

Archaeology at Cambridge

2014-2015







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Introduction: the McDonald Institute and **Archaeology at Cambridge**

CYPRIAN BROODBANK (Director) & SIMON STODDART (Acting Deputy Director)

Archaeology at Cambridge presents the activities of archaeologists across the University, in the McDonald Institute for Archaeological Research, the Division of Archaeology, the Division of Biological 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 McDonald Institute provides an interdisciplinary focus for this diverse community. In 2014–15, it served as a research hub for over 51 staff archaeologists (mostly University Teaching Officers), 72 Research Fellows, 20 Senior Fellows and 31 Visiting Scholars. This year's introduction comes from a new team: Cyprian Broodbank is newly arrived in Cambridge as the Institute's Director, John Disney Professor of Archaeology and a Fellow of Gonville and Caius, and Simon Stoddart, Reader in Prehistory and a Fellow of Magdalene, replaces James Barrett for three years as Acting Deputy Director.

This has been an exciting year for the past and future of undergraduate teaching in Archaeology at Cambridge. One highlight was the celebration of the Centenary of the renowned and recently discontinued Archaeology and Anthropology (Arch & Anth) Tripos on 27–28 February

2015. The event was hosted by the McDonald Institute, the Museum of Archaeology and Anthropology, the Mongolia and Inner Asia Studies Unit, the Duckworth Collection and Magdalene and St John's Colleges (see further, pp. 52-3). This resounding affirmation of Cambridge's traditional centrality to the teaching of Archaeology in the UK was complemented by the active development of plans for a new Tripos in Archaeology, with wide and greatly appreciated support within the University. We are now delighted to announce that, at 4 pm on Friday 13 November 2015, this new degree was formally approved by Grace, and will admit its first cohort of undergraduates in 2017–18. Another strategic focus over this year has been the promotion of the campaign for a new Chair in African Archaeology, to fill permanently the vacancy left by David Phillipson's retirement several years ago.

A packed programme of events throughout the year included the McDonald Lecture by emeritus Disney Professor Graeme Barker entitled 'The Archaeology of Climate/People Interactions: Science or Story-Telling?' on 19 November 2014; the celebration of Eighty Years of emeritus Professor of Classical Archaeology, Anthony Snodgrass, in the Magdalene Cripps Conference Centre on 7–9 November, 2014, as well as the Plant to Cloth Workshop on 25 March 2015 and the African Farming Research Network workshop on 4–9 May 2015 (with Pembroke College), and the Von Hügel Public Lecture by Chris Gosden (University of Oxford) on 'Art, animism and power' at the Museum of Archaeology and Anthropology on 12 March 2015.



Colin Renfrew, D.M. McDonald, Graeme Barker and Cyprian Broodbank. Three Directors and the Founder, at the centennial celebration of the Arch & Anth Tripos at the McDonald Institute.



We were joined by another inspiring group of new postdoctoral research fellows this year, including Daniel Longman and Laura Buck (as part of Jay Stock's ERC project), Andrew Clarke (a Leverhulme Trust Early Career Fellow), Emanuela Cristiani (who directs a five-year ERC project on 'Plant foods in Palaeolithic and Mesolithic societies of SE Europe and Italy'), Joanne Cutler (as part of Margarita Gleba's ERC Project on Textiles), David Friesem and Paola Di Giuseppantonio Di Franco (Marie Curie Fellows), Emmanuelle Honoré (Newton International Fellow), Hannah Malone (Junior Research Fellow in Magdalene), Miljana Radivojević (as a McDonald Anniversary Fellow working on early metallurgy in the Balkans), James Blinkhorn (working on the origins of hafting), Ceri Shipton (Fellow in African Archaeology) and Uri Davidovich (supported by funds from the Rothschild Foundation). As part of the ongoing restructuring of Archaeology and Anthropology within Cambridge, we were also able to welcome Jay Stock and Toomas Kivisild into the Division of Archaeology.

This year was an excellent one for well-deserved promotions in the Division of Archaeology: Marie Louise Stig Sørensen and John Robb to Professorships, Jay Stock to a Readership and Tamsin O'Connell and Kate Spence to Senior Lectureships. The year's end was also marked for John and Kate with new college Fellowships at Peterhouse and Emmanuel respectively, and by Cyprian Broodbank's election to a Fellowship of the British Academy. Many congratulations are also due to our outstanding researchers appointed to new appointments outside Cambridge: Yağmur Heffron, Matt Davies, Rhiannon Stevens and Hazel Reade all leave for posts at UCL. Lastly, we wish Carenza Lewis all the very best with her new Chair at Lincoln; the programme of Access Cambridge Archaeology is now being transferred to the Cambridge

Archaeological Unit, with which the Division of Archaeology is developing dynamic new connections.

Among many notable grant-winning successes, particular congratulations to Cameron Petrie for the award of a major ERC Consolidator Grant for his 'Two Rains' project on climate change and the Indus civilization. We warmly thank the Raymond and Beverly Sackler Foundation for their generous endowment of an annual lecture in honour of Norman Hammond, the Tràng An Landscape Complex Management Board and Truong Enterprise for an MPhil plus PhD studentship, and Baillie Gifford for funding an MPhil scholarship across the AHRC's remit, including Archaeology.

We would like to thank our predecessors, Graeme Barker and James Barrett, for handing us a great legacy, and wish the first an undoubtedly energetic retirement, and the second a productive three years' writing sabbatical before returning to the Deputy Directorship. The retirement of Graeme Barker was marked by a well-attended surprise dinner at St John's College and the presentation of a Commemorative volume, *Living in the Landscape*, on 18 October 2014. After the sad death of Dora Kemp, the Publications team (as mentioned elsewhere) is now supported by Anne Chippindale (principally for the *Cambridge Archaeological Journal* and Annual Report) and by Ben Plumridge (for the Monographs). The medium-term publication strategy of the Institute will continue to be based around these two figures with the continuing support of Emma Jarman.

Cambridge Archaeology stands at a crossroads, with a range of strategic new developments across research, teaching and wider engagement that are currently in train, and which we look forward to reporting more fully in our next issue.



Anthony Snodgrass at his 80th birthday celebrations, November 2014.



Graeme Barker with the copy of Living in the Landscape presented to him on 18 October 2014.

Division of Archaeology

Marie Louise Sørensen

Each new Disney Professor introduces a new era. In October 2014 we said 'Goodbye' to Professor Graeme Barker, with much gratitude and appreciation of his contributions on so many fronts, and welcomed Professor Cyprian Broodbank. With Cyprian comes the challenge of thinking about who we are and what we want to aim at over the next decade and more—what will be our aspirations in terms of intellectual profile and contribution and what do we need to do to get there? With the REF some years ahead, this is a good time for such reflections.

The last year has been exceedingly busy in terms of administration. In particular, we have been working hard on reintroducing an Archaeology Tripos, as the change to HSPS had some unplanned consequences in terms of our student numbers and profile as well as our own sense of disciplinary identity. We are deeply committed to undergraduate teaching and are very pleased this has been recognized throughout the university. At the end of the academic year 2014–15, it became clear that we had succeeded in our efforts to change the current situation. We will get a separate Archaeology Tripos back, but at the same time maintain our involvement with the HSPS Tripos. Getting to this point has been an enormous job and the contribution of all staff towards this end should be recognized, with the core work of Cyprian Broodbank and John Robb deserving to be singled out.

There have also been other changes. Professor Charly French stepped down as the Head of Division at the end of Michaelmas term 2014, after many years of steady and consistent leadership and gentle guidance. I think we were all rather shocked to be suddenly without him as our head; but we were aware that a break was overdue and very well deserved. In order for Cyprian to get a little used to us before taking on the full burden, I stepped in as Head of Division for the Lent and Easter terms, and very much enjoyed seeing more of the inside of the administrative black box, although I am also very happy to pass the job on to Cyprian from October 2015. Amongst other changes, we are working on closer integration with Biological Anthropology and two lecturers (Toomas Kivisild, Reader in Human Evolutionary Genetics, and Jay Stock, Reader in Human Evolution and Adaptability) from Biological Anthropology have now joined the Division of Archaeology. We see this as an opportunity to provide more integrated teaching and to explore shared research interests and develop common projects. This was also the first year of Simon Stoddart's role as Acting Deputy Director of the McDonald Institute, in addition to his duties as a University Teaching Officer and college Fellow, while James Barrett is on research leave for three years. This arrangement made it possible

to deploy the replacement teaching money to Dacia Viejo-Rose on a three-year lectureship in Heritage Studies, helping to cover the growing teaching and supervisory need within that area. 2014–15 was the last period of important teaching provided by Matt Davies (African archaeology) and Yağmur Heffron (Mesopotamian archaeology) in addition to their fellowships; both now have lectureships at UCL. In terms of our administrative support, Mark Newman, our Division Administrator for many years, decided to move away from Cambridgewe are extremely grateful for the many years of sterling work he has given us. We were very fortunate that Ben Davenport, who had been Graduate Secretary, was able to step into the role and when the job was advertised he was appointed as our new Division Administrator. During a busy and difficult year he has already shown his strengths, and we feel safe with him at the head of our administration. Finally, during the last Senior Academic Promotions exercise, John Robb and Marie Louise Stig Sørensen were both given Professorships, Jay Stock was made a Reader, and Tamsin O'Connell and Kate Spence were both given Senior Lectureships.

The division staff continue to produce high-quality research and publications on a wide range of topics, contributing to scholarships in a number of ways. We also continue to have a wide range of field projects; they range in intensity from explorative to long-term commitments, make use of new methodological developments and techniques, and address periods as diverse as early humans to the last few hundred years. Many of the projects bridge theoretical debates and data collection, addressing some of the big questions about the environment, social organization and the role of things in human interactions. We give lectures in the UK and abroad to a variety of audiences and contexts, ranging from conferences, such as the annual meetings of the SAA and EAA, to local groups, and to special interest societies. In terms of cross-disciplinary collaboration within the university, we have seen more involvement with CRASSH, with substantial archaeological input in many of its programmes, such as the seminar series Field Notes and Places of Amnesia. CRASSH also co-sponsored the 16th Annual Heritage Seminar on Africa. Under the remit of the Philomathia programme, a faculty-wide initiative, Marie Louise Sørensen and Dacia Viejo-Rose were granted a Philomathia workshop (War and Cultural Heritage).

This was also the year when we could note with pleasure and satisfaction that one of our colleagues, Elizabeth DeMarrais, received the Pilkington Prize for teaching. We were also extremely pleased to learn that Graeme Barker received a CBE 'for services to Archaeology' in the Queen's New Years Honours at Buckingham Palace, and that Cyprian Broodbank has become a fellow of the British



Academy, Augusta McMahon was a Visiting Professor at the University of Rome, La Sapienza, and Charly French was a Visiting Professor at the University in Cagliari in Sardinia. We also saw significant successes in terms of grants, ranging from small to large grants, such as Cameron Petrie's ERC award (see further, p. 30).

The Cambridge excavation team at Ta Hagrat.

Our impact outside academia takes different forms.

We continue to develop ways for our fieldwork to result in more local engagement, and to explore various forms of dissemination as well as impact. The current rate of destruction of heritage in the wake of war and aggression, in particular in Syria, has resulted in many of us making presentations on TV, radio, and to the press generally, including foreign media, such as Augusta McMahon's commentary on heritage destruction in the *New York Times* and in *El Mundo*.

We have been working on creating even stronger links with the Cambridge Archaeological Unit (CAU) during the year, including shared grant applications and hosting more of their fieldwork news on our website. The Unit continues to produce a series of important research volumes from its large-scale landscape investigations in advance of commercial development, and Chris Evans and his staff are to be much congratulated. Their paper on the Over Barrow project published in the *Proceedings of the Prehistoric Society* was given the Baguley Award, a clear recognition of its quality and significance. For the full range of their recent projects, see further on p. 6.

The second-year undergraduate fieldtrip was combined with the training excavation this year and relocated to the island of Malta. Seventeen students contributed to the excavation of Santa Verna monument and the Ggantija World Heritage site, to study the fragility and resilience of the prehistoric island populations. When not undertaking fieldwork, they gave presentations on (the most appropriate) location, developing themes as diverse as: Malta in World War II, the rebranding of the Museum of Fine Arts, Heritage and identity,

Wine production, Maltese bees, Maltese cuisine, Fortification, Arab Malta, St Paul, the Catacombs, the Phoenicians, the Material culture of death, Prehistoric figurines, the Brochtorff Circle and Palaeolithic Malta. Honey, wine and cuisine played their role when required. Their bound reports were presented as an informed guide to the Cambridge alumni who visited the project later in the summer. The fieldtrip was coordinated by Dr Simon Stoddart (for Archaeology), assisted by Paola Filippucci (for Social Anthropology), ably supported by

PhD students Bela Dimova and Jeremy Bennett. Tansy Branscombe was awarded a prehistoric figurine model for the best illustration. Our IIB students again performed extremely well in the Arch & Anth Tripos. Out of a cohort of 17 there were seven firsts, one of which was a starred first (Nina O'Hare, who was also awarded the Anglia Prize). The Mulvey Prize went to Mair Trueman, the Daniel Prize to Alice Hobbs. The other 10 students gained 2.1s, and there were no classes lower than this. The External Examiner for Archaeology commented that 'the standards achieved by the cohort of students on this programme are very high and the teaching is clearly of an exemplary standard.'

Our graduate and post-doctoral research communities remain healthy; they bring a re-invigorating enthusiasm and thirst for knowledge to the division, and we are rightly proud of them. We had 25 MPhil students, and the number of PhD students was around 70, with 13 PhDs successfully completed during the year, including: Ben Cartwright, Afroditi Chatzoglou, Hannah Cutler, Tessa de Roo, Kathrin Felder, Katherine Hall, Erell Hubert, Maikel Kuijpers, Hyun Kyung Lee, Elizabeth Raddatz, Willem Paul van Pelt, Domenic Walker and Guohua Yang. As usual, our PhD students upon graduating have gone on to a variety of rewarding and challenging jobs: Hannah Cutler is working for Suffolk Archaeology, Maikel Kuijpers and Hyun Kyung Lee have lectureships (in Leiden and Seoul respectively), Paul van Pelt has a Junior Research Fellowship at Trinity Hall, Katie Hall has begun teacher training, and others have moved into publication, working for governmental offices, or independent research, including Afroditi Chatzoglou, Tessa de Roo, Domenic Walker and Guohua Yang.

The Museum of Archaeology and **Anthropology (MAA)**

JODY JOY

The museum was involved in a wide range of activity over the year, with a focus by the archaeology section on the Cambridge region. A particular highlight was a long-term loan of five artefacts to the Chatteris Museum, including a spectacular Bronze Age shield, which provides the centrepiece of a new gallery focusing on the earliest human occupants of the area.

Between August and October, the research case in the Cambridge Archaeological Gallery featured the Rudham Dirk, a monumental weapon dating to the Bronze Age on loan from the Norfolk Museums Service. The Wall of Cambridge App was also made available for free download on the iTunes website (www.maa.cam.ac.uk/ app). Designed to work in conjunction with the Wall of Cambridge display in the Cambridge Archaeological Gallery, the App also features a timeline and maps. New displays were installed in the World Archaeology Gallery, spotlighting unseen parts of MAA's collection, such as the Beck bead collection

MAA's main exhibition space, the Li Ka Shing Gallery, featured two exhibitions: Buddha's Word: The Life of Books in Tibet and Beyond and The Power of Paper: 50 years of

printmaking from Australia, Canada and South Africa. Buddha's Word received around 35,000 visitors and The Power of Paper provided the opportunity to display many new acquisitions funded by a grant from the Arts Fund Renew Scheme. Exhibitions were also held in the South Lecture room during the Easter and summer vacations: Tartan: Its Journey through the African Diaspora and Rivers Stars Reindeer: Imaging Evenki and Orochen communities of Inner Mongolia and Siberia. The museum hosted two exhibitions in its Micro Gallery: Magic and Memory: Paul Montague in New Caledonia and Sounding out the Morning Star—Music and West Papua.

The museum received just under 61,000 visitors over the course of the year, with over 2,100 people visiting during the four hours of our Twilight at the Museums event in May. MAA's teaching collection was extensively used, hosting over 587 student visits during 52 practical sessions, 18 open sessions, an Archaeology Open Day and the Sutton Trust summer school. We had 6,764 visitors from formal educational establishments with 2548 receiving a taught session, a 21 per cent increase on last year. The archaeology section also hosted 85 research visits.

Other artefacts on loan from the archaeology section of MAA included an Iron Age massive armlet from Fetlar, Shetland, loaned to Shetland Museum & Archives, Lerwick (14 November 2014–20 January 2015) and a cache of Elizabethan objects found in Corpus Christi College loaned to the Fitzwilliam Museum's Treasured Possessions exhibition (24 March-6 September 2015).



Bronze Age shield from Chatteris (MAA 1910. 229), loaned to the Chatteris Museum.



The Rudham Dirk, East Rudham, Norfolk. (© Norwich Museums Service.)



Cambridge Archaeological Unit

CHRISTOPHER EVANS

Appropriate to the fact that March marked the 25th anniversary of our operations, it has been a truly vibrant year for the Unit and this looks set to continue. At the time of writing we have just commenced an eight-month-long excavation of the spectacularly preserved Late Bronze Age timber platform at Must Farm, Whittlesey. Jointly funded by Historical England and the quarry (Hanson, now Forterra), a number of fine bronzes have already been recovered in the first weeks. In addition, work continues in Hanson's Manor Farm Quarry in Milton Keynes, where still another length of its huge riverside cursus system has been exposed and which has a major barrow at its eastern end (the floodplain there being crossed by a waterlogged Iron Age pit alignment). Equally, digging has just started on a vast multiphase Iron Age settlement at Cambridge's Newmarket Road, opposite Marshall's Airport.

Aside from a large-scale excavation on the south side of Godmanchester (Iron Age, Roman and Saxon phases), as well as further exposures within the Eye and Langtoft quarries (the latter having a Bronze Age timber circle monument), after more than a year we have just completed Northstowe's programme at Longstanton. Justice cannot be done here to its Romano-British 'village'. With evidence of a turf-bank perimeter and pottery production (with a number of graffiti-inscribed vessels), this complex, apparently high-status settlement straddled a major roadway and, with its route forking at the village's northwestern end, a small shrine was set at the junction. All this was preceded by



Longstanton, vertical drone-flown image enhanced to show 'signature-type' Iron Age building.



Manor Farm, Milton Keynes, showing cursus and barrow.

extensive Iron Age settlement, which—directly comparable to those at an adjacent sub-site in this landscape (reported last year)—included still another distinct building-type: a 'banjo-ish' arrangement with a large roundhouse linked to corridor-like parallel ditches.

As part of a Heritage Lottery Fund initiative concerned with the Ouse Washes, over the summer we undertook two public excavations involving local volunteers: a villa site in the RSPB reserve lands at Fen Drayton, and alongside an Ouse palaeochannel at The Bulwark at Earith. These proved very popular and yielded solid results, especially at the latter, where—in addition to the discovery of a new Iron Age settlement—an extraordinary prehistoric river sequence was exposed. As part of the larger project's events, and in demonstration of the Bedford Level having been a 'landscape of science' (next year we'll have an 'archaeology of the hovertrain' weekend), we also restaged Samuel Rowbottom's nineteenth-century flat earth trials at the Denver Sluice; films were made both of this and the site work, and these are available on YouTube.

By the riverside in Cambridge itself, on behalf of Trinity Hall, at St Clement's Gardens we investigated a sequence spanning over 3000 years. This included a Bronze Age palaeochannel with good organic preservation, Iron Age flood deposits, a Roman settlement (with major boundary ditch, palisade, burials and a waterside area), Saxon flooding and then, from the eleventh/twelfth century onwards, occupation linked to the Medieval town.

In the late spring we returned to the Barleycroft/Over landscape, where the Needingworth Quarry investigations have now progressed—after 20 years' wait—to border the earlier Haddenham Project lands. Seeing the first exposures on the east bank of the Ouse palaeochannel system, not only were a Bronze Age field-system and a



Barleycroft/Over, before-and-after shots of the henge/barrow monument.

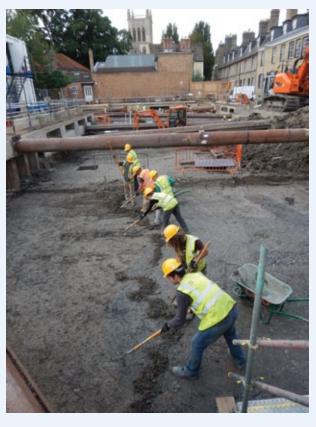
Grooved Ware-attributed structure excavated, but also a major three-phase monument complex: a later Neolithic henge superseded by oval, and then round, barrows. Photographs of the barrow site will feature in the October 2015 *Antiquity* (no. 347), plus an outline of it and other recently dug Fenland monuments in the journal's Project Gallery. Mention should be made that the summary covering the dating of the project's Low Grounds Barrow Cemetery excavations that appeared in 2014's *Proceedings of the Prehistoric Society* won that society's Baguley award for the paper of the year.

The Longstanton site hosted one of this year's Divisional training digs and, in addition to Cambridge students, this included three Nigerian participants. Similarly, two Cape Verdean colleagues also received fieldwork training on the Over barrow-site.



Cape Verdean archaeologists participating in the Barleycroft/Over excavations.

There is much to look forward to in the coming months. Aside from the promise of the on-going excavations, one of our senior project managers, Craig Cessford, will be the McDonald Institute's Field Archaeologist in Residence and study Cambridge's college-ceramics assemblages, and December 2015 will see the launch of the Unit's final Mucking excavation volumes (coinciding with that renowned site's 50th anniversary).



Excavation at Clement's Gardens, Cambridge.



Faculty of Classics

MARTIN MILLETT

The Classical Archaeology group ('D Caucus') in the Faculty of Classics had another good year. Dr Dunia Filippi (from Rome) arrived to begin her two-year Marie Curie fellowship. She is working on the topography of the City of Rome. Dr Lindsay Spencer started work as a Research Associate on the Lerna publication project, and Drssa Ninetta Leone started in a similar role on the AHRC GPR project.

Our well-supported programme of seminars continued, with a wide range of presentations including papers from Polly Lohmann (Ludwig-Maximilians-Universität München), Jean Turfa (University of Pensylvania) and Margarita Gleba (University of Cambridge). In May, the series included a paper on the environmental work at Portus—a joint project between the McDonald Institute, Classics and the University of Southampton.

We were awarded a grant from the AHRC for investigating the early phases of Roman towns in Italy using high-resolution GPR survey. This project is being undertaken in collaboration with Ghent University and the British School at Rome.

Fieldwork survey projects also flourished with large-scale work continuing in Kent (in collaboration with Kent County Council and Oxford University), at Aldborough in North Yorkshire (in collaboration with the Landscape Research Centre), and in Etruria (as part of Stefano Campana's Marie Curie fellowship project). A further season of excavations on the theatre at Interamna Lirenas (Lazio, Italy) went on alongside large-scale GPR survey there and at Falerii Novi, undertaken as part of the AHRC project.

Work began on the Mycenaean archive donated to the Faculty by Dr Lisa French. Reports on its archiving and conservation were completed, and we hope to appoint someone to work on this shortly. Work also commenced on the publication of the Bronze Age phases from Lerna.



Notebooks relating to the excavation of tombs at Mycenae, summer 1922.

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 is provided by University Senior Lecturer Dr Gillian Carr, in Archaeology, and University Reader, Dr Susan Oosthuizen, in Historic Environment, 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 Advanced Diploma is a research-based course, in which students undertake a project under individual supervision. Advanced Diploma projects in progress in 2014–16 in Historic Environment include research on early modern landscapes in Wiltshire and the landscape of Romano-British Horningsea. Archaeology was represented by an investigation into the recently discovered Iron Age coin hoard in Jersey. The Certificate and Diploma in Archaeology were successfully offered, as was the Certificate in Historic Environment.

Courses offered in Archaeology and Heritage Studies in the Madingley Weekly Programme (a series of five-week non-accredited courses) ranged from *Collectors and Collections* to *Persecuted!* and *Punishment and Crime*. In Historic Environment, courses included *The Medieval Fenland* and *Humps and Bumps, Houses and Hedges*, an introduction to landscape archaeology. Non-accredited online courses were offered in Archaeology by *Ritual and Religion in Iron Age Britain* taught by Gilly Carr and Historic Environment (*The Medieval Village Landscape*, and *Googling the Earth*, the latter taught by Dr Ulla Rajala). The Institute is an enthusiastic contributor to the Festival of Ideas, offering an annual field-visit led by Dr Oosthuizen and annual lectures in Archaeology and Historic Environment.

Finally, a healthy number of day and weekend courses continue to be offered in Historic Environment and in Archaeology and Anthropology. Courses in Archaeology and Anthropology included the Roman World, Iron Age Britain, Ancient DNA, Stonehenge, and Great War Archaeology. Those in Historic Environment included courses in garden history and the landscape of the first World War, as well as in Romano-British, medieval and postmedieval landscape archaeology. During the summer of 2015, the International Summer School offered courses in Conflict Archaeology (taught by Gilly Carr), the Aztecs and Maya, the Etruscans and Ancient Egyptians.

Members

- Dr Martin Allen (Fitzwilliam Museum) Later medieval English coins and tokens
- Dr Sally-Ann Ashton (Fitzwilliam Museum) Egyptology
- Dr Robert Attenborough (Biological Anthropology) Anthropological and archaeological genetics; evolutionary anthropology; human population biology and health
- Dr James Barrett (McDonald Institute for Archaeological Research/ Division of Archaeology) Medieval archaeology and historical ecology
- Dr Kate Beats (Faculty of Classics) Curator of Musuem of Classical Archaeology
- Dr Katherine Boyle (McDonald Institute for Archaeological Research) Archaeozoology; environmental archaeology; palaeobiogeography; European prehistory
- Dr Marcus Brittain (Cambridge Archaeological Unit) Interaction of landscape, memory and identity within non-literate societies
- · Prof. Cyprian Broodbank (McDonald Institute for Archaeological Research) Mediterranean archaeology and history; Aegean prehistory; island archaeology; landscape archaeology; comparative world archaeology
- 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 Tiziana D'Angelo (Faculty of Classics) Classical art and archaeology
- · 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 Susanne Hakenbeck (Division of Archaeology) Early medieval Europe; mortuary studies; archaeological theory and stable isotope analysis
- Dr Liliana Janik (Division of Archaeology) Archaeological theory; visual cognition in
- Prof. Martin Jones (Division of Archaeology) Archaeobotany; environmental archaeology; early agriculture
- Dr Jody Joy (Museum of Archaeology & Anthropology) Senior Assistant Curator of Archaeology
- Dr Toomas Kivilsild (Department of Archaeology & Anthropology)
- Dr 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
- 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, field and garden 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
- 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 Janice Stargardt (Department of Geography) Late Iron Age transition to early urbanism in South East Asia
- Dr Jay Stock (Division of Biological Anthropology) Bioarchaeology, human osteology, human growth and development
- 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
- Dr Susanne Turner (Faculty of Classics) Curator of Musuem of Classical Archaeology
- Prof. Andrew Wallace-Hadrill FBA (Faculty of Classics) Roman studies
- Dr Dacia Viejo Rose (Division of Archaeology) War-time destruction of cultural heritage and its post-war reconstruction
- Dr Caroline Vout (Faculty of Classics)
- Dr Chris Wingfield (Museum of Archaeology & Anthropology) Senior Assistant Curator of Archaeology
- · Dr Martin Worthington (Division of Archaeology) Akkadian language, literature and medicine



Senior McDonald Fellows

• Prof. Graeme Barker FBA

(McDonald Institute for Archaeological Research) Landscape archaeology (Mediterranean, arid zone, tropical); transitions to farming

· Janine Bourriau

(McDonald Institute for Archaeological Research)
Egyptology and ceramics

· Prof. Dilip Chakrabarti

(McDonald Institute for Archaeological Research)
Ancient India

• Dr Christopher Chippindale

(McDonald Institute for Archaeological Research)
Rock art, especially Australian

Dr Harriet Crawford

(Institute of Archaeology, UCL) Mesopotamia and Persian Gulf

Dr Corinne Duhig

(McDonald Institute for Archaeological Research)
Osteoarchaeology

Prof. Norman Hammond FBA

(Boston University)
Origins, florescence and decline of Maya civilization in Mesoamerica

Dr Catherine Hills

(McDonald Institute for Archaeological Research) Anglo-Saxon England; Europe in migration and early medieval periods

Prof. Barry Kemp FBA

(McDonald Institute for Archaeological Research)
Egyptology

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

• Dr Joan Oates FBA

(McDonald Institute for Archaeological Research) Mesopotamia and Syria

• Prof. Nicholas Postgate FBA

(Division of Archaeology)
Assyriology; social and economic history of Mesopotamia

• Prof. Lord Colin Renfrew FBA

(McDonald Institute for Archaeological Research) Keros Project

Dr Jane Renfrew

(Lucy Cavendish College)
The uses of plants by prehistoric man; ancient agriculture; food and wine in antiquity

Dr Colin Shell

(McDonald Institute for Archaeological Research) 2D & 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) Middle Palaeolithic assemblage of Barakah open-air site in Abu Dhabi Emirate

· Prof. Ann Wintle

(McDonald Institute for Archaeological Research)
Luminescence dating

McDonald Research Fellows

- Dr Craig Alexander (Research Associate) PITOTI Project
- Dr Frederick Baker (Research Associate)
 PITOTI Project; Alpine Rock Art and the Origins of Cinema; Post-conflict Archaeology
- Dr Giovanni Bellandi (Research Associate) PITOTI Project
- **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 Roger Blench

(Kay Williamson Educational Foundation) Linguistics and anthropology in West-Central Africa, South East Asia and Peru

- Dr James Blinkhorn (Research Associate)
 Palaeolithic archaeology and South Asian
 Prehistory
- · Dr Valentina Borgia

(Marie Curie Postdoctoral Researcher)
PALEOHUNT: reconstruction of hunting techniques to understand the diffusion of populations in the European Palaeolithic

Dr Michael Boyd

(Stavros S. Niarchos Research Fellow) Icon and centre in the Cycladic early Bronze Age

• Dr Sandra Brunnegger

(Junior Research Fellow, St Edmunds College) Latin America

- Dr Stefano Campana (Faculty of Classics)
 Landscape archaeology and archaeological methodology
- Dr Helen Chappell

(MRC Human Nutrition Research Unit)
Modellingof nanominerals; effects of trace
elements and isotopes on their structure and
function

Rev. Dr David Clark (Independent Scholar)
 Roman Byzantium; architecture; religion and symbolism

• Dr Andrew Clarke

(Leverhulme Early Career Fellow)
Applied agro-archaeology in Eastern Africa

- Dr James Cockram (National Institute of Agricultural Botany, Cambridge) Food Globalization in Prehistory (FOGLIP) Project
- Dr Emanuela Cristiani

(Marie Curie Postdoctoral Fellow)
Hidden foods

• Dr Uri Davidovich

(Rothschild Foundation Postdoctoral Scholar)
Violent conflicts in pre-urban societies during
the Chalcolithic and Early Bronze Age I (c.
4500–3000 BC

- Dr Matthew Davies (Research Associate/BIEA)
 Late Stone Age to Early Iron Age of East Africa
- Dr Paola di Giuseppantonio di Franco (Marie Curie Postdoctoral Researcher)
 Digital artefacts: how people perceive tangible cultural heritage through different media
- Dr Delphine Driaux

(Fondation Maison des Sciences de l'Homme Fellowship)

Ancient Egyptian urban and domestic archaeology

Dr Lucy Farr

(Research Associate)
Demography of Pleistocene hunter-gatherer
populations of Europe

- **Dr Dunia Filippi** (Faculty of Classics) Roman topography
- Dr Peter Forster

(Murray Edwards College)
Population genetics

Dr Jennifer French

(Junior Research Fellow, Peterhouse)
Demographic, cultural and environmental change in European Middle and Upper Palaeolithic populations

• Dr David Friesem

(Marie Curie Postdoctoral Researcher)
Tropical micro-archaeology, related to 'huntergatherer' use of space

Dr Margarita Gleba

(Senior Research Associate)
PROCON project; textile economy and urbanization in Mediterranean Europe

· Dr Aude Gräzer Ohara

(Fyssen Foundation Postdoctoral Fellow)
Egyptian domestic space in Pharaonic times

Dr Robert Harding

(Wolfson College & University College London) Archaeology of south India; archaeology of Buddhism; history of archaeology

• Dr Yağmur Heffron

(McDonald Anniversary Fellow)
Religion and ex-patriate identity in Anatolia



- Dr Jeremy Hill (British Museum) Head of Research, British Museum
- · Dr Emmanuelle Honoré (Newton International Fellow) North African rock art
- Dr Francesco lacono (Institute of Aegean Prehistory Fellow) Late Bronze Age Aegean; central Mediterranean archaeology
- Dr Sacha Jones (Research Associate) Effects of climate change on Neanderthals and Modern Humans in southwest Asia
- Dr Simon Kaner (University of East Anglia) Japanese archaeology; cultural heritage, archaeology at the extremities of the Silk Road
- · Dr Sheila Kohring (Division of Archaeology) Later European Prehistory; construction of knowledge through technological practices
- 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) FOGLIP project - Food globalization in prehistory
- Dr Diane Lister (Research Associate) Genetic analysis of historical barley landraces; spread of cereal cultivation across Europe
- Dr Giulio Lucarini (Marie Curie Postdoctoral Researcher) AGRINA – Human transitional pathways towards food production in North Africa
- Greg Luton (English Heritage) East of England Regional Director
- Dr John MacGinnis (Independent Scholar) Ziyaret Tepe Archaeological project; Mesopotamia and Eastern Anatolia
- · Dr Hannah Malone

(Junior Research Fellow, Magdalene College) Historic Environment Intelligence Officer (Development), Heritage Protection Department

Dr Evi Margaritis

(Marie Curie Postdoctoral Researcher) Cemeteries and the architectural heritage of Fascist Italy

- David McOmish (Historic England) OVIPE - Olive and vine in prehistoric Europe
- · Dr Jiajun Mei (Director, Needham Institute)
- Dr Piers Mitchell (Biological Anthropology) Palaeopathology/ancient diseases in humans

• Dr Rune Nyord

(Wallis Budge Fellow, Christ's College) Conceptions of the afterlife in ancient Egyptian mortuary religion

Dr Sara Owen

(Research Associate, Classics) Greek colonization; archaeology of European development

- Dr Emma Pomeroy (Division of Biological Anthropology) PAVE - BioAnthropology
- Dr Ronika Power (Research Associate) FRAGSUS - Fragility and sustainability in restricted island environments
- Dr Sandy Pullen (Research Associate) One River project; ancient land and water use along the Rio Icam, south-central Andes
- Dr Ryan Rabett (McDonald Institute Postdoctoral Fellow) Early human diversity: behavioural modernity in inter-regional perspective
- · Dr Miljana Radivojević (McDonald Anniversary Fellow) Metallurgy
- Dr Hazel Reade (Research Associate) UP-North: colonization and cultural diversification in unfamiliar landscapes
- Dr Alice Samson (British Academy Postdoctoral Fellow) Creolization; materiality; settlements; interisland relations; indigenous Caribbean
- · Dr Colin Shaw (Research Associate) Behaviour and skeletal morphology in Pleistocene and Holocene hominins
- Dr Julia Shaw (University College London) South Asian archaeology
- Dr Ceri Shipton (Research Associate) Evolution of stone tool technology througout the East African Stone Age
- Dr Laurence Smith (Independent Scholar) Suakin Project
- · Dr Pamela Jane Smith (Independent Scholar) History of archaeology
- Dr Victoria Pía Spry-Marqués (Research Associate) Archaeology; environment; earth sciences
- Dr Rhiannon Stevens (Senior Research Associate) UP-North: colonization and cultural diversification in unfamiliar landscapes
- Dr Brian Stewart (Research Fellow, Homerton College) Middle Stone Age of the Lesotho Highlands

Dr Fiona Stewart

(Division of Biological Anthropology) Primate research

- Dr Jeremy Tanner IUniversity College London) Greek and Roman art; early Chinese art; sociology of art; comparative art; art and archaeology
- Dr Sian Thomas

(Research Fellow, Selwyn College) Native Egyptian law after the Roman Conquest

Dr Astrid van Oyen

(Junior Research Fellow, Homerton College) Storage: re-inserting 'things' in the Roman economy

Dr Robyn Veal

(McDonald Anniversary Fellow) Environmental archaeology; charcoal analysis

- Dr Isabelle Vella Gregory (Junior Research Fellow, Christ's College) Mediterranean prehistory
- Dr Lacev Wallace (Faculty of Classics) The archaeology of the western Roman **Empire**
- Dr Meike Weber (Leverhulme Centre for Evolutionary Studies) Roman pottery (Samian ware)
- Dr Rowan Williams (Magdalene College) Master of Magdalene College
- Dr Yanfu Zu (Mongolia and Inner Asia Studies Unit) The Silk Road Project

Visiting Scholars

Dr Oscar Aldred

(Newcastle University) North Atlantic archaeology; landscape archaeology

 Dr Nikolas Arvanitis (Independent Scholar)

The European Mediterranean from antiquity to the contemporary era

Dr David Barreiro

(Institute of Heritage Sciences NCIPIT) Socio-economics of archaeology; production of Heritage from a historical perspective

- Dr Trisha Biers (Independent Scholar)
- Dr Letizia Ceccarelli (Independent Scholar) Sanctuaries in Latium vetus; the site of Ardea
- · Dr Emanuela Cristiani (Independent Scholar) Mesolithic-Neolithic technology



Visiting Scholars (cont.)

- Dr Pieterjan Deckers
 (Brussels Free University)
 COST Action Oceans Past Platform Working
 Group 2 'Coastal Settlements'
- Prof. Margarita Díaz-Andreu (Barcelona University)
 Heritage; history of archaeology; identity; prehistoric rock art
- Patricia Duff (ArchaeoLink)
 Linking archaeologists with communities
- Dr Dafne Eerkes-Medrano (Marine Scotland Science) Whale diet and ecology
- Dr Cristina Felici (Independent Scholar) Medieval archaeology
- Dr Ricardo Fernandes (Kiel University)

 Quantitative diet reconstruction
- Peter French (Independent Scholar)
- Dr Francesa Fulminante
 (Saffron Walden Museum & University of Rome, Tor Vergata)
 Mediterranean State Formation; origins of Rome and the Latins
- Dr Helen Geake (National Finds Adviser, Portable Antiquities Scheme)
 Anglo-Saxon archaeology; metal detectorists
- Dr Haskel Greenfield (Visiting Scholarship, St John's College)
 Old World evolution of food production and complex societies
- Dr Susanna Harris (University College London)
 PROCON project Textile economy and
 urbanisation in Mediterranean Europe 100–500
- Prof. Christine Hastorf (University of California, Berkeley)
 Meaning in the everyday; palaeoethnobotany; food and foodways; Andean region of South America; prehistoric agricultural systems; data interpretation and theory
- Dr Berit Hildebrandt (University of Copenhagen)
 Classical archaeology; silk in antiquity; Roman Emperors' garments; silk and Silk Route trade
- Prof. Fred Hocker (Vasa Museum, Sweden)
 Vasa Historical and Archaeological Research Program
- Prof. Matthew Johnson (Northwestern University)
 Theory; medieval archaeology; castles, buildings; landscape
- Prof. Sun Keqin (China University of GeoSciences, Beijing)
 Palaeobotany in China in the context of paleoclimate, geology and archaeology

- Dr Kathelijne Koops (University of Zurich)
 Primate Research
- Dr Sabine Laemmel (Independent Scholar) Ancient Egyptian Pottery
- Prof. Chungkyu Lee
 (Yeungnam University, Republic of Korea)
 Asian Bronze culture; Korean archaeology
- Prof. Mary Miller (Yale University)
 Department of History of Art Slade Lecture Series 2014–15
- Dr Giuseppina Mutri (Independent Scholar)
 Human adaptational patterns to arid
 environments in North Africa
- Dr Alex Pryor (University of Southampton) Human occupation of marginal environments in the Palaeolithic
- Prof. Ravindra Nath Singh (Banaras Hindu University)
 Analyses of archaeological materials by SEM, EPMA, X-ray, metallography, chemical
- Dr Lucy Walker (Independent Scholar)
- Dr Laura Zucconi
 (Richard Stockton College)

 Pre-Edomite history of the southern Levant

Affiliated Scholars

- Prof. lan Baxter
 (Head of Suffolk Business School, UCS)
 Heritage
- Dr Andrew Bednarski (Gonville & Cauis College) Egyptology
- Dr Simon Coupland (Independent Scholar) Medieval historian; Vikings; ninth-century coinage
- Dr John Creece (Independent Scholar) Iroquian personhood and the body
- Dr Nicholas James (Independent Scholar)
- **Dr Kevin Lane** (Independent Scholar) One River Project
- Dr Jacke Phillips (School of Oriental and African Studies) Suakin Project
- Dr Nellie Phoca-Cosmetatou (Independent Scholar)
 Human evolution; human settlement and subsistence across southern Europe
- Prof. Dominic Powlesland (Landscape Research Centre)
 Archaeology of landscapes from the Palaeolithic to the present

- Dr Ulla Rajala (Stockholm University)
 Boundaries and territorial geographies of Archaic and early Roman central Italy
- Dr Shadia Taha (Wolfson College)
 Cultural heritage; ethnography; qualitative research; community engagement; outreach projects
- Dr Gemma Tully (Archaeolink)
 Community archaeology in Sudan; Visitor
 Services and Learning Officer at Saffron Walden
 Museum
- Dr James Walker (Independent Scholar) Oronsay project

Postgraduate Students

PhD Students (2014-2015)

- Kelly Accetta (Division of Archaeology)
 Thresholds of the God: Inscribed Doorways and the Creation of Sacred Space in Ancient Egypt
- Pablo Alonso Gonzalez (Division of Archaeology)
 Nation-building and Cultural Heritage in Post-Colonial and Revolutionary Cuba
- Ting An (Division of Archaeology)
 Why 'Chinese Element' in Europe before the 3rd millennium BC
- Christopher Andrews (Division of Archaeology)
 What were the Human Responses to Climate
 Change during the Younger Dryas in Northwest
 Furope?
- Robert Anstey (Division of Archaeology)
 Precontact Hunter-Gatherer Interactions in the
 Strait of Belle Isle, Newfoundland and Labrador,
 Canada
- Daniela Arroyo Barrante
 (Division of Archaeology)

 Tell Majnuna: Pottery Production and Feasting at the Outset of Urbanism in Mesopotamia
- Amy Bahé (Division of Archaeology)
 The Demotic Ostraca from Deir el-Bahari in the
 British Museum
- 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
- Jeremy Bennett (Division of Archaeology)
 Managing the Agrarian Environment in
 Prehistoric Malta and Gozo
- Kathryn Boulden (Division of Archaeology)
 Investigating the Early Neolithic Agricultural Landscapes of Southern Britain Through Soil Micromorphology and Faunal Isotope Analysis



- Kathleen Bowe (Division of Archaeology) Negotiating the Reconstruction and Destruction of Cultural Heritage in Northern Germany
- Ben Cartwright (Division of Archaeology) Making the Cloth that Binds Us: The Role of Spinning and Weaving in Crafting the Communities of Viking Age Atlantic Scotland (AD c. 600-1400)
- Giandaniele Castangia (Division of Archaeology) Symbols and Landscapes: The Meaning of the Sardinian Nuraghi Through Time and Space
- Emma Chapman (Division of Archaeology) Children and Child Burial in Medieval England
- Afroditi Chatzoglou (Division of Archaeology) Heritage and the Built Environment: The Case Study of the Living Historic City of Athens, Greece
- Sarah Clegg (Division of Archaeology) Capturing the Standards: Capacity Systems in their Social and Economic Context in Third Millennium BC Mesopotamia
- Elizabeth Cohen (Division of Archaeology) In What Ways Does the Use of Ottoman Heritage in Greece Help Our Understanding of Difficult Heritage and the Heritage of the 'Other'?
- Eleri Cousens (Faculty of Classics) Religious Practices in the Communities of Roman Britain
- Samantha Cox (Division of Archaeology) Growth and Development of Sexual Dimorphism in the Pelvis
- Aaron Critch (Division of Archaeology) Exchange, Authority, and Identity: Ring-Money Production in the Viking Age Earldom of Orkney
- Hannah Cutler (Division of Archaeology) Understanding Late Middle Palaeolithic Neandertal Landscape-use during Short-Term Occupations in Britain
- 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
- Ningning Dong (Division of Archaeology) Into the Wild: A Zooarchaeological Study on Wild Animal Exploitation in Farming Societies
- Sarah Evans (Division of Archaeology) Communication and Information Storage in the Upper Palaeolithic: An Analysis of Geometrically Engraved Bone and Antler Objects from Western Europe

- Kathrin Felder (Division of Archaeology) A Key to Early Anglo-Saxon Identities? Girdlehangers in 5th- and 6th-century England
- Renate Fellinger (Division of Archaeology) The Participation of Women in the Legal Landscape of Ptolemaic Egypt
- Pedro Goncalves (Division of Archaeology) Holocene Landscape and Environmental Changes in the Capital Zone of Egypt
- Kathryn Hall (Division of Archaeology) All the Live-Long Day: Modelling Land-use and Experience Across the Mesolithic-Neolithic Transition of Southern England
- Emily Hallinan (Division of Archaeology) Variation and Modernity in Stone Age Landscape Use in the Western and Northern Cape Region, South Africa
- Benjamin Hinson (Division of Archaeology) The Childhood Experience in Ancient Egypt
- Erell Hubert (Division of Archaeology) Moche Colonial Identity in the Santa Valley, Peru
- Barbora Janulikova (Division of Archaeology) Accessing the Society of Early Dynastic Memphis
- 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
- Alina Kozlovski (Division of Archaeology) The Historicity of Objects and Spaces in the Ancient Roman World
- 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
- Cynthia Larbey (Division of Archaeology) There Are Significant Phylogenetic Evolutionary Differences in Human Adaptation to Diet - How Does That Correlate with a Deep History of Processed Plant Food Consumption?
- Hyun 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 History of Cattle Traction in North 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
- Russell O' Riagain (Division of Archaeology) Settlements and Colonialism in Ulster and Argyll from the Iron Age to the Middle Ages
- Janine Ochoa (Division of Archaeology) Endemicity, Indigeneity and Zooarchaeology: Palaeozoological Reconstruction and Ecological

- Knowledge Systems in Philippine Island **Environments**
- Shawn O'Donnell (Division of Archaeology) An Ethnopalynological Examination of Late Quaternary People-Plant Interactions in Northern Island Southeast Asia, and Implications for Conservation
- Danika Parikh (Division of Archaeology) The Social Organization of the Indus Civilization through an Analysis of Ceramic Production and Distribution in Northwest India
- Georgina Peters (Division of Archaeology) Society and Space: Rethinking the Reciprocal Relationship Between Iron Age People and the Landscape They Inhabited
- Leanne Philpot (Division of Archaeology) Transatlantic Slavery Narratives at Museums and Heritage Sites in England
- James Pigtain (Division of Archaeology) Evidence of Biological Adaptation to Cultural Demands and Environmental Pressure in Medieval Scandinavia Utilising Cross-sectional Geometric Analysis of Long Bone Diaphyses
- Elizabeth Pratt (Division of Archaeology) The Living Stones: Knowing Prehistoric Archaeological Heritage in 21st Century Cornwall
- Hannah Price (Faculty of Classics) The Roman Forum
- Natalia Przelomska (Division of Archaeology) Flowering Time Genetics of Foxtail Millet (Setaria italica) and its Potential Impact of Food Security
- Elizabeth Raddatz (Division of Archaeology) Making Sense of Cave and Open-air Sites: A Taphonomic Investigation of inter-site and Lithic Assemblage Variability and Hunter-Gatherer Landscape Use in Peninsular and Island Southeast Asia during the Later Stages of the Late Pleistocene (c. 70-20 kya)
- Claire Ratican (Division of Archaeology) Multiple Burials in Viking Age Scandinavia and the British Isles
- Rachel Reckin (Division of Archaeology) High Altitude Archaeology in the Absaroka and Beartooth Mountains of Montana and Wyoming
- 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) Here Lies Our Land: Heritage, Identity, and Clanship in Contemporary Scotland
- Sarah Roe (Division of Archaeology) Responses to Environment Conditions in Domestic Architecture
- Miranda Semple (Division of Archaeology) Pursuing Identity: Constructing Northern Mesopotamian Households, 4th to 2nd Millennium BC



Postgraduate Students

(cont.)

- Susan Shay (Division of Archaeology)
 Native Hawaiian Land Claims and the Use of Heritage as a Vehicle for Indigenous Sovereignty
- Francesco Sponza (Division of Archaeology)
 The Aestern Taiwan Material Culture, Dynamics and Quality of Cultural Diffusion Between 7000 and 3500 BP
- Sarah Strange (Division of Archaeology)
 Immigration in Late Ancient Egyptian History: A Bioarchaeological Approach
- Meghan Strong (Division of Archaeology)
 Illuminating the Path of Darkness: Artificial Light in Ancient Egypt
- Lynette Talbot (Division of Archaeology)
 The Language of Pathology in Akkadian
- 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
- Willem Van Pelt (Division of Archaeology)
 Pyramids, Proteins, and Pathogens: A Cultural and Scientific Analysis of Egyptian Old Kingdom Pyramid Mortars
- Olga Vinnichenko (Division of Archaeology)
 The Influence of Aramaic on Neo-Assyrian
- Dominic Walker (Division of Archaeology)
 Towards a Decentred Museum: Authority,
 Mueums and the Web
- 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
- Emily Wright (Division of Archaeology) Cremation and Inhumation Practices in the Mediterranean, 1500–500 BC
- Guohua Yang (Division of Archaeology)
 The Concept of 'Patriotic Education' and its
 Influence on China's World Heritage Practice

MPhil Students (2014-15)

- Ethan Aines (Division of Archaeology)
 Normal for Norfolk: A View of Iron Age
 Landscape and Depositional Habitus from Metal
 Detected Finds in Breckland
- Ayhan Aksu (Division of Archaeology)
 Ancient Representations of Ancient Kings: The Case of Sargon of Akkad
- Michael Armstrong (Division of Archaeology)
 The Heritagisation of Death: An Examination of Visitor Attitudes to the Display of the Dead in the Capuchin Catacombs of Palermo
- Flaminia Bartolini (Division of Archaeology)
 Editing the Past of Troina: Cultural Heritage in Post-Conflict Reconstruction in a Sicilian Town
- Elizabeth Briggs (Division of Archaeology)
 Isotopic Analysis of the Olives from the 4th
 century BCE Shipwreck of Mazotos, Cyprus
- David Cebrian Martinez
 (Division of Archaeology)
 Unbecoming an Iberian in the Ager
 Tarraconensis: A Case Study of North-East
 Catalunya
- Silvia Ferreri (Division of Archaeology)
 Cremation Burials in North Mesopotamia
 in the First Millennium: Evidence of Social
 Differentiation in the Assyrian Empire?
- Rebecca Haboucha (Division of Archaeology)
 Changing Foodways, Reimagined Communities:
 The Transmission of Food as Heritage in the
 Afghan Diaspora in London
- Emma Hannah (Division of Archaeology)
 Anglo-Saxon Diet in the Conversion Period:
 A Comparative Isotopic Study of Human
 Remains from the Cemeteries at Melbourn,
 Cambridgeshire, and Polhill, Kent, Using Carbon
 and Nitrogen
- Rebecca Hodgin (Division of Archaeology)
 Ancient Egyptian Iconography of Kingship: Kiosk Scenes in 18th Dynasty Private Tombs
- Julia Hurley (Faculty of Classics)
 Mapping Food in Iron Age and Roman-Period Britain: An Integrated Approach
- Isabel Kasdin (Division of Archaeology) Rethinking Integrity: 'Urban Husbanders' and Alternative Preservation Strategies in Detroit, Michigan
- Joanna Lawrence (Division of Archaeology)
 Phallic Representations in Bronze Age
 Scandinavian Rock Art: Contexts, Associations, and Interpretations
- Alex Loktionov (Division of Archaeology)
 An Assessment of the Practice of Law
 Enforcement in Ramesside Egypt

- Conor McAdams (Division of Archaeology)
 Site Formation Processes and Environmental
 Change: Geoarchaeological Investigation of the
 Temple Period Structure at Tac-Cawla, Gozo
- Ian Ostericher (Division of Archaeology)
 Midden Composition, Extent and Implications for Neolithic Settlement at Stonehall Farm,
 Orkney
- Samantha Oxford (Division of Archaeology) Isotopic Study of Burials from Tenuta del Duca, a Second to Third Century AD Roman Cemetery from Portus, Italy
- Emilio Passera (Division of Archaeology)

 Body Adornment and Social Identity in Ancient
 Egypt
- Leah Powell (Division of Archaeology)
 The Hevingham Hoard: A Late Bronze Age Hoard from Norfolk
- Christoph Schmidhuber (Division of Archaeology)
 Case Marking in Old Babylonian Sumerian Royal Inscriptions: Studies in Linguistic and Orthographic Variation
- Akshyeta Suryanarayan (Division of Archaeology)
 Gauging Preservation of the Cultural Horizon at Must Farm: A Multi-Method Study
- Jasna Vilic (Division of Archaeology)
 Making Sense of Landscape: Spatial Analysis of Megalithic Towers in Talayotic Menorca
- Margaret White (Division of Archaeology)
 The Emergent Heritage of Oppression:
 Romania's Communist Heritage at Sighet
 Memorial Complex
- Bethany Whitlock (Division of Archaeology)
 Micromorphological and Archaeological
 Approaches to Characterising Changes in the
 Use of Space at Sangayaico, Peru
- Jun Yi Wong (Division of Archaeology)
 Texts and the Illiterate: Practical Uses of Egyptian Hieroglyphs

Material Culture Laboratory

John Robb, Elizabeth DeMarrais & Sheila Kohring

The 2014–2015 academic year saw some changes in the activities of the Material Culture Laboratory. The Thinking about Things reading group continued exploring material culture theory with the topic 'Art Beyond Representation', but we shifted focus in our laboratory seminar structure. The lab's lunchtime seminars widened our net around Cambridge, hosting research by our own members, including storage technologies by Astrid Van Oyen and memory and technology by Sheila Kohring, as well as including guests from the History of Medicine (Alexandra Ion and the importance of the face and 'humanness') and Lucy Wrapson from the Hamilton-Kerr Institute, discussing pigments and conservation in rood screens in Norfolk. Our main lab events included talks by Catherine Allen from George Washington University, Dan Hicks from Oxford and Yvonne Marshall from University of Southampton. These talks challenged ideas about the discipline, with examples of Andean animistic ontologies, object ontologies in New Zealand and thoughts on 'when' is contemporary archaeology?

Within our membership, we have seen two of our post-doctoral researchers obtain permanent positions—Dr John Creese at North Dakota State University and Dr Alice Samson at the University of Leicester—and three of our post-graduate students, Sebastian Becker, Aaron Critch and Bela Dimova, submit their PhDs. We wish them the best of luck!

Staff

Professor John Robb Dr Elizabeth DeMarrais Dr Sheila Kohring

Post Doctoral Researchers

Valentina Borgia Michael Boyd Paola di Giuseppantonio di Franco Aude Gräzer Ohara Rune Nyord Alice Samson Astrid Van Oyen Robyn Veal Isabelle Vella Gregory



Lithic study. (Photographs by S. Kohring, original artwork by division alumnus Tuukka Kaikkonen.)

Postgraduate Members

Daniela Arroyo Barrantes Flaminia Bartolini Sebastian Becker Ben Cartwright David Jesús Cebiran Martinez Aaron Critch Bela Dimova Sarah Evans **Emily Hallinan** Barbora Janulíková Joanna Lawrence Eduardo Machicado-Murillo Rusell Ó Ríagáin Danika Parikh Emilio Passera Leah Powell Mauro Puddu Rachel Reckin Wannaporn Rienjang Sarah Roe Francesco Sponza Meghan Strong Akshyeta Suryanarayan Ana Tavares Zitung Wang



Grahame Clark Zooarchaeology Laboratory

PRESTON MIRACLE

The Grahame Clark Laboratory had a fruitful and productive year in 2014–15. Our heartiest congratulations go to Ryan Rabett, who started a lectureship at Queen's University Belfast in April, 2015. Ryan has been a pillar of the Clark Laboratory and Cambridge's zooarchaeological community since 1998— our loss is Belfast's gain! Minghao Lin passed his PhD viva 'with flying colours' and Yiru Wang submitted her PhD dissertation in September of 2015. Congratulations to both of them; we eagerly await two newly minted Doctors of Philosophy! We welcomed Janine Ochoa and Marjolein Bosch to the Clark Laboratory. Janine arrived in February 2015 and is researching a PhD on 'Palaeozoological reconstruction and ecological knowledge systems in Philippine island environments'. Marjolein joined the Lab in October 2015 as a Marie Skłodowska-Curie Postdoctoral Fellow; she is working on Palaeolithic shell ornaments.

Preston Miracle's field research in coastal Croatia continued in 2014–15. He and his team returned in September 2015, after a two-year break, to Vela Spila Cave on the western end of the island of Korčula (Croatia). They opened a surface of about 6 m², excavating early Neolithic and late Mesolithic deposits that yielded rich assemblages of pottery,

stone tools, and faunal remains. These remains will significantly add to our understanding of the shift from hunting and gathering to food production in the region. We are now prepared to open an extensive excavation surface (c. 40 m²) in Mesolithic and underlying Upper Palaeolithic layers at Vela Spila. Investigation of these deposits, and whatever may lurk beneath, will be the focus of work at the site for years to come. Preston has also been actively involved with his co-director Dinko Radić (Director, Cultural Centre of Vela Luka) in preparing a major museum exhibition, 'Korčula Before Christ', that is due to open in Zagreb, Croatia, in November 2016.

Jessica Rippengal spent nine days in Dunwich supervising a trench and test pits on a HLF-funded community dig with ACA and Touching the Tide to find out more information about this important medieval town which has been disappearing into the sea for the last 800 years. The four trenches, plus numerous test pits, produced not only early and late medieval pottery and small finds that helped map the extent of the settlement, but also Bronze Age and Iron Age pottery and worked flint.

Katherine Boyle has continued with her research on hunting during the European Neolithic, focusing on the procurement and uses of red deer in northern Italy and marine mammals in northwestern France.

Pía Spry-Marqués (postdoctoral fellow) returned in March 2015 from a nine-month maternity leave



Excavating Early Neolithic layers at Vela Spila, Croatia. Ivana Krile and Šime Ivić.



Vela Spila Project field laboratory in action, Cultural Centre of Vela Luka, Croatia. Mia Koščak, Goran Tomac, Siniša Radović.

to continue work as a faunal analyst on Dr Philip Nigst's NEMO-ADAP project. She has been analysing vertebrate remains from the Upper Palaeolithic open-air site of Korman 9 in Ukraine. The work has been quite challenging owing to the terrible state of preservation of the bone, but is nonetheless providing important new information about Pleistocene environments and Upper Palaeolithic subsistence in the region.

Marjolein Bosch (MSCA postdoctoral fellow) lent zooarchaeological expertise to two field projects, the 'Mitoc-Malu Galben Project' in Romania (Pls Vasile Chirica, Romanian Academy of Sciences, Pierre Noiret, University of Liege and Philip Nigst, University of Cambridge) and the ERC-funded 'In Africa Project' in Kenya (PI Marta Mirazon Lahr, University of Cambridge). Fieldwork at Mitoc-Malu Galben focused on the youngest Aurignacian layer as well as the younger Gravettian and older Aurignacian deposits. Bone preservation is poor and remains are often encased in hard calcareous concretions. Nevertheless, some identifiable remains were found, mainly of horse and microfauna. Her fieldwork in Kenya focused on remains of the recent African elephant (Loxodonta africana) and an extinct species of elephant (Elephas cf. recki) from Middle and Later Stone Age sites. On 1 October 2015, she started a two-year Marie Skłodowska-Curie fellowship on 'Early Upper Palaeolithic personal ornaments and behavioural adaptations'.

Minghao Lin passed his PhD viva on 'The Early History of Cattle Traction in North China'. In addition to submitting and defending his PhD dissertation, he has published several journal articles and was awarded a Wenner-Gren Engaged Anthropology Grant to support the

dissemination of his PhD research in China. Yiru Wang submitted her PhD dissertation on 'Origins of Sheep and Goat Domestication in Western China'. Ningning Dong (3rd-year PhD) is researching ethno-taxonomies in prehistoric China. In the summer of 2014, she visited several museums and archaeological institutes across China to access original records of faunal assemblages and conduct her own analyses of faunal remains from two late Neolithic sites on the southeast coast—the Jiangzhuang and Dongshancun sites. Janine Ochoa (1st-year PhD) was in the Philippines (Palawan and Luzon Islands) in the summer of 2015 for initial data gathering and bone analysis. She presented papers at two conferences, the European association of Southeast Asian Archaeologists and the Postgraduate Zooarchaeology Forum. Finally, she attended a training workshop in dental microwear in Tarragona, Spain.

STAFF

Dr Preston Miracle (Laboratory Director) Jessica Rippengal (Zooarchaeology and Chief Technician)

Postdoctoral Researchers

Marjolein Bosch Dr Katherine Boyle Natasha Dodwell Dr Ryan Rabett Vida Rajkovača Dr V. Pía Spry-Marqués

PhD Research Students

Ningning Dong Minghao Lin Van Pigtain Brittany Walsh Yiru Wang



Jessica Rippengal digging at the Medieval town of Dunwich, Suffolk.



Marjolein Bosch excavating a horse tibia from the Gravettian exposed in an old section at Mitoc-Malu Galben.



George Pitt-Rivers Laboratory of Archaeobotany and Bio-archaeology

Martin Jones

Our laboratory continues to support worldwide research into early food, economic plants and the environmental context of human subsistence.

Significant investment in resources by the Central Fund of the School of Humanities and Social Sciences and the McDonald Institute has supported a new microscopy laboratory for the desktop scanning electron microscope and high-resolution Leicas, creating a valuable shared resource for bioarchaeologists and material culture specialists. A new Zeiss compound microscope with automated Z-stack imaging software also enhances our research into a wide range of biological remains and material culture, notably wood charcoal, plant fibres and tool residues. Alongside these developments, we were sorry to say goodbye to Louise Butterworth, who moved to a new appointment after many years supporting the laboratory. Louise had a pivotal role in securing these resource upgrades, in liaison with technical colleagues and lab members. We convey our thanks to Louise and wish her all the best for the future.

Some of the earliest known evidence for modern humans processing and cooking starchy foods is being analysed by Cynthia Larbey for her PhD thesis, notably charred plant tissues from Klasies River Cave Complex in the Eastern Cape, South Africa. Slightly later remains are also being reviewed by Cynthia from Zengpiyan in southern China. The objective is to contrast direct archaeobotanical evidence for starchy plant use with the emerging genetic evidence for human adaptation to starch consumption.



Cynthia Larbey plant collecting under licence in Klasies River ravine.



Charred Mature Harappan rice from the Land, Water, Settlement Project site of Masudpur I in India.

The FOGLIP project, led by Martin Jones (p. 29), has continued to investigate plant macrofossil evidence for the prehistoric movement of crops in Eurasia, alongside genetic and isotopic food web evidence. Movements of food plants across Eurasia are also under investigation by Ting An, who is contrasting early Neolithic pottery impressions with archaeobotanical evidence; this research is conducted in association with FOGLIP. Ting has recently conducted field trips to Romania, China and Russia to examine museum collections of painted potteries from, respectively, the Cucuteni, Anan and Majiayao Cultures.

Congratulations are due to Jennifer Bates on submitting her PhD thesis into village agricultural strategies in the Indus Civilization (c. 3200–1500 BC), which draws on both plant macrofossil and phytolith evidence. She returns to the laboratory this autumn as a Junior Research Fellow at Selwyn College, Cambridge, to continue her studies of the prehistoric agriculture of the Indus Valley and to extend this research into adjacent mountainous regions. Jennifer has also been busy co-editing the Aşvan Archaeobotanical Monograph for the BIAA (British Acadamy small grant) and conducting plant macrofossil analysis for FRAGSUS and phytolith analysis for TRANS-NAP.

Evi Margaritis has continued her investigation of early olive and grape cultivation in the Aegean and the production of wine and olive oil. She has also published on the ritual use of plants in prehistoric Europe, with fieldwork focusing primarily on Bronze Age sites in Crete and Cyprus. This autumn, Evi will become Assistant Professor in Science and Technology in Archaeology (STARC) at the Cyprus Institute, Cyprus; we wish her all the best for the future.

For the proto-historic and historic periods, Robyn Veal (p. 44) has continued her research into the economics of fuel and timber, based primarily on charcoal from early Republic to Late Antique Rome and from Pompeii. She has conducted extensive collaborative fieldwork in Italy and organized several high-profile conferences and one-day meetings. Her presence in the laboratory has supported skills training and research by Master student Elizabeth Briggs (Bronze Age waterlogged timber and Roman charcoal).

Rachel Ballantyne has conducted sampling of Viking Age charred plant remains in support of James Barrett's role in 'Tracking Viking-assisted dispersal of biodiversity using ancient DNA', University of Oslo. Her other projects include augering and flotation at Interamna Lirenas, in collaboration with Alessandro Launaro, Faculty of Classics (p. 39), and archaeobotany for major excavations by Cambridge Archaeological Unit at Ham Hill, North West Cambridge and Must Farm.

We continue to support the work of colleagues based primarily in other laboratories. Phytolith analysis has been used by David Friesem (p. 28) within his ethnoarchaeological investigation of microscopic remains associated with foraging activity loci in tropical south India. Peter Griffiths (LCHES, Biological Anthropology) is, with guidance from Jennifer Bates, using phytolith analysis as a proxy for reconstructing Late Quaternary vegetation change in the deltaic and lakebed sediments of the Turkana Basin, Kenya.

Our suite of microscopes has also supported colleagues interested in material culture. Residues and microwear by Valentina Borgia, Emanuela Cristiani, Giulio Lucarini (p. 34), Giuseppina Mutri and Ronika Power. The new Zeiss is currently being used by Herman Muwonge (LCHES, Biological Anthropology) to study residues and microwear on Late Stone Age lithics from the Albertine Rift Valley, Uganda. Textile and fibre analysis has been



Tool residue analysis by Herman Muwonge, using the new Zeiss microscope.

conducted by Margarita Gleba (p. 39) and David Beresford-Jones. Plant macrofossil evidence from David's research in Peru also includes macrofossils of early crops such as Lima beans (*Phaseolus lunatus*), radiocarbon-dated to 5300 bp (uncal).

Once again, research in the lab has reflected the stretch of archaeobotanical research, across the continents and through time, from Middle Stone Age Africa to Viking Europe. Now that our institutional links with biological anthropologists have come closer, we can look forward to exploring yet further dimensions of people—plant relations in the coming years.

Staff

Prof. Martin Jones (*Laboratory Director*)
Mrs Louise Butterworth (*Research Technician until Feb* 2015)

Dr Rachel Ballantyne (*Research Technician, March–* Sept 2015)

Postdoctoral Researchers

Dr Rachel Ballantyne (part-time, *Research Council of Norway*)

Dr Evi Margaritis (*Marie Curie Intra-European Fellowship*)

Dr Robyn Veal (McDonald Institute Anniversary Fellow)

PhD Research Students

Ting An (CSC China Scholarship, Cambridge Overseas Trust)

Jennifer Bates (AHRC Studentship) Cynthia Larbey (AHRC Studentship)

Associated Researchers

Dr David Beresford-Jones Dr Valentina Borgia Dr Emmanuela Cristiani Dr Margarita Gleba Peter Griffiths Dr Giulio Lucarini Dr Giuseppina Mutri Herman Muwonge Dr Ronika Power CHARLES FRENCH

The geoarchaeological laboratory has had its busiest year ever. It has been involved in at least 30 research projects in the UK and around the world, and has produced more thin-section slides than ever before, numbering some 450, through the efforts of Tonko Rajkovača, lab members and visiting students, with the Director completing over 15 micromorphological reports. We are also very pleased to say that Katie Hall has been awarded her PhD and will be going on to teacher training, and Kate Boulden successfully completed PhD research in 2015, with lan Ostericher, Beth Whitlock, Akshyeta Suryanarayan and Conor McAdams successfully completing MPhils at the end of August, 2015. Dr Sean Taylor is also thanked for taking over the Director's teaching duties whilst he was HoD and then on research leave this past year.



The house structure in La Yerba III, lower Ica valley, Peru.



Close-up of the in situ laminar ashy and organic floor deposits in the La Yerba III structure (knife length 15 cm).

The Ica Valley project conducted its fourth season of fieldwork along the Pacific littoral, excavating a complete late Pre-ceramic structure within the shell midden La Yerba III. This was comprised of two superimposed sub-circular post-built and woven reed structures of about 5 m on their long axis, set about 50 cm into the sand on the north shore of the Ica River about 500 m inland from the Pacific. Hearths and *in situ* floors were well preserved with evidence of both hunter-gathering as well as agricultural activities at about 6500 years BP.

Other geoarchaeological work by lab members continued in Gozo, Sardinia, Bosnia and Cape Verde (see p. 32) as well as new research in India (see Friesem, p. 28) and Greece amongst many other projects on the go; a few of these are now described briefly.



Augering and geophysical survey of an area of Knights of St John sixteenth-century AD field systems in the Ramla valley immediately south of Ggantija temple.



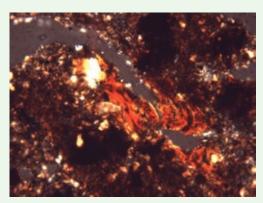
The in situ pre-late Neolithic soil (below the labels) beneath dumped soil and settlement debris and a collapsed stone rampart entranceway structure at Ġgantija temple on Gozo.

Test excavations at the two later Neolithic temple sites of Ġgantija and Santa Verna on Gozo (as part of the FRAGSUS project; see p. 42) revealed intact, thick brown Mediterranean buried soils. These reflect a more humid and well-vegetated environmental regime, very different from todays xeric and depleted red soils on the limestone plateau of the island. Survey of known sixteenth-century AD field systems in the adjacent Ramla valley revealed no such soils, but rather impermeable silty clay soils on marine clay geology that would not have been suitable for arable agriculture until the combination of metal ploughs and intense land-use pressure made it feasible.

In the lower Posada river valley in eastern Sardinia, extensive coring has revealed a massive and some 12.5 m deep earlier Holocene palaeochannel system with a substantial marine embayment phase extending at least 2 km inland from the present shore between about 7050 and 5550 $\ensuremath{\mathtt{BP}}$ (or c. 6010–4343 cal BC) (Fig. 5). This was associated with a pollen assemblage indicative of coastal marshland and semi-open vegetation dominated by Ericaceae shrubland, with many other evergreen taxa such Olea, Quercus, Pistacia and Arbutus, and significant elements of maguis (Dr



A deep core through the lower Posada valley showing the transition from black peaty marshland (right) to higher velocity riverine sands (middle) and then silty clay overbank alluvium above (left).



Photomicrograph of crescentic, micro-laminar clays in the base of the buried soil profile at Topica Brdo, near Prijedor, Bosnia (frame width = 2.25 mm; cross polarized light).

Federico Di Rita, pers. comm.). There is then a long period of river avulsion and higher velocity riverine deposition dominating until the later prehistoric and Roman periods when overbank alluvial deposition becomes predominant in the lower river valley. This latter sedimentation is undoubtedly related to clearance upstream in the valley system and extensive agricultural intensification and arable cropping associated with cereal agriculture, most probably for the feeding of Rome's citizens.

Analytical work at two hill-top promontory sites of Zecovi and Topica Brdo, discovered through geoarchaeological survey in the Sana River of Bosnia, has indicated that they are both of mid third-millennium or Eneolithic age with radiocarbon dates centred around 2500 cal BC. Both hill-tops have evidence of extensive and well-preserved settlement deposits in shallow tell-like formations, which in both cases last well into the second-millennium BC Bronze Age and at Zecovi into the Roman period. These settlements were developed on argillic brown earths with micro-laminar clays indicative of slow, stable soil development, most probably under woodland.

David Friesem's project has been looking at how huntergatherers' ways of living in the forested hills of the Western Ghats of southern India are reflected in their use of space and how it affects deposition patterns of microscopic materials in tropical forests (see p. 28).

Staff

Prof Charles French Tonko Rajkovača

Graduate Students

Jeremy Bennett Kate Boulden Matt Dalton Pedro Gonzales Katie Hall Eduardo Machicado Miranda Semple

MPhil students

Conor McAdams Ian Ostericher Aksyheta Suryanarayan Beth Whitlock

Post-doctoral researchers

Dr David Friesem Dr David Beresford-Jones Dr Sayantani Neogi Dr Sandy Pullen Dr Sean Taylor

Laboratory Affiliates

Dr Judith Bunbury (Earth Sciences, Cambridge) Dr Kevin Lane (Heritage Gibraltar) Gary Marriner (UCL) Ivana Ozán (Buenos Aires) Dr Clea Paine Dr Corinne Roughley (Hughes Hall) Dr Federica Sulas (CNR, Cagliari, Sardinia) Dr Heejin Lee (Seoul, South Korea)

Visiting graduate students

Susanne Cereda (Rome) William Posada (Bogotà)



Glyn Daniel Laboratory for Archaeogenetics

Martin Jones

Andrew Clarke is well under way with his archaeogenetic research on the origins and dispersal of the bottle gourd, the world's first global crop. A number of our archaeogenetics researchers are engaged within the FOGLIP project (p. 29). These include Harriet Hunt, Diane Lister, Natalia Przelomska and Yang Lu.

Harriet Hunt has continued her research investigating the spread of crops across Eurasia, focusing on genetic diversity in broomcorn and foxtail millet. This year Harriet attended training courses at The Genome Analysis Centre (Norwich), on genotyping-by-sequencing, and at the Scottish Centre for Ecology and the Natural Environment, on genetic data analysis in R to enable her to bring projects to completion.

Diane Lister has been tracing the routes of spread of barley cultivation across Eurasia using microsatellite markers and studying the role of flowering time genes in the establishment of barley cultivation in regions of Eurasia, with a particular interest in the Tibetan Plateau. Diane has also carried out ancient DNA analysis of desiccated Chinese bread wheat from tombs in the Tarim Basin, Xinjiang. Her research is also looking at the genetic basis of the sphaerococcoid mutation in wheat which gives rise to rounded seed morphology, and its relationship to size distribution of archaeobotanical wheat remains across Eurasia.

Natalia Przelomska continued her PhD research on the genetic basis for variation in flowering time for foxtail millet from across Eurasia. This year, she has been using a targeted genes approach focusing on the MADS-box genes involved in plant development, as well as some phytochromes involved in plants' light perception. Natalia was assisted with this work by Yang Lu (Sunny), a visiting student from Shanxi Agricultural University, China. Natalia expanded our collection of foxtail millet samples with grain collected on the peripheries of Eurasia in Taiwan and northern Spain. She also expanded her knowledge of bioinformatics—computational methods for handling and analysing vast amounts of genetic next generation sequencing data—to allow her to undertake a targeted gene-sequencing approach three to four orders of magnitude larger in scale than her current method. Our MPhil student Elizabeth Briggs joined the study of foxtail, exploring adaptation to flowering times at different latitudes.

Our archaeogenetic work still generates a major data source for phylogeography and the movement of economic species in relation to human movement. More and more, our work concerns expressed genes and tighter connection between archaeogenetic studies, human ecology, variation and nutrition.

We are most grateful to the European Research Council, The Leverhulme Trust, the BBSRC, Unilever BioScience, the Isaac Newton Trust, and the DM McDonald Grants and Awards fund for their financial support of this work.

Members

Prof. Martin Jones (Laboratory Manager)
Catherine Kneale (Research Technician)
Dr Andrew Clarke (Leverhulme Early Career Fellow)
Dr Harriet Hunt (Research Associate)
Dr Diane Lister (Research Associate)
Natalia Przelomska (PhD student)
(Sunny) Yang Lu (Visiting Student, Shanxi Agricultural University, China)

Student Project

Elizabeth Briggs (MPhil student): 'Blooming into the light: single nucleotide polymorphisms in the EARLY FLOWERING 3 gene of Setaria italica and Setaria viridis (foxtail millet)'



Egyptology at Cambridge

HRATCH PAPAZIAN

Egyptological research has been an integral part of the activities of the McDonald Institute since its foundation. Although Egyptological research at Cambridge does not make use of a formal laboratory setting for a hub, it does nonetheless integrate a group of researchers and students with varied interests and interdisciplinary perspectives into its academic activities. By virtue of the location of Egypt and the diversity of the cultural elements of its ancient past, the scope of research conducted within Egyptology is broad, in terms of both subject matter and geographical coverage, and encompasses various strands of archaeology (including bioarchaeology and earth sciences) and text-based enquiry from Egypt and the Sudan, with links beyond to Libya and the eastern Mediterranean. There are ongoing field projects in Egypt and the Sudan conducted under the direct aegis of the McDonald Institute, such as Dr Kate Spence's excavations at Sesebi, in the Sudan, and Dr Hratch Papazian's work at Abydos. Other excavations such as Professor Barry Kemp's project at Amarna (p. 33) maintain links with the McDonald Institute. Researchers and students from Cambridge are active at many sites in Egypt and the Sudan, including Memphis, Giza, Helwan, Kerma and Amara West.

In addition to the research and teaching activities of the academic staff in the Division of Archaeology (Dr Kate Spence for Egyptian Archaeology and Dr Hratch Papazian for Egyptian Language), several post-doctoral fellows with research pursuits firmly grounded in Egyptology, or who maintain very strong links with the field, were affiliated with the McDonald Institute during the 2014–15 academic year. Many have been funded by leading European agencies, and some of them continue to maintain their association with the Institute. These were Dr Delphine Driaux (aspects of water management in Egyptian settlements), Dr Aude Gräzer Ohara (approaches to refuse disposal and hygiene in Egyptian settlements) (p. 32), Dr Giulio Lucarini (lithics,

plant processing and investigation of Prehistoric sites in

New Kingdom temple at Sesebi, looking East.

the Western Desert) (p. 34), Dr Rune Nyord (Coptic texts, Egyptian religious practices and material culture) and Dr Ronika Power (biocultural archaeology and cemetery analysis). Dr Paul van Pelt (technology, cultural contact and entanglement, particularly between Egyptian and Nubian communities) holds a Junior Research Fellowship at Trinity Hall.

The primary vehicle for the public dissemination of research on ancient Egypt is the Egyptian World Seminar series held regularly at the McDonald Institute. The Seminars are intended to present the breadth of current research in Egyptology, while also featuring the research of members of the Cambridge community. This year's programme of guest speakers included Delphine Driaux, Salima Ikram, Helena Jaeshke, David Jeffreys, Luigi Prada, Ilona Regulski, Pierre Tallet and John Wyatt, supplemented by a summer lecture series, with talks by Barry Kemp and Brian Muhs. Topics varied from reports on excavations and textual research to conservation and ornithology. The scale of the Egyptian Seminars was expanded for the first time this year to include recurrent forums featuring the research of Cambridge PhD students and postdoctoral fellows in Egyptology and ancillary fields. The principal topics under discussion included domestic architectural space in Egypt and Nubia and on elements of ancient Egyptian administration.

Funding for the Egyptian World Seminar Series is provided by The Thomas Mulvey Fund. The McDonald Institute for Archaeological Research and the Division of Archaeology are hereby also acknowledged for their support.

The following senior researchers are affiliated to Egyptology:

Janine Bourriau (McDonald Institute) Judith Bunbury (Earth Sciences) Corinne Duhig (Bioarchaeology) Barry Kemp (Professor Emeritus in Egyptian Archaeology) Geoffrey Martin (Christ's College) John Ray (Professor Emeritus in Ancient Egyptian Language) Anna Stevens (Amarna Project)



Old Kingdom step pyramid at Sinki in South Abydos.



Heritage Research Group & Cultural Heritage Laboratory

Marie Louise Stig Sørensen, Dacia Viejo Rose & Gilly Carr

The Heritage Research Group (HRG) was started in the 1990s: since then, the number of students, post-doctoral fellowships, staff members and other researchers involved with heritage research has increased. HRG is now a substantial community that draws in people from a number of disciplines, such as anthropology, architecture, history and even engineering.

The Cambridge Heritage Research Group meets once a week in term-time for discussions on the theme of heritage. The programme includes talks by invited speakers as well as members of the group. During 2014–15 the seminar series saw topics ranging from rethinking Malta's Fine Art Museum (Sandro Debono) to the emergence of branded museums in the Gulf States (Dr Lina Tahan), and portrayals of heritage in television programmes (Dr Helen Weinstein). Special events during the year included a panel discussion on opportunities and challenges facing Egypt's archaeological heritage today and another on the driving forces shaping remembrance activities today.



RESEARCH SYMPOSIUM

The social life of material and immaterial heritage in the Mediterranean: from the longue durie to the here and now

> 14-15 November 2014 McDonald Institute for Archaeological Research, University of Cambridge & Darwin College

This symposium proposes to reflect on the heritage in and of the Mediterranean. In particular it will focus on those moments and sires, when its multiple heritages have become elements of division or union, of conflict or common ground. The aim will be to consider the constant revision of heritage narratives in the region, reflecting shifting social and cultural contexts.

With kind support from The Beirish Academy, The Institute Français-Royaume-Uni, Trinity College, the McDonald Institute for Archaeological Research, and Darwin College.











On 14–15 November 2014, Dr Viejo Rose, as part of her British Academy Fellowship, co-organized a research symposium for the Group on 'The social life of material and immaterial heritage in the Mediterranean: from the longue durée to the here and now. The meeting was made possible thanks to the support of the British Academy, the French Institute in London, the McDonald Institute and Trinity College, Cambridge. The multidisciplinary symposium brought together practitioners and researchers working on heritage issues from across the Mediterranean, including Egypt, France, Greece, Italy, Lebanon, Libya, Tunisia and Spain. By exploring the uses of material culture to construct identity narratives over time in this region, symposium participants considered the constant revisioning of heritage, reflecting shifting social and cultural contexts. The aim of the symposium was to establish new links between researchers in order to form a base for developing future collaborations on the topicseveral ideas are currently brewing!

Since 1996, the Cambridge Heritage Research Group has also hosted a series of one-day seminars and two-day conferences, known as the Cambridge Heritage Seminars (or CHS). The CHS series have brought together researchers, policy-makers and practitioners to explore the most pressing issues in heritage studies today. In 2015 the seminar became a two-day conference dedicated to challenges faced by cultural heritage in Africa and especially on the double pull of development and sustainability.

Co-ordinated by Dr Britt Baillie, Leanne Philpot and Dr Sørensen, The African Heritage Challenges: Development and Sustainability conference was co-convened by the University of Pretoria (UP) and Cambridge University's Heritage Research Group (HRG). Funding came from CRASSH, the McDonald Institute for Archaeological Research, Cambridge Africa Alborada Research Fund, The British Institute in Eastern Africa and UP's Capital Cities Institutional Research Theme. This enabled the financing of seven scholars from Africa (flights, accommodation, fees), sponsorship of the conference refreshments, and the charging of a subsidised fee for students. The conference explored how heritage can promote, secure or undermine sustainable development in Africa and, in turn, how this affects conceptions of heritage. It also challenged the seemingly dichotomous relationships between preservation and development, conservation and innovation in Africa. One of the conference aims was to extend existing scholarly networks and links; these continue to be strengthened through conversations and plans for collaborations. Plans for publication of the proceedings are under way.

Still running strong, and with over 700 subscribers world-wide, the HRG Bulletin aims to connect the heritage research community in Cambridge and beyond. By sharing information about events, publications and opportunities for gaining experience and employment in the field, it hopes to strengthen the sense of a community engaged with heritage research in all of its facets.

Over the year the Group and heritage programme hosted visiting research students and scholars. These included graduate students from Norway and Spain, and members of the research group gave lectures in the UK and abroad and were involved in several field projects.

At the start of 2015 the Group got its own designated work and meeting space in the shape of the Cultural Heritage Laboratory. There is thus now a base for postgraduates, postdoctoral researchers, visiting fellows and staff working on all aspects of cultural heritage to connect and collaborate. Allocated desk space and hot-desking will provide a hub for students and researchers, facilitating conversations and connections. By bringing researchers together, the work already being done by the seminar series, the HRG Bulletin and the annual conference will be further enhanced.

You can stay in touch through the following media: Website: www2.arch.cam.ac.uk/heritage/index.html Facebook: www.facebook.com/cambridgehrg Twitter: https://twitter.com/#!/cambridgehrg Linkedin: www.linkedin.com/groups/Cambridge-Heritage-Research-Group-4925222

Staff

Marie Louise Stig Sørensen Dacia Viejo Rose Gilly Carr Lila Janik Paola Filippucci

Postdoctoral Researcher

Paola di Giuseppantonio di Franco

PhD Students

Pablo Alonso Gonzalez Meghan Bowe Elizabeth Cohen Hyun Kyung Lee Leane Philpot

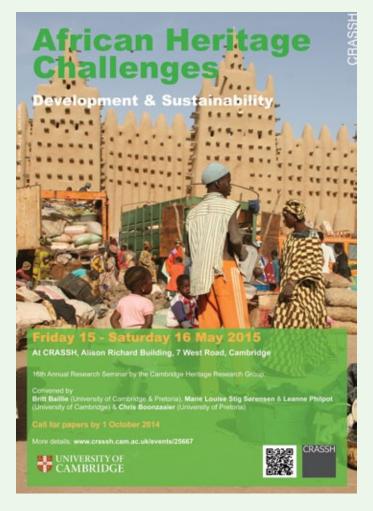
Elizabeth Pratt Susan Shay Yingwen Tao Guohua Yang

Affiliated Researcher

Patricia Duff

Calum Robertson







The CHS16 Africa Group.

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 2014–15, grants totalling nearly £140,000 were awarded to 32 projects ranging widely in time and space, many of which are highlighted in this report.

Projects

James Blinkhorn

Ancient crop transfers as a potential Austronesian signature in the archaeological record of Nosy Mangabe, Madagascar

· Gillian Carr

Lost in the Landscape: Nazi Camps on British Soil

• Christopher Chippindale

Using new digital methods to resolve two key research issues in the prehistoric rock-art of Valcamonica (BS), Italy

• Emanuela Cristiani

Late Pleistocene and Early Holocene foragers of Montenegro

Paola DiGuiseppantonio Di Franco DIGIFACT: Digital artefact representation in

DIGIFACT: Digital artefact representation in research and education

• Chris Evans & Marie Louise Sørenson Cidada Velha, Cape Verde: excavation and display of the Conception Church

• Ricardo Fernandes & Tasmsin O'Connell Mechanisms of macronutrient routing: isotopic studies of C and N metabolism

· Yannis Galanakis

Excavation of a Mycenaean chamber tomb (Prosilio Tomb 2) near Orchomenos, central Greece

Susanne Hakenbeck

Meat under the saddle: pastoralists and farmers in early medieval Hungary

· Liliana Janik

· Sacha Jones

Attribute analysis of archived Late Pleistocene Homo neanderthalensis and Homo sapiens stone artefacts from Shanidar Cave, Iraqi Kurdistan

· Hannah Malone

Unearthing the fallen: Italian fascism and ossuaries of the Great War

• Evi Margaritis

The olive and grape in EBA Greece and Cyprus

Martin Millett

Aldborough (Isurium Brigantum): GPR survey

· Cameron Petrie

Understanding rural/urban dynamics in the hinterland of Rakhigarhi: Two rains & systematic surface survey and preliminary excavation at Lohari Ragho II

• Emma Pomeroy

Death on the rock: the bioarchaeology of a post-medieval hospital in Gibraltar

· Miljana Radivojević

The revolution of early Eurasian metallurgy: exploring the how and why behind metal invention and innovation in Balkan and Steppe metallurgy

• Colin Renfrew

The Keros–Naxos seaways and the origins of cult at the Kavos sanctuary

• Alice Samson

Precolumbian creolizations: cave survey and results

Ceri Shipton

Panga ya Saidi: 75,000 years of human adaptation on the coast of East Africa

· Laurence Smith

Suakin Project (Suakin and Red Sea coast of Sudan)

Kate Spence

Exploitation and interaction in a contested zone: Preliminary survey of the Nile corridor and hinterland between Sesebi and Soleb

· Simon Stoddart

The limits of Etruria project: study of carbonized seeds

Robyn Veal

Forest Exploitation in Province and Empire

• Robyn Veal

Preliminary work for 'Fuel and Fire in the Ancient Mediterranean'

Lacey Wallace

Ickham Survey (Canterbury Hinterland Project)

Conferences

· Valentina Borgia

Out of Italy – Advanced studies on the Italian Palaeolithic

Margarita Gleba

Craft and production in the European Iron Age

Liliana Janik

Art and the brain: how imagery makes us human

Philip Nigst

EUP Landscapes 2

John Robb

Connectivity and cultural interaction in central Mediterranean prehistory

· Dacia Viejo-Rose

16th Annual Cambridge Heritage Research Seminar – African Heritage Challenges: Development and sustainability



Research Grants

Prof. Graeme Barker

The Cyrenaica Prehistory Project: Renewed Fieldwork at the Haua Fteah (Society for Libyan Studies)

· Prof. Graeme Barker

Cultural Transformations and Environmental Transitions in North Africa (European Research Council)

Prof. Graeme Barker

How resilient were Neanderthals and Modern Humans in SW Asia to climate change? (Leverhulme Trust)

Dr James Barrett

Northern Journeys: Reimagining the Medieval Revolution and its aftermath (Leverhulme Trust)

Dr James Barrett

Tracking Viking-assisted dispersal of biodiversity using ancient DNA (University of Oslo)

Dr David Beresford-Jones

One River Project (Alberto Benavides Ganoza)

• Dr Valentina Borgia

PALEOHUNT: The reconstruction of hunting techniques to understand the diffusion of populations in the European Palaeolithic (EC FP7, Marie Curie Intra European Fellowship)

• Dr Andrew Clarke

Archaeogenetics of the first global crop: 10,000 years of bottle gourd dispersal (Leverhulme Trust and Isaac Newton Trust)

· Dr Emanuela Cristiani

Plant foods in Palaeolithic and Mesolithic societies of SE Europe and Italy (European Research Council)

Dr Matthew Davies

Applied agro-archaeology in Eastern Africa (Leverhulme Trust and Isaac Newton Trust)

• Dr Paola Di Giuseppantonio Di Franco

Digital artefacts: how people perceive tangible cultural heritage through different media (EC FP7, Marie Curie Intra European Fellowship)

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 David Friesem

TROPICMICROARCH: Tropical Micro-Archaeology: An interdisciplinary project aiming to study site formation processes in tropical environment related to hunter-gatherers' use of space (EC FP7 Marie Curie Intra European Fellowship)

· Dr Helen Geake

Finds Advisor: medieval and modern artefacts (Portable Antiquities Scheme)

· Dr Margarita Gleba

Production and consumption: textile economy and urbanisation in Mediterranean Europe 1000–500

(European Research Council)

· Dr Emmanuelle Honoré

Painting the body: Prehistoric cognition of oneself and of the 'alter' in North African rock art (Royal Society Newton International Fellowship)

· Prof. Martin Jones

Food Globalisation in Prehistory (EC FP7, European Research Council)

· Prof. Martin Jones

CASE Studentship: Identification of Flowering Time in Genes in Foxtail Millet and its Potential Impact on Food (BBSRC and Unilever)

Dr Giulio Lucarini

Human transitional pathways towards food production in North Africa (AGRINA) (EC FP7, Marie Curie Intra European Fellowship)

· Dr John MacGinnis

Ziyaret Tepe (Rausing Charitable Trust and Ziyaret Tepe Archaeological Trust)

· Dr Evi Margaritis

OVIPE: The olive and the vine in prehistoric Europe (EC FP7, Marie Curie Intra European Fellowship)

Prof. Paul Mellars

The Oronsay Project: economy & society at the Mesolithic-Neolithic transition (Leverhulme 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 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 Tamsin O'Connell

Mechanisms of macronutrient routing: isotopic studies of C and N metabolism (Royal Society)

• 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

Winter rain, summer rain: adaptation, climate change, resilience and the Indus civilisation (European Research Council)

• Dr Ryan Rabett

The Tràng An Project (Nguyen Van Truong)

· Prof. Colin Renfrew

Becoming human: the emergence of meaning (John Templeton Foundation)

· Prof. Colin Renfrew

Icon and centre in the Cycladic Early Bronze Age (Leverhulme Trust)

· Dr Alice Samson

The materiality of early creolization in the Caribbean, AD 1000-1550 (British Academy Early Career Fellowship)

· Dr Anna Stevens

Excavating the Amarna Cemetery: life, death and beyond (British Academy)

• Dr Rhiannon Stevens

UP-NORTH: Colonisation and Cultural Diversification in Unfamiliar Landscapes (European Research Council)

· Dr Jay Stock

ADaPt: Adaptation, dispersals and phenotype: understanding the roles of climate, natural selection and plasticity in shaping global huntergatherer adaptability (European Research Council)

• Dr Simon Stoddart

Fragility and sustainability in restricted island environments (FRAGSUS) (European Research Council)

• Dr Dacia Viejo-Rose

Cultural violence/violence against culture (British Academy Early Career Fellowship)



Aesthetic properties of Cu-Sn-As ternary alloys

MILIANA RADIVOJEVIĆ (McDonald Institute)

Archaeometallurgical studies of prehistoric copper and bronzes have mostly concentrated on testing their mechanical properties in order to build explanatory models for the appearance of these metals across Eurasia, and globally. Aesthetic properties of bronzes in particular have rarely been explored systematically, and were mainly addressed in the light of occurrence of noble metals (like gold or silver). While colour references for noble materials can be found in the modern jewellery-making industry, there is a noticeable lack of reference bronze materials for the purpose of studying colour appeal of the most widespread bronzes in the ancient world, arsenical copper and tin bronzes.

This project investigates colour properties of Cu-Sn-As alloys using experimentally produced metal pellets in various combinations (Cu-As, Cu-Sn, Cu-As-Sn) in order to build a ternary colour diagram that can be used for assessing the colour of ancient bronzes based on composition. In collaboration with Professor Željko Kamberović (Faculty of Technology and Metallurgy, University of Belgrade, Serbia), a set of 70 metal pellets was produced and analysed for composition. These pellets were photographed and colour values used to build a ternary diagram for the purpose of visualizing the true colour of bronzes with known composition. The study continues to explore other properties of Cu-As-Sn alloys, aiming to provide a synthesis on both aesthetic and mechanical properties of these alloys.



One of 70 experimentally produced metal pellets (Cu 80 per cent wt-Sn 20 per cent wt).

Geo-Ethnoarchaeology of Hunter-Gatherers in Tropical Environment

David Friesem (McDonald Institute)

The TropicMicroArch project aims to study archaeological site-formation processes related to hunter-gatherers in tropical environments. This project involves ethnoarchaeology, social anthropology and geoarchaeology in order to study deposition patterns of microscopic materials associated with hunter-gatherer ways of living and how these are affected by post-depositional processes occurring in tropical forests.

This year featured long-term ethnographic work (with Noa Lavi, a social anthropologist, University of Haifa) among a contemporary hunter-gatherer community in the forests of the Western Ghats in South India. Living for a year with this community allowed us to observe and study their daily practices and the social perceptions and values behind their use of space. Several sites (open-air sites and a rock-shelter) abandoned by the same people c. 20-30 years ago were excavated and sampled by applying a geo-ethnoarchaeological approach. Sediment samples were analysed in the Charles McBurney Laboratory for Geoarchaeology and the George Pitt-Rivers Laboratory for Bioarchaeology. The analyses helped us to trace microscopic remains related to hunter-gatherers' activities and to evaluate post-depositional processes in tropical environments. In spite of the intangible nature of archaeological evidences for hunter-gatherer sites in tropical forests, the integration of archaeology, social anthropology and earth sciences allowed us to identify materials associated with human activity and reconstruct archaeological site-formation processes in tropical environments in general, and in particular in relation to hunter-gatherer ways of living.

TropicMicroArch is funded by the European Commission under a Marie Skłodowska-Curie Intra-European Fellowship held by David Friesem.





Left: Noa Lavi during ethnographic work among a huntergatherers community in South India. Right: David Friesem excavating and sampling a rock-shelter (above) and an open-air site (bottom) in the tropical forests of South India.

Food Globalization in Prehistory (FOGLIP)

Martin Jones (Division of Archaeology)

FOGLIP brings archaeogenetics, stable isotope palaeodietary studies and archaeobotany together to explore a hitherto poorly known major period in the prehistory of agriculture, when the Old World crop species intermingled. The archaeogenetic research of Diane Lister, Harriet Hunt, Natalia Przelomska and Yang Lu is described on p. 22.

Emma Lightfoot has been working on understanding the isotopic variation in millet varieties grown under uniform conditions and investigating the impact of climate on the spread of agriculture in Gansu province, China. She has also been looking at stable isotope methodology by conducting a review of published human oxygen isotope data in order to test the assumptions of the method. She undertook a sampling trip to Zagreb and worked with Croatian colleagues investigating the impact of endemic violence on diet and health in Late Mediaeval and Historic Croatia (Pl: Mario Slaus, Croatian Academy of Sciences and Arts, Zagreb). This year Emma also taught a continuing education course on 'Science of the Past' and presented at SAA and INQUA.

Penny Jones examines climatic conditions at Indus Civilization sites by the use of isotopic analyses of plant and faunal material. Her study includes several rural sites excavated by the Land, Water and Settlement Project (directed by C.A. Petrie and R.N. Singh), as well as the Indus city of Harappa. In March 2014–15, Penny visited northwestern India to sample faunal remains and collect soil

Historic and Pre-Hispanic Cavescapes of the Caribbean

ALICE V.M. SAMSON (McDonald Institute)

Ongoing interdisciplinary fieldwork on uninhabited Mona Island in the Caribbean is uncovering evidence for 5000 years of human activity, much of it in the island's 200+ caves. Alice Samson and co-director Jago Cooper (British Museum) have carried out five seasons of archaeological survey in collaboration with the Department of Natural and Environmental Resources, the Institute of Puerto Rican Culture, speleologists from the Coastal Cave Survey & University of Western Kentucky, and with students from the Centre of Advanced Studies of Puerto Rico and the Caribbean.

The caves are one of the best preserved pre-Hispanic landscapes in the Caribbean, with iconography covering thousands of square metres. ¹⁴C and Uranium-Thorium techniques have dated the region's cave art and cave activities for the first time. In historic times, the island was a hub for early Native–European encounters and tied into global networks through piracy, the illicit economy and nineteenth-century guano mining, with evidence for all these periods on the cave walls and floors.

samples for a modern calibration study, which aims to support her analyses of archaeological plant remains by increasing the understanding of the relationship between water availability and plant carbon isotopes in this region. She also assisted with a trial excavation of a new Indus Civilization site, Lohari Rago, as part of a team led by Cameron Petrie.

Ting An continued comparative studies of pottery and visited Romania, China and Russia to look at examples of painted pottery in terms of typology and technology. Ting also visited Durham to look at pieces of daub collected in Ukraine dating to 6000 BP which may show crop impressions and show possible early evidence of millet use.

We are especially grateful to the ERC, Darwin College Cambridge, BBSRC, China Scholarship Trust, Unilever Bioscience and the Rae and Edith Bennett Travelling Scholarship for their support of this work.



Website:

http://www.britishmuseum.org/research/research_projects/ all current projects/el coraz%C3%B3n del caribe.aspx

Research is funded by the British Academy, McDonald Institute for Archaeological Research, British Museum, British Cave Research Association and Natural Environment Research Council.



Pirate marks on the cave walls of Mona Island.



Excavations in Northwest India: From Land, Water and Settlement to TwoRains

CAMERON PETRIE (McDonald Institute)

In 2015, the Land, Water and Settlement project carried out excavations at the site of Lohari Ragho II (Hissar District, Haryana), which were intended to provide preliminary insight into the archaeology of this site in preparation for the collaborative TwoRains project, which is set to run from 2015 until 2020. Lohari Ragho II is one of the major settlements in the hinterland of the Indus urban site of Rakhigarhi and was documented during the two phases of the Rakhigarhi Hinterland Survey in 2009 and 2014. Based on previous surface collections, it appears to have been occupied during the Early, Mature and Late Harappan periods. The field research conducted in 2015 included detailed surface mapping of the site and also systematic surface collection, which was carried out with the help of students from MD University Rohtak. Preliminary excavations demonstrated that there has been considerable disturbance of the archaeological deposits in certain parts of the mound, but also showed that there is good preservation of structural features and occupation areas in other locations, which make it ideal for further investigation.



Topographic survey and surface collection at Lohari Ragho II.



Processing ceramics and small finds from the surface collection, Lohari Ragho II.

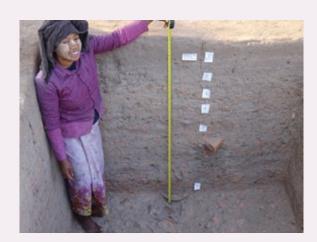
Sri Ksetra

Janice Stargardt (McDonald Institute)

Urbanism is a process often associated with the origins of states and empires since it intertwines issues of centralization, economic specialization and diversification, political hierarchization as well as environmental issues and ideas of historical contingency. The early urban centres of central Myanmar (first-eighth centuries AD) have, until now, been understood mainly in terms of above-ground monuments, statuary and inscriptions, loosely associated with three AMS dates. The Sri Ksetra, Ancient Pyu City project has undertaken new surface surveys in October-November 2014 and excavations in January–February 2015 on a very productive habitation site at the Yahanda mound to assemble data with the above issues in mind. This fieldwork is challenging earlier assumptions about the nature of urban life at Sri Ksetra and allowing us to reconstruct the presence of people in this city. The project's integration of GIS, excavation, material analysis and geoarchaeology will further address issues of interaction, networks and local histories at the site. The present writer, with 45 years of previous fieldwork at the site, was able successfully to support the application for recognition of the Outstanding Universal Value of the three ancient Pyu cities of Burma at the Doha meeting of the World Heritage Committee of UNESCO in June 2014. The current Sri Ksetra fieldwork programme will deepen understanding of these important world treasures.

For further information, see: http://www.arch.cam.ac.uk/ research/projects/sri_ksetra/sri_kse

Fellow archaeologists in Cambridge, Dr Sheila Kohring and Dr Sean Taylor, made valuable contributions in cooperation with the Principal, staff and students of the [national] Field School of Archaeology of Burma, who received field training. Financial support is gratefully acknowledged from the McDonald Institute, the European Research Council and the British Museum and Sidney Sussex College.



Fifth- to eighth-century occupation floors at Yahanda Mound.



Excavations at Buto and study of Memphis pottery

Janine Bourriau (McDonald Institute)

The pottery from Memphis covers 200 years (XIII Dynasty— end of the Second Intermediate Period), the product of a meticulously stratified excavation. The study has had two guiding principles: study of closed deposits and sampling from the perspective of an experienced ceramicist. Special steps were taken to analyse small rim sherds and to distinguish deliberate dumps from living contexts.

The results show a significant quantity of non-Egyptian ceramics. It was necessary to assess this fully to satisfy the most important historical question posed by the excavation: to what extent the culture of the Hyksos (who originated, it was thought, from Syria-Palestine, ruled from Avaris in the eastern Nile delta and controlled the Nile from Hermopolis northwards) was identifiable at Memphis. To assess the foreign ceramics, specialists Kathryn Eriksson (fine wares from Crete and Cyprus), Mary Ownby (Canaanite jars), Serena Giuliani, Janine Bourriau (Nubian pottery) and Bettina Bader ('Fish dishes') were invited to offer their detailed knowledge.

I am very conscious of the support that the Institute has given me during this time. Two of my collaborators were members: Mary Ownby did her PhD research here and Bettina Bader was a Marie Curie visiting fellow from University of Vienna.

Settlement of Ancient Saharan Lakes

Judith Bunbury (Department of Earth Sciences)

Saharan sediments show that large lakes formed and dried several times during the Holocene. With Salima Ikram (American University in Cairo), we are exploring encampments on the shores of the lakes where rock art records fish, wading birds and wildlife that was drawn to the water, including crocodiles, elephants and abundant giraffe. Many of the latter are shown accompanied by humans, who hold them on tethers.

The stack of sediments in the photo shows how deep sediment gradually accumulated in the basin upon whose shore, just beyond the vehicles in the background, stood round dwellings. During periods or seasons of drying, edible vegetation was established on the lakebeds and is recorded by abundant tools and grindstones. Although the lakes dried completely during the 8.3 ky and 4.2 ky droughts, the lake basins continued to fill periodically and attracted New Kingdom and Roman visitors, who also left buildings and inscriptions. In the Roman period new technology allowed water to be gleaned from a wide area by *manawir* (also known as *ganat*: this could be described as a chain of wells connected by an sloping underground canal), and farming and mining burgeoned.

Additional work with Piers Litherland in the desert near Luxor suggests that habitat changes prompted novel uses of the desert during the Eighteenth Dynasty, including cross-desert routes and wells.

Work funded by American University in Cairo and New Kingdom Research Foundation.



Interpreting ancient environment from Saharan sediment deposited around 7000 years ago in a now dry lake basin. The jeeps in the background mark an ancient lake-shore site.

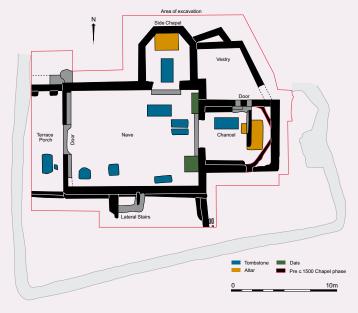


Christopher Evans (Cambridge Archaeological Unit) and Marie Louise Stig Sørensen (Division of Archaeology)

Cambridge has been working at Cidade Velha, the Cape Verde Islands' Portuguese Atlantic-trade transhipment centre, since 2006, with the last two years dedicated to the excavation of the church of Capela Nossa Senhora de Conceicao, the earliest church in Cape Verde (and the Tropics). With its rectangular nave and gothic-style side chapel, the church is typical of early Portuguese colonial architecture, although close scrutiny suggests distinct adaptations. In particular, the squat nave seems an adaptation to the location between a bend of the river and the mountain slope. There is also evidence of severe flood-damage. This, evidently, led to periods of rebuilding and eventually abandonment. It seems clear that the Portuguese colonizers did not understand the local environment, siting their prestigious building where no one would today.

The early date of the church is clear. Seventeenth-century wall tiles still adhere to the fabric; but they are part of a later recladding, with earlier sixteenth-century ones still found at some places. In addition, six tombstones were found, with the earliest *in situ* stone dating to 1518. In its main form, the church dates to around 1500; yet the intriguing finding of a polygonally arranged foundation pre-dating the chancel's rectangular layout suggests there may be an earlier precursor.

Apart from now standing as a magnificent ruin, the church has also given us a unique window into how Portuguese designs were adapted within the early colonies and how the colonizers did not fully understand the environment in which they settled.



Capela Nossa Senhora de Conceicao, site plan.

Investigating domestic comfort in Pharaonic Egypt

Aude Gräzer Ohara (McDonald Institute)

This individual research project, funded by Fyssen Foundation, aims to determine Ancient Egyptians' concepts and standards of comfort, and to evaluate how their quest for well-being shaped urban space, domestic architecture, material culture and language. This research integrates archaeological evidence with iconographical and textual resources dating from the second millennium BC. During the second year of the project, emphasis has been placed on how the material environment guided the perceptions and physical experiences of the people of the time. An indepth examination of available textual and pictorial material describing comfortable and uncomfortable domestic environments, and a comprehensive lexicographical study of the vocabulary used to name and express comfort, offered an insight into the physiological, cognitive and emotional processes which determined subject-environment interactions, as understood by the Ancient Egyptians.

Depiction of an official entering his 'comfortable (ndm) house' as stated by the inscription (Western Thebes, Sheikh Abd el-Gurna, tomb of Tjay TT23, reign of Merneptah). (After N. de G. Davies (1929), The town house in Ancient Egypt. Metropolitan **Museum Studies** *I*(2), 246, fig. 7.)



Carobs in a basket—the Egyptian word Indian (written with the carob-sign) which means 'comfortable' probably originates from the pleasurable chocolate flavour of these fruits.



A. GRÄZER OHARA

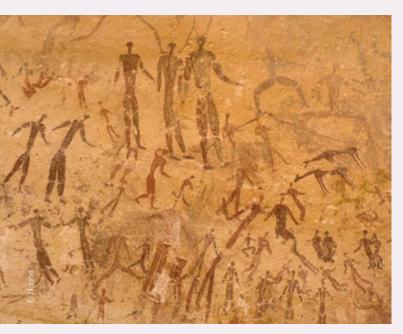
Rock art and identity in Saharan **Prehistory**

Emmanuelle Honoré (McDonald Institute)

Saharan rock art encompasses a wide range of representations, of which images of the human body and of social life constitute a very high proportion. Beyond considerations of typology, style and technique which have dominated rock-art studies so far, this huge corpus is now explored for its immeasurable value concerning what might be termed 'palaeosociology'.

Human depictions dating back to the Holocene climatic optimum (c. 9000–3500 BC) testify to body perception and human relationships throughout a period of profound ecological and socio-economic changes. Two approaches are applied: (1) at a large scale with a database and GIS platform; and (2) on a smaller subset, in which images are 'excavated' through a detailed analysis. Recurrent and distinctive features on human bodies allow us to understand how prehistoric groups have built images to represent their individual and collective identities and how they conceived their social being.

This project is a British Academy funded Newton International Fellowship.



Human representations in the shelter of Wadi Sūra II (Libyan Desert, Egypt).

The Ancient City of Amarna, Egypt

Barry Kemp (McDonald Institute)



The start of excavation at a new part of Amarna: the North Tombs Cemetery of the people of the city.

It proved possible during 2015 to run two consecutive field research projects. The first was a continuation of the re-examination of the Great Aten Temple. Increasingly the results tell a story of ritual use and changing patterns that is not properly represented in the well-known tomb scenes and texts. The second was a new phase in the study of the population of the city from its burials of ordinary people. This saw the first season of excavation at a cemetery towards the northern end of the site. It had been densely filled with simple pit graves, often containing more than one burial. Objects were few. Preliminary examination of the human remains reveals a strikingly young population, even younger than that found at a similar cemetery at the southern end of the site. The excavation was directed by Dr Anna Stevens.

www.amarnaproject.com and www.amarnatrust.com

The excavations were funded from a range of sources channelled through the Amarna Trust, including the Amarna Research Foundation (Denver, Colorado) and the Egyptian Department of the Metropolitan Museum of Art, New York; the North Tombs Cemetery was partly funded by a NEH grant held by the University of Southern Illinois.

AGRINA – Human Transitional Pathways towards Food Production in North Africa

GIULIO LUCARINI (McDonald Institute)



Excavation of one of the Sheikh el Obeiyid structures.

The AGRINA project is a Marie Skłodowska-Curie Action FP7-PEOPLE-2012-IEF. The project investigates the chronology and locations of the first appearance of the Levantine domesticates in North Africa and how their exploitation was integrated with the use of African wild plants and animals. It takes advantage of two fieldwork programmes: the Cyrenaican Prehistory Project, Libya, and the Farafra Oasis Archaeological Project, Egypt.

A fieldwork season in Farafra, which was also awarded a McDonald Grants and Awards Fund, was carried out specifically in the northern edge of the depression along the course of Wadi el Obeiyid. The new data, gathered in particular from the investigation of the Sheikh el Obeiyid Village 1 and the newly discovered Village 6, have confirmed the role of these slab structure sites as main areas of occupation in the oasis during the Mid Holocene. These sites yielded remains of domestic caprines dating to *c.* 6000 BC, which are among the oldest found in North Africa.

A use-wear and residue analysis carried out on the grinding equipment from Farafra and the Haua Fteah Cave has stressed the exclusive exploitation of wild plants in both the regions.

From the data collected so far, nomadic pastoralism integrated with an intensive exploitation of grasses and other wild resources seems to have been the most successful adaptive strategy both in the Eastern Sahara and along the Libyan littoral during the Holocene.

Suakin 2015

Laurence Smith (McDonald Institute), Michael Mallinson (Mallinson Architects), Jacke Phillips (SOAS & McDonald Institute), S. Taha (McDonald Institute) & Kate Ashley (Loughborough University)

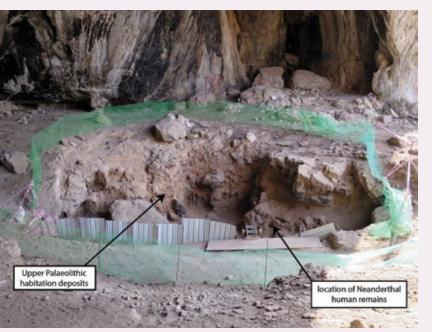
Study of the settlement at Suakin, under the Sudanese National Corporation for Antiquities and Museums (NCAM) and the Red Sea State, continued to focus on post-excavation study, including the evidence for medium and long-distance external links. Knowledge of routes for pilgrimage and trade has been extended further towards inland southern Sudan and Uganda. Further work on imported Chinese ceramics has indicated much came from 'non-official' kilns and included products likely from northern China, in Hubei or Hunan, as well as southern kilns such as Dehua in Fujian Province. Trade links with south Arabia are indicated by pottery from Beit Khorshid Effendi (BKE), similar to vessels considered to have been made in Yemen. Soil micromorphological analysis has demonstrated the presence of fragments possibly of mud brick, and plant remains at BKE.

Fieldwork was extended to the historic mainland town (*Geyf*), with a survey of Suakin School, the first secular school in Sudan. Further work was done on community outreach with plans for an information centre in the old Police Station. A Memorandum of Understanding between NCAM and the McDonald Institute has been set up for the future continuation of the projects at Suakin.

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. Thanks to: L. Chen, C.A.I. French and C. Ward.



Suakin School (centre) in its setting before reconstruction, as viewed from the Island Town.



New excavations at Shanidar Cave, Iraqi Kurdistan.

The project is funded by the Leverhulme Trust, with additional support from the McDonald Institute for Archaeological Research.

Byzantine Churches of Jordan, Syria, Lebanon and Iraq: Past and Present

DAVID L.C. CLARK (McDonald Institute)

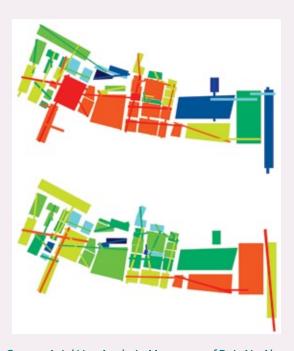
Archaeological and architectural research on ecclesial complexes in Jordan, Iraq, Lebanon and Syria continues to reconstruct their spatial significance for liturgical praxis, their placement within the urban environment and landscape and their theological implications on the local Christian church. These church structures housed the social and liturgical life for religious communities and local, ordinary people and their cultic behaviours.

Owing to the unfortunate political instability in Syria, the current fieldwork is restricted to Lebanon, Jordan and Iraq. It is, however, expanding with a modern tangent of researching the 70-plus churches that have recently been destroyed by the conflict and Da'esh (ISIL). The displacement of the Christian communities and the loss of their cultural heritage continues to be documented in this study. This research is also significant in proposing future resettlement plans in the urban environment based on historical and present architectural principles for integration or segregation of the Christian populace. The research data show a greater regional diversity of styles than previously imagined, as well as the individual sites' significant social-liturgical evolutions. For example, with the Monastery of Deir Ain Abata (illustrated), the closure of one liturgical entrance to the church at c. 691 AD significantly isolated the accessibility of the community to the Cave of Lot for devotions.

Excavations at Shanidar Cave, Iraqi Kurdistan

Graeme Barker (McDonald Institute)

Shanidar Cave is an iconic site in Palaeolithic archaeology because of the series of Neanderthal burials found there in the 1950s by Ralph Solecki. New work in summer 2014 had to be aborted because of the IS threat to Iraqi Kurdistan, but the team was able to undertake two highly successful campaigns in April and August/September 2015. We cleared part of the top 4 m of backfill in Ralph Solecki's 14 m deep trench and undertook excavations of the exposed in situ sediments. We found habitation deposits of the Upper Palaeolithic ('Baradostian') phase, assumed to be evidence of the first Modern Humans to use the site, and dated them to around 40,000–30,000 years ago. Below these we found fragmentary leg and foot bones which almost certainly derive from the uppermost Neanderthal burial discovered by Professor Solecki. Now in his late 90s, Professor Solecki has provided invaluable help for project post-doctoral research fellow Dr Sacha Jones, who, with Institute funding, undertook two periods of analysis of the stone tools from his excavations now curated in the US.



Convex-Axial Line Analysis, Monastery of Deir Ain Abata. (Red to blue, more integration to more segregation. The Axial lines indicate a preferred movement pattern and connectedness of liturgical spaces.) At Deir Ain Abata, pre 691 AD (top), the devotional Cave of Lot was accessed from both the north and south of the site. Post 691 AD (below), the Cave of Lot became accessible only from the southern entrance of the site.

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



Ziyaret Tepe

JOHN MACGINNIS (McDonald Institute)

The summer of 2104 saw a final on-site study season at Ziyaret Tepe. Analysis of the archaeobotanic remains by Dr Melissa Rosenzweig demonstrated that, while all inhabitants of the ancient city consumed wheat, barley, lentils, peas, figs and grapes, in the low-status residences this was supplemented by collecting seasonal fruit growing wild, such as hackberries, and by cultivating crops such as carrots and vetch. Meanwhile, the archaeozoological analysis undertaken by Dr Tina Greenfield revealed that the sheep, goat, cow and pig common to all was supplemented by venison and fowls among the elite and by turtle and hare in the low-status residences. The recording of the ceramics was also completed, and threw up some interesting pieces, for example the sherds of stamped pithoi illustrated here. The sherds come from the lower town administrative complex and the stamps will certainly relate to an administrative

Funding from the Vice-Chancellor's Endowment Fund.





Stamped sherds from the lower town administrative complex at Ziyaret Tepe.

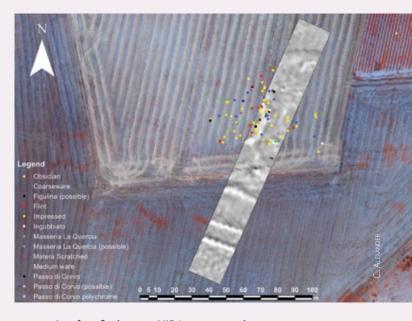
Exchange in the Tavoliere (Puglia, Italy) Neolithic

CRAIG ALEXANDER (McDonald Institute)

In our third (2015) field season, we expanded our focus to include flint - also amenable to pXRF (portable X-ray fluorescence) analysis based on early results - as well as ceramics and obsidian. We increased our number of riverine clay samples by 50% and field-walked several additional sites. More importantly, we trialled—in collaboration with Technische Universität Graz and Università di Perugia/ArcheoRes—the use of near-infrared (NIR) fixed-wing UAV-based photography/ photogrammetry and ground-based magnetometer survey at several sites: results from both were extremely good, showing subsurface features clearly (see figure).

Statistical models that predict the source area of the clay used in each ceramic find have been developed and reconstruction of the sourcing and exchange networks for Neolithic ceramics is currently underway. Additionally, we are developing new ways of analysing pXRF data that incorporate experimental error - something seldom considered by archaeological users, but of potential interpretative significance.

Funding for 2015 was provided by the University of South Florida and private donors.



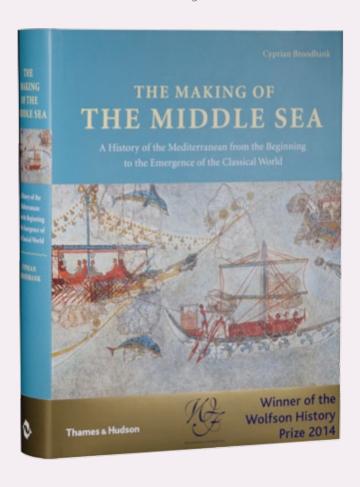
Artefact find-spots, NIR imagery and magnetometer survey results at site FG003663, southwest of Cerignola (FG), Puglia, Italy. (Analysis by Craig Alexander of data provided by project team, ArcheoRes, Technische Universität Graz, Regione di Puglia, etc.)

The Making of the Middle Sea

CYPRIAN BROODBANK (McDonald Institute)

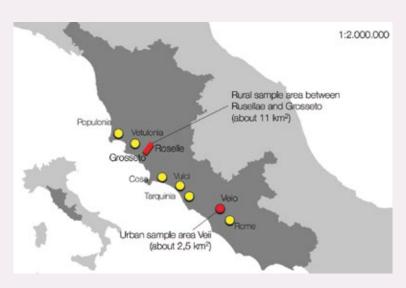
Cyprian Broodbank's recent book The Making of the Middle Sea: A History of the Mediterranean from the Beginning to the Emergence of the Classical World (London: Thames & Hudson, 2013) won the Wolfson History Prize shortly before he arrived in Cambridge to take up the Disney Chair and Directorship of the McDonald Institute. It is now being translated into Italian, German, Japanese, Korean and Turkish.

While this first year (2014–15) has been a tight time for personal research, he developed his thinking on the early Mediterranean in comparative perspective through invited lectures at a series of venues, during the spring of 2015 at universities in the USA (Stanford, Berkeley, Cincinnati, Harvard and Yale), and over the remainder of the year at the British Academy (for the British School at Athens), the British Museum, Institute for Historical Research, Metropolitan Museum of Art (New York), University of Edinburgh (Munro lecture series) and the European Association of Southeast Asian Archaeologists in Nanterre.



EMPTYSCAPES: Filling 'Empty' Landscapes, Mapping the Archaeological Continuum

STEFANO CAMPANA (Faculty of Classics)



Rusellae/Grosseto and Veii study areas.

A two-year interdisciplinary programme is designed to stimulate changes in the way in which archaeologists in Italy in particular, but also more generally in the Mediterranean world, study the archaeology of landscapes, moving from an essentially site-based approach to a truly landscape-scale perspective. The aim is to help in the development and wider application of new paradigms for landscape analysis based on the integration between traditional approaches, multidisciplinary studies and new technologies in the form of large-scale geophysical survey and the collection (UAV based) and analysis of highresolution LiDAR data.

The geographical focus of the project lies for the most part in central Italy, Tuscany (around Rusellae) and Lazio (Veii plateau and acropolis), where the Research Fellow has been working for some time on two carefully selected study areas.

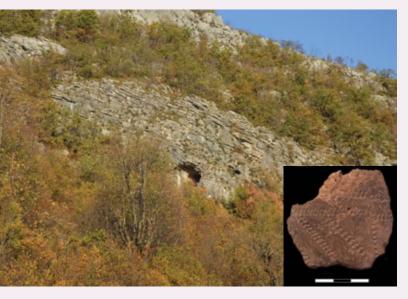
Funded by FP7-PEOPLE-2013-IEF n.628338.

Foragers and Farmers at Vrbička Cave, Western Montenegro

Emanuela Cristiani (*McDonald Institute*) and Dušan Borić (*Cardiff University*)

In 2015, we continued our investigations in Vrbička Cave, where previously both Late Pleistocene and Early Holocene levels were excavated. The field season focused on the excavation of Holocene deposits in certain areas of the cave's first chamber. A particular challenge was to resolve a complex stratigraphic matrix of layers with ceramic finds and the Mesolithic layer lying at the interface between the Pleistocene and Holocene sediments. Some of the ornamented ceramic fragments from the uppermost level have now given us the first secure evidence for the dating of these deposits to the Late Neolithic, probably the mid fifth millennium BC, on the basis of diagnostic fragments of pottery resembling the Hvar culture of the wider eastern Adriatic area. Previously, disarticulated human remains were found in the same layer in the deeper part of the cave, and a direct AMS date on these remains is expected to confirm our provisional dating. Also, it was now possible for the first time to establish a stratigraphic superposition of the layer with Early Neolithic impresso ceramics and later Neolithic occupation. One of the discovered sherds has direct parallels with the ceramic assemblage from the hinterland Early Neolithic site of Obre I in Bosnia.

The project is part of a collaborative initiative between the McDonald Institute for Archaeological Research in Cambridge, Cardiff University, the Centre for Conservation and Archaeology of Montenegro in Cetinje, National Museum and the Centre for Culture in Nikšić, Montenegro, and the Faculty of Philosophy in Belgrade, Serbia.



Vrbička cave, and an Early Neolithic impresso ceramic fragment found there.

Spaces through time: the Roman Forum

Dunia Filippi (Faculty of Classics)

This two-year project explores the Roman Forum as a privileged setting for understanding the continuously evolving identities of a civilization in long-term history. For the first time, it is possible to follow the topographical history of the Roman Forum (eighth century BC—mid sixth century AD) by means of the plans developed in my previous research. By applying new theoretical approaches to the understanding of space by means of an analytical taxonomy of human activities in their topographical context (a social GIS), it is possible to give back to the Forum its role as a multi-ethnic and dynamic place, restoring visibility to the women and the men who used this space.

In the first year, 2015, the work has concentrated on the structure and implementation of the database.

The project is funded by the EC FP7 Marie Curie.



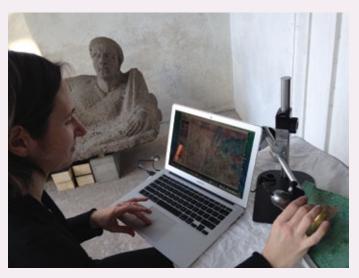
Roman Forum. Equestrian statue base reused as the pedestal for the statue of Flavius Stilicho (403 AD).

Textile Production and Consumption (PROCON)

Margarita Gleba (McDonald Institute)

The project focuses on the significance of the production and consumption of textiles for the development of city-states in Mediterranean Europe during 1000-500 BC. The past year was dedicated to data collection in museums of Italy, Germany, Austria and Greece, recording textiles, tools and iconography. Our preliminary analyses suggest that, during the Iron Age, and possibly already much earlier, most of Italy shared the twill textile culture of Central Europe (specifically Eastern Hallstatt), while Greece followed the Near Eastern tradition of weft-faced tabby and tapestry. Weft-faced tabbies are also documented in Italy, but are restricted to southern and eastern Adriatic regions and date to the post-colonial period, or are found in exceptional Etruscan and Latial burials, which also contain unusual quantities of eastern imports. Based on its geographical and chronological occurrence, it is likely that this type of textile may be connected with Hellenic influence in Italy. Iconographic analysis appears to support the differences seen in textiles, indicating that, whilst taking the biases inherent in this type of evidence into account, it may be used as a reliable source to ascertain broader patterns of textile consumption.

The project is funded by the European Research Council (Starting Grant No. 312603).



Margarita Gleba analysing an Etruscan mineralized textile at the Villa Giulia Museum, Rome.

Town and Hinterland. Interamna Lirenas and its Territory through Antiquity

ALESSANDRO LAUNARO & MARTIN MILLETT (Faculty of Classics)

Alessandro Launaro and Martin Millett further extended their excavation of the Roman theatre located on the northwestern corner of the forum of Interamna Lirenas (central Italy). A deeper and larger section of the stage area has been exposed, showing signs of very heavy post-abandonment spoliation, most prominently in the form of a passageway which was cut through the very foundations of the building. This passage was eventually blocked with a good number of large slabs of stones, robbed from the theatre and stacked onto each other. Behind the stage, significant remains of painted plaster have also been brought to light (probably pertaining to the decoration of a portico). Furthermore, as part of a recently funded AHRC project, a high-resolution GPR survey started to be carried out over the whole urban area: this year it covered 10 ha, including that part of the theatre which is still buried (results are currently being processed).

The 2015 season was undertaken in collaboration with the British School at Rome, the Soprintendenza Archeologia del Lazio e dell'Etruria Meridionale and the Comune di Pignataro Interamna with support from the Arts and Humanities Research Council, the Faculty of Classics and the Comune di Pignataro Interamna.



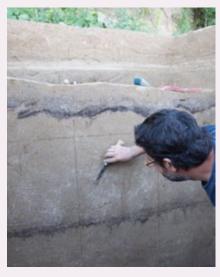
A 3D photographic model of the excavation at the end of the 2015 season.

Research on the Environmental Conditions of Neanderthal Occupation in Eastern Europe: Fieldwork at Neporotovo 7 (Middle Dniestr valley, Ukraine)

Philip R. Nigst (Division of Archaeology)

In 2015 the multi-national team of the NEMO-ADAP research project conducted four weeks of fieldwork at the Middle Palaeolithic site of Neporotovo 7 (discovered during our 2012 survey), directed by Philip R. Nigst and Larissa Kulakovska (Museum of Archaeology, Institute of Archaeology, Kiev). The NEMO-ADAP research project analyses Neanderthal and modern human responses and adaptations to the changing climate in the last 200,000 years in Eastern Europe. Currently, most activities focus on obtaining high-resolution environmental data from the loess deposits of the Dniestr River valley. The 2015 fieldwork activities included excavation on the two Middle Palaeolithic horizons, probably dating to the Early Glacial/Early Pleniglacial. Due to the extremely low water-table of the Dniestr River Reservoir Lake in July and August 2015, we were also able to excavate in the Middle Pleistocene deposits of the site. Our work in these lower deposits included geological analysis and sample collection for palaeoenvironmental reconstruction. Preliminary results suggest Neanderthal presence during cold and arid climatic conditions. In sum, the more than 8 m thick loess-palaeosol deposits range from the Middle Pleistocene at their base to the Late Pleistocene and are covered by the Holocene soil formation on top. The sequence currently contains five Middle Palaeolithic horizons. We are planning to continue our fieldwork in July/August 2016.

The project is funded by the Leakey Foundation, a EC FP7 Marie Curie Career Integration Grant (Nr. 322261), the Max-Planck-Society (MPI EVA, Department of Human Evolution, Leipzig), the Isaac Newton Trust and the McDonald Institute for Archaeological Research.



Neporotovo 7: project geologist Stéphane Pirson cleans a section in the Middle Pleistocene deposits.

Research on the Upper Palaeolithic in Romania: Excavations at Mitoc-Malu Galben

Philip R. Nigst (Division of Archaeology)

The Mitoc-Malu Galben research project aims at a better understanding of the chronostratigraphy and palaeoenvironment as well as the formation of the archaeological horizons at the site. Another goal is to test hypotheses about organization of lithic technology in the Early and Upper Palaeolithic in the East Carpathian region. Mitoc-Malu Galben is one of the key sites for the Upper Palaeolithic in Romania and the wider region. The 14 m deep sequence covers about 10,000 years and the deposits can be described as a semi-continuous loess-palaeosol sequence with rather high palaeoclimatic resolution. In July 2015, we continued our fieldwork at the site, begun in 2013. The fieldwork team, led by Vasile Chirica, Măriuca Vornicu, George Bodi (Institute of Archaeology, Romanian Academy of Sciences, Iasi), Pierre Noiret (University of Liège, Belgium) and Philip R. Nigst, excavated two trenches along the old excavations' sections. The main focus of our work was the excavation of a small lithic scatter attributed to the Late Aurignacian. Further, we collected abundant samples for geoarchaeological and radiocarbon analyses. Project geologist Paul Haesaerts (IRSNB, Brussels, Belgium) analysed the exposed sections and documented the stratigraphic sequence. Project zooarchaeologist Marjolein D. Bosch (University of Cambridge) analysed the faunal remains of the 2013–2015 excavations. We plan to continue our field and lab research in 2016.

The project is funded by a grant from the University of Liège (Fonds spéciaux pour la Recherche, Crédit classique C-13/69), a EC FP7 Marie Curie Career Integration Grant (Nr. 322261) and the McDonald Institute for Archaeological Research.



Scatter of lithic artefacts during excavation at Mitoc-Malu Galben.

Bronze Age Metallurgy in Semirech'ye, Kazakhstan

MILIANA RADIVOJEVIĆ (McDonald Institute)

The Eurasian steppe communities went through a period of major social, economic and technological transformations between c. 3000 and 1000 BC. Innovations in metallurgical activities in particular are considered as one of the driving forces behind these transformations, distinguishing the Bronze Age societies of the steppes as major agents in organizing production, trade and exchange of metals throughout Eurasia at the time. Extensive studies of properties of metal implements found throughout the Eurasian steppes laid the building blocks of narratives explaining cultural dynamics of Bronze Age societies. The widely accepted model of metallurgical provinces, established by E. Chernykh, differentiates multiple core areas of metal production and hence innovative centres of copper and bronze-making industry in this area. Nevertheless, little has been done to address the knowledge of copper and bronze making and transmission of recipes within and beyond the metal-making societies. The aim of this project is to explore the nature of *chaîne opératoire* of metallurgical activities in several regional production centres across the Eurasian steppes. The overarching idea is to provide a more nuanced understanding of steppe communities' economies.

This year I looked at the archaeometallurgical materials from the sites of Begash and Dali in Semirech'ye (eastern Kazakhstan) with Dr Michael Frachetti (Washington University, St Louis, USA). Preliminary results showed that both sites contain copper and tin bronze production evidence and artefacts, which will be further analysed for structure and composition at the University of Cambridge. This study will also be used to identify potential deposits of copper and tin in Semirech'ye, and plan further field activities in this region and beyond.

This project is funded by the McDonald Institute for Archaeological Research



The site of Dali, Semirech'ye, Kazakhstan.

Complex Network Analyses of Metal Flow in the Fifth-millennium BC Balkans

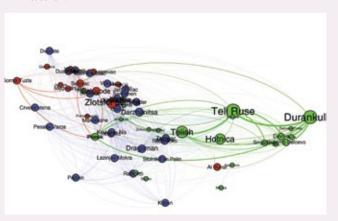
MILJANA RADIVOJEVIĆ (McDonald Institute)

The Late Neolithic and Chalcolithic in the Balkans (c. 5500–3800 BC) was a time of widespread social and technological changes. An unprecedented scale of metal production, mirrored in c. 4300 artefacts of extant objects, is estimated to represent only a portion of their actual circulation.

Although the scale of such metal production remains unparalleled across Eurasia at the time, the main focus of early metallurgy studies is commonly set on finding the very origins (single or multiple) of the smelting events, and less on human behaviour shaping the trajectory of its early development. Extensive provenance studies indicated the use of local copper sources for making these objects and suggested almost simultaneous exploitation of multiple deposits across the Balkans. Still, the nature of uncertainty related to tracing the origins of an artefact to its source renders these analyses unfit to reveal patterns of copper exploitation, organization of metal production, or recycling behaviour of cultural groups at the time.

In order to exploit the full potential of provenance analyses, Dr Jelena Grujić (Vrije University, Brussels, Belgium) and I developed a novel method for addressing these questions by employing complex networks analyses using provenance analyses of various archaeometallurgical materials dated *c.* 5500–3800 BC. The preliminary results show the existence of several communities across the defined time period, delineating the zone of their interaction and presenting patterns of organization of metal production at previously undocumented social, temporal and spatial scales.

This project is funded by the McDonald Institute for Archaeological Research.



Complex networks analyses of combined provenance data show distinctive communities (colour coded) sharing similar ore sources across the Balkans, between c. 5500 and 3800 BC.

Keros, Greece

COLIN RENFREW & MICHAEL BOYD (McDonald Institute)

Colin Renfrew and Michael Boyd have continued their study of the world's earliest maritime sanctuary, located on the remote and today uninhabited island of Keros in the Cyclades, Greece, and dating to the mid third millennium BC. Publication of the 2006–2008 excavations is nearing completion, with one volume published, two others in press, and two further volumes in advanced preparation. Study of the results of the 2012–2013 surface survey of the island is also well advanced, and it is hoped to submit a first volume (of two) in the coming year. As this report goes to press, a new four-year project has commenced, beginning with survey on south Naxos, the nearest large island, in order to investigate Keros' maritime networks. Major new excavations on Keros will follow in 2016-2017, with survey on the island of Kato Kouphonisi, midway between Keros and Naxos, completing the fieldwork in 2018. Meanwhile two conferences on 'Early Cycladic Sculpture in Context' were held in 2014 and 2015.

Work on these projects has been funded by the Institute for Aegean Prehistory, the Stavros S. Niarchos Foundation, the Balzan Foundation, the McDonald Institute for Archaeological Research, the Leventis Foundation, the British Academy, the Society of Antiquaries of London, the British School at Athens, the National Geographic Society, the Leverhulme Trust and Creta Farms.



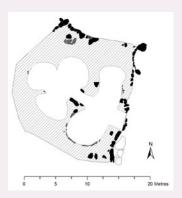
Peggy Sotirakopoulou and Colin Renfrew studying marble sculptures from Keros and Naxos in the Naxos Museum.

A New 'Temple' for Gozo (Malta)

SIMON STODDART (Division of Archaeology)

The University of Cambridge played a major role in the year's fieldwork of the FRAGSUS project. The spring season targeted the Bronze Age site of In Nuffara, the temple site of Ġgantija and the enigmatic site of Santa Verna. A substantial part of the workforce was provided by CAU personnel, who worked on In Nuffara, and the second-year students of the Division of Archaeology, who worked principally on the latter two sites. Work at Ggantija under the direction of Charly French conclusively demonstrated the presence of rich humic soils in the Neolithic preserved under the approaches to the UNESCO-listed monument (see pp. 20–21). More extensive open area excavation at Santa Verna, following in the footsteps of Thomas Ashby and David Trump, convincingly uncovered another example of the typical 'temple' format of similar size to the famous Ggantija monument and orientated in the same direction. Deposits that date from the earliest Neolithic on the island until the construction of the temple monument will allow deeper understanding of the way in which the larger monuments developed.

The FRAGSUS project is supported by an ERC grant (PI Caroline Malone, Queen's University Belfast).



Hypothetical plan of the Santa Verna temple.



The team for Santa Verna.

A New Museum for Troina (Enna, Sicily)

Patricia Duff (ArchaeoLink), Letizia Ceccarelli (Visiting Scholar), Simon Stoddart (Division of Archaeology) and Lucy Walker (Independent Scholar)

At the kind invitation of the mayor, Fabio Venezia, many members of the Troina project team reassembled, with the support of new colleagues, to create a seven-case museum display, in the space of 10 days, entitled TROINA: Crocevia della Sicilia Interna: Seimila anni di Storia dal Simeto ai Nebrodi [Troina: Crossroads of Inland Sicily: 6000 years of history from the Simeto river to the Nebrodi mountains]. The exhibition is introduced by the landscape methodology of the project, then focuses on the excavation of the Casa Sollima Chalcolithic hut, under the direction of Caroline Malone. The central part of the exhibit was principally drawn from the excavations of the late Giacomo Scibona, a substantial task executed expertly by Letizia Ceccarelli and her team. The final section on the Medieval and Modern was assembled by Lucy Walker. Flaminia Bartolini completed her MPhil dissertation on how the fascist authorities had created tradition by inserting a piazza for the First World War dead in the historic centre of the town overlooking the panorama studied by the Troina project (see figure). Patricia Duff followed up the museum creation by measuring the actual and potential impact of archaeology on this upland zone.

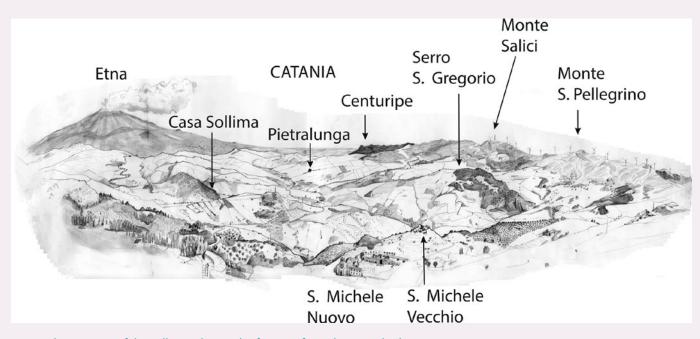
The visit to Troina was supported by McDonald Impact funds and, on location, by the Comune of Troina. Caroline Malone (Queen's Belfast), Ben Plumridge, Diego Puglisi (University of Catania), Charlotte, Lucy and Simon Stoddart and Lucy Walker were members of the original project team who returned. Flaminia Bartolini, Letizia Ceccarelli, Olivia Crawford, Stefania Dora Amata (Troina), Fabio Salinaro (Troina) and Ruth Taylor (Queen's Belfast) comprised the new members of the team.

Laurence Seminar on Roman Material Culture

ASTRID VAN OYEN (Division of Archaeology)

The 2015 Laurence seminar 'Rethinking artefacts in Roman archaeology: beyond representation' was organized by Dr Astrid Van Oyen (Homerton College, Cambridge, and a member of the Material Culture Lab) and Dr Martin Pitts (University of Exeter). The seminar brought together an international line-up of archaeologists, ancient historians and artefact specialists to consider how Roman archaeology builds historical narratives based on objects. Traditionally, artefacts are thought of either instrumentally (as used by people for a certain goal) or representationally (as signalling meanings). Recent material culture theory has shown that these possibilities do not exhaust the way humans relate to things: objects do not always fit neatly into human schemes of action and meaning. The seminar explored other mechanisms for how material culture works, and the impact these could have on histories of the Roman world. A volume based on the outcomes of the seminar is currently in preparation for publication with Oxbow in the Museum of Classical Archaeology Monograph Series.

The seminar and its publication were made possible by generous grants from the Faculty of Classics and the McDonald Grants and Awards Fund.



Landscape view of the valley to the south of Troina, from the town, looking east.

Natural Resources in the Ancient Roman Economy

ROBYN VEAL (McDonald Institute)

The economics of fuel and timber still dominate my research, and I have continued to work on charcoals from the early Republic to the Late Antique periods, in sites in and around Rome and Campania. Fieldwork was also focussed in these areas. New collaborations were formed with the Glac Project (ancient Sirmium, Sydney/Glasgow), the Piklihal Project (South India, UCL), and the British-Tunisian Utica Project (AIAC Rome/Oxford).

A new approach to distinguishing 'weather' from 'climate' using ratios of charcoal types has shown ancient Campania's climate to be wetter than previous research has suggested. Modelling of all environmental remains more generally has commenced with a pilot study in ancient Campania. With this broader approach, I co-organized a conference on 'The Economic Utility of Olive', and gave a number of conference papers and guest lectures in the UK, Europe and the USA. Next year, the AEA 2016 international conference will be held in Rome: 29 September to 2 October. Colleagues Giulio Lucarini (McDonald Institute) and Charlene Murphy (UCL) are joining me in the organization of this conference.

Nazi Camps on British Soil

GILLY CARR (Institute of Continuing Education)

2015 marked the second season of excavation at Lager Wick, a Nazi forced-labour camp in Jersey in existence from 1942–44. The two aims for the second season were to excavate the latrine block and one of the camp's barrack blocks.

Excavation revealed that the latrine block, comprising a latrine, changing room and washroom, was in fact a three-room structure at the far end of a larger barrack block. Small finds included a toothbrush, a toothpaste tube, some medicine bottles and a hand mirror. We also found a meal dish with initials scratched on the base (probably belonging to a labourer).

The excavated barrack block burnt down in April 1944 and we successfully located a layer of burning in our trench. Finds included a schnapps glass, a spoon handle and the base of Nazi mug. This barrack was likely to have been the mess hut of the overseers. Plans are afoot for a third season of excavation. The excavation blog can be read at: http://gillycarr. wordpress.com/

The project was funded by the British Academy.



Fish vertebrae and scales from flotation of a soil sample c. 1st century AD, Castelporziano, east of Rome. (Photographed using Dinolite digital camera at 200× magnification.)



Base of mug depicting an eagle and swastika found in the foundations of the mess hut of Lager Wick forced labour camp.

Richard III—Case Closed after 529 Years

Peter Forster (McDonald Institute)

An international research team including Dr Turi King (Leicester) and Dr Peter Forster (McDonald Institute) has provided overwhelming DNA evidence that the skeleton discovered under a car park in Leicester indeed represents the remains of King Richard III—closing what is probably the oldest forensic case solved to date. Analysis of all the available evidence confirms the identity of King Richard III to the point of 99.999 per cent. The team published their findings in the journal Nature Communications.

The researchers collected DNA from living relatives of Richard III and analysed several genetic markers, including the complete mitochondrial genomes, inherited through the maternal line, and Y-chromosomal markers, inherited through the paternal line, from both the skeletal remains and the living relatives. While the Y-chromosomal markers differ, the mitochondrial genome shows a genetic match between the skeleton and the maternal line relatives. The

former result is not unsurprising, as the chances for a falsepaternity event is fairly high after so many generations.

Forster said: 'Although the false paternity means we cannot look forward in time, we can trace King Richard's Y lineage back into prehistory. Historically, the male line of the Plantagenets is recorded back until AD 1028 in north France (Hugues, Count of Perche). Using King Richard's genetic profile, we can go back much further: Richard's G2a type traces back to the first farmers who migrated from the Near East and Anatolia (modern Turkey) to Europe about 8000 years ago, quickly spreading along the Mediterranean and into Central Europe and France by 5500 BC.

'These pioneer farmers carried predominantly G2a types, which today are quite rare, around 1 per cent in Europe (see map). And one of these Anatolian farmers was King Richard's immigrant male ancestor. Incidentally, the descendants of the Plantagenets not only became Kings of England but also of Jerusalem, bringing the migration of this Y chromosome type full circle.'



Map shows locations of 14 living men who are close genetic matches to King Richard: their G2a type is quite rare, around 1 per cent in Europe today.

Exning

CATHERINE HILLS (McDonald Institute)

Research was undertaken on seventh-century Anglo-Saxon burials from Exning, near Newmarket. Burials excavated in 2014 by Archaeological Solutions included several graves with finds dating to the seventh century AD, including a glass vessel, a gold pendant, decorated fittings and an unusually large spearhead. Parallels to some of these artefacts can be found in high-status burials across England and also in Frankish or Alemannic burials on the continent.

Gilded copper alloy fitting with zoomorphic ornament, probably a horse harness mount, from Exning grave 6.



The Bury Farm Project: Local Landscapes ... and Monuments

SHEILA KOHRING (McDonald Institute)

The Granta River is the focal point for defining the local landscape of the Bury Farm project. In previous years, the core team of Sheila Kohring, Katherine Boyle, Charly French, Kate Boulden, Jenni French and Ben Davenport have concentrated on the river edge and the ways that activities along this edge changed in relation to the river. In April 2015, MPhil Conor McAdams and our own 'Geophys Guru' David Redhouse conducted a geophysical survey over a location on the middle chalks which showed great potential from the aerial photography. They were able to locate two very different features through a combination of earth resistivity, magnetometry and magnetic susceptibility testing. These two features were then ground-truthed with initial excavations in August of 2015.

The findings of the season indicate that the circular feature appears to be the remains of the ditch of a probable Bronze Age enclosure. A rectangular enclosure was also located, but proved more elusive. The aptly named 'Schrödinger's Feature' was finally found, but was located on the last day of excavation. Still, the edge appears strong and the feature well defined. So, now that we know it is there, we will have lots of work for 2016!

The Bury Farm Project was funded in 2014–2015 by a HEIF-5 grant.



Working Trench 7 circular feature.



View of Rickett's Woods and Granta River from early enclosure structures.

Aldborough, North Yorkshire

ROSE FERRARY & MARTIN MILLETT

Fieldwork on stage 1 of the project was completed, with the Roman town and its suburbs now fully mapped by magnetometry, an area of about 90 ha. This was complemented by further selective use of high-resolution Ground Penetrating Radar.

The magnetometry survey revealed extensive systems of trackways and fields to the south of the town, and to the north of the river Ure showed roadside settlement continuing alongside a previously unknown road, probably linking Aldborough with Malton.

GPR work focused on areas investigated in the eighteenth and nineteenth centuries. The north range of the forum (uncovered in 1770) and the west gate (known from a sketch plan of about 1840) were successfully mapped beneath the modern road. The context of the mosaics excavated in the 1840s and now displayed by English Heritage was also comprehensively elucidated with the house plans revealed for the first time.

Thanks to the Faculty of Classics, the McDonald Institute and the Thriplow Charitable Trust for funding this work.



High-resolution GPR survey of the Forum beneath the road at Aldborough.

The Archaeology of Collective Governance

Susan Oosthuizen (McDonald Institute)

A major undertaking this year has been a lengthy review of models for cultural change, taking the case of the emergence of Anglo-Saxon England c. 400-800 AD. Ideas critically examined include the role of migration in the transformation of material culture; politics and economy in a post-imperial world; the significance of 'core' and 'periphery' in evolving polities; ethnogenesis as a strategy in kingdom building; property rights as a lens for investigating cultural change; and the relationship between hierarchical political structures and collective forms of governance. The review suggests that an explanatory framework focused on rights of property allows for greater subtlety in identifying the interactions of tradition and innovation in evolving cultural change in which extrinsic factors such as climate change, epidemic and migration are unlikely to have been new.

Other work has used common property rights to explore social identity, concluding that specific forms of governance, reciprocity and social distinction can be inferred from the shared exploitation of resources. A regional study on cultural change in the post-Roman Cambridgeshire fenland indicates that at least some mid seventh-century territorial groups in the region may have evolved from Romano-British antecedents.

Bronze Age Mining Landscapes, West Wales

SIMON TIMBERLAKE (McDonald Institute)

Fieldwork carried out by the Early Mines Research Group in 2014–15 involved a return to some of the Early Bronze Age copper mining and prospecting sites we first examined some 15–25 years ago within the upper reaches of the River Severn east of Plynlimon, and southwest of here at the important mining site of Cwmystwyth.

At Nantyreira Mine, extensive test-pitting carried out along the mineral vein revealed evidence for prehistoric mining over a distance of almost 150 m, suggesting that rock in excess of a thousand tons had been removed using fire and stone cobble tools. Meanwhile, at Copa Hill, Cwmystwyth, the extent of buried workings was probed geophysically by Archaeophysica Ltd using ERT (Electrical Resistance Tomography)—the first time this technique has been applied to the investigation of ancient mining. The results of this work are still being modelled, yet already it seems that both in terms of distance and depth the opencast(s) are substantially bigger than previously thought (perhaps over 20 m deep).

Archaeological investigations within the surrounding landscape of this mine continued in October 2015 with the de-turfing and planning of a 13.5 m diameter Early Bronze Age kerb cairn dramatically situated on the hillside opposite the mine. This cairn is located 180 m above the valley floor where the Bell Beaker Banc Tynddol gold disc was discovered during excavations in 2002.

The project has been funded by the Early Mines Research Group (UK) and Archaeophysica Ltd.



Mungrisdale Common, Cumbria. The quality and character of rough common grazing on extensive upland pastures like these has deliberately been maintained through collective governance since at least the late Iron Age.



Location of the Pant Morcell kerb cairn photographed from the Early Bronze Age copper mine on Copa Hill, Ystwyth Valley, Ceredigion.

McDonald Annual Lecture

●19 November Graeme Barker (McDonald Institute) - The Archaeology of Climate/People Interactions: Science or Story-Telling?

McDonald Institute Seminars

- **© 15 October** Margarita Gleba (*McDonald Institute*) Tracing textile cultures of ancient Italy and Greece
- **© 22 October** PAOLA DI GIUSEPPANTONIO DI FRANCO (University of Cambridge) 3D Laser Scanning and 3D printing techniques for preserving and disseminating past material culture
- **© 5 November** Dacia Viejo Rose (*University of Cambridge*) Heritage and Risk
- 12 November Delphine Driaux (University of Cambridge) Water installation and use in ancient Egyptian urban sites
- **②26 November** Evi Margaritis (McDonald Institute) Cultivation, management and production of secondary products: The olive and the vine in prehistoric Aegean
- **3 December** HAZEL READE (*University of Cambridge*) Late Quaternary environments in the Gebel Akhdar, Libya
- **©21 January** PAUL JOHNSON (*University of Nottingham*) Drawing archaeological meaning from geophysical survey data: the use of digital technologies to support the analysis and interpretation of spatial datasets
- ●28 January URI DAVIDOVICH (University of Cambridge)
 Identifying a landscape of refuge: The Judean Desert (Southern Levant) during the Late Chalcolithic period
- **4 February** JENNIFER C. FRENCH (*University of Cambridge*) Demography and the Palaeolithic archaeological record
- **11 February** Astrid Van Oyen (*University of Cambridge*) Writing material histories
- **18 February** Postdoc Forum
- ●4 March Noriyuki Shirai (University College London) -The Desert Fayum at 80: Re-studying the beginning of agriculture in Egypt
- **9 March** Aude Gräzer Ohara (University of Cambridge) Rooftop ritual: an unexpected location for domestic cult practice in Egypt
- **11 March** Lucy Farr (*University of Cambridge*) Marine Isotope Stage 4 in North Africa and the Levant: Variability in archaeological and palaeoenvironmental records
- **© 6 May** Peter Tomkins (*University of Sheffield*) 'Agronauts' of the Eastern Mediterranean: an exploration of voyaging, value and identity in the early farming communities of the Aegean *c.* 7000–5300 BC)
- **11 May** Andrew Clarke (*University of Cambridge*) On the trail of the bottle gourd: multidisciplinary archaeology and the world's first global crop
- ●13 May CHRISTINA TSORAKI (Universiteit Leiden) Ritual and domestic: grinding activities as a history-making process at Neolithic Çatalhöyük, Turkey

- **20 May** Letizia Ceccarelli (*University of Cambridge*) History of an Etruscan frontier: Ceramics and production
- 21 May SHARON SAUNDERS (Research Staff Development Consultant, University of Cambridge) - Open Postdoc Meeting
- **27 May** Garden Party

Garrod Research Seminars (Division of Archaeology)

- **16 October** Toomas Kinisild (University of Cambridge) Genetic bottlenecks and cultural revolutions: perspectives of the Y
- 30 October Charles French (University of Cambridge)
 Floods and droughts: Landscape change and coping strategies
- **13 November** Kate Spence (University of Cambridge) Negotiating space: thinking through houses
- **© 27 November** Martin Jones (*University of Cambridge*) Food globalisation in prehistory: staple crops in East and Central Asia
- 22 January Tamsin O'Connell (University of Cambridge) What do isotopic analyses tell us that we didn't know already?
- **© 5 February** Martin Worthington (*University of Cambridge*) Towards a grammar of Neo-Assyrian
- **19 February** Preston Miracle (*University of Cambridge*) Palaeolithic and Mesolithic R and R, Balkan style
- 5 March Dacia Viejo Rose (University of Cambridge) -Cultural violence/violence against culture: Theory, practice and implications
- 23 April Chris Wingfield (*University of Cambridge*) Collection as assemblage: Refreshing museum archaeology
- ●7 May Philip Nigst (University of Cambridge) The Neanderthal acculturation reloaded
- **© 23 April** Susanne Hakenbeck *(University of Cambridge)* Getting away from marauding armies: new approaches to early medieval migrations

Conferences and Workshops

- **29 November** Personal Histories Film-Making Workshop
- **6 December** Personal Histories Film-Making Workshop
- **27–28 February** Centennial of the Archaeology and Anthropology Tripos
- 25 March Plant to Cloth Workshop
- ●4-9 May African Farming Network Workshop
- ●22-23 May Out of Italy



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!

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: Yağmur Heffron (yh356@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: Emma Smith (es578@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).

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); Ting An (ta343@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: Renate Fellinger (rf296@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: John Robb (jer39@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: Penny Jones (pij25@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: Susan Shay (scrs2@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: Simon Stoddart (ss16@cam.ac.uk).

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

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: Emily Hallinan (esh27@cam.ac.uk); Rachel Reckin (rjr57@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: Sheila Kohring (sek34@cam.ac.uk); John Robb (jer39@cam.

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



Prehistory Day (25 October 2014)

'This event gets better every year!' a happy participant commented. We were blessed with gloriously warm autumn sunshine for this year's event and this certainly attracted the crowds and helped contribute to its roaring success.

A couple of teenagers who have been enthusiastic attendees since they were toddlers joined the team as

volunteers this year. We hope they are the archaeologists of the future.

Regular visitors enjoyed the usual programme of spear throwing, archery, metal smelting, pottery, bread baking and rock art. However, a couple of new activities added variety. A dyeing workshop using woad and indigo was responsible for many bright blue hands and a tribe of Vikings in full regalia provided extra colour as well as the telling of sagas, the writing of runes and the tantalizing smells of Viking pottage.









Dyeing workshop; building shelters; Viking saga; a new recruit to the team.

Science Day (14 March 2015)

Archaeology's contribution to the University of Cambridge's annual Science Festival remains a highlight for many visitors of all ages—particularly budding scientists aged from 5 to 10.

Members of the public were able to gain a taster of archaeological science through a series of hands-on activities. They examined use-wear and residues on lithics under a microscope, identified animal bones and discovered how prehistoric textiles survive and what archaeologists can learn from them. The human remains stand proved particularly popular. Visitors learned how modern scientific techniques can piece together stories about the human remains excavated from archaeological sites. They saw how Geoarchaeologists use microscopic techniques to identify household activities in floors and walls, buried soils under monuments to reconstruct past vegetation cover, and even investigate remains of rubbish pits! The specially constructed model test pit kept many younger visitors happily engaged for hours.







Preston Miracle on the animal bone stand; digging for finds; Valentina Borgia helps young visitors examine lithic residues.

Pint of Science 2015

Cambridge archaeologists delivered a hugely successful series of pub-based talks during Pint of Science week in May 2015. Rather than a series of formal talks, this annual event aims to recreate the buzz of popular music festivals, offering multiple stages across each city that allow leading experts in various scientific fields to present, discuss and take questions on their latest discoveries and research with members of the public 'over a beer and a packet of pork scratchings.' These talks were organized by Marie Curie Fellows at the McDonald Institute, Giulio Lucarini and Valentina Borgia, together with postgraduate archaeology students Flaminia Bartolini and Meghan Strong. They were part of a larger 'Our Society Team' dealing with social/humanistic themes such as archaeology, history, politics, economics, philosophy, sociology, public policy.

Corinne Duhig (McDonald Institute) spoke on 'Forensic archaeology and anthropology in a war zone: Justice or closure'; Evi Margaritis (McDonald Institute) on 'Bread, bulgur, wine and olive oil: Food in antiquity'; John Robb (Division of Archaeology) on 'How to achieve a social life after death' and Marie Louise Stig Sørenson (Division of Archaeology) on 'Life was different then—reflecting on sex and gender in prehistory'.



Marie Louise Sørenson delivers a public talk at the Boathouse pub in Cambridge.



Organizers for the archaeology contribution to Pint of Science Week, Cambridge: from left, Valentina Borgia, Eva Margaritis and Giulio Lucarini.

ArchaeoLink

Patricia Duff (McDonald Institute)

ArchaeoLink assists researchers to achieve impact; defined as the outcome of taking their research into the public domain. This is especially vital in archaeology where effective outreach results in a exchange between the community and the research team, generating a bi-directional flow of information. ArchaeoLink's methods comprise the assessment and encouragement of societal, educational and economic benefits to the communities as derived from their archaeology and heritage. The value of an interest in and pleasure gained from Heritage to the wellbeing of a community is considerable and measurable.

Highlights include an ethnographic study on traditional cheese-making in Montelabate, Italy (to form the basis of an exhibition) inspired by the excavation of Etruscan sieves (600 BC) during Simon Stoddart & Caroline Malone's Frontier project; working with Jane Renfrew, the local museum and Friends Society to plan and instate a garden of plants mentioned in the Homeric Hymn to Demeter, as an additional point of interest in Elefsina, Greece; a major article in *Current* World Archaeology on the cult and mysteries of Demeter and Persephone at Elefsina; negotiation with Andante Travel which now features Elefsina on their 'Hidden Athens' tours; lectures on 'Achieving Impact' given in Cambridge and abroad.

Researchers are invited to contact Patricia to discuss how ArchaeoLink might assist in extending the local impact of their work. Further details of our projects may be found at www.ArchaeoLink.org

ArchaeoLink is supported by the McDonald Institute, the Isaac Newton Trust, the Prometheus Trust, the National Co-ordinating Centre for Public Engagement and a number of private sponsors.



Cheese-making 2600 years on: plastic has now replaced ceramic.

Members of Friends of Elefsina enjoying a

seminar.



P. Duff

Personal Histories Project

Pamela Jane Smith (McDonald Institute)

The Personal Histories Project invites influential figures from the sciences, humanities and arts to explore the stories behind their careers. We are a popular project that organizes public events, personal interviews and skills training workshops to pursue our goal of collecting life histories for educational purposes. For a selection of our free films, please visit the Streaming Media Service: http://www.sms.cam.ac.uk/collection/750864

Vimeo: https://www.personalhistoriesproject/videos our webpage: http://www.personalhistories.arch.cam.ac.uk and view and 'like' the Personal Histories Facebook page. Since 2010, there have been over 22,000 downloads of Personal Histories films in over 115 countries and, each year, we train over 160 university and community members in digital skills enhancement workshops.

The Personal Histories Project is also pleased to announce that Pamela Jane Smith was awarded an honorary Igbo chieftaincy in September 2015 during her visit to Nigeria sponsored by the McDonald Institute. The title of Ola-Ocha Ndigbo Na Oyo State recognises Pamela's dedicated service to the Igbo people and also honours her as the widow of Thurstan Shaw and as a representative of the McDonald. Accompanied by Marcus Brittain, also an Institute Fellow, Pamela attended meetings to discuss the iconic African bronze art sites of Igbo-Ukwu in southeast Nigeria. The sites were originally excavated by Shaw with the participation of the Igbo Anozie families in 1959 and 1964. A royal burial with stores of intricate pottery, copper, fabric and elaborate bronze artwork was discovered. A team of Nigerian and UK archaeologists hope to return to continue the work interrupted by the Biafran War. 'Marcus and I received a wonderful welcome in Nigeria,' Pamela stated; 'The title was truly unexpected and an honour.'

The project is funded by the McDonald Institute for Archaeological Research, the Thriplow Charitable Trust, the Cambridge University Students' Union and the School of the Humanities and Social Sciences.



Pamela Jane Smith in ceremonial robes with HRH Eze Dr Alex Anozie, Ezendigbo Ezedigbonma I nala Ibadan and Oyo States and the Council, the Ezendigbo in Council, the Ezend on the occasion of the conferral on her of an Igbo honorary Chieftaincy.

One Hundred Years of Arch & Anth

The Hundred Years of Arch & Anth were memorably celebrated over the course of two days (27–28 February 2015) by more than the 451 officially registered alumni, past and present staff and current students. On the afternoon of the first day, the centenary was properly discussed by representative sections of all three disciplines in the McDonald Institute itself (1), the Mongolia & Inner Asia Studies Unit (2) and the Duckworth Laboratory (3). In the early evening, participants gathered at the focal shared locale of the discipline, the Museum of Archaeology and Anthropology, where, amongst the graduates of Arch & Anth, Sir David Wilson gave the first keynote lecture (4), followed by colleagues from both Archaeology (5) and Social Anthropology (6).

On the second day, when the celebrations moved to Magdalene College, they were introduced by the Fellow in Archaeology and Anthropology (7), and commenced with a panel of some of the earliest participants in the discipline. These alumni ranged across all the subjects, including Ancient Near East, Anglo-Saxon Norse and Celtic (ASNAC) (8), Archaeology, Physical Anthropology (10) and Social Anthropology (11 & 12). The activities of the remainder of the day cycled between thematic breakout sessions (Africa, Beyond the Academy, Collaboration, Fieldwork, Life of the Tripos, Maritime and Mediterranean, Science and Deep Time and Theory) and plenary reports back in the main auditorium, culminating in general discussion (13) and key questions (14). These dialogues have now developed into the format for the next hundred years: both as a tripos focused on the identity of Archaeology and continued contributions towards a broader new tripos entitled Human Social and Political Sciences. As is appropriate on all celebratory occasions, the day ended with a series of feasts in four locations within Magdalene and in the Wordsworth Room of St John's College, where the Master of Magdalene (15) and Tim Taylor (Arch & Anth alumnus) respectively placed the tripos in perspective during their afterdinner speeches.

The celebrations were wonderfully supported, not only by the alumni themselves (16), but also by a small team of assistants, many dressed in distinctive T-shirts. *Personal Histories* recruited and trained these 43 student volunteers to run the celebration (17). The film crew, Lucy Parker and James Bull, produced 12 hours of Centennial edited film, five Shorts, an 'Oral-history of the McDonald Institute at their 25th Anniversary' http://sms.cam.ac.uk/media/2106052 and a history of the Duckworth Lab http://www.sms.cam.ac.uk/media/2100255, and recorded 25 individual interviews—these will be archived in College libraries.

Many alumni gave donations over and above their personal cost and the event was also supported by the Archaeological Field Club, the Cambridge University Social Anthropology Society, Personal Histories (all three aided by the Syndics of the University Societies), the Divisions of Archaeology and Social Anthropology, the Thriplow Charitable Trust and the McDonald Institute. Emma Jarman kindly handled most of the administration. Photographs by Patricia Duff unless otherwise credited.



Access Cambridge Archaeology

Laure Bonner & Catherine Ranson (Division of Archaeology)

2014–15 was another busy year for Access Cambridge Archaeology (ACA), directed by Dr Carenza Lewis, including a full complement of Higher Education Field Academies (HEFA), various community projects and a programme of events with HLF landscape partnership scheme, *Touching the Tide*.

Catherine Ranson continued in her role as archaeological supervisor with Jessica Rippengal (Division of Archaeology) providing part-time support for excavation supervision. After four years with the ACA team, Clemency Cooper took up a new role with the Portable Antiquities Scheme in December 2014, and Laure Bonner joined as administrator in January 2015. Dr Jenni French (Peterhouse, Cambridge) and Dr Trish Biers (MAA) continued in assessing HEFA students' written reports as well as delivering sessions on report-writing skills during the HEFA.

Sixteen HEFAs were run in 2014–15, in Shefford, Hillington*, North Warnborough, Brundall* (x2), Rampton, Southminster*, Walberswick, Hadleigh*, Sawtry, Blo' Norton*, Great Amwell, Long Melford, Hindringham, Riseley and Manuden (*indicates villages excavated for the first time in 2015). In 2014–15, 668 learners attended HEFA from 62 schools, accompanied by 128 school staff, with the University of Cambridge Widening Participation Project funding thereby providing 2004 learner days. 84 per cent of learners attended from high priority schools with low levels of progression rates to HE, GCSE attainment and 'Value Added' indices. 93 per cent of all participants rated it as 'Excellent' or 'Good' and the number intending to apply to university increased by 18 per cent, to a Russell Group university by 49 per cent and to Cambridge by 55 per cent.

Students digging at the Hillington (Norfolk) HEFA.

Additionally, ACA carried out several community outreach projects in East Anglia throughout 2014–15. Under ACA supervision, in September and May, Stour Valley Community Archaeology continued excavations of the well-preserved late Anglo-Saxon manorial complex at Goldingham Hall, Bulmer (Essex). In September, encouraged by the success of their community project in 2012, residents of Nayland (Suffolk) carried out further excavations of 16 test-pits with the support of ACA, identifying a surge of eleventh-century activity in this region of the Stour Valley. Funded by the Sudbury Museums Trust (Suffolk), in October ACA ran the 'Sudbury Big Dig' where 31 test pits were dug by more than 100 local residents and school children, revealing the early Anglo-Saxon origins of the town.

In conjunction with *Touching the Tide*, ACA ran two community-based projects on the Suffolk Coast. The first event in January saw 36 local residents braving the cold to fieldwalk at Covehithe, a village rapidly eroding into the North Sea. The second project was a nine-day excavation at Dunwich intent on revealing the remains of this oncethriving medieval port. Around 50 local volunteers, ranging in age from 6 to 80, uncovered a well-preserved c. twelfthcentury street and associated house plot, original medieval harbour revetments and evidence for the original eastern boundary wall of the Greyfriar's precinct. This excavation highlighted the previously unknown extent of medieval archaeology still surviving in Dunwich today, which will hopefully lead to further coastal archaeological work before this valuable resource is lost forever to the sea. Touching the Tide also provided funding for a six-week archaeological internship, specifically focused on the Dunwich dig. Nina O'Hare, a recent archaeology graduate of the University of Cambridge, was the successful candidate and her role focused on background research, liaising with the local community and post-excavation work.



One of the trenches excavated in Dunwich by local volunteers.



Cambridge Archaeological Journal

JOHN ROBB

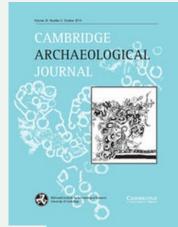
2015 has been an excellent year for *CAJ*. Volume 25 (2015) contains a near-record 914 pages, including 30 articles, book reviews, one article-based discussion feature ('Neolithization in Southwest Asia in a Context of Niche Construction Theory', by Kim Sterelny & Trevor Watkins), and three thematic special sections:

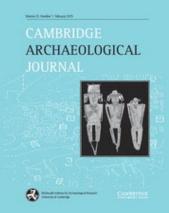
- Knowing, Learning and Teaching—How Homo became Docens (Anders Högberg, Peter Gärdenfors & Lars Larsson)
- Cosmovision in New World Ritual Landscapes (Anne Dowd)
- Invention as a Process: Pyrotechnologies in Early Societies (Benjamin W. Roberts & Miljana Radivojević

Editorially, submissions remain high, with 108 submissions in the previous 12 months and a healthy acceptance rate of about 30 per cent. Editorial process is running smoothly, with an average time of just less than two months between submission and final decision. We have recently integrated the widely used CrossCheck plagiarism-detection software into our ScholarOne online submission system; so far, this seems to indicate, reassuringly, that authors are indeed submitting original work to CAJ. We have also reduced the word limit on articles from 12,000 to 10,000 words, as compressing manuscripts usually improves them considerably, and while 10,000 words still allows detailed and substantive treatment on a par with almost all comparable journals, this allows us to use our page budget to give readers a greater variety of material.

Our current *modus operandi* of sharing production tasks between Anne Chippindale and Cambridge University Press is working admirably, with the journal coming out efficiently and on schedule. Financially, the journal continues to make a healthy surplus for the McDonald Institute. Circulation and readership continues to expand; traditional individual subscriptions (both online and in print) are stable, while the number of readers with access to the journal continues to grow, thanks to CUP's efforts in bundling the journal into packages of humanities journals sold to library consortia in many countries.

Plans for 2016 (Volume 26) include negotiating an expanded page budget with CUP, and revamping how we handle book reviews. We currently have one special thematic section scheduled, on the use of assemblage theory in archaeology (Andy M. Jones & Yannis Hamilakis).











McDonald Institute Monographs

SIMON STODDART (Acting Series Editor) & EMMA JARMAN (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

Rainforest foraging and farming in Island Southeast Asia: The archaeology of the Niah Caves, Sarawak edited by Graeme Barker

'The authors have successfully collated, condensed and interpreted the Niah Caves excavations, providing remarkable insights into the rich and diverse cultural heritage of Borneo and its broader implications for world (pre)history.'

Antiquity 89 (2015)

Spong Hill, part IX: Chronology and Synthesis by Catherine Hills and Sam Lucy

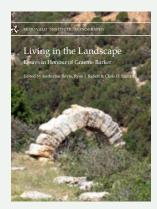
'This important publication changes our perceptions of the Anglo-Saxon settlement of England."

British Archaeology* (July/August 2015)

The monograph publications are now edited by the Deputy Director with the assistance of Emma Jarman, Anne Chippindale and Ben Plumridge and the graphics team of the Cambridge Archaeological Unit. Anne Chippindale will play a leading role in the preparation of the *Annual Report* and the *Cambridge Archaeological Journal*, whereas Ben Plumridge and the graphics team of the Cambridge Archaeological Unit will focus on monograph production.

Living in the Landscape: Essays in Honour of Graeme Barker edited by Katherine Boyle, Ryan J. Rabett & Chris O. Hunt Hardback | £48/\$70.57 | ISBN 978-1-902937-73-1 | xvi + 364 pp. | 131 figs | 28 tables | 2014 |

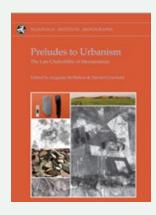
This edited volume reflects on the multitude of ways by which humans shape and are shaped by the natural world, and how Archaeology and its cognate disciplines recover this relationship. The structure and content of the book recognize Graeme Barker's pioneering contribution to the scientific study of human–environment interaction, and form a secondary dialectic between his many colleagues and past students and the academic vista which he has helped define. The volume comprises 22 thematic papers, arranged chronologically, each a presentation of front-line research in their respective fields. They mirror the scope of Barker's legacy through a focus on transitions in the human–environment relationship, how they are enacted and perceived. The assembled chapters illustrate how climate, demographic, subsistence, social and ecological change have affected cultures from the Palaeolithic to Historical, from



North Africa and West-Central Eurasia to Southeast Asia and China. They also chronicle the innovations and renegotiated relations that communities have devised to meet and exploit the many shifting realities involved with Living in the Landscape.

Preludes to Urbanism: The Late Chalcolithic of Mesopotamia edited by Augusta McMahon, Harriet Crawford Hardback \mid £30/US\$44.10 \mid ISBN-13: 978-1-902937-65-6 \mid x + 196 pp. \mid 108 figs \mid 8 tables \mid 2015 \mid

This volume explores early complex society and nascent urbanism, based in studies of Mesopotamia during the fifth–fourth millennia BC. Urbanism in the Near East has traditionally been located in late fourth-millennium BC southern Mesopotamia (south Iraq); but recent excavations and surveys in northeast Syria and southeast Turkey have identified a distinctively northern Mesopotamian variant of this development, which can be dated to the early fourth millennium BC. The authors use multi-scalar approaches, including material culture-based studies, settlement archaeology and regional surveys, to achieve an understanding of the dynamics of early urbanism across this key region. The book reveals the variety of social, economic and political relationships that are implicit within an urban centre and an urbanized society.



Archaeological Review from Cambridge

GENERAL EDITORS 2014–15: ANA TAVARES, MAT DALTON & Georgie Peters

ARC has once again enjoyed a successful year, showcasing the talents of graduate students (and beyond), both within the department and from other universities globally. The biannual journal, which is run on a non-profit voluntary basis by post-graduate students at the Division of Archaeology, produced two highly successful issues tackling diverse aspects of the archaeological discipline. In November 2014 we had *The Archive Issue* (29.2), edited by Renate Fellinger and Leanne Philpot, which reassessed this fundamental resource of archaeology, examining the new approaches and perceptions surrounding archives and their contribution to the archaeological discipline. This was followed by the April 2015 issue (30.1), Seen and Unseen Spaces, edited by Mat Dalton, Georgie Peters and Ana Tavares, which contained a diverse array of papers looking at how visibility of places and activities on a variety of scales can affect our interpretation of the past.

ARC also looks forward to the release of our next two issues this upcoming year: the forthcoming November 2015 issue, Archaeology: Myths Within and Without, edited by Ben Hinson and Barbora Janulikova, which looks at the different ways in which mythology plays a part in our interpretation of archaeology. Then, in April 2016 Meghan Strong edits issue 31.1, In the Trenches, looking at aspects of conflict archaeology and how modern conflict affects archaeologists working today.

We look forward to welcoming new members of the ARC committee with the start of the new academic year. More information about all of our past and upcoming 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/





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CRAIG ALEXANDER

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MARTIN ALLEN

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GRAEME BARKER

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ELIZABETH C. BLAKE

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JENNIFER FRENCH

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ANTHONY SNODGRASS

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CHRIS WINGFIELD

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Technical Staff Publications

Tonko Rajkovača

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Postgraduate Students' **Publications**

Pablo Alonso González

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ROBERT ANSTEY

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JEREMY BENNETT

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MAT DALTON

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ALEX LOKTIONOV

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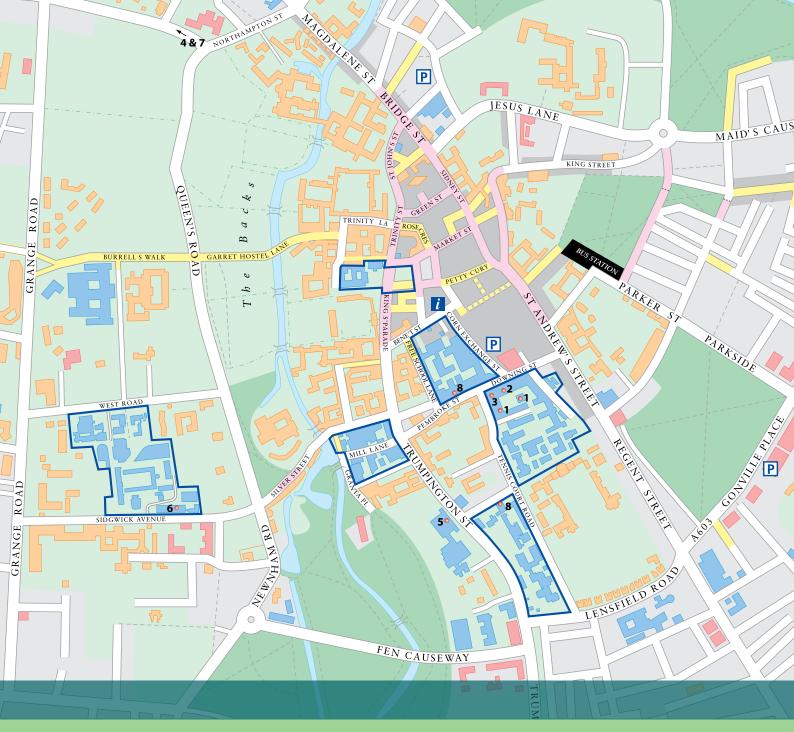


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