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Introduction: The McDonald Institute and Archaeology at Cambridge

CYPRIAN BROODBANK & JAMES H. BARRETT

It has been another extraordinary year for Archaeology at Cambridge as the new Department continues to grow. Matthew Collins (McDonald Professor of Palaeoproteomics), Paul Lane (Jennifer Ward Oppenheimer Professor of the Deep History and Archaeology of Africa) and Marcos Martín-Torres (Pitt-Rivers Professor of Archaeological Science) took up their new posts. So did Nikhil Chaudhary (Lecturer in Human Evolutionary and Behavioural Ecology) and Emma Pomeroy (Lecturer in the Evolution of Health, Diet and Disease), strengthening Biological Anthropology. Three further lecturers in Biological Anthropology, appointed to start in 2019–20, will be introduced in next year’s report.

We have also been very fortunate to have Jane Humphris, Director of the British Institute in Eastern Africa, join the McDonald Institute on a 20 per cent appointment, and Rachel Ballantyne take up a part-time teaching post in Archaeobotany. Our teaching staff was further augmented by the talents of Temporary Lecturers Jason Hawkes, Jason Hodgson, Marc Vander Linden and Selena Wisnom.

The Institute also welcomed new postdoctoral research fellows. Andreas Angourakis joined as a Research Associate on the ERC project ‘Winter Rain, Summer Rain: Adaptation, Climate Change, Resilience and the Indus Civilisation’. Nancy Highcock joined as a Research Associate on the Swedish Research Council project ‘Memories for Life: Materiality and Memory of Ancient Near Eastern Inscribed Private Objects’. Ruoyun Hui joined as a Research Associate on the Wellcome Trust funded ‘After the Plague’ project. We were also delighted to retain talented researchers in key new roles. Beatriz Marín-Aguilera was appointed to our flagship Renfrew Fellowship, for research on ‘Bodies Matter: A Comparative Approach to Colonial Borderlands’. Toby Wilkinson took up a Research Associate post assisting the Director with publication of research on Kythera, Greece.

2018–19 was a great academic year for grants and awards. It saw the launch of two new ERC projects: ‘Beasts to Craft’, an Advanced Grant on the bioarchaeology of medieval parchment, led by Matthew Collins, and ‘Encounter’, a Starting Grant on demographic and agricultural change in Japan led by Enrico Crema. Paul Lane is co-investigator of a new AHRC grant ‘Rising from the Depths: Utilising Marine Cultural Heritage in East Africa to Help Develop Sustainable Social, Economic and Cultural Benefits’. He also received new grants from the British Institute in Eastern Africa, Research England and other sources for community archaeology in Africa. Gilly Carr received funding from the International Holocaust Remembrance Alliance for a project on ‘Sites at Risk: Guidelines for Best Practice’. Cameron Petrie and Emma Pomeroy were awarded British Academy grants to study, respectively, collections in the National Museum in Afghanistan and Neanderthal behaviour. With Shadreck Chirikure of the University of Cape Town, Marcos Martín-Torres was awarded a Royal Society Newton Mobility Grant to study ‘Archaeological Science and Globalisation: A Case Study of Crucibles and Metallurgical Artefacts from Great Zimbabwe World Heritage Site’. PhD studentships on prehistoric Cyprus and marine historical ecology were funded by grants to Cyprian Broodbank (Pouroulis Foundation) and James Barrett (Horizon2020 Marie Skłodowska-Curie ITN), respectively.

It was also a year to wish completing postdocs and fixed-term staff well in their new activities. Jessica Beck moved to Vassar College. Robert Attenborough becomes a Senior Fellow of the McDonald Institute. Marianne Hem Eriksen took up her Associate Professorship at the University of Oslo. Giulio Lucarini was appointed to a permanent research position at the Italian National Research Council. Daniel Longman took up a lectureship in Physiology at Loughborough University. Ian Moffat returned to Flinders University as a Senior Research Fellow. Anna Stevens took up a post at the University of Melbourne. Andrew Turner moved to the J. Paul Getty Museum. Darryl Wilkinson will take up an Assistant Professorship at Dartmouth College and Selena Wisnom takes up a Lectureship in the Heritage of the Middle East at the University of Leicester.
We also bid a fond farewell to Jay Stock, Reader in Human Evolution and Adaptability, who takes up a new post at Western University in Canada, to Professor Sue Oosthuizen on her retirement from the Institute of Continuing Education, and to temporary lecturers Robert Attenborough, Jason Hawkes, Jason Hodgson and Selena Wisnom.

The programme of distinguished lectures, conferences and workshops was as full as ever. Details are provided in the report to follow. Particular lecture highlights include the McDonald Annual Lecture by Roberta Gilchrist (University of Reading) on ‘The Medieval Ritual Landscape: Archaeology and Folk Religion’ and the second Annual Heritage Lecture by Mark Turin (University of British Columbia) on ‘Language as Heritage’. Among others, major conferences and workshops included: the 20th Cambridge Heritage Symposium: Heritage and Food, ‘Big Data in Archaeology: Practicalities and Possibilities,’ ‘Fierce Lions, Angry Mice and Fat-tailed Sheep: Animal Encounters in the Ancient Near East,’ ‘Neanderthal Notions of Death and its Aftermath,’ ‘Mend the Gap: Human/Environment Interactions from the Last Glacial Maximum to the Mid Holocene,’ ‘Queer(y)ing the Past: An Afternoon of Alternative Archaeology’ (a contribution to LGBT+ history month) and ‘Reclaiming Social Complexity in Global Perspective’.

Throughout the archaeology at Cambridge community it was a year of highlights and achievements. There is space for only a sample here. The Department’s two new MPhil programmes, in Heritage Studies and Archaeological Science, have been approved and will begin recruiting for October 2019 and October 2020 starts, respectively. Concurrent with her McDonald Institute role, Katherine Boyle was appointed Director of Research at Homerton College. Postdoc M. Cemre Ustunkaya was co-winner of the University’s Researcher Development Pitch Competition for an important leadership training initiative ‘The Researchers’ Sisterhood: Supporting the Next Generation of Female Researchers.’ Postgraduate students Danika Parikh and Akshyeta Suryanarayan were winners in the 2019 Outstanding Student Contribution to Education Award (OSCEAs) in the category of Inclusive Practices. The Cambridge Archaeological Unit achieved a Green Impact Bronze Award. Congratulations are owed to Gilly Carr on being elected a Fellow of the Royal Historical Society and to Martin Worthington, whose short film in Babylonian ‘The Poor Man of Nippur’ took the world by storm. Not least, long-serving custodian Silvia Hogg was awarded a professional staff service recognition award in the category of ‘unsung hero’.

In brief, it was a year of notable events, great successes and exciting new developments. We congratulate everyone in the wider community of Archaeology at Cambridge for their individual and collective achievements, as we look to archaeology’s contributions to the challenges of the decade to come.

Filming ‘The Poor Man of Nippur’—the world’s first film in Babylonian. Directed by Martin Worthington with a cast of Assyriology students and staff. View film at https://www.arch.cam.ac.uk/about-us mesopotamia/mesopotamian-films
The Museum of Archaeology and Anthropology (MAA)

Archaeology at the Museum of Archaeology and Anthropology had an active and varied 2018–19 academic year. Front of House recorded high visitor numbers (80,270), and the popular exhibition A Survival Story: Prehistoric Life at Star Carr has been extended. The Education Team facilitated 112 school groups (3247 pupils and teachers) and 56 self-directed school visits (1457 pupils and teachers). Taught sessions focused on many archaeological subjects, from the Maya to British prehistory.

In October 2018, Akshyeta Suryanarayan and Danika Parikh (Archaeology PhD researchers) and Ananya Mishra (PhD researcher in English) launched their Untold Histories Museum Tours to tell stories of collecting through colonialism and conflict. Recently, they received an award for Outstanding Student Contribution to Education under Inclusive Practice (Access and Outreach) from the Cambridge Centre for Teaching and Learning, and were mentioned in a New York Times article on alternative museum tours.

In terms of tertiary education, the Keyser Workroom received 328 undergraduate student visits to work with archaeological collections as part of 32 practical classes and 13 open sessions. Across both archaeology and anthropology, the museum also received 493 enquiries, 219 research visits and 102 loan arrangements.

Museum archaeologists have been conducting innovative projects. In 2018, Senior Curator Jody Joy gained funding for Unpacking Cambridge’s Past from the Cambridge Humanities Research Grant Scheme. This grant enabled Teaching and Collections Assistant Eleanor Wilkinson to perform a major reassessment of Cambridgeshire’s Iron Age collections. The brand-new temporary exhibition Feast! is an exciting outcome from this research.

In September, we were sorry to say goodbye to Senior Curator for World Archaeology Andrew Turner, who has taken up a position at the J. Paul Getty Museum in California, USA. Dr Turner had a productive year at the MAA, including updating exhibition information in the Andrews Gallery, and we wish him all the best in his new role.

Looking forward to the 2019–20 year, we are thrilled to begin a major project to relocate all our off-site collections to a new Collections Study Centre in a former Cold War bunker in south Cambridge. The University of Cambridge is supporting the refurbishment of the building, to be completed in 2020, as well as the five-year project to photograph and rehouse around 250,000 objects. Mark Elliott (Senior Curator, Anthropology) and Imogen Gunn (Collections Manager, Archaeology) have been spearheading the preliminary work on the project, which will ultimately have a dedicated Project Team of up to 11 people. By the end of the project the collections will be more visible and physically accessible than ever before, both online and in a new purpose-built object lab.


Previously unaccessioned fowl bones (TEMP.00813.2) from a burial at Snailwell, Cambridgeshire. Eleanor Wilkinson recognized the bones as those identified in the Snailwell excavation report, published in the Proceedings of the Cambridge Antiquarian Society.

The new temporary exhibition Feast!—an outcome of Jody Joy and Eleanor Wilkinson’s research into Iron Age feasting.
Cambridge Archaeological Unit
CHRISTOPHER EVANS

In February/March 2019 the Unit sent a field-team down to initiate a survey of the archaeology of the South Georgia Islands. This proved entirely successful and it looks as if the CAU is set to start working in earnest in the Antarctic region over the next few years. See p. 29 for a fuller report.

At ‘home’, within Cambridge’s historic core, the most significant site was along Round Church Street behind the Student Union Building. The sequence proved surprisingly shallow, but a high density of Roman finds and cut features were present. While the town’s King’s Ditch defensive circuit extended into the site’s northern end, the area was otherwise marginal relative to Cambridge’s core in medieval times. With wells and quarrying pits occurring, nonetheless, some spectacular finds were forthcoming, particularly a seventeenth-century pocket sun-dial (ivory), probably of French origin, and a sword pomel.

Within Cambridge’s suburbs, after various campaigns, North West Cambridge’s (aka Eddington) fieldwork finally drew to an end, with its villa-estate’s bathhouse—illustrated in last year’s report—completed amid trying weather conditions. On the city’s north side, in the fields opposite the airport (and beside the Newmarket Road Park-&-Ride), major excavations occurred on the Marshall Wing land anticipating housing. Having multi-period land-use, a major Middle Bronze Age enclosure complex there was later superseded by Iron Age and Roman settlement. In addition was a scatter of Early Saxon features, including a Grubenhaus that had been destroyed by fire and whose charred remains provide rare insights into the period’s sunken building techniques.

Over the year work has continued on the Unit’s long-standing quarry landscapes, including at Broom, Beds. (Iron Age), West Deeping in South Lincs. (prehistoric and a probable Roman villa) and,
in the Cam Valley north of Cambridge, at Gravel Diggers Farm/Mitchell Hill, where Early–Middle Iron Age settlement has been exposed. The most ‘headline’ quarry results have, though, been from this year’s work at Hanson’s Needingworth Quarry, across the floodplain east of the River Great Ouse and north of Over. There, involving two of the river’s palaeochannels, within a small side channel of one of them was a mass of preserved timber. Although having only very few artefacts as such, this would appear to be a series of oft-reset Middle Bronze Age fishing weirs. Also excavated there was a small Early Bronze Age barrow with a central pit-pyre cremation and a secondary interment consisting of a ‘cocktail-shaker’-like arrangement of Collared Urns together holding what were the transported burnt remains of a mature female.

A second round barrow, much larger and of Neolithic date, was also dug at Over (the monument’s dating coming from a cache of worked flint within the top of its mound). Six inhumations were recovered in total. The primary interment was unaccompanied, whereas a secondary child’s burial cut into the surrounding ditch contained two fineware Beakers. The other burials—all without grave goods or personal ornaments—occurred within the mound’s upper profile and only their radiocarbon dating will determine if they are Neolithic or Bronze Age.

(Below, left) The Bronze Age barrow at Over under excavation.

(Below) Collared Urn ‘cocktail-shaker’ arrangement for the transportation of cremated human remains.
The Material Culture Hub
SHEILA KOHRING

The 2018–19 academic year started strong. We welcomed Marcos Martinón-Torres into the community as a co-director, and the lab hosted the Michaelmas Garrod Seminars. The series included Dr Karina Grömer (Naturhistorisches Museum Wien) speaking on textiles as prestige goods in the Iron Age Hallstatt period, Professor Gavin Lucas (University of Iceland) on salient objects and the idea of varying importance, Professor Lin Foxhall (University of Liverpool) on the agency of things in social networks, Dr Stephanie Wynne Jones (University of York) on living with objects at Songo Mnara (Tanzania) and Dr Kunlong Chen (UCL) finishing the series by addressing the social and economic landscape of the Shang period through a metallurgical perspective. In addition to these lectures, the Hub hosted the Time and Material Culture workshop as part of the wider university Material Culture Forum in Michaelmas to kick off this interdisciplinary community’s workshop series, and Andrew Turner (Museum of Archaeology and Anthropology) gave us a lunchtime lab seminar on Mesoamerican trade to end our events in the Easter term.

Within our membership, we said goodbye in Lent to Marianne Hem Eriksen, who returned to the University of Oslo, but we welcomed Ann-Zanettte Tsigaridas Glørstad (Kulturhistorisk Museum, University of Oslo) as a Visiting Scholar for the Lent and Easter terms. Finally, but far from least, we would like to congratulate two of our PhD researchers, Danika Parikh and Akshyeta Suryanarayan (and colleague Ananya Mishra), on winning the 2019 Access and Outreach Outstanding Student Contribution to Education award. They have taken time within their studies to create and deliver ‘Untold Histories’ museum tours at the Museum of Archaeology and Anthropology. Well done!
In the second year since its establishment in 2017, the Cambridge Heritage Research Centre (CHRC) has continued to grow its activities and events, expanding the range of the Centre’s research themes and exploring new formats for engagement and collaboration.

The CHRC welcomed a new cohort of graduate members in October 2018, the last year for which heritage studies would be taught as an Archaeological Heritage and Museums option within the MPhil in Archaeology, before the launch of the MPhil in Heritage Studies in October 2019.

The academic year started with an opportunity to showcase the exciting and wide-reaching research topics of our established doctoral student members at the Annual Heritage Fair, where poster presentations displayed current projects. Both PhD and MPhil student members benefited from talks by a number of distinguished visitors to Cambridge arranged by the CHRC and also from several graduate masterclasses which provided them with new perspectives on their developing research projects.

The Heritage Research Seminar Series was another forum displaying the breadth and interdisciplinary nature of the field, with 11 seminars taking place during term-time on subjects ranging from ‘The role of women in the transmission of Sudanese intangible heritage’ to ‘The protection of cultural property during armed conflict’. In May the CHRC held its second Annual Heritage Lecture at which Professor Mark Turin (University of British Columbia) spoke about ‘Language as Heritage’ and Indigenous language resurgence in the twenty-first century, in what was a timely presentation in the United Nations International Year of Indigenous Languages. Since giving his lecture, Professor Turin has become one of seven Affiliated Members of the CHRC, with Dr Tanja Hoffmann (University of Saskatchewan) also linking with the Centre in this capacity in 2019. The CHRC welcomed several visiting scholars who contributed greatly to the heritage community this year: Felipe Gaitán-Ammann (Columbia), Dr Hyun Kyung Lee (South Korea), Dr Eisuke Tanaka (Japan) and Saw Naing Oo (Myanmar).

May also saw the 20th Cambridge Heritage Symposium. The CHRC welcomed 20 speakers and over 60 delegates to the two-day event to explore the subject of Heritage and Food. As in previous years the Symposium convenors, Rebecca Haboucha and Dr Liliana Janik, were ably supported by our Heritage MPhil students, both in planning the event and on the day.

Centre research projects continued in Cape Verde (Marie-Louise Stig Sørensen), Cambodia (Dacia Viejo Rose), Tanzania and coastal East Africa (Paul Lane) and the White Sea region (Liliana Janik). New projects which began in during the 2018–19 academic year included Gilly Carr’s project ‘Sites at Risk’, funded by the International Holocaust Remembrance Alliance (IHRA), and Marie Louise Stig Sørensen’s project ‘Yangshao Culture: 100 year research history and heritage impact’, funded by the Shanghai Academy of Guyewang Studies.

https://www.heritage.arch.cam.ac.uk/
Institute of Continuing Education (ICE)
Gilly Carr

The Institute of Continuing Education (ICE) offers part-time University of Cambridge awards in Archaeology and Historic Environment at first-, second- and third-year undergraduate levels. During 2018–19, academic leadership in Archaeology was provided by Gilly Carr, University Senior Lecturer in Archaeology, and in Historic Environment by Susan Oosthuizen, who retired at the end of 2018.

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 Certificate in The Archaeology of Ancient Britain and the Advanced Diploma in Research Methods was successfully offered, as were the Certificate in the Study of Medieval England and the Certificate in The Making of the English Landscape.

Non-accredited courses were offered in Archaeology and Historic Environment. A healthy number of day schools and weekend courses continue to be offered in these fields in a wide variety of subjects. The Institute is also an enthusiastic contributor to the Festival of Ideas, offering an annual field visit led by Susan Oosthuizen and a lecture in Archaeology by Gilly Carr.
Members

- Dr Martin Allen (Fitzwilliam Museum) Later medieval English coins and tokens
- Dr Robert Attenborough (Department of Archaeology) Anthropological and archaeological genetics; evolutionary anthropology; human population biology and health
- Dr James Barrett (McDonald Institute) Medieval archaeology and historical ecology; ecological globalization; comparative study of maritime societies
- Dr Kate Beats (Faculty of Classics) Curator of Museum of Classical Archaeology
- Dr Trisha Biers (Duckworth Collection Curator) Human osteology; palaeopathology; death and display
- Dr Marcus Britain (Cambridge Archaeological Unit) Interaction of landscape, memory and identity within non-literate societies
- Prof. Cyprian Broodbank (McDonald Institute) Mediterranean archaeology and history; Aegean prehistory; island archaeology; landscape archaeology; comparative world archaeology
- Dr Judith Bunbury (Department of Earth Sciences) Geoarchaeology in Egypt
- Prof. Ulf Büntgen (Department of Geography) Environmental systems across space and time; dendrochronology
- Dr Gilly Carr (Institute of Continuing Education) Archaeology and heritage of WWII, specifically the German occupation of the Channel Islands
- Dr Nikhil Chaudhary (Department of Archaeology) Human evolutionary and behavioural ecology
- Dr Anastasia Christophilopoulou (Fitzwilliam Museum) Assistant Keeper/Cyprus Curator
- Prof. Matthew Collins (McDonald Institute) McDonald Professor in Palaeoproteomics
- Dr Enrico Crema (McDonald Anniversary Fellow) Modelling the emergence and evolution of cultural boundaries
- Dr Elizabeth DeMarrais (Department 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
- Dr Paola Filippucci (Murray Edwards College) Heritage; battlefields of the Western Front
- Prof. Rob Foley (Department of Archaeology) Human evolution
- Prof. Charles French (Department of Archaeology) Landscape interpretation; soil micro-morphology; scientific rescue archaeology
- Dr Yannis Galanakis (Faculty of Classics) Greek prehistory
- David Gibson (Cambridge Archaeological Unit) Neolithic and Bronze Age
- Dr Caroline Goodson (Faculty of History) Early medieval Mediterranean; urbanism and built environment; environmental history
- Dr Susanne Hakenbeck (Department of Archaeology) Early medieval Europe; mortuary studies; archaeological theory; stable isotope analysis
- Dr Jason Hawkes (Department of Archaeology) Temporary Lecturer in South Asian Archaeology
- Dr Jason Hodgson (Department of Archaeology) Temporary Lecturer in Biological Anthropology
- Dr Charlotte Houldcroft (Department of Archaeology) Temporary Lecturer in Biological Anthropology
- Dr Jody Joy (Museum of Archaeology & Anthropology) Senior Assistant Curator of Archaeology
- Dr Richard Kelleher (Fitzwilliam Museum) Assistant Keeper, Department of Coins and Medals
- Dr Mark Knight (Cambridge Archaeological Unit) Prehistoric and wetland field archaeology
- Prof. Christine Lane (Department of Geography) Geochronologist and Quaternary Geographer; Prehistoric and wetland field archaeology
- Dr Joe Jeffery (Department of Archaeology) Archaeological theory; visual cognition in rock art
- Dr Liliana Janik (Department of Archaeology) Archaeological theory; visual cognition in rock art
- Dr Paul Lane (Department of Archaeology) Later Holocene archaeology of sub-Saharan Africa
- Dr Alessandro Launaro (Faculty of Classics) Archaeology and history of Roman Italy; landscape archaeology; economic history
- Dr Sam Lucy (Newnham College) Anglo-Saxon archaeology
- Dr Augusta McMahon (Department of Archaeology) Mesopotamian archaeology and history; complex society; site biography
- Prof. Marcos Martín-Torres (Department of Archaeology) Archaeological science
- Prof. Jianjun Mei (Director, Needham Institute) Historical metallurgy and metals
- Prof. Martin Millett (BA (Faculty of Classics) Social and economic archaeology of the Roman world
- Dr Preston Miracle (Department of Archaeology) Palaeolithic and Mesolithic Europe; zooarchaeology; ethnosemantics; palaeoanthropology
- Prof. Marta Mirazon Lahr (Department of Archaeology) Role of East Africa in the evolution of human diversity
- Dr Philip Nigst (Department of Archaeology) Palaeolithic archaeology
- Dr Tamsin O’Connell (Department of Archaeology) Diet and nutrition in past and present human populations; stable isotope techniques
- Prof. Clive Oppenheimer (Department of Geography) Volcanic & magmatic processes; geoarchaeology; palaeoenvironments
- Prof. Robin Osborne FBA (Faculty of Classics) Iconography of everyday life’s scenes on Athenian pots; the Classical Body
- Dr Harth Papazian (Department of Archaeology) Egyptology
- Dr Cameron Petrie (Department of Archaeology) South Asian and Iranian archaeology
- Dr Adrian Popescu (Fitzwilliam Museum) Ancient coins and medals
- Prof. John Robb (Department of Archaeology) Neolithic Europe; archaeological theory; symbolism and agency
- Dr Marie Louise Stig Sørensen (Department of Archaeology) Bronze Age Europe; archaeological heritage studies; archaeological theory
- Dr Kate Spence (Department of Archaeology) Archaeology of ancient Egypt; urbanism and built environment; social history, art
- Dr Nigel Spivey (Faculty of Classics) Etruscan art and archaeology; Greco-Roman art; the anthropology of art
- Dr Jay Stock (LCHES) Bioarchaeology; human osteology; human growth and development
- Dr Simon Stoddart (Department of Archaeology) Later European prehistory; landscape archaeology; complex societies; island communities
- Dr Andrew Turner (Museum of Archaeology & Anthropology) Mesoamerican art
- Dr Susanne Turner (Faculty of Classics) Curator, Museum of Classical Archaeology
- Dr Dacia Viejo Rose (Department of Archaeology) War-time destruction of cultural heritage and its post-war reconstruction
Members (cont.)

- Prof. Barry Kemp (Department of Archaeology)
- Prof. Martin Jones (Department of Archaeology)
- Dr Selena Wisnom (Department of Archaeology)
- Prof. Sir Paul Mellars FBA (Retired)
  Palaeolithic and Mesolithic archaeology
- Dr Joan Oates FBA (Retired)
  Mesopotamia and Syria
- Prof. David Phillipson (Retired)
  African Archaeology
- Prof. Nicholas Postgate FBA (Retired)
  Assyriology; social and economic history of Mesopotamia
- Dr Kate Pretty (Retired)
- Prof. Lord Colin Renfrew FBA (Retired)
  Keros Project
- Dr Jane Renfrew (Retired)
  Uses of plants by prehistoric people, ancient agriculture
- Dr Colin Shell (Retired)
  2D & 3D geophysical survey
- Prof. Anthony Snodgrass FBA (Retired)
  Boerotia Project
- Dr Janice Stargardt (Sidney Sussex College)
  Archaeology of South and Southeast Asia
- Prof. Andrew Wallace-Hadrill FBA (Faculty of Classics)
  Impact of the ancient city
- Prof. Ann Wintle (Retired)
  Luminescence dating
- Prof. Graeme Barker FBA (McDonald Institute)
  Landscape archaeology (Mediterranean, and zone, tropical); transitions to farming
- Dr Roger Bland (British Museum)
  Department of Portable Antiquities and Treasure
- Dr Janine Bourriau (Retired)
  Egyptology and ceramics
- Prof. Gerald Brown (Retired)
  Indigenous communities (2700–2200 BC)
- Dr Jonathan King (von Hügel Fellow, British Museum)
  Museum anthropologist; Arctic material culture; Native North America
- Prof. Geoffrey Martin (Honorary Keeper of the Archives, Christ’s College)
  Egyptology
- Prof. Nick Mascie-Taylor (Retired)
  Human population biology and health
- Prof. Christopher Chippindale (Retired)
  Australian rock art
- Dr Robert Harding (University College London)
  Early South Asia; archaeology of Buddhism
- Dr Nancy Highcock (Research Associate)
  Materiality and memory of ancient Near Eastern inscribed private objects
- Dr Jeremy Hill (British Museum)
  Head of Research, British Museum
- Prof. David Phillipson (Retired)
  African Archaeology
- Prof. Nicholas Postgate FBA (Retired)
  Assyriology; social and economic history of Mesopotamia
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  Mesopotamia and Syria
- Prof. David Phillipson (Retired)
  African Archaeology
- Prof. Nicholas Postgate FBA (Retired)
  Assyriology; social and economic history of Mesopotamia
- Dr Kate Pretty (Retired)
- Prof. Lord Colin Renfrew FBA (Retired)
  Keros Project
- Dr Jane Renfrew (Retired)
  Uses of plants by prehistoric people, ancient agriculture
- Dr Colin Shell (Retired)
  2D & 3D geophysical survey
- Prof. Anthony Snodgrass FBA (Retired)
  Boerotia Project
- Dr Janice Stargardt (Sidney Sussex College)
  Archaeology of South and Southeast Asia
- Prof. Andrew Wallace-Hadrill FBA (Faculty of Classics)
  Impact of the ancient city
- Prof. Ann Wintle (Retired)
  Luminescence dating

Senior McDonald Fellows

- Prof. Graeme Barker FBA (McDonald Institute)
  Landscape archaeology (Mediterranean, and zone, tropical); transitions to farming
- Dr Roger Bland (British Museum)
  Department of Portable Antiquities and Treasure
- Dr Janine Bourriau (Retired)
  Egyptology and ceramics
- Prof. Gerald Brown (Retired)
  Indigenous communities (2700–2200 BC)
- Dr Jonathan King (von Hügel Fellow, British Museum)
  Museum anthropologist; Arctic material culture; Native North America
- Prof. Geoffrey Martin (Honorary Keeper of the Archives, Christ’s College)
  Egyptology
- Prof. Nick Mascie-Taylor (Retired)
  Human population biology and health
- Prof. Sir Paul Mellars FBA (Retired)
  Palaeolithic and Mesolithic archaeology
- Dr Joan Oates FBA (Retired)
  Mesopotamia and Syria
- Prof. David Phillipson (Retired)
  African Archaeology
- Prof. Nicholas Postgate FBA (Retired)
  Assyriology; social and economic history of Mesopotamia
- Dr Kate Pretty (Retired)
- Prof. Lord Colin Renfrew FBA (Retired)
  Keros Project
- Dr Jane Renfrew (Retired)
  Uses of plants by prehistoric people, ancient agriculture
- Dr Colin Shell (Retired)
  2D & 3D geophysical survey
- Prof. Anthony Snodgrass FBA (Retired)
  Boerotia Project
- Dr Janice Stargardt (Sidney Sussex College)
  Archaeology of South and Southeast Asia
- Prof. Andrew Wallace-Hadrill FBA (Faculty of Classics)
  Impact of the ancient city
- Prof. Ann Wintle (Retired)
  Luminescence dating

McDonald Research Fellows

- Dr Andreas Angourakis (Research Associate)
  Icebergs: Winter rain, summer rain – adaptation, climate change, resilience and the Indus civilization
- Dr Tunde Babalola
  (Smuts Fellowship, Centre for African Studies)
  Craft production, specialization and complex societies in West Africa; archaeology of glass making in Ile-Ife, Nigeria; early trade and exchange
- Dr Rachel Ballantyne (Research Associate)
  Discovering the legacy of historic Atlantic cod exploitation using ancient DNA
- Dr Jess Beck (Marie Curie Postdoctoral Researcher)
  Identity and inequality in early mining communities (2700–2200 bc)
- Dr Nick Blegen (Department of Geography)
  Ashes of our ancestors
- Dr Roger Blench
  (Kay Williamson Educational Foundation)
  Linguistics and anthropology in West-Central Africa, Southeast Asia and Peru
- Dr Marjolein Bosch
  (Marie Curie Postdoctoral Researcher)
  Behavioural modernity in the Early Upper Palaeolithic
- Dr Michael Boyd
  (Stavros S. Niarchos Research Fellow)
  Icon and centre in the Cycladic early Bronze Age
- Dr Philip Boyes (Faculty of Classics)
  Bronze and Iron Age Levant; Ugaritic writing system
- Dr Sandra Brunnegger
  (Junior Research Fellow, St Edmunds College)
  Latin America
- Craig Cessford (Research Associate)
  After the Plague: Health and history in medieval Cambridge
- Dr Francesc Conesa (Research Associate)
  Long-term land use and water management strategies in arid margin landscapes
- Dr Jenna Dittmar (Research Associate)
  After the Plague: Health and history in medieval Cambridge; palaeopathology
- Dr Mark Dybále
  (Junior Research Fellow, Jesus College)
  Hunter-gatherer behavioural ecology
- Dr Marianne Hern Erikse
  (Marie Curie/Norwegian Research Council Postdoctoral Researcher)
  Domestic space in Scandinavia from the Bronze Age through the Viking Period
- Dr Rose Ferraby (Faculty of Classics)
  Art and archaeology; Roman towns; geophysical survey
- Dr Elizabeth Fowden (Faculty of Classics)
  Impact of the ancient city
- Dr Arnaud Garcia
  (Marie Curie Postdoctoral Researcher)
  Water management strategies and climate change in the Indus Civilization
- Dr Marc Gener Moret
  (Marie Curie Postdoctoral Researcher)
  IBERION: The rise of iron technology in pre-Roman Iberia: a large-scale and multidisciplinary approach
- Dr Elham Ghasdeh
  (Centre for Human Evolutionary Studies)
  Palaeoethnobotany
- Dr Erik Gjesfeld (Renfrew Fellow)
  Modelling technological change with archaeological big data
- Dr Margarita Gileva
  (Senior Research Associate)
  PROCON project, textile economy and urbanization in Mediterranean Europe
- Dr Adam Green (Research Associate)
  TIGRESS: Transforming India’s Green Revolution by Research and Empowerment for Sustainable food Supplies
- Dr Robert Harding (University College London)
  Early South Asia; archaeology of Buddhism
- Dr Nancy Highcock (Research Associate)
  Materiality and memory of ancient Near Eastern inscribed private objects
- Dr Jeremy Hill (British Museum)
  Head of Research, British Museum
• Dr Emmanuelle Honoré (Research Associate, St John’s College) Cognition and representation of self and the other in North African rock art
• Dr Harriet Hunt (Research Associate) Crops, Pollinators and People
• Dr Francesco Iacono (Marie Curie Postdoctoral Researcher) Cultural heritage of dictatorship in Albania
• Dr Sara Inskip (Research Associate) Health and history in medieval Cambridge; palaeopathology
• Dr Anna Judson (Junior Research Fellow, Gonville & Caius College) Writing systems of the Bronze Age Aegean
• Dr Philipp Kobusch (Faculty of Classics) Hellenistic archaeology
• Dr Simon Kaner (Director, Centre for Japanese Studies, University of East Anglia) Japanese archaeology and cultural heritage; archaeology at the extremities of the Silk Road
• Dr Sheila Kohring (Department of Archaeology) Material Culture Laboratory
• Dr Emma Lightfoot (Research Associate) TwoRains: Winter rain, summer rain – adaptation, climate change, resilience and the Indus civilization
• Dr Diane Lister (Research Associate) Genetic analysis of historical barley landraces; spread of cereal cultivation across Europe
• Dr Emma Loftus (Leverhulme Early Career Fellow) Earliest human occupation of the shoreline.
• Dr Daniel Longman (Research Associate) ADAPT: Adaptation, dispersal and phenotype
• Dr Giulio Lucarini (Research Associate) Archaeological deep history and dynamics of Mediterranean Africa c. 9600–700 BC
• Dr Beatriz Marin Aguiera (Renfrew Fellow) Bodies Matter: A comparative approach to colonial borders
• Dr Javier Martinez-Jiménez (Faculty of Classics) Impact of the ancient city
• Dr Piers Mitchell (Department of Archaeology & Consultant Orthopaedic Surgeon, Peterborough) Palaeopathology/ancient diseases in humans
• Dr Ian Moffat (Commonwealth Rutherford Fellowship) Geoarchaeological investigations of the climate history of human evolution
• Dr Ioanna Moutafi (Marie Curie Postdoctoral Researcher) MYSOBIO: Deciphering the interplay of funerary treatment and social dynamic in the Mycenaean period
• Dr Sam Ottewill-Soulsby (Faculty of Classics) Impact of the ancient city
• Dr Sara Owen (Research Associate, Faculty of Classics) Greek archaeology; culture contact and exchange; Greek ‘colonization’
• Dr Monica Ramirez (Marie Curie Postdoctoral Researcher) Anthropogenic landscapes and evolution of plant production; human-environment interactions during the final Pleistocene and early Holocene in the Levant
• Dr Laerke Recht (Marie Curie Postdoctoral Researcher) The Spirited Horse: Human–equid relations in the Bronze Age Near East
• Dr Jaap Saers (Research Associate) Effects of mobility and physical activity on human postcranial skeletal variation
• Dr Ester Salgarella (Junior Research Fellow, St John’s College) Bronze Age Aegean writing systems, especially Linear A & B
• Dr Julia Shaw (University College London) South Asian archaeology
• Dr Laurence Smith (Independent Scholar) Sukin Project
• Dr Pamela Jane Smith (Independent Scholar) History of archaeology
• Dr Lindsay Spencer (Research Associate, Faculty of Classics) Contexts and relations between early writing systems
• Dr Anna Stevens (Senior Research Associate) Delivering sustainable heritage of rural Egypt: community and archaeology at Tell el-Amarna
• Dr Jeremy Tanner (University College London) Greek and Roman art; early Chinese art; sociology of art; comparative art; art and archaeology
• Dr Christina Tsouparopoulou (Senior Research Associate) Ancient Near Eastern inscribed private objects
• Dr Gemma Tully (Research Associate) Delivering sustainable heritage of rural Egypt: community and archaeology at Tell el-Amarna
• Dr Meltem Cemre Ustunkaya (Research Associate) TwoRains: Winter rain, summer rain – adaptation, climate change, resilience and the Indus civilization
• Dr Darryl Wilkinson (Leverhulme Early Career Fellow) Anarchism in the prehistoric Andes; material culture of anti-complexity

Field Archaeologists in Residence

• Dr Rachel Ballantyne (Cambridge Archaeological Unit) Must Farm post-excavation team
• Chris Chinnock (Museum of London Archaeology – MoLA) Osteoarchaeology: Saxon cemetery, Ketton Quarry
• David Gibson (Cambridge Archaeological Unit) Must Farm post-excavation team
• Dr Mark Knight (Cambridge Archaeological Unit) Must Farm post-excavation team
• Iona Robinson Zeki (Cambridge Archaeological Unit) Must Farm post-excavation team

Honorary Research Affiliates

• Dr Ike Achebe (Nnamdi Azikiwe University) Theoretical intersections between language, material culture, and identity, especially in West Africa
• Dr Fred Baker (Independent Scholar) Archaeologist and film maker
• Prof. Shadreck Chirikure (University of Cape Town) African archaeology
• Dr Tina Greenfield (Joint Field Director, Cambridge Expedition to the Valley of the Kings and NRFF Mission to the Western Wadis) Egyptian archaeology
• Prof. Colin Haselgrove (University of Leicester) Late Iron Age archaeology
• Prof. Christine Hastorf (University of California Berkeley) Palaeoethnobotany and Andean archaeology
• Prof. Michael Herzfeld (Harvard University) Social theory; history of Anthropology; social poetics; politics of history; Europe (especially Greece & Italy); Thailand
• Prof. Poul Holm (Trinity College, Dublin) Environmental history
Honorary Research Affiliates (cont.)

- Dr Evangelina Kiriati (Director, Fitch Laboratory, British School at Athens)
  Ceramic technology, petrography and chemical analysis; Bronze Age in the southern Aegean and Macedonia; Co-director, Kythera Island Project

- Piers Litherland (Director, Cambridge Expedition to the Valley of the Kings and NKRF Mission to the Western Wadi)
  Egyptian archaeology

- Prof. Alessandro Naso
  (Director, Institute for Ancient Mediterranean Studies, National Research Council of Italy)
  Illicit cultures; material culture and models of trade

- Dr Anthony Pace
  (Superintendent of Cultural Heritage, Malta)
  Maltese heritage

- Dr Ronika Power (Macquarie University)
  Biological anthropology

- Prof. Thilo Rehren
  (Director of STARC, Cyprus Institute)
  Science and technology in archaeology; Culture Research Centre

- Prof. Robert G. Scaife
  (University of Southampton)
  Palaeoecologist, archaeobotanist; analysis of pollen, diatoms and charred plant remains

- Dr Christiana Schieb
  (University of Tartu)
  Head of Ancient DNA Laboratories

- Prof. Ravindra Nath Singh
  (Banaras Hindu University)
  Co-director, Land, Water and Settlement and TwaRans projects

- Prof. Matthew Spriggs
  (Australian National University)
  Oceanic archaeology; archaeology and language; meshing of aDNA and archaeological data and theory

- Maria Alicia Uribe Villegas
  (Director, Museo del Oro, Columbia)
  Pre-Hispanic goldwork

- Prof. Ezra Zubrow
  (University at Buffalo)
  Archaeological theory, with a specific interest on palaeoethnography, spatial analysis and simulation

Visiting Scholars

- Dr Laura Basell
  (Queens University, Belfast)
  Life, evolution & palaeoecology at the source of the Nile

- Dr Maria Stella Busana
  (University of Padua)
  Classical archaeology

- Dr Zachary Cofran
  (Vassar College)
  Anthropology

- Dr Phillip DeSmedt
  (Ghent University)
  Geophysical approaches to landscape archaeology; focus on prehistoric land-use and environment

- Dr Lindsay Duncan
  (Independent Scholar)
  Environmental archaeology; archaeobotany; geoarchaeology; human-environment interactions; human niche construction, wetland environments

- Dr Natalia Egüez
  (University of La Laguna)
  Ethnoarchaeology of pastoralism; micro-taphonomy and biomarkers of organic-rich soils and sediments

- Dr Manuel Fernández-Gótz
  (University of Edinburgh)
  Archaeology of Iberia

- Dr Sarah Fiddyment
  (BioARCH, University of York)
  B2C project

- Dr Per Ditte Fredriksen
  (University of Oslo)
  African archaeology; contemporary archaeology; critical heritage studies; Iron Age archaeology

- Dr Zanette Glerstad
  (University of Oslo)
  Historical archaeology; material culture; Viking Age Scandinavia

- Prof. Kathryn Jackes
  (University of Waterloo)
  St John’s College Beaufort Visiting Scholar

- Dr Igor Kreimerman
  (Independent Scholar)
  Effects of warfare on conquered cities and non-combatant population in Mesopotamia 3rd–2nd centuries BC

- Dr David Lubell
  (University of Waterloo)
  St John’s College Beaufort Visiting Scholar

- Dr David Meltzer
  (Southern Methodist University)
  Co-director, Land, Water and Settlement and TwaRans projects

- Dr Aninka Oros Srlen
  (Institute for Quaternary Palaeoentology and Geology, Croatian Academy of Sciences and Arts)
  Mend the Gap twinning project; palaeoecology, palaeoecology and taphonomy of Quaternary birds

- Dr Joanne Rowland
  (University of Edinburgh)
  Pre- and early historic Egypt; mortuary practices; Ptolemaic and Roman Egypt; archaeology of the Nile delta

- Dr Gerd Stegmaier
  (Eberhard-Karls-University Tübingen)
  Late Iron Age oppidum Heidengraben

- Dr Pau Sureda
  (UfH; Pompeu Fabra University)
  Mediterranean Bronze Age; islands archaeology, archaemetalurgy; Śami reindeer pastoralism

- Prof. Ryo Takahashi
  (Wasda University & Sainsbury Institute for the Study of Japanese Arts and Cultures, Norwich)
  Jomon figurines

- Dr Etsuke Tanaka
  (Fukuoka Jo Gakuin University)
  Heritage studies; protecting heritage in the context of tourism development in Turkey

- Dr Matthew Teasdale
  (BioARCH, University of York)
  B2C project

- Dr Derya Yılmaz
  (Ankara University)
  Anatolia during the Early Bronze Age

- Dr Laura Zuconi
  (Stockton University)
  History and archaeology of copper mining in the Southern Levant during Bronze Ages
PhD Students (2018–2019)

- Deborah Priddy (Historic England)
  Inspector of Ancient Monuments

- Dr Carolyn Rando (University College London)
  Forensic archaeological science

- Dr Rebecca Roberts (Administrator, ADAPT Project, University of Cambridge)
  Late Bronze Age to Iron Age land use and subsistence strategies in the Semirechiye region of Kazakhstan

- Dr Calum Robertson (Independent Scholar)
  Heritage and identity in contemporary Scottish society

- Dr Anja Slawisch (Research Associate, Faculty of Classics)
  Greek art and archaeology in the eastern Mediterranean

- Dr Nigel Strudwick (Independent Scholar)
  Egyptology

- Dr Shadia Taha (Wolfson College)
  Cultural heritage; ethnography; qualitative research; community engagement; outreach projects

- Simon Timberlake (Independent Scholar)
  Field archaeology and geology; early metal mining

- Dr Ann de Vareilles (Independent Scholar)
  Archaeobotany

- Dr Robyn Veal (Hughes Hall)
  Ancient natural resource economics

- Dr Lucy Walker (Independent Scholar)
  Archaeolink

- Dr Jean Wilson (Vice-President, Church Monuments Society)
  Material culture and imagery of the Early Modern period; funerary monuments in Britain AD 1500–1700

Postgraduate Students

PhD Students (2018–2019)

- Ethan Aines (Department of Archaeology)
  Memory, Landscape, and Place-Making Through Votive Deposition in Later Prehistoric Norfolk

- Camila Concepcion Alday
  (Department of Archaeology)
  The Dance of Making Fibres: A Study of the Earliest Plant-Fibre Technology by Marine Hunter-Gatherers on the Pacific Coast of South America

- Helen Alderson (Department of Archaeology)
  An Archaeology of Artisan Identities and Global Relationships: Case Studies of 19th and Early 20th Century Weavers and Carvers from Pohnpei and Kosrae, Micronesia

- Pablo Alonso Gonzalez
  (Department of Archaeology)
  Nation-Building and Cultural Heritage in Post-Colonial Cuba (1898–2014)

- Monique Arntz (Department of Archaeology)
  Beyond Meaning: An Artefact Approach to the Neolithic Figurines from Tell Sabi Abyad (Syria) and Çatalhöyük (Turkey)

- Alex Reina Barker (Department of Archaeology)
  Humour in Akkadian Literature: A Contextual Analysis

- Flaminia Bartolini (Department of Archaeology)
  Rome’s Divided Memory: Nazi-Fascist Heritage and Post-War Memory Construction in Italy

- Tristan Begg (Biological Anthropology)
  The Beethoven Genome Project

- Jeremy Bennett (Department of Archaeology)
  Managing the Agrarian Environment in Prehistoric Malta and Gozo

- Hari Blackmore (Department of Archaeology)
  Worlds of Authority, Communities of Practice, and State Formation in Early 1st Millennium AD Central Korea

- Kathryn Boulden (Department of Archaeology)
  A Bioarchaeological Reassessment of Livestock Management Practices between the Neolithic and the Roman Period in Wessex

- Ella Jane Maclod Brown (Department of Archaeology)
  Functional Adaptation of Trabecular Bone in the Mandibular Condyle of Human and Non-Human Primate Populations

- Pippa Browne (Department of Archaeology)
  An Investigation into the Agency and Operation of Food offerings in Old Kingdom Private Mortuary Cults at Saqqara

- Emma Brownlee (Department of Archaeology)
  Change and Continuity of Burial Practice: A Study of Cultural and Religious Cohesion in Early Medieval Europe

- Alessandro Ceccarelli (Department of Archaeology)
  Ceramic Traditions and Ceramic Landscapes of the Indus Civilisation: Investigating the Technologies and Socio-economic Complexity of Rural Pottery Production in Bronze Age Northwest India

- Petros Chatzimpalaioglu (Department of Archaeology)
  Geological Reconnaissance and Provenancing of Potential Neolithic Lithic Sources in the Maltese Islands

- Margaret Comer (Department of Archaeology)
  The Heritage of Repression: Memory, Commemoration, and Politics in Post-Soviet Russia

- Malcolm Connolly (Department of Archaeology)
  Building a Picture of Desert Abandonment during Extreme Climate Phases. Settlement Patterns and Site Formation Processes in the Desert Uplands ‘Refuge’, Australia

- Thomas Crowley (Department of Archaeology)
  We are the Antiques of the World: The Kalasha of Northwest Pakistan and the Age of Heritage

- Leah Damman (Department of Archaeology)
  Buried Together: An Advanced Taphonomic Approach to Human and Animal Co-mingled Fragmentary Interments in Neolithic Britain

- Sarah Louise Decrausaz (Biological Anthropology)
  Bringing to Bear: A Biocultural Examination of the Developmental Origins of the Obstetric Dilemma

- Ningning Dong (Department of Archaeology)
  Animal Classifications in Prehistory – Case Studies in North China during the Neolithic

- Silvia Ferrieri (Department of Archaeology)
  Symbols as Active Conveyors of Meaning. Kudurnus of Southern Mesopotamia in the Second and First Millennium BC

- Lewis Ferrero (Department of Archaeology)
  Invisible Craft, Visible Tools: An Investigation of Textile Tools in Iron Age Southern Britain

- Lindsey Jo Fine (Department of Archaeology)
  Paths to Social Complexity: A Multiscalar Examination of Land Passes in Central Greece

- Laura Elizabeth Foster (Department of Archaeology)
  Exploring Transit in Post-Roman Britain: A Theoretical and Methodological Assessment in Kent

- Dylan Andrew Charles Gaffney (Department of Archaeology)
  Taking the Northern Route: Research into the Initial Colonisation of Insular Rainforests by Archaic and Modern Humans

- Devlin Alexander Gandy (Department of Archaeology)
  Since Time Immemorial: Utilizing Ancient eDNA to Reevaluate Human Presence in the Americas during the Late Pleistocene

- Peter Griffith (Department of Archaeology)
  Late Quaternary Habitats of the Nakuru Basin, Kenya: Phytolith Evidence from the Middle and Late Stone Age Site of Prospect Farm

- Rebecca Haboucha (Department of Archaeology)
  Envisioning Sustainable Heritage in the Face of Climate Change: A Call to Align National Heritage Management Policies across Borders

- Emily Hallinan (Department of Archaeology)
  Variation and modernity in Stone Age landscape use in the Western and Northern Cape, South Africa

- Mark Haughton (Department of Archaeology)
  Social Identities and Power in Early Bronze Age Society: A Comparative Analysis of the Construction and Negotiation of Age and Gender Ideologies in the Burials of Ireland and Scotland

- George Robert Heath-Whyte (Department of Archaeology)
  Bēl and Marduk in the First and Late-Second Millennium BC
Postgraduate Students (cont.)

- Yi-Ting Hsu (Department of Archaeology)
  Fire Assay, Cupellation and the Dissemination of Technical Knowledge in Post-Medieval Europe

- Katrien Janin (Department of Archaeology)
  The Evolutionary Role(s) of Integration and Modularity on the Morphology of the Primate Pelvic Girdle

- Friederike Katharina Jürcke (Department of Archaeology)
  On the Road to Urbanism: Modelling Movement across the Iranian Plateau in the Fourth and Third Millennium ac

- Kyra Elise Kaercher (Department of Archaeology)
  Understanding Regionalization in the Northern Zagros during the Middle Islamic Period (1000–1500 CE): A Ceramic Study

- Sarah Kaewert (Biological Anthropology)
  Immune-driven Positive and Balancing Selection in Human Populations

- David Kay (Department of Archaeology)
  The Changing Rhythms of Settlement and Domestic Space in Marakwet, Northwest Kenya

- Kevin Kay (Department of Archaeology)
  The Material Politics of Houses at Catalhoyuk, 7000–6300 BCE

- Andrea Kocsis (Department of Archaeology)
  The Role of WWI Commemorations in National Mythmaking

- Marta Krzyzanka (Department of Archaeology)
  The Dispersal of Common Buckwheat (Fagopyrum esculentum) across Eurasia, after its Domestication in the 6th Millennium BCE in China

- Rafael Laoutari (Department of Archaeology)
  Social Dynamics in Non-urban Societies: A Multiscalar Analysis of Social Interaction in Prehistoric Bronze Age Cyprus

- Cynthia Larbey (Department of Archaeology)
  In the Human Past is the Perennial Consumption of Starch a Shallow or a Deep Phenomenon?

- Joanna Lawrence (Department of Archaeology)
  Human Conceptualizations of Non-human Animals in the Scandinavian Bronze Age: Perspectives from Swedish Rock Carvings

- Marissa Ledger (Biological Anthropology)
  Intestinal Parasites in the Roman Empire, Their Regional Distribution and Ecological Determinants

- Samantha Leggett (Department of Archaeology)
  Diet, Death and Christianisation in Seventh Century Anglo-Saxon England

- Rennan Lemos (Department of Archaeology)
  Foreign Objects in Context: The Social Role of Egyptian and Egyptian-styled Objects in Mortuary Assemblages from Late Colonial Nubia

- Michael Lewis (Department of Archaeology)
  Social Transformations and Modes of Ceramic Production during the Fourth–Early Third Millennium BCE in the Shahruzor Plain and Bazyan Valley, Iraqi Kurdistan: A Pictographic and Geochemical Study

- Huiru Lian (Department of Archaeology)
  Water and City Development in Southeast China: Geoarchaeology Case Study of the Construction, Occupation and Abandonment of the Ancient Liangzhu City

- Alex Loktionov (Department of Archaeology)
  The Development of the Justice System in Ancient Egypt from the Old to the Middle Kingdom

- Thomas Jacob Matthews Boehmer (Department of Archaeology)
  Tracking Identity Change and Societal Shift in the Late Iron Age and Early Roman Southern North Sea Basin. Can New and Alternative Narratives Be Constructed to Describe the Archaeological Developments of the Period?

- Eleanor Maw (Department of Archaeology)
  The Yorkshire Wolds: Assessing Continuity and Change in the Rural Iron Age and Romano-British Landscape

- Joanie Meharry (Department of Archaeology)
  US Archaeology and Cultural Diplomacy in Afghanistan, Iran and Iraq

- Julia Montes Landa (Department of Archaeology)
  Evolution, Co-existence and Adaptation of Bronze-making Recipes in Prehistory: Northeastern Iberia as Study Region

- Sara Moirisset (Department of Archaeology)
  Art and Collective Identity: Production Processes and Trade in the Ica Valley on the Peruvian South Coast

- Bram Mulder (Department of Archaeology)
  Functional Adaptation in Cortical and Trabecular Bone. Differential Effects of Mechanical Loading and the Implications for Reconstructions of Past Activity

- Leanne Joy Munroe (Department of Archaeology)
  Narratives of Transatlantic Slavery in British Museums

- Herman Mwunonge (Department of Archaeology)
  An Investigation into the Late Quaternary Prehistory of the Albertine Rift Valley, Uganda

- Chioma Ngonadi (Department of Archaeology)
  Early Agricultural Communities in Leija, South-eastern Nigeria: An Archaeobotanical Investigation

- Bongumzeni Nxumalo (Department of Archaeology)
  The Role of Hydrological Changes in the Demise of Iron Age State Societies in Southern Africa: An Integrative Study of Mapungubwe, South Africa

- Janine Ochoa (Department of Archaeology)
  Island Biodiversity and Human Palaeoecology in the Philippines: A Zooarchaeological Study of Late Quaternary Faunas

- Ian Ostericher (Department of Archaeology)
  Human-Environmental Interaction, Holocene Landscape Development & Sustainable Pastoralism in the Forest-Steppe, Tarvagatai River Valley, Bulgan Aimag, Mongolia

- Peerapat Ouysook (Department of Archaeology)
  ‘I Write Therefore I Am’: Reading the Ideologies of Nebuchadnezzar Through His Inscriptions

- Sarah Paris (Department of Archaeology)
  What Determines the Choice of Colour in Pleistocene Hominins?

- Eóin Parkinson (Department of Archaeology)
  Body Size, Skeletal Biomechanics and Habitual Behaviour: A Bioarchaeological Approach to Exploring Social and Economic Change in the Copper Age Central Mediterranean

- Stephanie Payne (Biological Anthropology)
  Phenotypic Variation and Thermoregulation of the Human Hand

- Georgina Peters (Department of Archaeology)
  Fantastic Hillforts and Where to Find Them: A Region-based Landscape Analysis of the Iron Age in Britain, and the Methods We Use to Assess the Past

- Mariana Pinto Leitão Pereira (Department of Archaeology)
  The Significance of Heritage in Dispersed Communities: Portuguese and Macanese as a Case Study

- Elizabeth Pratt (Department of Archaeology)
  The Living Stones: Knowing Prehistoric Archaeological Heritage in 21st Century West Cornwall

- Claire Ratican (Department of Archaeology)
  The Other Body: Persons in Multiple Burials across the Viking World

- Wannaporn Rienjang (Department of Archaeology)
  Honouring the Body: Relic Cult Practice in Eastern Afghanistan with Comparison to Dharmarajika Pakistan

- Michael Rivera (Biological Anthropology)
  Exploring Diachronic Changes in Human Activity, Diet and Health on the Prehistoric Baltic Coast

- Kirk Roberts (Department of Archaeology)
  Decoding the Language of the City: An Agent-based Approach to Mesopotamian Urbanism

- Alice Rose (Department of Archaeology)
  The Black Death in Cambridge: An Isotopic Analysis of the Impacts of the Plague

- Kim Eileen Ruf (Department of Archaeology)
  The Reuse of Past Architecture and Historic Structures – Perspectives on Everyday Heritage Creation

- Jaap Saers (Department of Archaeology)
  Ontogeny and Functional Adaptation of Human Pedal Trabecular Bone

- Alisa Santikarn (Department of Archaeology)
  Locating Conflicts in Conservation Values: The Heritage of Elephants in Thailand
• Elena Scarsella (Department of Archaeology) Mediterranean Highlanders: Connectivity and Identity in Late Prehistoric Central Italy
• Christoph Schmidhuber (Department of Archaeology) Childhood in Ancient Iraq: Perspectives from Babylonia in the Second Millennium BC
• Susan Shay (Department of Archaeology) The Right to Control the Land: Law, Heritage and Self-determination by Native Hawaiians
• Charles Brendan Simmons (Department of Archaeology) The Evolution of Leadership and Inequality: An Analysis of the Jomon and Yayoi Settlements in Prehistoric Japan
• Frances St George-Hyslop (Biological Anthropology and Department of Archaeology) Self-determination by Native Hawaiians: The Land of the Living
• Meghan Strong (Department of Archaeology) Illuminating the Path of Darkness: Social and Sacred Power of Artificial Lighting in Pharaonic Period Egypt
• Akshyeta Suryanarayan (Department of Archaeology and Biographical Anthropology) What’s Cooking in the Indus Civilisation? Integrating Ceramic Residue Analysis and Bioarchaeology to Approach Ancient Indus Foodways
• Jess Thompson (Department of Archaeology) Heads, Shoulders, Knees and Toes: Exploring Bodies, Body Parts and Personhood in Late Neolithic Malta Through Funerary Taphonomy
• Emily Margaret Carole Tilby (Department of Archaeology) Neanderthal and Modern Human Adaptations to Climate Change in Southwest Asia: Climate Reconstruction of Marine Isotope Stage 5-3 (130–29 ka) Based on Small Mammal Records from Shanidar Cave (Iraqi Kurdistan)
• Benjamin Joon Utting (Department of Archaeology) Exploring Prehistoric Technology at the Tràng An Landscape Complex, Ninh Binh Province, Vietnam
• Laura Van Holstein (Biological Anthropology) Correlated Asymmetry in Divergence
• Jasmine Miria Karolína Vieri (Department of Archaeology) Regional and Temporal Patterns in the Composition of Pre-Columbian Gold and Copper Alloys
• Joanna Walker (Department of Archaeology) Human-Environment Interactions in the Indus Civilisation: Reassessing the Role of Rivers, Rain and Climate Change in Northwest India
• Kimberley Watt (Department of Archaeology) A Sign of the Times: Administration of Monumental Construction During Eighteenth Dynasty Egypt
• Simon M. Weppel (Department of Archaeology) Heritage Temporalities in the Context of Cultural Change: A Russian Case Study
• Emily Wright (Department of Archaeology) Dead Bodies, Lived Fictions: Understanding Changing Funerary Practices Through a Re-examination of the Relationship Between Cremation and Inhumation in the Mediterranean, 1500–500 BC
• Keaghan Yaxley (Biological Anthropology) Investigating Adaptive Zone Shifts With Combined-Evidence Phylogenies

MPhil Students (2018–19)
• Umar Mazhar Ahmad (Department of Archaeology) The Effect of Urbanism on Human Health, A Mesopotamian Case Study
• Faiz Alam (Biological Anthropology) Association of Socioeconomic and Demographic Factors with Child Undernutrition in Punjab, Pakistan
• Georgia Rose Ashworth (Department of Archaeology) The Literary Heritage of the Levant: Translating Literary Settings into Heritage Sites
• Lane Atmore (Biological Anthropology) Developing a Novel Test Statistic for Measuring Ancestry Proportions in Recently-Admixed Human Populations
• Maria Averkiou (Department of Archaeology) Cypriot Antiquities in University Museums: Collecting Practices, Presentation and Reception
• Evangeline May Hunter Bell (Department of Archaeology) The Effect of Culture on Genetic Diversity
• Spyridon Beretoulis (Biological Anthropology) Combined Biomolecular Approaches to Identify Differential Sheep and Goat Resource Use in Prehistoric Britain: A Case Study at the Cursington Pasture Cave

• James Cracknell (Biological Anthropology) Relationship Between Fluctuating Asymmetry, Resting Metabolic Rate and Athletic Performance in Rowers
• Leanne Margaret Daly (Department of Archaeology) Capturing Shadows: The Exhibition of Intangible Heritage of Oceania in Lisa Reihana’s In Pursuit of Venus
• Jessica Danuta Domiczewska (Department of Archaeology) The Land of the Living: Understanding British Neolithic ‘Houses’
• William Eskew (Biological Anthropology) Parasite Analysis of a 19th-century Ottoman Period Latrine from Acre, Palestine
• Lachlan Hugh Gell (Department of Archaeology) Divinatory Interpretation and Imperial Decision at the Sargonid Court
• Axel Tower Getz (Department of Archaeology) Cultural Landscapes and Climate Change Comprehension: How we See Global Warming in the Local Environment
• Laura Gimeno (Biological Anthropology) Spatiotemporal Variation in the Wider Determinants of Coronary Heart Disease in France (1980–2015)
• Emilie Jean Green (Department of Archaeology) The Dogu Puzzle: An Exploration of the Fragmentation, Movement and Deposition of Chiba Prefecture’s Jomon Dogu Figurines by Means of Geochemical Analysis
• Elizabeth Ann Hart (Department of Archaeology) Heritage as a Creative Force: Two Case Studies from the Pottery Industry of Stoke-on-Trent
• Tara Henderson (Biological Anthropology) Revaluation of the Amount of Ancestral Admixture Present in Modern Near Oceania Populations
• Raphael Henkes (Department of Archaeology) When There Is No Solution: Dealing with Perpetrator Heritage
• Auday Hussein (Department of Archaeology) Crown Prince or Prince? Succession in the Neo-Assyrian Period
• Luke Richard Morgan Jenkins (Department of Archaeology) Understanding Grinding Stones: A Study of the Use of Grinding Stones in Neolithic and Chalcolithic SE Hungary
• Petra Hannah Jones (Department of Archaeology) A Study of Material Culture through Rings and Shape Variation Using the Ceramics at Százhalombatta-Földvár: An Analysis of Phase I ‘Tradition’
• Bailey Elease Kirby (Department of Archaeology) The Connection Between Color and Social Status in Medieval European Clothing
Postgraduate Students (cont.)

- Rupert John Colson Knight (Department of Archaeology)
  Neandertal Fuel Choice: A Multisite Study in the Iberian Peninsula

- Kirsty Marie Lilley (Department of Archaeology)
  ‘Fairy houses’ on a Mediterranean Island: Relating Settlement, Tombs, and Society in Pre-Nuragic Sardinia (4400–2900 BC)

- Abigail Lloyd (Biological Anthropology)
  Parasite Egg Survival, Taphonomy and Soil Composition in a Crusader Cesspit from 13th-century Acre, Israel

- Jodie Nichole Lopez (Department of Archaeology)
  Currency Crimes and Persecution of Thirteenth Century English Jews: A Social Archaeology of the Coin Clipping Crisis

- Theresa Luhmann (Department of Archaeology)
  Exploring the Northwestern Indus Border of the Integrated Era (c. 2600–1900 BC) Using Statistical Analyses of Ceramic Decoration

- Elizabeth Anne Marston Leahy (Department of Archaeology)
  Liminal Space and the Sacred Landscape in the New Kingdom: The ‘Betwixt and Between’

- Ilana Rachel McAfoos (Department of Archaeology)
  A Comparison of Bear Ritual in Early Medieval Period Sami, Nordic and Anglo Saxon Societies

- Alexandra Simone McKeever (Department of Archaeology)
  Perpetuating Historical Tensions: Civil War Museums and Confederate Heritage in the Deep South

- Frederieke Charlotte Meijer (Department of Archaeology)
  One Paradigm, Two Perspectives: Assessing the Interaction between Heritage Management Strategies of Heritage Scholars and the New Dutch Environmental Planning Act

- Reed Johnston Morgan (Department of Archaeology)
  Seasonal Sea Surface Temperature Variability in the Middle Ages: New Insights from Patella vulgata δ¹⁸O

- Natasha Noel Nagle (Department of Archaeology)
  Exploration of Late Neolithic Provenance by Morphology in Skorba, Malta

- Gabriel Salgado Natal (Department of Archaeology)
  Ideology into Stone: Local Temples and Politics of the 12th Dynasty of Ancient Egypt

- Cecilia Padilla Iglesias (Biological Anthropology)
  The Evolutionary Ecology of Bilingualism in Yucatan and Its Implications for Linguistic Diversity

- Rachel Palkovitz (Biological Anthropology)
  Geometric Morphometrics of the Larynx Complex in Non-Human Primates

- Estelle Praet (Department of Archaeology)
  Zooming through the Maya: An Approach to Assess Faunal Diversity in Lamanai and Marco Gónzalez (Belize)

- Maria Pykala (Biological Anthropology)
  Is a Friend in Need a Friend Indeed? Analysing Function and Mechanism of Cooperative Ties among the Mbendjele Bayaka

- Grace Pyles (Biological Anthropology)
  Infectious Disease in the Middle East: Analysis of Intestinal Parasites in an Achaemenid Period Latrine in Bahrain

- Lauren Maree Robinson (Department of Archaeology)
  Examining Scarab Amulet Use in Belief and Burial Practices at New Kingdom Pharaonic Sites: A Case Study from Fadrus and Qau-Badari Cemeteries

- Sydney Stewart Rose (Department of Archaeology)
  Our Heritage: A Discourse Analysis of Universalism in Three Contexts

- Danielle Nicole Silverman (Department of Archaeology)
  How Can We Assess the Archaeological Visibility of Pilgrimage Activity through Ritual Material Culture in the Hinterland of Anuradhapura, Sri Lanka?

- James Rufus Sinclair (Department of Archaeology)
  ‘Tis But a Scratch: An Investigation into the Tools Used in Medieval Ecclesiastical Graffiti in Cambridge

- Darryl Anthony Smith (Department of Archaeology)
  Tangled Intermem: A Comparative Analysis of Multiple Burials in Ancient Egypt and Nubia

- Zachary Samuel Stancombe (Department of Archaeology)
  How Should We Interpret the Range of Buildings at Kerma and Doukkii Gel?

- Edward Thum (Biological Anthropology)
  The Influence of Evolutionarily Significant Human Facial Characteristics on Perceived Attractiveness: An Experimental Approach

- Lucy Timbrell (Biological Anthropology)
  Characterising and Exploring Patterns of Cranial Shape Variation in Recent Aboriginal Australians

- Maria Uvarova (Department of Archaeology)
  Sunlight on Cold Water: The Use and Perception of Water in Ritual Space at Amarna

- Leonora Visoka-Weller (Department of Archaeology)
  Atrocity Heritage and the Status of the Massacred Dead

- Lawrence Stuart James Webb (Department of Archaeology)
  Reinterpreting Nubia; The Role of Museums in Addressing Negative 19th- and 20th-century Conceptions of Ancient Nubia
Archaeological Science Laboratories

Marcos Martínón-Torres

The Laboratories for Archaeological Science and Biological Anthropology at the University of Cambridge offer state-of-the-art resources for the integrated analytical study of inorganic and organic materials to reconstruct landscapes, technology, mobility, domestication, diet, human evolution and cultural transmission, and the use of computational methods to model and analyse data at all scales. Across 450 square metres of laboratory space, we run facilities for preparation and analysis of archaeological, anthropological and environmental materials for macro- and microstructural examination (2D and 3D), chemical and isotopic composition, ancient DNA and protein extraction, as well as high-performance computing. Our vision is the integrated use of relevant scientific methods to enrich archaeological, bioanthropological and palaeoanthropological research, crossing divides between organic and inorganic specializations and upholding the highest standards of scientific practice.

Lab refurbishment and expansion

Our laboratories have seen major refurbishment and development this year, in an effort to consolidate our strengths, expand into new fields and facilitate integration among the many science strands. We know very well that technicians and support staff are the heart of a laboratory, and none of the developments reported here would have been possible without the Herculean efforts of Catherine Kneale, Jo Osborn, Jessica Rippengal, Tonko Rajkovača, Fabio Lahr and Steve Topper.

After a major review, laboratory spaces were redecorated and deep-cleaned to optimize workflows and minimize risks of contamination. All our DNA work is now concentrated in the Henry Wellcome Laboratory for Biomolecular Archaeology, with separate laboratories for ancient and modern DNA, facilities for sample preparation and automated DNA extraction and smaller rooms for PCR preparation and post-PCR work. The aDNA lab has a separate external entrance, is under positive pressure and supplied with HEPA-filter clean air. These labs are now used for a range of materials, most recently including modern plant samples (Buckbee Project), medieval human remains (After the Plague Project) or Antarctic whale bones, in addition to hormone assays (ELISA), ancient parasites and dental calculus. We are currently assembling the facilities to conduct ancient protein analysis at Cambridge, not least to support the ERC Advanced Grant Beasts to Craft (B2C).

The new Keyence VHX-6000 super resolution 3D microscope at the Glyn Daniel Laboratory has proved extremely popular. Examples of applications this year include the examination of toolmarks on Mexican jade from the British Museum, the study of tiny Chalcolithic beads made of ostrich eggshell, textural analyses of Neolithic chert and the fast, automated mapping of metallographic sections under high magnification. The user base for this instrument will no doubt continue to grow, as we are currently exploring applications to microfaunal and archaeobotanical remains. Together with the existing scanning electron microscope and three Leica and Zeiss optical microscopes with advanced image analysis software, among other facilities, this laboratory is now a hub for the microscopic analysis of all kinds of samples.

At the Pitt-Rivers Laboratory, our extensive archaeobotanical reference collections have been reorganized so that they can be accessed more easily by local researchers, students and visitors. We have also installed desiccators for the atmosphere-controlled storage of certified reference materials and metallographic samples. Like the Glyn Daniel, this space has undergone a major overhaul and it now includes designated areas for the layout of materials with improved photographic capabilities.
microscopic analysis of bulk and unmounted samples and etching of metallographic blocks, among others.

We have also optimized calibrations for the chemical analysis of ceramics, rocks and sediments using portable X-ray fluorescence spectrometry (pXRF), and further calibrations for metal analysis are well under way. For this we employed our growing library of reference materials as well as comparison with values obtained by inductively coupled plasma mass spectrometry (ICP-MS). The instrument is now proving so popular that we have just ordered a new Olympus Vanta to complement our existing Bruker Tracer and increase the availability of instrument time for our students.

Our sample preparation laboratory has also undergone dramatic changes. In addition to cutting and drilling equipment, lapping wheels, a sand blaster and extraction hoods, we now have a PetroThin for the preparation of thin sections of ceramics and rocks. We are thus in a position to prepare virtually all kinds of samples for a variety of analyses, and we are particularly pleased to see researchers working on ceramics, metals, rocks, shell, bones and plants sharing space and ideas.

Of course, a major and established sample preparation facility continues to be that at our Charles McBurney Laboratory for Geoarchaeology, where researchers produce and analyse hundreds of exceptionally large and high-quality micromorphological thin-sections for research projects across the world. Some highlights this year include the ongoing involvement with the TwoRains project in northern India and the Living with Monuments project in Avebury, England, as well as new geoarchaeological work at the Neolithic settlement of Drenovac in Serbia.

We have consolidated in a single location our extensive range of digital imaging equipment, including a variety of 3D scanners, a 3D printer, a thermal imaging camera and advanced software for image analysis. Our established expertise in the use of these resources for bioanthropological research is now being extended to a variety of archaeological materials.

As the quantity of data we produce and analyse increases, so do our computing requirements. In order to keep up with these, this year we purchased a Research Computing Infrastructure as a Service (RCIS) instance with 16 vCPUs and 96Gb Ram. The virtual machine is enabling students and researchers to carry out high-performance computing and analysis.
The physical proximity of our laboratories with those in other departments also means that we can continue to develop synergies as our range of activities expands. The well-established collaboration between our Dorothy Garrod Laboratory for Isotopic Analysis and the Godwin Laboratory at the Earth Sciences Department continues to deliver notable results on carbon, nitrogen, oxygen, and strontium isotopes, including the recently published results on the Portus Project. In addition, we are accessing various ICP-MS for the analysis of inorganic materials in Earth Sciences and Geography, as well as the Qemscan and other microanalysis facilities in Earth Sciences and Materials Science and Metallurgy. In due course we will report on further archaeological science collaborations under development, for example with the Fitzwilliam Museum, the British Museum and the Museum of Archaeology and Anthropology.

A few research highlights
It is impossible to list here all the successful grants and research achievements of the past year, and readers are encouraged to browse through the Research Highlights and Publications sections of this Annual Report to get a flavour of some of them. We can only report a few selected examples:

- **Encounter**, the ERC Starting Grant Project led by Enrico Crema, was launched in April. The project will investigate the transition to farming in Japan, reconstructing demographic changes and modelling the spread of rice and millet in the Japanese archipelago.
- **Beasts to Craft** (B2C), the ERC Advanced Grant led by Matthew Collins, is pioneering an approach to the materiality of parchment from the standpoint of the preparation and use of animal skins.
- Charly French, Tonko Rajkovača and three PhD students (Petros Chatzimpaloglou, Mike Lewis, Ian Ostericher) undertook the first geoarchaeological assessment of the Drenovački valley. This revealed a re-modelled valley filled with hillwash burying a substantial early Neolithic settlement as a consequence of clearance for agriculture.
Further geoarchaeological work at the Avebury World Heritage landscape has revealed three major phases of landscape disruption, earlier and later prehistoric and in medieval times.

At another World Heritage Site, collaborative research on China’s Terracotta Army site led by Marcos Martinón-Torres showed that, contrary to widely held belief, the exceptional preservation of the hundreds of bronze weapons was not caused by an ancient anti-rust treatment with chromium; instead, by geochemical fortune rather than intention, the alloy composition of the weapons and the nature of the burial soil appear to have favoured metal preservation.

Marjolein Bosch continued to develop micro-CT and virtual modelling techniques to understand the production of Palaeolithic shell beads.

The projects WAMSTRIM and MarginScapes continued to work with TwoRains in using historic mapping and big data approaches to site location in India and Pakistan.

The In-Africa project had another season of fieldwork in northern Kenya, continuing to build the ecological and technological hominin landscape in Africa during the Middle Pleistocene.

Preston Miracle and a range of colleagues successfully completed the Horizon 2020 Project Mend the Gap, which focused on the integration of genetics with other sciences of the past.

Research at the exceptionally well preserved Bronze Age pile-dwelling settlement of Must Farm revealed intriguing information about diet and health, with a striking presence of largely terrestrial dryland food sources, but also the incidence of intestinal worms caught from foraging for food in the lakes and waterways. The interdisciplinary team includes Mark Knight, Rachel Ballantyne, Marissa Ledger, Piers Mitchell, Vida Rajkovača and many others.

Research by Cynthia Larbey, Martin Jones and colleagues demonstrated that anatomically modern humans in South Africa were roasting and eating plant starches, such as those from tubers and rhizomes, as early as 120,000 years ago.

Building on his background as a physicist, Marc Gener-Moret developed comparisons between the results obtained on iron weapons by neutron diffraction and traditional metallography, in a significant step towards non-invasive metallography of archaeological metals.

Emma Loftus led the publication of the Southern African Radiocarbon Database (SARD)— a new online, open-access database of published radiocarbon dates from southern African archaeological contexts integrated with OxCal, which will no doubt become a great resource.

**People and networks**

The ongoing expansion of our archaeological science provision is also reflected in the growing size of our team. This year, Marcos Martinón-Torres formally took up his position as the new Pitt-Rivers Professor of Archaeological Science and Matthew Collins was elected as the McDonald Professor of Palaeoproteomics. Three very recent appointments in the field of Biological Anthropology will be reported next year.

We believe our international, interdisciplinary critical mass is our greatest asset, and postdoctoral and graduate researchers are the core of this. This year we welcomed a good number of postdocs in archaeological science, including Andreas Angourakis (developing agent-based models for the ERC TwoRains Project), Marc Gener-Moret (working on the earliest iron technology in Iberia for the IBERIRON project), Beatriz Marín-Aguilera (analysing a range of materials in colonial borderlands), Ruoyun Hui (using genetics to explore medieval health for After the Plague), and Toby Wilkinson (developing computational tools for the Kythera Project).

New science-based PhD students starting this year included Friederike Jürke, Charles Simmons, Jasmine Vieri, Yi-Ting Hsu and Julia Montes-Landa, whose work spans South America, Europe, South and East Asia. As we welcome a new cohort of emerging researchers, we congratulate those who completed their theses this year, including Petros Chatzimpaloglou (on Neolithic chert sourcing in the Maltese Islands), Janine Ochoa (on zooarchaeology in the Philippines), Robin Morrison (on gorilla social organization), Steph Payne (on the phenotypic variation of the human hand), Sarah-Louise Decrausz (on the obstetric dilemma), Eóin Parkinson (on bioarchaeology in the Copper Age Mediterranean), Akshyeta Suryanarayan (on Indus Civilization ceramics lipid residue analyses), Sarah Kaewert (on population genetics), Michael Rivera (on bioarchaeology in the Neolithic Baltics) and Pedro Lourenço Gonçalves (on geomorphology in dynastic Egypt).

The atmosphere was further enriched by numerous visiting researchers and students representing a wide range of backgrounds and interests, among many others including Aftab Alam (Banaras Hindu University, India), Pau Sureda (Institute of Heritage Sciences, CSIC, Spain), Priya Iswarbhai (UCL Institute of Archaeology, UK); Natalia Eguez, Lucia Leierer and Rory Connelly (University of La Laguna, Spain); Beth Whitlock (Brown University, US), Philippe de Smedt (University of Ghent), Ian Moffat (Flinders University), Nawrast Sabah (Mosul University), Sabrina Save (Amélie Études Environmentales & Archéologiques, Troyes, France), Jairo Arturo Escobar (Universidad de Los Andes, Colombia), David Killick (University of Arizona, US), Roberto Valcarcel Rojas (Instituto Tecnologico de Santo Domingo, Republica Dominicana) and Shadreck Chirikure (University of Cape Town, South Africa).
In addition to our well-established seminar series, we organized numerous conferences and courses. To give a few examples, Erik Gjesjeld and Enrico Crema organized a very successful international conference on ‘Big Data in Archaeology: Practicalities and possibilities’. Laerke Recht led the conference ‘Fierce Lions, Angry Mice and Fat-tailed Sheep: Animal encounters in the ancient Near East’, and Preston Miracle organized ‘Mend the Gap: Human/environment interactions from the Last Glacial Maximum to the mid Holocene’.

A one-day intensive workshop on the R statistical computing language was also organized and well attended, as were several training sessions on portable XRF, 3D scanning, and the use of our new Keyence microscope. As part of the Horizon 2020 Twinning Project Promised, Cyprian Broodbank, Giulio Lucarini and Matthew Collins taught archaeological science at an international training course at the Science and Technology in Archaeology and Culture Research Center (STARC) of the Cyprus Institute. Matthew Collins led a micro-workshop organized by Lisa Onaga at the Max Planck Institute for the History of Science (MPIWG) on ‘Proteins and Fibres, Scaffolding History’. The Beasts to Craft Project held a three-day workshop on ‘The Parchment Record and the Biology of the Book’ in May, at the Folger Shakespeare Library in Washington DC.

We also delivered dozens of conference presentations internationally, and are particularly proud that many of them were led by our graduate students. A particular highlight of the conference circuit was the ‘Archaeometallurgy in Europe’ conference in Miskolc, Hungary: here, Cambridge researchers made up the largest institutional cohort and showcased one of our growing strengths, offering as many as 11 presentations on copper, bronze, iron, silver and gold, ranging from the Bronze Age to the post-medieval period. There was also a great showing at the Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology in London, with many presentations and posters by Cambridge researchers at all levels, including a poster by Alice Rose on multi-isotope analyses of medieval human remains, which won the Bill White Award.

Keynote speeches were delivered by Cambridge researchers at the ‘Developing International Geoarchaeology’ conference (Charly French), the International Congress on the Archaeology of Gold, the Latin American Archaeometry Congress, and the Cyprus Institute (Marcos Martinón-Torres), the Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology (Tamsin O’Connell), and the ICAZ Archaeozoology, Genetics, Proteomics and Morphometrics Working Group (Matthew Collins).

Our PhD students and postdocs have also been instrumental in leading on many outreach and public engagement activities, including open days, lab tours, Science Week, Festival of Ideas, and many other events. They demonstrate that cutting-edge science is compatible with popular communication, and their commitment to sharing their work is commendable.
DM McDonald Grants and Awards

The Institute supports field projects and other research initiatives of the University of Cambridge archaeologists through its annual grants from the DM McDonald Grants and Awards Fund. Grants totalling just over £75,000 were awarded to 27 projects, conferences and workshops. Many of the successful projects are highlighted in this report.

Projects

- **Tunde Babalola**
  Crafts and society: early glass production in southwest Nigeria
- **Graeme Barker**
  Neanderthal life and death at Shanidar Cave (Iraqi Kurdistan)
- **Jess Beck**
  An osteoarchaeological investigation of the major tomb at Râmeţ Gugului
- **Trish Biers**
  Conquest and colonial pathogens: indigenous response and resistance in Peru
- **Gilly Carr**
  Confinement and conflict: comparative materialities of internment 1914–1919
- **Elizabeth DeMarrrais**
  British migration to the Massachusetts Bay Colony and interactions with indigenous peoples
- **Rob Foley**
  East African Middle Stone Age lithic diversity
- **Charles French & Tonko Rajkovača**
  Deciphering the origins of the sediment complex at the Neolithic settlement site of Drenovac in the Morava Valley, Serbia
- **Nancy Highcock**
  The Early and Middle Bronze Age occupation (Area D) at Kınık Höyük, Niğde
- **Harriet Hunt**
  Beyond domestication centres: establishing the chronology of buckwheat in China
- **Liliana Janik**
  Connecting the landscape: materiality of substance
- **Jody Joy & Marcus Brittain**
  The Mirrors of Aranmula, Kerala
- **Marta Lahr**
  Field investigations of the new hominin site of Lokodongot 6, West Turkana, Kenya
- **Paul Lane & Pamela Jane Smith**
  Heritage site management in Igbo-Ukwu with week long preparatory training
- **Emma Loftus**
  Shellfishing in the South African Later Stone Age
- **Beatriz Marín-Aguilera**
  The Sudanese-Ethiopian borderland in the 10th–17th centuries: deterritorialised bodies
- **Colin Renfrew & Michael Boyd**
  The Keros-Naxos seaways and the origins of cult at the Kavos sanctuary: study and publication
- **Jaap Saers**
  Ecogeographic variation in Japanese Macaque trabecular bone structure
- **Marie Louise Sørensen & Chris Evans**
  Early Portuguese-Luso African relations at Alcatrazes, Cape Verde, Phase II
- **Kate Spence**
  Delivering sustainable heritage strategies for Amarna
- **Simon Stoddart**
  Defining the Etruscan frontier: post excavation
- **Toby Wilkinson**
  Project Panormos Survey 2019
- **Selena Wisnom**
  Firing holes in cuneiform tablets: materiality, form, and function

Conferences/Workshops

- **Marc Gener Moret**
  IberoArchUK2019. Ibero-British Archaeology: beyond borders
- **Caroline Goodson**
  The state of the city: current approaches to urbanism in Early Medieval Italy
- **Liliana Janik**
  20th Cambridge Heritage Symposium. Tasting identity, cooking memory: the heritage and heritagisation of food
- **Simon Stoddart**
  Feeding communities

Locations of research projects awarded grants in 2018–19

*External grants*  
*DM McDonald grants*
Research Grants

• Dr James H. Barrett
  Catching the past: Discovering the legacy of historic Atlantic cod exploitation using ancient DNA
  (University of Oslo – FB Research Council of Norway)

• Dr James H. Barrett
  SeaChanges: Thresholds in human exploitation of marine vertebrates
  (EC H2020 MSC ITN)

• Dr Jess Beck
  Mortuary archaeology of the rame? Bronze Age landscape: identity and inequality in early mining communities
  (2700–2200 bc)
  (EC H2020 MSC Fellowship)

• Dr Dorothea Bosch
  EU-Beads: Early Upper Palaeolithic personal ornaments and behavioural adaptations
  (EC H2020 MSC Fellowship)

• Prof. Cyprian Broodbank
  The archaeological deep history and dynamics of Mediterranean Africa, c. 9600–700 bc
  (Leverhulme Trust)

• Prof. Cyprian Broodbank
  Promoting archaeological material science in the eastern Mediterranean
  (EC H2020 Spread Excellence & Widen Participation – Twining)

• Prof. Cyprian Broodbank
  Cyprus in the Eastern Mediterranean project
  (Pouroulis Foundation)

• Dr Gilly Carr
  Sites at risk: Guidelines for best practice
  (IHRA)

• Prof. Matthew Collins
  Beasts to craft: BioCodicology as a new approach to the study of parchment manuscripts
  (EC H2020 ERC Advanced)

• Dr Francesc Conesa
  Long-term land use and water management strategies in arid margin landscapes
  (EC H2020 MSC Fellowship)

• Dr Enrico Crema
  Encounter: Demography, cultural change, and the diffusion of rice and millets during the Jomon–Yayoi transition in prehistoric Japan
  (EC H2020 ERC Starter)

• Prof. Charles French
  Geoarchaeological investigations of the climate history of modern human evolution
  (Commonwealth Scholarships)

• Dr Arnau Garcia
  Water management strategies and climate change in the Indus Civilisation
  (EC H2020 MSC Fellowship)

• Dr Marc Gener-Moret
  The rise of iron technology in pre-Roman Iberia: A large-scale and multidisciplinary approach
  (EC H2020 MSC Fellowship)

• Prof. Philip Gibbard
  Pleistocene glaciation of fenland, England and its implications for evolution of the region
  (Leverhulme Trust)

• Dr Margarita Gleba
  Production and consumption: textile consumption and urbanization in Mediterranean Europe 100–500 bc
  (PROCON)
  (EC FP7 ERC Starter)

• Dr Francesco Iacono
  Cultural heritage of dictatorship in Albania
  (EC H2020 MSC Fellowship)

• Dr Liliana Janik
  Sourcing clays for making prehistoric Dogu figurines
  (Japan Foundation Endowment Committee)

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• Prof. Charles French
  Geoarchaeological investigations of the climate history of modern human evolution
  (Commonwealth Scholarships)

• Dr Arnau Garcia
  Water management strategies and climate change in the Indus Civilisation
  (EC H2020 MSC Fellowship)
• Dr Emma Loftus  
Coastal origins: Earliest human occupation of the shoreline  
(Israel Newton Trust and Leverhulme Trust)

• Dr John Macginnis  
Ziyaret Tepe archaeological project  
(Ziyaret Tepe Archaeological Trust)

• Prof. Marcos Martínón-Torres  
Silver sourcing by triangulation: The case of Mycenae  
(British Academy)

• Prof. Marcos Martínón-Torres  
Archaeological science and globalisation: A case study of crucibles and metallurgical artefacts from Great Zimbabwe World Heritage site  
(Royal Society)

• Dr Augusta McMahon  
Fierce lions, angry mice and fat-tailed sheep: Animal encounters in the ancient Near East  
(British Institute for the Study of Iraq)

• Dr Augusta McMahon  
Albert Reckitt Fund for Mesopotamian Fieldwork (TELL BRAK Archaeological Project)  
(Albert Reckitt Charitable Trust)

• Dr Preston Miracle  
Smart integration of genetics with sciences of the past in Croatia: mending and mending the gap  
(EC H2020 Spreading Excellence & Widening Participation – Twinning)

• Dr Ioanna Moutafi  
MYSOBIO: Deciphering the interplay of funerary treatment and social dynamics in the Mycenaean period  
(EC H2020 MSC Fellowship)

• Dr Cameron Petrie  
Environmental adaptation and resilience to climate change: Investigating the sustainability of the Indus Civilisation  
(British Council India)

• Dr Cameron Petrie  
Land, water and settlement in northwest India  
(British Academy)

• Dr Cameron Petrie  
Transforming India’s Green Revolution by research and empowerment for sustainable food supplies  
(BBSRC)

• Dr Cameron Petrie  
Winter rain, summer rain: adaptation, climate change, resilience, and the Indus Civilisation  
(EC H2020 ERC Consolidator)

• Dr Cameron Petrie  
Enhancing British Allchin’s 1951 photographic collection of the collections of the National Museum of Afghanistan  
(British Academy)

• Dr Emma Pomeroy  
A reassessment of Neanderthal mortuary behaviour at Shanidar Cave, Iraqi Kurdistan  
(British Academy)

• Dr Monica Ramsey  
H-E Interactions: Increasingly anthropogenic landscapes and the evolution of plant-food production: human–environment interactions during the final Pleistocene and early Holocene in the Levant  
(EC H2020 MSC Fellowship)

• Dr Laerke Recht  
The Spirited Horse: Human–equid relations in the Bronze Age Near East  
(EC H2020 MSC Fellowship)

• Prof. Lord Colin Renfrew  
Keros, antecedents of urbanism at the world’s earliest maritime sanctuary  
(A. G. Leventis Foundation)

• Prof. Lord Colin Renfrew  
Early Cycladic sculpture and the archaeology of ritual  
(Stavros S. Niarchos Foundation)

• Dr John Robb  
After the plague: Health and history in medieval Cambridge  
(Wellcome Trust)

• Dr John Robb  
Health, history and human lives in medieval Cambridge  
(Wellcome Trust)

• Dr Kate Spence  
Delivering sustainable heritage strategies for rural Egypt: Community and archaeology at Tell El-Amarna  
(British Council)

• Prof. Marie Louise Stig Sørensen  
Yangshao culture: 100 year research history and heritage impact  
(Shanghai Academy of Guyewang Studies)

• Dr Jay Stock  
ADAPT: Adaptation, dispersals and phenotype: understanding the roles of climate, natural selection and plasticity in shaping global hunter-gatherer adaptability  
(EC FP7 ERC Starter)

• Dr Jay Stock  
The effects of mobility and physical activity on human postcranial skeletal variation  
(BBSRC)

• Dr Simon Stoddart  
Romanisation of Umbria  
(Rust Family Foundation)

• Dr Christina Tsouparopoulou  
Memories for life: Materiality and memory of ancient Near Eastern inscribed private objects  
(Uppsala University – FB Swedish Research Council)

• Dr Darryl Wilkinson  
Anarchism in the prehistoric Andes: The material culture of anti-complexity  
(Isaac Newton Trust and Leverhulme Trust)
Research Highlights

B2C – Beasts to Craft
Matthew Collins

The ERC Advanced award Beasts to Craft (B2C), a project to explore the materiality of parchment as a record of animal husbandry and craft skill, kicked off with a meeting in the Henry Wellcome Building and was combined with a class given by the B2C staff to undergraduate and MPhil students in the Parker Library, Corpus Christi College.

This was followed by a Workshop, ‘Biocodicology: The parchment record and the biology of the book’, hosted by the Folger Shakespeare Library in Washington (DC) in March, where a small group of 30 researchers drawn from three continents and nine countries met to discuss how to integrate scientific and historical research on parchment with materiality and conservation.

As an introduction to the prospects of the project, the team prepared a joint article, ‘So you want to do biocodicology? A field guide to the biological analysis of parchment’ which was published in Heritage Science. Project administrator Alizon Holland joined the Department of Archaeology in January, and other members of the team will be joining next year.

https://sites.google.com/palaeome.org/ercb2c/


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Contexts of and Relations between Early Writing Systems (CREWS)
Philip J. Boyes & Philippa M. Steele

The CREWS project (Contexts of and Relations between Early Writing Systems) organized a major international conference in March 2019 on the theme of ‘Exploring the Social and Cultural Contexts of Historic Writing Systems’. This meeting pushed the boundaries of traditional approaches to the study of writing by bringing together 24 speakers working on writing practices from a very wide range of different viewpoints: from social archaeology, anthropology, cognitive archaeology and linguistics to studies of materiality, iconography, agency, identity and cultural memory. The resulting discussion identified important areas of common ground between these different disciplinary approaches, applicable to (mostly pre-modern) writing systems across the world, from the Americas to the Far East, and makes a major contribution to the CREWS research agenda to overturn and rethink the way we study writing systems and practices.

The proceedings will be published (with open access) with Oxbow Books, but in the meantime many of the presentations are available to watch on the CREWS YouTube channel: https://crewsproject.wordpress.com/social-and-cultural-contexts-of-writing/

The conference was generously sponsored by the European Research Council, which funds the CREWS project (Horizon 2020 grant no. 677758).

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Emma Nichols (Cambridge University Library) demonstrates parchment sampling to staff and students at the B2C kick-off meeting.

Experimental parchment samples prepared by Jiri Vnoucek, Det Kongelige Bibliotek, Copenhagen.
Alcatrazes, Cape Verde
CHRISTOPHER EVANS & MARIE LOUISE STIG SØRENSEN

In December 2018, at the invitation of the local mayor, two weeks were spent further investigating sites within the Alcatrazes’ environs, on the east coast of Santiago Island. This focused on two found in 2012’s survey and that featured in our 2017 *Antiquity* Gallery account (Nos. 1 & III), with Site XII’s convent then also formally drawn and a new site complex identified (No. XV).

At Site I’s short-lived (i.e. ‘failed’) late fifteenth-century Portuguese town, three further masonry buildings were exposed. Well preserved in a passageway between two of these, great dumps of early sixteenth-century pottery, animal bone, glass and metalwork were recovered: an assemblage of tremendous importance.

At Site III, just to the north on a seaside promontory overlooking the bay, more robust and ‘formal’ masonry remains were encountered than anticipated. Having mortared walls, and with buildings laid out on a courtyard plan, these may relate to an early plantation that only later saw Luso-African occupation. The remains appear linked to a major cross-valley wall, with further structures found nearby alongside an old routeway (Site XV); these all seem part of an estate complex and their further excavation will surely provide significant insights into Santiago’s early land-use history.

Well Being
PAUL LANE & FRED A NKROTE M’MBOGORI (Country Director, BIEA)

Indigenous wells, pastoralist biocultural heritage and community archaeology for sustainable development: this is a collaborative research project between archaeologists and Boran and Gabra pastoralist community organizations on the long-term history of indigenous water management and well digging in northern Kenya and southern Ethiopia. Our combined research on extant and abandoned wells aims to bring together stakeholders with diverse knowledge, skills and experience to exchange understandings of pastoralist self-organization and sustainable development in these arid but resilient landscapes. This year, the project undertook archaeological surveys and test excavations aimed at mapping the distribution of extant and abandoned wells (and any other archaeological remains in their proximity) in Marasbit County, northern Kenya, and the collection of oral histories and traditional knowledge about well use, construction, ownership and cultural significance. Two workshops were also held, one in Nairobi at the British Institute in Eastern Africa, and the second in Marsabit, at which the oral histories of wells and well use across the region were discussed and initial training of local ‘heritage stewards’ in site mapping and recording began. This training continued in the field over July, under the direction of Dr Freda M’mbogori. Next year will see an extension of the training and field research to southern Ethiopia, with a focus on the tula wells of the Borana.

The project is funded by the British Academy as part of its Global Challenges Research Fund Sustainable Development Programme.

Site III’s main building range, with the town’s Gothic chapel in the distance behind (upper left).

An abandoned well and stone revetment wall at El Hadi, July 2019.

Western Sudan Community Museums

The Western Sudan Community Museum project aims to enable the capacity of Sudanese heritage professionals to play a significant role in a marginalized region of Sudan. As well as helping protect the heritage of Darfur, Kordofan and Omdurman, the project provides a platform for regional archaeological and cultural research and for making this heritage accessible to the local Sudanese communities and schools.

Building restoration work has focused on restoring nineteenth-century Mahadia-period buildings, using traditional lime-restoration technologies. Curators at Nyala’s Darfur Museum, El Obeid’s Sheikan Museum, Kordofan and the Khalifa House in Omdurman, Khartoum, have also received training in museum management, exhibition design and developed cataloguing and conservation recording techniques for their collections. They are now researching new material to create a context for their collections and create engaging dialogues with their communities.

The project is funded by the British Council Cultural Protection Fund with the Department for Digital, Culture, Media and Sport; coordinated by the National Corporation for Antiquities & Museums (Sudan), Mallinson Architects & Engineers (London), the Cambridge Centre for Heritage Studies at the University of Cambridge, the ICCROM-ATHAR Conservation Centre for Arab Region in Sharjah (UAE) and the British Institute in Eastern Africa, Nairobi.

Igbo-Ukwu Royalty Visits Archaeology, June 2019

Paul Lane and Pamela Jane Smith were delighted to celebrate the 60th anniversary of Thurstan Shaw's 1959 Igbo-Ukwu excavation by welcoming a delegation of Igbo royalty from the original excavation village and sites. The delegates were HRH Ocheze B.N. Ezeh, wife of the late HRH Igwe Dr Martin N. Ezeh (Idu II of Igbo-Ukwu), HRH Eze Dr Alexander Chukwudum Anozie from Igbo Jonah, Lieutenant Johnson Chukwemeka Anozie from the Igbo Richard site, Chinenyenwa Blessing (Igbo Isaiah Anozie's granddaughter), Curator Enyi Samuel Imebuogu of the Igbo-Ukwu NCMM Museum, Dr Kingsley Daraojimba from University of Nigeria, Nsukka, and Architect Okey Eze and Dr Levi Monanu, whose families excavated with Thurstan Shaw.

Running from September 2018 to January 2020, the project has five primary foci: Community Engagement, Conservation and Collection Management, Building Restoration, Museum Management Training and Developing Education, Exhibitions, and Media. The main objective has been finding out how to create active community participation around the question 'What do you want to do in your museum?' This has generated new work on schools programmes, exhibitions on the climates of Jebel Marrah and local marriage traditions, and community mapping of local heritage. The latter led to the discovery of ancient metal workings and a synagogue in Kordofan, and prehistoric painted caves and historic landscapes in Darfur.

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The original excavation village and sites. The delegates were HRH Ocheze B.N. Ezeh, wife of the late HRH Igwe Dr Martin N. Ezeh (Idu II of Igbo-Ukwu), HRH Eze Dr Alexander Chukwudum Anozie from Igbo Jonah, Lieutenant Johnson Chukwemeka Anozie from the Igbo Richard site, Chinenyenwa Blessing (Igbo Isaiah Anozie's granddaughter), Curator Enyi Samuel Imebuogu of the Igbo-Ukwu NCMM Museum, Dr Kingsley Daraojimba from University of Nigeria, Nsukka, and Architect Okey Eze and Dr Levi Monanu, whose families excavated with Thurstan Shaw. They attended a week-long archaeological training exercise. The training will support an on-site educational community outreach pilot project proposed by Kingsley Daraojimba and designed to inspire long-term archaeological and heritage programmes. This foundational work will engender crucial and vital conservation measures and public interpretation strategies for this internationally important complex of sites and excavated materials.

The Igbo delegation at the McDonald Institute.
Suakin 2018–19

LAURENCE SMITH (McDonald Institute), MICHAEL MALLINSON (Mallinson Architects), JACKE PHILLIPS (SOAS/McDonald Institute), S. TAHAR (McDonald Institute) & KATE ASHLEY (Loughborough University/Mallinson Architects)

The Suakin Project, under the Sudanese National Corporation for Antiquities and Museums and the Red Sea State, continued with post-excavation study, concentrating on the port’s contacts with the Western Indian Ocean region, including India, and with Eastern Asia.

One turquoise or blue glazed ware is widespread in the western Indian Ocean region. Ceramic petrography (Patrick Quinn) indicates such sherds at Suakin were manufactured in the same location. Consultation at the Red Sea IX Conference, Lyon, showed that there are visually similar wares, including kiln wasters, at a site near Cambay, indicating India as one source; and Durham University confirmed similarities between a black-burnished ware at Suakin and Indian wares. These Suakin sherds vary in petrographic composition, suggesting production in more than one location. Identifications of porcelain and celadon sherds confirmed a Chinese and a south-east Asian origin, respectively. Metal items from collections in Cambridge, previously cleaned and consolidated, were drawn by Jacke Phillips and the drawings inked up. Most identifiable items are stakes, pegs and nails, differing in size and in the shape of the head. A preliminary typology was established, currently comprising eight types and sub-types. Ethnographic data collected by Shadia Taha expanded the interpretations of the ceramic evidence for contacts with South Asia, on the basis of interviews with the descendants of the Indian traders resident on Suakin. They settled there from 1821, opening perfume shops and trading in silk, sandalwood, and perfume oil; most of these being archaeologically invisible.

The Western Sudan Community Museums Project (Michael Mallinson and Kate Ashley) included an Education Workshop in April, attended by 11 of the regional museums, who developed education material, with further training on conservation and collection reports, and how to develop museum displays. This will be used for museums in Western Sudan but also in other regional museums, including Suakin.

During 2018–19, the project was funded and supported by the McDonald Institute for Archaeological Research, Gerald Averay Wainwright Fund, Oxford University, Cambridge University Foreign Travel Fund, Cultural Protection Fund (British Council), Red Sea State and Ministry of Tourism, Antiquities and Wildlife, Sudan. Thanks to Dr Elizabeth Lambourn, De Montfort University, for information on the Cambay material, William Schenck for inking finds drawings and to Dr Derek Kennet and Dr Ran Zhang, Durham University, for information on the Indian and East Asian ceramics.

Egyptian Landscape Change

JUDITH BUNBURY (Department of Earth Sciences)

This year work continued to understand the harbour area previously identified from augering at Gourob, entrance to the Faiyum with the Institute Française d’Archéologie Orientale. Initially we had interpreted the area as a relatively informal place for coming alongside but excavations by Ian Ostericher and Mostafa el-Wakeel (Cairo University) showed that there had been harbourside buildings during the New Kingdom.

More details emerged from the work of Piers Litherland and the New Kingdom Research Foundation in the Theban Mountain of rapidly changing climate that has produced six generations of river-bed terraces since the early Holocene. Detailed mapping of settlements in the mountain by Bryony Smerdon and Kelly Accetta also showed how, in the Early Holocene Isnian period, population were widespread in the mountain and led to discovery of new rock-art panels.

Continued investigation at Shas-hotep, Middle Egypt, identified the course of ancient Graeco-Roman waterway past the site, masked by the remains of Mamluk waterways. Both irrigation systems were engineered as part of large agricultural projects during their respective empires. The sandy substrate of the waterway meant that crops were poor and the land in its course better re-used for housing.

Augering in a barren garden to find the ancient waterway.
The Ancient City of Amarna, Egypt

BARRY KEMP (McDonald Institute)

The Amarna Project was able to complete two periods of work at Amarna in 2019, in June and between October and December. Study was made of the wealth of material stored in the site magazines, from the cemeteries, from the city (in particular a workshop for glass) and from the Great Aten Temple. At the temple further areas within the huge temenos were excavated and the plan to make visible the outlines of the monumental front of the temple using new limestone blocks was finished.

The Amarna Project is funded from a range of sources including the Amarna Trust (incorporating many private donations), the Amarna Research Foundation (Denver, Colorado) and the Egyptian Department of the Metropolitan Museum of Art, New York.

Web reports are:

The South Georgia Archaeological Project

MARCUS BRITTAINE (Cambridge Archaeological Unit)

The first recorded hunting of seals on the sub-Antarctic island of South Georgia occurred in 1786. The pelts of Antarctic Fur Seals were distributed across a global market and oil rendered from Elephant Seal blubber was a hugely important resource. Within 40 years, however, both species were near to extinction, though hunting continued intermittently into the early twentieth century. Today, their numbers have significantly regenerated, but the seals are now continuously exposing and eroding archaeological deposits and built structures. A partnership between the Cambridge Archaeological Unit and the South Georgia Heritage Trust, the project conducted its first season of fieldwork in February/March 2019 in order to assess the nature and condition of these remains. Aerial (UAV) and ground surveys were augmented by targeted excavation. Sites with material traces of early sealing were identified at 12 of the 17 landing points; further human activities were noted at the other five. These included foundations of stone and timber structures, including large iron cauldrons (trypots)—three set within a stone and brick fire chamber—used to boil slices of blubber. Samples from timber, soils, bone and preserved seal pelt have been returned to Cambridge for further analysis. Investigations will resume at South Georgia and, it is hoped, the Falkland Islands in 2021.

https://www.sght.org/sealing-archaeological-project/

This project is mainly citizen science-funded, with support also from the McDonald Institute, National Geographic, the Gino Watkins Memorial Fund (SPRI) and the South Georgia Association. Drone survey was contributed to the project by the SAERI Coastal Habitat Mapping project, grant-aided by the Darwin Initiative (DPLUS065) through UK Government funding.

The team at Elsehul with stone-encased trypots, South Georgia.
New Light on Preservation Mystery of Terracotta Army Weapons

Marcos Martinón-Torres

For 40 years, there has been a widely held belief that over 2000 years ago the Chinese Qin developed an advanced chromate conversion coating technology to prevent metal corrosion. This belief was based on the detection of chromium traces on the surface of bronze weapons buried with the Terracotta Army and the very good preservation of these weapons.

Earlier this year, we published in *Scientific Reports* the results of a collaborative research project with Emperor Qin Shihuang’s Mausoleum Site Museum and UCL, where we challenged this theory. We analysed hundreds of weapons, as well as samples of lacquer and soil, and carried out accelerated ageing experiments in an environmental chamber. We showed that the chromium detected on some weapons was simply contamination from lacquer applied to shafts and scabbards. Further, we argued that the nature of the burial soil, with moderate basicity, low organic content and small particle size, was a key factor to explain weapon preservation. Chance, and not arcane knowledge, seemed to be the answer to the mystery.

New Insights into Early Metallurgy in China

Jianjun Mei (Needham Research Institute), Lu Wang & Kunlong Chen (University of Science and Technology Beijing)

Increasing archaeological evidence indicates that northwestern and northern parts of China played a crucial role in the introduction of copper and bronze metallurgy into the Central Plains of China during the late third and early second millennia BC. Recent archaeological discoveries at the Mogou cemetery site in Lintan, Gansu province, have yielded more than 300 copper and bronze objects, largely implements (such as knives) and ornaments (such as buttons, earrings, tubes, torques, armlets and beads), being the most so far found among the Qijia culture (2000–1600 BC) sites.

We have carried out a systematic scientific examination of copper and bronze objects excavated from the Mogou site in order to reveal their material and manufacturing characteristics. This revealed that the ornaments were mostly manufactured by forging and annealing, while the implements were mainly cast, with cold-working being applied at the final stage of shaping. Tin bronze is the most important alloy which was mainly used for the ornaments, with copper being largely for implements. In the meantime, other alloy materials were also in use, such as Cu-As, Cu-Pb, Cu-Sn-Pb and Cu-Sn-As. The new studies of the Mogou bronzes provide crucial scientific evidence for throwing new light onto the development of early bronze metallurgy in northwest China.
TwoRains and TIGR2ESS in 2019
C.A. Petrie & R.N. Singh

In January–February 2019, the collaborative TwoRains project returned to the field for its final field season, involving survey and sample collection in various locations across northwestern India. This work was combined with fieldwork for Flagship Project 4 of the new TIGR2ESS project, which is investigating the management of water in a changing monsoon climate. One team (Ravindra Nath Singh, Alana Giesche, Vikas Singh & Cameron Petrie) collected samples for palaeoclimate reconstructions from various locations, including revisiting caves in Himanchal Pradesh. A separate team (Aftab Alam & Adam Green) continued our systematic surveys into additional parts of Haryana that we have not investigated previously. In addition, Aftab Alam and Ravindra Nath Singh visited Cambridge as part of a DST-UKIERI funded exchange programme, and the TwoRains team continued their post-excavation laboratory research, which is producing rich insights into the way that Indus civilization populations were adapted to living in a diverse and variable climatic and environmental context.

The research for the TwoRains project is funded by DST-UKIERI and the European Research Council under the European Union’s Horizon 2020 research and innovation programme (grant agreement no. 648609). The research for the TIGR2ESS project is supported by a Global Challenges Research Fund grant, awarded by the UKRI.

Drone photograph of Masudpur I.

As part of this project a delegation from the Yangshao Culture Museum and regional administration in Henan province visited the Cambridge Heritage Research Centre (CHRC). They designed a small exhibition of replica Yangshao pottery to display in the Downing College library.

History and Heritage of the Yangshao Culture
M.L.S. Sørensen & G. Yang

This project analyses the historiography of the Yangshao Culture and its functioning as a heritage icon for the Chinese nation as well as its impact on various societal concerns. Yangshao Culture refers to a cultural complex along the Yellow River in central China between 5000 and 3000 BC. First excavated in 1921, the culture has been granted a central role in the development of agriculture, pastoralism and the invention of new material forms during Chinese prehistory, and it has been allocated a seminal role in the formation of a multi-ethnic Chinese nation. There are three strands of analysis:

• Historiography of the Yangshao Culture, its excavation and the changes in interpretations since 1921:
• Investigation of how the culture has been understood as heritage, especially its role in the formation of Chinese nationalism (government institutions and museums):
• Analysis of how the Yangshao Culture has been integrated in mainstream cultural expressions (advertisement, slogans, commercial exploitation and branding).

Funder: The Shanghai Academy of Guyewang Studies, China.
Further Remains of a New Neanderthal in Shanidar Cave, Iraqi Kurdistan

GRAEME BARKER (McDonald Institute) & EMMA POMEROY (Department of Archaeology)

Since 2015, a team led by Graeme Barker has been re-investigating Shanidar Cave (Iraqi Kurdistan), a site iconic in Palaeolithic archaeology following Ralph Solecki’s discoveries in 1951–60 excavations of the skeletal remains of c. 10 Neanderthals. He argued, controversially, that some of these had died in rockfall from the cave roof and others had been buried with formal burial rites, including one with flowers. In the 2019 season, we found part of the spine and ribs of an adult Neanderthal immediately underneath where in 2018 we found the skull and some upper limb bones of the same individual, which we have dated to about 75,000 years ago. The individual is immediately adjacent to where Solecki found a cluster of four bodies including Shanidar 4, the ‘Flower Burial’. The body was lying in a shallow scoop that cannot be explained in terms of natural processes such as water flow and in part covered with stones that are different from rockfall boulders higher up the stratigraphy, from which they and the body are separated by occupation sediment. Hence it seems very likely that this is a case of deliberate burial. Fragmentary remains of a different Neanderthal were also noted lower down, so the evidence is accumulating of a tightly situated group of bodies that is unique in Neanderthal archaeology. Emma Pomeroy has led the excavation of these remarkable new finds and is coordinating their study.

The 2019 fieldwork of the Shanidar Cave Project was funded by the D.M. McDonald Grants and Awards Committee, the Rust Family Foundation and a British Academy Small Research Grant to Professor Chris Hunt (Liverpool John Moores University).

Memories for Life: Materiality and Memory of Ancient Near Eastern Private Inscribed Objects

CHRISTINA TSOPAROPOULOU, NANCY HIGHCOCK & SILVIA FERRERI

In June 2019, the project received generous funding from the Riksbankens Jubileumsfond (Swedish Foundation for Humanities and Social Sciences) to host a workshop ‘Crafting memories and Identities in Antiquity: Inscribed dedicatory and commemorative objects’. The workshop, held 13–14 September at the University of Uppsala, was organized by Christina Tsouparopoulou, Nancy Highcock and their fellow team members at Uppsala, Jakob Andersson (PI) and Rune Rattenborg (research associate).

The workshop brought together leading scholars working across Classics and Classical Archaeology, Assyriology, Ancient Near Eastern Archaeology, Egyptology, Biblical Studies, Late Antiquity and Comparative Religion in order to develop theoretical models and methodologies for analysing and interpreting inscribed objects across time and space. We considered the ritual underpinnings of inscribed objects, their role as active agents in memory and identity construction and their function in generating and maintaining human and divine networks. Publication of these contributions is currently being planned.

In addition, the ‘Memories for Life’ team is now preparing to transfer their database of Mesopotamian inscribed commemorative objects to the online ORAAC (Open Richly Annotated Cuneiform Corpus) platform which will be fully accessible to researchers and the public in 2020. This dataset is the first of its kind to encompass the material width and temporal depth of three millennia of ancient Near Eastern inscribed objects with a particular focus on objects commissioned by private individuals.

Funded 2017–20 by the Swedish Research Council.
Research Highlights

Lagash Archaeological Project

Augusta McMahon

The Lagash Archaeological Project (LAP) examines the ancient city of Lagash (Tell al-Hiba) in south Iraq. LAP is a collaboration among colleagues at the Universities of Cambridge and Pennsylvania and the Iraqi State Board of Antiquities and Heritage; Augusta McMahon is the Field Director. The project began in March of 2019 with six weeks of remote sensing, survey, excavation and environmental sampling.

At c. 600 hectares, Lagash is one of the largest sites in Mesopotamia, primarily dated to the Early Dynastic Period, c. 2900–2400 BC. This period saw the consolidation of city-states across southern Mesopotamia (south Iraq). LAP takes an ambitious multi-scalar approach to the city, focused on the reasons for its rapid growth and sustainability. Our combination of drone photography, magnetic gradiometry and surface survey suggests that occupation of the city was extremely dense. These methods also produced evidence for canals or streets running through the city, defining neighbourhoods, and for a massive city wall. We are also examining variability and zoning of activity areas in the city, beginning with excavations in an area of intensive ceramic production.

Funding: British Institute for the Study of Iraq, Reckitt Trust, National Geographic Society, University of Pennsylvania.

Resurrecting the Animal Husbandry at Abu Salabikh

Nicholas Postgate

In 2017, after nearly 30 years, 30 crates of animal bones were retrieved from the ruins of the dig house at Abu Salabikh in south Iraq and given a safe haven in the premises of the Inspectorate of Antiquities at Diwaniyah. To provide the missing link in the final report on ‘Two Early Dynastic Houses’ (Abu Salabikh Excavations Vol. 5), which is scheduled for completion in 2020, we were fortunate that in May 2019 Dr Tina Greenfield, now at Saskatchewan, and her specialist co-workers Dr Jane Gaastra (University of Exeter) and Eleuterio De Sousa (University of Manitoba) embarked on a two-week trip to Diwaniyah, where they received a warm welcome and massive logistical support from the staff of the State Board for Antiquities and Heritage, especially Jacob Jawdat (1), and from Prof. Abbas al-Hussainy of the Department of Archaeology, University of Qadisiyah.

Their study concentrated on the animal bones and teeth recovered from two elite family residences in this city of about 2400 BC. In addition to the regular identification procedures, butchering marks were analysed by Eleuterio De Sousa under a dinolite microscope (2), and Jane Gaastra conducted GMM (geometric-morphometric) analyses of intact astragali (ankle bones) of sheep and goats selected for photogrammetric 3D modelling, building the models of each specimen, which will allow for comparisons of sheep and goat breeds present at Abu Salabikh with those from contemporary sites across Mesopotamia. Stable isotope and trace element analyses on animal teeth will shed light on the mobility and management of animals—whether they were kept inside the city compounds, left to roam, pastured on an agricultural landscape close to the city, or marched seasonally hundreds of miles north in search of pasture.

Funding from the British Institute for the Study of Iraq, the Cambridge Humanities Research Grants Scheme, and St Thomas More College, University of Saskatchewan, is gratefully acknowledged.

First day of Lagash excavations.

Site survey: Cambridge and Penn students on the LAP team.

2. Butchering cut mark, using the dinolite microscope.
TRIBE and MARBAL
Jess Beck

In 2019 Jess Beck spent one month collecting osteoarchaeological data from the Copper Age enclosure site of Los Melgarejos in Getafe, Spain, as part of the TRIBE project (‘Tiempo y usos de los recintos de fosos del Calcolítico peninsular’, PGC2018-095506-B-I00). As part of this research she prepared and analysed carbon and nitrogen from human and faunal bone collagen for 58 samples from the site in the Dorothy Garrod Laboratory. Beck also spent the 2019 summer field season excavating an Early Bronze Age tomb in Transylvania as part of the international collaborative Mortuary Archaeology of the Râmeț Bronze Age Landscape (MARBAL) project. The summer 2019 season included a combination of osteoarchaeological analysis, excavation, magnetometry and orthophotogrammetry.

The research at Los Melgarejos was funded by the Ministerio de Ciencia, Innovación y Universidades, Spain, and Área Arqueología. The MARBAL project received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 746216, and a D.M. McDonald grant from the McDonald Institute for Archaeological Research.

Pigments of the Scythians
Margarita Gleba

Traces of colours have survived on bone, wood and leather artefacts found in Scythian burials from southern Ukraine dated to the fourth century BC. They provide a rich source of information about the materials and techniques used by the Scythians for the embellishment of tools, weapons and elements of clothing. The project used a multi-analytical approach (SEM, FTIR, Raman, multispectral imaging) to identify the pigments. The abundance of the red pigment cinnabar on a variety of objects, such as bone spindles, wooden arrow shafts and leather quivers, indicates that Scythians had a stable supply of this relatively rare mineral. Analysis of one of the blue samples showed that it is Egyptian Blue, a synthetic pigment produced by fusing quartz, lime, alkali and copper compounds in a furnace. It was a common blue pigment in the ancient world, but its presence on a Scythian leather quiver is unusual and may suggest that it originated from the Greek settlements on the northern Black Sea coast. Future work will focus on binding media and provenance.

The project is funded by the McDonald Grants and Awards Fund. Thanks to Miljana Radivojevic, Sasha Turchyn, Josephine Clegg, Giovanni Verri.

(Top) Detail of the leather quiver from Ilijinka decorated with red cinnabar and Egyptian Blue; (bottom) the latter luminesces in UV light.
**Interamna Lirenas. A Roman Town and its Territory**

ALESSANDRO LAUNARO & MARTIN MILLET (Faculty of Classics)

Three new trenches were opened in order to investigate the nature and state of preservation of a series of buildings/structures originally identified through geophysical prospection. The first trench, next to the theatre and along the forum, brought to light the lower part of two large brickwork columns (Ionic/Corinthian style), a well-preserved concrete floor and scarcely preserved remains of a lateral wall (also in concrete). By integrating this evidence with the geophysical data we were able to confirm our original interpretation of this building as the town’s basilica (c. 20x26 m), whose precise chronology is yet to be established. The second trench was opened over a building (whose interpretation remains elusive) at the southwestern corner of the forum. Plough damage turned out to have been especially extensive in this case: it had reached as deep as the thresholds and the foundations, intercepting two late child burials, which had been placed there following the abandonment of the building. A third trench was opened downslope from the theatre, confirming the presence of a retaining wall (in opus reticulatum) which kept the theatre’s own terraced platform in place. Further work was carried out within the theatre, significantly illuminating aspects of its architecture and original building process.

For more information about the project, visit www.classics.cam.ac.uk/interamna

The 2019 season was undertaken in collaboration with the Soprintendenza Archeologia Belle Arti e Paesaggio delle Province di Frosinone Latina e Rieti, the British School at Rome and the Comune di Pignataro Interamna, with support from the Faculty of Classics and the Comune di Pignataro Interamna.

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**A Mycenaean Social Bioarchaeology (MYSOBIO)**

IOANNA MOUTAFI

My research investigates the interplay between funerary treatment and social dynamics in the Late Bronze Age Aegean (1700–1050 BC) through a contextual bioarchaeological approach to human remains. Transcending traditional disciplinary boundaries, the MYSOBIO project integrates mortuary theory and traditional archaeology with interdisciplinary scientific advances in the study of collective mortuary assemblages. The aim is to reconstruct Mycenaean funerary treatment to a new level of detail, in order to assess its complex interaction with wider socio-political developments.

This year, work was divided between multi-faceted data analysis in Cambridge, focusing on the final processing of taphonomic and demographic data, and completing data collection in Greece. In March 2019, extensive aDNA sampling (over 250 samples from key Mycenaean sites) was concluded through a field-trip in the Peloponnese and the initial processing of samples in the M.H. Wiener Laboratory (ASCSA) in Athens. The genetic component of MYSOBIO is conducted in collaboration with the Centre for GeoGenetics, University of Copenhagen (directed by Eske Willerslev).

This year was also particularly busy in terms of broad dissemination of the project through a series of international lectures, teaching seminars and conference presentations in the UK, Greece, Netherlands, Denmark and Switzerland.

This project is funded by an H2020 Marie Skłodowska-Curie Fellowship (grant no. 747458). The genetic analyses run under the Rise II project ‘Towards a New European Prehistory’, led by Kristian Kristiansen (University of Gothenburg) and funded by Riksbankens Jubileumsfond.

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Aerial view of the archaeological excavation at Interamna Lirenas, looking south.

Ioanna Moutafi and Jesper Stenderup in the Wiener Laboratory, Athens: preparing for aDNA sampling of an adult skull from the Mycenaean cemetery of Voudeni (fourteenth century BC).
Keros, Greece

Colin Renfrew & Michael Boyd (McDonald Institute)

Excavation and survey have investigated the Early Bronze Age (2750–2240 BC) sanctuary and settlement of Dhaskalio and Kavos at the western end of the island of Keros in the central Cyclades, Greece. The excavations have demonstrated the site's dramatic expansion around 2500 BC through a massive construction project. The import of metal and the production of metal artefacts was one of the key drivers of site formation. All material goods found on the site are imported, suggesting a remarkable centripetal factor in the networks built and articulated through Keros. These factors, along with changes in the subsistence base, point to incipient urbanization with major changes in hierarchical and heterarchical social relations.

Following the completion of fieldwork for the four-year programme in October 2018, the project has entered a period of study and publication. A ten-week study season took place during March, April and May 2019, followed by shorter study in September and October. Study and laboratory analyses will continue throughout 2020, leading to a multi-volume publication series beginning in 2021. A National Geographic documentary team filmed project members on Dhaskalio and in the Naxos Museum in September. From July to October a public exhibition of finds from the project was mounted in the new Kouphonisi Museum. Meanwhile, a comprehensive conservation project is currently under way at the site, preserving its unique remains for future generations.

In 2019 the project was supported by the Institute for Aegean Prehistory, the Cyprus Institute, the A. G. Leventis Foundation, Packard Humanities Institute, the Stavros Niarchos Foundation, Gerda Henkel Stiftung, AIGEAS-AMKE, the British Academy, the McDonald Institute for Archaeological Research, the British School at Athens, Cosmote, Blue Star Ferries, EZ-dot and private donors.

Firing Like the Romans

Letizia Ceccarelli, Luca Primavesi & Simon Stoddart

Over the past two years, an accurate half-scale model of a double updraft Roman kiln has been reconstructed in the administration courtyard of the Gaslini Estate at Montelabate (Perugia, Umbria). The original, substantially preserved, kiln had been excavated within 500 m of the reconstructed working model during a series of successful excavation campaigns (2012–18), as part of the Montelabate Project. The mudbrick technique was very efficient for the stability of the double chamber structure (1.5 x 1.5 m x 2.4 m in height) and bricks provide a significant contribution to the thermal insulation.

A roofed pottery workshop was added in 2019 to protect the kiln and to provide testimony of the longevity of pottery production in the Umbrian region.

The kiln has now been tested in several 24-hour firings, using thermal couples to check the achieved temperature. In the style of the Roman craftsmen, good approximations to temperature have been achieved by observation of colour. Samples of tiles, made out of local clays and temper, have been successfully fired and then tested scientifically, in the laboratories of the Politecnico di Milano, to compare with the original production of tiles and amphorae.

As well as an important scientific test of experimental archaeology, the kiln is now an important tourist attraction for the numerous visitors to the Gaslini estate and the abbey of S. Maria di Valdiponte.

The project is grateful to the Arts and Humanities Impact Fund of the University of Cambridge for the financing of the kiln and pottery workshop reconstruction, to the Politecnico di Milano for technical support and to the McDonald Institute and the Rust Family Foundation for the principal finance behind the excavation of the original kilns.
Of Linear Features and Walker Lines at Panormos

TOBY WILKINSON & ANIA SLAWISCH

Since 2015, the Project Panormos Survey has aimed to transform our understanding of human–environment interaction in a pivotal transition zone between Aegean and Anatolian cultural and geographic spheres, namely, the Milesian peninsula, today on the west coast of Turkey. In 2019, fieldwork was directed at the less explored and less well understood interior of the peninsula. A large swathe of linear features, presumed to be the remains of ancient agricultural field systems, that had been identified and digitized in 2018 were visited on the ground and an initial assessment made of their above-ground features. Their status as field boundaries was confirmed, but their exact developmental histories remains a task for the future. Meanwhile intensive fieldwalking focused on the inland area beyond the immediate coastal hinterland of the ancient Panormos harbour: surface finds were very varied, but most excitingly the presence of Late Chalcolithic or Early Bronze Age occupation in this inland area was confirmed by ceramic and lithic scatters. Finally drone survey of the region was begun in order to place surveyed finds and monuments in better topographic and vegetation context (see image).

The 2019 fieldwork was supported by the Institute for Aegean Prehistory, the McDonald Institute, the British Institute at Ankara, the Gerald Averay Wainwright Fund, the Institut Français d’Études Anatoliennes and Albert-Ludwig University of Freiburg.

Reconstruction of the probable area of the ancient (pre-Roman) harbour at Panormos using oblique-angle drone photograph.

Safeguarding Holocaust Sites

GILLY CARR

This year I have begun chairing a five-year project funded by the International Holocaust Remembrance Alliance, which seeks to write European heritage guidelines to safeguard Holocaust and Roma genocide sites in the twenty-first century. Such sites are at risk today from lack of funding and from decay, destruction, the rise of the far right, Holocaust denial and distortion, climate change and natural disasters, to name but a few. This project seeks to mitigate these risks through the introduction of a charter for best practice. The ultimate aim of the project is for European countries to incorporate these guidelines into national heritage legislation. Over the next five years I will be leading my team to visit many such sites with the aim of informing the guidelines and helping to advise stakeholders in tackling the many challenges they face.

Earlier in the year my fourth monograph Victims of Nazism in the Channel Islands: A legitimate heritage? was published by Bloomsbury Academic. My exhibition ‘On British Soil’, previously shown at the Wiener Holocaust Library in London, travelled to Guernsey Museum, where it featured as the major Spring exhibition. Finally, I have recently been appointed by the government as one of eight academic advisors to the new Holocaust Memorial and Learning Centre in London.

Funders: International Holocaust Remembrance Alliance (IHRA).

The IHRA Safeguarding Sites team at the Hammond Memorial, Alderney.
Geoarchaeology of the World Heritage Landscape of Avebury
CHARLES FRENCH, MICHAEL J. ALLEN & PHILIPPE DE SMEDT

Extensive geoarchaeological and EMI geophysical survey of the Avebury World Heritage landscape in the upper Kennet river valley has taken place as part of the AHRC-funded Living with Monuments project. To date, the palaeosol data strongly suggest that weakly developed woodland soils had developed and survived in only a few places, primarily along the margins of the upper Kennet floodplain and on patches of Clay-with-Flints geology. Otherwise thin grassland rendzina soils are ubiquitous and long-lived, which implies a much greater degree of landscape openness and stability throughout the prehistoric periods.

As a consequence of long-term, widespread, well-established grassland soils, hillwash erosion deposits are relatively rare. These are largely limited to two major phases of valley fill rather than aggrading hillwash deposits at the base of the downland slopes. First there is re-worked bedload calcitic silt material accumulating in a number of shallow flat-bottomed basins in the earlier Holocene, and second a greyish brown silty clay deposited across the available floodplain area from Roman/post-Roman times through medieval times (J.G. Evans’ ‘Arion Clay’). The latter directly relates to arable disturbance of the downland slopes of the catchment, leading to the extensive topsoil erosion. Inbetween these two main phases is a more ephemeral and variable phase of erosion and valley fill related to later prehistoric landscape disturbance and mixed agricultural practices on the downland slopes of the watershed. Thus the patchy and relatively shallow accumulations of eroded material in the floodplain indicate a relatively stable grassland landscape in much of the hinterland over the early-mid-Holocene, with most major accumulations occurring in historic times.

Funding source: AHRC (Living with Monuments: PIs Prof. Joshua Pollard, Southampton and Mark Gillings, Leicester)

The borehole soil data for the Avebury World Heritage landscape.

Film Skills
PAMELA JANE SMITH

In early 2019, after a decade of teaching staff, students and researchers to communicate their research using short films for Instagram, YouTube and webpages, Pamela Jane Smith retired. Her skills training and film-making course passed to Cambridge Digital Humanities, while the ‘From Concept to Clip’ classes training continues at: learning@cdh.cam.ac.uk


‘TwoRains Project – Winter Rain, Summer Rain: Adaptation, Climate Change, Resilience and the Indus Civilisation’ https://www.youtube.com/watch?v=8qvCEafgjM Created by Alessandro Ceccarelli, PhD candidate
Aldborough, North Yorkshire  
Rose Ferraby & Martin Millett (Faculty of Classics)

Work continued at the Roman town of Isurium Brigantium with a long fieldwork season in May. We re-opened an area beside the principal road to the North Gate first explored in 1924. This work revealed evidence for buildings and yielded several architectural fragments. Our aim was to examine a good-sized area of deposits from the period of the town’s origins enabling us to assess its early character. It proved difficult to identify the extent of the 1924 work, but our trench revealed a long sequence of structures and the surface of the most northerly street within the planned town. We did not reach the beginning of the sequence, but a second-century blacksmith’s workshop was revealed in the deepest part of the trench. Above this, successive phases of buildings faced onto the main road. A fourth-century midden was overlain by two phases of timber buildings taking the sequence into the fifth century. The excavation will be continued in 2020.

In collaboration with Charly French and Sean Taylor, the survey of the geoarchaeology of the valley floor to the north of the town continued. The initial prospection of the area was completed, and a complete pollen core recovered. This is currently being analysed by Rob Scaife at Southampton.

A series of podcasts recorded during the excavation can be accessed at:  
https://aldboroughromantown.wordpress.com/podcasts/

The 2019 excavation from the north with the blacksmith’s workshop visible in the foreground.

The project was funded by an anonymous donor.

Final Film-skills Workshop, 2 March 2019.
McDonald Annual Lecture
7 November ROBERTA GILCHRIST (University of Reading) - The Medieval Ritual Landscape: Archaeology and Folk Religion

Field Archaeologist in Residence Lectures
25 February Second Field Archaeologist in Residence Lecture - MUST FARM PROJECT TEAM - Texture and Temporality – Identifying Routine in the Must Farm Pile-dwelling Settlement Assemblage
5 June Second Field Archaeologist in Residence Lecture - CHRISTOPHER CHINNOCK (MOLA) - Isotopic Analysis of Human Remains From Two Early Medieval Cemetery Populations and the Significance of Collaborative Research

Special Lecture
16 October HEINZ WANNER (University of Bern) - Rapid Changes or Gradual Transitions? Holocene Climate and Its Impact on Societies

Garrod Research Seminars
11 October KARINA GRODER (Vienna) - A rarely known material evidence - Textiles as prestige goods in Central Europe, 1st millennium BC
18 October GAVIN LUCAS (University of Iceland) - Salient Objects: Or, are some things more important than others?
25 October LIN FOXHALL (University of Leicester) - Material actors: exploring the agency of things in social networks
1 November STEPHANE WYNNE JONES (University of York) - Living with objects at Songo Mnara (Tanzania)
15 November ANDREW TURNER (University of Cambridge) - Calendars, Astronomical Observation, and the Problem of Dating Monuments in Ancient Mexico
22 November KUNLONG CHEN (UCL) - Social and economic landscape in Shang period China: a metallurgical perspective
31 January CHRIS GODDEN (University of Oxford) - Rethinking the history of magic
14 February JOANNA SOFAER (University of Southampton) - Archaeology as/and the Humanities
21 February CORINNE HOFFMAN (Leiden University) - Deeply rooted: archaeology and legacy of the indigenous Caribbean
28 February PHILIP STOCKHAMMER (Ludwig-Maximilians-Universität and Max Planck Institute) - Bioarchaeological Prehistoriography: New Data from the Neolithic to the Early Bronze Age in Southern Germany
7 March MARGARITA DÍAZ ANDRÉU (Universitat de Barcelona) - Rock art soundscapes: reflecting on the challenges ahead
25 April JOANNA SOFAER (University of Southampton) - Archaeology as/and the Humanities
9 May ÉSZTER BÁNFY (Römisch-Germanische Kommission des Deutschen Archäologischen Instituts) - A bottleneck in the spread of early Balkan farmers: the birth of the Central European Neolithic
16 May ANNE HAOUR (University of East Anglia) - Medieval connections: the archaeology of the cowrie trade

Conferences and Workshops
14–15 November Mend the Gap: Human–environment interactions from the Last Glacial Maximum to the mid Holocene (c. 22,000–6000 BP): Smart Integration of the Sciences of the Past (Workshop)
24 November African Archaeology Research Day (AARD)
3 December Heritage in the Making: Dealing with Legacies of Fascist Italy and Nazi Germany (Workshop)
11–13 January How Jared Diamond Stole the Grand Narrative: Reclaiming Social Complexity in Global Perspective (Forum)
25–28 January Neanderthal Notions of Death and its Aftermath: The Contribution of New Data from Shanidar Cave (Workshop)
7 February Reuse, Appropriate and Ownership in Ancient Egypt: Framing our Understanding (Colloquium)
26 February Headland Archaeology A14 Seminar
4–5 March Where the Wild Things Are: From the comfortable domus to glimpses of past ontologies (Workshop)
12–15 March Material cultures of natural history and ethnography
18 March Cambridge Centre for Climate Science Poster Session
22–23 March Fierce Lions, Angry Mice and Fat-tailed Sheep: Animal Encounters in the Ancient Near East (Conference)
27–28 March Big Data in Archaeology: Practicalities and Possibilities
17 May Ibero-British Archaeology: beyond borders (Workshop)
10 June Aegean Archaeology Group Conference 2019: Reinterpreting Collections, The Power of Images & Eastern Connections
20–21 September Marine Mammal Working Group (International Council for Archaeozoology) (Workshop)
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.

Organizer: David Kay

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!

Organizer: Sara Morrissett

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.

Organizer: Kyra Kaercher

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.

Organizers: Isobel Coats, Ruairidh McLeod

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.

Organizer: Dylan Gaffney

The Computational and Digital Archaeology Lab (CDAL) is a hub for doctoral, post- doctoral and faculty levels that are committed to advancing the application of digital, computational, and quantitative methods in archaeology. The workshop series brings together experts of the field from around the world showcasing their latest research.

Organizers: Enrico Crema, Marta Kryzanska

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.

Organizer: Kate Spence

East Anglia is a very active region in commercial archaeology. Field Archaeology: Methods and Mayhem (FAMM) is a forum where the concerned parties across the spectrum: Archaeological Units, Development Control, Outreach groups and the University can discuss the ongoing advancements, discoveries and the problems within this region and beyond.

Organizer: Donald Home

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

Organizer: Anna O’Mahony

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.

Organizer: Ben Davenport

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.

Organizer: Thomas Matthias Boehmer

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

Organizer: Samantha Leggett

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.

Organizer: Andreas Nymark, Benjamin Utting, Emily Hallinan

The Pitt-Rivers Archaeological Science Seminars are generally given by Cambridge researchers and visitors. They are primarily aimed at researchers working in the archaeomaterials, geoarchaeology, archaeobotany, genetics and isotope laboratories in the McDonald Institute, but cover a wide range of topics.

Organizers: Camila Alday, Emily Tilby
February is LGBT+ History month in the UK. This annual celebration aims to promote equality and diversity by increasing the visibility of lesbian, gay, bisexual and transgender people, their history, lives and experiences. In 2019, the Department of Archaeology held a number of events marking LGBT+ History month, including hosting an exhibition on the lives of LGBT+ migrants in Britain (in conjunction with UCM, Encompass Network and Cambridge City Council), the inaugural ‘Queer(y)ing the Past: an Afternoon of Alternative Archaeology’ series of talks on sexuality and gender in the past featuring keynote lecturer Prof. Richard Parkinson of the University of Oxford, and flying the rainbow and transgender pride flag atop the McDonald Institute.

**Prehistory & Archaeology Day (20 October 2018)**

Our seminal, family-friendly Festival of Ideas event, Prehistory and Archaeology Day was held at the Cambridge Archaeological Unit on 20 October 2018. As ever, it was an incredibly busy day with over 500 people in attendance!

From toddlers to grandparents, the day featured something for everyone—spear throwing, archery, pottery making, cave painting, metal smelting, finds displays, zooarchaeology, cuneiform, hieroglyphics, practice excavation and evolutionary models. Whew!

The wood-fringed grounds of the CAU provided the perfect setting on a beautiful autumn day; CAU staff, researchers, students and professional staff volunteers and demonstrators enjoyed themselves as much as the public.

**Science on Saturday (16 March 2019)**

Archaeology is always a proud contributor to the University of Cambridge’s annual Science Festival. This year’s ‘Science on Saturday’ event, held at the McDonald Institute, proved as popular as ever as members of the public (over 1300 of them!) flocked from far and wide to enjoy a wide range of activities on the theme of ‘the science of archaeology’.

Attendees learned about Neanderthals, Jomon figurines, alchemy, remote sensing, swords, Mesopotamian languages and zooarchaeology with the super-popular ‘A Game of Bones’.

Visitors were fascinated by the way modern scientific techniques can help solve puzzles of the past, such as where people came from, what they ate and how ancient societies worked. We always hope to inspire the archaeological scientists of the future and, from feedback, we seem to be doing something right!

**LGBT+ History Month**

February is LGBT+ History month in the UK. This annual celebration aims to promote equality and diversity by increasing the visibility of lesbian, gay, bisexual and transgender people, their history, lives and experiences. In 2019, the Department of Archaeology held a number of events marking LGBT+ History month, including hosting an exhibition on the lives of LGBT+ migrants in Britain (in conjunction with UCM, Encompass Network and Cambridge City Council), the inaugural ‘Queer(y)ing the Past: an Afternoon of Alternative Archaeology’ series of talks on sexuality and gender in the past featuring keynote lecturer Prof. Richard Parkinson of the University of Oxford, and flying the rainbow and transgender pride flag atop the McDonald Institute.

**Masterclasses**

The Cambridge Admissions Office organizes a number of subject-specific Masterclasses every year and the Archaeology masterclass was held on 16 February. Prof. Paul Lane and Dr Tamsin O’Connell gave presentations on ‘Challenging European Stereotypes about Africa through Archaeology’ and ‘Biomolecular Approaches to Past Human Lives’ respectively to the c. 30 sixth-formers in attendance, who were selected for academic ability and interest in the subject.

‘Queer(y)ing the Past’ poster for LGBT+ History Month event.
Peterhouse Archaeology Summer School

Peterhouse hosted and funded this year’s residential summer school for sixth-formers, which took place 5–9 August 2019. Like all Archaeology outreach events, it was entirely free to attend and generous travel subsidies were available. Thirty students took part coming from as far afield as Bristol, Glasgow, Sunderland, Lancashire and the Czech Republic! Following on from the successful summer schools hosted by St John’s, Homerton and Trinity Colleges in previous years, the programme was designed to expose participants to the full intellectual breadth of the tripos, including Archaeology, Biological Anthropology, Egyptology and Assyriology. Lectures and practical sessions were given on topics including ancient diet, human behavioural ecology, osteology, zooarchaeology, computational archaeology, ancient Mesopotamia, artefact handling and Egyptian language.

The highlight of this year’s summer school was the opportunity for students to participate in excavation training in the Fellows’ Garden at Peterhouse, led by Richard Newman and Cat Collins of the Cambridge Archaeological Unit. Five test pits were excavated, two of which encountered structural remains associated with domestic properties that formerly fronted onto Trumpington Street. Of these remains, one structure in particular consisted of a substantial masonry building of probable late fifteenth-century date. The domestic properties were demolished in the mid nineteenth century, at which time the Fellows’ Garden was also expanded from its original, late medieval walled footprint. Made-ground deposits associated with this latter event were identified in two further test pits, beneath which stratified late medieval deposits were encountered.

We were tremendously impressed by participants’ liveliness, friendliness, and intellectual capability. After the summer school participants said, ‘The lectures and activities throughout the week were all really interesting and the people in charge were lovely. I especially enjoyed the Egyptian language session and the dig in the grounds. I also found it very useful to look around the uni and find out more about it. I enjoyed how it gave a taster of different aspects of the course and I liked meeting other people interested in similar things.’ We anticipate that many summer school participants will apply to the archaeology tripos for 2020 entry.

Studying Ancient Egypt and Mesopotamia at University: A Conference for Sixth-Formers

One of the distinctive features of the Cambridge archaeology tripos is that it includes Egyptology and Assyriology: students can specialize in these subjects from the first year, or do them to a lesser extent in the first year and specialize in the second. With this in mind, the fourth annual ‘Studying Ancient Egypt and Mesopotamia at University’ conference for sixth-formers was held at the Royal Asiatic Society and the British Museum on 2 March 2019. The event was organized by Dr Nancy Highcock.

Nearly 60 students from across the UK attended the conference. The students heard presentations by researchers from Cambridge, Oxford, UCL, SOAS, Liverpool, Birmingham, Reading, Cardiff and UWTSD. They also enjoyed tours of the Egyptian and Mesopotamian galleries at the British Museum and took part in a ‘treasure hunt’. There was the opportunity to meet current students from many of the institutions in the UK that teach these subjects.

A panel on careers involving recent graduates showed the breadth of jobs to which degrees in Egyptology and Assyriology can lead, from business and consultancy to commercial archaeology to further research. In feedback after the event, an overwhelming majority of participants stated that it had made them more likely to study Egypt and Mesopotamia at University.

Peterhouse archaeology summer school.

Archaeological Unit. Five test pits were excavated, two of which encountered structural remains associated with domestic properties that formerly fronted onto Trumpington Street. Of these remains, one structure in particular consisted of a substantial masonry building of probable late fifteenth-century date. The domestic properties were demolished in the mid nineteenth century, at which time the Fellows’ Garden was also expanded from its original, late medieval walled footprint. Made-ground deposits associated with this latter event were identified in two further test pits, beneath which stratified late medieval deposits were encountered.

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Excavating in the Fellows’ Garden at Peterhouse for the archaeology summer school.
Science in Archaeology Day at Trinity Hall

This year, the third annual Science in Archaeology Day was hosted by Trinity Hall on 19 March 2019. Twenty students, mainly from widening participation backgrounds, attended the event which included presentations by Department students and staff on a variety of topics including isotopic analysis, archaeometallurgy, health, genetics, geoarchaeology, archaeobotany, ancient parasites, archaeological textiles and genetics. The prospective students were treated to lunch and a tour of the college and a session on admissions. This event is held annually to raise awareness of the uses of science within the discipline of archaeology.

London Anthropology Day

London Anthropology Day is a regular fixture of our outreach calendar and has been for many years. The day is organized by the Royal Anthropological Institute and is held at the British Museum’s Education Clore Centre. It is a free university-taster day for students, careers advisers and teachers. This year’s ‘LAD’ was on 29 June and Dr Emma Pomeroy hosted a stall and ran a workshop on human osteology to the crowd of 200+ participants who came to discover more about anthropology at university.

LAD 2020 will be held at the British Museum on 19 June 2020.

Egyptology and Assyriology Study Day at Emmanuel College

Emmanuel College hosted the inaugural ‘Egyptology and Assyriology Study Day’ at Cambridge this year on 17 January. Twenty students attended the event which included presentations by Department students and staff on Assyriology and Egyptology themes, including ancient languages. The prospective students also had a practical session in the MAA and were treated to lunch, a tour of the college and had a session on admissions from the college admissions tutor.

Sutton Trust Archaeology and Biological Anthropology Summer School

The Cambridge Sutton Trust Summer Schools are highly competitive, week-long, subject-specific residences, where students live and study as a Cambridge student. The summer schools are open to students studying in Year 12 (or equivalent) at a UK state school and in 2019 the Department of Archaeology welcomed 10 students to the Archaeology and Biological Anthropology strand. The week consisted of presentations and practical sessions on medieval archaeology, behavioural ecology, diet and disease in the past, artefact handling, ancient Egyptian language, zooarchaeology and computational archaeology. The students also produced their own independent research project based on an artefact from the MAA’s collection.

After the summer school participants said, ‘Following the summer school, I feel confident that Bio Anth is something I want to study in the future and I feel informed about the incredible range of specialization and study across the field. The lecturers and practical leaders were amazing, I really appreciated the opportunity to discuss what I was interested in with actual PhD students and learn about their current work as well as their journey to Cambridge.’

The Sutton Trust Archaeology and Biological Anthropology Summer School is set for 17–21 August, 2020.

Biological Anthropology Study Day

This year, the Department hosted a subject-specific Biological Anthropology Study Day for prospective undergraduates on 2 May.

Over 30 students attended the event which included multiple lectures and practical sessions on human adaptation and evolution. Participants also had a tour of the Duckworth collection and a session on making a competitive application to Cambridge.

The 2020 Biological Anthropology Study Day is set for 30 April.
Volume 29 has been another bumper year for the Cambridge Archaeological Journal. CAJ published a record 33 full-length articles, spanning the entire range of human history from the earliest stone tools in African to post-medieval Sweden, and from the northwest coast of Canada to the Bronze Age Levant. Some work highlighted traditional themes such as cosmology, gender and trade; an increasing number of articles highlighted emerging themes such as ontology and relationality. It has probably also been the most diverse year ever for our authorship. Genderwise, our lead authors include 16 females and 17 males. Geographically, our lead authors come from the USA (9), UK (6), Australia (2), Sweden (2), Italy (2), Germany (2), Denmark (2), Finland, Israel, the Philippines, Cameroon, Austria, Canada, Spain, Taiwan and Ireland. This remarkable diversity attests CAJ’s strength as an outlet for the best in international research.

We must mark the departure of two colleagues from our editorial team. Tom Leppard, Reviews Editor, has left to take up a tenure-track professorship at Florida State University. Augusta McMahon, Associate Editor, has left to take up editorship of Iraq. We are grateful to both for their immense contributions on CAJ and wish them the best in these new adventures.

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• Copper-alloy Belts at Hasanlu, Iran: A Case Study in Hybridization and Heteroglossia in Material Culture by MEGAN CERVELL, MANUEL CASTELLUCCIA & ROBERTO DAI
• Material Geographies of House Societies: Reconsidering Neolithic Catalhöyük, Turkey by IVAN KUIT
• The Origins of Iconic Depictions: A Falsifiable Model Derived from the Visual Science of Palaeolithic Cave Art and World Rock Art by DEBRA HODGSON & PETER PETTITT
• Alternative Past and Colonial Engagements in the North: The Materiality and Meanings of the Pajala Runestone (Vinsavaara Stone), Northern Sweden by VILLA-PERTA PIHKA, JANNE RESTONEN, MATTHIEN BUSKE & JAN HAKONEN
• Ambiguity, Ambivalence, Multiplicity: A Case Study of Late Pottery Neolithic Ceramic Assemblages from the Southern Levant by ASAF NAFTALI
• Comparing Near Eastern Neolithic Megasites and Southwestern Pueblos: Population Size, Exceptionalism and Historical Trajectories by WESLEY BENNISON & GREGG SCHOFIELD
• The Social Role of Non-metal ‘Valuables’ in Late Bronze Age Britain by JOANNA BRICK & ALICE DAVIS
• Transformations in representations of Gender During the Emergence of the Teotihuacan State: A Regional Case Study of Ceramic Figures from the Basin of Mexico by KEI HAGEMANN

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• The Filipinnes from c. 14,000 to 4,000 cal. bp in Regional Context, plus Corrigendum by ALFRED PAUL & PHIL PFEYER
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• Beyond Ethnic Boundaries: Architectural Practices and Social Identity in the Mandara Highlands, Cameroon by MICHIEL CIJSSMA
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• Archaeological Demography as a Tool for the Study of Women and Gender in the Past by JENNIFER C. FRENCH
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• Negotiating Imperialism and Resistance in Late Bronze Age Ugarit: The Rise of Alphabetic Cuneiform by PHIL J. BOYES
• Cognition: From Capuchin Rock Pounding to Lomékwian Flake Production by MARLIGE LOUBARD, ANDRE HOOGA & MIRIAM N. HULE
• Reconsidering ‘Tokens’: The Neolithic Origins of Accounting or Multifunctional, Utilitarian Tools? by LUCY E. BENNISON-CHAPMAN
• Revisiting the Dead: Tomb Reuse and Post-Burial Practices at Ascoli Satriano (Pre-Roman Apulia, Seventh–Fourth Century BC) by MATTHIAS HOFER, CHRISTIAN HERTZ & MANUEL LAUER
• Multiple Burials in Ancient Societies. Theory and Methods from Egyptian Archaeology by CAROLINA MIRAKO
• Non-Human Whalers in Nuuk-chah-nuth Art and Ritual Reappraising Orca in Archaeological Context by ALAN D. McWILLAN
• Domesticating Light and Shadows in the Neolithic: The Dominate Passage Grave (A Coruña, Spain) by A. CESAR GONZALEZ-GARCIA, BENITO NUÑEZ-ESTRELLA, ELIA LÓPEZ-ROMERO & PATRICIA MARIANA-BENJAMIN
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Vol. 29, No. 3, August 2019
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• Creating the Cosmos, Refusing Power: A Zooarchaeological Investigation of Corporal Animal Forms in the Copan Valley by NEVA SUGIYA, WILIAM FAY & CHRISTINE FRANCE
• Social Implications of Unburied Corpses from Intergroup Conflicts: Postmortem Agency Following the Sandby borg Massacre by CLARA ALFSDÓTTIR
• Feasting on Wild Boar in the Early Neolithic: Evidence from an 11,400-year-old Placed Deposit at Tappeh Aliyā, Central Zagros by PHYLLIS BRANDGARD, LEIJA YVONNE, HEIDIL DAVIES, KRISTIYAN GREGOR, JOCHEN HENRICH, TOMAS RIVETE & PETER MÜRTZEN
• Interactions of Care and Control: Human–animal Relationships in Hunter-gatherer Communities in Near-contemporary Eastern Siberia and the Mesolithic of Northwest Europe by ANA PAULA MOTTA
• Levels of Narrativity in Scandinavian Bronze Age Petroglyphs by MICHAEL RATHEN, PETER SEIDELIN, ANNA CLARA REID & TOMAS RIVETE
• Doing Llama Face Stew: A Late Moche Culinary Assemblage as a Domestic Dedicatory Deposit by GUY S. DUNNE

Cambridge Archaeological Journal
JOHN ROBS (Editor)

Archaeology at Cambridge 2018–2019
McDonald Institute Monographs

James Barrett (Series Editor) & Emma Jarman (Administrator)

In its first year since launching, the Institute’s new Conversations Series has seen a further two books published online under an open access model. Demand from prospective editors and authors has continued to grow, with exciting new titles accepted for publication in the next academic year and beyond. This is a tremendous success for a micro publisher such as the McDonald, and we are confident, given the evidence, that this Series will grow from strength to strength in the coming years. The Evolution of Fragility: Setting the Terms, edited by Norman Yoffee, is based on a conference held in December 2017 that was co-sponsored by The McDonald Institute and The Getty. Far from the Hearth: Essays in Honour of Martin K. Jones is a Festschrift produced in honour of Professor Martin Jones, who retired as the George Pitt Rivers Professor of Archaeology. Further details of these volumes, with links to the Apollo online repository where they are freely available, are provided below.

Equally pleasing, we have also maintained our traditional Monographs Series with major excavation reports under production for both open access online distribution and high-quality lithographic printing of hard copies that will continue to be distributed by Oxbow Books. We look forward to new outputs early in the 2019–20 academic year, including From King’s Ditch to Department Store: Investigations of an 11th–20th-century Suburb and the Town Ditch of Cambridge, edited by Craig Cessford and Alison Dickens of the Cambridge Archaeological Unit.

Many thanks go to our typesetters Ben Plumridge and Anne Chippindale for their expertise and continued dedication, and to our printers, Short Run Press and E & E Plumridge Ltd.

Conversations Series: The Evolution of Fragility: Setting the Terms edited by Norman Yoffee

eBook | ISBN—978-1-902937-88-5 | x + 194 pp. | 67 figs | 1 table | 2019 |
https://www.repository.cam.ac.uk/handle/1810/293556

Explanations for the collapse of early states (and complex societies) often assume that they were integrated and stable until something bad happened, usually environmental change or because enemies overwhelmed them. In fact, many of these early states lasted a relatively short time, at least in archaeological reckoning. Others were longer-lived, but struggled to overcome structural weaknesses that eventually resulted in the fragmentation or a large-scale undoing of political orders. Rulers who attempted to institute mechanisms of control often laid the conditions for resistance and the disintegration of their regimes. The central theme of this volume is to undermine some traditional themes that naturalize the state and legitimize its historical claims to permanence.
Conversations Series: *Far from the Hearth: Essays in honour of Martin K. Jones* edited by Emma Lightfoot, Xinyi Lui & Dorian Q Fuller

**eBook | ISBN- 978-1-902937-87-8 | xii + 210 pp. | 41 figs | 16 tables | 2019 |**

[https://www.repository.cam.ac.uk/handle/1810/291123](https://www.repository.cam.ac.uk/handle/1810/291123)

The essays in this volume honour a man whose research over the last four decades has exemplified the potential of archaeology, archaeological science and their cognate disciplines to address central questions about food and human nature. The volume comprises 17 thematic papers, all focused on the archaeology of food and arranged into three sections reflecting Martin Jones’ wide-ranging career. The first section, ‘A Botanical Battleground’, honours his central role in the development of archaeobotany and biomolecular archaeology. The second, ‘The Stomach and the Soul’, discusses the archaeology of food from evolutionary perspectives; while the final section, ‘Between Fertile Crescents’, connects to his recent research on food globalization in prehistory. The assembled chapters emphasize not only the food itself, but also the communities who produced and consumed it, as Martin Jones has repeatedly demonstrated that it is the interconnection between social and biological discourses that sheds most light on the human past. Far from the time when the first hearth was ever built, the research of archaeologists connects the meals of the present to past communities and their interconnections to each other and to plants.
Archaeological Review from Cambridge

GENERAL EDITOR 2019–20: CAMILA ALDAY

The ARC committee has grown immensely in the past academic year, bringing a diversity of interests and backgrounds to our editorial content. ARC publishes outstanding research carried out by graduate students and early-career academics to worldwide readership.

Edited by Leah Damman and Sam Leggett, ARC 33(2) ‘The Others – Deviants, Outcasts and Outsiders in Archaeology’ (November 2018) brought together a range of theoretical approaches to analyse critically the construction and the perception of others versus insiders from an archaeological perspective. The volume features articles from archaeological, ethnographic, iconographic, osteological and textual evidence and covers research in the Balearic Islands, China, Greece, Finland and North America. Dr Katie Tucker, keynote speaker at the launch of the 33(2) ‘Other’ volume, stressed the importance of the discussion on social inclusions in Bioarchaeology as well as the interpretation of others’in burials and the archaeological record. The recent ARC 34(1) ‘Desert Archaeology’ (April 2019), edited by Camila Alday and Sara Morrisset, seeks to deepen our understanding of human adaptation to deserts at a global scale and reveal the social dynamics of desert communities beyond a behavioural ecology perspective. This volume contains articles from a variety of time periods in the desert of Australia, Namibia, Qatar, Peru and the arid Bolivian high plateau. Professor Peter Frankopan, keynote speaker at the launch of the ‘Desert’ volume, gave a talk on the facets of desert peoples and the social mechanisms developed by desert peoples.

The ARC committee is grateful for the large interest from across Archaeology departments and beyond in our publications, which could not be possible without the support of McDonald Institute for Archaeological Research and the Cambridge Department of Archaeology.

Graeme Barker

James Barrett

Jessa Beck

Michael Boyd

Marcus Brittain
Members’/Fellows’ Publications (cont.)

NANCY HIGGHECK

CATHERINE HILLS

BARRY KEMP

PAUL LANE

ALESSANDRO LAUNARDI

DIANE LISTER

EMMA LOFTUS

ALEX LOKHTONOVE

MARCOS MARTINSON-TORRES
2018 (with A. Bevan, X. Li, Z. Zhao, J. Huang, S. Laidlaw, N. Xi, Y. Xia & S. Ma). Ink marks, bronze crosbows and their implications for the Qin Terracotta Army. Heritage Science 6, 75.
2019 (with X. Li, X. Xia, A. Benzonielli, A. Bevan, S. Ma, J. Huang, L. Wang, D. Lan, J. Liu, S. Liu, Z. Zhao & T. Rehren). Surface chromium on Terracotta Army bronze weapons is neither
an ancient anti-rust treatment nor the reason for their good preservation. *Scientific Reports* 9, e5289.


**Martin Millett**


2019 (with R. Fernaby). *Aldborough Roman Town Layered Plan with site gazetteer. (Dataset.*) https://doi.org/10.17863/CAM.39574

**Cameroon Petrie**


**Nicholas Postgate**


**Simon Stoddart**


**Dacia Viejo Rose**


**Marie Louise S. Sørensen**

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