Archaeology at Cambridge

2022–2023

UNIVERSITY OF CAMBRIDGE

McDonald Institute for Archaeological Research

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Introduction: The McDonald Institute and Archaeology at Cambridge

Matthew Davies

Dear friends, colleagues and collaborators,

I am delighted to have the privilege of introducing this latest Annual Report. 2022–23 was my first full year in post and also a year in which I had the honour to Act as Director of the McDonald Institute, allowing Professor Broodbank to take a well-deserved sabbatical.

I would like to begin by thanking everyone in our community for the wonderful support and energetic activity that you have provided over the year. I hope that I have managed to maintain the welcoming atmosphere for which the McDonald Institute and Department of Archaeology are renowned while pushing forward important initiatives set in motion by Professor Broodbank. I would particularly like to thank the outstanding professional teams of the McDonald Institute and Department of Archaeology for putting up with me and making sure I didn't make too many mistakes! I must also greatly thank Dr Tamsin O'Connell for her sterling leadership of the Department of Archaeology across the year and I hope that between us we have managed to maintain the longstanding synergy between the McDonald and the Department.

And what a year it has been! 2022–23 felt to me like the first year that things truly got back to normal. The McDonald Institute and Department of Archaeology saw a full programme of in-person teaching, outreach and academic events. Our lively seminars and conferences were restored to their past glory, international visitors streamed in, and the coffee room was once again full of friendly academic debate. Major research projects established during the previous two years have gone from strength to strength, bringing in new staff and driving new intellectual agenda. At the same time, we have launched two major new initiatives of our own as a prelude to longer-term strategic aims.

Dr Linda Mbeki pioneered the first of these, becoming the inaugural fellow in Black Heritage or Identity and undertaking ground-breaking research on the bioarchaeology and history of indentured and other forms of coercive Labour in Southern Africa from the eighteenth to nineteenth centuries. Her work is particularly novel in drawing comparative analyses between differing forms of coercive labour, its material expression and its codification in law in both the Cape and the UK.

Linda Mbeki on fieldwork in South Africa.

Our second strategic initiative saw the launch of a major programme of research into the archaeology, heritage and related biodiversity of the Fenland region. The Fenland Futures Archaeological and Heritage Research Initiative (FFAHRI) aims to synthesize decades of existing research across the Fens and to develop a network of pilot projects. It is guided by an expert Advisory Board comprised of academics, practitioners and representatives of key stakeholder organizations and offers a competitive responsive funding stream with some £70k per year to distribute. At the core of FFAHRI is the *Fenscapes* research project led by Matt Brudenell, Rachel Ballantyne and Phil Stastney. *Fenscapes* is leading the data synthesis, developing an extensive project GIS, modelling deposits and analysing a wealth of palaeoecological data. Although both of these strategic initiatives are just in their early phases, we hope that they set models for the kinds of major interventions that the McDonald Institute is able to make moving forward.

Throughout the year we bade farewell to a number of valued colleagues who have moved on to important roles elsewhere. This included, in the Department of Archaeology, Amélie Beaudet who took up a post at the CNRS, Tina Greenfield who moved on to roles at the Universities of Winnipeg and Manitoba, Federica Sulas who moved to a lectureship at Gothenburg, and Ben Davenport who, following wonderful service in a number of professional roles, began a PhD in Heritage at the University of York. At the McDonald Institute, a number of Early Career Researchers moved on to posts elsewhere, including Helen Alderton (Renfrew Fellow), who became Deputy of Knox College, University of Otago, as well as Lucia López-Polín Dolhaberriague, Rune Olsen, Julia Tejada, Edgard Camarós, Douglas Momberg, Maria Suarez, Alex Loktionov, Sarah Fiddyment and Matthew Teasdale.

Yet those moving on to new pastures were outweighed by new arrivals, a fact that speaks to the success of our community in attracting the best of the best. The Department made major new appointments in the shape of Mark Dyble (Comparative Human Biology) and Steve Renette (Mesopotamian Archaeology), while Sylvain Lemoine took on a permanent position (Primatology). Andrew Pottorf (Assyriology) and Alfredo Cortell-Nicolau (Quantitative and Computational Methods) also took up posts as Teaching Associates. The McDonald Institute was joined by 26 new postdoctoral fellows across a range of funded schemes and projects including MSCA, ERC, Leverhulme Trust, Newton Trust, British Academy, Arcadia and the Pouroulis Foundation. Anna O'Mahony took a secondment and Melanie Norton Hugow became the interim Departmental Administrator. Lydia Clough took up the role of Outreach and Communications Co-ordinator. They were joined on our outstanding professional and technical teams by Juulia Tumanoff, Izabela Czopor, Emmi Hughes, Sue Barker and Rosemary Watson. Across the Department and the McDonald, we saw the professional team grow to a high of 32 staff.

Across the year research staff included some 27 University Teaching Officers, 13 Teaching Associates, 69 postdoctoral researchers (including college JRFs), 22 senior fellows, 22 affiliated scholars and 32 Honorary Research Fellows. This vibrant community was joined by some 25-plus visitors from around the globe, including from Nigeria, Kenya, China, India, Colombia, New Zealand, Australia, Canada, Spain and Italy.

Throughout 2022–23 our community therefore comprised what we think is an all-time high of some 210 staff, fellows and affiliated scholars as well as formal visitors. Added to this are our outstanding colleagues based in the Museum of Archaeology and Anthropology, Cambridge Archaeological Unit and associated Departments including Classics, History and the Institute of Continuing Education, as well as nearly 100 PhD students and collaborative partners from around the world. This large dynamic community is matched by our successes in competitive funding applications. By the end of 2023, our running total research income across the current UK Research Evaluation Framework (REF) 2029 period was quickly closing in on the total from the previous cycle. Katherine Boyle and Nicholas Ward deserve particular mention for their excellent curatorship of this research success. Under the leadership of Lydia Clough, the vibrancy of our research is also now much better showcased via our new 'shorthand' news stories on the Departmental website and across revived social media accounts including X/Twitter, Instagram and Facebook, and a lively programme of outreach events.

Our flagship events continued to showcase the breadth of our engagements from human evolution to archaeological science and more contemporary issues. The 2023 Annual Lecture was delivered brilliantly by Professor Amy Bogaard (Oxford) on the potential for pre-historic farming to inform more contemporary issues, while the inaugural Jennifer Ward Oppenheimer Lecture was given by Professor Zerey Alemseged (Chicago) who did us the honour of a glimpse at new hominid finds from Ethiopia. At the other end of temporal scale, the annual McDonald conference grant went to Ryan Espersen who delivered a lively event focused on illicit trade in the nineteenth-century Caribbean. The intellectual heritage of our own region was particularly highlighted in Jody Joy's *Beneath our Feet* exhibition at the MAA, which complemented Simon Stoddart and Oscar Aldred's conference and exhibit on the legacy of Cyril Fox later in the year.

The Cambridge Heritage Research Centre also maintained impressive momentum with its 6th Annual Lecture by Professor Michael Herzfeld (Harvard/Leiden) and the 23rd Cambridge Heritage Symposium on the theme of Encountering Human Remains. The Garrod Research Seminars took on the topics of 'violence' and 'globalizations' and were joined by a regular cohort of some 13 other thematic seminar groups. Between the McDonald Institute and the Henry Wellcome Building, it is now common for our community to host at least two seminars per day in term-time alongside a plethora of more ad hoc events.

As this report, our news stories and our events demonstrate, our research successes span the full breadth of disciplinary interests from critical heritage studies to primatology to Assyriology. Yet maintaining a sense of camaraderie and mutual support across such a large and diverse range of people and interests is no mean feat. We have worked hard to ensure that this integration is a success: from pizza-van lunches and ice-cream trolley events, the Christmas pub-quiz and karaoke, thematic Early Career Researcher social events (including Halloween, St Andrew's Day, and global cuisine) and excursions (Botanic Gardens, punting), to cross-disciplinary mentor groups, a carers fund, and lively post-seminar receptions. Yet we know that there is still much to be done on this front. We must maintain the pace of efforts to ensure gender equity and broaden our diversity and inclusivity. We must not lose sight of the fact that success is differentially distributed across the community, and we will work hard to develop scaffolding that ensures our full breadth of talent is able to realize its potential.

Nevertheless, I hope that our colleagues and collaborators have enjoyed being part of this community and that we all appreciate that the real magic often occurs in those serendipitous moments—from a critical reflection on a major lecture with someone new, to a shared wobble amongst first-time punters, and a swapped slice of pizza. To my mind, success is measured in a mix of excellence and enjoyment and bred not only in the big grants and prizes but also in the little moments of positive human engagement. I hope that it is this pursuit of original leading-edge knowledge within a vibrant, mutually supportive community that makes the Department of Archaeology and McDonald Institute such a special place. This outstanding atmosphere was something that I experienced myself first-hand as a Postdoc at the McDonald Institute from 2010–15, and it is this ethos that encouraged me to return here. It has therefore been a great privilege to have had the chance to play a small part in maintaining this community and I hope that those who work with us now and in the future will have equally positive experiences.

Although we can only scratch the surface of the successes of such a large community, I hope that this report nevertheless provides a good insight into all we have achieved across the year. So please do enjoy reading and do share its contents!

Amy Bogaard and Tamsin O'Connell with Dorothy Garrod.

The Museum of Archaeology and Anthropology (MAA)

Jimena Lobo Guerrero Arenas & Jody Joy

During the academic year 2022–23 Jody Joy led the archaeology team's most recent temporary exhibition: *Beneath our Feet: Archaeology of the Cambridge Region*. The exhibition highlighted voices from archaeologists, metal-detectorists and scientists and received extensive media coverage. In the spring of 2023 Jimena Lobo Guerrero Arenas and Eleanor Wilkinson redisplayed the Egyptian corner in the Andrews Gallery. MAA's notable Egyptian collections, including a Protodynastic ceramic coffin, are now on display for the first time.

MAA

Beneath our Feet: Archaeology of the Cambridge Region. *MAA temporary exhibition, 2022–23.*

MAA hosted 43 researchers from the UK and internationally, examining over 1000 objects. Research topics included fingerprint analysis on Egyptian predynastic pottery, Peruvian and Colombian textile production, lithic use wear in Libya, Stone Age blade production in Lesotho, Acheulean tradition dispersal in India, East Anglian rood screens, Early Medieval bead making, Bronze Age swords in the UK, South American ceramic animal iconography, pXRF analysis of Egyptian bronzes and historical conservation practices on basketry. MAA also supported university-based projects, such as use-wear analysis on the West Tofts hand axe and the creation of virtual 3D models of Egyptian cippi sculptures.

On-site collections care involved creating 540 new database records and capturing nearly 500 images. The Stores Move Project documented medieval British and Middle Eastern materials. With the collaboration of UCM's conservator Kirstie French and Student Work Placement Katerina Theodoraki, a 22nd Dynasty Egyptian beaded mummy net from the archaeology collections has been re-mounted, ensuring its preservation for years to come.

MAA workshop team installing the Protodynastic ceramic coffin for the redisplay of the Egypt corner in the Andrews Gallery.

MAA

The Archaeology team actively engaged with diverse audiences through talks, digital platforms and loans. Jimena Lobo Guerrero Arenas hosted children from Escuelita, a Cambridge Spanish language school initiative, and a targeted music, art and craft playshop for children aged 4 to 11 took place, sponsored by CRASSH Multidimensional Dialogues Research Network, Americas Archaeology Group and MAA. Imogen Gunn hosted early career pottery specialists where they had the opportunity to study a wide variety of local pottery. In April 2023 Imogen Gunn and Lily Stancliffe hosted the Arts Society of Ely at the Centre of Material Culture. Eleanor Wilkinson and Sarah-Jane Harknett supported the Sutton Trust Summer School, conducting handling classes and a gallery tour. In May 2023, Jimena Lobo Guerrero Arenas and Elisa Guerra jointly organized the *Cheers: Beer and Brewing in the Past* conference within the framework of the Cambridge Beer Festival.

Long-term loans were facilitated to the Faith Museum in Bishop Auckland, showcasing material from the Bronze Age to the Early Medieval Period and a loan of five hand axes to the Benaki Museum for their exhibition *The Origins of Sculpture*, opening in September 2023. Other loans included contributions to *Islanders: The Making of the Mediterranean* at the Fitzwilliam Museum, Cambridge, and a semi-permanent display at the Faith Museum, Bishop Auckland, opening in September 2023.

The Department of Archaeology's Christina Geisen and the University Library Digital Content Unit members Amélie Deblauwe and Blazej Mikula work with MAA's cippi collection to create 3D virtual models.

MAA

Cambridge Heritage Research Centre (CHRC)

Joshua Bland

This academic year has been another exciting one for the Cambridge Heritage Research Centre!

Throughout the year, the CHRC has hosted several keynote events – including the 6th Annual Heritage Lecture, given by Michael Herzfeld (Ernest E. Monrad Research Professor of the Social Sciences at Harvard University and IIAS Professor of Critical Heritage Studies Emeritus at Leiden University). Prof. Herzfeld's talk focused on the topic of *Material Ghosts: Resurgent Social Relations and the Organization of Lived Space*, questioning the tangible/intangible binary of heritage through case studies from Bangkok and Rome. Over 11–12 May, the McDonald Institute for Archaeological Research also held the 23rd Cambridge Heritage Symposium, with the theme *Encountering Human Remains: Heritage Issues and Ethical Considerations*. The symposium hosted researchers from all over the world, in person and online, with a presentation by artist Charles Clary showcasing his Memento Mori style artwork, and keynote speakers Dr Layla Renshaw (Kingston University) and George Gumisiriza (University of Bath). February 2023 also saw two fascinating workshops. First, the CHRC's industrial heritage working group organized the first Heritage Dialogues Workshop on *Industrial Heritage between De-Industrial Actions and Post-Industrial Expectations* with Professor Stefan Berger as a keynote speaker. Then, in collaboration with the Sainsbury Institute for the Study of Japanese Arts and Cultures, a two-day workshop on the *Value of Spirituality* and heritage places in post-secular societies was organized, addressing the under-explored value of spirituality in heritage affordance, with 16 participants from Europe and Asia. Throughout the year, the CHRC Lunchtime Seminars series brought together insights from diverse disciplines addressing heritage matters. Speakers discussed heritage ecologies and environmental sustainability, historic preservation and urban development, meaningful community engagement and societal wellbeing, and the 'soft power' of museums.

CHRC

Michael Herzfeld addresses the audience at the 6th CHRC Annual Heritage Lecture.

The CHRC hosted seven post-doctoral researchers from Spain, Canada, China, the US and the UK, working on topics as varied as international guidelines for best practices at Holocaust sites; the Yangshao culture of China; forensic archaeology of the Spanish Civil War; the transnational heritage of mining communities; and the visual legacy of Picasso's Guernica in the Middle East.

It has also been a productive year for some of the CHRC's discussion groups. The Indigenous Studies Discussion Group (ISDG) has continued its programming through 2023 as a funded CRASSH Network for a third consecutive year. It organized seminars, movie screenings, and discussions on a range of topics including decolonizing disciplines at the University, exile and diaspora, ecocide and dispossession, and language revitalization. Concurrently, the Heritage and Colonialism Discussion Group (HCDG) organized a series of online sessions engaged with the theme 'Legacies of Injustice', and announced its ongoing online programme, entitled 'It's Complicated'.

In addition to this wide array of academic work, the CHRC continued to engage actively in an advisory capacity with other organizations including the Greater London Authority, the international Trust Fund for Victims, Heritage for Peace and the International Coalition of Sites of Conscience. Excitingly, ISDG members have received a grant from MEAP Arcadia at UCLA to survey and digitize vulnerable collections that are important to the Guaiquerí Indigenous Peoples of Margarita.

Alisa Santikarn

CHRC Postdoctoral Fellow Alisa Santikarn 'interviews' an elephant on fieldwork in Thailand.

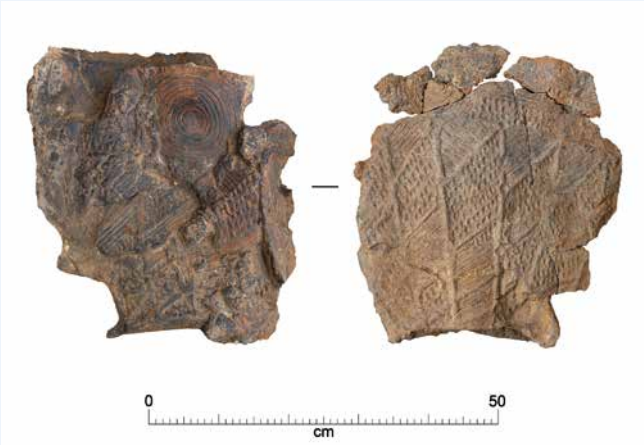
Cambridge Archaeological Unit

Matthew Brudenell

With the Cambridge region at the heart of the CAU's long-term research focus, it was only fitting that the Unit's existing projects and legacy of endeavours in this landscape featured prominently in a series of events and outputs in 2023 that marked the centenary of the publication of Cyril Fox's *The Archaeology of the Cambridge Region*. These included no less than three published papers reflecting on aspects of Fox's work and the patterns that have emerged since, as well as contributions to two conferences in his honour, plus assistance with the MAA's *Beneath Our Feet* exhibition.

Fieldwork in these Cambridge heartlands also continued at pace during the year, with major campaigns of excavation at Land North of Cherry Hinton and Needingworth Quarry, Over, forming the backbone of the Unit's deployments. At the former, excavation exposed a further swathe of Late Bronze Age settlement remains comprising a small post-ring enclosure, roundhouse and four-post structures. A significant Late Saxon–Medieval settlement including several rectangular buildings, wells and enclosures was also uncovered, with one standout find being a silver late Saxon 'Viking' arm ring. At Needingworth Quarry, extensive excavations revealed further tracts of Bronze Age field system, amongst which were two linked enclosures associated with groups of watering holes preserving fragments of log ladders, a sewn bark container and lengths of twining. Other highlights from the site included the discovery of a rectangular Neolithic structure and a pit containing a complete, intricately decorated Late Neolithic Grooved Ware vessel.

Late Saxon silver arm ring, Land North of Cherry Hinton.



Late Neolithic Grooved Ware vessel, Needingworth Quarry, Over.

Further spectacular discoveries were made at Must Farm, Peterborough, with investigations now falling on the lower contours of the Flag Fen Basin and the much deeper valley/floodplain of the prehistoric River Nene. Here, buried soils and a pair of upstanding Middle Neolithic oval barrows were uncovered overlooking the adjacent floodplain. Lower down, freshwater peat sealed the alluviated buried soil, and was itself blanketed by a thick layer of Fen Clay marking the transition from freshwater to marine conditions. Strikingly, the sharp interphase between these two environments was fringed by fallen trees, or *bog oaks*, which died abruptly because of these rapidly changing conditions around 2300 BC. Vividly highlighting the depth, drama and outstanding qualities of Fenland archaeology, these discoveries are timely in relation to the McDonald Institute's launch of the *Fenscapes* project and wider Fenland initiative, within which the CAU is firmly embedded.

The Unit's partnership working also continued in the field, with staff excavating alongside MOLA on the A428 scheme, investigating a series of later Iron Age settlement sites on Cambridgeshire's western claylands. Moreover, the Unit's involvement in the Sainsbury Institute's community-based *Later Prehistoric Norfolk Project* entered its second year, with investigations turning to the enigmatic Iron Age hillfort at Warham Camp, Norfolk, and the project featuring on the BBC's popular *Digging for Britain* programme. Further afield, the CAU continued its work on the *MOWAA Project* with the British Museum, excavating in the

Warham Camp Iron Age hillfort, Norfolk.

heart of Benin City, Nigeria. As part of this project, the Unit hosted a four-week skills enhancement and knowledge exchange programme for four colleagues from the Museum of West African Art and the National Commission for Museums and Monuments, supported by members of the McDonald Institute and Department of Archaeology, as well as staff from Historic England, the Cambridgeshire County Council Historic Environment Team, the MAA and Fitzwilliam Museum, the Sainsbury Institute and Wessex Archaeology.

More broadly, engagement activities featured strongly in the CAU's schedule, with 16 public lectures and 11 school sessions delivered over the year. The Unit's online and social media presence also increased dramatically, with videos themed around the production of replicas of Bronze Age tools and objects from Must Farm viewed over 80,000 times, and other highlights being television appearances on *Digging for Britain* and *Countryfile*.

Middle Neolithic oval barrows above floodplain, Must Farm, Peterborough.

Institute of Continuing Education (ICE)

Gilly Carr

The Institute of Continuing Education (ICE) offers part-time University of Cambridge awards in Archaeology and Landscape History at first, second and third-year undergraduate levels. Academic leadership in these areas are provided by Dr Gilly Carr, University Associate Professor in Archaeology.

University of Cambridge awards offered by the Institute include Certificate, Diploma and Advanced Diploma courses. ICE also offers non-accredited short courses, and this has focused on the online programme. This has provided great opportunities for archaeology colleagues throughout Cambridge to widen the offer to students by teaching innovative new courses as well as their favourite themes.

All teaching at undergraduate level is delivered online, which has increased ICE's global reach and international student demographic. This has greatly enriched the teaching and learning experience, as students bring in case studies from across the world.

During the last year, Certificates in *The Archaeology of Ancient Britain* and *The Study of Medieval England* were offered, as well as Diplomas in *Death and the Ancient World* (with modules in 'Osteoarchaeology and Palaeopathology', the 'Origin of Human Burial', and 'Funerary Archaeology in Ancient Egypt'). The Advanced Diploma in Research Methods was also successfully offered.

Gilly Carr

Gilly Carr

ICE student Sarah Holloway joined Gilly Carr on fieldwork at Ravensbrück concentration camp in 2023. Above: photographing finds. Right: excavation at Ravensbrück.

Classical Archaeology

Michael Squire

At Cambridge, as in many places, the study of Classical Archaeology sits between different Departments, Faculties and Schools. This poses some conspicuous obstacles for collaboration. But it also offers opportunities—not least in thinking relatively about intellectual assumptions, approaches and methodologies.

Cambridge classical archaeologists remain committed to working across such disciplinary faultiness. Within the Faculty of Classics, the group is known as the 'D Caucus': members have been growing in recent years, including staff from the Departments of Art History and Archaeology and the Fitzwilliam Museum. Since 2001 the group has been brilliantly led by Martin Millett, who in 2022 retired as Laurence Chair of Classical Archaeology. Thankfully Martin remains an active presence in both the McDonald Institute and Classics Faculty, not least in leading the AHRC-funded project on 'Roman York Beneath the Streets'.

There have been other staffing changes, too. In addition to my own arrival in Cambridge in January 2023, Jane Rempel (formerly Senior Lecturer at Sheffield) started as Assistant Professor in Classical Archaeology in October, bringing new research strength in the Black Sea region. Jane joined Clare College and is one of two new Fellows in Classical Archaeology to start there in 2023, following in the giant footsteps of Anthony Snodgrass: Jessica Plant also joined Clare as a JRF, with an exciting research project on Roman stucco.

Activities have continued apace, too. During the three terms we have held 20 weekly classical archaeology seminars, with speakers from across Britain, Europe and North America. The summer of 2023 also witnessed one of our largest fieldwork seasons this century—involving no fewer than 39 Cambridge students. In the UK, work centred around projects at Aldborough and Harpham. Further afield, Michael Loy (who this year began a Leverhulme fellowship) collaborated on the West Area of Samos Archaeological Project. In Italy, Alessandro Launaro continued excavations at Interamna Lirenas, in partnership with the Municipality of Pignataro Interamna and the Italian Ministry of Culture.

Cambridge Classical Archaeology continues to benefit from the immense support of many university institutions, not least the McDonald Institute and Faculty of Classics. At the same time, we are committed to finding new ways to sustain research and teaching. One key moment this year has been the establishment of the Brian Leech Memorial Fund: we hope to use this generous donation to enrich student opportunities in Classical Archaeology at Cambridge, by funding travel to Classical lands in connection with our taught courses, for example, and collaborations with British International Research Institutes (especially at Athens and Rome).

https://www.classics.cam.ac.uk/news/brian-leech-memorial-fund

Alessandro Launaro

Alessandro Launaro

Fieldwork at Interamna Lirenas (summer 2023), led by Alessandro Launaro.

Martin Millett

Fieldwork at Aldborough (summer 2023), led by Martin Millett.

Members

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  North Atlantic; landscape archaeology; field archaeology; archaeological theory; past movement
- **Dr Martin Allen** *(Fitzwilliam Museum)*
  Senior Assistant Keeper, Department of Coins and Medals; Later medieval English coins and tokens
- **Dr Emily Banfield**
  (Cambridge Archaeological Unit)
- **Dr Amélie Beaudet** *(Department of Archaeology)*
  Human origins
- **Dr Trisha Biers** *(Department of Archaeology)*
  Duckworth Collection Curator; human osteology; palaeopathology; death and display
- **Dr Katherine Boyle** *(McDonald Institute)*
  Archaeozoology; environmental archaeology; palaeobiogeography; European prehistory
- **Dr Marcus Brittain**
  (Cambridge Archaeological Unit)
  Interaction of landscape, memory and identity within non-literate societies
- **Prof. Cyprian Broodbank** *(McDonald Institute)*
  Mediterranean archaeology and history; Aegean prehistory; island archaeology; landscape archaeology; comparative world archaeology
- **Dr Matthew Brudenell**
  (Cambridge Archaeological Unit)
  Director
- **Prof. Ulf Buentgen** *(Department of Geography)*
  Environmental systems across space and time; dendrochronology
- **Dr Judith Bunbury** *(Department of Earth Sciences)*
  Geoarchaeology in Egypt
- **Dr Gilly Carr** *(Institute of Continuing Education)*
  Archaeology and heritage of WWII; German occupation of the Channel Islands
- **Craig Cessford** *(Cambridge Archaeological Unit)*
  Health and history in medieval Cambridge
- **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 Anwen Cooper**
  (Cambridge Archaeological Unit)
  Prehistory of NW Europe; landscape archaeology; material culture; social theory; fieldwork
- **Dr Alfredo Cortell-Nikolaou**
  (Department of Archaeology)
  Senior Teaching Associate in Quantitative and Computational Methods in Archaeology and Biological Anthropology
- **Dr Enrico Crema** *(Department of Archaeology)*
  Modelling the emergence and evolution of cultural boundaries
- **Dr Rennan de Souza Lemos**
  (Department of Archaeology)
  Teaching Associate in Egyptian Archaeology
- **Dr Elizabeth DeMarrais**
  (Department of Archaeology)
  Archaeological theory; Andean archaeology; settlement patterns
- **Dr Mark Dyble**
  (Department of Archaeology)
  University Assistant Professor in Comparative Human Biology
- **Dr Paola Filippucci** *(Murray Edwards College)*
  Heritage; battlefields of the Western Front
- **Dr Yannis Galanakis** *(Faculty of Classics)*
  Greek prehistory
- **Dr Christina Geisen** *(Department of Archaeology)*
  Egyptology
- **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 Tina Greenfield** *(Department of Archaeology)*
  Mesopotamian archaeology and history; complex society; site biography
- **Dr Jimena Lobo Guerrero Arenas**
  (Museum of Archaeology & Anthropology)
  Senior Curator in World Archaeology
- **Dr Susanne Hakenbeck**
  (Department of Archaeology)
  Early medieval Europe; mortuary studies; archaeological theory; stable isotope analysis
- **Dr Charlotte Houldcroft**
  (Department of Genetics & Christ's College)
  University Teaching Officer in Virus Genetics; virus evolution, including virus ancient DNA
- **Dr Jane Humphris**
  (British Institute in Eastern Africa)
  African archaeometallurgy
- **Dr Guy Jacobs** *(Department of Archaeology)*
  Human evolutionary genetics and bioinformatics
- **Dr Liliana Janik** *(Department of Archaeology)*
  Archaeological theory; visual cognition in rock art
- **Dr Jody Joy**
  (Museum of Archaeology & Anthropology)
  Senior Assistant Curator of Archaeology
- **Dr Richard Kelleher** *(Fitzwilliam Museum)*
  Senior Curator, Medieval and Modern Money
- **Dr Alastair Key** *(Department of Archaeology)*
  Palaeolithic archaeology
- **Dr Mark Knight** *(Cambridge Archaeological Unit)*
  Prehistoric and wetland field archaeology
- **Prof. Christine Lane** *(Department of Geography)*
  Geochronologist and Quaternary geographer; mechanisms, timing and environmental impacts of past climatic change
- **Prof. 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 Sylvain Lemoine** *(Department of Archaeology)*
  Behavioural ecology and primatology
- **Dr Sam Lucy** *(Newnham College)*
  Anglo-Saxon archaeology
- **Prof. Marcos Martinón-Torres**
  (Department of Archaeology)
  Archaeological science
- **Dr Francesca Mazzilli**
  (Cambridge Archaeological Unit)
  Archaeological theory; Roman pottery; Roman religion; Roman Near East; Roman Britain
- **Prof. Jianjun Mei**
  (Needham Research Institute)
  Director; historical metallurgy and materials
- **Prof. Marta Mirazon Lahr**
  (Department of Archaeology)
  Role of East Africa in the evolution of human diversity
- **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' scenes on Athenian pots; the Classical Body
- **Dr Andreas Pantazatos**
  (Department of Archaeology)
  Heritage Studies
- **Dr Hratch Papazian** *(Department of Archaeology)*
  Egyptology
- **Dr Sarah Paris** *(Department of Archaeology)*
  Senior Teaching Associate in Core Archaeology
- **Dr Cameron Petrie** *(Department of Archaeology)*
  South Asian and Iranian archaeology
- **Dr Daniel Pett** *(Fitzwilliam Museum)*
  Head of Digital and IT
- **Dr Emma Pomeroy** *(Department of Archaeology)*
  Bioarchaeology; modern and ancient health; palaeoanthropology; human variation
- **Dr Adrian Popescu** *(Fitzwilliam Museum)*
  Ancient coins and medals
- **Dr Andrew Pottorf** *(Department of Archaeology)*
  Teaching Associate in Assyriology

- **Dr Gillian Ragsdale** *(Department of Archaeology)*
  Teaching Associate in Biological Anthropology
- **Dr Steve Renette** *(Fitzwilliam Museum)*
  Assistant Professor in Mesopotamian Archaeology
- **Dr Paola Ricciardi** *(Fitzwilliam Museum)*
  Museum Analytical Lab; cultural heritage
- **Prof. John Robb** *(Department of Archaeology)*
  Neolithic Europe; archaeological theory; symbolism and agency
- **Dr Kate Spence** *(Department of Archaeology)*
  Archaeology of ancient Egypt; urbanism and built environment; social history; art
- **Dr Neal Spencer** *(Fitzwilliam Museum)*
  Deputy Director (Collections and Research); Iron Age Nubia
- **Dr Nigel Spivey** *(Faculty of Classics)*
  Etruscan art and archaeology; Greco-Roman art; the anthropology of art
- **Prof. Michael Squire** *(Faculty of Classics)*
  Laurence Professor of Classical Archaeology
- **Dr Marie Louise Stig Sørensen** *(Department of Archaeology)*
  Bronze Age Europe; archaeological heritage studies; archaeological theory
- **Dr Simon Stoddart** *(Department of Archaeology)*
  Later European prehistory; landscape archaeology; complex societies; island communities
- **Dr Helen Strudwick** *(Fitzwilliam Museum)*
  Curator (Ancient Egypt)
- **Dr Federica Sulas** *(Department of Archaeology)*
  Senior Teaching Associate in Geoarchaeology
- **Dr Jon Tenney** *(Department of Archaeology)*
  Assyriology
- **Dr Carmen Ting** *(Department of Archaeology)*
  Archaeological science; ancient technology; ceramic analysis; knowledge transfer
- **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
- **Dr Caroline Vout** *(Faculty of Classics)*
  Roman cultural history; classical art and archaeology and its reception; Latin literature
- **Prof. Eske Willerslev** *(Department of Zoology)*
  Prince Philip Chair of Ecology and Evolution
- **Dr Rob Wiseman** *(Cambridge Archaeological Unit)*
  Bronze Age Britain; Anglo-Saxon England; archaeological theory; conceptual metaphor and cognitive linguistics; historical linguistics

Senior McDonald Fellows

- **Dr Robert Attenborough** *(Retired)*
  Anthropological and archaeological genetics; evolutionary anthropology; human population biology and health
- **Prof. Graeme Barker** FBA *(Retired)*
  Landscape archaeology (Mediterranean, arid zone, tropical); transitions to farming
- **Dr James Barrett** *(Norwegian University of Science and Technology)*
  Medieval archaeology and historical ecology; ecological globalization; comparative study of maritime societies
- **Dr Roger Bland** *(Retired)*
  Portable antiquities and treasure
- **Prof. Dilip Chakrabarti** *(Retired)*
  Ancient India
- **Christopher Evans** *(Retired)*
  British Archaeology; Nepal; China; Cape Verde
- **Prof. Robert Foley** *(Retired)*
  Human evolution
- **Prof. Charles French** *(Retired)*
  Landscape interpretation; soil micro-morphology; scientific rescue archaeology
- **Prof. Norman Hammond** FBA *(Retired)*
  Origins, florescence and decline of Maya civilization in Mesoamerica
- **Dr Catherine Hills** *(Retired)*
  Anglo-Saxon England; Europe in migration and early medieval periods
- **Prof. Martin Jones** *(Retired*
  Archaeobotany; environmental archaeology; early agriculture
- **Prof. Barry Kemp** FBA *(Retired)*
  Egyptology
- **Prof. Nick Mascie Taylor** *(Retired)*
  Human population biology and health
- **Prof. Martin Millett** *(Retired)*
  Social and economic archaeology of the Roman world
- **Prof Susan Oosthuizen** *(Retired)*
  Medieval archaeology
- **Prof. Nicholas Postgate** FBA *(Retired)*
  Assyriology; social and economic history of Mesopotamia
- **Dr Kate Pretty** *(Retired)*
  West Midlands in the early mediaeval period
- **Prof. John Ray** *(Retired)*
  Egyptology
- **Prof. Lord Colin Renfrew** FBA *(Retired)*
  Keros Project
- **Dr Colin Shell** *(Retired)*
  2D & 3D geophysical survey
- **Prof. Anthony Snodgrass** FBA *(Retired)*
  Boeotia Project
- **Dr Marie Louise Stig Sørensen** *(Retired)*
  Bronze Age Europe; archaeological heritage studies; archaeological theory

McDonald Research Fellows

- **Dr Helen Alderson** *(Renfrew Fellow)*
  Archaeology of women in Oceania; charting agency and expertise from deep past to present
- **Dr Julia Aramendi** *(Newton International Fellow)*
  Exploring locomotor and biomechanical diversity in the hominin fossil record based on long bone external morphology
- **Dr Rachel Ballantyne** *(Senior Research Associate)*
  Palaeoecology of the Fenland Region
- **Dr Konogan Beaufay** *(Faculty of Classics & Ax:son Johnson Centre for the Study of Classical Architecture)*
  Design of Roman imperial-period bath buildings
- **Dr Agnese Benzonelli** *(Research Associate)*
  REVERSEACTION: reverse engineering collective action: complex technologies in stateless societies
- **Dr Emma Brownlee** *(Junior Research Fellow, Girton College)*
  Scandinavian burial practices between the sixth and eighth centuries AD
- **Dr Edgard Camarós** *(Marie Curie Postdoctoral researcher)*
  TRAUMOBITA: The role of traumatic mortality in late human evolution from an integrated non-invasive bioarchaeological and taphonomic perspective
- **Dr Katie Campbell** *(Junior Research Fellow, Kings College)*
  Urban archaeology; field archaeology; medieval Central Asia and Caucasus; Mongol conquest
- **Dr Simon Carrignon** *(Research Associate)*
  ENCOUNTER: Demography, cultural change, and the diffusion of rice and millets during the Jomon-Yayoi transition in prehistoric Japan
- **Dr Alfredo Cortell-Nicolau** *(Marie Curie Postdoctoral researcher)*
  ArchBiMod – Agent-Based Modelling to assess the quality and bias of the archaeological record
- **Dr Kingsley Daraojimba** *(Newton International Fellow & Marie Curie Postdoctoral researcher)*
  Social settlement dynamics and environmental process in pre-colonial Nigeria: growing the Igbo-Ukwu urban/cultural landscape
- **Dr Ryan Espersen** *(Marie Curie Postdoctoral researcher)*
  No dollar too dark: free trade, piracy, privateering and illegal slave trading in the northeast Caribbean, early 19th century
- **Dr Sarah Fiddyment** *(Research Associate)*
  B2C: Beasts to Craft; biocodicology as a new approach to the study of parchment manuscripts

- **Dr Joshua Fitzgerald**
  (Junior Research Fellow, Churchill College)
  Science of learning and material culture relating to Mesoamerica (especially 'Aztecs'); colonial Latin American history
- **Dr Anna Florin**
  (Junior Research Fellow, St John's College)
  Early plant food use across the Wallace Line
- **Dr Daniel Fuks**
  (Marie Curie Postdoctoral Researcher)
  CroProLite: Crop Production in the Levant and International Trade Exchange: investigating coprolites and crop plant remains from the first millennium CE Negev Highlands and Aravah Valley
- **Dr Jason Gellis**
  (British Academy Postdoctoral Fellowship)
- **Dr Jason Hawkes** *(Gonville & Caius College)*
  College Lecturer in Archaeology; South and Southeast Asian archaeology; religion and urbanism
- **Dr Katherine Haworth**
  (Junior Research Fellow, Kings College)
  Kinship, community and identity in early medieval mortuary archaeology
- **Dr Catherine Klesner** *(Research Associate)*
  REVERSEACTION: Reverse engineering collective action: complex technologies in stateless societies
- **Dr Anne Kwaspen** *(Research Associate)*
  REVERSEACTION: Reverse engineering collective action: complex technologies in stateless societies
- **Dr Michela Leonadi** *(Department of Zoology)*
  Research Associate; palaeoecology; biological impacts of past climatic changes; ecological niche modelling through time
- **Dr Gonzalo Linares Matás**
  (Junior Research Fellow, Emmanuel College)
  Palaeolithic archaeology; African archaeology; zooarchaeology
- **Dr Yang Liu** *(Research Associate)*
  Crops, pollinators and people: the long-term dynamics of a critical symbiosis
- **Dr Alex Loktionov**
  (Junior Research Fellow, Christ's College)
  Egyptology; Egyptian justice of the third and second millennia BCE
- **Dr Lucía López-Polín Dolhaberriague**
  (Research Associate)
  Shanidar Cave
- **Dr Michael Loy** *(Department of Classics)*
  Research Associate; conflict and cargo: Aegean networks after the Persian wars
- **Dr Juliën Lubeek** *(Research Associate)*
  Ng'ipalajem Project
- **Dr Sam Lunn-Rockliffe** *(Research Associate)*
  Leverhulme/Isaac Newton Trust; Contemporary archaeology of agriculture in Elgeyo-Marakwet, Kenya'
- **Dr Hirzi Luqman** *(Research Associate)*
  MOBILE Project
- **Dr John MacGinnis** *(Research Associate)*
  Ziyaret Tepe Archaeological project
- **Dr Carmen Martin-Ramos** *(Research Associate)*
  Palaeolithic; African Early and Middle Stone Age
- **Dr Thomas Matthews-Boehmer**
  (Faculty of Classics)
  Burials and funerary practices in the Roman West
- **Dr Linda Mbeki**
  (Research Fellow in Black Heritage or Identity)
  Bioarchaeology of marginalised communities
- **Dr Stefania Merlo** *(Senior Research Associate)*
  Mapping Africa's endangered sites and monuments
- **Dr Ileana Micarelli**
  (Marie Curie Postdoctoral Researcher)
  Osteobiographical investigation of disability and care in Medieval Europe
- **Dr Preston Miracle** *(Senior Research Associate)*
  Independent Researcher
- **Dr Jana Mokrisova** *(Faculty of Classics)*
  Bronze and Iron Age eastern Mediterranean; archaeology of mobility
- **Dr Carlo Mologni** *(Research Associate)*
  Ng'ipalajem Project
- **Dr Douglas Momberg** *(Research Associate)*
  Life history theory in maternal and child health: formative research in South Africa
- **Dr Bharath Nair** *(Research Associate)*
  B2C: Beasts to Craft: biocodicology as a new approach to the study of parchment manuscripts
- **Dr Erin O'Halloran** *(Research Associate)*
  Guernica as Orient: bombs, art and fake news
- **Dr Rune Rasmus Olsen** *(Research Associate)*
  Navigating new economic networks in ancient Egypt
- **Dr Nik Petek-Sargeant**
  (Marie Curie Postdoctoral Researcher)
  HEATT: Historical East African Archaeology and Theory
- **Dr Christos Plastiras** *(Research Associate)*
  Ng'ipalajem Project
- **Dr Rebecca Roberts** *(Research Associate)*
  Mapping Asia's Endangered Sites and Monuments Project
- **Dr Miriam Saqqa Carazo**
  (Research Associate/Margarita Salas Fellowship)
  Forensics and the Spanish Civil War
- **Dr Christiana Scheib**
  (Junior Research Fellow, St John's College)
  Tracing the spread and impact of bubonic plague during the Anglo-Saxon period in England
- **Dr Phil Stastney**
  (Senior Research Associate, Fenland Landscape)
  Landscape archaeology of the Fenland region
- **Dr Philippa Steele**
  (Senior Research Associate, Faculty of Classics)
  VIEWS Project; Visual Interactions in Early Writing Systems
- **Dr Christopher Stevens** *(Research Associate)*
  ENCOUNTER: Demography, cultural change, and the diffusion of rice and millets during the Jomon–Yayoi transition in prehistoric Japan
- **Dr Aksheta Suryanarayan** *(Gerald Averay Wainwright Postdoctoral Hosted Fellow))*
  ENGulf: Exchange Networks in the Arabian Gulf in the Bronze Age
- **Dr Kuili Suganya Chittiraibalan**
  (Research Associate)
  Mapping Asia's Endangered Sites & Monuments Project
- **Dr Federica Sulas**
  (A.G. Leventis Foundation Post-Doctoral Research Associate in African Archaeology)
  African archaeology
- **Dr Matthew Teasdale** *(Research Associate)*
  B2C: Beasts to Craft: biocodicology as a new approach to the study of parchment manuscripts
- **Dr Julia Tejada Lara**
  (Marie Curie Postdoctoral Researcher)
  FEPS: Evolution on an island continent: feeding ecology of Pleistocene sloths
- **Dr Jess Thompson** *(Research Associate)*
  ANCESTORS: Making ancestors: the politics of death in prehistoric Europe
- **Dr Laura van Holstein**
  (Junior Research Fellow, Clare College)
  Evolutionary biology; macroevolution and evolutionary ecology of hominins and primates
- **Dr Toby Wilkinson** *(Senior Research Associate)*
- **Dr Camille Westmont**
  (Marie Curie Postdoctoral Researcher)
  SCAIHL: Spatial and Critical Approaches to Industrial Heritage Landscapes
- **Dr Ashleigh Wiseman** *(Leverhulme/Isaac Newton Trust Early Career Fellowship)*
  How to build a hominin: predictive simulations of locomotion in human evolution
- **Dr Guohua Yang** *(Senior Research Associate)*
  Yangshao Culture: 100 Year research history and heritage impact
- **Dr Rouran Zhang** *(Research Associate)*
  Yangshao Culture: 100 Year research history and heritage impact

Research Assistants

- **Junaid Abdul Jabbar**
  Mapping Archaeological Heritage in South Asia
- **Ed Burnett**
  Mapping Africa's Endangered Archaeological Sites and Monuments
- **Rosie Campbell**
  Mapping Archaeological Heritage in South Asia
- **Rosie Crawford**
  REVERSEACTION
- **Petrus Gerrits**
  Mapping Archaeological Heritage in South Asia
- **Afifa Khan**
  Mapping Archaeological Heritage in South Asia
- **Joseph Lewis**
  MOBILE Project
- **Manoj Lokare**
  Mapping Africa's Endangered Archaeological Sites and Monuments
- **Elias Michaut**
  Mapping Archaeological Heritage in South Asia
- **Mouh Sarmah**
  Mapping Archaeological Heritage in South Asia
- **Maria Suarez-Moreno**
  Mapping Archaeological Heritage in South Asia
- **Jack Tomaney**
  Mapping Archaeological Heritage in South Asia
- **Jasmine Vieri**
  REVERSEACTION
- **Vaneshree Vidyarthi**
  Mapping Archaeological Heritage in South Asia
- **Marina Zafra-Granados**
  Ng'ipalajem Project

Honorary Research Associates

- **Prof. Stanley Ambrose** *(University of Illinois)*
  Archaeological science and geochemistry
- **Dr Giovanna Bagnasco** *(Department of Cultural and Environmental Heritage, Milan)*
  Etruscan cultural history
- **Dr Britt Baillie** *(Centre for Urban Conflicts Research, University of Cambridge)*
- **Dr Amélie Baudet**
  Palaeobiology of early hominins
- **Dr Michael Boyd** *(Science and Technology in Archaeology Research Center, The Cyprus Institute)*
  Pivotal moments of change in human society
- **Dr Letizia Ceccarelli** *(British School at Rome)*
  Etruscan and Roman archaeology
- **Prof. Shadreck Chirikure** *(University of Oxford)*
  Archaeometry and social formation in southern Africa
- **Prof. Felipo Criado-Boado** *(Institute of Heritage Sciences; Spanish National Research Council)*
  Director on the Spanish National Research Council
- **Dr Erik Gjesfjeld** *(John Templeton Foundation)*
  Program Officer
- **Dr Tina Greenfield**
  (Joint Field Director, Cambridge Expedition to the Valley of the Kings and NKRF 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
- **Dr Evangelina Kiriatzi** *(British School at Athens)*
  Director, Fitch Laboratory; Co-director, Kythera Island Project; ceramic technology, petrography and chemical analysis; Bronze Age in the southern Aegean and Macedonia
- **Dr Toomas Kivisild** *(KY Leuven)*
  Human genetics
- **Dr Kathelijne Koops** *(SNSF Eccellenza Professorial Fellow, University of Zurich)*
  Primatology
- **Piers Litherland**
  (Mission Head and Joint Field Director, Cambridge Expedition to the Valley of the Kings and NKRF Mission to the Western Wadis)
  Egyptian archaeology
- **Dr Freda M'Mbogori**
  (British Institute in Eastern Africa (BIEA)
  Director
- **Dr Sade Mire** *(Head of Archaeology for Somaliland; Director, Horn Heritage Foundation)*
  African archaeology
- **Prof. Piers Mitchell** *(Consultant orthopaedic surgeon, Peterborough General Hospital)*
  Palaeopathology and palaeoparasitology
- **Prof. Johannes Mueller**
  (Director, Institut für Ur- und Frühgeschichte, Christian-Albrechts-Universität)
  Prehistoric archaeology
- **Prof. Alessandro Naso**
  (Director, Institute for Ancient Mediterranean Studies, National Research Council of Italy)
  Italic cultures; material culture and models of trade
- **Dr Hector Orengo**
  (Catalan Institute of Classical Archaeology)
  Remote sensing applications in archaeology
- **Dr Innocent Pikirayi** *(University of Pretoria)*
  African archaeology
- **Prof. Thilo Rehren**
  (Director of STARC, Cyprus Institute)
  Science and Technology in Archaeology; Culture Research Centre
- **Dr Layla Renshaw**
  (Associate Professor, Kingston University)
- **Prof. Matthew Spriggs**
  (Australian National University)
  Oceanic archaeology; archaeology and language; meshing of aDNA and archaeological data and theory
- **Dr Anna Stevens** *(University of Melbourne)*
  Deputy Director, Amarna Project
- **Dr Mary Anne Tafuri**
  (Università di Roma 'La Sapienza')
  Isotope specialist
- **Prof. Ibrahima Thiaw**
  (IFAN-Université Cheikh A. Diop)
  Archaeology and legacies of enslavement
- **María Alicia Uribe Villegas**
  (Director, Museo del Oro, Columbia)
  Pre-Hispanic goldwork
- **Dr Marc Vander Linden**
  (Department of Archaeology)
  Late Prehistoric Europe
- **Prof. Ezra Zubrow** *(University at Buffalo)*
  Archaeological theory, with a specific interest on palaeodemography, spatial analysis and simulation

Visiting Scholars

- **Prof. Ali K. Al-Belushi**
  (Sultan Qaboos University)
  Archaeological resources and modernization in the Arab States of the Gulf: controversy and challenges
- **Dr Lina Maria Campos Quintero**
  (Museo del Oro, Colombia)
  REVERSEACTION
- **Dr Steven Cooke** *(Deakin University)*
  Difficult Heritage – The spatialities of difficult history and memory, particulalry as they relate to war and genocide; Holocaust pedagogy
- **Dr Paloma de la Pena**
  (Universidad de Granada)
  Archaeology; Quaternary; lithic technology; field archaeology (excavation and prospection survey); experimental archaeology
- **Dr Céline Erau** *(Wiener Anspach Fellowship)*
  Andean archaeology; zooarchaeology
- **Dr Fanny Gaveriaux** *(Independent Scholar)*
  Archaeobotany; agricultural practices, environmental changes and urbanization processes from the tenth to the fifth century BCE in central Italy
- **Dr Elisa Guerra-Doce** *(University of Valladolid)*
  The Power of Ecstasy: Altered States of Consciousness and Psychoactive Substances in the Copper Age Social Dynamics of the Iberian Peninsula
- **Prof. Simon Kaner** *(University of East Anglia)*
  Archaeology & Heritage studies of Japanese Arts and Cultures
- **Dr Tom Leppard** *(Florida State University)*

Visiting Scholars *(cont.)*

- **Dr Qin-Qin Lu**
  (University of Science and Technology of China)
  Ancient technologies of a range of inorganic materials from the Silk Roads, mainly glass
- **Dr Kai Liu**
  (Yanching Institute of Technology)
  The role of cultural industires in heritage making of contemporary China: comparative study of Palace Museum and Yangshao Culture
- **Dr Luigi Magnini** *(University of Sassari)*
  Methods and theory of archaeological research
- **Dr Monica Ramsey**
  (University of Toronto Mississauga)
  Increasingly anthropogenic landscapes and the evolution of plant food production: human–environment interactions during the final Pleistocene and early Holocene in the Levant
- **Dr Thais Rocha da Silva** *(University of Oxford)*
  Domestic space in ancient Egypt: sensorial experience and negotiations in foreign lands
- **Prof. Dennis Sandgathe** *(Simon Fraser University)*
  Hominin evolution and the Palaeolithic/Stone Age period
- **Dr Nikoline Sauer**
  (Carlsberg Foundation Fellowship)
  Early Rome; urbanization; archaeological science
- **Prof. Ravindra Nath Singh**
  (Banaras Hindu University)
  Smuts Commonwealth Fellowship at Centre of South Asian Studies
- **Prof. Bing Wang** *(Zhejiang Sci-Tec University)*
  Archaeological science; paleoproteomics and immunoassay; ancient silk and other textiles
- **Dr Priscilla Wehi** *(University of Otago)*
  Ethnobiology; historical ecology; socio-ecological systems
- **Dr Yan Zheng** *(Institute for Cultural Studies, Shandong Academy of Social Sciences)*
  Inheritance and protection of intangible cultural heritage; museums and cultural exhibitions; folklore and folk literature
- **Prof. Laura Zucconi** *(Stockton University)*
  Early Christian and Rabbinic medicine: developments under Roman and Sasanian domination

Affiliated Scholars

- **Dr Rachel Ballantyne** *(Independent Scholar)*
  Archaeobotany
- **Dr Flaminia Bartolini** *(Independent Scholar)*
  Heritage
- **Prof. Ian Baxter** *(University of Suffolk)*
  Heritage
- **Dr David Beresford-Jones** *(Independent Scholar)*
  Transition to agriculture and human ecology in South America
- **Dr Marie-Françoise Besnier**
  (Independent Scholar)
  Assyriology
- **Prof. Josephine Crawley Quinn**
  (University of Oxford)
  Roman history, art, archaeology and architecture; Mediterranean history and archaeology; ancient religion; gender studies
- **Dr David Friesem** *(Independent Scholar)*
  Tropical micro-archaeology, related to 'hunter-gatherer' use of space
- **Barrie Fuller**
  (Chair, Cambridge Archaeology Field Group)
  Landscape history and field archaeology in a volunteer group capacity
- **Dr Jason Hawkes** *(The British Museum)*
  South Asian archaeology
- **Dr Diane Lister**
- **Dr Maya Mise** *(Independent Scholar/ Research Office, University of Cambridge)*
  Mediterranean archaeology, pottery; reconstruction of ancient trade
- **Dr Janine Ochoa** *(Independent Scholar)*
  Zooarchaeology
- **Dr Jacke Phillips**
  (School of Oriental and African Studies)
  Suakin project
- **Dr Josephine Quinn** *(University of Oxford)*
  Ancient history
- **Dr Alisa Santikarn**
  (Cambridge Heritage Research Centre)
  Heritage
- **Dr Ceri Shipton** *(University College London)*
  Palaeolithic archaeology
- **Dr Laurence Smith** *(Wolfson College)*
  Suakin project; African archaeology
- **Dr Nigel Strudwick** *(Independent Scholar)*
  Egyptology
- **Dr Shadia Taha** *(Wolfson College)*
  Cultural heritage; ethnography; qualitative research; community engagement; outreach projects

  Dr Helen Taylor *(Independent Scholar)*
  Human cognitive evolution; dyslexia
- **Dr Simon Timberlake** *(Independent Scholar)*
  Field geologist and archaeologist; experimental prehistoric metallurgy
- **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

- **Iqtedar Alam** (*PhD Archaeology*)
  Urban Water History of Shahjahanabad (1639–1857) Delhi: A Study of Water Culture of the 'Last & Greatest Capital' of the Mughal Empire
- **Camila Concepcion Alday** (*PhD 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
- **Saltanat Amirova** (*PhD Archaeology*)
  Goldsmithing Technologies, Organic Materials and Funerary Rituals in the Saka Societies of the Eurasian Steppe Region during the Iron Age (*c.* 900–100 BCE)
- **Oliver Antczak** (*PhD Archaeology*)
  (Un)Interrupted Histories, Continuous Feeling: Indigenous Identity Formation and Notions of Heritage in the Southern Caribbean
- **Monique Arntz** (*PhD Archaeology*)
  Beyond Meaning: An Artefact Approach to the Neolithic Figurines from Tell Sabi Abyad (Syria) and Çatalhöyük (Turkey)
- **Tristan Begg** (*PhD Biological Anthropology*)
  The Beethoven Genome Project
- **Joshua Christopher William Bland** (*PhD Archaeology*) Football Clubs as Cultural Lifejackets: England's Football Clubs as Industrial Relics
- **Rachel Kate Blevis** (*PhD Archaeology*)
  Noise into Signal: Identification Challenges and the Medieval Fishing Revolution
- **Alette Anne Blom** (*PhD Archaeology*)
  A Multidisciplinary Approach to Reconstructing the Lived-experience of Medieval Hansen's Disease (Leprosy) Sufferers
- **Sofia Bourantoni** (*PhD Archaeology*)
  What Role Does Responsibility Play in the Heritage-making Process?
- **Leah Marion Brainerd** (*PhD Archaeology*)
  Move On Up: Evaluating the Spread of Agriculture During the Jomon–Yayoi Transition in Japan Through Ideal Distribution and Agricultural Suitability Models
- **George Brill** (*PhD Biological Anthropology*)
  Human Locomotor Versatility and the Nature of Human Locomotor Performance
- **Doudou Carol Cao** (*PhD Biological Anthropology*)
  Biocultural Dynamics in High-altitude Development and Adaptation: A Comparative study of Ancient Tibetan and Lowland Chinese Inhabitants
- **James Clark** (*PhD Biological Anthropology*)
  Seasons of Change: Investigating the Role of Seasonality in the Oldowan-Acheulean Transition

- **Keziah Conroy** (*PhD Biological Anthropology*)
  From Provinciality to Trans-continentality: The Evolving Scale of Hominin Species Ranges
- **Laura Elizabeth Courto** (*PhD Archaeology*)
  Scrimshaw: Unlocking the Cultural and Biological Archive of Sea Mammal Art
- **Leanne Margaret Daly** (*PhD Archaeology*)
  Home from Away: Challenging Extinction Discourse through the Repatriation of Indigenous Beothuk Human Remains
- **Mark Edward Davis** (*PhD Archaeology*)
  Brass *vs* Bronze: Continuity and Change from Late Antiquity to the Early Islamic Period in the Persian Gulf and Adjacent Regions
- **Edwin de Jager** (*PhD Biological Anthropology*)
  How Did the Human Brain Evolve? Tracking Cerebral Changes in the Fossil Hominin Record Using Advanced Imaging Techniques and 3D Modelling
- **Elifgül Dogal** (*PhD Archaeology*)
  Politics, Identity and Ethics in Heritage Preservation: Managing Archaeological Human Remains in Turkey
- **Miranda Anita Evans** (*PhD Archaeology*)
  The Palaeoproteomics of Pottery and its Application to Romano-British Foodways
- **Asha Febina** (*PhD Biological Anthropology*)
  Influences of Lifestyle Transition and Social Network in Microbiome Assembly in Indonesian Hunter-gatherer Communities
- **Emilia Franklin** (*PhD Biological Anthropology*)
  Plague Mortality and Medieval Demography: An Osteological Analysis of Black Death Mass Graves and Parish Cemeteries from 7–16th century England and Wales
- **Devlin Alexander Gandy** (*PhD Archaeology*)
  Since Time Immemorial: Utilizing Ancient eDNA to Reevaluate Human Presence in the Americas during the Late Pleistocene
- **Ali Giritlioglu** (*PhD Biological Anthropology*)
  A Behavioural Ecological Analysis of the Rise and Fall of Social Stratification and Labour Coercion in Late Medieval and Early Modern Europe: the Fitness Effects on the Dominant & the Subordinate in Changing Environments
- **Kieran Thomas Gleave** (*PhD Archaeology*)
  Everyday Industrial Heritage and Community Identities in English De-Industrial Contexts
- **Jonathan R. Goodman** (*PhD Biological Anthropology*)
  Evolutionary Explanations of Non-semantic Signals in Human Language
- **Julia Ann Gustafson** (*PhD Archaeology*)
  The Nuragic Landscape of Siddi Through Space, Time, and Memory
- **Stuart Edward Henderson** (*PhD Archaeology*)
  Life, Art, and Industry: A History of the English and Welsh Leather Economy, 1700–1900
- **Raphael Henkes** (*PhD Archaeology*)
  Towards a More Holistic Approach to the Management of Space and Buffer Zones at Difficult Heritage Sites
- **Megan Rose Hinks** (*PhD Archaeology*)
  Bitumen *chaîne opératoire*: A Multi-analytical Archaeometric Approach to the Role of Bitumen in Southern Mesopotamian Sociopolitical Economy (4th–2nd millennium BCE)
- **Yi-Ting Hsu** (*PhD Archaeology*)
  Fire Assay, Cupellation and the Dissemination of Technical Knowledge in Post-Medieval Europe
- **Kiah Johnson** (*PhD Archaeology*)
  Visible Herders, Open Roads: Finding Ephemeral Archaeology of Transhumant Pastoralists in Kalahari Southern Africa
- **Friederike Katharina Jürcke** (*PhD Archaeology*)
  On the Road to Urbanism: Modelling Movement across the Iranian Plateau in the 4th and 3rd Millennia BC
- **Kyra Elise Kaercher** (*PhD Archaeology*)
  Production and Consumption of Middle Islamic Ceramics (1000–1500 CE): Regional Practices in an Interconnected World
- **Amanpreet Kaur Kang** (*PhD Archaeology*)
  Zooarchaeology by Mass Spectrometry (ZooMS): Utilising New Methods to Unravel Hominin Cognition From Worked Bone
- **Pavlina Kapsali** (*PhD Archaeology*)
  Material Culture Performativity and the Making of Collectives: Studying Living Environments in Mainland Greece 2500–2000 BCE
- **Geon Young Kim** (*PhD Archaeology*)
  The Role of Museums in the Practice of Reconciliation: The Case of South Korea
- **Hyunjae Kim** (*PhD Archaeology*)
  An Analysis of the 'Non-Elite' Colonial Heritage and its Postcolonial Perception by the Local Community in Busan, South Korea
- **Marta Krzyzanska** (*PhD Archaeology*)
  The Dispersal of Common Buckwheat (*Fagopyrum esculentum*) across Eurasia, after its Domestication in the 6th Millennium BP in China
- **Elizabeth Moorehead La Duc** (*PhD Archaeology*)
  The Use of Coal for Ferrous Metallurgy in Roman Britain
- **Rafael Laoutari** (*PhD Archaeology*)
  There Is This Island: Social Dynamics and Connectivity in Prehistoric Bronze Age Cyprus
- **Joseph Lewis** (*PhD Archaeology*)
  Modelling Past Land Routes in Archaeology: A 'Roman Roads' Theoretical and Methodological Rethinking
- **Michael Lewis** (*PhD Archaeology*)
  Social Transformations and Modes of Ceramic Production during the 4th–Early 3rd Millennium BCE in the Shahrizor Plain and Bazyan Valley, Iraqi Kurdistan: A Petrographic and Geochemical Study
- **Min Lin** (*PhD Archaeology*)
  Comparing the Construction of Social Identity in Early Iron Age Greek and Eastern Zhou Dynasty Rich Female Burials
- **Shiting Lin** (*PhD Archaeology*)
  Depreciation or Valorisation? The Formation and Effects of the Commercial Use of Yangshao Culture for Branding and Product Development
- **Junting Lyu** (*PhD Archaeology*)
  Yangshao Culture Heritage and National Identity: Focusing on National Archaeological Site Parks
- **Ruairidh Macleod** (*PhD Archaeology*)
  Palaeo-omics of Mid-Holocene Hunter-Gatherers at the Lake Baikal Region Siberia
- **Gian Battista Marras** (*PhD Archaeology*)
  Holocene Human–Environmental Interactions and Climate Change in the Western Mediterranean: A Comparative Study from Sardinia
- **Glynnis Caitlin Maynard** (*PhD Archaeology*)
  Supernatural Creature Imagery and the Formation of Cultural Consensus in Neo-Assyrian Society
- **Selene Mazza** (*PhD Archaeology*)
  Human–Animal Relationships in the Viking Age (*c.* 750–1050 CE): Relational Approaches to Animals in Funerary Contexts
- **Alexes Kaitlyn Mes** (*PhD Archaeology*)
  What Promotes Human Migration? Spatial Models to Reconstruct Regional Geographic Variations in the Bantu Expansion
- **Anna Rose Mika** (*PhD Archaeology*)
  Flake It 'Til You Make It: The Production and Use of Palaeolithic Flake Tools in Modelling and Practice
- **Julia Montes Landa** (*PhD Archaeology*)
  Understanding the Selection and Co-existence of Tin Bronze Alloying Techniques in Antiquity. An Experimental and Archaeological Approach with Northeast Iberia as Case Study (2800–200 BC).
- **Oliver Andrew Moxham** (*PhD Archaeology*)
  Interpreting Conflict Heritage: A Multilingual Evaluation of Visitor Interpretation at Asia-Pacific War Heritage Sites in Tokyo, and Kyoto, Japan
- **Lucia Nadal Urias** (*PhD Biological Anthropology*)
  Factors of Craniomandibular Morphological Variation in the Robust Australopithecines
- **Marianna Emilia Sofia Negro** (*PhD Archaeology*)
  The Archaeological Landscape of the Gubbio Valley. A Post-colonial Evaluation of the Relationship between Roman and Umbrian Cultures
- **Chioma Ngonadi** (*Department of Archaeology*)
  2020–22 Early Agricultural Communities in Lejja, South-eastern Nigeria: An Archaeobotanical Investigation

- **Christos Nikolaou** (*PhD Archaeology*)
  Hybridity, Culture Contact and Colonial Relations in the Hellenistic Far East with Regards to Urbanism and Religion
- **Stanley Jachike Onyemechalu** (*PhD Archaeology*)
  Heritage and the Legacies of Violent Conflict: The Biafra War (1967–1970) and Present-day Igboland Nigeria
- **Taylor Michelle Peacock** (*PhD Archaeology*)
  Questioning Sex: A Critical Feminist Approach to Skeletal Analysis and Skeletal Sex Estimation
- **Victoria Pham** (*PhD Archaeology*)
  Drumming Trees and Stone Percussion: An Evolution of Rhythm
- **Chike Sekou Pilgrim** (*PhD Archaeology*)
  Beginnings at Banwari: A Landscape Historical Ecology Study of the Earliest Human Colonisation of Trinidad
- **Mariana Pinto Leitão Pereira** (*PhD Archaeology*)
  The Significance of Heritage in Dispersed Communities: Portuguese and Macanese as a Case Study
- **Grace Carol Pyles** (*PhD Archaeology*)
  Chasing Unicorns: Material Culture, Legend, and Reality in Ancient and Medieval Europe
- **Sophie Rabinow** (*PhD Biological Anthropology*)
  A Multi-proxy Approach to Freshwater and Marine Fish Consumption in the Low Countries (11th–17th Centuries)
- **Natasha Jasmine Kaur Rai** ((*PhD Archaeology*)
  Old Kingdom Buhen in Context: Egyptian-Nubian Social and Political Dynamics in Indigenous Landscapes
- **Ismael Rodriguez Palomo** (*PhD Archaeology*)
  Computational Methods for the Study and Integration of Palaeoproteomics and Inorganic Analysis in Ceramics, Plasters and Parchment
- **Kim Eileen Ruf** (*PhD Archaeology*)
  Living (with the) Past – On the Everyday Experience, Performance, and Valuation of Heritage
- **Sergio Giuseppe Russo** (*PhD Archaeology*)
  Cultural Variation and Spatial Structures in the Northern Lands: A Geostatistical Application for the Bronze Age Ancient Near East (*c.* 2350–1550 BCE)
- **Nicola Mary Savage** (*PhD Archaeology*)
  Waste Land, Not Wasted Land. Change and Continuity in the Significance and Exploitation of Uncultivated Land from Late Prehistory to the Norman Conquest in Southern England
- **Lucia Scalise** (*PhD Biological Anthropology*)
  Unravelling Cremation: A Multi-analytical Approach to the Study of Bronze Age Cremated Human Remains
- **Elena Scarsella** (*PhD Archaeology*)
  Mediterranean Highlanders: Connectivity and Identity in Late Prehistoric Central Italy
- **Ann Frijda Schmidt** (*PhD Archaeology*)
  Feeding the Etruscans
- **Elisa Scholz** ((*PhD Archaeology*)
  A Communications Revolution? The Emergence of Images and Writing in Early Iron Age Greece and Central Italy
- **Qihao Shen** (*PhD Archaeology*)
  Between the Bees: Comparative Historical Ecology of Apiculture in Baringo and Elgeyo-Marakwet, Kenya
- **Charles Brendan Simmons** (*PhD Archaeology*)
  The Evolution of Leadership and Inequality: An Analysis of the Jomon and Yayoi Settlements in Kohoku New Town
- **Henry Slesser** (*PhD Biological Anthropology*)
  The Population Identity and Foraging Ecology of South Georgia Humpback Whales (*Megaptera novaeangliae*)
- **Alicia Victoria Stevens** (*PhD Archaeology*)
  Cultural Heritage, Remembrance and the Peace Process in Post-Junta Myanmar
- **Emily Margaret Carole Tilby** ((*PhD 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)
- **Joanna Tonge** (*PhD Archaeology*)
  Maritime Mimesis: Investigating the Heritage of Appropriation, Innovation and Technological Advantage in the Historic Canoes of the Hawaiian IslandsI
- **Thomas Løth Torp-Hansen** (*PhD Archaeology*)
  Archaeology in the British Mandate of Palestine between WWI and WWII
- **Rhea Tuli Partridge** (*PhD Archaeology*)
  The 'Complications' of the Clive Collection: 'Conflict' Culture Wars and *Lut*
- **Benjamin Joon Utting** (*PhD Archaeology*)
  Exploring Prehistoric Technology at the Tràng An Landscape Complex, Ninh Bình Province, Vietnam
- **Maria Uvarova** (*PhD Archaeology*)
  Water Installations at Amarna: Assessing the Role of Water in Built Environment and Ritual Practice
- **Matthew Van Schalkwyk** (*PhD Biological Anthropology*)
  The Evolutionary Context of *Homo sapiens*: A Palaeoecological and Palaeogeographic Approach
- **Jasmine Miria Karoliina Vieri** (*PhD Archaeology*)
  Bayesian Regional Models of Gold and Copper Alloys from Pre-Hispanic Colombia
- **Leonora Visoka Weller** (*PhD Archaeology*)
  Conflict and Contestation of Cultural Heritage in Post-war Kosovo
- **Isavella Voulgareli** (*PhD Archaeology*)
  Gender Performativity and Heritage Discourse: The Tangible/Intangible Distinction Revisited
- **Tianyi Wang** (*PhD Biological Anthropology*)
  Lifestyle and Intestinal Parasite Infection in Northern Europe: A Study Comparing Clergy and the General Population of Cambridge and Belgium in 12th–17th Centuries
- **Simon M. Weppel** (*PhD Archaeology*)
  Heritage Temporalities in the Context of Cultural Change: A Russian Case Study
- **Ella McCafferty Wright** (*PhD Archaeology*)
  A Quantitative Study of Representations of Royal Children in Egypt's 18th and 19th Dynasties and the Relationship Between these Images to Systems of Royal and Courtly Power
- **Andriana-Maria Xenaki** (*PhD Archaeology*)
  'A View from the Mountain's Top': Modelling the Use and Perception of the Mountainous Areas of Prehistoric Crete
- **Keaghan Yaxley** (*PhD Biological Anthropology*)
  Investigating Adaptive Zone Shifts With Combined-Evidence Phylogenies
- **Caterina Zaggia** (*PhD Archaeology*)
  Plaster Production in Ancient Egypt: An Insight in the Technological Development from the Old Kingdom to the Greco-Roman Period
- **Camilla Zeviani** (*PhD Archaeology*)
  Invisible Etruscans. A Study on Rural Landscape and Settlement Organisation during the Urbanisation of Etruria (7th–5th Centuries BC)
- **Fang Zhai** (*PhD Archaeology*)
  Identity-making through Post-Secular Religious Heritage in Urban Space: A Trio Case Study of Contemporary Chinese Cities of Guandong Plain Urban Agglomeration

MPhil Students

- **Rebecca Sage Aaron** *(MPhil Assyriology)*
  Roles and Rituals in the Eanna Temple, Uruk: Archaeological and Philological Evidence
- **Jasmine Jade Zhang Alexander** *(MPhil Heritage Studies)*
  Constructing Heritage through Diplomacy: How the Mobilisation of Silk Road Rhetoric in China's Contemporary Diplomatic Strategies is Reframing Silk Road Heritage
- **Agnieszka Arcisz** *(MPhil Assyriology)*
  Representation of the Royal Gender during Ashurbanipal's Reign
- **Noah Atkin** *(MPhil Biological Anthropological Science)*
  The Causes and Implications of Flange Plasticity in Male Orangutans
- **Anne Elizabeth Auchter** *(MPhil Heritage Studies)*
  Assessing Value and Use through Community Engagement: The Future of Redundant Churches as Sites of Heritage
- **Heeran Basi** *(MPhil Human Evolutionary Studies)*
  Investigating the Evolutionary Function of Exposure in Shifting Concept Perception

- **Kira Baughn** *(MPhil Archaeological Science)*
  Metallographic Composition Analysis of Bronze and High Tin Bronze Artefact Samples Recovered from LBA cemetery near Nong Nor north east Thailand
- **Madison Lee Bennett** *(MPhil Archaeological Science)*
  The Epidermis as a Key Indicator of Medieval Parchment Preparation
- **Aliya Beyhum** *(MPhil Heritage Studies)*
  Embroidered Narratives: The Politization of Palestinian Embroidery
- **Joanna Zofia Bryl** *(MPhil Archaeology)*
  An Experimental Approach to the Study of Cutmarks
- **Georgina Burr** *(MPhil Assyriology)*
  Man or Divine? Anthropomorphic Iconography in the Southern Levant
- **Hanwen Cao** *(MPhil Archaeology)*
  The Potentiality of the First Carrying Device in the Hominin Transition from the Oldowan Techno-complex to the Acheulean Techno-complex
- **Yeyu Chen** *(MPhil Heritage Studies)*
  Street Food as Public Heritage: A Sustainable Mechanism or A Crowd Culture Instrumentalization?
- **Sara Corona** *(MPhil Heritage Studies)*
  Contested Landscapes in Sardinia: Heritage and Ethnic Identity under Italian Green Resource Nationalism
- **Nicole Coroner** *(MPhil Archaeological Science)*
  Microfossils in the Gorges of Gardon
- **Benjamin Rafael De Almeida Newton** *(MPhil Archaeological Research)*
  Ruin in Ancient Egypt
- **Lindsay Anne Dobrovolny** *(MPhil Heritage Studies)*
  Institutions and Collection Practice within the Field of 19th-century Paleontology)
- **Mathilde Anne El Hadjen** *(MPhil Archaeological Research)*
  A Way towards Decolonisation: Expressions of Gender through the Funerary Record in Central Postclassic Mexico (1200–1521 CE)
- **Yu Fan** *(MPhil Heritage Studies)*
  The Importance of Being Indigenous: Discovering Swearing Changes in Chinese Chongqing Dialect as Intangible Cultural Heritage
- **Jackson Patrick Fitzgerald** *(MPhil Archaeological Science)*
  Sulfur Isotope Analysis for Isoscape Modelling in East Anglia
- **Lucy Victoria Amy Ganss** *(MPhil Heritage Studies)*
  What Impact have Museums Had in Perpetuating the Epistemic Injustice of Neurodiverse Individuals?
- **Srinidi Gopal** *(MPhil Assyriology)*
  Bureaucracy in Times of Instability in Mesopotamia
- **Congrui Gu** *(MPhil Archaeological Science)*
  A Case Study: A Comparison of Regional Differences in the Production and Technology of Glazed Ware in Medieval Cyprus
- **Muyan Guo** *(MPhil Heritage Studies)*
  Dealing with the Tension: How Local Communities Balance Heritage Preservation with Imperative Need for Economic Development, Rooted in the First and Second Phase of the Chinese Ecomuseum
- **Charvi Gupta** *(MPhil Human Evolutionary Studies)*
  Interaction between two sympatric hominins – Paranthropus boisei and Homo habilis
- **Sydni Ashlynn Haggerty** *(MPhil Assyriology)*
  Cultic Connections Across the Levant and Mesopotamia
- **Haoxiang Hu** *(MPhil Human Evolutionary Studies)*
  The Co-evolution of Social Status and Fairness in Cooperative Society
- **Guganesan Ilavarasan** *(MPhil Archaeological Science)*
  A Simulation-based Comparison of the Precision and Accuracy of Optimal Linear Estimation (OLE) and Bayesian Phase Models in Estimating Origination Dates
- **Amy Iwasaki** *(MPhil Heritage Studies)*
  All's Well That Ends Well: Comparing Wellbeing Benefits of Heritage Collections across Asia & the Pacific, Europe & North America, and Latin America & the Caribbean
- **Eva Yawa Kakrada** *(MPhil Human Evolutionary Studies)*
  The Sociosexual Role of Non-Conceptive Sex in Female Primates
- **Raphaelle Cassandra Killick** *(MPhil Heritage Studies)*
  'Morts pour la France' .Remembering colonial soldiers in post-colonial Senegal
- **Carolin Victoria Koenig** *(MPhil Heritage Studies)*
  How to Display the Essence of an Art Object – Examining Carlo Scarpa's Museology Approach in Regard to Contemporary Displaying Strategies
- **Katherine Carsley Lacroix** *(MPhil Heritage Studies)*
  Fake it 'til you Make it: The Factum Foundation's Facsimiles of Horace Walpole's Collection at Strawberry Hill House
- **Noel Yoon Lee** *(MPhil Heritage Studies)*
  How Runway Shows and Exhibitions can make 'Herstory' of Female Agency and Power through Fashion Heritage
- **Minyi Li** *(MPhil Archaeology)*
  The Change of the Size of the Lithic Tools with the Change of the Morphology of Hominins' Hand
- **Viktoria Anika Lien** *(MPhil Archaeology)*
  Tracking Violence in Prehistoric Europe, through the LBK and its Predecessors
- **Mia Gabriella Macallister** *(MPhil Archaeology)*
  Identifying Inka 'Houses of the Chosen Women' (Aqllawasi) through Archaeology, Architecture, and Ethnography
- **Rossana Maletto Cazzullo** *(MPhil Heritage Studies)*
  The Legacy of Italian Colonialism in Rome's Urban Landscape
- **Rose Jacqueline McCoy** *(MPhil Archaeology)*
  An Examination of the Scandinavian Impact on Ireland and the Development of Hiberno-Norse Towns and Trade
- **Ewan Mortimer** *(MPhil Assyriology)*
  The Translation and Presentation of Kingship in Mesopotamia from the Neo-Assyrian to Seleucid Empire
- **Jacqueline Bernadette Mouttet** *(MPhil Heritage Studies)*
  'Has Carnival been Forgotten?': An Exploration of the Roots of Carnival in Trinidad and Whether These Have Been Forgotten and Replaced by a Party
- **Claire Elizabeth Nevin** *((MPhil Heritage Studies)*
  Memories for the Future: The Impact of Global Climate Change on Heritage Values in at the Dunkirk Memorial and Town Cemetery
- **Jeffery Robert Lee Pendleton** *(MPhil Biological Anthropological Science)*
  The Evolutionary Ecology) of Inherited Psychological Mechanisms Across London Neighbourhoods
- **Vaughan Pilikian** *(MPhil Assyriology)*
  He Who Saw The Deep: Knowledge, Power and the Underworld Journey
- **Declan Scott Pollard** *(MPhil Assyriology)*
  The Diqdiqqeh Seals and Their Portrayal of the Temple of Nanna's Public Ritual in the Early Dynastic, Sargonic, and Third Dynasty Periods
- **Michael Robinson** *(MPhil Heritage Studies)*
  The Death and Afterlife of Richard III: Heritage, History, and Identity
- **Aritri Samadder** *(MPhil Archaeology)*
  Reappraisal of Indus Ornamentation
- **Jonas Schwartz** *(MPhil Assyriology)*
  Criminality and banditry in the Neo-Assyrian Empire
- **Rowena Yinuo Zhang Stening** *(MPhil Archaeological Science)*
  The Distribution and Exchange of Early Bronze Age Shell-tempered Pottery in East Anglia
- **Alexander Strauss-Jones** *(MPhil Archaeological Science)*
  Sulphur Isotope Analysis of Bone Collagen from the Ica Valley, Peru, dating to the Late Intermediate Period

Postgraduate Students *(cont.)*

MPhil Students

- **Tatiana Tondini** *(MPhil Archaeological Science)*
  The Paleopathological Study of Cancer in Antiquity through Human Remains
- **Finlay Hugo Tyson** *(MPhil Assyriology)*
  Class and Leisure Activities
- **Alyssa Anne Walton** *(MPhil Heritage Studies)*
  The Power of Objects(?): How Museum Visitors Engage with Presence and Absence in Benin Bronze Displays
- **Reese Albert Waters** *(MPhil Assyriology)*
  Get Big or Get Out? Questions of Scale in Mesopotamian Agriculture
- **Charlotte Ingeborg Dorothea Wood** *(MPhil Heritage Studies)*
  Natural History Collections as Heritage and Their Role in Shaping Ideas about Nature
- **Ella Susan Worsfold** *(MPhil Human Evolutionary Studies)*
  An Evaluation of the Methodology) used to Study Episodic-like Memory in Corvids
- **Yiping Yang** *(MPhil Archaeology)*
  A GIS-based Analysis of the Possible Paleolithic Sites Location in China
- **Yiquan Zhang** *(MPhil Archaeological Science)*
  Scientific Study on the Organic Residue on Roman Bronze Vessels
- **Chenyu Zhao** *(MPhil Heritage Studies)*
  Engaging with Heritage: Chinese Calligraphy as an Embodied Performance
- **Yuyi Zhou** *(MPhil Heritage Studies)*
  Should Universal Museums Decolonise Their Gift Shop?
- **Ziling Zhou** *(MPhil Human Evolutionary Studies)*
  Diet and Oral Microbiome of Late Holocene Hunter-Gatherers in the Lake Baikal Region: An Integrated Biomolecular Approach
- **Emily Jade Hui Ziegler** *(MPhil Archaeology)*
  Core-Periphery Relations Re-Evaluated: Caucasian–Mesopotamian Relations in the Late Chalcolithic and Bronze Age
- **Jingyuan Zou** *(MPhil Heritage Studies)*
  Identity Formation in a Multi-Ethnic Nation: An Examination of the Contemporary Significance of the Cultural Heritage of Neolithic and Bronze Age Sichuan (*c.* 3000–600 BC), China

Archaeological Science Laboratories

Marcos Martinón-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. 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. Distributed across the department, the laboratory facilities we run span 700 square metres, but of course it is the people working in them, and their research, that matters the most.

People

Every year our community is enriched by new colleagues who bring ideas and expertise across a variety of fields. Newcomers this year include Qin-Qin Lu, who is developing new approaches to chemical and isotopic analyses of Silk Roads glass, as well as Catherine (Kate) Klesner and Anne Kwaspen, who joined the REVERSEACTION team to carry out research on the technology of pre-Hispanic ceramics and textiles, respectively. We also welcomed Linda Mbeki as our first Research Fellow in Black Heritage or Identity, to investigate the bioarchaeology of marginalized and enslaved persons.

In addition, we hosted a good number of short-term visitors, including Yaiza Hernández Casas (University of Granada), who is investigating Islamic metalwork from Spain; Andrew McNey, who came from Oxford for an archaeobotany internship; and a delegation of visitors from the Museum of West African Art in Benin, who came as part of a much larger collaboration and knowledge exchange programme in partnership with the Cambridge Archaeological Unit. Lina Campos-Quintero temporarily left the Gold Museum in Bogota to join us and study gold and iron artefacts from the Colombian Caribbean. A particular highlight of Lina's research is the first ever analytical study of archaeological iron from Colombia; the artefacts were recovered in indigenous burials and bear witness of the early exchange of European materials and their recontextualization in indigenous systems.

Sadly, however, the most significant news under the 'People' heading is the premature loss of our colleague Lisa Lodwick. A rising star in archaeobotany and a maverick of open science, Lisa was due to join us as an Assistant Professor in Environmental Archaeology in 2022, and there was genuine excitement among all involved. We once again share our deepest condolences to her husband Jo, her family and friends at her untimely death at far too young an age.

Students and graduations

The MPhil Archaeological Science continues to recruit and train some of the next generation of archaeological scientists. A particularly enjoyable moment this year was the Cambridge–Oxford Archaeological Science Exchange, organized by Carmen Ting (Cambridge) and Victoria Sainsbury (Oxford). They mixed Master's students (and a few PhD students) from both universities to share presentations, museum visits and social events, helping them create the networks and debunk university boundaries.

We also celebrated the completion of several PhD students in archaeological science. While a successful PhD should always be cause for celebration, we are particularly proud of this batch of researchers who had to overcome the severe disruption caused by the pandemic. Our heroes include Yi-Ting Hsu (who investigated post-medieval silver assaying in Europe), Friederike Jürcke (human–landscape interactions in fourth- to third-millennium BC Iran), Julia Montes-Landa (prehistoric bronze-making in Iberia), Joseph Lewis (Roman road networks) and Jasmine Vieri (modelling of chemical data from pre-Hispanic gold). The last three are back in the Department, now as postdoctoral research associates on various projects—and we are delighted to have retained them!

Some research highlights

Every year we showcase a small selection of projects that can give a flavour of the breadth of our research. Others are highlighted in other sections of this Annual Report.

The Fenscapes project started in June as a core component of the new Fenland Futures Archaeology and Heritage Initiative (FFAHRI), funded by the McDonald Institute. Led by Phil Stastney and Rachel Ballantyne, Fenscapes is synthesizing the rich and diverse geoarchaeological and environmental archaeological data to generate new, creative perspectives on long-term histories of humans, resources and environments in the East Anglian Fens.

A short but very impactful project was ArchaeoRiddle, funded by the British Academy and led by Alfredo Cortell-Nicolau, Simon Carrignon and Enrico Crema, with input

from the broader community at the Computational and Digital Archaeology Laboratory and an extended network of keen participants. The project explored the limits of archaeological inference via computer simulation and 'gamification' of data-science, using a simulated dataset that was analysed by multiple participants in a workshop at the European Association of Archaeologist's Meeting in Belfast.

The identification of organic residues in archaeological ceramics is an area of constant methodological development, and we are part of pioneering collaborations in method development. For example, Miranda Evans started a collaboration with the University of York and the Cambridge Archaeological Unit to analyse both proteins and lipids preserved in Romano-British ceramics. Ismael Rodriguez-Palomo travelled to the Fitch Laboratory of the British School at Athens, where he led a series of 'cooking' experiments on ceramic briquettes to investigate protein preservation and recovery methods in different types of ceramics.

Agnese Benzonelli used funding from the Society for the History of Alchemy and Chemistry and the McDonald Institute to revisit the mystery of the famous 'Corinthian bronzes', cited in alchemical sources and often debated by scholars. In a complex and fruitful collaboration, the project involved analyses of archaeological bronzes excavated in Corinth, but also a collaboration with

Agnese Benzonelli

Laboratory experiments replicating the ancient recipe for the making of Corinthian bronzes.

Elizabeth La Duc

Abandoned coal mine near Vindolanda.

alchemy historian Matteo Martelli to translate historical recipes, and experimental replications in a chemical lab.

Also funded by the McDonald Institute, and by the Steppe Sisters, Kate Klesner travelled to Sadyr-Kurgar in Kyrgyzstan, safely identified with the early Islamic city of Shelji. There, in collaboration with the Institute of Archaeology in Kyrgyzstan, she sampled recently excavated glazed ceramics and metallurgical remains for subsequent analyses that will hopefully inform about possible cross-craft interactions.

Building much-needed bridges between environmental archaeology and archaeometallurgy, Elizabeth La Duc has continued her doctoral quest to understand where and why coal was used as fuel in Roman iron metallurgy. In addition to material from the Cambridge-led excavations at the site of Aldborough, she has sampled slag from from York (courtesy of MAP), Ribchester (Historic England), Corbridge and Housesteads (English Heritage), and from Walton-le-Dale (Oxford Archaeology North), also using the opportunity to visit several sites along Hadrian's Wall.

Selene Mazza, Min Lin and Saltanat Amir participated in excavations of burial mounds in the Zaisan Lake region of East Kazakhstan led by the Kazakh National University in Almaty. The team discovered an intact and rich Middle Bronze Age burial of a teenager, accompanied by several bronze objects such as a mirror adorned with a frog, 180 astragali, and a pair of gold earrings that constitute the earliest goldwork found in the region.

The Duckworth Laboratory welcomed researchers from all over the world to its collections of human and primate remains. The team has been active in cataloguing the

Saltanat Amir

Freshly excavated Bronze Age mirror in Kazakhstan.

collections more fully while digitizing archival records crucial for archaeological work. We have continued to collaborate with communities on repatriation, and student volunteers have been directly involved in curatorial work to support this.

This was also a very fruitful year for the *REVERSEACTION* team, which led several research trips to various sites and museums across Colombia, met indigenous communities and artisans, pushed ahead with several strands of analytical work and hosted a meeting of the international Advisory Board at the Gold Museum in Bogota.

New methods and facilities

Last year we reported on the successful expansion of the Cambridge Heritage Science Hub (*CHERISH*), a vibrant cross-departmental facility boosted by a large grant from the Arts and Humanities Research Council. Thanks to ongoing success with additional grants, we have been able to add further instruments to our repertoire. Among others, we have purchased a micro 3D scanner, allowing high-resolution scanning of centimetre-sized objects and completing our range of scanning and photogrammetry equipment. We are also developing protocols for the use of our new fibre optics reflectance spectrometer (FORS), which may be used for applications ranging from the assessment of collagen preservation in bone to the identification of pigments on ceramics. Our new materials tester allows us to carry out mechanical tests of various materials properties and is heavily used on lithics experiments. We have also acquired a colorimeter, allowing us to bring some reproducible data to our assessment of the always subjective but crucial topic of the perception of colours in the past, and a Speed Vac system to optimize our preparation of samples for proteomics and DNA.

Meanwhile, we keep working on the optimization of other instruments so they can benefit a wider spectrum of users. For example, our portable XRF instruments now have tailored calibrations for archaeological ceramics, stone, copper and gold alloys, supplementing the off-the-shelf manufacturer algorithms. Our micro CT scanner has continued to be used extensively for anthropological remains, but new materials included dung pellets and glass beads. Also the scope of our McBurney Geoarchaeology laboratory keeps expanding to new materials and regions, with countless micromorphology sections produced in a facility that enables our research but also that of multiple collaborators who rely on our expertise.

The majority of these techniques generate complex datasets requiring computational power, which has been greatly improved by our new server with1258 Gb of RAM and two Xeon 6336Y processors.

Sharing knowledge

Most archaeological scientists have experienced the frustration of being pushed into a specialist pigeonhole that is assumed to be inaccessible to other colleagues—not to mention the broader public. As such, Marcos Martinón-Torres was particularly pleased with the opportunity to co-curate, with Ningbin Hou,

REVERSEACTION

Reverseaction team with the Advisory Board at the Gold Museum in Bogota.

an exhibition that brought some of the famous terracotta warriors from China to the Archaeological Museum in Alicante, Spain. The exhibition included 'zoom' points that expanded on scientific aspects ranging from the archaeometallurgical analyses of the warrior's weapons, through spatial statistics on their distribution, to the DNA studies of the mausoleum builders. With over 280,000 visitors, the exhibition proved the most popular in the museum's history so far, and demonstrated once again that archaeology is a great arena for science education.

Closer to home, Rebecca Roberts hosted a workshop with Arbury Primary School and researchers from various Cambridge institutions to assess how the latest research, particularly women's histories, can be woven into the school's history curriculum.

In more academic circles, we were once again very active at international conferences. A particularly remarkable event was the meeting of the European Association of Archaeologists in Belfast, which saw contributions by no fewer than 12 archaeological scientists from Cambridge, spanning from computational modelling through environmental archaeology, from ceramics to textiles. There were also good representations from Cambridge in Amsterdam for the Computer Applications and Quantitative Methods in Archaeology (CAA) conference, in Chicago for the Society for American Archaeology (SAA) meeting, and in Estonia for the conference of the International Society for Biomolecular Archaeology (ISBA), among many others.

Tamsin O'Connell delivered the keynote speech 'Critical reflections on biomolecular archaeology' at the Annual Conference of the British Association for Biological Anthropology and Osteoarchaeology (BABAO).

Marcos Martinón-Torres

Display of the terracotta warriors at the Museo Arqueologico de Alicante.

Among the many meetings organized at Cambridge, we highlight Multidimensional Dialogues: Entangling the Americas' Pasts, Presents and Futures, funded by the Centre for Research in the Arts, Social Sciences and Humanities, and convened by Camila Alday, Oliver Antczak, Joshua Fitzgerald, Jimena Lobo Guerrero Arenas, Chike Pilgrim and Jasmine Vieri.

Oliver Antczak

Multidimensional Dialogues post-seminar dinner with invited speaker Manuel Arroyo-Kalin.

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. In 2022–23, grants totalling over £70,000 for fieldwork were awarded along with two £10,000 Conference grants to Ryan Esperson for 'Illicit Trade and the Global Caribbean in the 19th century Age of Revolutions' and Simon Stoddart & Oscar Aldred for 'Fox's regional archaeology and its contribution to landscape analysis'.

Projects

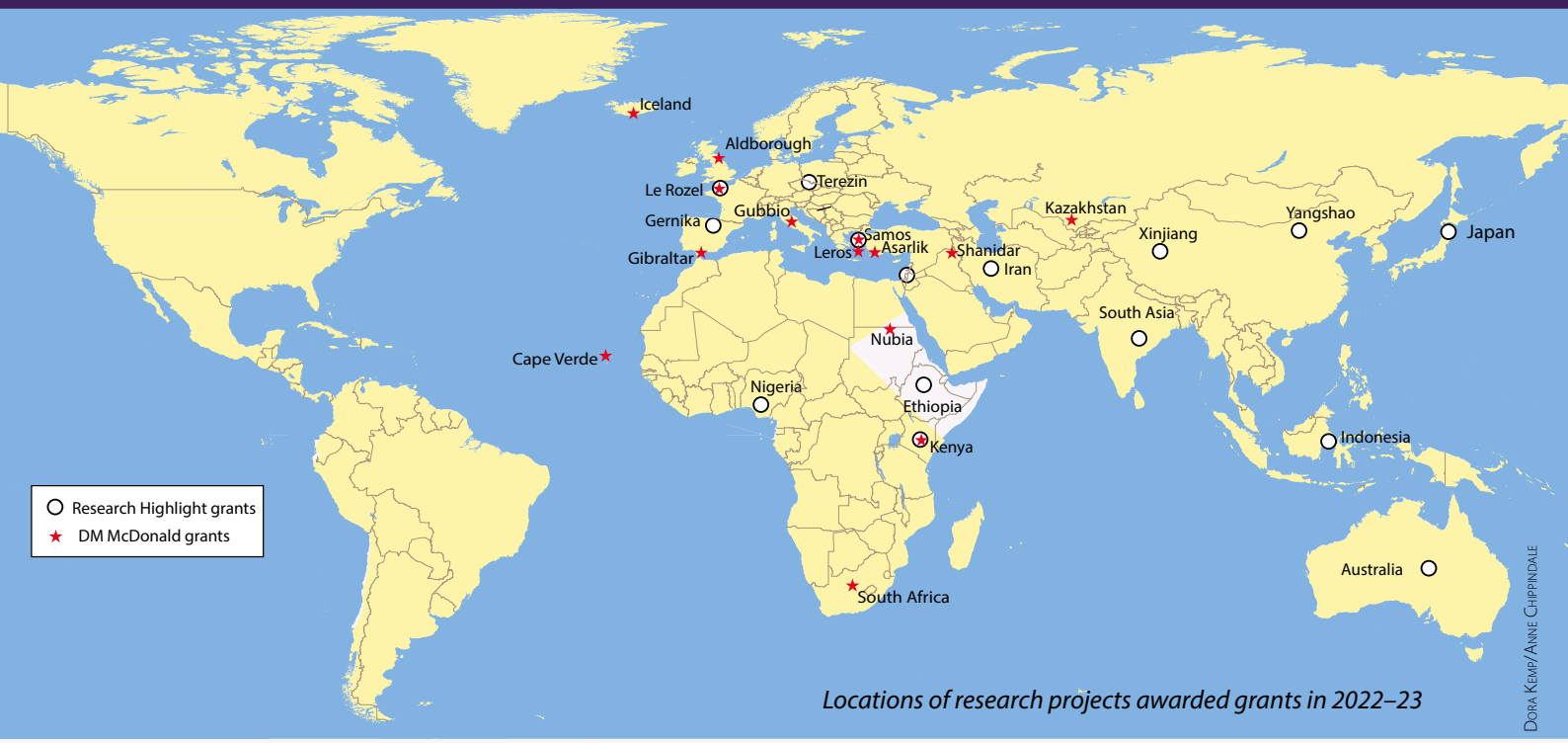
- Oscar Aldred
  Transhumance in Iceland (800 to 1800): post-excavation
- Julia Aramendi
  Anatomical and biomechanical diversity in East and South Africa during the Plio-Pleistocene; a preliminary survey of the fossil hominin collections of Koobi Fora (Kenya) and the Cradle of Humankind (South Africa)
- Matthew Brudenell & Marcus Knight
  The Arminghall timber circle (the Later Prehistoric Norfolk project)
- Katie Campbell
  Agricultural Sustainability in the Otrar Oasis, Kazakhstan (2023–2026)
- Katie Campbell
  The 'Silk Road' City in Central Asia: Patterns of occupation and abandonment from the 11th–15th century (2020–2026)
- Anastasia Christophilopoulou
  West Area of Samos Archaeological Project (WASAP)
- Lila Janik
  Connecting the Landscape: Materiality of Substance
- Catherine Klesner
  Research on early Islamic glazed ceramic and silver
- Paul Lane
  An Archaeological Investigation of Multiple Human Burials, Baawa Cairnfield, Kenya
- Rennan Lemos
  (Re)producing colonization on local ground: Determining the Local Production of Egyptian-style Objects in New Kingdom Colonial Nubia through Archaeological Science
- Sylvain Lemoine
  The anthropogenic landscape of Gibraltar: effects on territoriality, cooperation and population dynamics
- Qin-Qin Lu
  Islamic plant-ash glass
- Sam Lunn-Rockliffe
  Sirikwa Livelihoods and Socioecological Emergence in the Cherangani Hills, Kenya
- Martin Millett
  Aldborough Roman Town Excavations
- Jana Moriskova
  The Rise of Iron in Early Iron Age Caria: Analysis of Knives from Asarlık, Turkey
- Andreas Pantazatos
  Leros: Living with Difficult Heritage at Eastern Mediterranean Sea
- Sarah Paris
  Ochre-to-Bone Taphonomy
- Marie Louise Sorenson & Chris Evans
  Portuguese-Luso African relations at Alcatrazes, Cape Verde
- Laura Van Holstein
  Teach a hominid to crab-fish: The evolutionary implications of aquatic faunivory by chimpanzees
- Ashleigh Wiseman
  The rock shelter site of Le Rozel: Investigating trace evidence of Neanderthal child handprints

£10,000 Conference awards

- Ryan Espersen
  Illicit Trade and the Global Caribbean in the 19th century Age of Revolutions
  (Awarded in Michaelmas 2022)
- Simon Stoddart & Oscar Aldred
  Fox's regional archaeology and its contribution to landscape analysis
  (Awarded in Michaelmas 2022)

Impact Fund

- Matthew Brudenell
  Making Must Farm: Phase 2
- Nikhil Chaudhary
  Evolutionary perspectives on childrearing support: Increasing awareness among mothers experiencing postnatal mental health difficulties
- Ryan Espersen
  Networked Database of Global Maritime Trade
- Simon Stoddart
  Constructing identity and implementing cultural policy in the Nebrodi (Sicily)
- Gilly Carr
  Safeguarding Sites: the IHRA Charter for Good Practice



Locations of research projects awarded grants in 2022–23

Dora Kemp/Anne Chippindale

Research Grants

- **Dr Helen Alderson**
  An Archaeology of Women in Oceania: Charting agency and expertise from the deep past to the present
  (Renfrew Fellow, McDonald Institute for Archaeological Research)
- **Dr Matthew Brudenell**
  FENSCAPES: Archaeology, Natural Heritage and Environmental Change
  (McDonald Institute for Archaeological Research)
- **Prof. Cyprian Broodbank**
  Cyprus in the Eastern Mediterranean
  (Pouroulis Foundation)
- **Prof. Cyprian Broodbank**
  Oued Beht Archaeological Project
  (McDonald Institute for Archaeological Research/ Libyan Studies Foundation)
- **Dr Edgard Camarós**
  Traumobita: The role of traumatic mortality in late human evolution from an integrated non-invasive bioarchaeological and taphonomic perspective
  (EC H2020 MSC Fellowship)
- **Dr Katie Campbell**
  Silk Road Cities: Survey at Otrar, Kazakhstan
  (British Academy)
- **Dr Simon Carrignon**
  Archaeoriddle: A collaborative game to improve archaeological inference
  (British Academy)
- **Prof. Matthew Collins**
  Analysis of Ancient DNA from Mid-Holocene Humans at Lake Baikal Region, Siberia: Population history, ecology and adaptation
  (University of Copenhagen – FB Novo Nordisk Foundation)
- **Prof. Matthew Collins**
  B2C: Beasts to Craft: Biocodicology as a new approach to the study of parchment manuscripts
  (EC H2020 ERC Advance Award)
- **Prof Matthew Collins**
  A blank page? exploring paper documents as a biomolecular archive
  (Richard Lounsbery Foundation)
- **Dr Alfredo Cortell-Nicolau**
  Agent-Based Modelling to assess the quality and bias of the archaeological record
  (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 Award)
- **Dr Kingsley Daraojima**
  Social Settlement Dynamics and Environmental Process in Pre-colonial Nigeria: Growing the Igbo-Ukwu urban/cultural landscape
  (BA Newton International Fellowship)
- **Dr Ryan Espersen**
  No Dollar Too Dark
  (EC H2020 MSC Fellowship)

- Dr Anna Florin
  Anatomy of Economic 'Roots & Tubers'
  (Cambridge Humanities Research Grant)
- Dr Daniel Fuks
  The Flowering Desert: First millennium CE agricultural developments in the Negev desert reconstructed from dung microbiomes and rubbish-dump plant remains
  (BA Newton International Fellowship)
- Dr Daniel Fuks
  Crop Production in the Levant and International Trade Exchange: investigating coprolites and crop plant remains from the 1st millennium CE Negev Highlands and Aravah Valley (CroProLite)
  (EC H2020 MSC Fellowship)
- Dr Jason Gellis
  Transitions in early stone tool technologies: a computer vision and machine learning approach
  (British Academy)
- Dr Guy Jacobs
  Movement Networks and Genetic Evolution among Tropical Hunter-gatherers of Island Southeast Asia
  (EC H2020 ERC Starting)
- Dr Liliana Janik/Dr Oscar Aldred
  Landscape Regeneration Solutions to the Interlinked Extinction and Climate Crises that support Sustainable Development
  (NERC)
- Dr Alastair Key
  An Open Access Database Detailing the Comparative Sharpness and Cutting Performance of Raw Materials Used to Produce Palaeolithic Stone Tools
  (Royal Society)
- Dr Alastair Key
  Rescue Excavations at Britain's Earliest Acheulean Site: Fordwich and Old Park 2022–2023
  (The Leakey Foundation)
- Prof. Marta Mirazon Lahr
  The evolutionary landscape of modern human origins in Africa (NGIPALAJEM)
  (EC H2020 ERC Advanced)
- Prof. Paul Lane
  MAEASaM: Mapping Africa's Endangered Archaeological Sites and Monuments
  (Arcadia)
- Prof. Paul Lane
  Well Being: Indigenous wells, pastoralist biocultural heritage and community archaeology for sustainable development in Northern Kenya and Southern Ethiopia
  (GCRF via the British Academy)
- Prof. Paul Lane
  Pastoralist Cultural Heritage, Water Security and Wellbeing in Northern Kenya
  (University of Cambridge, AHRC Impact Fund & UKRI Funding)
- Prof. Paul Lane
  Chongoene Archaeological and Biocultural Heritage Park Project (PArBiC)
  (Gerda Henkel Foundation)
- Prof. Paul Lane
  Rising from the Depths: Utilising marine cultural heritage in East Africa to help develop sustainable social, economic and cultural benefits
  (University of Edinburgh – FB AHRC)
- Dr Alex Loktionov
  The Development of Early Constitutional Thought
  (AHRC)
- Dr Sam Lunn-Rockliffe
  The Contemporary Archaeology of Agricultural Innovation in Elgeyo Marakwet, Kenya
  (Leverhulme Early Career/Isaac Newton Trust)
- Dr John MacGinnis
  Ziyaret Tepe Archaeological project
  (Ziyaret Tepe Archaeological Trust)
- Dr Carmen Martin-Ramos
  (Re)defining the Howiesons Poort technocomplex. Technological strategies and temporal modelling
  (Pouroulis Foundation)
- Dr Linda Mbeki
  Research Fellow in Black Heritage or Identity
  (McDonald Institute for Archaeological Research)
- Dr Ileana Micarelli
  B-CARED: Osteobiographical investigation of disability and care in Medieval Europe
  (EC H2020 MSC Fellowship)
- Prof. Marcos Martinón-Torres
  Brass vs *Bronze: continuity and change from Late Antiquity to the early Islamic*
  (AHRC)
- Prof. Marcos Martinón-Torres
  Cambridge Heritage Science Hub (CHERISH): infrastructure for research in material culture and collections
  (AHRC)
- Prof. Marcos Martinón-Torres
  Reverse Engineering Collective Action: Complex technologies in stateless societies
  (EC H2020 ERC Advanced)
- Prof. Marcos Martinón-Torres
  Training the next generation of archaeological scientists PLAcE
  (EC H2020 MSC ITN)
- Dr Stefania Merlo
  Digital Storytelling on African Urbanisms: A model to empower education initiatives across the global south
  (AHRC)
- Dr Erin O'Halloran
  Guernica as Orient: Bombs, Art, and Fake News
  (British Academy/EC H2020 MSC Fellowship)

- Dr Rune Olsen
  Navigating new economic networks in ancient Egypt
  (Carlsberg Fellowship)
- Dr Nik Petek-Sargeant
  Historical East African Archaeology and Theory: A framework for historical archaeology and identity formation
  (British Academy; EC H2020 MSC Fellowship)
- Prof. Cameron Petrie
  MAHSA: Mapping Archaeological Heritage in South Asia
  (Arcadia)
- Dr Emma Pomeroy
  From this world to the next: novel perspectives on Neanderthal death
  (Templeton Foundation)
- Prof. John Robb
  Making Ancestors: The politics of death in prehistoric Europe
  (EC H2020 ERC Advanced)
- Dr Christiana Scheib
  Development of an Ancient Pregnancy Test Using Paleoproteomics
  (British Academy)
- Dr Rihlat Said Mohamed
  Life History Theory in Maternal and Child Health: Formative research in South Africa
  (Wellcome Trust)
- Prof. Marie Louise Stig Sorensen
  Yangshao Culture: 100 Year Research History and Heritage Impact
  (Beifang International Education Group/Shanghai Academy of Guyewang Studies)
- Dr Akshyeta Suryanarayan
  Exchange Networks in the Arabian Gulf in the Bronze Age (ENGulf)
  (Gerald Avery Wainwright Fund)
- Dr Julia Tejada Lara
  Evolution on an Island Continent: Feeding ecology of Pleistocene sloths
  (EC H2020 MSC Fellowship)
- Dr Camille Westmont
  Spatial and Critical Approaches to Industrial Heritage Landscapes (SCAIHL)
  (EC H2020 MSC Fellowship)
- Dr Toby Wilkinson
  Oued Beht Archaeological Project
  (McDonald Institute for Archaeological Research/Libyan Studies foundation)
- Dr Toby Wilkinson
  Cyprus in the Eastern Mediterranean
  (Pouroulis Foundation)
- Dr Ashleigh Wiseman
  Early American Colonisation: Life on the White Sands National Park playa in the Pleistocene
  (British Academy)
- Dr Ashleigh Wiseman
  How to Build a Hominin: Predictive simulations of locomotion in human evolution
  (Leverhulme Early Career/Isaac Newton Trust)

Tactical Simulation and Archaeology

Alfredo Cortell-Nicolau

Within the framework of the *ArchBiMod* project, we have developed an extensive programme of tactical simulation to understand the problems and biases of the archaeological record better. Essentially, tactical simulation involves the development of computational and statistical simulated models with known parameters and theoretical constraints, so that these can be explored and tested in a controlled environment. It follows that, from a full understanding of the model's parameters, we can further test potential confounding factors such as biases or gaps in the data, all common to the archaeological record.

The project has produced several outputs, but within these, we would like to highlight the sub-project *Archaeoriddle*, developed along with other members of the Computational and Digital Archaeology Laboratory, such as Simon Carrignon, Ismael Palomo, Leah Brainerd, Charles B. Simmons, Joseph Lewis, Enrico Crema and other lovely participants. Full information can be found at **https://theia.arch.cam.ac.uk/archaeoriddle/**, but briefly, aside from producing a substantial amount of fun and engaging media content, the project consists of a computerized simulation of an interaction process between a group of hunter-gatherers and farmers. From this, and sharing only partial and biased data (emulating the archaeological record), we asked volunteer researchers to assess specific questions with their preferred methods, which has allowed us to assess the performance and reliability of such methods. The final results were presented at the last EAA conference (Belfast 2023) in a very stimulating workshop and we are currently finishing the last details for its scientific publication.

Sources of funding: H2020-MSCA-IF actions. Grant No. 101020631, ArchBiMod project; British Academy Small Fund.

Elena Grau

The Archaeoriddle *team, ready for the final battle. In order from left to right: Alfredo Cortell-Nicolau, Joseph Lewis, Vaneshree Vidyarthi, Miranda Evans, Simon Carrignon, Leah Brainerd, Charles B. Simmons, Enrico R. Crema, Carmen Ting, Camilla Zeviani and Jasmine Vieri.*

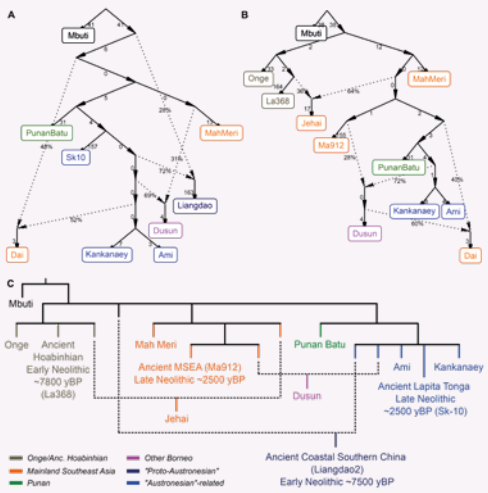
MOBILE Investigates Behaviour and Biology During Subsistence Transitions

Guy Jacobs

The *MOBILE* project (**www.mobile-project.info**) started in April 2021 and investigates how changing subsistence impacts the behaviour and biological diversity of traditionally hunter-gatherer groups in Indonesia. We are studying mobility and dietary practices along with microbiome and genomic diversity of people and their dogs to reveal the nature and impacts of transition. The project works in close collaboration with the Mochtar Riady Institute for Nanotechnology (MRIN) in Jakarta.

Over the last two years we have welcomed Drs Hirzi Luqman and Joe Lewis and PhD student Clarissa Asha Febinia. We completed major data collections in the academic year 2022–23, visiting five communities in Borneo and Sumatra. We are currently analysing mobility and social network data, as well as pilot genetic data. Our microbiome work has allowed us to build the first database of unique Indonesian microbial diversity and investigate lifestyle and demographic drivers and community variation. Our mobility analyses document patterns of ongoing land use and have previously been instrumental in supporting land-rights protection. The coming year will be busy and exciting, particularly with the generation of our main sequencing datasets.

This five-year project is funded by the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (ERC Starting Grant, agreement No. 950610).



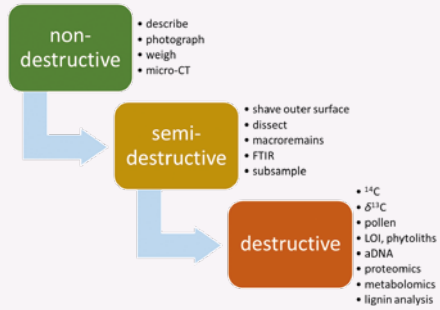
Ancestry analysis of Bornean and Punan groups. We find that local Bornean ancestral components pre-date the genetic signal of the Austronesian language-family expansion through Indonesia, with relevance to the long-term population and cultural history of the region.

CroProLITE project updates

Daniel Fuks

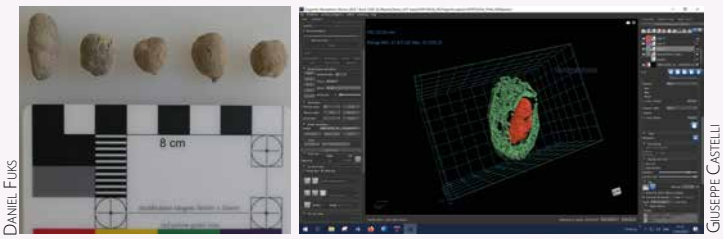
As time capsules of past economies and ecologies, ancient faeces, or coprolites, comprise a scarce but valuable archaeological resource. To make the most of the information encapsulated in this increasingly researched sample type, developing multi-proxy workflows has been a focus of my *CroProLITE* project. Over the past year this has led me to engage in analyses of various types, including micro-CT scanning at the McDonald Institute's Paleolab (with Giuseppe Castelli and Elizabeth La Duc) and at the Zoology Department's Biotomography Centre (with Keturah Smithson); proteomics extractions at the University of Copenhagen (with Takumi Tsutaya); ancient DNA extractions at the McDonald Institute's Henry Wellcome Laboratory for Biomolecular Archaeology (with Ruairidh MacLeod and Marta Muñoz Alegre); and radiocarbon pretreatments at the 14CHRONO Centre in Belfast (with Niamh O'Neill-Munro and Zachary Dunseth). The latter began as a set of experiments on minimally destructive radiocarbon dating of sheep/goat dung funded by a Tier 1 Cambridge Humanities Research Grant (CHRG). These experiments demonstrated the possibility of dating shavings of dung pellet exteriors, which is significant because it makes good use of an otherwise discarded source of contaminants (Fuks *et al.* 2023, *Radiocarbon*). To carry this work forward, I was recently awarded a Tier 2 CHRG for research aiming to confirm or qualify this result through a series of experiments on the consistency and reliability of radiocarbon dates obtained from this material.

Funding: Marie S. Curie International Fellowship, Project CroProLITE, no. 101025677; Cambridge Humanities Research Grants (CHRG).



Daniel Fuks

Workflow proposal for multi-proxy coprolite analysis.



Daniel Fuks

Giuseppe Castelli

Dung pellets from Early Islamic Nahal Omer, northern Aravah valley, Israel. Left: Intact dung pellets; Right: micro-CT generated 3D model of a dung pellet with seed inside.

Crop History Consortium (CHC)

Daniel Fuks

Founded in May 2022, the CHC is a cross-disciplinary group of researchers aiming to conduct and promote interdisciplinary synthesis research on crop histories, with a focus on the last 2000 years or so in the Middle East and Mediterranean. The CHC grew out of the *Moving Plants* workshop on first-millennium CE crop diffusion, held at the McDonald Institute for Archaeological Research in May 2022. The CHC was officially inaugurated at a seed meeting that same week, in the offices of the Higher Education, Research and Innovation (HERI) Department of the French Embassy in London.

In 2023, our first full calendrical year as a consortium, the CHC attained some key milestones. We hosted our first conference session at the European Archaeology Association (EAA) meeting in Belfast 2023. 'Interdisciplinary integration in reconstructing agricultural crop histories' was the topic, and it drew a great group of participants. In addition, we were awarded our first grant aimed at facilitating CHC goals, a UKRI AHRC Networking Grant, awarded to Michelle Alexander (Univeristy of York; PI) and Daniel Fuks (co-PI). Meanwhile, most of the *Moving Plants* workshop proceedings are now available online and the full proceedings are scheduled for publication as a *Vegetation History and Archaeobotany* special issue in late 2024. Finally, we wrote our first joint paper, on 'Orphan crops of archaeology-based crop history research'. For more on the paper and the CHC, see: **https://www.arch.cam.ac.uk/news/orphan-crops**

Michelle Alexander

Crop History Consortium session at EAA 2023 Belfast on 'Interdisciplinary integration in reconstructing agricultural crop histories'.

The First Hominin Soft Tissue Reconstructions

Ashleigh L. Wiseman

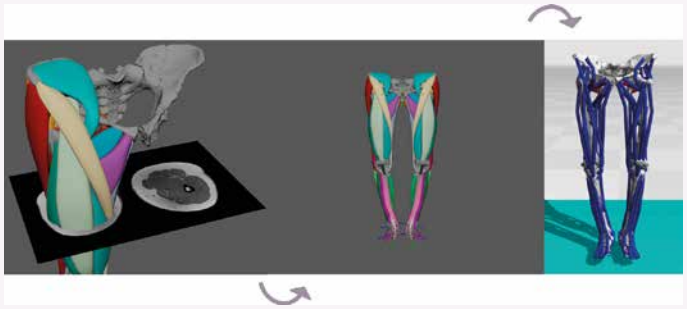
The *How to Build a Hominin* project saw the first ever soft tissue reconstructions of a hominin in 2023. Soft tissues do not preserve and instead we are left with just the bare bones. Muscles animate the body, facilitating movement, and if we want to understand past movement, we first need to reconstruct these missing tissues. In summer 2023, the first soft tissue reconstruction of the *Australopithecus afarensis* specimen AL 288-1 (Lucy) was published and subsequently became one of *Royal Society Publishing's* top five most-read papers of 2023. The reconstruction process utilized MRI scans of humans to guide the placement of muscles within Lucy's body. This guidance was further refined by incorporating muscle scarring patterns, drawing upon the extant phylogenetic bracket. The findings revealed a musculature in Lucy that shared similarities with humans but exhibited greater volume, suggesting the capacity for generating higher muscle forces, particularly in the hip region.

Expanding upon this, dissections were performed on a range of primates in collaboration with Belgian researchers to measure muscle architectural parameters which were used to construct numerous musculoskeletal models of hominin species. Preliminary predictive simulations demonstrated the sensitivity of changing such input architecture on subsequent model performance, but found that similar muscle group activations between Lucy and a human are needed to sustain single-limb support on an upright limb.

There are ongoing predictive simulations employing diverse hominin musculoskeletal models. These aim to provide deeper insights into the efficient movement patterns of hominins to enrich our understanding of the origins of human bipedalism further.

https://walkinginthepast.co.uk/

This work was supported by a Leverhulme Trust Early Career Fellowship (grant number: ECF-2021–054) and by the Isaac Newton Trust, University of Cambridge.



Ashleigh L. Wiseman

Image shows the workflow of reconstructing the musculature in Lucy, starting from guiding polygonal reconstructions using MRI scans to musculoskeletal model creation in the biomechanical software OpenSim.

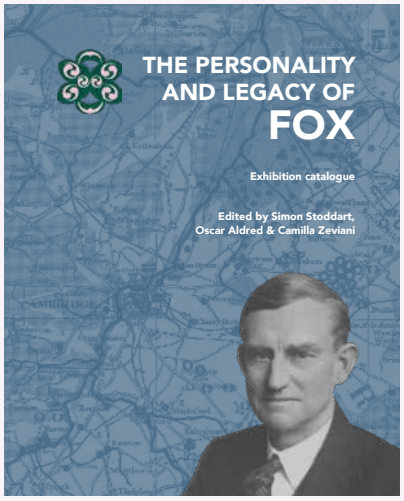
Celebrating Fox

Oscar Aldred, Simon Stoddart & Camilla Zeviani

2023 was the centenary of the publication of Cyril Fox's *Archaeology of the Cambridge Region* (*ACR*) by Cambridge University Press. Sir Cyril Fox (1882–1967), the first student to submit a PhD (1922) in the department, some seven years before Louis Leakey (1930), was not the first to bring the weight of geography and environment alongside archaeological evidence. However, he was the first to make a convincing case for its landscape-scale perspective, for dividing a region into areas and producing quality maps based on conventional periods. His analysis furthermore provides a centennial comparison of the achievement of the Cambridge Archaeological Unit over the last 30 years.

To celebrate the publication of *ACR*, we organized a conference and an exhibition, funded by the McDonald Institute and the DAAD, to explore the impact of Fox's work on the understanding of the Cambridge region, and, writ large, on archaeology itself. The conference consisted of 20 papers presented across two days; the first day focused on the papers addressing the Cambridge region, while the second presented papers from an international perspective. The six-week exhibition in the Cripps Gallery of Magdalene College offered material such as portraits, pictures, maps, diaries and books from Magdalene College, the National Library of Wales and the Museum of Archaeology and Anthropology. In addition, the exhibition contained 17 posters presenting research from the Cambridge region and continental Europe. The presence of continental European scholars allowed a comparison of similar regional sequences from France, Germany, Italy, the Netherlands, Spain and Ukraine. The exhibition catalogue *The Personality and Legacy of Fox* has provided a permanent and enhanced record of the event, including material that could not be placed in the conference or exhibition for reasons of time and space. The catalogue is available digitally for download by members of the University of Cambridge here:

https://shorturl.at/PWZ24



Indigenous African Plant Knowledge and Sustainability (*IAPS*): A Citizen Science Project

Matthew Davies & Samuel Lunn-Rockliffe

The *IAPS* project brings together a team of community researchers led by Timothy Kipkeu Kiprutto and Andrew Yano alongside multiple collaborators including Wilson Kipkore from the University of Eldoret and colleagues from the Institute for Global Prosperity and the ExCiteS Research Group at University College London. The project has piloted and developed novel research into the co-design of a Citizen Science smartphone application with farmers in Elgeyo-Marakwet County, Kenya. The application allows farmers to self-report a wide range of innovations in the cultivation of food plants, including novel forms of intercropping and the maintenance of botanic diversity such as multiple landraces of crops. The application also allows for the recording of challenges to farming including issues with rain and soil fertility and the presence of crop diseases and pests. Importantly, the application was created in real time with groups of rural small-holder farmers and making use of their own self-defined categories and systems of classification, thus allowing the application to reflect actual agricultural practice on the ground. Unlike many common agri-tech applications, the app was produced with a simple interface including easily identifiable icons and writing in *Kiswahili* to enable local users. We hope to be able to continue to scale trials with the application and to hold discussions with the Elgeyo-Marakwet County government so as to incorporate research data better into County-level policy planning.

https://www.ucl.ac.uk/bartlett/igp/ucl-institute-global-prosperity

https://www.ucl.ac.uk/geography/research/research-centres/extreme-citizen-science-excites

This project was supported by the Global Challenge Research Fund.

Samuel Lunn-Rockliffe

Intercropped maize and finger millet in the highlands of Elgeyo Marakwet.

Histories of Honey: Biocultural Heritage of Beekeeping and Conservation in the Cherangani Hills, Kenya

Samuel Lunn-Rockliffe, Wilson Kipkore, Benny Shen & Matthew Davies

This project aims to explore the positive intersections between the biocultural heritage of indigenous apiculture and forest conservation in Kenya's Cherangani Hills. Such work is underpinned by concerns that conservation strategies remain embedded in colonial governance structures of environmental protectionism that continue to marginalize local community knowledge and practice. A clear example of this can be seen in the current Forest Conservation and Management Act, which prohibits any form of beekeeping inside gazetted Forest Blocks. This prohibition is puzzling, not least because the biocultural heritage of indigenous beekeeping across Kenya is primarily characterized by the maintenance of productive and healthy apiaries through the ongoing shaping and sustainable management of diverse regional ecologies. Preventing people from engaging with these activities thus seems at odds with the fundamental principles of forest conservation. In view of this, *Histories of Honey* has been building from an extensive archive documenting endangered material histories of beekeeping and how these are entwined with local forms of environmental management. The project has received seed funding from the McDonald Institute to build a network of partners, marshalling the expertise of archaeologists, ecologists, foresters and citizen scientists to explore the challenges and potentials for translating the positive intersections between ecosystem management and indigenous beekeeping into policy change. Immediate outputs from this funding will include a workshop to produce a strategic white paper focused on influencing regional and national policy, with longer-term output including the co-design of an ambitious grant proposal to action white paper recommendations.

https://www.emkp.org/histories-of-honey-material-practices-of-beekeeping-in-the-cherangani-hills-kenya-2/

This project is supported by an impact grant from the McDonald Institute for Archaeological Research.

Beekeepers moving a new beehive to its final location in the eastern Embobut Forest.

Campbell Martin

The Contemporary Archaeology of Agricultural Innovation in Elgeyo Marakwet, Kenya

Samuel Lunn-Rockliffe & Matthew Davies

This project adopts an archaeological framework to reconceptualize smallholder innovation in Elgeyo Marakwet County, Kenya, as an iterative historic process harnessable as a mechanism for future agricultural design. The rationale to do so stems from the notion that mainstream attempts for transforming food systems across the region remain focused on modernizing paradigms that overlook historic and contemporary smallholder practice as primary sources of innovation. The project builds on previous grants from the AHRC and Global Challenges Research fund and a new Leverhulme Early Career Fellowship. Throughout 2023, a team of Kenyan and UK-based researchers undertook a series of participatory mapping exercises of individual farmsteads alongside wider landscape surveys across a range of ecologies in order to understand changing land-use patterns, cropping practice and soil management techniques. Analysis of this work demonstrates significant diversity in how farmers improvise and experiment as they encounter challenges and opportunities over multiple scales and time frames, from daily and seasonal planting activities of annual crop cultivation to long-term considerations of tree planting, soil management, irrigation and climate-related challenges. The project has also recorded how externally derived development interventions intersect with local knowledge and practice. An example of these processes has involved documenting the implementation and subsequent collapse of a Red Cross-funded irrigation scheme and how this was imprinted over older forms of irrigation in ways that undermined local agricultural systems and destabilized livelihood security.

This project is supported by the McDonald Institute and a Leverhulme Trust Early Career Fellowship and by the Isaac Newton Trust, University of Cambridge.

Samuel Lunn-Rockliffe

Farmstead located on the steep slopes of the Elgeyo Escarpment.

Mapping Africa's Endangered Archaeological Sites and Monuments (MAEASaM)

Paul Lane

This project aims to identify and document endangered archaeological heritage sites across Africa using a combination of remote sensing, records-based research and selective archaeological surveys. It will make records of these sites available in an Open Access Arches geospatial relational database tailored for different interest groups and stakeholders. The focus over the year was on consolidation of previous work and completion and testing of the project's Arches database and the resource models, thesauri and other documentation that underpin it, and undertaking field verification missions that had been delayed by the Covid-19 pandemic. Concurrent with this work, the team and their partners have continued digitization of legacy data, expanded various remote sensing surveys of large tracts of the study countries, using Google Earth Pro, and hosted various workshops aimed at enhancing in-country capacities. Open, online seminars, conference sessions and social media posts further aided promotion of the project's goals, activities and results.

PI Prof. Paul Lane (Co-Is Prof. Stephanie Wynne-Jones, University of York; Prof. Kevin MacDonald, Institute of Archaeology, UCL; Dr Daniel Löwenborg, Uppsala University; Prof. Ibrahima Thiaw, Université Cheikh Anta Diop de Dakar, Senegal; Dr Jane Humphris, British Institute in Eastern Africa, Nairobi, Kenya; & Prof. Amanda Esterhuysen, University of the Witwatersrand, South Africa). Funded by Arcadia.

Ezekia Mtetwa

Zimbabwe Tradition stone-walled site at Mtoa, Hwange National Park, Zimbabwe, inspected in July 2023.

Well Being: Indigenous Wells, Pastoralist Biocultural Heritage and Community Archaeology for Sustainable Development in Northern Kenya and Southern Ethiopia

Paul Lane

This collaborative research project between archaeologists and pastoralist community organizations on the long-term history of indigenous water management and well digging in northern Kenya and southern Ethiopia concluded in autumn 2022. The main activities during the year included continuation of survey work around the town of Kalacha (Marsabit County), on the edge of the Chalbi Desert, and preparation of an exhibition and accompanying trilingual exhibition catalogue outlining the main results of the project. The survey work, led by Paul Lane, involved collaborators from the British Institute in Eastern Africa and the National Museums of Kenya and three of the community heritage stewards who had participated in previous seasons of fieldwork in northern Kenya and southern Ethiopia. Work focused on GPS mapping all the visible stone cairns and stone-walled enclosures in a roughly 3 km^2 area to the north of Kalacha and those in a smaller (*c.* 1.5 km^2) survey block around Kargi Oasis some 70 km to the south as the crow flies. A very high density of cairns and enclosures was recorded for both areas and many more were observed in the areas around the survey blocks. Given the density of cairns and enclosures, the data from the field-mapping exercise are now being used as part of the *MAEASaM* project to develop an algorithm for automated mapping of similar features using the Google Earth engine, and the generated maps will be shared with local planning authorities to inform them of the rich archaeological heritage around the Chalbi Desert.

Paul Lane

The Hon. Dido Ali Rasso, MP Saku constituency, Prof. Ratemo W. Michieka, Chairman, Kenya National Academy of Sciences and other dignitaries at the opening of the Pastoralist Wellbeing Exhibition, National Museum, Nairobi, 20 September 2022.

Work on the exhibition and accompanying trilingual (English, Swahili and Boorana)exhibition booklet was led by the project PI Dr Freda M'Mbogori (NMK) and the exhibitions team at the National Museum. The exhibition was opened by the Hon. Dido Ali Rasso, MP for Saku constituency, Marsabit County, Prof. Ratemo W. Michieka, Chairman, Kenya National Academy of Sciences and Dr Emmanuel Ndiema, head of Research, National Museums of Kenya. It was also attended by the Provincial Commissioner of Yabello and the Administrator of Guchi district in Ethiopia, where the project worked, all of the community stewards and other collaborators who had been trained on the project and other dignitaries. In all, around 200 invited guests attended the opening. The exhibition remained open to the public until the end of January 2023, and was visited by between 1500 and 2000 people each month, many from schools from around Kenya. A variant of the exhibition was also exhibited in Kalacha (Marsabit), where its opening was attended by around 300 people, and at Irdar, Ethiopia and Borana University, Yabello, where it formed a key element of the annual Yabello cultural festival in February 2023, attended by around 5000 people.

Co-I Prof. Paul Lane (PI Dr Freda M'Mbogori, BIEA/NMK, Nairobi). GCRF funded via the British Academy as part of its Sustainable Development funding programme.

Pastoralist Cultural Heritage, Water Security and Wellbeing in Northern Kenya

Paul Lane

Building on recent research on pastoralist biocultural heritage across Marsabit County, Kenya, under the auspices of the Wellbeing project, this follow-up study aims to integrate data collected on past systems of indigenous water governance among pastoralist communities in Marsabit County, the nature and distribution of cultural heritage assets, and current threats. To facilitate this, data were collected via a stakeholder workshop in January 2023, facilitated by Dr Rebecca Kariuki (School of Sustainability, Arizona State University) and Dr Freda M'Mbogori (National Museums of Kenya), using a participatory, iterative, future scenario modelling tool (KESHO) previously employed on the Adaptation and Resilience to Climate Change project in northern Tanzania (see Annual reports from 2018 to 2021). Participants included diverse stakeholders from Marsabit County, representing public and private organizations, communities, and researchers. The workshop aimed to explore possible future land use and land cover change (LULCC) scenarios and their possible consequences for securing sustainable water futures for pastoralists in Marsabit County through discussion of past LULCC in the area with diverse stakeholders. The discussions aimed at prompting the identification of key thresholds and tipping points, why these may have been reached, and reflection on possible trajectories of change under different climatic conditions and management regimes. Two target dates—2030 and 2063—were used to model possible future scenarios, as these align, respectively, with those set for the United Nation's Sustainable Development Goals and the African Union's Development Agenda.

Paul Lane

John Kanyngi (BIEA Nairobi) providing training in documentation of archaeological features using mobile technologies at the Pastoral Iron Age site of Lanet, Nairobi, to project members in February 2023.

These insights were supplemented by participatory mapping of community heritage values using the Photovoice methodology. Participants were drawn from communities who had already engaged and collaborated with the British Academy funded Wellbeing project. An initial workshop was held at the National Museum in Nairobi and the Hyrax Hill Site Museum, Nakuru in February 2023, and aimed at introducing the Photovoice concept to participants and providing training in capturing information about sites participants considered to have heritage value and ways to record their perspectives on the long-term future of these heritage resources. Follow-up meetings were held in Marsabit in March 2023 and Kalacha in August 2023, at which participants presented the photographs they had taken to the rest of the group, followed by a group discussion of the images, with each participant presenting for around five minutes. The discussions highlighted several examples of concern and also cultural value. In August, time was also spent on identifying a selection of photographs and agreeing on accompanying short pieces of text

submitted by each participant for inclusion in a physical and online exhibition to be displayed in Marsabit County in 2024.

Additional activities undertaken included the establishment of five heritage clubs in primary and secondary schools around the town of Kalacha, on the margins of the Chalbi Desert, in direct response to concerns expressed by community members over the loss of knowledge of the history and culture of the locality among school-age youth.

PI Prof. Paul Lane. Co-I, Dr Freda M'Mbogori, (National Museums of Kenya, Nairobi); Funding: Internal University of Cambridge AHRC IAA Impact Fund, and UKRI GCN/ODA Funding.

Ahmed Mosha

Students from Rage Primary School, Kalacha practising recording the dimension of a stone cairn as part of their Heritage Club activities, June 2023.

Paul Lane

Paul Lane

Dr Freda M'Mbogori from the National Museums of Kenya explaining how a stone tool may have been used to members of the Rage Primary School Heritage Club, Kalacha, August 2023.

Archaeological Investigation of Naakedi Cairnfield, Baawa, Samburu District, Kenya

Paul Lane

This project was initiated following reports in 2005 that several stone cairns making up a distinct cairnfield near the village of Baawa in Samburu District had been disturbed, exposing the skeletal remains of numerous individuals. Consultations with members of the community indicated general interest in archaeological excavations and recording of the disturbed burials to determine their date and possible links with contemporary Samburu. Recording of the disturbed burials was undertaken in 2006, supplemented by excavation of an apparently undisturbed cairn. Further excavations of both disturbed and undisturbed burial contexts were undertaken in 2008. This research demonstrated that the first cairns were likely established for single inhumation burial around 2700 BP during the Pastoral Neolithic. They were subsequently re-used, and possibly added to, for multiple burials between 900 and 300 BP during the Pastoral Iron Age.

Nik Petek-Sargeant

The Baawa 2023 Field Team, July 2023.

In July 2023, a team from Cambridge University, the National Museums of Kenya, the British Institute in Eastern Africa, Cleveland Musuem of Natural History and Baawa group Ranch returned to Naakedi with the specific aim of completing the excavation of one of the more complex cairns and refining understanding of the stratigraphic relationships between the multiple burials it contains. Alongside successful completion of this work (despite the cairn having been subject to further disturbance), additional samples were recovered that should enable better dating of the entire complex. Surveys were also undertaken around the complex leading to the location of several other clusters of stone cairns, a few of which also showed signs of deliberate recent disturbance, and various other surface traces of former settlement activity associated with the Pastoral Iron Age and more recent times. Some of the surface scatters of obsidian and other lithics and occasional

surface ceramics hint at earlier Pastoral Neolithic activity, but unfortunately no definitive early herder settlement remains were located. Stable isotope analyses of some of the human remains are planned to determine the diet and mobility of those individuals buried during different phases of cairn use, and pottery samples will be tested for biomarkers relating to their use. These results will supplement earlier aDNA research led by Harvard University.

PI Prof. Paul Lane. Co-Is Dr Emmanuel Ndiema, National Museums of Kenya, Dr Elizabeth Sawchuk, Cleveland Museum of Natural History, Ohio. Funding McDonald Institute.

Chongoene Archaeological and Biocultural Heritage Park Project (PArBiC)

Paul Lane

The dunes along the south-central Mozambique coastline host numerous archaeological shell middens while also supporting a mosaic of habitats comprising dune forest, dune grassland, miombo woodland and savanna flora, with high species diversity and localized species endemism. These habitats have long been an important source of natural resources for local communities, but with population expansion the coastal dune system is steadily being eroded, leading to damage to the archaeological sites and reduction in vegetation cover. The coastal strip around Chongoene and Xai-Xai in Gaza province has an especially rich concentration of shell middens, and some have been the focus of archaeological research for several decades.

Paul Lane

Examples of natural products harvested from the marine environment and coastal dunes at Chongoene and Xai-Xai used by local healers, March 2023.

Most were likely established by Early Farming Communities in the first few centuries CE, although some were occupied by later communities. With funding from the Gerda Henkel Foundation, this project has sought to introduce community-driven systems of integrated, biocultural heritage documentation and site protection following successful petitioning of the Gaza Provincial Council to gazette an area of the best-preserved dunes. Key activities in 2022–23 included the organization and hosting of several information-gathering, training and dissemination workshops at Chongoene, official opening of the gazetted Biocultural Heritage Park by the local mayor and Vice Rector of Eduardo Mondlane University, and the laying of the foundations for construction of a Visitor Centre and Heritage Market on the boundaries of the newly designated park. Work has also progressed with developing a system of land-use and activity zoning with all relevant stakeholders, to enable existing users' continued rights while also introducing legislative measures to restrict uncontrolled exploitation of the surviving intact dune systems. New signage and information panels have also been designed to help communicate further the importance of the archaeological sites and their associated biocultural heritage.

PI: Dr Solange Macamo, Department of Archaeology & Anthropology, Eduardo Mondlane University, Mozambique; Co-I/Academic consultant Prof Paul Lane. Funding: Gerda Henkel Foundation.

Paul Lane

Workshop participants inspecting one of the larger shell middens under active erosion at Chongoene Beach, March 2023.

Social Settlement Dynamics and Environmental Process in Pre-colonial Nigeria: Growing the Igbo-Ukwu Cultural Landscape (*SosDen*)

Kingsley Chinedu Daraojimba

SosDen examines the intersection of human-environmental interactions at the ninth–thirteenth-century CE Igbo-Ukwu cultural landscape with the aim of understanding how human–environment interactions have contributed to the development of early urban landscapes in West Africa. The project is community driven, which will strengthen local community relations and foster the goal of broadening our understanding of the processes driving landscape evolution. Public engagement has been a useful strategy for public interpretation of the material culture from the excavations. Key tasks during the project's first season in June 2023 were to (1) execute stratigraphic excavations through community participation; (2) collect samples for ^{14}C dating, geochemical, soil micromorphology and archaeobotanical analyses; (3) organize museum workshop and photo exhibition for secondary school students and community members. Excavations revealed a lizard figurine, ceramics including a miniature highly decorated globular vessel, glass bead, and unidentified metal objects. Archaeological deposits were rich in fungal spores with poorly preserved pollen throughout the stratigraphic profile suggesting herbivore activities on the landscape and relatively warm climates with local seasonal drying over time. The project is indeed providing opportunities to develop the historical narrative of this landscape, including the ecological context, and to establish a groundwork for future research addressing the social complexity responsible for Igbo-Ukwu's notable craftworks.

The project is funded by the British Academy Newton International Fellowship, Public Engagement Starter Fund and the UKRI Postdoc Guarantee under the Marie Skłodowska-Curie Actions (MSCA) grants. The project is supervised by Prof. Paul Lane.

HRH Ocheze II B Ezeh (compound owner in white top), research team and field trainees.

Historical East African Archaeology and Theory (HEAAT)

Nik Petek-Sargeant

HEAAT is dedicated to creating a decolonised and community-centred approach to historical archaeology in East Africa, and aims to bridge the gap between past cultures and their descendant communities. It also aims to raise confidence in the persistence of material culture identities during times of immense change. The project works closely with Kenya's Ilchamus community, with whom my team and I have been working for 10 years. The relatively young ethnic community has a complex history of in- and out-migration and extensive links to other Kenyan ethnicities. There is also a prevalent feeling that many parts of their culture are disappearing.

In the second year, after finishing extensive analyses the project focused on connecting MAA museum collections and Ilchamus archaeological assemblages with the Ilchamus community, in order to highlight the intricate material, environmental and migration histories of modern intersectional ethnic identities. The findings were presented at various conferences, including *Symbols in Action at 40: Baringo and Beyond*, organized by Paul Lane, Matthew Davies and me to trace the impact of Ian Hodder's seminal study on archaeological theory in Africa and beyond. The project also published four documentaries on traditional crafts and material culture, which have received over 2000 views, and is preparing for a community co-created touring exhibition.

The project is supported by European Union's Horizon 2020 research and innovation programme under Marie Skłodowska-Curie grant agreement No. 884702, the Smuts Fund, D.M. McDonald Grants and Awards Fund, the British Institute in Eastern Africa, British Academy Small Grants (SG2122\210789) and Cambridge Humanities Research Grants.

Nik Petek-Sargeant

HEAAT *research team celebrating and recording Glen Nakure's (centre)* lolbaa *ceremony, marking his accession to the Lmeingati age set.*

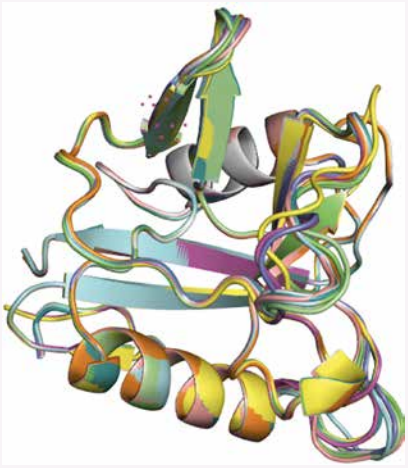
The Demon-duck of Doom

Matthew Collins

Late last summer we were visited by a film crew who stayed at Homerton to shoot a short film about work that colleagues and I undertook exploring an extinct bird and resurrecting the structure of an extinct protein from distinctive Australian eggshell fragments dating back to 400,000 years ago and disappearing 50,000 years ago. Ancient protein sequences determined that the fragments belonged to an extinct giant bird (*Genyornis*), not a type of bush turkey. The eggs, it has been argued, were too small to hatch this giant 'terror bird' which stood between 2 and 2.5 m tall.

The work suggests early humans interacted with these colossal birds; indeed some of these ancient eggshells show signs of having been cooked. This suggests that our ancestors probably ate these eggs and may have contributed to the bird's extinction—the last of a long line of 'terror birds' which evolved during the time of the dinosaurs. We were not able to bring the bird back—but remarkably, from the protein sequence alone we were able to predict the three-dimensional structure of the protein. Part of the protein was missing, predicted to be a flexible region which would therefore have been likely to be lost in the heat of 50,000 Australian summers. Such findings not only help unravel Australia's rich prehistoric tapestry, but also highlight the power of modern science in bridging gaps between archaeology and indigenous narratives.

The short film 'AlphaFold and the demon-duck of doom - Google DeepMind' made by the delightful crew can be watched on YouTube: **https://www.youtube.com/watch?v=xlwPY6n8KGM**



Matthew Collins

AlphaFold exploration of how the protein backbone of the extinct protein would have been altered by plausible differences in a missing segment of the protein which the researchers were unable to recover.

Connecting the Landscape: Materiality of Substance

Liliana Janik

The last few years of my research conducted with Japanese and British colleagues was designed to answer the question of whether prehistoric Japanese Jomon dogu figurines made in one location can be found far away. The question arises from the way the majority of figurines were made to be broken, as established by looking at their construction based on assembling lumps of clay, which in turn provided weak surfaces easy to be separated by breaking the statue. Our questions were: (1) If the clay objects were made to be broken, what happened to the fragments? (2) Were they were given to different people who lived in various place (in which case we should be able to 'track' them as they moved through the landscape showing the ideas 'trapped' in broken figurines), or did they remain in the place they were made? This second question is linked to the understanding of how Jomon archaeological 'cultures' are defined: in the context of Jomon Japan, the formal distinction between distinctive styles is based on the differentiation between various designs and shapes, and they are often ascribed to a particular region. So, by looking at clay figurines made in different styles related to particular regions, can we see the movement of figurines from one place to another as part of the network of ideas and relationships, visible in material culture reflecting human interactions? Using a portable XRF machine, which allows us to establish the chemical composition of the clays (the place of origin), samples from a series of Jomon sites (mainly c. 5000–3000 years old) were analysed. So far, the preliminary results indicate that local clays were used to produce figurines of different styles despite their being part of archaeological assemblages attributed to different regions. This poses further questions: what happened to the fragments missing from the site where they were produced? And what can we say about the distribution of styles as a form of regional variation?

L. Janik

Goggle-eyed figurine, Makumae site, late Jomon.

Yangshao Culture: 100 Years of Research History and Heritage Impact (2018–2024)

Marie Louise Stig Sørensen & Guohua Yang

Over the last year, the aims of the Yangshao Project have been successfully pursued. For research into the relationship between archaeology, branding, and heritage, Shiting Lin has visited liquor companies, Yangshao ceramic reproduction craft enterprises and heritage villages in the Henan province, China. Through this, the varied ways commercial enterprises use the past have become clear, including the different kinds of value that are being explored. Junting Lyu and Rouran Zhang have both worked on collecting data on how the Yangshao Culture fuels official value claims, including claims on bonds between the past and the present. Junting 's fieldwork focused on the recent phenomenon of Archaeological Parks, arguing that they can be understood as an agent of the social imaginary. Rouran's research into governmental policies as well as contemporary discussions of claims about the Yangshao Culture on Chinese social media complements this.

Research on museums as media disseminating and authorizing public understanding of the Yangshao Culture was pursued by Miao Yang and Guohua Yang. Miao is investigating the significance given to prehistory compared with historical periods within six regional museums and the tensions found between regional and national narratives, whereas Guohua is analysing the history of the archaeological museum in China, following its transformation from a largely European ideal to a distinct Chinese idea. The project also went on a fieldtrip to China, visiting relevant Yangshao Culture sites and institutions and giving presentations at workshops and conferences.

To follow the project, visit:
https://www.heritage.arch.cam.ac.uk/research-projects/yangshao

The project is funded by Beifang International Education Group and Shanghai Academy of Guyewang Studies.

M.L.S. Sørensen

Guohua Yang

Left: An in-situ *subterranean Yangshao house, Dadiwan, Gansu province.*
Right: The Chinese Archaeological Museum in Beijing.

Novel Application of Strontium and Neodymium Isotopes for Silk Roads Glass Provenance

Qin-Qin Lu & Marcos Martinón-Torres

To understand the production technology and trade of plant-ash glass from the eastern Silk Roads regions, including Iran, Central Asia and Xinjiang (China), Qin-Qin Lu has been working on developing strontium (Sr) and neodymium (Nd) isotope methods in the study of archaeological materials.

Elemental analyses are often used to trace the origin of archaeological glass, but this approach becomes challenging when there are multiple raw material sources and manufacturers—as is the case for plant-ash glass. As a complementary approach, Sr and Nd isotopes have recently been used to trace the major glassmaking materials—plant ash and silica, respectively—but research has largely focused on evidence from the Near East. Extending the application of these tracers to glass from east of the Zagros will advance our currently limited understanding of technological and cultural developments associated with plant-ash glass in these regions.

Qin-Qin Lu

Glass samples from Nishapur, Iran.

To partly alleviate the lack of a reference database or geochemical benchmark, a large-scale baseline for bioavailable Sr and detrital Nd isotopes has been developed for specific zones in the Tigris–Euphrates River Basin, Iran, and Central Asia (Lu et al. 2023, Journal of Archaeological Science). Multiple lines of evidence enable a more robust understanding of glass production and spread. Consequently, an integrative approach is being developed, incorporating elemental analyses, Sr and Nd isotope analyses, Nd isotope mixing lines and Sr-Nd isotope baselines. Chemical composition and Sr-Nd isotopes reveal potential connections through compositional clustering, while the Nd isotope mixing lines capture the dynamics of glass mixing. Sr-Nd isotopic baselines serve as the geo-environmental contexts for raw materials.

A pilot study applying this approach to an eleventh- to twelfth-century assemblage unearthed in Nishapur, Iran, was completed in 2023. This demonstrated the utility of Sr-Nd isotopes in refining the provenance of diverse Islamic plant-ash glasses. Working with collaborators, glass samples from Xinjiang are now being analysed, and an investigation of samples from Kyrgyzstan is expected to start soon.

MAHSA – Mapping Archaeological Heritage in South Asia

Cameron A. Petrie, Rebecca Roberts & *MAHSA* team, partners and collaborators

The Mapping Archaeological Heritage in South Asia (*MAHSA*) project is thriving. We have established a full documentation workflow, from the digitization of historical map data and legacy data records to automated site detection, field verification and documentation, post-field data analysis, and cleaning and import into our Arches database. As part of this work, we have completed the georeferencing and documentation of over 1300 historic Survey of India 1" to 1 mile map sheets, covering in excess of 1 million sq. km of the Indus River Basin and the surrounding areas, which stretch across both Pakistan and India. We have also reconstructed almost 200,000 sq. km of hydrological networks to help us assess environmental impact on both ancient populations and site preservation. Our machine learning algorithms are making it possible to locate thousands of historic mounds, a substantial proportion of which are archaeological. All of this laboratory-based research has been combined with training in GIS and site documentation, including on-site ground-truthing in both India and Pakistan. We have also been actively engaging with various stakeholders involved with sustainability in agriculture, urbanism and heritage with a view to identifying common ground between these co-existent elements.

MAHSA project

Training in Pakistan (above) and India (below).

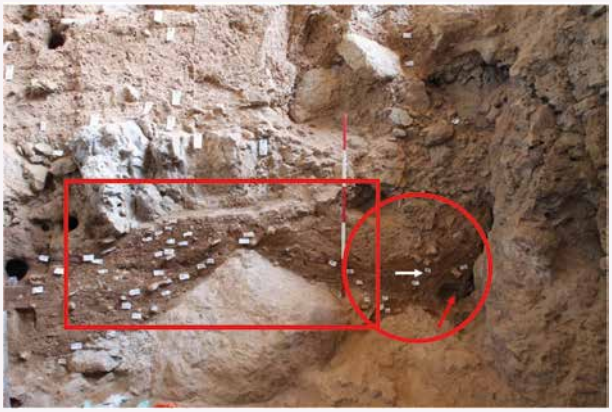
MAHSA project

Neanderthals at Shanidar Cave (Iraqi Kurdistan)

Graeme Barker & Emma Pomeroy

Our work at Shanidar Cave, Iraqi Kurdistan, has continued to provide exciting insights into Neanderthal behaviour (www.shanidarcaveproject.com). In the September 2022 and May 2023 fieldwork seasons, our tenth and eleventh campaigns, we found further fragmentary Neanderthal skeletal remains immediately below the well-preserved Neanderthal we excavated a few years ago that we have termed Shanidar Z. These individuals were placed within arm's reach of the famous Neanderthal skeleton found by Ralph Solecki in 1960 that he interpreted as having been buried with flowers, and he found the remains of two adult individuals and an infant immediately underneath the Flower Burial. In sum, there appears to have been an extraordinary cluster of several bodies carefully placed in flexed positions with similar orientation, and beside a rock pillar that would have been a prominent marker on the cave surface at the time of the burials around 75,000 years ago. In the same layers we found evidence for Neanderthals making campfires, cooking, butchering animals and repairing equipment—life and death appear to have been intimately entangled. We excavated about 1.5 m below the skeletal remains and found further living floors, the deepest likely to be nearly 100,000 years old. Our palaeoclimate indicators (sediment, microfauna, pollen, landsnails) indicate that the Neanderthals mainly visited the cave at times when the climate and landscape were not dissimilar to those of today. In combination, the new and old discoveries in Shanidar Cave have significant implications for understanding the nature of Neanderthals' mortuary behaviour and their use and conception of the landscape, including possible 'special places' for mortuary and daily living activities.

The September 2022 and May 2023 excavations, and the ongoing laboratory work, were funded by the John Templeton Foundation, the McDonald Institute and Newnham College.



Graeme Barker

The intimacy of Neanderthal life (red rectangle) and death (red circle) in Shanidar Cave 75,000 years ago. The labels mark living floors, the white arrow marks the location of Shanidar Z, the red arrow marks further fragmentary skeletal remains below. The bodies were placed up against the rock pillar on the right of the image. Scale: 1 m.

WASAP West Area of Samos Archaeological Project

Anastasia Christophilopoulou, Naoise Mac Sweeney & Michael Loy

The West Area of Samos Archaeological Project (*WASAP*) is a five-year research programme (2021–25) co-directed by Anastasia Christophilopoulou, Michael Loy and Naoise Mac Sweeney. The *WASAP* project aims to analyse how the nature of the rural landscape of the west of the island developed—and assess whether this area really was a 'blank spot' in terms of antique settlements. During our third season, in September 2023 we focused on intensively exploring the Karlovasi basin in the northwest of Samos Island. Five weeks were devoted to fieldwalking, with two weeks of ceramics study and ethnographic work already having taken place early in the year.

We are extremely grateful for funding for this project received from the McDonald Institute for Archaeological Research, the Faculty of Classics, the Institute of Classical Archaeology of the University of Vienna, the Rust Family Foundation, the British Academy and the Leverhulme Trust. The *WASAP* project is undertaken by the British School at Athens, University of Cambridge and University of Vienna, and operates under the kind permissions of the Greek Ministry of Culture (permit number: Ψ5ΛΩ4653Π4-ΑΑ1) and the Ephorate of Antiquities of Samos and Ikaria.

WASAP Team 2023

The Karlovasi basin viewed from Kastrovouni.

WASAP Team 2023

Team members walking tracts in the field, Xirokampos area.

Osteobiographical Investigation of Disability and Care in Medieval Europe

Ileana Micarelli

The bioarchaeological characterization of disabled individuals from the past is particularly challenging because it pushes the boundaries of the interpretation of pathologies recognisable on human remains. *B-CARED* will investigate the bioarchaeological approaches for recreating the 'Past to life'. In so doing, the osteobiographical approach offers a possible framework, in which human remains are used to understand the embodied experience during life.

The work involves analysing archaeological skeletal collections to find cases of people needing care using palaeopathological methods, CT scans and biomolecular analysis. The first-year project has mainly investigated two cases dated to Roman and post-Medieval periods from Leicester and a small skeletal collection from Cambridgeshire dated to the pre-modern era. In collaboration with the Cambridge Archaeological Unit (CAU), a small series of skeletons from Roman Britain has been selected and is under investigation.

This project has yielded multiple outcomes: a guest-edited special volume in the *International Journal of Paleopathology* has been published, along with a new volume in the *Bioarchaeology International* journal, which serves as a guest-edited edition focusing on narrative osteobiographies. Additionally, three full open access papers have been delivered, one paper is currently in press and another is under submission.

The European Union Horizon 2021 research and innovation programme supports the project under the Marie Skłodowska-Curie funded by UKRO, grant agreement 101061838.

A geographical and chronological map of the Special Issue papers.

Gubbio Revisited

Marianna Negro, Simon Stoddart, Nicholas Whitehead & Letizia Ceccarelli

The main publication of 1994, *Territory Time and State*, concentrated on the excavations undertaken on Monte Ingino, Monte Ansciano and in the valley at San Marco during the Gubbio Project. *Gubbio Revisited* has focused on the study of the full detail of the regional survey, both by re-examination of the ceramic materials and by full digitization of the paper record. This chronological and digital approach is bringing to light new information about the density of rural occupation through the various phases of the late first millennium BC and early first millennium AD.

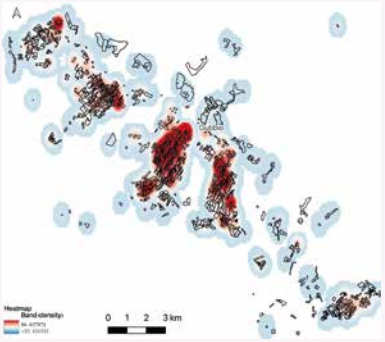
The research has shown that there is a correlation between the distribution of Umbrian sites throughout the valley and the landscape occupation by the Romans. Firstly, the occupation of the countryside was already well-developed before the Romans, indicating an already forming complex Umbrian state organization. Secondly, the occupation of the landscape by the Romans resulted in a development of what were already Umbrian rural sites, which developed for a number of reasons, plausibly connected to the phenomenon of globalization rather than romanization.

In conjunction with this work, new scientific techniques such as isotopes and aDNA, as well as more precise radiocarbon dating, are being applied to large faunal deposits from Ingino and Ansciano. In the course of this work, the archaeological archive, both material and documentary, is being brought into order for the next generation of scholars.

The project is supported by the British Academy, the McDonald Institute, Magdalene College, the Soprintendenza Archeologia Belle Arti e Paesaggio dell'Umbria and the Comune di Gubbio.

Luigi Magnini

Aerial view of Monte Ingino.



Marianna Negro

Heatmap showing the density of occupation in the Gubbio Valley between the late first millennium BC and early first millennium AD.

Gernika as Orient: Tracing the Connected Legacies of Bombs, Art and Fake News across Europe & the Middle East

Erin O'Halloran

This project explores why and how the 1937 bombing of Gernika, a Basque town in northern Spain, became the fulcrum for a set of momentous transitions in the conduct of war, the politics of art and the manipulation of news media. The project connects the fascist assault on Gernika during the Spanish Civil War to both earlier and later instances of aerial bombardment of civilians across the Middle East and North Africa. The visual and printed materials surrounding the 1937 assault and other case studies under review show how officials sought to cover up, deny, or otherwise 'explain away' the bombing of civilians, frequently instrumentalizing forensic sciences like architecture and archaeology for this purpose. Works of art, printed manifestos, photos, murals and placards reveal how Picasso's famous 1937 painting *Guernica* was quickly seized on by Arab artists and activists as a symbol of their own struggle against European empire, which they connected to the struggle against fascism in Europe. *Guernica* has continued to be reproduced & reinterpreted as a visual lexicon of protest against violence in the Middle East—something which this project seeks to account for through interviews with Arab artist practitioners, researchers and peace activists. In these ways the project reveals the Eastern, colonial dimensions of Gernika/*Guernica*—that is, a place, an event and a painting which are frequently thought of as quintessentially European.
Project website: https://www.arch.cam.ac.uk/research/projects/current-projects/gernika-orient-bombs-art-fake-news

Funders: British Academy & Marie Sklodowska Curie Postdoctoral Fellowships.

Scottish National Gallery of Modern Art Archives, Edinburgh

A reproduction of Picasso's Guernica *adorns the 1938 manifesto of* Art & Liberty, *an anti-fascist art collective based in Cairo.*

Neanderthal Footprints at Le Rozel

Ashleigh L. Wiseman

In collaboration with the DRAC in France, fieldwork and experimentation at the Le Rozel site are ongoing, supported by the McDonald Grants and Awards Fund in 2022 and 2023. The site was first excavated in the 1960s, uncovering stone tools and butchered animal remains. Since 2012, the site has been revisited, uncovering many footprint traces. There are nearly 1000 documented footprints belonging to individuals living in Normandy, dated to around 80,000 years ago. The footprints most likely were created by Neanderthals. Most of these trace fossils belong to children, some estimated to be as young as 18 months old. It is very unusual to have such a distinct lack of adult traces.

In 2023, a documentary detailing the excavations and on-site experimentation of possible footwear traces was released, featuring staff from Cambridge and the DRAC. Cambridge archaeology students have since been involved with the post-processing of the data and have assisted with footprint identification from 3D models and data archiving.

Funding: McDonald Grants and Awards Fund in 2022 and 2023.

Footprint dated to 80,000 years ago being excavated at Le Rozel.

The cave shelter of Le Rozel in Normandy.

Safeguarding Holocaust Sites

Gilly Carr

2023 has marked the penultimate year of this five-year project, which is writing a heritage charter to safeguard Holocaust sites in Europe on behalf of the International Holocaust Remembrance Alliance.

In 2023, the Safeguarding Sites team visited the Terezin Memorial, the former ghetto of Theresienstadt in Czechia. We combined the trip with visits to the nearby former concentration camp of Litomeřice, now marked only by its crematorium; the village of Lidice, which was destroyed by the Nazis in 1942; and the site of the Roma concentration camp of Lety, which was being excavated during our visit.

The focus on the trip to Terezin was to understand better how climate change impacts Holocaust heritage. The Dresden Barracks, into whose attics Jews were packed during the war, is at a tipping point of collapse following storms and floods. Conversations with stakeholders helped us to understand that, following restoration, the ideal of reusing such buildings only for memorial functions is unrealistic. The first priority must be to find tenants to keep the building in good condition.

Following pressure from IHRA and other parties, the Czech government has now pledged the funds necessary to restore the site.

In 2023, the University's Creative Encounters programme funded the video *Highlighting Holocaust Heritage*, a collaboration between Gilly Carr and artist Neda Ahmadi (https://www.youtube.com/watch?v=30SAwjbDmNo&t=3s) which IHRA features on the project webpage.

https://www.holocaustremembrance.com/resources/ihra-charter-safeguarding-sites

Project chair and PI Gilly Carr. Funding: International Holocaust Remembrance Alliance (IHRA).

The Dresden Barracks, Terezin.

McDonald Annual Lecture

⦿**16 November 2022** Amy Bogaard (*University of Oxford*) – Prehistoric farming futures? Recent insights from western Asia and Europe

Distinguished Visitor Lecture

⦿**21 November 2022** *The Jennifer Ward Oppenheimer Lecture* Zeresenay Alemseged (*University of Chicago*) – The changing face of *Australopithecus* and human origins in Africa

Conferences & Workshops

⦿**29–30 September 2023** – Illicit Trade and the Global Caribbean in the 19th century Age of Revolutions (*recipient of McDonald £10,000 Conference Award*)

Garrod Research Seminars

Michaelmas 2022 – Violence

⦿**13 October** Simon Stoddart (*University of Cambridge*) – Robert Capa, 'Beni culturali' and the Battle of Troina: Memorialising Violence

⦿**20 October** Giovanna Bagnasco (*University of Milan*) – Ritual violence in the Classical World

⦿**27 October** Ian Armit (*University of York*) –Surrogate beasts: Violence and the human body in Iron Age Europe

⦿**3 November** Elena Scarsella (*University of Cambridge*) – Mediterranean Mountains in the Iron Age between violence and identity

⦿**10 November** Rick Schulting (*University of Oxford*) – Lethal violence among Late Holocene hunter-gatherers: an Early Bronze Age massacre at Shamanka II, Lake Baikal, southern Siberia

⦿**17 November** Hamish de Bretton-Gordon (*Magdalene College*) – The unconventional violence and materiel of modern warfare

⦿**24 November** Linda Fibiger (*University of Edinburgh*) – Prehistoric violence or Dead images

⦿**8 December** Francesco Loda (*University of Roma Tre*) – Gods, Leadership, and Violence: a comparative, historical, and religious approach to the art of single and individual combat

Lent 2023 – Rethinking Past Globalisation(s): Part I

⦿**26 January** Justin Jennings (*Royal Ontario Museum*) – Globalisation and Wari state-making: Re-evaluation Middle Horizon Peru

⦿**4 February** Barry Gills (*University of Helsinki*) – Globalisation and Historical Globalities

⦿**16 February** Inanna Hamati-Aya (*University of Cambridge*) – Globalisation in deep time: Postdisciplinary lessons from the 'Palaeolithic'

⦿**23 February** Susan Sherratt (*University of Sheffield*) – What do we mean by globalisation in the prehistoric and early historic Mediterranean?

⦿**9 March** Sureshkumar Muthukumaran (*National University of Singapore*) – Crop migrations as a globalising process: The case of tropical Asian crops in ancient East-West networks

Easter 2023 – Rethinking Past Globalisation(s): Part II

⦿**4 May** Martin Jones (*University of Cambridge*) – Food Globalization in prehistory: What kinds of globalization?

⦿**11 May** Izabela Romanowska (*Aarhus Institute of Advanced Studies*) – Graves, grains and grievances: How quantifying archaeological data can help us race urban dynamics against their global context

⦿**18 May** Tamar Hodos (*University of Bristol*) – Re-Defining Globalisation for the Past

Discussion Groups

Set up and run by postgraduate students since 2016, the **Aegean Archaeology Group** works to bring together researchers from the Department of Archaeology and the Faculty of Classics in support of interdisciplinary approaches to the history of the lands in, around, and in contact with the Aegean Sea. This collaborative initiative aims to facilitate dialogue across traditional academic boundaries and strengthen ongoing research through the promotion of comparative scholarship.

Organizers: Polina Kapsali & Andriana Xenaki

The **African Archaeology Group** showcases leading-edge Africanist archaeological research from across the continent and all periods from the Early Stone Age to Contemporary Heritage. We invite speakers from the continent, the UK and globally to share their latest data, analyses and ideas from the field to the lab.

Organizers: Michaelmas 2022: Federica Sulas, Kingsley Daraojimba & Ed Burnett; Lent 2023: Benny Qihao Shen, Sam Lunn Rockcliffe & Matthew Davies

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!

Organizers: Joshua Fitzgerald, Jasmine Vieri, Oliver Antczak & Chike Pilgrim

Ancient Near East Seminars: with visiting speakers coming from universities, museums and other institutions from around the world, it is hoped that these evenings will offer a focus for the wide range of Assyriological and Ancient Near Eastern archaeological projects across the University, build links with other research centres,and offer a chance for all to see the incredible work that is being carried out in this vast and hugely important field of research.

Organizers: Glynnis Maynard & Sergio Russo

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!

Organizers: Min Lin & Saltanat Amirova

The **Biological Anthropology Seminar Series** aims to discuss key topics in human evolutionary studies. Speakers from the UK and overseas institutions are invited to talk about their research in biological anthropology.

Organizers: Michaelmas 2022: Jaap Saers & Lucia Nadal-Urias; Lent 2023: Ashleigh Wiseman, Edwin de Jager, Clarissa Asha Febinia & Ali Giritlioglu

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: Simon Carrignon & Joseph Lewis

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: Rennan Lemos

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 Horne

The **Garrod Research Seminar Series** is the Department of Archaeology's principal seminar series of invited scholarly lectures. Each new term has a common theme, and should comprise a mix of external and internal speakers presenting on the theme from different (e.g. geographical, methodological, analytical, theoretical, disciplinary) perspectives.

Organizers: Michaelmas 2022: Stanley Onyemechalu, Elena Scarsella & Simon Stoddart; Lent 2023: Carmen Ting & Daniel Fuks

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** (LEPG) welcomes everyone interested in the European Neolithic, Bronze and Iron Ages. For more than 40 years, the LEPG has been a core activity within Archaeology at Cambridge. The group aims to appeal broadly not only within the field of prehistory but also within heritage and classics, and to provide an informal and friendly setting for the exchange of ideas, dissemination of research results and the discussion of current topics of interest.

Organizer: Marianna Negro

A series of events hosted by the **Material Culture Research Hub**: the **Thinking about Things** (TAT) reading group, lunchtime presentations by hub members to help develop ideas, workshop days with other disciplines and a guest lecture series bringing in archaeologists and social theorists from around the world.

Organizer: Sheila Kohring

The **Palaeolithic-Mesolithic seminar series** (PalMeso) is the longest running format of talks within the Department of Archaeology. PalMeso presents talks on the Palaeolithic and Mesolithic, and is open and free to anyone who is interested to come along. Talks are given by internal MPhil and PhD research students, as well as post-docs, visiting scholars and university lecturers from UK and overseas academic institutions..

Organizer: Aman Kang & Anna Mika

The **Pitt-Rivers Archaeological Science Seminars** are well-established as a relatively informal and highly dynamic meeting point for archaeological scientists of all kinds who share their research as it happens – often before it has made it to publications. Our speakers include researchers based in or around Cambridge as well as visitors from around the world.

Organizers: Caterina Zaggia, Ismael Rodriguez, Sophie Rabinow & Taylor Peacock

Sutton Trust Archaeology and Biological Anthropology Summer School

The Cambridge Sutton Trust Summer Schools are highly competitive, week-long, subject-specific residential courses held throughout the summer. The programme is designed to support high-achieving students from disadvantaged backgrounds. Over the summer, 480 Year 12 students, who have only ever attended a state-funded school, came to Cambridge to experience 22 different subject streams.

In August 2023, we had 11 students take part in the Archaeology and Biological Anthropology Summer School. They attended sessions with us throughout the day and then spent their evenings exploring Cambridge and staying in College—they even went punting!

While with us, the Year 12 students had the opportunity to experience the wide range of research and teaching that goes on in the Department and McDonald Institute. The week kicked off with an introductory series of talks about pathways into archaeology and advice about applying. They then attended a lecture 'How to read a cemetery' from Sam Lucy, followed by a tour and hands-on practical at the Museum of Archaeology and Anthropology from Sarah-Jane Harknett and Eleanor Wilkinson. On the second day, the students had a session on proteomics from Matthew Collins, a GIS practical session with Enrico Crema and another practical mapping session from the *MAEASaM* and *MAHSA* project teams. The next day, they attended a session on Neanderthals and Shanidar Cava with Emma Pomeroy, a practical workshop exploring Egyptian Language with Alex Loktionov and a flint-knapping practical with Alastair Key. On their last day, they had a laboratory practical session with Catherine Kneale and a visit from CAU's Chris Wakefield, exploring development-led archaeology.

A huge thank you to all those involved in supporting the Sutton Trust. We had excellent feedback from the students, who really enjoyed their time with us. Without the support of individuals giving up their time to run these sessions, this event would not be possible. The students reported that they learnt a lot through attending the engaging sessions and that the experience has left them with a positive perception of university.

Lydia Clough

Sutton Trust students in a handling session at the MAA.

Lydia Clough

Chris Wakefield, CAU, speaking to Sutton Trust students.

Lydia Clough

Sutton Trust students working on a GIS project in the computer lab.

Lydia Clough

A Sutton Trust student during their flint-knapping practical.

Undergraduate Open Days

University-wide Undergraduate Open Days were held on 6 and 7 July and 15 September 2023. These are organized by the Cambridge Admissions Office and are an opportunity for prospective students to come and have a look around, find out more information and speak to staff and students.

The Open Day in September was mainly college-based, but prospective students were able to view a virtual tour of the Department online.

The main July Open Days were a real success, with hundreds of potential applicants attending. The two-day event comprised tours of the Museum of Archaeology and Anthropology, as well as of department laboratories. A series of information presentations, as well as sample lectures, ran across the two days, in addition to an information stall.

Again, many thanks to all those involved, without whom this event would not be possible.

Gill Ragsdale

London Anthropology Day

The Annual London Anthropology Day was held on 30 June 2023 at the British Museum. The event was organized by the Royal Anthropological Institute for students, career advisors and teachers to find out more about studying Anthropology. Nikhil Chaudhary and Gill Ragsdale hosted a drop-in stall with a range of books and artefacts. The stall was busy throughout the day and the collection of hominin fossils was especially popular.

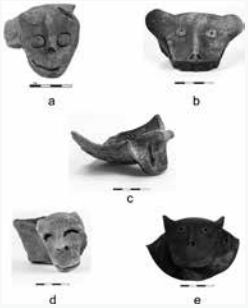
Nikhil Chaudhary at LAD 2023.

Subject Masterclasses

The Cambridge Admissions Office organizes a number of subject-specific Masterclasses every year. These are held online and are a chance for Year 12 students to experience typical undergraduate teaching at the University of Cambridge and to learn more about a topic of interest. Prospective students heard from Emma Pomeroy and John Robb, who talked about the evolution of the features that make humans distinctly human, and prehistoric art and social organization, respectively.

Cambridge Archaeological Journal

Elizabeth DeMarrais & John Robb (*Editors*)



Vol. 32 No. 4, November 2022

- 'Contact' Rock Art and the Hybrid Economy Model: Interpreting Introduced Subject Matter from Marra Country, Southwest Gulf of Carpentaria, Northern Australia by Liam M. Brady, Daryl Wesley, John Bradley, Amanda Kearney, Shaun Evans & David Barrett
- Rock Art and (Re)Production of Narratives: A Cassowary Bone Dagger Stencil Perspective from Auwim, East Sepik, Papua New Guinea by Roxanne Tsang, Sebastien Katuk, Sally K. May, Paul S.C. Taçon, François-Xavier Ricaut & Matthew G. Leavesley
- Towards a Spatial Archaeology of Crafting Landscapes by Nathaniel L. Erb-Satullo
- Buried Scripture and the Interpretation of Ritual by Jonathan Thumas
- Commensalism, Imaginaries and Early Urbanism: A Mezcala Sculpture in the Mixteca Alta, Mexico by Jeffrey P. Blomster
- Staying Egalitarian and the Origins of Agriculture in the Middle East by Ian Hodder
- Last Meal for the Monks. Human Ecology, Food Prescriptions and Manipulation from a Sealed Archaeological Context. Case Study of San Vincenzo al Volturno Abbey, Molise, Southern Italy, Late Ninth Century AD by Alfredo Carannante, Salvatore Chilardi & Francesco Solinas
- Filling the Void: Rock-art Continuity Over the Pleistocene–Holocene Boundary in Eastern Iberia by Juan F. Ruiz, José Royo-Lasarte, José Ignacio Royo-Guillén & Olivia Rivero
- To Unite and Divide: Canals, Tinku, Liquids and Time in the Moche World by Michele L. Koons
- Extraordinary Back-to-Back Human and Animal Figures in the Art of Western Arnhem Land, Australia: One of the World's Largest Assemblages by Paul S.C. Taçon, Sally K. May, Joakim Goldhahn, Luke Taylor, Liam M. Brady, Alex Ressel, Andrea Jalandoni, Daryl Wesley & Gabriel Maralngurra

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- Viewing the World through Cosmovision at Late Preclassic Noh K'uh in Chiapas, Mexico by Santiago Juarez
- Can We Decolonize the Ancient Past? Bridging Postcolonial and Decolonial Theory in Sudanese and Nubian Archaeology by Rennan Lemos
- Photographic Insights from Engaged Archaeology: Yucatan and Beyond by Sarah Kurnick
- Not All That Glitters is Gold? Rock Crystal in the Early British Neolithic at Dorstone Hill, Herefordshire, and the Wider British and Irish Context by Nick J. Overton, Elizabeth Healey, Irene Garcia Rovira, Julian Thomas, Julie Birchenall, Dana Challinor, Tim Hoverd & Keith Ray
- Complexity, Instability and Contradiction: The Impact of Human–Thing Entanglement on the Social Decline of the Hamin Mangha Neolithic Site in China by Yan Liu
- Cultures of Creativity: Hieroglyphic Innovation in the Classic Maya Lowlands by Mallory E. Matsumoto
- The Political Economy of Livestock in Early States by Noa Corcoran-Tadd, Max Price & Ari Caramanica
- Large Predator Hunting and Its Interpretation: Leopards, Bears and Lions in the Archaeological Record of the Southern Levant by Ron Shimelmitz, Hagar Reshef, Assaf Nativ & Nimrod Marom
- The Cognitive Processus Behind Neolithic Schematic Rock Art. Archaeological Implications and Research Hypothesis by Claudia Defrasne

Vol. 33 No. 2, May 2023

- The Wider World of Writing. Networks of People, Practice and Culture Underpinning Writing in Late Bronze Age Ugarit by Philip J. Boyes
- Naturalistic Parrots, Stylized Birds of Prey: Visual Symbolism of the Human–Animal Relationship in Pre-Hispanic Ceramic Art of the Paraná River Lowlands, South America by Flavia V. Ottalagano
- Material and Sensory Experiences of Mesolithic Resinous Substances by Aimée Little, Andy Needham, Andrew Langley & Benjamin Elliott
- Insights into Natufian Social Identity: A Case Study from the Graveyard of Hayonim Cave by Leore Grosman & Anna Belfer-Cohen
- Towards a Broader Understanding of the Emergence of Iron Technology in Prehistoric Arctic Fennoscandia by Carina Bennerhag, Sara Hagström Yamamoto & Kristina Söderholm
- Revealing the Earliest Animal Engravings in Scotland: The Dunchraigaig Deer, Kilmartin by Joana Valdez-Tullett, Tertia Barnett, Guillaume Robin & Stuart Jeffrey with contributions from Frederick Alexander, Łukasz Banaszek, Linda-Marie Bjerketvedt, Hamish Fenton, Tom Goskar, Callum Graham, Maya Hoole, Al Rawlinson, Aaron Watson, Sharon Webb & Lyn Wilson
- Learning About Death and Burial: Mortuary Ritual, Emotion and Communities of Practice in the Ancient Andes by Sarah Baitzel
- Alterity, Otherness and Nomad Geometries: New Trajectories for the Interpretation of Late Neolithic Monuments by Mark Gillings
- Ayllus, Ancestors and the (Un)Making of the Wari State by Justin Jennings & Stephen Berquist

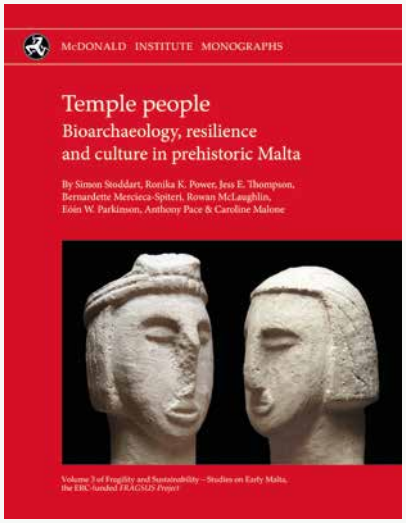
Vol. 33 No. 3, August 2023

- An Upper Palaeolithic Proto-writing System and Phenological Calendar by Bennett Bacon, Azadeh Khatiri, James Palmer, Tony Freeth, Paul Pettitt & Robert Kentridge
- Frontier Archaeology: Excavating Huli Colonization of the Lower Tagali Valley, Papua New Guinea by Jeremy Ash, Tim Denham, Chris Ballard, John Muke & Joe Crouch
- Building Ideas out of Wood. What Ancient Egyptian Funerary 'Models' Tell Us about Thought and Communication by Camilla Di Biase-Dyson
- A Kin-based Trade Partnership Model for Obsidian in the Halafian Interaction Sphere: A View from the Southern Levant Wadi Rabah Culture by Doron Yacobi & Avi Gopher
- Socializing the Materiality of Earthen Structures: The Chaîne opératoire of Construction Practices at the Neolithic Site of Kleitos 2, Greece by Evita Kalogiropoulou, Dimitris Kloukinas & Kostas Kotsakis
- 'Vandalizing' Father Hittite. Karabel, Orientalism and Historiographies by Néhémie Strupler
- Minds on Fire: Cognitive Aspects of Early Firemaking and the Possible Inventors of Firemaking Kits by Marlize Lombard & Peter Gärdenfors
- Out of Ruins: Contextualizing an Ancient Egyptian Spectacle of Architectural Reuse by Luiza Osorio G. Silva
- Ancestral Waters: Material Culture, Notion of Transformation and Shamanism in the Stilt Villages in Eastern Amazonia by Alexandre Navarro

McDonald Institute Publications

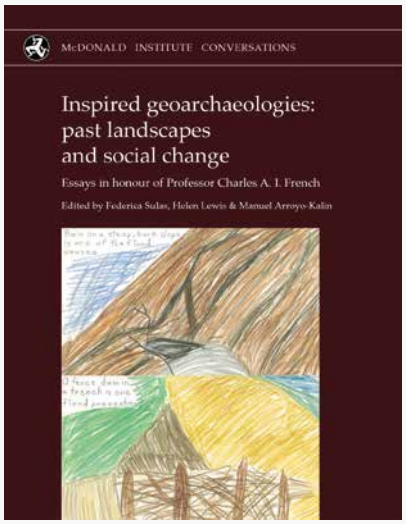
Matt Davies (*Series Editor*) & Emma Jarman (*Administrator*)

Temple people: Bioarchaeology, resilience and culture in prehistoric Malta edited by Simon Stoddart, Ronika K. Power, Jess E. Thompson, Bernardette Mercieca-Spiteri, Rowan McLaughlin, Eóin W. Parkinson, Anthony Pace & Caroline Malone (Volume 3 of Fragility and Sustainability – Studies on Early Malta, the ERC-funded *FRAGSUS project*)
Hardback | £65.00/US$86.00 | ISBN 978-1-913344-07-8 | xxvii + 344 pp. | 331 figs | 58 tables | 2022
eBook | ISBN 978-1-913344-08-5 | xxvii + 344 pp. | 331 figs | 58 tables | 2022
Monographs Series https://www.repository.cam.ac.uk/collections/90635c86-a8ac-4787-b0f3-766c680ec0f7



The ERC-funded FRAGSUS Project (Fragility and sustainability in small island environments: adaptation, culture change and collapse in prehistory, 2013–18) led by Caroline Malone has focused on the unique Temple Culture of Neolithic Malta and its antecedents. This third volume builds on the achievements of *Mortuary customs in prehistoric Malta*, published by the McDonald Institute in 2009. It seeks to answer many questions posed, but left unanswered, of the more than 200,000 fragments of mainly commingled human remains from the Xagħra Brochtorff Circle on Gozo. The focus is on the interpretation of a substantial, representative subsample of the assemblage, exploring dentition, disease, diet and lifestyle, together with detailed understanding of chronology and the affinity of the ancient population associated with the 'Temple Culture' of prehistoric Malta. The first studies of genetic profiling of this population, as well as the results of intra-site GIS and visualization, taphonomy, health and mobility, offer important insights into this complex mortuary site and its ritual. Remarkable evidence on the bioanthropology of care practised by these populations, together with a relatively low level of interpersonal violence, and examples of longevity, reveal new aspects about the Neolithic Maltese. Detailed case studies employing computerized tomography describe disease such as scurvy and explore dietary issues, whilst physical activity and body size have been assessed through biomechanical analysis, supported by taphonomic study, isotopic analyses, a review of mortuary practices during prehistory and a robust new chronology. The results form a rich contextualized body of material that advances understanding of cultural change within the context of small island insularity, and provides biological comparisons for the graphic figurative art of early Malta. These data and the original assemblage are conserved in the National Museum of Archaeology in Valletta as a resource for future study.

Inspired geoarchaeologies: past landscapes and social change. Essays in honour of Professor Charles A. I. French edited by Federica Sulas, Helen Lewis & Manuel Arroyo-Kalin
eBook | ISBN 978-1-913344-09-2 | xvii + 283 pp. | 116 figs | 22 tables | 2022
https://www.repository.cam.ac.uk/collections/8e33a7ed-604c-4144-8350-758b9a5f0aa8



Geoarchaeological research captures dimensions of the past at an unprecedented level of detail and multiple spatial and temporal scales. The record of the past held by soils and sediments is an archive for past environments, climate change, resource use, settlement lifeways, and societal development and resilience over time. When the McDonald Institute was established at Cambridge, geoarchaeology was one of the priority fields for a new research and teaching environment. An opportunity to develop the legacy of Charles McBurney was bestowed upon Charles French, whose 'geoarchaeology in action' approach has had an enormous impact in advancing knowledge, principles and practices across academic, teaching and professional sectors. Many journeys that

began at Cambridge have since proliferated into dozens of inspired geoarchaeologies worldwide. This volume presents research and reflection from across the globe by colleagues in tribute to Charly, under whose leadership the Charles McBurney Laboratory became a beacon of geoarchaeology.

Ancient Egyptian gold: Archaeology and science in jewellery (3500-1000 BC) edited by Maria Filomena Guerra, Marcos Martinón-Torres & Stephen Quirke
Hardback | £65.00/US $82.00 | ISBN 978-1-913344-12-2 | xxv + 495 pp. | 415 figs | 88 tables | 2023
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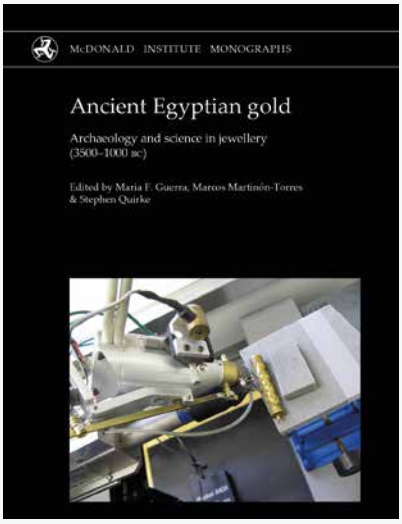

This book aims to provide a new level of synthesis in the study of gold jewellery made in Egypt between 3500 BC and 1000 BC, integrating the distinct approaches of archaeology, materials science and Egyptology. Following accessible introductions to the art and use of gold in Ancient Egypt, and to current advances in technical analyses, the volume presents detailed results on the manufacturing technology and elemental composition of some 136 objects in the collections of six European museums, with discussion of the findings in historical and cultural contexts. The questions generated by the jewellery buried with a woman and a child at Qurna (Thebes) led to investigation of assemblages and individual artefacts from later and earlier periods in varied social contexts, from the rural environment of Qau and Badari, to sites connected with urban or royal centres, such as Riqqa, Haraga and Lahun. A final discussion of the Qurna group provides an agenda for future research.

Interamna Lirenas: A Roman town in Central Italy revealed edited by Alessandro Launaro & Martin Millett
Hardback | £52.00 / US $65.00 | ISBN 978-1-913344-10-8 | xi + 157 pp. | 60 figs | 2 tables | 2023
eBook | ISBN 978-1-913344-11-5 | xi + 157 pp. | 60 figs | 2 tables | 2023
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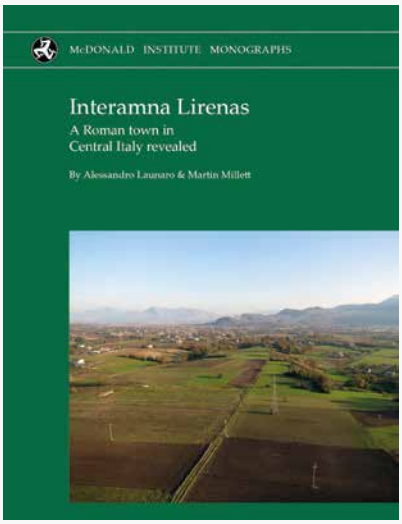


The Roman town of Interamna Lirenas (Southern Lazio, Central Italy) was established as a colony in 312 BC and was occupied until the 6th century AD. Despite its long life, it has since almost disappeared from view: until recently, the site only featured a series of crop fields, its visible archaeology amounting to little more than a dense ploughsoil assemblage, with very few standing remains. However, since 2010 an integrated archaeological project by the Faculty of Classics of the University of Cambridge, in collaboration with various other institutions, has explored both the town and its surrounding countryside through geophysical prospection, field survey and excavation. The research presented in this volume covers survey work over the urban area. It provides an account and discussion of the results of our application of non-destructive archaeological methods (geophysical prospection and systematic surface collections) to the study of the urban site. It includes a review of what was known of the town prior to our involvement, and also a discussion of the development, potential and limitations of the kind of high-resolution, extensive ground-penetrating radar survey which was carried out. This study places special emphasis on the earliest colonial phase as well as later transformations, and explores how the inhabitants of Interamna Lirenas responded to the challenges and opportunities presented by a growing Roman world, thus identifying the conditions that contributed to the town as a successful urban centre. This volume thus contributes substantial new evidence to broader historical debates about the political, social, economic and cultural development of Roman urbanism, in Italy and beyond.

Archaeological Review from Cambridge

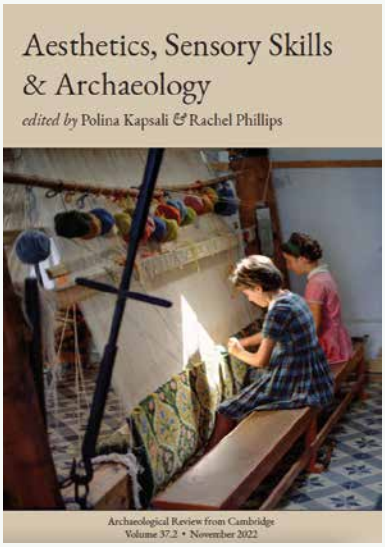
General Editor 2022–23: Marianna Negro

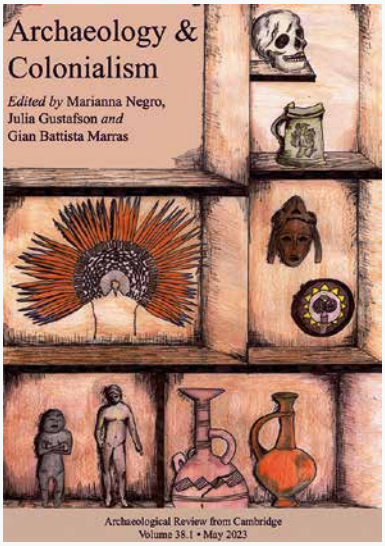
The *Archaeological Review from Cambridge* (*ARC*) has seen significant growth and success in the past year, both in terms of departmental members and institutional subscribers. The journal has undergone a redesign of its website and released two notable volumes.

Volume 37(2), 'Aesthetics, Sensory Skills & Archaeology', edited by Polina Kapsali and Rachel Phillips, was launched in November 2022. This volume delved into the relationship between aestheics, sensory skills and social praxis in past societies. It built upon earlier *ARC* volumes, such as 'Aesthetics and Style' (1985) and 'The Archaeology of Perception and the Senses' (1998), to explore how social norms are influenced by interactions with the material world.

The most recent release, Volume 38(1), 'Archaeology & Colonialism', was edited by Marianna Negro, Julia Gustafson and Gian Battista Marras and was launched in May 2023. This volume marked a significant step for *ARC* as it addressed the theme of colonialism for the first time in the journal. Given the increasing awareness of colonialist legacies in academic discourse and broader society, contributors examined the role of colonial ideology across different regions of the world. They also explored how past and present archaeological practices contribute to both problematizing existing explanatory narratives and shaping new ones. The volume concluded with a commentary by Rennan Lemos from the Department of Archaeology, offering further insight into the discussion.

The ARC team expresses gratitude to all authors, anonymous peer-reviewers and members who have contributed to the success of the publication. We also extend thanks to the McDonald Institute for Archaeological Research and the Cambridge Department of Archaeology for their support.





Members'/Fellows' Publications

Oscar Aldred

2022 Historic seascape character: the Vikings and the North Atlantic, in *Routledge Handbook of Seascape*, ed. G. Pungetti. London: Routledge, 196–212.

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Julia Aramendi Picado

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Robert Attenborough

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Graeme Barker

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Marcus Brittain

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Judith Bunbury

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Gilly Carr

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Christopher Evans

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2023 Redirecting the field – total archaeologies, flagships, and sample design, in *Sentient Archaeologies: Global perspectives on places, objects, and practice – essays in honour of Professor Chris Gosden,* eds C. Nimura, R. O'Sullivan & R. Bradley. Oxford: Oxbow, 242–56.
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Joshua Fitzgerald *(cont.)*
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Rob Foley
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Lila Janik
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Jody Joy
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Richard Kelleher
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Barry Kemp
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Alastair Key
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Alastair Key *(cont.)*

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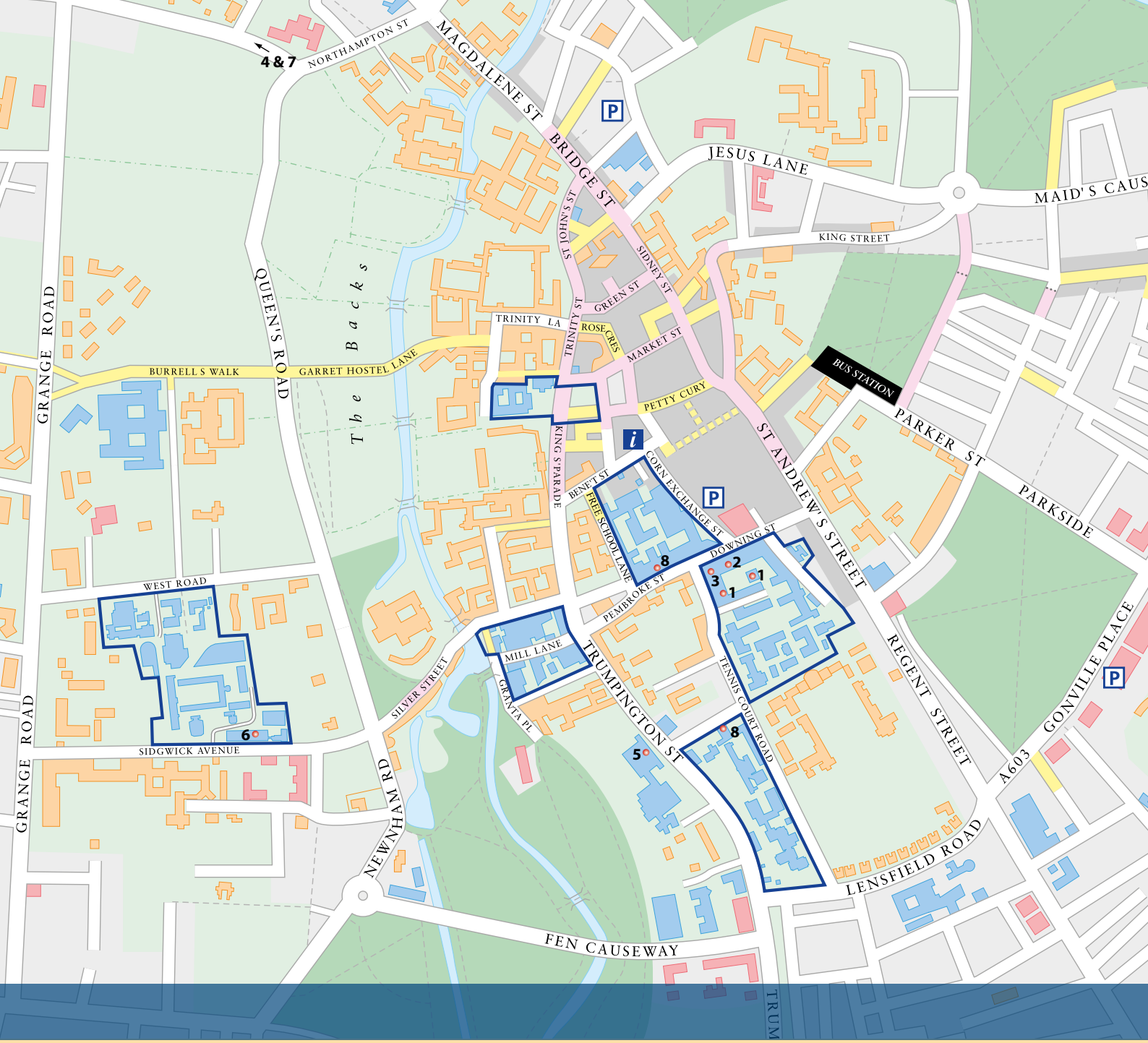

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***Cover**: Rapidly changing cultivated landscape and gazetted forest, Cheragani Hills, Kenya. (Photograph: © M. Davies.)*