). Autosomal genetic diversity in non-breed horses from eastern Eurasia provides insights into historical population movements. *Animal Genetics* 44(1), 53–61.
- 2013 (with M.G. Campana, D.L. Lister, C.M. Whitten, C.J. Edwards, F. Stock & G. Barker). Complex relationships between mitochondrial and nuclear DNA preservation in historical DNA extracts. *Archaeometry* 54, 193–202.

**MICHAEL BOYD**

- 2013 (ed. with C. Renfrew, O. Philaniotou, N. Brodie & G. Gavalas). *The Settlement at*

*Dhaskalio*. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research. And chapters therein: The Dhaskalio and Kavos terrain: topography survey, 57–60; The terrace structure east of the summit: Trenches I, II and XV, 93–140; The north structure at the summit (the Hall): Trenches VI, X, XLII, XXIV, XXXVI and XXX, 141–88; The central summit area and summit enclosure, Trenches XXIII, XX, XXV and XXXV, 189–224; The remaining lower terraces: Trenches XVII, XVIII, XIII, III, IV and V, 281–308; The structure and architecture of the settlement, 341–86; The stone discs from Dhaskalio, 597–644; The radiocarbon determinations, 695–704.

2013 Geophysical survey at Plataiai: methods, problems and results, in *Plataiai: Archäologie und Geschichte einer boiotischen Polis*, eds. A. Konecny, V. Aravantinos & R. Marchese. Vienna: Austrian Archaeological Institute, 185–212.

2013 (with J. Marchand & I. Tzonou-Herbst). Αποτελέσματα επιφανειακής και γεωφυσικής έρευνας στο Ντοράτι Κορινθίας, in *The Corinthia and the Northeast Peloponnesus: Topography and History from Prehistoric Times until the End of Antiquity*, eds. K. Kissas & W.-D. Niemeier. Munich: Hirmer, 55–61.

**MARCUS BRITAIN**

- 2012 (with T. Clack). Archaeological and ethno-historical investigations in Mursiland, S.W. Ethiopia: second interim report. *Nyame Akuma* 78, 41–57.
- 2013 Assembling bodies, making worlds – an archaeological topology of place, in *Archaeology After Interpretation*, eds. B. Alberti, A. Jones & J. Pollard. Walnut Creek (CA): Left Coast Press, 257–76.
- 2013 (with T. Clack & J. Salazar Bonet). Hybridity at the contact zone: ethnoarchaeological perspectives from the Lower Omo Valley, Ethiopia. *Archaeological Review from Cambridge* 28(1), 131–48.
- 2013 (with N. Overton). The significance of Others: a prehistory of rhythm and interspecies participation. *Society & Animals* 21, 135–50.

**MATT BRUDENELL**

- 2013 (with C. Evans, R. Patten & R. Regan). *Process and History: Prehistoric Communities at Colne Fen, Earith*. (The Archaeology of the Lower Ouse Valley, vol. I.) Cambridge: Cambridge Archaeological Unit.

**GILLIAN CARR**

- 2012 Of coins, crests and kings: symbols of identity and resistance in the occupied Channel Islands. *The Journal of Material Culture* 17(4), 327–44.
- 2013 (with M.E. Jasinski). Sites of memory, sites of oblivion: the archaeology of twentieth century conflict in Europe, in *Re-enacting the Past: Museography for Conflict Archaeology*,





- eds. M. Bassanelli & G. Postiglione. Syracuse: LetteraVentidue, 36–55.
- 2013 Resistance, the body and the V-sign campaign in Channel Islander WWII German internment camps, in *Historical Archaeologies of Cognition*, eds. J. Symonds, A. Badcock & J. Oliver. London: Equinox Publishing, 117–31.

**CRAIG CESSFORD**

- 2013 (with A. Dickens). Huntingdon Street St Neots: from medieval suburb to early 20th century household. *Proceedings of the Cambridge Antiquarian Society* 102, 93–109.

**CHRISTOPHER CHIPPINDALE**

- 2012 (with F. Baker). *PITOTI. Digital Rock-art from Prehistoric Europe: Heritage, Film, Archaeology*. Milan: Skira.
- 2012 (with F. Baker & M. Kren). Pitoti: Eine Bewegungsanalyse der prähistorischen Felskunst von Valcamonica anhand von Animation und Grafik. *Mitteilungen der Anthropologischen Gesellschaft in Wien (MAGW)* 142, 1–28.

**LIDIA COLOMINAS-BARBERÁ**

- 2013 *Arqueozoología y Romanización. Producción, distribución y consumo de animales en el noreste de la Península Ibérica entre los siglos V a n.e.–V d.n.e.* (British Archaeological Reports International Series 2480.) Oxford: Archaeopress.
- 2013 (with A. Schlumbaum & M. Saña). The impact of the Roman Empire on animal husbandry practices: study of the changes in cattle morphology in the north-east of the Iberian Peninsula through osteometric and ancient DNA analyses. *Archaeological and Anthropological Science* 6(1), 1–16.
- 2013 (with E. Pons & M. Saña). Ritual practices and collective consumption of animal products at the Iron Age rural settlement of Mas Castellar de Pontós (Girona, Spain) (5th–4th c. BC). *Environmental Archaeology* 18(2), 154–64.

**HARRIET CRAWFORD**

- 2013 (ed.). *The Sumerian World*. Abingdon: Routledge. And chapters therein: Introduction, 1–12; Trade in the Sumerian world, 447–61.

**JOHN CREESE**

- 2012 The domestication of personhood: a view from the Northern Iroquoian longhouse. *Cambridge Archaeological Journal* 22(3), 365–86.
- 2012 Social contexts of learning and individual motor performance, in *Archaeology and Apprenticeship: Body Knowledge, Identity, and Communities of Practice*, ed. W. Wendrich. Tucson (AZ): University of Arizona Press, 43–60.
- 2013 Rethinking early village development in southern Ontario: toward a history of place-making. *Canadian Journal of Archaeology* 37(2), 185–218.
- 2013 Book review of: *Decolonizing Indigenous*

*Histories: Exploring Prehistoric/Colonial Transitions in Archaeology*, eds. M. Oland, S.M. Hart & L. Frink. Tucson (AZ): University of Arizona Press. *Cambridge Archaeological Journal* 23(3), 563–4.

**EMANUELA CRISTIANI**

- 2012 (with D. Boric, V. Dimitrijevic, D. White, C. Lane & C.A.I. French). Early modern human settling of the Danube corridor: the Middle to Upper Palaeolithic site of Tabula Traiana Cave in the Danube Gorges (Serbia). *Antiquity* 86, Project gallery. [www.antiquity.ac.uk/projgall/boric334/](http://www.antiquity.ac.uk/projgall/boric334/).

**MATTHEW DAVIES**

- 2012 BIEA archaeological surveys in the Juba-Nimule Nile region of South Sudan 2009. *Nyame Akuma* 78, 23–40.
- 2012 (with C. Leonardi). Gordon's fort at Laboré and issues of developing archaeology in the new South Sudan. *Antiquity* 86, Project gallery. [www.antiquity.ac.uk/projgall/davies334/](http://www.antiquity.ac.uk/projgall/davies334/).
- 2013 (ed. with F. Nkirete). *Humans and the Environment: New Archaeological Perspectives for the 21st Century*. Oxford: Oxford University Press. And chapters therein: Environment in North American and European archaeology, 3–26; Forced moves or just good moves? Environmental decision making among Pokot farmers, northwest Kenya, 57–76.
- 2013 (ed. with L. Hildebrand). *Monumentality in Africa*. *Azania: Archaeological Research in Africa* 48 (Special Issue).
- 2013 Stone cairns in eastern Africa: a critical review, in *Monumentality in Africa*, eds. L. Hildebrand & M.I.J. Davies. *Azania: Archaeological Research in Africa* 48 (Special Issue), 218–40.
- 2013 Clan and lineage based societies in African archaeology, in *The Handbook of African Archaeology*, eds. P. Mitchell & P. Lane. Oxford: Oxford University Press, 723–36.

**ELIZABETH DEMARRAIS**

- 2013 (ed. with J. Robb). *Art Makes Society*. Special issue of *World Art* 3(1).
- 2013 Art as an affecting presence: infant funerary urns in Pre-Hispanic northwest Argentina. *World Art* 3(1), 110–19.
- 2013 (with J. Robb). Art makes society: an introductory visual essay. *World Art* 3(1), 3–22.
- 2013 Colonización interna, cultura material y poder en el imperio Inca. *Relaciones de la Sociedad Argentina de Antropología* 38(2), 351–76.

**ALISON DICKENS**

- 2013 (with C. Cessford). Huntingdon Street St Neots: from medieval suburb to early 20th century household. *Proceedings of the Cambridge Antiquarian Society* 102, 93–109.
- 2013 (with R. Newman & C. Evans). Some splendid rooms: further archaeological and architectural investigations in Jesus College,

Cambridge, 1998–2011. *Proceedings of the Cambridge Antiquarian Society* 102, 73–92.

**CHRISTOPHER EVANS**

- 2012 Small devices, memory and model architectures: carrying knowledge. *Journal of Material Culture* 17, 369–87.
- 2013 Against narrative: reading and gauging sequences. *Landscapes* 14, 103–12.
- 2013 Delivering bodies unto waters: a Late Bronze Age mid-stream midden settlement and Iron Age ritual complex in the Fens. *Antiquaries Journal* 93, 55–79.
- 2013 (with M. Brudenell, R. Patten & R. Regan). *Process and History: Prehistoric Communities at Colne Fen, Earith*. (The Archaeology of the Lower Ouse Valley, vol. I.) Cambridge: Cambridge Archaeological Unit.
- 2013 Body parts and archaeological mapping, in *Excavating the Present*, by Issam Kourbaj. (Exhibition Catalogue for Oxfam's Syria Crisis Appeal.) Cambridge: Privately published.
- 2013 Pitt Rivers in Canada (and America): the Filmer Album and Notman Studio Lane Fox portraits, and the John Wimburn Laurie diary entries, in *Rethinking Pitt-Rivers*. [web.prm.ox.ac.uk/rpr/index.php/articles-index/12-articles/883-pitt-rivers-in-canada/index.html](http://web.prm.ox.ac.uk/rpr/index.php/articles-index/12-articles/883-pitt-rivers-in-canada/index.html).
- 2013 (with J.D. Meadows, C. Garrow & J. Tabor). Outliers, offsets, misfits and Low Grounds: a Bayesian chronological model for the Beaker–Early Bronze Age barrow cemetery at Over, Cambridgeshire, England. Poster contribution to 7th International Symposium on 14C and Archaeology, Ghent, Belgium.
- 2013 (with R. Newman & A. Dickens). Some splendid rooms: further archaeological and architectural investigations in Jesus College, Cambridge, 1998–2011. *Proceedings of the Cambridge Antiquarian Society* 102, 73–92.

**LUCY FARR**

- 2012 (with G. Barker, P. Bennett, E. Hill, C. Hunt, G. Lucarini, J. Morales, G. Mutri, A. Prendergast, A. Pryor, R. Rabett, T. Reynolds & M. Twati). The Cyrenaican Prehistory Project 2012: the fifth season of investigation of the Haua Fteah cave. *Libyan Studies* 43, 115–36.

**PETER FORSTER**

- 2012 (with M.E. Hurler, T. Jansen, M. Levine & C. Renfrew). Origins of the domestic horse. *Proceedings of the National Academy of Sciences of the USA* 109(46), E3148; E3149. doi:10.1073/pnas.1210326109.
- 2013 (with M. Forster, A. Elsharawy, G. Hemmrich, B. Kreck, M. Wittig, I. Thomsen, B. Stade, M. Barann, D. Ellinghaus, B.S. Petersen, S. May, E. Melum, M.B. Schilhabel, A. Keller, S. Schreiber, P. Rosenstiel & A. Franke). From next-generation sequencing alignments to accurate comparison and validation of single-nucleotide variants: the pibase software. *Nucleic Acids Research* 2013 Jan 7; 41(1), e16. doi: 10.1093/nar/gks836. Epub 2012 Sep 10.



Members'/Fellows' Publications (cont.)

**CHARLES FRENCH**

- 2012 (with F. Morello, J. Torres, I. Martinez, K. Rodriguez, M. Arroyo-Kalin, V. Sierpe & M. San Roman). Punta Santa Ana archaeology: reconstruction of marine hunter-gatherer occupation sequences from the Magellan Strait, southernmost Patagonia, Chile. *Magallania* 40(2), 129–49.
- 2012 (with R.N. Singh, C.A. Petrie, J. Bates, A.K. Pandey, D. Parikh, C. Lancelotti & D.I. Redhouse). Survey and excavations at Dabli vas Chugta, Hanumangarh, Rajasthan. *Puratattva* 42, 133–48.
- 2012 (with D. Boric, V. Dimitrijevic, D. White, C. Lane & E. Cristiani). Early modern human settling of the Danube corridor: the Middle to Upper Palaeolithic site of Tabula Traiana Cave in the Danube Gorges (Serbia). *Antiquity* 86, Project gallery. www.antiquity.ac.uk/projgall/boric334/.
- 2012 (with K. Milek). The geoarchaeological evidence, in *Experimental Archaeology and Fire: the Investigation of a Burnt Reconstruction at West Stow Anglo-Saxon Village*, ed. J. Tipper. (East Anglian Archaeology 146.) Bury St Edmunds: Archaeological Service, Suffolk County Council, 77–89.
- 2013 Tony James Wilkinson, in *Encyclopedia of Global Archaeology*, ed. C. Smith. Heidelberg: Springer, 7820–22.
- 2013 (with S. Taylor). Micromorphological analysis of the occupation deposits, in *The Settlement at Dhaskalio*, eds. C. Renfrew, O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 325–39.
- 2013 (with M. Vander Linden, D. Orton, I. Panžić, M. Đurđević, B. Vujinović, L. Srdić, J. Balen, S. Forenbaher, D. Mihailović, D. Gazivoda, T. Hopkinson, G. Marriner, T. Rajkovača & P. Miracle). EUROFARM: comparison and modelling of early farming and associated technologies in Europe. *Antiquity* 87, Project gallery. www.antiquity.ac.uk/projgall/linden336/.
- 2013 (with C. Scarre). The palaeogeography and Neolithic archaeology of Herm in the Channel Islands. *Journal of Field Archaeology* 38(1), 4–20.

**SUSANNE HAKENBECK**

- 2013 Potential and limitations of isotope analysis in early medieval archaeology. *Post Classical Archaeologies* 3, 109–25.

**NORMAN HAMMOND**

- 2012 William L. Rathje '1945–2012'. *SAA Archaeological Record* 12(4), 56.
- 2013 Great walks of Peru, review of *Past Presented: Archaeological Illustration and*

*the Ancient Americas*, ed. J. Pillsbury. *Times Literary Supplement* 5757, 12–13.

**CATHERINE HILLS**

- 2013 (with S. Lucy). *Spong Hill*, part IX: *Chronology and Synthesis*. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.
- 2013 Anglo-Saxon migrations, in *The Encyclopedia of Global Human Migration* Wiley-Blackwell. doi:10.1002/9781444351071.
- 2013 Review of *Worlds of Arthur* by G. Halsall and *Myth and History*, by Stephen Yeates. *Antiquity* 87, 1220–22.

**HARRIET HUNT**

- 2012 (with P. Wang, Q. Dong, C. Zhang, P.-F. Kuan, Y. Liu, W.R. Jeck, J.B. Andersen, W. Jiang, G.L. Savich, T.-X. Tan, J.T. Auman, J.M. Hoskins, A.D. Misher, C.D. Moser, S.M. Yourstone, J.W. Kim, K. Cibulskis, G. Getz, S.S. Thorgeirsson, L.R. Roberts, D. Ye, K.-L. Guan, Y. Xiong, L.-X. Qin & D.Y. Chiang). Mutations in isocitrate dehydrogenase 1 and 2 occur frequently in intrahepatic cholangiocarcinomas and share hypermethylation targets with glioblastomas. *Oncogene* 32(25), 3091–100.
- 2013 (with H.M. Moots & P.J. Matthews). Genetic data confirms field evidence for natural breeding in a wild taro population (*Colocasia esculenta*) in northern Queensland, Australia. *Genetic Resources and Crop Evolution* 60(5), 1695–707.
- 2013 (with G. Motuzaite Matuzeviciute, R.A. Staff, X. Liu & M.K. Jones). The early chronology of broomcorn millet (*Panicum miliaceum*) in Europe. *Antiquity* 87, 1073–85.
- 2013 (with N. Wang, M. Thomson, W.J.A. Bodes, R.M.M. Crawford, A.W. Featherstone, J. Pellicer & R.J.A. Buggs). Genome sequence of dwarf birch (*Betula nana*) and cross-species RAD markers. *Molecular Ecology* 22(11), 3098–111.

**LILIANA JANIK**

- 2013 Joining forces: neuroaesthetics, contemporary visual art and archaeological interpretation of the past, in *Art and Archaeology: Collaborations, Conversations, Criticisms*, eds. I.A. Russell & A. Cochrane. New York (NY): Springer-Kluwer, 35–50.
- 2013 Changing paradigms: flux and stability in past environments. *Cambridge Anthropology* 31(1), 85–104.

**MARTIN JONES**

- 2013 (with G. Motuzaite Matuzeviciute & S. Telizhenko). The earliest evidence of domesticated wheat in the Crimea at Chalcolithic Ardych-Burun. *Journal of Field Archaeology* 38, 120–28.
- 2013 (with G. Motuzaite Matuzeviciute, J. Jacob & S. Telizhenko). Miliacin in palaeosols from an Early Iron Age in Ukraine reveal *in situ* cultivation of broomcorn millet.

- Archaeological and Anthropological Sciences* doi:10.1007/s12520-013-0142-7.
- 2013 (with D.L. Lister, H. Jones, D.M. O'Sullivan & J. Cockram). Analysis of DNA polymorphism in historic barley material: validation of the KASPar SNP genotyping platform. *Taxon* 62(4), 779–89.
- 2013 (with G. Jones, M. Charles, S. Colledge, F. Leigh, D.L. Lister, L. Smith, W. Powell, T.A. Brown & H. Jones). DNA evidence for multiple introductions of barley into Europe following dispersed domestications in W. Asia. *Antiquity* 87, 701–13.
- 2013 (with G. Motuzaite Matuzeviciute, R.A. Staff, H.V. Hunt & X. Liu). The early chronology of broomcorn millet (*Panicum miliaceum*) in Europe. *Antiquity* 87, 1073–85.

**SACHA JONES**

- 2012 (with E. Pennarun, T. Kivisild, E. Metspalu, M. Metspalu, T. Reisberg, J.-P. Moisan, D.M. Behar & R. Villems). Divorcing the Late Upper Palaeolithic demographic histories of mtDNA haplogroups M1 and U6 in Africa. *BMC Evolutionary Biology* 12(234), 1–12.
- 2013 (with C. Shipton, C. Clarkson, J.N. Pal, R.G. Roberts, C. Harris, M.C. Gupta, P.W. Ditchfield & M.D. Petraglia). Generativity, hierarchical action and recursion in the Acheulean to Middle Palaeolithic transition: a perspective from the Son Valley, India. *Journal of Human Evolution* 65, 93–108.

**BARRY KEMP**

- 2012 *The City of Akhenaten and Nefertiti: Amarna and its People*. London: Thames & Hudson.
- 2012 (ed.). Tell el-Amarna, 2011–12. *Journal of Egyptian Archaeology* 98, 1–26.
- 2012 An unintentional social experiment: Pharaoh Akhenaten at Amarna, in *Sickness, Hunger, War, and Religion: Multidisciplinary Perspectives*, eds. M. Harbeck, K. von Heyking & H. Schwartzberg. (Rachel Carson Center Perspectives.) Munich: Rachel Carson Center for Environment and Society, 9–13.
- 2013 (with A. Stevens, G.R. Dabbs, M. Zabecki & J.C. Rose). Life, death and beyond in Akhenaten's Egypt: excavating the South Tombs Cemetery at Amarna. *Antiquity* 87, 64–78.

**SHEILA KOHRING**

- 2013 Conceptual knowledge as technologically materialised: a case study of pottery production, consumption and community practice, in *Embodied Knowledge: Historical Perspectives on Belief and Technology*, eds. M.L.S. Sørensen & K. Rebay-Salisbury. Oxford: Oxbow Books, 106–16.
- 2013 Stepping stones: art and community on prehistoric Guernsey, Channel Islands. *Journal of World Art* 3(2), 297–318.





**KATHELINE KOOPS**

2013 (with W.C. McGrew & T. Matsuzawa). Ecology of culture: do environmental factors influence foraging tool use in wild chimpanzees (*Pan troglodytes verus*)? *Animal Behaviour* 85, 175–85.

**KEVIN LANE**

2013 Entre el agua y la pared: patrimonio, desarrollo, campesinos y arqueólogos en la Cordillera Negra, Perú, in *Arqueología y desarrollo en América del Sur: de la práctica a la teoría*, ed. A. Herrera. Bogotá/Lima: Uniandes/IEP, 97–117.

**ALESSANDRO LAUNARO**

2013 (with S. Hay, N. Leone & M.J. Millett). *Interamna Lirenas* e il suo territorio. Indagini archeologiche non invasive 2011, in *Lazio e Sabina*, vol. 9, eds. G. Ghini & Z. Mari. Rome: Quasar, 507–17.

**CARENZA LEWIS**

2012 Test pit excavation within occupied settlements in East Anglia in 2011. *Medieval Settlement Research Group Annual Report* 27, 42–56.

2012 (with R. Jones). The Midlands: medieval settlements and landscapes, in *Medieval Rural Settlement: Britain and Ireland AD 800–1600*, eds. N. Christie & P. Stamper. Oxford: Windgather Press, 186–205.

2012 A practical guide to investigating medieval rural settlements, in *Medieval Rural Settlement: Britain and Ireland AD 800–1600*, eds. N. Christie & P. Stamper. Oxford: Windgather Press, 288–308.

2013 (with M. Johnson). 'Can you dig it?' Developing an approach to validly assessing diverse skills in an archaeological context. *Journal of Vocational Education & Training* 65(2), 177–92.

**EMMA LIGHTFOOT**

2013 (with R.E. Stevens, J. Hamilton, B. Cunliffe & R.E.M. Hedges). Investigating dietary variation with burial ritual in Iron Age Hampshire: an isotopic comparison of Suddern Farm Cemetery and Danebury hillfort pit burials. *Oxford Journal of Archaeology* 32(3), 257–73.

2013 (with R.E. Stevens, J. Hamilton, B. Cunliffe & R.E.M. Hedges). One for the master and one for the dame: stable isotope investigations of Iron Age animal husbandry in the Danebury Environs. *Archaeological and Anthropological Sciences* 5, 95–109.

**DIANE LISTER**

2013 (with H. Jones, M.K. Jones, D.M. O'Sullivan & J. Cockram). Analysis of DNA polymorphisms in ancient barley herbarium material: validation of the KASP SNP genotyping platform. *Taxon* 62(4), 779–89.

2013 (with G. Jones, M. Charles, M. Jones, S. Colledge, F. Leigh, L. Smith, W. Powell, T.A. Brown & H. Jones). DNA evidence for multiple introductions of barley into Europe following dispersed domestications in W. Asia. *Antiquity* 87, 701–13.

2013 (with M.G. Campana, D.L. Lister, C.M. Whitten, C.J. Edwards, F. Stock, G. Barker & M. Bower). Complex relationships between mitochondrial and nuclear DNA preservation in historical DNA extracts. *Archaeometry* 54, 193–202.

**XINYI LIU**

2013 (with G. Motuzaite Matuzeviciute, R.A. Staff, H.V. Hunt & M. Jones). The early chronology of broomcorn millet (*Panicum miliaceum*) in Europe. *Antiquity* 87, 1073–85.

**SAM LUCY**

2013 (with C. Hills). *Spong Hill*, part IX: *Chronology and Synthesis*. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research.

**JOHN MACGINNIS**

2013 (with J. Ur, L. de Jong, J. Giraud & J. Osborne). Ancient cities and landscapes in the Kurdistan region of Iraq: The Erbil Plain Archaeological Survey 2012 season. *Iraq* 75, 89–117.

2013 Qabra in the cuneiform sources. *Subartu [Journal of the Archaeological Syndicate of Kurdistan]* 6–7, 1–10.

**WILLIAM MCGREW**

2012 (with T. Gruber, K. Potts, C. Krupenyne, M. Byrne, C. Mackworth-Young, V. Reynolds & K. Zuberbuehler). The influence of ecology on chimpanzee (*Pan troglodytes*) cultural behavior: a case study of five Ugandan chimpanzee communities. *Journal of Comparative Psychology* 126, 446–57.

2013 (with K. Koops & T. Matsuzawa). Ecology of culture: do environmental factors influence foraging tool use in wild chimpanzees (*Pan troglodytes verus*)? *Animal Behaviour* 85, 175–85.

2013 (with T. Nishida & L.F. Marchant). Wild chimpanzees at Mahale are not manually lateralized for throwing. *Pan Africa News* 19, 21–3.

2013 (with M.A. Ebbert & L.F. Marchant). Community composition, correlations among taxa, prevalence, and richness in gastrointestinal parasites of baboons in Senegal, West Africa. *Primates* 54, 183–9.

2013 (with M. Nakamura *et al.*). Ranging behavior of Mahale chimpanzees: a 16 year study. *Primates* 54, 171–82.

2013 (ed. with W. Schiefenhoefel & L.F. Marchant). *Evolution of Human Handedness*. *Annals of New York Academy of Sciences*

(Special Issue) 1288.

2013 (with L.F. Marchant). Handedness is more than laterality: lessons from chimpanzees. *Annals of the New York Academy of Sciences* 1288, 1–8.

2013 (with S. Carvalho & T. Matsuzawa). From pounding to knapping: how chimpanzees can help us to model hominin lithics, in *Tool Use in Animals: Cognition and Ecology*, ed. C. Sanz. Cambridge: Cambridge University Press, 225–41.

2013 (with C.A. Phillips). Identifying species in chimpanzee (*Pan troglodytes*) feces: a methodological lost cause? *International Journal of Primatology* 34, 792–807.

2013 (with L.P. Birkett). 'Unnatural behaviour' in chimpanzees: obstacle or insight at the species interface?, in *The Politics of Species: Reshaping Our Relationships with Other Animals*, eds. R.H.A. Corbey & A. Lanjouw. Cambridge: Cambridge University Press, 141–55.

2013 (with L.F. Marchant, C.L.R. Payne, T.H. Webster & K.D. Hunt). Well-digging by Semliki chimpanzees: new data on laterality and possible significance of hydrology. *Pan Africa News* 20, 5–8.

2013 (with M.A. Ebbert & L.F. Marchant). Community composition among taxa, prevalence, and richness in gastrointestinal parasites of baboons in Senegal, West Africa. *Primates* 54, 183–9.

**AUGUSTA McMAHON**

2012 The Akkadian Empire: environment and imagination, in *A Companion to the Archaeology of the Ancient Near East*, ed. D.T. Potts. (Blackwell Companions to the Ancient World.) Oxford: Wiley-Blackwell, 649–67.

2012 Post-Akkadian ceramic assemblages of the central Upper Khabur: What can pottery tell us about political and climate change?, in *Seven Generations Since the Fall of Akkad*, ed. H. Weiss. Weisbaden: Otto Harrassowitz, 25–44.

2013 The Mesopotamian city, in *The Oxford Handbook of Cities in World History*, ed. P. Clark. Oxford: Oxford University Press, 31–48.

2013 North Mesopotamia in the third millennium BC, in *The Sumerian World*, ed. H. Crawford. Abingdon: Routledge, 460–75.

2013 Space, sound, and light: toward a sensory experience of ancient monumental architecture. *American Journal of Archaeology* 117(2), 163–79.

2013 Tell Brak, early northern Mesopotamian urbanism, economic complexity and social stress, fifth–fourth millennia BC, in *100 Jahre Archäologische Feldforschungen in Nordost-Syrien – Eine Bilanz*, eds. D. Bonatz & L. Martin. Weisbaden: Harrassowitz, 67–80.



Members'/Fellows' Publications (cont.)

**PAUL MELLARS**

- 2013 (with K.C. Gori, M. Carr, P.A. Soares & M.B. Richards). Genetic and archaeological perspectives on the initial Modern Human colonization of southern Asia. *Proceedings of the National Academy of Sciences of the USA* 110(2), 10,699–704.
- 2013 The role of coastal dispersal in the initial modern human colonization of South and East, in *Basic Issues in Archaeology, Anthropology and Ethnography of Eurasia*, eds. M. Shunkov & N. Drozdof. Novosibirsk: Russian Academy of Sciences, 238–56.
- 2013 (with J.C. French). Population changes across the Neanderthal-to-Modern human transition in western France: a reply to Dogandzic & McPherron. *Journal of Human Evolution* 65(3), 330–33.

**MARTIN MILLETT**

- 2012 Vespasian and the Flavian transformation of Britannia, in *Vespasiano e l'impero dei Flavi*, eds. L. Capogrossi & E. Tassi. Scadone. Rome: L'Erma di Bretschneider, 71–82.
- 2013 (ed. with P. Johnson). *Archaeological Survey and the City*. Oxford: Oxbow Books. And chapter therein: Understanding Roman towns in Italy: reflections on the role of geophysical survey, 24–44.
- 2013 (with S. Hay & S.J. Keay). *Ocriculum (Otricoli, Province of Terni): an Archaeological Survey of the Roman Town*. (Monograph 22.) London: British School at Rome.
- 2013 (with S. Hay, A. Launaro & N. Leone). *Interamna Lirenas e il su territorio*. Indagini archeologiche non invasive 2011, in *Lazio e Sabina*, vol. 9, eds. G. Ghini & Z. Mari. Rome: Quasar, 507–17.

**PRESTON MIRACLE**

- 2013 (with M. Vander Linden, D. Orton, I. Panžić, M. Đurđević, B. Vujinović, L. Srdić, J. Balen, S. Forenbaher, D. Mihailović, D. Gazivoda, T. Hopkinson, G. Marriner, T. Rajkovača & C. French). EUROFARM: comparison and modelling of early farming and associated technologies in Europe. *Antiquity* 87, Project gallery. www.antiquity.ac.uk/projgall/linden336/.

**GIEDRE MOTUZAITE MATUZEVICIUTE**

- 2013 (with R.A. Staff, H.V. Hunt, X. Liu & M.K. Jones). The early chronology of broomcorn millet (*Panicum miliaceum*) in Europe. *Antiquity* 87, 1073–85.
- 2013 (with S. Telizhenko & M.K. Jones). The earliest evidence of domesticated wheat in the Crimea at Chalcolithic Ardych-Burun. *Journal of Field Archaeology* 38, 120–28.
- 2013 (with J. Jacob, S. Telizhenko & M.K. Jones). Miliacin in palaeosols from an Early

Iron Age in Ukraine reveal *in situ* cultivation of broomcorn millet. *Archaeological and Anthropological Sciences* doi:10.1007/s12520-013-0142-7.

**GIUSEPPINA MUTRI**

- 2012 (with G. Barker, P. Bennett, L. Farr, E. Hill, C. Hunt, G. Lucarini, J. Morales, A. Prendergast, A. Pryor, R. Rabett, T. Reynolds & M. Twati). The Cyrenaican Prehistory Project 2012: the fifth season of investigation of the Haua Fteah cave. *Libyan Studies* 43, 115–36.

**PHILIP NIGST**

- 2012 (with W. Antl-Weiser). Les structures d'occupation gravettiennes en Europe centrale: le cas de Grub/Kranawetberg, Autriche. *L'Anthropologie* 116(4), 639–64.
- 2012 (with M.D. Bosch). KG Nöhagen. *Fundberichte aus Österreich* 50, 324–7.
- 2012 (with P. Haesaerts). The Aurignacian in eastern Austria: preliminary results of an analysis of the lithic technology of archaeological horizon 3 at Willendorf II, and its implications for the chronology of the Early Upper Palaeolithic in central Europe. *L'Anthropologie* 116(4), 575–608.
- 2013 Willendorf II: geography and culture, in *Encyclopedia of Global Archaeology*, ed. C. Smith. Heidelberg: Springer, 7824–33.
- 2013 (with P. Haesaerts, F. Dambon & J.-J. Hublin). ABA and ABOx radiocarbon cross-dating on charcoal from Middle Pleniglacial loess deposits in Austria, Moravia, and Western Ukraine. *Radiocarbon* 55, 641–7.

**TAMSIN O'CONNELL**

- 2013 (with A.L. Prendergast, M. Azzopardi, C. Hunt, G. Barker & R.E. Stevens). Oxygen isotopes from *Osilinus turbinatus* as a proxy for sea surface temperature in the central Mediterranean: a case study from Malta. *Chemical Geology* 345, 77–86.

**SUSAN OOSTHUIZEN**

- 2012 Review of *Thorps in a Changing Landscape* by P. Cullen, R. Jones & D. Parsons (University of Hertfordshire, 2011). *Medieval Archaeology* 56, 407.
- 2013 *Tradition and Transformation in Anglo-Saxon England: Archaeology, Common Rights and Landscape*. London: Bloomsbury.
- 2013 A truth universally acknowledged? Morphology as an indicator of medieval planned market towns. *Landscape History* 34(1), 51–80.
- 2013 Common people. *British Archaeology* 128, 42–5.

**ROBIN OSBORNE**

- 2013 (with A. Wallace-Hadrill). Cities of the ancient Mediterranean, in *Oxford Handbook of Cities*, ed. P. Clark. Oxford: Oxford University Press, 49–65.
- 2013 Democracy and religion in classical

Greece, in *The Greek Polis and the Invention of Democracy: a Politico-cultural Transformation and its Interpretations*, eds. J. Arnason, K. Raaflaub & P. Wagner. Oxford: Blackwell, 274–97.

**HRATCH PAPAZIAN**

- 2012 (with G. Marouard). Edfu-pyramide-projektet. *Papyrus* 32(2), 24–37.
- 2013 The central administration of the resources in the Old Kingdom: departments, treasuries, granaries and work centers, in *Ancient Egyptian Administration*, ed. J.C. Moreno García. (Handbuch der Orientalistik, 104.) Leiden and Boston (MA): Brill, 41–83.

**CAMERON PETRIE**

- 2012 (with P. Magee). The Achaemenid expansion to the Indus and Alexander's invasion of north-west South Asia. *Iranian Journal of Archaeological Studies* 2(1), 1–25.
- 2012 (with K.D. Thomas). The topographic and environmental context of the earliest village sites in western South Asia, *Antiquity* 86, 1055–67.
- 2012 (with R.N. Singh, J. Bates, A.K. Pandey, D. Parikh & D.P. Singh). Survey and excavations at Bahola, Karnal District, Haryana: March 27–April 17, 2012. *Manaviki* III.2–IV.1, 5–11.
- 2012 (with R.N. Singh, C. French, J. Bates, A.K. Pandey, D. Parikh, C. Lancelotti & D.I. Redhouse). Survey and excavations at Dabli vas Chugta, Hanumangarh, Rajasthan. *Puratattva* 42, 133–48.
- 2013 South Asia, in *The Oxford Handbook of Cities in World History*, ed. P. Clark. Oxford: Oxford University Press, 83–104.
- 2013 The Chalcolithic of south Iran, in *Oxford Handbook of Iranian Archaeology*, ed. D.T. Pott. Oxford: Oxford University Press, 121–59.
- 2013 (with R.N. Singh, P.P. Joglekar, S. Neogi, C. Lancelotti, A.K. Pandey & A. Pathak). Recent excavations at Alamgirpur, Meerut District: a preliminary report. *Man and Environment* 38(1), 32–54.

**NICHOLAS POSTGATE**

- 2013 (with A. Stone). A Luwian shrine? The stele building at Kilise Tepe, in *Luwian Identities: Culture, Language and Religion Between Anatolia and the Aegean*, eds. A. Mouton, I. Rutherford & I. Yakubovich. Leiden: Brill, 193–213.
- 2013 (with M.P.C. Jackson & T.E. Şerifoğlu). Kilise Tepe 2011 Yılı Kazıları / Excavations at Kilise Tepe 2011. *Kazı Sonuçları Toplantısı* 34(2), 1–24.

**ALEX PRYOR**

- 2012 (with G. Barker, P. Bennett, L. Farr, E. Hill, C. Hunt, G. Lucarini, J. Morales, G. Mutri, A. Prendergast, R. Rabett, T. Reynolds & M. Twati). The Cyrenaican Prehistory Project 2012: the fifth season of investigation of the Haua Fteah cave. *Libyan Studies* 43, 115–36.





**RYAN RABETT**

- 2013 (with P.J. Piper). Eating your tools: early butchery and modification of primate bones in tropical Southeast Asia, in *Bones for Tools – Tools for Bones*, eds. K. Seetah & B. Gravina. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 131–41.
- 2013 (with B. Gravina & K. Seetah). Combining stones and bones, defining form and function, inferring lives and roles, in *Bones for Tools – Tools for Bones*, eds. K. Seetah & B. Gravina. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 1–10.
- 2013 The early human occupation of Trảng An, Vietnam: archaeological and palaeo-environmental evidence. *Journal of Geology Series B* 336, 1–7.
- 2012 (with G. Barker, P. Bennett, L. Farr, E. Hill, C. Hunt, G. Lucarini, J. Morales, G. Mutri, A. Prendergast, A. Pryor, T. Reynolds & M. Twati). The Cyrenaican Prehistory Project 2012: the fifth season of investigation of the Haua Fteah cave. *Libyan Studies* 43, 115–36.

**COLIN RENFREW**

- 2012 *Cognitive Archaeology from Theory to Practice. The Early Cycladic Sanctuary at Keros*. (Annual Balzan Lecture 3.) Florence: Olschki.
- 2012 Towards a cognitive archaeology: material engagement and the early development of society, in *Archaeological Theory Today*, ed. I. Hodder. 2nd edition. Cambridge: Polity Press, 172–203.
- 2012 Arqueología y lenguas: hacia nuevos horizontes. *Boletín de Arqueología PUCP* 14, 15–28.
- 2012 (with P. Forster, M.E. Hurler, T. Jansen & M. Levine). Origins of the domestic horse. *Proceedings of the National Academy of Sciences of the USA* 109(46), E3148; E3149. doi:10.1073/pnas.1210326109.
- 2013 (ed. with O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd). *The Settlement at Dhaskalio*. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research. And chapters therein: Keros and the development of the project, 3–18; The development of the excavation: stratigraphy and phasing, 63–78; The terrace structure east of the summit: Trenches I, II and XV, 93–140; The north structure at the summit (the Hall): Trenches VI, X, XLII, XXIV, XIV, XXXVI and XXX, 141–88; The central summit area and the summit enclosure: Trenches XXIII, XX, XXV and XXXV, 189–224; The south summit area: Trenches VII, XLI, XL, XXI and XXII, 225–80; The remaining lower terraces: Trenches XVII, XVIII, XIII, III, IV and V, 291–308; The figurines from Dhaskalio, 483–90; The spools from Dhaskalio, 491–504; The pebbles from Dhaskalio, 517–30; Other finds of stone, 662–6; The radiocarbon determinations, 695–704; The role of the

- settlement at Dhaskalio: an overview, 705–24.
- 2013 Early Celtic in the West, the Indo-European context, in *Celtic from the West*, vol. 2: *Rethinking the Bronze Age and the Arrival of Indo-European in Atlantic Europe*, eds. J.T. Koch & B. Cunliffe. Oxford: Oxbow Books, 201–12.
- 2013 Conclusion: the future of archaeology, in *The History of Archaeology: an Introduction*, ed. P. Bahn. London: Routledge, 239–46.
- 2013 The sanctuary at Keros: question of materiality and monumentality. *Journal of the British Academy* 1, 187–212.

**JANE RENFREW**

- 2013 The mat and vine-leaf impressions, in *The Settlement at Dhaskalio*, eds. C. Renfrew, O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 645–9.

**JOHN ROBB**

- 2012 (with O.J.T. Harris). Multiple ontologies and the problem of the Body in History. *American Anthropologist* 114(4), 668–79.
- 2013 (ed. with E. DeMarrais). *Art Makes Society*. Special issue of *World Art* 3(1).
- 2013 (with E. DeMarrais). Art makes society: an introductory visual essay. *World Art* 3(1), 3–22.
- 2013 Material culture, landscapes of action, and emergent causation: a new model for the origins of the European Neolithic. *Current Anthropology* 54(6), 657–83.
- 2013 (with O. Harris). *The Body in History: Europe from the Palaeolithic to the Future*. Cambridge: Cambridge University Press.
- 2013 Creating death: an archaeology of dying, in *The Oxford Handbook of the Archaeology of Death and Burial*, eds. L. Nilsson Stutz & S. Tarlow. Oxford: Oxford University Press, 441–58.

**ALICE SAMSON**

- 2013 Household archaeology in the pre-Columbian Caribbean, in *Oxford Handbook of Caribbean Archaeology*, eds. W. Keegan, C.L. Hofman & R. Rodríguez Ramos. Oxford: Oxford University Press, 363–77.
- 2013 (with J.E. Cooper, M.A. Nieves, R.R. Ramos, P.N. Kambesis & M.J. Lace). Cavescaples in the pre-Columbian Caribbean. *Antiquity* 87, Project gallery. www.antiquity.ac.uk/projgall/samson338/.
- 2013 (with R. Valcárcel Rojas & M.L.P. Hoogland). Indo-Hispanic dynamics: from contact to colonial interaction in the Greater Antilles. *International Journal of Historical Archaeology* 17(1), 18–39.

**COLIN SHAW**

- 2013 (with J.H. Gosman, Z.R. Hubbell & T.M. Ryan). Development of cortical bone geometry in the human femoral and tibial diaphysis. *Anatomical Record* 296(5), 774–87.
- 2013 (with A. Migliano, I.G. Romero, M. Metspalu et al.). Evolution of the pygmy phenotype: evidence of positive selection from genome-

- wide scans in African, Asian, and Melanesian pygmies. *Human Biology* 85(1–3), 251–84.
- 2013 (with T.M. Ryan). Scaling of trabecular microstructure in the primate humerus and femur. *Proceedings of the Royal Society Series B* 280(1758), 1–9.
- 2013 (with J.T. Stock, M.K. Shirley, L.A. Sarringhaus & T.G. Davies). Skeletal evidence for variable patterns of handedness in chimpanzees, human hunter-gatherers, and recent British populations. *Annals of the New York Academy of Sciences* 1288 (June), 86–99.
- 2013 (with J.T. Stock). Extreme mobility in the Late Pleistocene? Comparing limb biomechanics among fossil *Homo*, varsity athletes and Holocene foragers. *Journal of Human Evolution* 64(4), 242–9.
- 2013 (with A.A. Macintosh, T. Davies, T.M. Ryan & J.T. Stock). Periosteal vs. true cross-sectional geometry: a comparison along humeral, femoral, and tibial diaphyses. *American Journal of Physical Anthropology* 150(3), 442–52.

**LAURENCE SMITH**

- 2013 (with M.I. Mallinson & J. Phillips). Archaeological work at Suakin, Sudan. *Fondation Max van Berchem Bulletin* 27, 6–8.

**ANTHONY SNODGRASS**

- 2012 The *Olpe* Chigi and iconography in Kypselid Corinth, in *L'Olpe Chigi: Storia di un'agalma*, eds. E. Mugione & A. Benincasa. (Ergasteria 2.) Salerno: Pandemos, 9–16.
- 2012 Homer and the Aegean prehistorian, in *A Virtual Birthday Gift Presented to Gregory Nagy on Turning Seventy by his Students, Colleagues, and Friends*. [http://nrs.harvard.edu/urn-3:hul.ebook:CHS\\_Bers\\_etal\\_eds.Donum\\_Natalicium\\_Gregorio\\_Nagy.2012](http://nrs.harvard.edu/urn-3:hul.ebook:CHS_Bers_etal_eds.Donum_Natalicium_Gregorio_Nagy.2012)
- 2012 Foreword: Penser l'art antique: alliances et résistances disciplinaires. *Perspective* 2012.2, 213–15.
- 2013 Setting the frame chronologically, in *Men of Bronze: Hoplites in Ancient Greek Warfare*, eds. D. Kagan & G. Viggiano. Princeton (NJ): Princeton University Press, 85–94.

**MARIE LOUISE STIG SØRENSEN**

- 2013 (with F. Riede & H. Eiberg). Using mtDNA to evaluate pioneer colonization scenarios for prehistoric southern Scandinavia. *Journal of Nordic Archaeological Science* 18, 3–11.
- 2013 (with J. Sofaer). Death and gender, in *The Oxford Handbook of the Archaeology of Death and Burial*, eds. L. Nilsson Stutz & S. Tarlow. Oxford: Oxford University Press, 527–41.
- 2013 A sword for the chief – a conversation with Kristian, in *Counterpoint: Essays in Archaeology and Heritage Studies in Honour of Professor Kristian Kristiansen*, eds. S. Bergerbrant & S. Sabatini. Oxford: Oxbow Books, 435–9.
- 2013 Gender archaeology, in *The Oxford Companion to Archaeology*, ed. N. Asher Silberman. Oxford: Oxford University Press.



Members'/Fellows' Publications (cont.)

**MARIE LOUISE STIG SØRENSEN** (cont.)

2013 The history of gender archaeology in northern Europe, in *Companion to Gender Prehistory*, ed. D. Bolger. Oxford: Blackwell, 396–412.

2013 (ed. with K. Rebay-Salisbury). *Embodied Knowledge*. Oxford: Oxbow Books. And chapters therein: Introduction to Part I: belief as practice, 11–14; Embodied knowledge. Reflections on belief and technology: Introduction, 1–8.

2013 (with M. Vicze). Locating household activities on a Bronze Age tell, in *The Archaeology of Household*, eds. I. Briz i Godino, G. Kovacs, B. Kulcsarne-Berzsenyi & M. Madella. Oxford: Oxbow Books, 159–78.

**KATE SPENCE**

2012 Amarna: palaces, houses and outlying settlements, in *Amarna 2012 – Nefertiti's Hundredth Year*, ed. F. Seyfried. Berlin: Ägyptisches Museum, 71–7.

2012 Amarna, in *Encyclopedia of Ancient History*, eds. R. Bagnall et al. Hoboken: Wiley-Blackwell.

2012 Deir el-Bahari, in *Encyclopedia of Ancient History*, eds. R. Bagnall et al. Hoboken: Wiley-Blackwell.

2012 Houses, housing, household formation, Pharaonic Egypt, in *Encyclopedia of Ancient History*, eds. R. Bagnall et al. Hoboken: Wiley-Blackwell.

**RHIANNON STEVENS**

2013 (with E. Lightfoot, J. Hamilton, B. Cunliffe & R.E.M. Hedges). Investigating dietary variation with burial ritual in Iron Age Hampshire: an isotopic comparison of Suddern Farm Cemetery and Danebury hillfort pit burials. *Oxford Journal of Archaeology* 32(3), 257–73.

2013 (with E. Lightfoot, J. Hamilton, B. Cunliffe & R.E.M. Hedges). One for the master and one for the dame: stable isotope investigations of Iron Age animal husbandry in the Danebury Environs. *Archaeological and Anthropological Sciences* 5, 95–109.

2013 (with A.L. Prendergast). Molluscs (isotopes) – Analyses in environmental archaeology, in *Encyclopedia of Global Archaeology*, ed. C. Smith. Heidelberg: Springer, 5010–19.

2013 (with A.L. Prendergast, M. Azzopardi, T.C. O'Connell, C. Hunt & G. Barker). Oxygen isotopes from *Osilinus turbinatus* as a proxy for sea surface temperature in the central Mediterranean: a case study from Malta. *Chemical Geology* 345, 77–86.

**FIONA STEWART**

2012 (with A.K. Piel & R.O. O'Malley). Responses of chimpanzees to a dead community

member at Gombe National Park, Tanzania. *American Journal of Primatology* 74, 1–7.

2012 (with O. Gonzalez-Moreno, R.A. Hernandez-Aguilar, A.K. Piel, M. Gracenea & J. Moore). Prevalence and climatic associated factors of *Cryptosporidium* sp. infections in savanna chimpanzees from Ugalla, western Tanzania. *Parasitology Research* 112, 393–9.

2013 (with J.D. Pruettz). Do chimpanzee nests serve an anti-predatory function? *American Journal of Primatology* 75, 593–604.

2013 (with A.K. Piel). Termite fishing in wild chimpanzees: a new report from Ugalla, western Tanzania. *Primates* 55, 35–40.

2013 (with A.K. Piel, L. Pintea, Y. Li, M.A. Ramirez, D.E. Loy, P.A. Crystal, G.H. Learn, L.A. Knapp, P.M. Sharp & B.H. Hahn). The Malagarasi River does not form an absolute barrier to chimpanzee movement in western Tanzania. *PLoS ONE* 8(3), e58965.

**CHRISTOPHER STIMPSON**

2013 A 48,000 year record of swiftlets in northwestern Borneo: morphometric identifications and palaeoenvironmental implications. *Palaeogeography, Palaeoclimatology, Palaeoecology* 374, 132–43.

2013 Review of *Conservation Biology and Applied Zooarchaeology* edited by S. Wolverton & R.L. Lyman (Tucson: The University of Arizona Press, 2012). *Cambridge Archaeological Journal* 23(2), 343–4.

**JAY STOCK**

2012 (with E. Pomeroy, S. Stanojevic, J.J. Miranda, T.J. Cole & J.C.K. Wells). Trade-offs in relative limb length among Peruvian children: extending the thrifty phenotype hypothesis to limb proportions. *PLoS ONE* 7(12), e51795.

2012 (with J.C.K. Wells & J.M. DeSilva). The obstetric dilemma: an ancient game of Russian roulette, or a variable dilemma sensitive to ecology? *Yearbook of Physical Anthropology* 50, 40–71.

2013 The skeletal phenotype of 'Negritos' from the Andaman Islands and Philippines relative to global variation among hunter-gatherers. *Human Biology* 85(1), 67–94.

2013 (with N. von Cramon-Taubadel & R. Pinhasi). Skull and limb morphology differentially track population history and environmental factors in the transition to agriculture in Europe. *Proceedings of the Royal Society Series B: Biological Sciences* 280(1767). doi: 10.1098/rspb.2013.1337.

2013 (with E. Pomeroy, S. Stanojevic, J.J. Miranda, T.J. Cole & J.C.K. Wells). Associations between arterial oxygen saturation, body size and limb measurements among high-altitude Andean children. *American Journal of Human Biology* 25, 629–36.

2013 (with T. Richter, L. Maher, K. Edinborough, M. Jones & A. Garrard). Epipalaeolithic settlement dynamics in

southwest Asia: new radiocarbon evidence from the Azraq Basin. *Journal of Quaternary Science* 28(5), 467–79.

2013 (with M.K. Shirley, L.A. Sarringhaus, T.G. Davies & C.N. Shaw). Skeletal evidence for variable patterns of handedness in chimpanzees, human hunter-gatherers, and recent British populations. *Annals of the New York Academy of Sciences* 1288, 86–99.

2013 (with A. Gómez-Olivencia, E. Been & J.L. Arsuaga). The Neandertal vertebral column, 1: The cervical spine. *Journal of Human Evolution* 64(6), 608–30.

2013 (with C.N. Shaw). Extreme mobility in the Late Pleistocene? Comparing limb biomechanics among fossil *Homo*, varsity athletes and Holocene foragers. *Journal of Human Evolution* 64(4), 242–9.

2013 (with A.A. Macintosh, T. Davies, T.M. Ryan & C.N. Shaw). Periosteal vs. true cross-sectional geometry: a comparison along humeral, femoral, and tibial diaphyses. *American Journal of Physical Anthropology* 150(3), 442–52.

**SIMON STODDART**

2012 (with F. Fulminante). Indigenous political dynamics and identity from a comparative perspective: Etruria and Latium vetus, in *Exchange Networks and Local Transformations: Interaction and Local Change in Europe and the Mediterranean from the Bronze Age to the Iron Age*, eds. M.A. Alberti & S. Sabatini. Oxford: Oxbow Books, 117–33.

2012 (with L. Ceccarelli & D.I. Redhouse). Before the frontier: Gubbio and its landscape before the state, in *L'Etruria dal Paleolitico al Primo Ferro. Lo stato delle ricerche. Atti del decimo incontro Preistoria e Protostoria dell'Etruria. Settembre 2010*, ed. N. Negroni Catacchio. Milan: Centro Studi di Preistoria e Archeologia, 677–87.

2013 (with A. Stevenson & L. Burn). Nuova luce sul Gubbio Project, in *Gli Umbri in età preromana. Atti del XXVII Convegno di Studi Etruschi e Italici*, ed. M.C. Bettini. Florence: Istituto di Studi Etruschi, 561–7.

2013 Italy, Sicily, Malta, and the Lipari Islands: prehistory, in *Encyclopedia of Global Archaeology*, ed. C. Smith. Heidelberg: Springer, 4138–45.

2013 (with L. Ceccarelli). Nepi: nuovi dati dallo scavo in area urbana, in *Tra Roma e l'Etruria. Cultura, identità e territorio dei Falisci. Proceedings of the Seminar held at the British School at Rome, 19th May 2011*, ed. G. Cifani. Rome: Quasar, 209–22.

2013 Constructing ancestral time: Tara and Tarxien (Malta), compared and contrasted, in *Tara – from the Past to the Future: Towards New Research Agenda*, eds. M. O'Sullivan, C. Scarre & M. Doyle. Dublin: Wordwell, 423–32.





- 2013 Neolithic and Bronze Age Malta and Italy, in *World Archaeology at the Pitt Rivers Museum: a Characterization*, eds. D. Hicks & A. Stevenson. Oxford: Archaeopress, 302–11.
- 2013 (with C. Malone). Caves of the living. Caves of the dead. Experiences above and below ground in prehistoric Malta, in *Sacred Darkness: a Global Perspective on the Ritual Use of Caves*, ed. H. Moyes. Boulder (CO): University Press of Colorado, 45–58.

**EMANUELE VACCARO**

- 2013 Patterning the late antique economies of inland Sicily in the Mediterranean context, in *Local Economies? Production and Exchange of Inland Regions in Late Antiquity*, ed. L. Lavan. Leiden: Brill, 245–99.
- 2013 Sicily in the eighth and ninth centuries had: a case of persisting economic complexity? *Al-Masaq. Islam and the Medieval Mediterranean* 25, 34–69.
- 2013 Re-evaluating a forgotten town using intra-site surveys and the GIS analysis of surface ceramics: *Philosophiana-Sofiana* (Sicily) in the *longue durée*, in *Archaeological Survey and the City*, eds. P. Johnson & M. Millett. Oxford: Oxbow Books, 107–45.

**ROBYN VEAL**

- 2013 Ralegh Radford Rome Fellowship report: forest exploitation and sustainability in central Italy and provincial Britain in the Roman Imperial period. *Papers of the British School at Rome* 80, 342–3.
- 2013 Fuelling ancient Mediterranean cities: a framework for charcoal research, in *The Ancient Mediterranean between Science and History*, ed. W.V. Harris. (Columbia Classical Studies Series 39.) Columbia (NY): Columbia University, 37–58.
- 2013 (with M. McCallum, H. van der Leest, A. Taylor, L. Cooney & L. Brown). The Roman villa at San Felice: investigations, 2004–2010. *Museion (Journal of the Classical Association of Canada)* 11(2), 25–108.

**DACIA VIEJO ROSE**

- 2013 Patrimonio cultural armado: la violencia cultural y simbólica, in *Lugares de represión, paisajes de la memoria. Aspectos materiales y simbólicos de la cárcel de Carabanchel*, ed. C. Ortíz. Madrid: Catarata, 21–7.
- 2013 Review of *Exhuming Loss* by L. Renshaw (Left Coast Press, 2011). *Cambridge Archaeological Journal* 23(1), 129–30.
- 2013 Review of *A European Memory?* edited by M. Pakier & B. Stråth (Berghahn Books, 2012). *Journal of Southeast European and Black Sea Studies* 13(1), 121–3.
- 2013 Reconstructing heritage in the Aftermath of Civil War: re-visioning the

Nation and the implications of international involvement. *Journal of Intervention and Statebuilding* 7(2), 125–48.

**ANDREW WALLACE-HADRILL**

- 2013 (with R. Osborne). Cities of the ancient Mediterranean, in *Oxford Handbook of Cities*, ed. P. Clark. Oxford: Oxford University Press, 49–65.

**CHRIS WINGFIELD**

- 2012 (with C. Gosden). An Imperialist folklore? Establishing the Folk-lore Society in London, in *Folklore and Nationalism in Europe during the Long Nineteenth Century*, eds. T. Baycroft & D. Hopkin. Leiden: Brill, 255–74.
- 2012 Photographing 'the Bridge': product and process in the analysis of a social situation in non-modern Zululand, in *Photography in Africa: Ethnographic Perspectives*, ed. R. Vokes. Oxford: James Currey, 56–80.
- 2013 Reassembling the London Missionary Society collection: experiments with symmetrical anthropology and the archaeological sensibility, in *Reassembling the Collection*, eds. S. Byrne, A. Clarke & R. Harrison. (SAR Seminar Series.) Santa Fe (NM): SAR Press, 61–88.

**MARTIN WORTHINGTON**

- 2013 Literatures in dialogue: a comparison of attitudes to speech in Babylonian and Middle Egyptian literature, in *Ancient Egyptian Literature: Theory and Practice*, eds. R. Enmarch & V.M. Lepper. Oxford: Oxford University Press for The British Academy, 261–92.

## Postgraduate Students' Publications

**JENNIFER BATES**

- 2012 (with R.N. Singh, C.A. Petrie, A.K. Pandey, D. Parikh & D.P. Singh). Survey and excavations at Bahola, Karnal District, Haryana: March 27–April 17, 2012. *Manaviki* III.2–IV.1, 5–11.
- 2012 (with R.N. Singh, C.A. Petrie, C. French, A.K. Pandey, D. Parikh, C. Lancelotti & D.I. Redhouse). Survey and excavations at Dabli vas Chugta, Hanumangarh, Rajasthan. *Puratattva* 42, 133–48.

**TINA GREENFIELD**

- 2013 (with D. Wicke & T. Matney). Integration and interpretation of architectural and faunal evidence from Assyrian Tushan, Turkey. *Bioarchaeology of the Near East* 7, 1–26.
- 2013 (with D. Wicke). The 'Bronze Palace' at Ziyaret Tepe – preliminary remarks on the architecture and faunal analysis, in *Assyrian Provincial Palaces*, eds. D. Kertai & P. Miglus. (Heidelberg Studien zum Alten Orient 15.)

Heidelberg: Heidelberger Orientverlag, 61–78.

- 2013 (with H. Greenfield). Bronze and Iron Age subsistence changes in the Upper Tigris: zooarchaeology of Operation E at Ziyaret Tepe, southeastern Turkey, in *Proceedings of the ICAZ-SW Asia Symposium, Brussels, June 28–30, 2011*, eds. V. Linseele, B. De Cupere, W. Van Neer, J. Driessen & B. Arbuckle. (Ancient Near Eastern Studies Supplement Series 20.) Leuven: Peeters Press, 121–44.

**SAYANTANI NEOGI**

- 2013 (with R.N. Singh, C.A. Petrie, P.P. Joglekar, C. Lancelotti, A.K. Pandey & A.Pathak). Recent excavations at Alamgirpur, Meerut District: a preliminary report. *Man and Environment* 38(1), 32–54.

**DANIKA PARIKH**

- 2012 (with R.N. Singh, C.A. Petrie, C. French, J. Bates, A.K. Pandey, C. Lancelotti & D.I. Redhouse). Survey and excavations at Dabli vas Chugta, Hanumangarh, Rajasthan. *Puratattva* 42, 133–48.
- 2012 (with R.N. Singh, C.A. Petrie, J. Bates, A.K. Pandey & D.P. Singh). Survey and excavations at Bahola, Karnal District, Haryana: March 27–April 17, 2012. *Manaviki* III.2–IV.1, 5–11.

**AMY PRENDERGAST**

- 2013 (with R.E. Stevens). Molluscs (isotopes) – Analyses in environmental archaeology, in *Encyclopedia of Global Archaeology*, ed. C. Smith. Heidelberg: Springer, 5010–19.
- 2013 (with M. Azzopardi, T.C. O'Connell, C. Hunt, G. Barker & R.E. Stevens). Oxygen isotopes from *Osilinus turbinatus* as a proxy for sea surface temperature in the central Mediterranean: a case study from Malta. *Chemical Geology* 345, 77–86.
- 2012 (with G. Barker, P. Bennett, L. Farr, E. Hill, C. Hunt, G. Lucarini, J. Morales, G. Mutri, A. Pryor, R. Rabett, T. Reynolds & M. Twati). The Cyrenaican Prehistory Project 2012: the fifth season of investigation of the Haula Fteah cave. *Libyan Studies* 43, 115–36.

**PAUL VAN PELT**

- 2013 (ed.) Archaeology and cultural mixture. *Archaeological Review from Cambridge* 28.1.

**SEAN TAYLOR**

- 2013 (with C. French). Micromorphological analysis of the occupation deposits, in *The Settlement at Dhaskalio*, eds. C. Renfrew, O. Philaniotou, N. Brodie, G. Gavalas & M.J. Boyd. (McDonald Institute Monographs.) Cambridge: McDonald Institute for Archaeological Research, 325–39.











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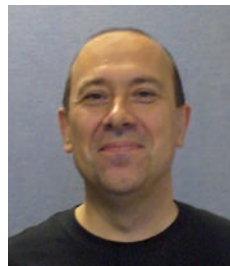
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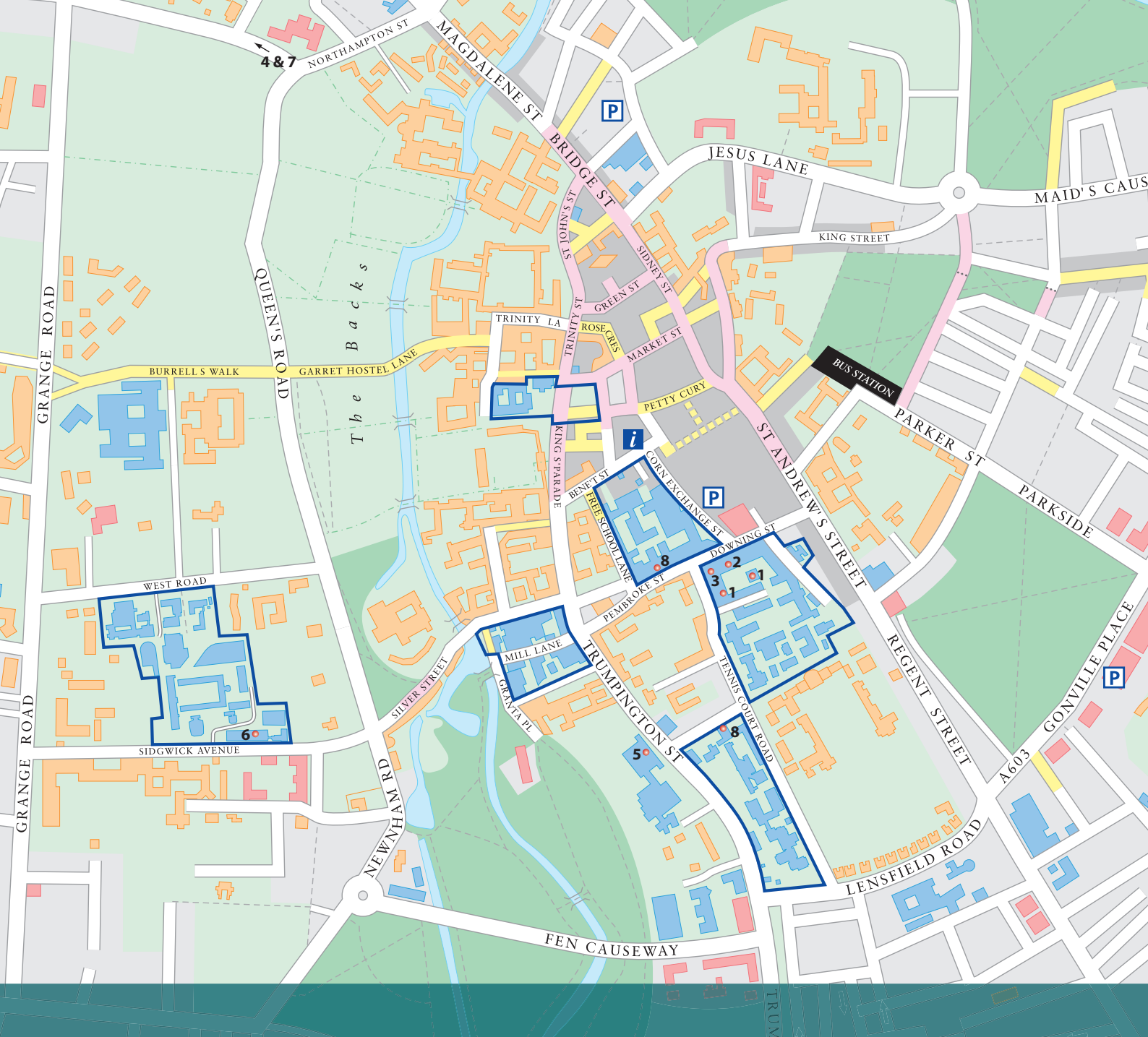
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*Cover photograph: Guillaume Robin using XRF equipment to analyse rock art in Sardinia. (Photograph by John Robb.)*