

Institution: University of Manchester (UoM)
Unit of Assessment: 29 (Classics)
<p>Section 1. Unit context and structure, research and impact strategy</p> <p><u>(a) Context and structure</u></p> <p>This UoA comprises the newly configured Department of Classics, Ancient History, Archaeology and Egyptology (CAHAE), returning 18.4 FTE research staff. During Faculty restructuring in 2018-19, the Department of Classics and Ancient History expanded to include Archaeology and Egyptology. CAHAE brings together 8 (FTE) specialists in Greek and Latin language and literature (+ one PDRA); 5.2 in ancient history; 3.6 in archaeology, and 1.6 in Greek-Arabic studies. Committed to multidisciplinary research into the ancient past in all its forms, the UoA combines breadth in time, from the Neolithic to Late Antiquity and modern reception; in space, from Britain to the Mediterranean and its hinterland including the Near East; and in genre and methodology. Our research is concentrated especially in four connected areas:</p> <ol style="list-style-type: none"> i. Classical literature (theory, interpretation; literary form e.g. epistolography): especially Bryan, Griffiths, Morello, Morrison, Phillips, Sarri, Schiesaro, Sharrock; ii. Ancient history (life-course, warfare, social organisation, science): especially Beagon, Fear, Giles, Laes, Langslow, Liddel, Mazza, Pormann, Todd; iii. Material culture (interpretation of objects; landscapes, monuments and places): especially Berg, Campbell, Giles, Thomas; iv. Critical editions, commentaries, translations, and linguistic studies: especially Kessel, Laes, Langslow, Liddel, Mazza, Pormann; Sarri, Todd. <p>Our unit facilitates collaboration among colleagues within and across these areas and interdisciplinarity in research methods (manifested in our work with Digital Humanities (DH) and our collaboration with biosciences). It supports key goals in our research strategy: to develop and foster research projects (both collaborative and individual); to produce critically and ethically-informed impact, locally, nationally and globally. We are part of the School of Arts, Languages and Cultures (SALC), one of the largest concentrations of humanities researchers in the UK.</p> <p>Our successes in this REF cycle include:</p> <ul style="list-style-type: none"> • Tripling our research income (up from £993K in REF2014 to £3.738M in the period 2014-20); • Publishing 25 monographs and edited volumes and many articles in internationally-excellent journals; • Supervising 52 FTE doctorates to completion, with 5 of them taking up academic posts elsewhere; • Producing notable impact locally (Manchester <i>Classics for All</i> [MCfA], Whitworth Park Community Archaeology Project, <i>Prehistory to Primary Schools</i>), nationally (work with Museums, work with schools and production of resources for school- and university-teachers) and internationally (heritage protection and conservation; the antiquities market). • Indications of individual recognition include Bryan's Stanford Lectures (2018), Langslow's FBA (2019) and appointment as Scholar in Residence, <i>Thesaurus Linguae Latinae</i>, Bayerische Akademie, Munich (2019), Mazza's <i>Tipton Distinguished Chair in Catholic Studies</i>, University of California at Santa Barbara (2019).

(b) Research Strategy**(i) Implementation of REF 2014 objectives**

The strategic objectives of Classics articulated in REF2014 (as UoA 31: Classics) emphasised (1) support of individual research projects, (2) development of research clusters (particularly in epistolography and epigraphy) and (3) increased grant-capture.

We have realised (1) through publication of monographs and leading-editor projects highlighted in REF2014, some of them supported by the School's *Supplementary Research Leave* scheme (SRL). These include **Griffiths**, *Children in Greek Tragedy*; **Langslow**, *Alexander Trallianus*; **Liddel**, *Decrees of Fourth-Century Athens*; **Morrison**, *Apollonius Rhodius, Herodotus & Historiography*; **Todd**, *Commentary on Lysias, Speeches 12–16*. Archaeologists integral to the newly-formed department from 2018 have finalised publications relating to several projects, including **Giles**, *Bog Bodies*; **Thomas**, *Neolithic Britain*; **Berg**, *The Cycladic and other Aegean Islands in Prehistory*. Monographs and collections published by colleagues appointed during the period include **Laes**, *Disability in Antiquity*; **Phillips**, *Pindar's Library and Untimely Epic*; **Bryan** (et al., ed.), *Authors and Authorities*.

As for (2), investment has enabled us to exceed our REF 2014 goals. In epistolography, collaboration between **Morello**, **[Gibson]** and **Morrison** (e.g. the *Cicero's Letters* conference in 2014) led to the major AHRC-funded project 'Ancient Letter Collections' (2016-21) with PDRA Sarri. The project contributed first to an interdisciplinary SALC/John Rylands Research Institute (JRRI) network *Lives and Afterlives of Letters* (2017-18), and latterly to the *Manchester Centre for Correspondence Studies* (2019-, with **Morrison** as founding co-Director). The *Centre* brings together c.30 Manchester specialists from English, History, Jewish Studies, UoM's John Rylands Library (JRL), and JRRI. It promotes correspondence studies through seminars, training initiatives, teaching and learning outcomes, and public-facing events. Events include a 2018 conference on ancient philosophical letters organised by **Bryan**, **Morello** and **Morrison**; in 2019 Sarri's JRRI-supported workshop, the *Aldine Edition of the Ancient Greek Epistolographers*, raised the international profile of the JRL collections of early printed Greek letters; proceedings will be published as a special issue of the 2023 *JRL Bulletin*. **Bryan** collaborates with Hodkinson (Leeds) on an annotated translation of the *Platonic Letters*.

In epigraphy, **Liddel** (CI), **[Low]** (CI), Pitt (CI, Athens) and Lambert (PI, University of Cardiff), collaborate on the AHRC-funded project *Attic Inscriptions in UK Collections* (AIUK: 2017-21); this has published 13 online, open-access, volumes of these inscriptions (with 8 more forthcoming) and associated material on the *Attic Inscriptions Online* (AIO) website. With **[Low]**, **Liddel** has published the Greek inscriptions from the Liverpool Museum, collaborating with **Campbell** on Reflectance Transformation Imaging (RTI). **Liddel** collaborates with Healey (Emeritus) and Turkish archaeologists to publish Greek inscriptions of eastern Anatolia. The appointment of **Laes** (co-editor of inscriptions of Grumentum) reflects investment in epigraphy.

Enhancing our capacity for (3) informed our strategic expansion into the area of material culture (see below, 2.a.i) and is already a striking success (see below, 3.a). Archaeology in REF2014 (UoA 17b) looked forward to future partnership with Classics and Ancient History and enhanced excellence in Social Archaeology (see below, under (ii): human condition and diversity of lifestyle).

(ii) Collaboration and interdisciplinarity:

Our strategy is to exploit the interdisciplinary collaboration enabled by the new department, in three key domains:

The human condition and diversity of lifestyle

CAHAE is breaking new ground in research on the different ways of 'being human' in the

ancient world: **Thomas** on Neolithic life; **Giles** on female experiences of death; **Sharrock** under the EuGeSta banner including the *Motherhood in Antiquity* conference (2014; 2020) and a conference on *Women in Antiquity* (2019); **Griffiths'** monograph on representations of childhood; **Laes** on disability studies with an international network and online hub (2.5K unique visitors in 2020), and a January 2020 colloquium with **Pormann** on intellectual disabilities. Work across the Department shares an intellectual focus on living alongside others: masculinity (**Fear** and **Giles** on martial identity; **Laes** on children and family relations); the body, trauma and disease (**Beagon**, **Giles**, **Laes**, **Langslow**, **Pormann**); humans and animals (**Beagon**, **Sharrock**, **Thomas**); humans and other forms of life (**Phillips**); ethics and their reception (**Bryan**, **Mazza**); community organisation, networks and institutions (**Berg**, **Liddel**, **Morello**, **Todd**). The ancient world is thus made meaningful by developing a long-term perspective of the ways of 'being human'.

Digital Humanities (DH)

DH methodologies are prominent in CAHAE's research culture, particularly text encoding and imaging. **Pormann's** ERC-funded team produced TEI/P5 compliant editions of 12 Arabic commentaries on the Hippocratic Aphorisms, a corpus of more than 1.5m words of previously unpublished texts. **Pormann's** Syriac Galen Palimpsest (SGP) team produced a TEI/P5 compliant critical *editio princeps* of Galen's Simple Drugs in Syriac; this was deployed in **Kessel's** Hunaynnet multilingual tool for computer-aided corpus analysis. **Pormann** initiated cataloguing projects at the JRL and JRRI, using TEI/P5 (Persian, Hebrew) in collaboration with University of Melbourne (Arabic). **Pormann's** SGP project has developed a new tool for image analysis, GalenQT, now widely used. **Liddel** (as Faculty Lead on DH) ran an international colloquium on DH in deciphering ancient texts (2018). Image capture and analysis is central to the research of several colleagues, using Reflectance Transformation Imagery (e.g. **Campbell**, **Liddel** on Greek inscriptions from Liverpool), Multispectral and X-ray Fluorescence Imaging (palimpsests and papyri: **Mazza**, **Pormann**), and Henry Mosley Manchester X-ray Imaging Facility Laboratory for both objects (**Berg**, Tyldesley, Nielsen) and human remains (**Giles**). **Campbell** uses photography to create orthomosaics and digital elevation models using photogrammetry.

Material culture

Material culture, which informs our work on the human condition and in DH, constitutes in itself a productive domain of research. In 2018 our archaeologists initiated the Manchester Centre for Archaeology and Egyptology (MCAE). Its steering committee includes **Berg** (the first lead), Tyldesley and experts in archaeological methodologies from across the University, including the Manchester Museum (Sitch), the School of Environment, Education, and Development (Woodward), and the Division of Cell Matrix Biology & Regenerative Medicine (Chamberlain). It hosts a fortnightly cross-Faculty research seminar; it organised the UKAS (UK Archaeological Sciences) conference in Manchester in April 2019; it hosted the Iron Age Research Student Symposium (IARSS: organised by **Giles**) in June 2020. MCAE contributed to the Council for British Archaeology Festival in 2020 (contributions from **Thomas**, Overton, Piprani, Nielsen).

(iii) Open Access

We are among the sector leaders in proactively developing Open Access beyond the REF Open Access Policy with internal and external support. The resources of **Pormann** (SGP; Hippocratic Amorphisms) are re-produced in other online scholarly resources here: <https://hunaynnet.oew.ac.at/> and here: <https://www.graeco-arabic-studies.org/texts.html>. **Liddel**-[**Low**] (AIUK) produce critical editions under a creative commons licence in order to facilitate text reuse. **Mazza's** 2015/16 Leverhulme Fellowship produced the Manchester Digital Library of unpublished JRL Special Collections' papyri. Sarri's 2017 monograph is open-access. **Campbell** is on the Advisory Board of the Alexandria Archive Institute, which runs Open Context, one of the largest platforms for open data in archaeology; it includes data from his Domuztepe project. All archaeology projects possess a data management strategy,

Unit-level environment template (REF5b)

involving deposit with the Archaeology Data Service, an open-access digital repository at the University of York.

(c) Future Research and Impact Strategy

Our research strategy for the next five years is as follows:

(i) To devise and promote individual and collaborative research projects and secure external funding for them. Major projects for completion in the period after 2021 have already attracted funding, including **Giles**, *Grave Goods: Boundary Objects*; **Thomas**, *Late Third- and Fourth-Millennium Ireland and Britain*; **Mazza**, *Late Antique Egypt*. Significant commentaries and editions being produced for the post 2021-period include those by **Morrison** (*Callimachus*), **Pormann** (*Al-Kaskarī, Medical Compendium*), **Todd** (*Lysias*, final volumes), **Langslow**, *Wackernagel's Unpublished Lectures on Syntax*.

(ii) To undertake research which embraces the diversity and breadth of the ancient world and its legacy, facilitated by the multifaceted research methodologies of our new interdisciplinary unit. Academic publication (including OA) and the hosting of conferences plays a major role in our *outward-facing* research culture. Our strategy for identifying and supporting collaborative research *within* the Department includes (a) an annual awayday to develop synergies and (b) a combined weekly research seminar (external speakers are expressly asked to address our broad audience). A possible new collaboration, involving colleagues from across CAHAE, includes a multi-disciplinary approach to Egypt in antiquity.

(iii) To exploit the breadth of our new department so as to enhance the impact of our research. We promote a critical understanding of our work among a wide range of external audiences. Prospective impact includes: (a) educational impact for schoolteachers and pupils (especially through our work with museums and libraries, through *MCfA* (established by **Langslow** in 2015) and the *Prehistory to Primary Schools* project (spearheaded by Cobb and Overton)); (b) promoting decolonising attitudes to antiquity through building upon our selected ICSs on heritage protection (**Campbell**) and research integrity in the preservation and publication of ancient documents (**Mazza**); there are potential synergies on museology with the Art History and Cultural Practices (AHCP) department within SALC through the School's DH and Creative Manchester initiatives.

Into the next REF cycle, our outward-facing impact culture (dedicated to social responsibility) will bolster connections with diverse audiences through different platforms. These include collaboration with local (see below, 3.b) regional and national museums and other stakeholders including the British Museum, the Science Museum and National Trust (e.g. **Liddell** on Athenian inscriptions: see below, 4.d). We will continue to support the production of open-access research-based resources aimed at transforming the public profile of the ancient past in all its forms (e.g. **Giles'** *Grave Goods* Schools teaching packs; Tyldesley's textbooks on Egyptology translated into 15 languages). Themes for ongoing development include the legacy of Greek medicine in Islamic traditions (**Pormann**) through collaborations with the *Foundation for Science, Technology and Civilisation*. Engagement through the national and local Classical Association (CA) will be a cornerstone of ensuring the impact of our classical research among a wide audience.

Section 2. People

(a) Staffing Strategy and Staff Development

(i) New appointments

Since REF2014, University investment (five new appointments and six internal transfers) in classical literature, philosophy, material culture and heritage protection has helped to create a department that foments impactful and interdisciplinary research. Our expansion into the area of material culture was initiated through the appointment of **Mazza** to a permanent

lectureship in Greco-Roman Material Culture in 2016, building on the temporary joint appointment in Roman archaeology reported in REF2014. In 2018, reconfiguration of SALC provided the opportunity to reinforce links with Archaeology still further, by incorporating two specialists in Mediterranean/Mesopotamian archaeology (**Berg, Campbell**) and two in Iron Age/Neolithic Britain (**Giles, Thomas**). This facilitates engagement with heritage management issues especially in contexts of political conflict and the antiquities trade (see the ICSs of **Campbell, Mazza**), and the nurturing of museum-based primary research which yields exhibitions alongside monographs (**Giles, [Insol]**). Our growth continued in 2019 when we transferred two Egyptologists (Nielsen, Tyldesley) from Life Sciences into the Department, complementing the Egyptian interests of **Mazza** (Roman Imperial), **Morrison** (Hellenistic) and the archaeological work of **Berg** and **Campbell**.

Four other new appointments mark our expansion into ancient philosophy and enhance collaborative research within classics and ancient history (**Bryan**, 2016; **Schiesaro**: 2016; **Laes**: 2018; **Phillips**: 2018). **Bryan**'s work on the philosophy/literature boundary overlaps with **Morrison**'s on the reception of philosophy in literary texts, and with **Sharrock**'s and **Schiesaro**'s on Lucretius and Seneca; **Phillips**' work in Greek literature dovetails with **Morrison**'s on Greek lyric and Hellenistic poetry (both published monographs on Apollonius in 2020), and **Morrison**'s and **Sharrock**'s on literary theory. **Laes**'s research in Greek and Roman social and cultural history, and especially on disability and the life-cycle complements **Beagon**'s on natural wonders, **Langslow**'s and **Pormann**'s on medicine, and **Griffiths**' and **Sharrock**'s on the family. **Schiesaro** came to UoM as Head of School and Professor of Classics, and bolsters further our strength in Latin literary criticism. Additionally, **Kessel**'s 2016 appointment as PDRA on *The Syriac Epidemics* project contributed to our output strength in Graeco-Arabic studies. Research in collaboration with former colleagues continues to be highly productive in the areas of epistolography and epigraphy (especially **Morrison** with **[Gibson]** and **Liddel** with **[Low]**). The department's research environment is enriched by emeritus staff (Adams, Briscoe, Cornell, Prag, Healey) who offer advice and support to colleagues and PGTs.

(ii) Equality and Diversity

The UoA comprises nine Professors (8M/1F), one Reader (F), five Senior Lecturers (1M/4F), and four Lecturers (2M/2F). Five permanent appointments have been made since REF2014 (3M/2F). In age and nationality, the UoA is diverse, and has close to an overall gender balance (42% of the staff are women) but we are acutely aware of the need to increase the representation of women and BAME scholars at Professorial level. An EDI working party steers our EDI strategy and policy. Since 2014, the Department has supported 6 successful promotion applications, 4F/2M (**Bryan, Laes, Morello, Morrison, Cobb, Tyldesley**) with outcomes helping to redress gender imbalance. Here we have drawn on SALC support of the career development of women and BAME scholars (including regular informal sessions with recently promoted staff), and we follow SALC's lead also in encouraging and supporting women to participate in training schemes including UoM's *Women (in)to Leadership*. Four BAME temporary post-holders in this period are now permanent elsewhere: two lecturers (Malik, Goh); two ECRs on **Pormann**'s project (Karimullah, now in R&T (SALC); Mimura, now UHiroshima).

We benefit from SALC and University support for progressing EDI. These measures include Carers' Leave; enhanced Carers' Research Support; Parental Leave; Flexible Working Arrangements; Flexible Retirement Arrangements; and support for return to work after Sickness Leave. CAHAE colleagues have been proactive on SALC's EDI committee including in its preparations for a 2021 Athena Swan Award application (**[Cooper], Bryan, Cobb**). Staff have contributed to ongoing work on EDI including drafting protocols on Diversity and Staffing (**Todd, [Morton], Bryan**). As Chair of the Chartered Institute for Archaeologists' E&D group, Cobb led in developing and implementing its Code of Conduct and Equal Opportunities policies.

EDI training is embedded in the Faculty induction programme for new staff. All staff complete regular refreshment of their EDI training (including obligatory Unconscious Bias training for appointment panels). Our EDI working party has developed 'good practice' guidelines to foster inclusivity in conference and workshop organisation and scheduling within CAHAE, especially for those with childcare responsibilities and disability requirements. We have incorporated the recommendations of the 2018 Committee of University Classics Departments Report on Race and Inequality and strive tactically (through public lectures and schools engagement) to improve BAME access to study and to the academic profession in our subject areas.

In compliance with University policies on research integrity and ethics (SALC and UoM representative: **Berg**), all CAHAE staff and PGRs complete the online training and additional specialist courses where appropriate, including an additional course for those doing fieldwork.

(iii) Mentoring and support for research and impact

Staff on all contracts receive mentoring and developmental support at every career stage. Our support for ECRs is informed by the UoM Implementation Plan for its 2019 'Concordat to Support the Career Development of Researchers', which received the HR Excellence in Research Award from the European Commission (see Institutional Statement 3.4).

New Appointments: All new staff are allocated an experienced colleague as mentor. New permanent appointments are mentored throughout a 3 to 4-year probation period. With mentor support they complete the Faculty's 'New Academics Programme' (HEA-accredited). To support their research trajectory they also benefit from a reduced teaching/admin load (75% in year 1, 80% year 2, 85% year 3), and from seed-corn funding initiatives for work towards their first major grant applications.

Support for all staff: All researchers participate in SALC's annual Personal Research Expectations Plans (PREP), discussed and agreed with the Departmental Research Coordinator and/or the Head of Department. This helps researchers to survey and prioritise research and impact goals, and contributes towards the UoA's and SALC's research planning. Staff who are planning grant bids are supported by SALC's research office, including access to a database of successful applications; those applying for grants of £100K+ receive enhanced support from SALC's impact officer and grant writing team.

For permanent staff, Institutional Research Leave (IRL) is normally available on a cycle of one semester in seven, subject to submission of an application documenting progress from the last period of leave, and plans for the next. IRL can be advanced or postponed by one semester, to fit with departmental research planning. Supplementary Research Leave schemes (SALC and Faculty) offer up to one semester of additional leave, and during this REF cycle have enabled **Bryan, Giles, Langslow** and **Liddell** to complete major publications. Research staff receive from SALC a Personal Research Allowance of £1,000 p.a. (up from £600 in REF 2014); SALC's Research Support and Development Fund offers further targeted support of up to £6K p.a., and additional funds specifically for supporting impactful research.

In each teaching week, research staff have one day officially scheduled for research. Our 'research Thursdays' place emphasis on the communal aspect of our research, normally featuring a departmental lunch and research seminar (featuring internal and visiting speakers). Over the course of the year, colleagues set aside time to review one another's draft research submissions and grant bids; the department provides a productive and collegial environment (particularly for ECRs) in which to discuss submissions or applications, as part of wider research planning for individuals and collaborations.

(iv) Career development

CAHAE ensures a nurturing environment for high-quality research, a balanced generational profile within the department and the wider vitality and sustainability of our disciplines.

Early Career Researcher support: In this REF period, CAHAE has been home to eight fixed-term post-doctoral research fellows (PDRFs), including one Leverhulme Early Career Fellow (Coker, 2013-16) with SALC providing 50% of the funding. Several PDRFs on **Pormann's** projects during the period have achieved further career success in permanent or temporary university positions, including: Carpentieri (Connecticut); Das (Michigan); Karimullah (SALC, UoM); Mimura (Hiroshima); Selove (Exeter). Mentoring (by **Morrison**, [**Gibson**]) and SALC research funding of Sarri (PDRA, 'Ancient Letters') supported publication (2017) of her doctoral monograph and her (non-project) research on papyri and Xenophon. The reduced teaching load in the first three years for ECRs on permanent contracts (see iii, above) enabled **Phillips** to work on his *Untimely Epic* monograph.

FTC Staff: All fixed-term staff receive mentoring; take part in research groups and networks, present their research to the department, apply for internal funding for workshops, conferences and other events, and have access to a research allowance. Several FTC early-career former colleagues have secured posts in other departments: e.g. Goh (Swansea), Malik (Roehampton), Agri (Birmingham), Cook (Leeds, then Durham); McKie (Durham); Benzi (Nottingham).

Career progression for all staff: In step with SALC's Athena Swan and Equality & Diversity committees, CAHAE policy and practice (via workshops and annual PREP meetings) ensure that colleagues are both encouraged to apply for promotion, and empowered to do so – through appropriate research support, and by being given the leadership opportunities that institutional promotion criteria demand. Our strategy has seen internal promotions to Senior Lectureships (**Morello**, **Bryan**) and Professorships (**Laes**, **Morrison**, Tyldesley). Departing colleagues have progressed to promotional appointments including a Professorship in Durham (**[Low]**), and prestigious Professorships elsewhere (**[Cooper: Royal Holloway]**, **[Gibson: Durham]**, **[Parkin: Melbourne]**, **[Insoll: Exeter]**, **[Jones: Stirling]**, **[Richards: Highlands and Islands]**).

(v) Impact and knowledge exchange support

We support colleagues in impact planning in their research from its outset: see section 3c.

(b) Research Students The recruitment and training of PGRs is a core element of our contribution to the vitality, sustainability, and impact of our disciplines.

(i) Recruitment

In this REF period we recruited on average 10 PGRs p.a., and 52 FTE completed. Currently, 31 doctoral students are registered for a PhD in Classics, Ancient History, Archaeology, or Egyptology (up from 23 reported for Classics plus Archaeology in REF2014). New appointments have increased our supervisory range, PhD projects being prompted by **Mazza** on papyri (Mundy, Aynaci, Ingham, Gregor-Som), and by **Laes** on the family and Living Latin (Brunet, Goessens, Lyvens).

SALC invests strategically in supporting high-quality doctoral research projects, through studentships and bursaries. These include fee-bursaries; Graduate Scholarships (home fees and partial maintenance); and the University's President's Doctoral Scholar Awards (covering home and overseas fees plus a grant £1K above the Research Councils' maintenance allowance). Helped by departmental mentoring of their applications, CAHAE graduates have enjoyed above-average success in the competitions for these awards, both internal UoM funding (including three in the 'President's' scheme and 11 in other SALC and Departmental awards), and externally in the AHRC competitions (33 in the period, including one in

collaboration with the British Museum).

(ii) Research culture

We promote our PGRs' full participation in our research culture. We support them in publishing papers in internationally excellent journals (e.g. Wilding 2015 on proxeny decrees; Molesworth 2018 on Lycophron's *Alexandra*; Ntanou 2020 on *Metamorphoses*) sometimes jointly with their supervisors (e.g. **Pormann**, Karimullah, Barry, Carpentieri, van Dalen, Mimura, Obald, on the Hebrew and Arabic Palladius (2017)). Our PhD students regularly give papers at national (AMPAH, AMPAL, CA) and international conferences (including in Perth, Shanghai, Groningen, London, Geneva, Cortona), supported financially by the Department and Graduate School. They take an active role in organising events emanating from our research groups (e.g. the colloquia around the visits of Moeller (Berlin) and Keith (Toronto)). They co-organise graduate conferences with support of the School (AMPAH in 2014, AMPAL in 2018, IARSS in 2020). Our PGRs are supported by the UoA, SALC and the Faculty in their own, independent, research initiatives: PGR involvement in the Bog Body Network led to a special edition of the *Journal for Wetland Archaeology*; Botfield organised the 2018 meeting of the Neolithic and Bronze Age Research Students Symposium in Manchester).

(iii) Monitoring and progression

All PhD students are supported and monitored throughout their programme by a supervisory team of three (the Research Panel) consisting of two supervisors and an independent reviewer (responsible for ensuring that the panel functions well). Supervisors meet students individually usually fortnightly. The Research Panel meets the student twice a year to discuss planning, overall progress, skills training, plans for completion, and to make a recommendation regarding progression. *eProg*, the University online supervisory tool, facilitates continuous monitoring and support. PGR students have a pastoral adviser in the shape of the departmental PGR Director. During the period we achieved one of the highest rates in SALC for completion of PhDs within 4 years (just under 60%) and within 5 years (66%).

(iv) Training, career development, and employability

We train PGRs in ancient and modern languages and scientific methodologies appropriate to their research. The School offers programmes of PGR training, aimed at GTA preparation, professional development (through SALC's Graduate School) and theoretically-informed development (through *artsmethods@manchester*). CAHAE is active in collaborative PGR training, helped by the School's successful 2018 bid to continue the Manchester-led North West Consortium Doctoral Training Partnership, and through particular projects such as **Thomas'** in Hay Bluff, Herefordshire (see 4.a below).

Our PGRs are encouraged and helped to forge (inter)national links to maximise post-PhD career opportunities. We have a tried-and-tested reciprocal exchange programme with Rostock, through which a UoM PhD (Cammoranesi) and a Rostock PhD (Reichetanz), both working with **Morello**, co-organised a conference on letters in 2019 with external funding. Since 2014, one postdoc and three PhDs have spent time at the Fondation Hardt in Geneva (Coker, Mawford, Abad del Vecchio). Our PhDs develop their professional skills through service as readers (e.g. for CQ) and on organising committees for large conferences (e.g. Muti, Islands in Dialogue International Postgraduate Conference in Italy 2018). MCfA and *Prehistory to Primary Schools* have a strong track-record in providing graduate students with training and experience of KE and public engagement: MCfA experience gave rise to the PGR-led (Mawford, Ingham) *Athena's Owls* reading group for KS 1 and 2 hosted in local public libraries and online during lockdown

The success of our training is demonstrated by former PGRs now in academic posts at HEIs: van Dalen (Columbia); Houlbrook (Hertfordshire); Jackson (MMU); Wilding (Lancaster, now OU); Ntanou (Athens); Overton and Piprani (Manchester). Those who have moved on to museum roles include Creighton (Yorkshire Museum) and Stone (National Football Museum).

Unit-level environment template (REF5b)

Former PGRs who published monographs in this REF period include Houlbrook, Gordon, Fennelly.

Section 3. Income, infrastructure, and facilities

(a) Income

In this REF period, CAHAE staff generated circa £3.738m in external grants, tripling our grant-capture outlined separately for Classics and Archaeology in REF2014. 24 colleagues in the UoA were awarded research grants from a range of funding bodies (especially DIUS Research Councils, and UK/EU government bodies).

The vigour of our unit's research culture and supporting infrastructure has ensured success in gaining external research funding across the board with notable success in the areas (cf. 1.a above) of New Critical Editions, and Material Culture:

- AHRC: **Mazza** (CI) 'Egyptian Votive Animal Mummies' (2016/17; £33K); **Liddel** and **[Low]** (CIs) *AIUK* (2017-20; c. £98K of total £0.5m to Manchester); **Pormann** (PI) 'Syriac Galen Palimpsest' (2015-20; £1m); **Giles** (PI) 'Grave Goods' (2016-20; c. £307K with 'Boundary Objects' extension grant bringing c. £4.5K to Manchester); **Giles** (CI) 'Continuing Bonds: Creative Dissemination' (2019: £41.5K of which c. £8K to Manchester); **Morrison-[Gibson]** (PIs) 'Ancient Letters' (2016-21; c. £560K); **Pormann-Todd** (CIs) 'Genealogies of Knowledge' (2016-20: c. £1m, with Baker and Pérez-González from SALC); **Thomas** (PI) 'Later Fourth and Third millennia BC Ireland and Britain' (2019-22: £344K).
- ERC: **Pormann** (PI) 'Arabic Commentaries on the Hippocratic Aphorisms' (2012-17; £1,246,775).
- British Council: **Campbell** (PI) 'Ground survey, documentation, and protection of archaeological sites in Basrah Province, Iraq' (2017-20; c. £304K).
- British Academy: **Todd** 'Commentary on Lysias' (2015/16; £43K); several Conference Grants and Small Grants to O'Daly, **Pormann**, Smelova.
- Wellcome Trust **[Parkin]** (PI) 'Sexual Health in Antiquity' (2015/16; £44K); **Kessel** 'Syriac Epidemics' (2015-21: £164K).
- Leverhulme Trust: **Mazza** 'Land and Power': £45K.
- Loeb Foundation: **Beagon's** 'Natural Wonders', **Todd's** 'Commentary on Lysias', c. £23K each.

With a view to enhancing impact, we have gained funding to support the dissemination of our research to non-academic beneficiaries, including grants from the *AHRC*, the *Arts Council*, the *Heritage Lottery Fund* (to enhance the public outreach of **Giles'** projects) and especially the charity *Classics for All* (c. £40K) and c. £9K from the University in the period 2015-20.

(b) Scholarly Infrastructure

Museums, laboratories, libraries

We have a strong record of engagement with the University's Manchester Museum (MM) and Whitworth Art Gallery: (i) in primary research on their internationally significant collections (**[Conneller]**, **Giles**, **[Insoll]**); (ii) in adding to the collections through primary fieldwork (**Giles**, Cobb, **[Jones]**); (iii) in Museum exhibitions disseminating our research (**Beagon**, Cobb & **Giles**, **[Conneller]**, **[Insoll]**, **[Jones]**, **[Richards]**); and (iv) in expert input into permanent gallery redesign (**Berg**, **[Conneller]**, **Giles**, **Thomas**). **Mazza** is MM Honorary Curator of Graeco-Roman Egypt and is currently collaborating on the organisation of a touring exhibition, 'Golden Mummies from Roman Egypt', which will go to the US next year and then feature in public events at the MM to mark its reopening after major refurbishment (2022).

The department's Digital Heritage laboratory (used by others including AHCP), and those which we use across the University for materials analysis, 3-D printing and 3-D imaging –

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especially the Henry Mosely XMIF laboratory, the aDNA laboratories, and the ‘Mummy Tissue Bank’ – are all excellent facilitators of our research, and widely used by specialists from other institutions. The Manchester Obsidian Laboratory (founded in 2014 by **Campbell**, Healey (Hon. RF) and Maeda (UTsukuba, Japan)) possesses a world-leading geological obsidian collection from the Middle East which increasingly loans to other laboratories (e.g. in 2018/19 to UMissouri and UCyprus).

The University Library (UL) has extensive holdings in all our research areas, including the largest collection of electronic resources in any university library in Europe: currently over 43,500 e-journals, 500,000 e-books, and a comprehensive range of research databases (Section 4.2 REF5a). The University Library includes the John Rylands Library (JRL), which houses UoM’s Special Collections: these contain holdings of international significance in all arts and humanities disciplines, including over 250,000 printed volumes, over 4,000 incunabula, and a large range of manuscripts, housed and curated in a recently-refurbished Grade 1 listed building. Its collections are extensively used in our research and that of our PGR students. It is here that **Mazza**’s Rylands Papyri project is based; its holdings are important in the **Morrison-[Gibson]** ‘Ancient Letters’ project; **Morrison** is Chair of the Management Committee of the JRL *Bulletin*. JRL special collections and archives were instrumental in a collaboration (2019-2021) led by **Giles** between the University and the National Trust on the history of environmental change at Quarry Bank Mill in Cheshire as a way of developing sustainable futures. Workshops for the public and schools groups have been delivered, and an exhibition is taking place in 2021.

John Rylands Research Institute (JRRI)

Since its founding in 2013, the JRRI has greatly enhanced the use made of the Special Collections by researchers local, national, and international, and serves as a focal point for the capture of externally generated humanities research income and philanthropic donations. **Pormann** was the founding Director (2013-15), and the projects of **Mazza**, **Morrison**, **Pormann** have continued the links. Several CAHAE colleagues have received JRRI seed-corn funding to use its collections in developing external grant applications and JRRI fellowships bring world-leading academics to Manchester (e.g., in Classics, Bowman). The JRRI has developed research partnerships (through staff and student fellowships) with other world-leading institutions: it hosts **Pormann**’s Syriac Galen Palimpsest project; its work in Classics has involved ECRs, e.g. Cromwell (now MMU); White (now Leeds) spent a year as JRRI research fellow in 2013-14. Recently, the JRRI has sponsored and developed projects in Digital Humanities, including the design and launch (in 2019) of a Special Collections Image Viewer (in collaboration with CUP, with c. £1.5 million University investment over 5 years and with input from **Pormann** and **Liddel**). Clearly, the JRRI will be an increasingly important and effective resource not only for our UoA as we develop our DH research in the new decade.

Digital Humanities

SALC’s Centre for Digital Humanities supports projects with significant digital outputs, computational skills training, DH workshops for staff and PGRs, and DH grant applications and collaborations with other researchers and units. **Liddel** helped to establish the Centre as Faculty Co-Lead of DH in 2018/19. Our DH projects include those of **Mazza**, **Pormann**, and **Liddel**; our DH events include a 2018 colloquium on digital methodologies in deciphering ancient texts. (See also 1.b.ii above, and 4.a below.)

(c) Organisational and operational infrastructure

Our research structures operate at departmental, School, and Faculty levels. This tiered structure ensures cross-fertilisation between research strategies within the department and balance with the wider aims of the University. Local research policy is co-ordinated by the Research Coordinator (RC) and the Head of Department. The RC is responsible for day-to-day management of staff research in the department, annually reviewing research and publication plans with each member of staff individually, and liaising between SALC and the

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Department, to which s/he reports four times a year on research developments, planning and policy both in the department and in SALC and the wider University. The Centre for Interdisciplinary Research in Arts and Languages (CIDRAL) supports interdisciplinary ventures in the School (e.g. **Todd** (organiser), *Constructing the Public Intellectual in the Premodern World*, 2019).

SALC Research policy is determined by a Research Committee, which meets five times a year, reports to the School Policy and Resources Committee, and is led by the SALC Director of Research who works with the Research Development Manager and the Research Office team. The Research Committee implements the SALC strategic research plan including targets for research income generation, research output quality, and academic impact, and is responsible for the allocation of the School's research budget. SALC's Research Office supports the implementation of strategy and facilitates research collaborations, informs staff regularly of funding opportunities, assists in developing grant applications, manages grants, and monitors the progress of funded projects against deadlines. Our supportive research-culture ensured that the externally supported projects of **Giles, Liddel, Morrison, Thomas** received specialist peer review at both UoA and School level. The Faculty's Humanities Strategic Investment Fund drives the Faculty's internationalisation agenda and encourages production of world-leading research projects, publications, and impact, including the work leading to the UoA's Impact Case Studies (**Campbell, Mazza**).

CAHAE owes much of its success in grant capture to SALC and Faculty seed-funding to develop projects and prepare external grant applications. One example is the AHRC-funded 'Grave Goods' project (2016-2020), a collaboration between the Universities of Manchester (CI **Giles**) and Reading and the British Museum); this gave rise to the Manchester Workshop 'Grave Matters' (June 2018) and the 'Objects and Death' public conference (British Museum, May 2019). A School Research Networking Grant awarded to **Giles** funded a 'Bog Body' workshop (August 2018), disseminating the results of collaborative research on the Museum's bog head (Worsley Man), which was funded by a School Research Support Grant, and involved partners from UBournemouth and UBradford.

Research Impact Infrastructure and Support

The School has an Associate Director of Research as academic lead for Impact, and an experienced administrative Impact Support Officer. Each offers advice to colleagues on maximising impact from existing research, on working with external partners, and on designing and articulating Impact in external funding bids.

The School and Faculty provide Impact support funds to disseminate our research beyond the academy. These funds have supported the work of **Campbell** and **Mazza** contributing to our Impact Case Studies and the widening participation and outreach work of **Giles, Langslow, Liddel, Morello**. We meet the challenge of keeping impact at the heart of our research in our UoA through our impact work, outreach networks and deployment of both digital and analogue facilities.

Impact and outreach are central to CAHAE's research culture and inform mentoring conversations and PREP meetings. We hold impact planning sessions (based on research already underway) both in CAHAE and across SALC (e.g. **Giles's** *Grave Goods* project was showcased at a SALC AHRC grant-writing workshop). All colleagues, especially ECRs, are encouraged to contribute to knowledge exchange through *MCfA* and *Prehistory to Primary Schools*. The School's annual 'Making a Difference' awards have raised awareness of these two flourishing schemes. In 2018/19, in recognition of *MCfA*, the School assigned a 0.5 administrator post to coordinate the outreach activities of CAHAE.

Section 4. Collaboration and contribution to the research base, economy and society

Our research and its environment are enriched by collaborations with other HEIs in the UK and beyond and by impact-producing engagement with the heritage sector, educational organisations and other academic institutions. These collaborative activities involve the application of pioneering methodologies, the formulation and facilitation of research with broad audiences and appreciation of issues of heritage protection with a view to ensuring the sustainability of our areas of research.

(a) Collaboration in Archaeological Practice and Digital Humanities

Thomas' 'Beneath Hay Bluff' project with Herefordshire County Council and Nexus Heritage (contributing c. £400K) supports the field training of PhD students from Manchester, Cardiff, Newcastle, UCL, and other universities in excavations at Olchon Court Farm and Dorstone Hill. The work of **Campbell** and Honorary RF Healey with XRF (X-ray fluorescence) analysis has involved a number of important collaborations: with Maeda (UTsukuba), Glascock (UMissouri), and others in USA, Japan, Turkey, France, Spain, Russia, Denmark. CAHAE collaborates with researchers in the physical, biological and geological sciences; including the University's Manchester Institute of Biotechnology (organising a virtual symposium on Technologies in Bioarchaeology and Palaeobiology in July 2020); commissioning of specific scientific analyses of objects (**Campbell, Giles**) and the sharing of equipment and/or expertise (**Berg, Campbell**). The DH 'Genealogies of Knowledge' project (**Pormann, Todd**) collaborates in the development of computing software with Luz (CI, Edinburgh).

(b) Building international scholarly communities

Colleagues from all our areas of research are involved in leadership of, and engagement with, international scholarly networks. As part of her 2017/18 JRRI Collaboration Grant, **Mazza** brought an international team of papyrologists who work on the Apion papyrus archive to Manchester, including Palme (Director of the Vienna Papyrussammlung), and Hickey (Center for the Tebtunis Papyri, UC Berkeley). **Sharrock** is a founding member of the Eugesta network (<https://eugesta-recherche.univ-lille3.fr/en/home/>), as is **Schiesaro** of the Augustan Poetry network (<https://reseau-poesie-augusteenne.univ-lille3.fr/augustan-poetry-network/>). **Sharrock** is a founding member of the International Society for Ovidian Studies, of which **Schiesaro** was a member of the organising committee of their European launch conference.

The unit contributes to the University-level strategic partnerships with the Universities of Toronto and Melbourne: **Sharrock** has a long-standing collaboration with Alison Keith (Toronto), with whom she has co-edited a volume and developed interaction between the JRRI and the Jackson Humanities Institute in Toronto. University-funded collaboration with UMelbourne underwrote **Berg's** 2018 international workshop on the *Entangled Sea* and the 2020 publication of an associated edited volume.

The UoA is a hub for research projects with associations beyond Manchester. **Laes'** disability studies network includes collaborators in France, Germany, and Egypt (<https://www.disabilityhistory-ancientworld.com/>). **Phillips** is a leading member of the network of scholars interested in Greek poetics (workshops in Chicago 2015, Warwick 2018 and 2020 from which a collaborative book will emerge). **Bryan** is a member of a team producing an annotated translation of the *Platonic Letters*, and she hosted the Northern Association of Ancient Philosophy workshop in 2019.

(c) Engagement with wider audiences

We ensure a high level of public awareness of our research through public lectures to regional

classical and archaeological societies, notably branches of the Classical Association (CA). Chaired in succession over the period by **Langslow** and **Morello**, the Manchester CA has been transformed to reach wider audiences through the establishment of: (i) *Manchester Classics for All*, (ii) the annual, endowed, Whitehead Lecture, and (iii) a series of three annual lectures on Roman Spain, hosted at the Cervantes Institute in Manchester's city centre. This was a contribution to the cultural life of the city: over 100 people attended each year, 35%-50% of them Cervantes members who had never previously attended a classical/university-related event. **Fear** is Chair of the North Staffordshire CA branch 2018-, thus maintaining classics activity in an area without a university department.

The UoA works to engage a broad cross-section of communities actively in our research. For example, the Heritage Lottery Fund supported 'Whitworth Park Community History and Archaeology Project' (2011-14) was led by **[Jones]**, **Giles** and Cobb, funded in part through a SALC grant and the University's Martin Harris Centre for performance. This involved nine schools and 403 children in archaeological excavation of the Victorian park on their doorstep. These projects also recruited 40 volunteers, with 20 dedicated placements for the local unemployed. CAHAE work fed into the cultural regeneration of an inner-city park, and bolstered the application to secure the £8 million restoration of the Whitworth Art Gallery. It resulted in the Manchester Museum exhibition 'Pleasure, Play and Politics' (2014; 44,567 visitors). In 2018 **Mazza** was a consultant for the Manchester City Art Gallery on the occasion of artist Sonia Boyce's exhibit and performance involving the removal of Waterhouse's *Hylas and the Nymphs*. This produced a blog post and public debate (later broadcast: <http://manchesterartgallery.org/exhibitions-and-events/event/first-wednesday/>).

Engagement with national and international audiences has been promoted through cultural events programmes (e.g. in 2017 **Giles** worked with arts company *Invisible Dust* and artist Wilson at the Hull & East Riding Museum). Media work has promoted and disseminated research work. **Giles** has featured in documentary programmes for BBC2 and BBC4, BBC Yorkshire, Channel 5 and Radio 4 'Women's Hour', and provided expert opinion for articles in the *Guardian*, *Independent* and *National Geographic*. **Thomas** has featured on BBC4's 'Digging for Britain' and Radio 4's 'Beyond Belief', and **Liddel**, **Pormann** and **Schiesaro** on 'In Our Time' (Radio 4). **Liddel**'s AIUK research was the basis of virtual lectures for the *Workers' Educational Association* during 'lockdown' and its aftermath in 2020.

We actively share our expertise with schoolteachers on a national level, both through research-based talks for schools and in more formal Continuing Professional Development (CPD). In particular, **Liddel**, as Chair of the CA Teaching Board (2016-20) regularly co-organised CPD events for schoolteachers of classical subjects, to which colleagues including **Griffiths**, **Langslow**, **Sharrock** contributed.

(d) Sustainability of Heritage and Antiquities Protection

Engagement with heritage protection issues is central to our work through leadership of and collaboration with public and private institutions in the heritage sector (e.g. **Campbell** ICS on antiquities post-conflict Iraq). It involves deploying our expertise in front-line exhibitions. **Thomas** is a member of the curatorial team for the Stonehenge travelling exhibition with MuseumsPartner Inc., fronting media operations for a major exhibition in Kansas City (2019). **Liddel** and **[Low]** have since 2013 collaborated on the Greek inscriptions at the City Museum of Liverpool; activities there included the application of RTI (with Lehoux, formerly UoM, now Queen's University, Canada, and with **Campbell**) on hard-to-read stones. This research led to a public display in Liverpool in 2016.

Giles works with museums to realise the full research potential of their archaeological finds, through innovative interpretation and display, including the prehistory galleries of the British

Museum, the 'Mystery Warrior Burial' of North Bersted for Novium Museum (opening 2020), and Dorchester Museum's £15 million National Lottery Heritage Fund development. **Giles** is also an academic adviser for the National Museum of Wales' research on the oldest-known chariot burial in Wales.

Liddel's AIUK work with **[Low]** and Lambert reaches a wide audience of visitors to historic properties in Britain. He is currently planning to extend the web-linked display-labels installed at the BSA to material at the BM, the Ashmolean, the Fitzwilliam, and National Trust estates. His main task in the fourth and final year of the project (2020-21) centres on outreach activities involving museums, schools and other audiences, including the production of short videos about the various collections.

As detailed in her ICS, **Mazza's** work on the ethics of the portable antiquities trade contributes vitally to ensuring that the antiquities industry and publishers take proper account of issues of provenance. An early landmark event was the one-day international colloquium at the JRL, 'To Publish or not to Publish?' (October 2014), on multidisciplinary approaches to the politics, ethics and economics of ancient artefacts. The colloquium was attended by antiquities dealers, museum and library curators and directors, and security experts, in addition to academics. **Giles** also has worked with the Portable Antiquities Scheme, advising on individual treasures (on a Roman coin hoard to the Peak District National Park and ArchHeritage, on a chariot discovery to the National Museum of Wales). She has also advised on Iron Age antiquities to the UK Arts Council Export Committee.

(e) Sustainability of the Discipline

Members of the Department contribute to the international vitality and sustainability of the discipline through involvement in Research Councils and other grant-awarding bodies. In the current period, **Berg** and **Morrison** served on AHRC panels; **Pormann** and **Sharrock** on Leverhulme Prize committees; **Mazza** on the steering committee of the AHRC/British Council-Newton Musharraf Fund on 'Preserving Egypt's Cultural Heritage: Mitigating Threats for a Sustainable Future'; **Liddel** on the British School at Athens Studentships Committee. Beyond the UK, **Langslow** serves as External Reviewer for the ERC, the French National Agency for Research, the College of Expert Reviewers of the European Science Foundation and the Biotechnology and Biological Sciences Research Council, **Sharrock** as a reviewer for the Research Council of Norway and the American Academy in Berlin, **Thomas** as overseas member on the white paper working group on protecting the archaeology of Chaco Canyon, US National Parks and University of Colorado. **Sharrock** and **Schiesaro** served on the Italian National Agency for the Evaluation of Universities and Research Institutes. **Fear** is evaluator for the Spanish Agencia estatal de Investigación (AEI). **Laes** was an adviser to the Flemish Minister of Education in the development of new attainment targets in classical languages (2019-20), and is President of *Classica Vlaanderen*.

We also contribute to the management and development of learned societies: **Giles** as Vice-President of the Prehistoric Society (2017-21) and International Advisory Board member of the Royal Irish Academy (2018-); **Mazza** as Trustee of the Egypt Exploration Society (2015-) and as member of the Society of Biblical Literature committees (2015-2020); **Morrison** on the Council of the Society for the Promotion of Hellenic Studies (2012-15); **Thomas** on the Council of the Royal Anthropological Institute (2018-); **Sharrock** on the advisory board of the Institute of Classical Studies (2020-). We have played a significant role in nurturing the development of Ancient History at Manchester Metropolitan University (MMU), where it is taught by two former PhD students of the Department (Crowley and Pudsey) and a former colleague at the JRR (Cromwell), who now hold permanent positions there. We continue to work closely with MMU on outreach projects (especially through MCfA). More recently, we have supported MMU in their establishing a PhD programme through joint supervision as part of the NWCDTP. Our researchers frequently assess cases for appointments and promotions at other universities

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and major museums, especially in the UK and the US, but recently also in Finland, Germany, Greece, Malta.

The UoA contributes significantly to the dissemination of research through academic editorship, expert review and editorial board membership. Editors of major journals during the period include **Morrison** as editor of *Classical Quarterly* (and **Bryan** as its philosophy adviser), **Pormann** as editor-in-chief of the *International Journal of the Classical Tradition*, **Liddel** as associate editor of *Polis* and co-editor of the *Annual of the British School at Athens*, **Schiesaro** as co-editor of *Maia*. **Sharrock** is Series co-editor of *Oxford Studies in Classical Literature and Gender Theory*; **Liddel** is Series co-editor of the *Oxford Clarendon Ancient History Series*, co-editor of *Brill's New Jacoby*, and a founder member of the Advisory Board of *Attic Inscriptions Online*. Together we have acted as independent readers for c. 50 academic publishers and national and international journals.

In sum, we engage and collaborate with wider networks and partnerships through academic and non-academic channels, nurtured by department, School and University level support. Through these conduits we promote awareness of the ancient world, with a critically and ethically informed research culture which is accessible to the broadest possible global audience.