

The Archaeologist

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In this issue:

Ethics in human
osteology
p3

Scientific applications in
development-led
oste archaeology
p6

Puberty in the past
p10

Welcome, Cifa
Australia
p24

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Contents

Notes for contributors

Themes and deadlines

TA 110 What is the legacy of an archaeological project and how do we go about creating the best resource we can from these? Are there examples of using raw material from archaeological research or projects built on legacy data? How can we encourage others to use the knowledge we create? Are collections being used creatively and positively for public engagement? **Deadline 1 April 2020**

TA 111 Archaeological projects have always required a diversity of skills and people. Helen Wass, Head of Heritage at HS2, will guest edit this edition to illustrate the range of competencies and skillsets that HS2 Ltd are drawing in to deliver a programme of archaeological work on an unprecedented scale, and highlight the new attitudes and approached expertise in emerging and developing technologies **Deadline 1 August 2020**

Contributions to *The Archaeologist* are encouraged.

Please get in touch if you would like to discuss ideas for articles, opinion pieces or interviews.

We now invite submission of 100–150-word abstracts for articles on the theme of forthcoming issues. Abstracts must be accompanied by at least three hi-resolution images (at least 300dpi) in jpeg or tiff format, along with the appropriate photo captions and credits for each image listed within the text document. The editorial team will get in touch regarding selection and final submissions.

We request that all authors pay close attention to ClfA house style guidance, which can be found on the website: www.archaeologists.net/publications/notesforauthors

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- 2 Editorial
- 3 Ethics in human osteology *Sharon Clough*
- 6 Scientific applications in development-led osteoarchaeology: a perspective from Oxford Archaeology *Louise Loe*
- 10 Puberty in the past *Ceri Falys and Mary Lewis*
- 12 Richmond Penitentiary cholera cemetery excavation, Grangegorman, Dublin *Dawn Gooney*
- 14 Birmingham Park Street burial ground: ethics and community engagement *Mary Ruddy*
- 17 St James's Burial Ground: delivering lasting learning *Caroline Raynor*
- 20 Standards in archaeology *Kate Geary*
- 22 So, archaeology isn't just about digging holes?! Taking part in an eight-week summer placement at ClfA *Natalie Olembo*
- 24 Welcome, ClfA Australia *Samuel Dix, Dani Wilkinson, Myfy Berry and Talei Holm*
- 26 Britannia Archaeology: training and developing volunteers at the Aylsham Roman Project *Martin Brook*
- 28 Member news
- 29 Obituary: a tribute to Theresa O'Mahony *David Connolly*
- 31 New members
- 32 Noticeboard

Cover photo: *Archaeologist* using iPad to carry out digital recording on site
Credit: *Caroline Raynor*



EDITORIAL



p6



p12



p14



p17

ClfA Human Osteoarchaeology Special Interest Group (OsteoSIG) was established just over a year ago in November 2018. The Group's remit is to represent the interests of professionals who work or have an interest in the area of osteoarchaeology and burial studies.

The Group also aims to promote standards and good practice for the excavation, treatment, conservation, analysis and curation of human remains and funerary archaeology from the historic environment. Since it was set up, the committee has organised two successful training courses. The first of these was about paleoradiology (the use of x-rays in osteoarchaeology) and the second more recently about puberty in the past and the use of new osteological methods used to identify stages of puberty in human skeletal remains. This workshop has resulted in the development of a recording form to summarise assessment criteria, and a summary table to aid in the estimation of the stage of puberty the individual was experiencing (see the article by Ceri Falys and Mary Lewis on page 10).

To highlight the work of the SIG and the work of osteoarchaeologists this edition of *The Archaeologist* looks at the ethical issues they face on a daily basis, for example when dealing with the analysis and archiving of human remains, the use of human remains in imagery, or with engaging and informing local

communities during the excavation of burials grounds such as Park Street in Birmingham as part of HS2. The articles also look at the wide range of rapidly developing techniques available to osteoarchaeologists, which allow us to continually learn more about past societies and the individuals who were part of them. The case studies from Dawn Gooney (page 12) and Louise Loe (page 6) cover isotope analysis, radiocarbon dating and ancient DNA.

As specialists, osteoarchaeologists can provide expert advice on the current and relevant techniques available and the ethical considerations around human remains. Their early engagement in archaeological projects is not just essential as part of excavation, recovery and analysis, but as Caroline Raynor highlights on page 17, it is also crucial for ensuring that the correct provisions in terms of handling, processing and storage are in place.

The Human Osteoarchaeology SIG committee is made up of very experienced osteoarchaeologists who are keen to promote good and ethical practice. If you have any queries about human remains please direct them to the ClfA OsteoSIG and email groups@archaeologists.net. You can follow the Group on Twitter @OsteoSIG and ClfA members can join the Group mailing list by logging into your member dashboard via the ClfA website.

Ethics in human osteology

Sharon Clough MClA (2223), Senior Environmental Officer Human Bones, Cotswold Archaeology

With the publication of ClfA's *Introduction to professional ethics* and the revised BABAO *Code of Ethics* (2019), ethics is a topic at the forefront our minds.

Human remains come with an extra ethical consideration. In the UK there are many legal requirements (for an overview see White 2010), but these do not always cover the ethical decisions that commercial osteoarchaeologists must make daily. Guidance documents are available (archaeologicaethics.org), but ethical dilemmas are rarely straightforward enough to be detailed in the exact same circumstances.

At the root of all work with human remains is the premise of respect. This is included in the UK legal requirements and in the Vermillion Accord on Human Remains (1989). When unsure of a course of action it always best to ask yourself: 'is this respectful?'

Recently, an ethical dilemma presented itself when I was asked what should be done with some cremation residues. These were bags of fine powder, containing sediment 1mm and less in size, left after cremation burials had been washed, sorted and bagged. They contained tiny powdered fragments of cremated bone that were too small for any analysis, but nonetheless were human



**“SKELETON DISCOVERY:
Ritual burial site from 3,000 years ago”**
Daily Express

**“Oxfordshire water pipe work
uncovers ancient skeletons”**
BBC News

**“Incredibly well-
preserved Iron age
and Roman remains
found in stream in
Oxfordshire”**
Evening Standard

**“Iron Age skeletons may
have been the victims of
ritual human sacrifice”**
Daily Telegraph

**“Amazing haul of Iron Age and Roman
artefacts – including two dozen 3,000-
year-old human skeletons – is uncovered
by workers laying new water pipes in
Oxfordshire”** *Daily Mail*

Examples of the varied headlines by news outlets from the same press release. Credit: Cotswold Archaeology



Excavation of a human skeleton. Credit: Cotswold Archaeology



Storage of human remains. Credit: Cotswold Archaeology

remains. Given that space is an issue when it comes to archiving, should the bags be disposed of, as there was no potential in their use osteologically or archaeologically? Or should they be kept because they contained almost microscopic parts of cremated human bone?

These decisions are never easy, but financial pressures should be disregarded when making them. Instead, considering the long-term potential of the material and whether the treatment is respectful are important.

Public presentation and outreach work are challenging when it comes to human remains. There are many different opinions amongst the heritage and museum community about whether to and how to display human remains. There are also many opinions about the use of images (and the printing of 3D images) of human remains. Balancing these views is not easy, and we don't always get it right. It is generally accepted that plastic skeletons are fine for open days and outreach work, but that handling and displaying real human skeletons should be kept for teaching or specifically themed events. Site visits for the general public during cemetery excavations are normally not possible, for health and safety reasons or because of construction activity, but it can be done and there are examples of successful open days. The legal requirement to screen excavations of human skeletons from public view does not preclude open days, and it can be very beneficial to get the public in to see the work. 'Hiding' our work from the public can create concern about how it is being undertaken and this can be dispelled when the careful removal that is part of professional archaeology is seen in person.

Using images in social media and other outlets is an increasingly challenging ethical area. Some feel that no images of human remains should be posted on social media. However, this goes against the 'Death Positive' movement, which aims to bring discussions and experiences of death and dying back into society to counter the medicalisation of death – something that has removed the experience from our everyday lives, making it more extraordinary than it once was. Encountering human remains is a part of our job and to not include images in our reports and website stories misrepresents the past. However, this should be done to educate or to highlight part of the story and not for sensationalism. But what happens to an image once it is out of the control of the organisation publishing it? Comments on websites and social media cannot be controlled. Despite a carefully worded press release accompanying an image, once the news outlets get the story, they can construct any headline they like. It is important to weigh this up against the public interest in the archaeology.

Sampling human remains for destructive analysis is coming under increasing scrutiny. Years ago, whole bones had to be destroyed to obtain a radiocarbon date. The *Science and the Dead* guidance document (APABE 2013)

was created to encourage proper recording and archiving to ensure that the same sampling is not undertaken twice on the same bone. This document is shortly to be updated to take into account new techniques, which are developing all the time.

Osteoarchaeologists should be consulted before destructive analysis is agreed, to ensure that full recording of the material to be destroyed has been undertaken and to balance the need for a result against the amount of material available to ensure that the process is repeatable. Recently, a request was made to sample a deposit of cremated bone to gain a radiocarbon date for a feature. The feature was not clearly a burial, but it may have been cremation-related and was also the only feature in the trench. The cremated bone weighed a total of 8g, but only 2g of it was positively identified as human (tooth roots, etc). Sampling this amount of human bone would have reduced it to such a small amount that any future analyses would not be possible. My professional opinion was that the benefit of a date did not outweigh the destruction of a valuable and finite resource, and given that the work was at an evaluation stage, further excavation may reveal better sources. Ethically it must be remembered that we are destroying human remains when we sample for radiocarbon dating or isotopic analysis. The cost and speed of scientific analyses has reduced considerably over recent years, making it more readily available, but it is no panacea and not to be used 'just because we can'.

It is also important to understand the scientific analyses you request. *Science and the Dead* (APABE 2013) outlines some of the current options. For example, if you request carbon and nitrogen isotopic analysis on a neonate, you will not gain a useful result. Babies and infants carry the isotopic signatures of their mothers due to breastfeeding (this is useful if looking at weaning ages), so all it will tell you is they are one trophic level higher than the adults.



Bone sample for C14 dating. Credit: Cotswold Archaeology



1mm residue sample. Credit: Cotswold Archaeology

Proportionally, neonates and infant skeletons are very small and a 2g sample from these is an entire limb. So, it is crucial that advice is sought from a specialist and alternative options are explored.

While human remains reside in our stores, we have a duty as the curators to treat them with dignity and respect. We cannot ask their relatives for permission to undertake the destructive analysis, so we have to consider requests carefully. We must also ensure that their research potential for the future is not compromised by inadequate archiving of the scientific sampling.

Further information

<http://archaeologicaethics.org/topic/human-remains-and-ethical-practice/>

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Vermillion Accord on Human Remains (1989)

APABE (Advisory Panel on Archaeology of Burials in England) 2013 *Science and the Dead – A guideline for the destructive sampling of archaeological human remains for scientific analysis*. English Heritage

Sharon Clough

Sharon is the Senior Environmental Officer and Specialist in Human Remains at Cotswold Archaeology and has worked in commercial archaeology for nearly 20 years for a variety of organisations. She believes passionately in a pragmatic and holistic approach to archaeological human remains and is the current Chair of OsteoSIG.



Scientific applications in development-led osteoarchaeology: a perspective from Oxford Archaeology

Louise Loe MClfA (5917), Oxford Archaeology

The application and impact of scientific techniques in development-led osteoarchaeology has grown considerably in recent years. A wide range of imaging modalities (eg computed tomography) and destructive techniques (eg radiocarbon and isotopes) are now available and these have become a relatively routine part of projects. The results of this work can radically change how we interpret archaeological burials and forge fruitful

collaborations between organisations. The fact that the work is development driven means that important serendipitous discoveries are made, challenging long-held views about the past, and important lessons provided for the specialists applying and developing the techniques. However, there are particular issues that we face, primarily the extent to which clients should be expected to fund such work, the lack of service providers, the reliability of the

results, and ethical issues associated with destructive methods. In addition, the reactive context in which development osteoarchaeologists work presents significant challenges in terms of providing appropriate advice on the use of advanced science on development-funded projects, keeping up to date with rapidly advancing techniques and applying them in a commercial environment in order to achieve the best research outcome.



'Hidden Lives' public exhibition at the Wellcome Genome Campus. Credit: Oxford Archaeology

This article considers some projects undertaken by Oxford Archaeology where advanced science using radiocarbon dating, isotope analysis and ancient DNA has been employed.

Radiocarbon dating of bone is not a new approach, but the technique has recently seen significant changes that have increased its potential and power. Dates can now be realised with less bone, pre-screening techniques have been developed, the 'marine reservoir effect'¹ has become an important consideration and burnt, fully calcined bone can be dated.

Radiocarbon dating can transform our understanding of burials. This was demonstrated during the excavation of Oxford Archaeology's chance discovery of a 10th/11th-century Viking mass grave on the crest of the Ridgeway Hill near Weymouth, Dorset. There was nothing to suggest that the burials dated to the 10th/11th century: they were surrounded by prehistoric archaeology and there were no dateable artefacts with the skeletons. The grave – a disused Roman quarry, with residual Roman pottery found within its fill – was initially believed to be Roman. However, as the mass of jumbled skeletons was exposed, this assumption became less certain. Radiocarbon dates are not typically obtained from human bone during excavation, but in this case the analysis was performed at this stage, on samples taken from three bones (one each from the top, middle and bottom of the deposit). These suggested that the deposits were early medieval rather than prehistoric or Roman. The timing in obtaining this result was crucial, because it was fundamental to subsequent strategies employed on the project. This included isotope analysis, which demonstrated that the individuals in the grave had spent their childhoods in places outside Britain, including Scandinavia, Northern Iceland, the Baltic states and Russia. Further analysis showed that they had lived in the Scandinavian region in later life and had not been in the British Isles for long before their deaths.

Without the radiocarbon dates and the isotope data, the interpretation of the mass grave could have been quite different, and it is interesting to consider that if it had been discovered less than 20 years ago, the science would not have been able to provide



The Viking mass grave discovered on Ridgeway Hill, Dorset. Credit: Oxford Archaeology

this pivotal information. It is a measure of how fast scientific applications in osteoarchaeology have developed. And they are not slowing down. Ancient DNA analysis has advanced considerably over the last decade following the introduction of next generation sequencing, which has presented greater opportunities to, for example, sex skeletons (eg non-adults) that cannot be osteologically sexed, identify 'invisible' diseases and to explore genetic ancestry and relatedness between individuals. Advances have also reduced the cost of DNA analysis, making it an attractive and exciting proposition for archaeologists and bringing it within the reach of development-led practice.

The method has also introduced collaborative opportunities, which have advanced techniques and had wide public impact. Oxford Archaeology has worked with scientists on studies of dental calculus taken from post-medieval skeletons excavated at the Oxford Radcliffe hospital burial ground to develop methods that may be applied to future studies (Velsko et al 2017, 2019). In another collaboration, human bone samples from three Cambridgeshire sites were examined to explore the impact of Anglo-Saxon migrations on the genetic composition of the current British population (Schiffels et al 2016). The project was initiated by the

Wellcome Trust as a result of their Genome Campus development at Hinxton, near Cambridge. The project also integrated the DNA, osteological and archaeological findings in a highly successful public exhibition about Hinxton, held at the campus.

Who we are and where we came from lie at the heart of public curiosity about the past and DNA analysis magnifies the benefit that development-led archaeology can bring to the public. This aligns very well with archaeology's goal to deliver social value, enshrined in planning guidance (NPPF 2012, 2018). Despite the popularity of DNA analysis and the increasing demand for it in development-led practice, there is a dearth of service providers. Further, the timeframes within which DNA specialists and commercial archaeologists work are often incompatible. This has not been properly acknowledged or appreciated. DNA specialists also seek to collect numerous samples from human skeletons, which is arguably unacceptable compared to other sampling techniques, and yet there has not been the opportunity to agree sensible protocols in response to this.

Historic burial grounds present perhaps the greatest opportunities for DNA applications. Work undertaken to identify 250 Australian and British WWI soldiers who fought and died

¹ Marine samples yield radiocarbon ages substantially older than terrestrial samples that are equivalent in true calendar age; thus individuals who consumed high quantities of seafood will appear older than their true calendar age.



Taking a dental calculus sample from a post-medieval skeleton, excavated at the Radcliffe hospital burial ground, Oxford. Credit: Oxford Archaeology



Recording one of the skeletons from the Ridgeway mass grave. Credit: Oxford Archaeology

in the Battle of Fromelles (1916) represents the largest DNA study of a historic population undertaken to date. The soldiers were found in six unmarked mass graves on the edge of Fromelles village, Northern France and were excavated and analysed by Oxford Archaeology in 2009. The soldiers were reburied in a new Commonwealth War Graves cemetery adjacent to the recovery site in early 2010, and efforts to identify them by name began later that year using archaeological, DNA, historical, genealogical and anthropological evidence. To date, 166 of the soldiers have had their names restored and their families have been informed. This has far exceeded expectations, largely due to the developments in DNA methodologies.

Although not a development-led project, Fromelles highlights some important considerations in the application of DNA analysis to historic populations in this context. Historic burial grounds have the potential to include individuals with living descendants, and/or communities, and this throws a spotlight on how DNA is handled. At Fromelles, the excavation employed scene-of-

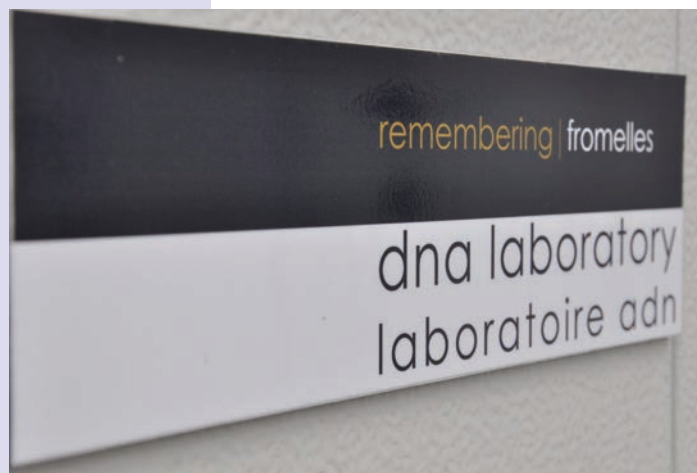
Historic burial grounds have the potential to include individuals with living descendants, and/or communities, and this throws a spotlight on how DNA is handled.

crime protocols and clear ethical frameworks were established so that, for example, any incidental findings (about an individual's genetic or non-genetic relationships) made through the analysis of the DNA have/will not be made publicly available.

Managing public expectation has been an essential part of the Fromelles project, by clearly communicating the reliability with which identifications can be made and the importance of the historical archaeological context, artefacts, genealogy and anthropology in the process. This is challenging because the science of DNA analysis is complex and continually changing. Despite this, it is widely accepted as 'the

silver bullet'. If DNA analysis is to find success in archaeology, re-education and continual updates are needed to understand its potential and its limitations. In addition, DNA studies of past populations can involve a long trajectory, continuing long after a project has finished in the field; planning for the long-term future on projects like this is very important.

Scientific applications in development-led practice have important and powerful contributions to make to understanding our osteoarchaeological heritage. Developments in science such as those described here have, and continue to be, the subject of much discussion. Two of the European Archaeology Association's annual meetings have recently provided a forum to discuss the issues and challenges of scientific developments and archaeology, coined the 'third science revolution' (Kristiansen 2014). Development-led osteoarchaeology has an important contribution to make to these discussions; this, the 'coal face', is where many of the scientific developments are happening and is the laboratory from which everyone can learn.



Fromelles, N. France: Excavating one of the WWI mass graves and sampling for DNA.
Credit: Oxford Archaeology



Louise Loe

Louise is Head of Heritage Burial Services at Oxford Archaeology, and leads a team dedicated to the burial archaeology undertaken by three regional offices. Holding a PhD in Biological Anthropology from the University of Bristol, she has over 20 years' experience in the excavation and analysis of human remains from a range of archaeological contexts. She led the excavation and analysis of WWI mass graves in Fromelles, Northern France as well as the detailed analyses of a Viking-age mass grave, discovered on Ridgeway Hill, Weymouth. She currently serves the Australian Army as a subject matter expert for the Fromelles Identification Board.

Louise is a Fellow of the Society of Antiquaries, a member of the Chartered Institute for Archaeologists and the British Association for Biological Anthropology and Osteoarchaeology (BABAO) and is Visiting Research Fellow at the Universities of Oxford and Reading. Her main interests lie in peri-mortem trauma, human skeletal modification, the palaeopathology of early medieval populations and the osteoarchaeology of mass graves.

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PUBERTY IN THE PAST

Ceri Falys MClfA (9061), Thames Valley Archaeological Services, and Mary Lewis, University of Reading

Puberty is emerging as an important and exciting new avenue of research in osteoarchaeology. Over recent years, Professor Mary Lewis and colleagues have developed innovative methods for assessing the stage of puberty of adolescent skeletons that combine clinical observation with identifiable landmarks of the developing human skeleton (Shapland and Lewis, 2013, 2014; Lewis et al., 2016). The ability to identify the stage of puberty being experienced by an adolescent at the time of their death not only provides physical details regarding their appearance, sound of their voice, and their reproductive capacity; it may have also played a key role in their social identity.

Osteoarchaeologists working in the commercial sector are uniquely placed to take part in, and enhance, the study of puberty in the past, as they are excavating and analysing newly discovered skeletons every day. The essential combination of the osteological data with the burial context of the skeleton provides researchers like Prof Lewis, and many others in the future, a wealth of information about the lives and deaths of adolescents in the past.

In order to introduce and encourage osteoarchaeologists to employ these new osteological methods, ClfA's Human Osteoarchaeology Special Interest Group (Osteo SIG) ran a sold-out workshop in July 2019. We were privileged to have Prof Mary Lewis, of the University of Reading, work closely with the workshop attendees, teaching them (both through lectures and hands-on experience with skeletal remains) essential osteological methods for analysing non-adult skeletal remains (ie estimation of age-at-death), as well as new advances in more challenging estimates (ie sexing techniques). Attendees were also provided with a set of criteria to allow puberty stage to be estimated quickly and efficiently.

As the Osteo SIG puberty workshop was sold out, the innovative methods are provided here, with the aim to introduce them to all interested ClfA professionals and to stimulate interest in the study of puberty in the past. Additional workshops are in the pipeline at the University of Reading. It is hoped commercial osteoarchaeologists will apply these puberty criteria to all applicable skeletal remains and make them part of the routine observations undertaken during the standardised osteological analysis.

As those experiencing puberty represent such a small subsection of the assemblages recovered during archaeological investigations, by working together and compiling a central database of these criteria, we can begin to investigate the meanings and rites of passage allotted to those in the transition between child- and adulthood. Prof Lewis (m.e.lewis@reading.ac.uk) is keen to hear from commercial osteoarchaeologists who have recorded puberty information for any skeleton(s), and would like to invite them and their information to be included on a central database of puberty information in British archaeology. Contributors will be included as authors of any publications that arise from the data.

The methods

To assess the pubertal stage, seven individual osteological markers have been developed, including the extent of the development of the mandibular canine root and hook of hamate, fusion epiphyses of the hand phalanges, distal radius and humerus and proximal ulna, the presence and fusion of the iliac crest epiphysis, and the morphology of the cervical vertebral body. A recording form has been developed to summarise the assessment criteria (Figure 1), to aid the application of the techniques. A summary table has also been developed to aid the estimation of the stage of puberty the individual was

PUBERTY STATUS RECORDING FORM

Site: _____ Skeleton: _____
 Age: _____
 Sex: _____
 Puberty Status: Pre Acc PHV Dec Mat Post PHV Menarche reached Y/N

1. Sex Assessment
 Using features of the humerus, pelvis and mandible, estimate the sex of the individual. Three areas need to agree for sex to be assigned to an individual with an unfused innominate (nr=not recordable):

PELVIS	Male	Male?	?	Female?	Female	nr
Sciatic notch depth						
Sciatic notch angle						
Auricular elevation						
Pubis morphology						

SKULL	Male	Male?	?	Female?	Female	nr
Mental prominence						
Skull (over 17 yrs)						

HUMERUS	Male	Male?	?	Female?	Female	nr
Trochlear symmetry						
Olecranon fossa						
Medial epicondyle						

Sex assessment: _____

Method	M	F	Reference
Ilium			
Greater sciatic notch depth	shallow	deep	Schutkowski (1993)
Greater sciatic notch angle	under 90°	Over 90°	Schutkowski (1993)
Auricular surface elevation	Flat compared to retroauricular area	Same level as retroauricular area	Weaver (1980)
Humerus			
Olecranon fossa shape	triangle	oval	Rogers (2009)
Trochlear symmetry	asymmetrical	symmetrical	Rogers (2009)
Medial epicondyle	Parallel with table	Raised above table	Rogers (2009)
Mandible			
Chin shape	Square/flat	pointed	Schutkowski (1993)

Figure 1: first page of the puberty status recording form

Skeletal and dental features associated with the phases of pubertal maturation in boys and girls

	Phase	External Physical changes	Canine Mineralisation ¹	Hamate Hook ²	Hand Phalanges ³	Wrist ³ (fusion score)	Iliac Crest ⁴ (fusion score)	CMV ⁵
0	Pre-Puberty		E	Stage G Hook absent	Stage 1 Proximal epiphysis of hand phalanges narrower than shaft	Stage 1 Distal radius unfused (0) Humerus capitulum unfused (0)	Risser 1 Epiphysis not present	1
1	Initiation (onset)	Ovaries enlarge Hormones released	F Root ½ to ¾	Stage G Hook absent	Stage 1 Proximal epiphysis of hand phalanges narrower than shaft	Stage 1 Distal radius unfused (0) Proximal ulna unfused (0) Humerus capitulum unfused (0)	Risser 1 Epiphysis not present	1
2	Acceleration	Breast buds Pubic hair Increased body mass	G/H Root complete to apex 1/2	Stages H or H.5 Hook appearing or increased	Stage 2 Phalangeal epiphyses of equal width to shaft	Stage 1 Distal radius unfused (0) Proximal ulna unfused (0) Humerus capitulum unfused (0)	Risser 2 Epiphysis 50% complete, unfused	2
3	PHV (transition)	Breast development Musculature Voice breaks	H Apex complete	Stage I Hook complete	Stage 3 Capping of phalangeal epiphyses	Stage 2 Distal radius unfused (0) Proximal ulna fusing/fused (1-2) Humerus capitulum fusing (1)	Risser 2-3 Epiphysis 50-75% complete, Unfused (0)	3
4	Deceleration	Menarche Ovulation	H Apex complete	Stage I Hook complete	Stage 4 phalangeal epiphyses fusing (1) (menstruation = fusion of the distal phalanx of MC2)	Stage 3 Distal radius unfused (0) Proximal ulna fused (2) Humerus capitulum fused (2)	Risser 3-4 Epiphysis 75-100% complete, Non to partial union (0-1)	4-5
5	Maturation	Regular ovulation Outwardly sexually mature	H Apex complete	Stage I Hook complete	Stage 5 phalangeal epiphyses fusing (1)	Stage 4 Distal radius fusing (1)	Risser 4 Epiphysis 100% complete, partial union (1)	5-6
6	Completion (post-puberty)		H Apex complete	Stage I Hook complete	Stage 6 Phalanges fused (2)	Stage 5 Distal radius fused (2)	Risser 5 Fusion complete (2)	6

¹ Chertkow (1980) based on Demirjian et al.'s dental stages (1973); Grave and Brown (1976); Chertkow (1980); Shapland and Lewis (2013); ² Grave and Brown (1976); Hägg and Taranger (1982) for the phalangeal epiphyses, Hägg and Taranger (1982) and Zhang et al. (2008) for the distal radius. ³ Hewitt and Anderson (1961a, b) (a and b); Scoles et al. (1987); Scheuer and Black (2000); ⁴ Hassel and Farman (1995) for cervical vertebra 3, Baccetti et al. (2002) for cervical vertebrae 2-4, Shapland and Lewis (2014).

Figure 2: Revised puberty assessment table

(below) Adolescent male from later medieval St Oswald's Priory, Gloucester. Formation of the hamate bone in the wrist suggests that this 14–15-year-old was in the acceleration phase of puberty. Credit: Mary Lewis

experiencing, as well as provide an indication of the physical changes the body was undergoing at the time of death (Figure 2). You can download both of these documents from the Human Osteoarchaeology SIG page on the ClfA website www.archaeologists.net/human-osteoaarchaeology-special-interest-group.



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Professor Mary Lewis (BA Leicester, MSc Bradford, PhD Bradford)

Mary is a Professor of Bioarchaeology in the Department of Archaeology, University of Reading. She specialises in non-adult skeletal pathology in relation to socio-economic transitions in the past and is programme director for the MSc in Professional Human Osteoarchaeology. Mary's publications include *The Bioarchaeology of Children* (CUP, 2007) and *Paleopathology of Children* (AP, 2018). In addition to her work on puberty assessment, Mary's research has helped to outline the criteria for the diagnosis of leprosy (2002), tuberculosis (2011), thalassaemia (2010) and trauma (2014) in child skeletal remains.



Dr Ceri Falys

Ceri has been the osteoarchaeologist for Thames Valley Archaeological Services for 15 years, and is a teaching fellow in human osteology in the Department of Archaeology, University of Reading. Ceri is also the secretary of ClfA's Human Osteoarchaeology Special Interest Group.



Richmond Penitentiary cholera cemetery excavation Grangegorman, Dublin

Dawn Gooney, Rubicon Heritage Services Ltd

Project background

Archaeological monitoring of construction groundworks was carried out on a light rail project that extended the Luas Green Line northwest through the centre of Dublin. These works were undertaken by Rubicon Heritage Services Ltd for SISK Steconfer Joint Venture Ltd (SSJV) on behalf of Transport Infrastructure Ireland (TII).

Test trenching identified two NE–SW orientated parallel ‘charnel’ trenches containing disarticulated human remains.

Historical background

During the 18th and 19th centuries the Grangegorman area became the focus for the development of a series of institutions to cater for the sick and indigent. The Richmond Penitentiary was converted to a hospital during the 1832 cholera epidemic and the garden of the penitentiary was used as an overflow cemetery when the epidemic reached Dublin, in March 1832.

In 1870, the Midland Great Western Railway acquired land from the adjacent Richmond Female Penitentiary site to facilitate the expansion of the rail yard at Broadstone. Accounts of the expansion note the discovery of burials and their reburial within these lands.

The excavation

The investigation methodology at the site was complicated by the presence of Japanese knotweed. A concentration of roots was found adjacent to the wall forming the north-western boundary of the site, where two rows of previously undisturbed graves were identified in addition to the charnel trenches.

Charnel trenches

The longest and deepest of the two charnel trenches extended for 45m in a NE–SW direction. The second trench lay to the north-west of the first and contained less concentrated amounts of bone. To maintain an approximate count of individuals whose remains had been re-interred in the trenches, each complete or almost complete cranium and mandible was numbered and its location within the trench was recorded. A total of 1697 crania were recorded on site.

The burial ground

Thirty burials were identified, set out in two discrete parallel rows. These were orientated NW–SE (heads NW) perpendicular to the penitentiary’s boundary wall. All but one of the deceased were buried in coffins and there were no instances of intercutting graves.

Osteoarchaeological analysis

The assemblage provides an important snapshot of the pre-famine population of Dublin city. Osteological analysis of the 30 articulated skeletons found that 12 were male, 14 female, two of ambiguous sex determination, one adolescent and one infant. The articulated burials were radiocarbon dated to cal AD 1680–1940 (2 σ , SUERC-72381).

Of the 1697 human crania, adult remains (97.5%) comprised the majority, compared to just 2.5% subadults. Males represented 43.4% of the disarticulated crania, females 44.7% and unsexed adults 11.8%. A male cranium was radiocarbon dated to cal AD 1641–1928 (2 σ , SUERC-72382).

Poor dental health was a feature in this population, with a higher rate of females affected by caries and ante-mortem tooth loss, while more males displayed calculus and periodontal disease. Males were affected more by non-specific infectious diseases and both sexes were equally susceptible to dietary deficiencies or illness. Males were more likely to be smokers and involved in heavy physical work from a younger age than females were.



An example of the concentration of disarticulated remains within the charnel trench. Credit: Rubicon Heritage Services



Excavating the charnel trench. Credit: Rubicon Heritage Services

Infections included syphilis and tuberculosis, and metabolic conditions such as scurvy and rickets were identified. Conditions normally associated with an ageing population were also present and slightly more males than females were victims of interpersonal violence. There was evidence of post-mortem dissections on cranial and vertebral fragments from the disarticulated assemblage.

Isotopic analysis

The strontium and oxygen isotope data indicate that most of the 23 individuals analysed are likely to have been local to Dublin. The carbon and nitrogen data suggest that there was a difference between the dietary inputs of the males and females, with some males consuming low levels of marine resources as adults. The females appear to split into two groups, one of which may have had maize in their diet; possibly due to women and children seeking aid in workhouses. The range of results may also reflect the mixture of social classes affected by cholera.

Dissection and the Anatomy Act, 1832

The peak of the cholera epidemic coincided with the introduction of the Anatomy Act 1832. There was a fear among the poor that if they died in hospital their bodies would be handed over for dissection by medical students; evidence from the site suggests people were correct in their suspicions.

Discussion

The cholera epidemic is a part of Irish history that has been overshadowed by the devastating effects of the later Great Famine of the 1840s; the results of the excavation and the skeletal and isotopic analysis have now helped shed some light on this period of Dublin's history.

Institutions dealing with the sick, indigent and criminal were located nearby, though it is

presumed that most of the individuals buried at the site were victims of the cholera epidemic.

The site also challenges the conventional wisdom that a short-lived, short-purpose cemetery would primarily have had interments in collective pits; instead, individual graves were potentially more common, and this was a closely planned and rigorously managed cemetery for the duration of its usage.



Vertebra fragment showing evidence of dissection.
Credit: Rubicon Heritage Services

Cranium #1401 – evidence of dissection or autopsy.
Credit: Rubicon Heritage Services

Dawn Gooney

Dawn has been a professional field archaeologist since graduating from UCC in 1999. After working on archaeological projects in Ireland and abroad, Dawn developed a keen interest in funerary archaeology and archaeoethnatology. She returned to university and completed an MSc in Osteoarchaeology at the University of Edinburgh in 2006. This led to her involvement in projects in the Orkney Islands and to a PhD in Archaeology, which she completed in 2015. Dawn joined Rubicon Heritage in 2015 as field osteoarchaeologist and site supervisor at the Grangegorman Cholera Cemetery, part of the LUAS Cross City works. Since joining the company, Dawn has been involved in a range of both archaeological and osteoarchaeological projects in both Ireland and the UK.



In-situ burials. Credit: Rubicon Heritage Services



Grave cuts, post-excitation. Credit: Rubicon Heritage Services

BIRMINGHAM PARK STREET BURIAL GROUND:

Mary Ruddy MCIfA (9220) WSP

HS2 IN BIRMINGHAM

HS2 is Europe’s largest infrastructure scheme and its first phase follows in the steps of Stephenson’s London and Birmingham Railway (L&BR) from London to the West Midlands. In 1838, the line made its name not only as the first intercity line into London, but also as the first of its kind in the world! The project today is no less complex, but perhaps for different reasons.

While Stephenson’s line was a feat of engineering through previously uncharted ground conditions, it lacked consideration of the environment and communities. Fast forward to the 21st century and these are of foremost importance to HS2 Ltd – addressing these issues alone has legitimately taken the same time it took Stephenson to build the entire L&BR.



Archaeological excavation in the North Site tent. Credit: LMJV



Bird’s-eye view of excavation tents looking south west. Credit: LMJV

HS2 undeniably represents an exceptional opportunity for British archaeology. Its discoveries have the potential to span half a million years of history, allowing us to rethink the Ice Ages in the Midlands, celebrate the architecture of post-war urban council housing and everything in between.

The aims and objectives of the project are driven by the ambitious Historic Environment Research and Delivery Strategy (HERDS), which, among other objectives, aims to improve archaeological working practice.

As part of its innovative approach, the overarching HERDS objectives are to create knowledge, involve people, and cultivate a legacy. The historic environment programme therefore directly feeds into HS2’s design vision *People, Place and Time*: a design that meets the needs of everyone, creates a sense of place that supports quality of life, and stands the test of time. It aims to ensure that through engaging with people and communities, the scheme is of real public benefit – resonating with past *TA* articles (Geary, *The Archaeologist*, Issue 105)

MAJOR BURIAL GROUND EXCAVATION: OPPORTUNITIES AND ISSUES

This *TA* looks at the opportunities major burial ground excavations offer and the issues that arise. As one of the largest 19th-century burial sites excavated outside London, Birmingham’s Park Street burial ground has and will face spiritual, religious and scientific ethical challenges in design, excavation, further study and reburial. Here we focus on the beliefs of the church, how they align with scientific ethics and the relationship with community engagement in delivering public benefit.

Archaeologists are no strangers to the sensitive and complicated issues that burial excavation introduces, and are often answerable to questions of ethics and decisions

ETHICS AND COMMUNITY ENGAGEMENT

on how to balance respecting Christian beliefs about death and burial with educational and scientific gain.

On the project the treatment of human remains has been approached with dignity, care and respect, and in accordance with HS2's legal undertaking with the Church of England. However, even following best practice proves challenging when managing the views of various interest groups, from the parish and religious leaders to Historic England, history groups, academics, local authorities, residents and local businesses.

An ethical approach involves listening to the views of those with a legitimate interest (APABE 2017, 4) from the start. Through the HERDS, HS2 places community-centred objectives at the forefront of project design, thereby allowing views to be heard and to inform the work itself. Engagement should be regarded as indispensable to an ethical approach – it helps to manage conflicting perspectives and plays a vital role in the process of delivering public benefit.

PARK STREET AND COMMUNITY ENGAGEMENT

Park Street is at a key location on the HS2 route: within the footprint of what will be the new Curzon Street terminus, a reference to the original double terminus of the L&BR and Brunel's Grand Junction Railway. The burial ground opened in 1810 as an overflow cemetery for the church of St Martin-in-the-Bullring and closed 63 years later. During its lifetime it existed in a state of dilapidation, maligned as a dangerous 'black spot' with loitering gangs and open sewers. The burial population of around 8000 shows the hardships of largely poor, unnamed Christians who suffered diseases and working conditions that we in the UK no longer experience.

To enable people to develop an understanding of local history and burial archaeology, the design consultant WSP (in consortium with Ramboll) worked with an archaeological team from MOLA-Headland Infrastructure (MHI) for the Principal Contractor LM (a Laing O'Rourke & J Murphy & Sons Ltd joint venture) to design an inclusive programme of talks, workshops, traineeships and school sessions.

Events reached a range of groups (youth, ethnically diverse and low-income) and built partnerships with a range of stakeholders, in particular Birmingham museums, sister organisations such as the Potteries Museum (PMAG) and the Birmingham Conservation Trust Coffin Works museum. HS2's Commonplace website has provided an accessible platform for information on events as well as for monthly blogs.

Family and school activities have been particularly successful: 'Meet the Expert', held at Birmingham's

The aims and objectives of the project are driven by the ambitious Historic Environment Research and Delivery Strategy (HERDS), which, among other objectives, aims to improve archaeological working practice.

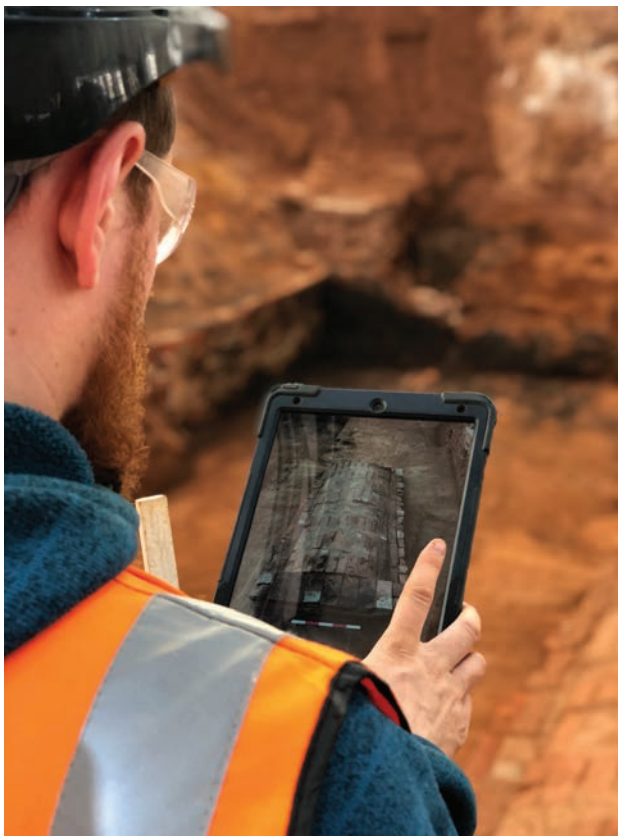


Trainee Eleanor surveying – Trainee programme 2018 LM/MHI with the West Midlands Combined Authority and BMet. Credit: LMJV



Object handling, Birmingham City University Family Day in June. Credit: LMJV

Thinktank Science Museum, gave families the opportunity to talk to professionals and to play with teaching skeletons, dig boxes and see artefacts, while educational packages for schools affected by the works have brought to classrooms concepts like map regression and what we can learn from recording skeletons.



Archaeological digital and photographic recording of burial vaults.
Credit: LMJV



MHI's Stuart Milby with teaching skeleton at Birmingham City University Family Day in June. Credit: LMJV

CONCLUDING REMARKS – ETHICS AND PUBLIC BENEFIT

Public interest in Park Street has been demonstrated by the work carried out so far, and the archaeology will continue to offer rich and stimulating material through post-excitation. HS2 offers a good example of an archaeological project in which community engagement is at the fore and benefits have been delivered through design, including through linking with social sciences, museums, engagement professionals and the arts. This is particularly important with burial grounds, where early consultation and listening to views on religion and science are part of an ethical approach.

Stepping outside the world of HS2, early community engagement could benefit archaeology more generally. The practice of planning, generating, measuring and communicating public benefit could be improved through the application of frameworks for evaluation (such as the *Magenta Book* or HLF evaluation guidance) that ensure public benefit is designed into projects from inception, and can be properly demonstrated at the end.

We would welcome opportunities to discuss any of the issues raised or talk about HS2 community events and activities in the Midlands. Burial archaeology ethics will be explored further at the HS2 session at this year's Theoretical Archaeology Group Conference.

Mary Ruddy

Mary is technical lead for Park Street burial ground for the WSP Cultural Heritage and Archaeology team. Previously, Mary was Museum of London Archaeology's Head of Osteology and Environmental Services until 2017 and played a part in major projects such as Crossrail's New Churchyard at the Broadgate Ticket Hall, Three Quays Wharf and Deptford Royal Dockyard.

Her underpinning interests are in Quaternary science, geoarchaeology, Holocene environmental change, river evolution and reconstructing past landscapes. Mary appreciates the importance of supporting stakeholder and community engagement, and volunteers with the Coastal and Intertidal Zone Archaeological Network (CITiZAN) and in schools.

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Advisory Panel on the Archaeology of Burials in England (APABE) 2017 *Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England*, second edition

Links

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/642655/hs2_phase_one_historic_environment_research_and_delivery_strategy.pdf
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St James's Burial Ground delivering lasting learning

Caroline Raynor MCIfA (9008), Project Manager and Principal Archaeologist, Costain Skanska JV



Archaeological staff using iPads to carry out digital recording on site. Credit: C Raynor Costain-Skanska JV



As infrastructure projects in the UK increase in size and scope, archaeological excavations equally increase in size and complexity. The enabling works for Euston Station, London, and particularly the work at St James's Burial Ground, are an excellent example of this.

Opened in 1789 and closed in 1853 due to the Metropolitan Burials Act, the site originally spanned 15,000m² and is believed to have received up to 61,000 burials. The expansion of Euston Station in the 1870s had a significant impact on the site, removing most of the paupers' ground, reducing the site to 11,000m² and potentially removing up to 20,000 burials. Despite this reduction in size, this is still the largest excavation of a post-medieval burial ground undertaken in the UK.

HS2's legal commitments, articulated in Schedule 20 of the High Speed Rail Act (London to West Midlands) 2017, the Heritage Memorandum, and the Historic Environment Research and Delivery Strategy (HERDS) set clear standards and requirements and provide the framework within which our archaeological excavations are delivered. <https://www.gov.uk/government/publications/hs2-information-papers-environment>. A legal undertaking with the



Images of the LEAN drying room, processing and storage facilities. Credit: Credit: C Raynor Costain-Skanska JV



Church of England underpins the approach to burial grounds on the project.

Principal contractor Costain Skanska JV (CSJv) recognised that a task of this magnitude and complexity would require planning and management beyond that usually applied to burial ground excavations.

The HERDS aims to deliver outputs that generate a meaningful legacy, including learning about the practice of archaeology itself. The design of this project included the testing and delivery of new processes for delivering archaeology as a project output.

These would be delivered through applying engineering and construction know-how to traditional archaeological activities. CSJv focused on making improvements to safety, efficiency, and archaeological recording methodology in the burial ground. Two of these are illustrated as brief case studies below.

Post-excavation processes

The scale of the works gave CSJv cause to re-assess the way in which the handling, processing and storage of cultural and skeletal remains is carried out. At the peak of

work in St James's Gardens there was the potential for up to 138 burials per day to be excavated and removed for archaeological assessment. Care, dignity and respect for the assemblage, as well as security and integrity, were paramount. A four-stage archaeological facility (pre-store – wash – dry – assess – store) was established using the basic principles of LEAN, a process of identifying and eliminating waste (time, resources, activities or material) to streamline activities ensuring net gains in efficiency, productivity and safety.

It was determined that the facility should promote a positive working environment for the archaeological team. Often space for archaeological processing is not included at the early stages of project design. This can lead to sub-standard facilities without adequate capacity, tools and equipment. CSJv determined that simple design considerations such as anti-fatigue flooring, archaeology-themed images, and a radio increased the team's well-being and improved morale.

Capacity for the facility was based on process mapping, where information about peak flow rates informed the design of each work area. Shelving and workstations were ergonomically designed, with shelf heights set to the fifth centile measurement of a UK

female to mitigate the use of step ladders or ad hoc working at height (particularly important where the team was 43 per cent women). Tooling was also implemented to reduce any musculoskeletal issues that might arise from repetitive activity. Ergonomic brush sets were deployed in the wash bay and grab tools were used in the drying rooms to prevent over-stretching when collecting artefacts from shelves.

During ten months of archaeological assessment and finds processing (equivalent to over 4800 person hours worked) there were no reported health, safety or wellbeing incidents within the processing facility.

Digital recording

The investigation of the burial ground should have resulted in thousands of context sheets, photographic record sheets and scale drawings. MOLA Headland Infrastructure expressed a clear interest in delivering the project digitally. The GWSI-HERDS stipulates 'the development of a highly accessible and outstanding archival legacy' with 'provision for the use of digital technology in order to aid decision-making, communication to interested parties and dissemination of ideas.' Developing a fully digital system is a significant step for the industry, where the drive towards digital has been underway for some time. This reflects the desire to improve efficiency and quality in recording and expedite the sharing of data with third parties, including academic groups and local communities.

CSjv, supported by MOLA Headland Infrastructure, applied for HS2 Innovation Industry Partnership (I3P) funding. A grant of £212,000 was awarded to ensure that a full suite of digital recording could be carried out using iPads. The system was designed to be compliant with current Historic England requirements but is flexible and can be modified to accommodate changes. Mandatory fields, drop-down boxes and an integrated photo app ensured an increase in the quality and completeness of recording. The iPads were managed by a dedicated team to ensure protection, performance and longevity, with synchronisation to a UK-based server taking place daily to manage data security. A 2 per cent hardware failure rate was recorded during the ten months of excavation; a positive indicator that technology in archaeology is not only possible and highly effective but more sustainable than many would have previously thought!

Conclusion

The combined outputs of the activities described above fed on site into a high-performing interdisciplinary culture, and a team working towards shared objectives and values built around archaeology.

Using the LEAN process on site and within the labs ensured the protection of the integrity of archaeological data. It has delivered efficiency and value for money while improving the safety and wellbeing of the site teams. Osteological data was gathered quickly, efficiently and shared in real time with on-site teams to improve the site mitigation strategy and identify new HERDS objectives. Learning gained from applying these new processes, as well as about the site itself, was shared weekly with the wider site team, including construction and

engineering disciplines, to increase the understanding of the value that archaeology brings to projects.

The digital recording generated an estimated 10 per cent increase in the speed of on-site recording and has improved the quality of recording, as well as allowing immediate data share to a wider group of specialists. Training and Equality, Diversity and Inclusion (EDI) benefits were also realised as the digital system aided those with visual impairments and dyslexia. This system also generated sustainability benefits with an estimated 17,560 pieces of paper being saved (the equivalent of two whole trees!)

These approaches can be applied to sites other than burial grounds and mark a significant change in the way large archaeological sites are managed.



Archaeological staff using iPads to carry out digital recording on site. Credit: C Raynor Costain-Skanska JV

Caroline Raynor

Caroline is Construction Project Manager and Principal Archaeologist for the Costain Skanska Joint Venture on the HS2 Enabling Works at Euston. She has a particular interest in uniting the fields of archaeology and engineering.



STANDARDS IN ARCHAEOLOGY

Kate Geary MCifA (1301), Head of Professional Development and Practice, ClfA

The Southport report (2011) set out a vision for ensuring quality which stated that

work should be led by accredited experts working to a full range of agreed professional standards for types of work and their products, and that the standards and guidance would be readily available, consistent and framed in the relevant language to support and inform professional judgements on what is proportionate and reasonable, placing greater emphasis on professional implementation over reliance on local authority monitoring of work.

Since 2011 discussions have continued about how that vision might be achieved. The idea of placing greater emphasis on professional implementation, in the face of diminishing local authority resources, has occasionally proved controversial. Taryn Nixon's review of the Southport recommendations in 2017 concluded that *'the standards and guidance now in place represent the most robust infrastructure we have yet had'* but noted that *'where the sector seems weakest is in ensuring consistent commitment to standards, and in ensuring that sufficient training and familiarisation has taken place right across organisations'* and identified *'a reluctance to specify the use of accredited expertise'* as a barrier to achieving the vision (Taryn Nixon, 2017, *What about Southport?*).

A frequent criticism of ClfA is that it lacks 'teeth': the ability, or willingness, to take action against accredited individuals or Registered Organisations whose work or behaviour may have fallen short of the standards required by ClfA's *Code of conduct*, *Standards and guidance*, or policies. Enforcement, however, as any local authority archaeological advisor knows, is just the tip of the iceberg. Professional bodies should, and do, enforce compliance with standards through their professional conduct processes but the majority of their work in support of high standards (and thereby, the delivery of public benefit) goes on behind the scenes: developing guidance to support published standards, training to ensure the

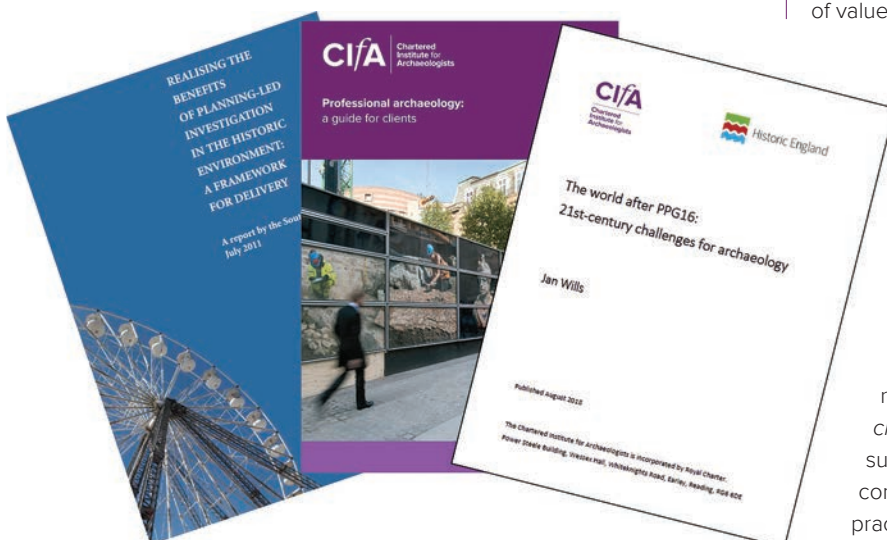
appropriate skills are available and providing advice to ClfA professionals facing specific issues in their work.

In a self-regulating profession, standards are not issued from 'on high'. They are defined by the profession itself, based on a shared understanding of what constitutes good practice, in order to deliver public benefit. Issues arise where there is a lack of shared understanding of, or commitment to, the mechanisms by which the profession can specify, promote, support compliance with, monitor and enforce its own standards.

The vision in the Southport report for a *'greater emphasis on professional implementation over reliance on local authority monitoring of work'* did not envisage professional bodies taking over the role of monitoring planning-led archaeological work from local authority advisors. Their role is crucial, under-resourced and requires vigorous defence in the face of ongoing cuts to local government services. Rather, it is based on the notion of **professionalism**, defined not by whether you get paid for your work, but by a personal and organisational commitment to undertake work to a high standard, in the public interest. For this to work requires a cultural shift away from compliance by enforcement (I adhere to standards because I might be sanctioned if I don't) towards a greater emphasis on individual commitment to upholding professional standards, and greater understanding of how they underpin the concept of value for the client *and* the public. It also requires much

more effort to explain the value of archaeological work to clients and why it is in their interest to use professionally accredited archaeologists.

The third 'pillar' required to achieve the Southport vision is a strong collaborative relationship between the various bodies with responsibility for setting standards, providing guidance and monitoring quality, based on mutual understanding and reinforcement of each other's roles. Feedback from the recent *21st-century challenges for archaeology* project, and elsewhere, suggests that the current landscape can appear confused and overcrowded, making it difficult for practitioners to navigate and understand.



From Southport to *21st-century challenges* to the workshops looking at the structure, funding and delivery of archaeology in Scotland on behalf of Scotland's Strategic Archaeology Committee, it's apparent that we haven't yet achieved the culture of confident professionalism and clear articulation of standards, quality and public benefit that the sector aspires to. But good progress is being made and there needs to be far more promotion of case studies and examples of good practice and leadership to illustrate what can be done. The list below outlines some of ClfA's recent and ongoing work to revise and update our Standards and guidance. More detail about these are on the ClfA website at www.archaeologists.net/news/projects-update-1573038615

- **Building capacity through innovation** – in partnership with the Association of Local Government Archaeologists (ALGAO), this project will identify barriers to innovation.
- **Mapping the sector** – jointly run by ClfA and ALGAO, this project will map the archaeology sector to better understand its structure and needs in relation to the provision of specialist advice.
- **Developing a finds reporting standards toolkit for grey literature** – initiated by the ClfA Finds Group, this project will produce a Toolkit to improve standards in finds reporting, in line with recommendations from the *Review of the standard of reporting on archaeological artefacts in England* (Cattermole 2017) <https://www.archaeologists.net/publications/reports>



Slide showing how standards and practice evolve

- **Re-imagining Scottish archaeology: structures, delivery and funding** – working on behalf of Scotland's Strategy Archaeology Committee, we held three workshops aimed at generating new ideas about the structure, funding and delivery of archaeology in Scotland <http://archaeologystategy.scot/>
- **Digital archives in archaeology** – ClfA is inputting into the DigVentures project to develop guidance for anyone working with digital data in archaeological projects. <https://digventures.com/projects/digital-archives/>
- **Write here! Write now!** – working with Historic England and others, we have outlined revisions to the Standards and guidance for field evaluation and for watching briefs to address issues of compatibility and comparability identified as part of synthesis projects.



Bruce Mann speaking at the ClfA desk-based assessment workshop in Edinburgh. Credit: ClfA

So, archaeology isn't just about digging holes?!

Taking part in an eight-week summer placement at ClfA

In July 2019, Natalie Olembó joined us on an eight-week placement as part of the Historic England Heritage Training placements specifically for individuals of Black, Asian or Minority Ethnic heritage.

These placements form part of Historic England's strategy to make sure the heritage workforce properly represents the UK population, and were offered in a variety of roles from collections care to visitor operations, from marketing and PR to graphic design.

In this article, Natalie shares her experience of her time with ClfA and induction into the world of professional archaeology.

The roof terrace at the Historic England office in London. Credit: Natalie Olembó



When I applied for my placement, I knew nothing about archaeologists other than they dug holes in the ground. What attracted me to the placement was the opportunity to broaden my understanding about a sector I had little knowledge of and to be involved in two projects that echo some of the interests and passions that I have.

Two words to describe my first few days at ClfA were 'information overload'. I had to get my head around how ClfA operates as a professional body and learn about what

archaeology really was – it's not just digging holes in the ground!

The two projects outlined in my placement brief were a careers information project and developing a ClfA 'ambassador' scheme. The careers project was a research-based task with the goal of identifying ways that ClfA can promote study and careers in archaeology effectively and to a wider audience. The second project, developing an ambassador scheme, focused on gathering information on how ClfA currently communicates with its

membership and seeing if there are any ways that ClfA can ensure that not only is information being distributed effectively within the membership but it is also being understood. Alongside this I attended various meetings with different staff members to fully understand what ClfA is truly about.

Throughout both projects one thing that I came to appreciate was the autonomy I was given during my time here. While I knew that the help was there if I needed it, the fact that I had full autonomy over the content of the projects and how I completed them meant that I was able to understand what ClfA does for myself. There is an importance in forming your own understanding of things, as it allows you to grasp concepts that were foreign for you. Furthermore, I was able to express my own opinions on certain matters and this can be clearly seen in the three blogs I wrote for the Institute, which give my take on certain areas of ClfA and archaeology: <https://www.archaeologists.net/NatalieOlembó>

I have come away from my placement with two key points of understanding about professional archaeology. The first is recognition of the massive potential archaeology has. I was surprised to find out that in archaeology as an undergraduate you can go for a Bachelor of Arts or Bachelor of Science. The versatility that archaeology has is incredible. When choosing my degree, I wanted something which would mean I could go down any career path that I wanted. If I had known about how versatile archaeology was, I would have considered taking it as part of my undergraduate studies, which is why I cannot stress enough the importance of archaeology marketing itself as this versatile study. The analytical skills through to the skills needed to present information in a coherent way, which archaeology offers, are valued by employers. Getting people to understand the value that studying archaeology can bring will mean people start seeing the value it has within society and why it's important.

The second key point is the need for effective promotion. Without people understanding how archaeology affects their daily lives they are unlikely to go out of their way to research or understand what is involved in archaeology. So, it's down to those within the profession to promote what archaeology does. For ClfA this is through its advocacy work and collaborating with various organisations within the heritage sector to promote the importance of archaeology and heritage. But for day-to-day archaeologists, this can be reaching out to



Natalie reviewing questionnaire responses as part of her project research. Credit: Anna Welch, ClfA

communities and trying to increase the visibility of archaeology. At secondary school, we never had someone representing archaeology or heritage come and speak to us about the profession and after the axing of archaeology as an A-level it means that archaeology has disappeared altogether from schools.

By promoting the work that you do as an archaeologist on your social media or taking an opportunity to go into schools and talk about what you do will help in making the sector visible.

The experience at ClfA has been invaluable. Not only did I learn so much about a sector that I never knew about, but I also learnt more about myself and what I want out of a career in the future. The opportunities to go and sit in various meetings and see the passion that people have for their profession has shown me why doing something you love, no matter how difficult, is important. Huge thanks to my mentors Anna Welch and Kate Geary, who have helped me every step of the way, and also to every single member of staff here at ClfA for welcoming me in and allowing me to tag along to meetings, and for taking the time to speak and help me with my projects.



Chris Elmer teaching one of the Southampton Young Archaeologists to use a level. Credit: Alex Walker

There is an importance in forming your own understanding of things, as it allows you to grasp concepts that were foreign for you.

Welcome, ClfA Australia



Pilbara, Western Australia. Credit: ClfA Australia

In February 2019 the ClfA Board of Directors voted in favour of forming the ClfA Australia Group (ClfA Australia). This Group consists of likeminded individuals who work in Australia, have worked in Australia, are Australians working in the UK, or are other ClfA members from the UK and around the globe with an interest in Australian archaeology. ClfA Australia is like any other Area Group or Special Interest Group within ClfA and welcomes participation from any individuals or groups who would like to be involved. ClfA Australia is keen to work alongside other ClfA Groups to collaborate, compare, and share how our profession works in these different regions.

Australia has one of the longest living cultures on earth, with evidence of Aboriginal occupation dating to 65,000 years ago. Australia is not only an important place for comparatively recent archaeology concerning the European colonisation of the country, but thousands of generations of Aboriginal societies and cultures that continue today.

Australia became home to many convicts transported for crimes in their home countries of Canada, British overseas colonies, and of course England, Ireland, Wales and Scotland in the early 19th century. Australia also became home to many free settlers as well as those soldiers who fought during the Napoleonic Wars, spanning the Peninsula Campaigns, and later, veterans from the Battle of Waterloo. Architecture, agriculture and industry thrived

in the colony, and Australia soon became one of the leading overseas colonies of the British Empire. Australia has a history of interaction with other parts of the world, including Indonesia, China, Spain, France and the Netherlands.

Today, the archaeology of Australia largely focuses on the broad themes of Indigenous archaeology and historic archaeology, on land and underwater. These themes promote specific aspects of Australia's history, but also overlap and show fascinating narratives of cultural interaction. Australia also has many impressive industrial sites, where the developments seen in industry were introduced to Australia at the height of the Industrial Revolution in Britain and adapted to perform in the vastly different climate.

ClfA Australia is committed to promoting archaeology as a positive, sustainable and financially viable career for student and career-level archaeologists. ClfA Australia will help to enhance archaeology in Australia; create a professional standards framework for archaeological practice; represent the views, aspirations and professional requirements of its members and campaign for improvements in archaeological practice in Australia. ClfA Australia will strive to increase the professionalism of Australian archaeology and ensure the respect and longevity of the profession while working collaboratively with other archaeological associations and organisations within Australia. The Group will work towards improvements in Indigenous Australian engagement in the archaeological profession and work alongside Native Title groups and Indigenous Australian organisations to ensure archaeological compliance with the ethical concerns of Aboriginal communities.

ClfA Australia will serve as a platform to provide a voice for its members in matters associated with Australian archaeology to the ClfA Board of Directors and advise ClfA on issues relevant to the Australian practice of archaeology and cultural heritage management.

If you are interested in joining, or would like to know more about ClfA Australia, please feel free to contact us at groups@archaeologist.net.au



Convict Probation Station, Tasmania, Australia. The probation system was a form of punishment and discipline introduced to Tasmania (then Van Diemen's Land) in 1839 as a form of government road gang. Probation stations were built to hold prisoners, soldiers and overseers building roads and networks around the colony. Credit: ClfA Australia

Samuel Dix MCIfA (8450) Chair, ClfA Australia

Samuel is currently completing his PhD in Contact Archaeology through Griffith University, Gold Coast, Queensland, Australia after receiving the Australian Research Council Laureate Scholarship to undertake these studies. Before this, Samuel worked as a government archaeologist, working on legislative reform, compliance investigations and providing expertise advice to ministerial departments in heritage-related matters. He joined ClfA in 2015 as ACIfA and upgraded to MCIfA in 2019. Samuel has worked throughout Australia in both government and consultant archaeology roles and has taught archaeological practice at different universities around Australia. He has also worked in the UK, Middle East and Africa on different archaeological projects.



Dani Wilkinson ACIfA (10109) Secretary, ClfA Australia

After completing her Master's in Maritime Archaeology at Flinders University of South Australia, Dani worked as a maritime archaeological consultant in Australia with Cosmos Archaeology. In her six years there, Dani completed projects in NSW, QLD, NT, VIC and WA. She then moved to the UK in 2018 and is currently a Project Manager in the Coastal & Marine team of Wessex Archaeology. Dani joined ClfA in 2018 and is also Chair of the ClfA Marine Archaeology Special Interest Group. She maintains an interest in Australian archaeology and continues her involvement as Vice President of the Australasian Institute for Maritime Archaeology.



Myfy Berry PCIfA (10191) Acting Treasurer, ClfA Australia

Myfy Berry completed her archaeological undergraduate degree at the University of Queensland in 2018. She has participated in both domestic and international excavations and has a keen interest in palaeopathology. Myfy joined ClfA in 2018 and has been involved in the development of ClfA Australia since its infancy, and is now a PCIfA and a committee member. Myfy will undertake postgraduate studies within archaeology in 2020.



Talei Holm

Talei is a recent graduate of the Australian National University, having gained a Bachelor of Archaeological Practice degree. She is currently undertaking a Graduate Diploma in Archaeology and Heritage Management at Flinders University while working as a sub-contractor in Sydney.



BRITANNIA ARCHAEOLOGY: TRAINING AND DEVELOPING VOLUNTEERS AT THE AYLSHAM ROMAN PROJECT

Martin Brook BA (Hons) MCIfA (5157), Director, Britannia Archaeology Ltd

In August 2019, professional archaeologists from Britannia Archaeology (BA) and amateur community archaeologists gathered in a field outside the town of Aylsham in Norfolk to begin a brand-new season of excavation. The field is part of a series of parcels of land owned by Mr Peter Purdy, the founder and director of the Aylsham Roman Project (ARP).

The ARP is a community-orientated organisation whose aim is to explore and preserve the archaeology and history of the recently discovered multi-phase settlement at the site. The goal is to involve the local community at every possible stage, while also maintaining a professional approach both to the excavation of the site and the publication of the findings.

BA help to organise, advise and train volunteers taking part in the project. Through months of close planning between BA and the ARP for each season, all aspects of the upcoming excavation areas are decided as well as organisation of additional specialist days, and visits from local schools, history groups and other professionals.

One of the key aims for the project has always been the training and development of the volunteers that attend the excavation each season. The volunteers can take part in all aspects of the archaeological work, from the excavation of features through to planning and completion of context records. All this is done under the close supervision and guidance of BA, applying the same standards that would be applied to professional work.

ARP's first excavation season was undertaken in August 2016. An earlier evaluation of the site had defined the location of a probable Roman kiln and several associated features. The excavation area encompassed these and other anomalies that were shown in the preceding geophysical survey. The excavation was successful in locating and excavating two Roman kilns, associated rake pits, a waste pit and several smaller features possibly pre-dating the kilns.

Since this first season multiple new areas have been opened, targeting areas of interest and expanding on areas already excavated. The work has gone on to identify archaeological features ranging in date from the Bronze Age through to the post-medieval period. A key excavation area in 2018 identified the presence of 11th/12th-century

The goal is to involve the local community at every possible stage, while also maintaining a professional approach both to the excavation of the site and the publication of the findings.

enclosures and possibly structural remains. Due to the presence of the Roman pottery production industry on the site, the number of finds recovered has been understandably high, with a 100 per cent retention policy in place. Currently over 30,000 individual finds have been processed ready for examination by the appropriate specialist.

The volunteers and members of the project are involved at every step. Initially a group of about 30 signed up to take part in 2016. Now, in the most recent season, this has grown to over 90 people and the project saw a daily footfall of up to 170 visitors.

The project is open for all to take part, no matter their level of archaeological experience. BA has developed a training system that helps to ensure that every person who turns up to either dig, wash finds or help survey is given the relevant training and tools to assist in their development. The project has seen many returning individuals who have gone from no experience in 2016 to now helping to train and supervise volunteers in 2019.

All development can be tracked on a specially designed PDP document and training log based on the CfA system. Members of the project who had no experience have now gone on to apply for courses and other projects using the PDP as a basis for their application. The project has also served as a training system for undergraduates, with students from multiple universities visiting and working with BA to gain valuable fieldwork experience; some have gone on to gain employment in other archaeological units and institutions.

The coming season will be no different; plans are already well underway for the year's excavation areas, tasks and training activities. Above all, everybody involved is excited and enthusiastic to begin revealing more of this multi-phase site.

More information on the Aylsham Roman Project can be found at <https://aylshamromanproject.com/> and Britannia Archaeology's website <http://www.britannia-archaeology.com/>



Martin Brook with a young volunteer in the children's excavation area. Credit: Kevin Myhill



Volunteers excavating Roman enclosure ditches in 2019. Credit: Britannia Archaeology Ltd



Volunteers after completing 30 test pits in area under evaluation. Credit: Britannia Archaeology Ltd



All the finds processed by the volunteers at the end of day 1 of the 2019 season. Credit: Britannia Archaeology Ltd



Member news

Mark James MCIfA (6293)

Mark is the Technical Director of MSDS Marine, a specialist marine archaeological contractor based in Derbyshire. MSDS Marine undertake a wide range of archaeological works, from input into large-scale offshore developments to underwater archaeological excavations. Mark's interests lie with geophysical survey and data interpretation and the management of archaeological diving projects. Mark is the UK project manager for the Rooswijk excavation on behalf of the Cultural Heritage Agency of the Netherlands and Historic England, and MSDS Marine are the retained archaeologists for several significant offshore windfarms.

With MSDS Marine going from strength to strength and Mark having worked consistently at a senior level for several years, his upgrade from ACIfA to MCIfA is long overdue. MSDS Marine recently gained ISO 9001 and 45001 accreditations and it was a perfect time to ensure all staff ClfA accreditations at MSDS Marine were updated to reflect the level at which they work and the high standards they aim to achieve.



Mark James. Credit: Mark James

Archaeology Podcast Network celebrates five years of success

Tristan Boyle, Affiliate (8120), co-founder of the Archaeology Podcast Network

The largest collection of podcasts dedicated to talking about the past marked its fifth year by releasing extra content each day in December 2019. The network, set up in 2014, has increased from three to eleven active shows and hundreds of back episodes from discontinued podcasts. Tristan Boyle explained: 'The network has gone from strength to strength over the last number of years, expanding and creating content for a diverse range of audiences.' It is not just for experts: 'even though some of our shows are geared towards professionals, we have shows like the Archaeology Show, which is for a general audience.'

The APN looked back at the last five years and selected information on how individual shows got started and how the hosts felt about being on the network. The hosts come from a variety of backgrounds including zooarchaeology,

Indigenous heritage and community archaeology, and talked about how they brought their stories and skills into their podcasts.

The APN began with The CRM Archaeology Podcast, The Struggling Archaeologist's Guide to Getting Dirty and The Anarchaeologist podcast, when Tristan and Chris Webster teamed up to create a platform for voices in archaeology. 'No one had tried to bring all these shows together before,' explained Chris. 'By sharing resources and engaging with each other, we have been able to build up our content and make it available for a larger audience.'

The network is primarily member-funded and has tiered subscriptions for supporters. The anniversary content is available on archpodnet.com and through all good podcast apps.

Please contact tristan@archaeologypodcastnetwork.com for more information.

Obituary

A tribute to Theresa O'Mahony, Affiliate (8664)

David Connolly MClfA (7057)

On 22 September 2019 many of us mourned the passing of a friend, archaeologist and a passionate campaigner for Enabled Rights in Heritage – Theresa O'Mahony.

At the time of her passing, she had been preparing the next steps for the newly formed charity **Enabled Archaeology Foundation**, born out of her unwavering belief that people with dis/Abilities had the same rights to engage in heritage pursuits, including field archaeology, as anyone else. I had been proud to accept Theresa's offer to be the first chair of the Board of Trustees for her foundation and alongside other like-minded individuals we banded together to support this remarkable woman and the cause she championed so fervently.

Theresa was a tireless activist for enabled archaeologists, advocating their rights against what she perceived as the culture of exclusion in professional archaeology. She fought hard for others, putting everything into what she did and never shying away from the next challenge.

I first met Theresa in 2014 at the University of Edinburgh at an archaeology seminar and witnessed the full force of her character and passion. She berated the panel (myself included) for our lack of understanding of the barriers to dis/Abled or enabled people in pursuing archaeology as a career, and the absolute inaction in counteracting the problem. I entirely shared her beliefs and approached Theresa after the seminar. Following some challenging but enlightening discussion, she agreed to organise her thoughts on **Enabled Archaeology** in a positive and creative way. The result was the *Guide to Enabled Archaeology* published on BAJR in March 2015, which presented Theresa's case for the employment and inclusion of archaeologists with all kinds of dis/Abilities in archaeological fieldwork. From this moment, the ideals that she stood for began to be supported by many, giving Theresa the strength to continue her fight in the face of sustained resistance by some doubters.

Theresa raising awareness about the barriers to dis/Abled or enabled people in pursuing archaeology as a career. Credit: Suzanne Taylor



Theresa O'Mahony

Theresa was a forceful character, who never hid from difficult conversations and never doubted her purpose, though it often hurt her in the process. As a real and lasting tribute to Theresa's unwavering spirit, we must continue the fight that she began in order to ensure that the shortcomings of archaeology and heritage-based companies are challenged. As Theresa rightly pointed out, archaeologists and companies alike should show, by deeds and not just words, that they are prepared to be as inclusive.



From humble beginnings, as the result of the direct and stubborn actions of a single woman, the scope and support of the Enabled Group/Campaign has grown exponentially to encompass all those who felt marginalised or excluded by those of us who should know better. It is the responsibility of all of us to ensure that Theresa's legacy is not forgotten.

Through her determined pursuit of the goal she invested so much energy and effort in, Theresa affected the lives of many, serving as a source of inspiration and support. I believe that these individuals should be given the opportunity to express how much Theresa meant to them and their memories of her. Here are just a few examples:

'She was an amazing woman, and for that we can be grateful, she stood up for what she believed in, and this legacy will continue.'

'Theresa has so much to be proud of. She has left behind a legacy of kindness, love, acceptance, and inclusivity.'

'The photo of me and Theresa was taken on the first day of the TAG conference in Chester, December 2018. She was so joyful that day as you can see in the photo. I am so glad I took that selfie of us. The photo is so precious to me.'

'I first met Theresa at the EAF conference and was left with what I call "The Theresa Effect". Quite simply her sheer passion, determination and resolve to find equality for us all transfixed me that day and spurred me on to believe in myself and my abilities.'

'I find myself smiling when I think about her, her passion, her persistence, her brazenness at taking no excuses, her courage in challenging so many status-quo's. I am, like my colleagues, so incredibly proud to have known her.'

'Long before we even met her, she had impressed us with her passion, commitment, determination and drive to right some of the wrongs she had experienced herself, and allow others to share her love of archaeology.'

As these excerpts testify, her passion for archaeology and for dis/Abled archaeologists' cause was astounding and inspiring. She never looked for special treatment, trite comments or pandering words, but strove to see and create real change. In one of her last posts, she wrote: *'Again I face not knowing if I will live or die in the archaeology I love. I may face death, if so, let it be; but dis/Abled enabled archaeology voices will not die. Mine may cease and become silent, invisible, no longer heard nor listened to, which is agonising. But what is a strong and massive comfort to me is that I know enabled archaeologists will still be a voice for a group ... contributing to the archaeology we all love.'*

Theresa will never be forgotten by those she helped and inspired. My heart goes out to her family, as I am sure it does from all of you who knew her. Farewell to a dear friend and passionate enabled archaeologist, until the next time ...



Photo of Suzanne and Theresa taken on the first day of the TAG conference in Chester, December 2018. Credit: Suzanne Taylor

You can visit the Enabled Archaeology website here <https://enabledarchaeologyfoundation.org/> and read Theresa's *Guide to Enabled Archaeology* here http://www.bajr.org/BAJRGuides/41_Enabled_Archaeology/41EnabledArchaeology.pdf

Theresa O'Mahony BA (Hons) MA Public Archaeology, UCL alumna; dis/Ability consultant specialising in contemporary dis/Ability in archaeology; Founder of the Enabled Archaeology Foundation, inclusive for all people with or without dis/Abilities in archaeology.

New members



Member (MCIfA)

10787	Claire Cogar	8346	Stewart Hawthorn
10483	Louise Davies	10819	Barry Hennessy
10667	Dan McConnell	10836	Thomas Houghton
9359	Jim McKeon	10855	John Joyce
10882	Ben Moore	10777	Paul Lincoln
10778	Patrizia Pierazzo	10734	Charlotte Loy
10852	Paul Riggott	10804	Joel Marquez Rodriguez
9993	Rhonda Robinson	9803	Csenge Markus
10888	Antony Walsh	10781	Patricia Martinez Silvan
		10723	Angus Milne
		10747	Kimberley Nash
		10823	Bruna Pelegrin i Garcia
		10724	Clare Powell
		10719	Svenja Pohl
		10687	Benedict Redclift
		10820	Theodore Reeves
		10716	Alessandra Rossi
		10822	Valeria Tiezzi
		10881	Frances Wildmun
		10736	Lee Yeung
		10713	Harold Young

Associate (ACIfA)

10850	Joseph Groarke	10755	Mark Adams
10864	Jamie Henderson	10867	Shay Barkham
8744	Robert Lenfert	10740	Joseph Beeching
10735	Adam Lodoen	10738	Rosemary Burton
10720	Andrew Macintosh	7322	Emily Carroll
10768	Anne-Aymonne Marot	10869	Bobbie Carter
10853	Kamil Orzechowski	10770	Sarah Cheng
10870	Neil Parker	9033	Rory Coduri
10750	Alison Roberts	10785	Rowena Creagh
10851	Denis Sami	10877	Maria Durkin
10717	Catherine Sinnott	10769	Kristian Evans
		10763	Matthew Fish
		10727	Stephen Fritsch
		10902	Sue Fursey
		10771	Nicola Fyfe
		10840	Patrick Gavaghan
		10899	Marie-Clare Gilbertson
		10814	Marianne McLeod Gilchrist
		9957	Peter Guest

Affiliate

Practitioner (PCIfA)

10585	Chloe Brownlee-Chapman	10772	Julia Hall
10802	Samantha Brummage	10845	Thomas Hough
10875	Marco Capardoni	10806	Jennifer Hulse
10746	Isabella Carli	10838	Alexis Ironside
10725	Katy Castle	10816	Ashley Kruger
10821	Cameron Cleaver	10830	Flora Lake
10185	Emma Cooper	10760	Lillian Maguiness
10737	Kathryn Davidson	10872	Perry Mesney
9512	Rene Javier Della Canonica Fernandez	10837	Andreas Moritz
10714	Genoveva Dimova	10774	Carrie-Ann Murray
10766	Niomi Edwards	10764	Sophie Norton
10803	Owain Ellis	10810	Kristen O'Connor
10783	Jaime Grant	10761	Natalie Olembo
9696	Sam Griffiths	10896	Jordan Paddison
		10815	Sadie Powell
		10887	Keith Rasor
		4639	Lorna-Jane Richardson
		10721	Andre Schuerger
		10722	Eva Carmen Szabo
		10825	Wendy Thompson
		10904	Raven Todd DaSilva
		10824	Marina Vatylioti
		10813	Maria de las Angeles Vazquez Martinez
		10758	Rosa Volpe
		10868	Olivia Watt
		10775	Miriam Weinbren
		10753	Hannah Wells
		7695	Helen Wilson

Student

10752	Lee Adams	10883	Georgina Cole
10805	Dominic Allen	7258	Kelly Corlett-Slater
10742	Jack Blackett	10773	Robert Cummings
10754	Guido Bowen	10848	Claudette Day
10751	Thomas Brown	10797	Saskia Edwards
9821	Elissia Burrows	10901	Evelin Eros
10807	Suzanne Butler	10812	George Ferguson
10801	Josephine Cavaliere	10895	Ines Ferjan
10898	Antonios Chaliakopoulos	10831	Guy Forster
10827	Jonathan Charmley	10757	Emilia Franklin
10791	Thomas Cloherty	10818	Joseph Ryan Gilkes
		10703	Emma Goss
		10905	James Harris
		10878	Keith Harvey
		10880	Julie Holmes
		10832	Jessica Hooley
		10739	Hsin-Yu Hu
		10884	Adam Hussey
		10900	Powell Le Feuvre
		10879	Alfie Leek
		10776	Ronald Macdonald
		10793	Panagiota Markopoulou
		8602	Robert Martin
		10794	India McDermott
		10828	Sarah Miles
		10847	Aishwarya Misra
		10826	Kathryn OConnell
		10885	Maria Nefeli Papaioannou
		10759	Gareth Pearce
		10795	Aarathi Prasad
		10844	Daniel John Proven
		10789	Lauren Reid
		10865	Emma Richard-Tremeau
		10829	Daniel Schlather
		10811	Sally Smart
		10871	Linsey Smith
		10790	Danielle Taylor
		10767	Aikaterini Vavaliou
		10817	Lynda Walker
		10886	Ann Wildman
		10756	Stephen Williams
		10741	David Willis
		10798	Amelie Wiseman
		10846	Siena Wood Hutton

Upgraded members

Member (MCIfA)

5095	Kate Bain	5748	Marie Kelleher
1442	Peter Crawley	9013	Suzanne McGalliard
8410	Liam Delaney	5233	Christiane Meckseper
7630	Joshua Gaunt	7885	Jen Parker Wooding
4993	Anthony Hanna	8697	Christina Reade
8441	Robert Hedge	8533	Nathan Thomas
6293	Mark James		

Associate (ACIfA)

6168	Rupert Birtwistle
7250	Helen Chittock
9195	Daniel Evans
10208	Loretta Nikolic

Practitioner (PCIfA)

8747	Charlotte-Elizabeth Barley
10083	Jason Summers

NOTICEBOARD

CifA2020 Promoting our profession

22–24 April 2020, Apex City of Bath Hotel, Bath
Sponsored by Towergate Insurance



At CifA2020 we will be looking to the future and asking what more we can do to promote the profession and our professionalism. Over the last decade we have defined new entry routes into archaeology and set out the career structures and competence requirements for professional archaeologists, but how can we maximise these to attract new and diverse talent and promote the value and quality of the work we do? Where can we further develop and reinforce the standards and good practice championed by the Institute to ensure we consistently understand and meet our professional obligation to deliver public benefit? And how, as a profession, can we better equip ourselves with the ethical and professional knowledge, skills and behaviours required in a changing, and challenging, environment? None of these are new concepts, but ones that we must all engage with.

There will also be CPD workshops covering the new finds toolkit; practical ways to diversify the recruitment of historic environment professionals; professional ethics; digital accessibility; and CifA Standards and guidance.

Social events will include a wine reception and networking dinner at the Bath Brew House, a buffet at Komedia, and Hippocampus (aka John Schofield) will be joining us again to DJ the disco.

Booking information, news and a full timetable of sessions can be found on our conference website: www.archaeologists.net/conference/2020

Special offers

To help Registered Organisations support staff to attend the conference we are offering a 10 per cent discount on the registration fee.

Conference bursaries

Delegates can apply for two different conference bursaries. The Hal Dalwood Bursary covers the cost of conference attendance, travel and accommodation to enable an early-career archaeologist of any age to attend the CifA conference. There is also a general CifA bursary pot to assist delegates with the cost of attending the conference. Find out how to apply for a bursary at www.archaeologists.net/conference/2020

Accessibility

CifA 2020 aims to be as accessible and inclusive as possible and we have a dedicated information page on the website <https://www.archaeologists.net/conference-accessibility>. If you would like any further information, contact conference@archaeologists.net.

OTHER CifA EVENTS

Throughout the year, CifA and CifA's Area and Special Interest Groups run a variety of CPD and training events. You can keep up to date with these via our events listing page (<https://www.archaeologists.net/civcrm/event/ical?reset=1&list=1&html=1>) ... and why not use your personal online CPD log to record your training and learning? CifA members can access this by logging into the members area of the website <https://www.archaeologists.net/members>



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