

**Institution:** University of Winchester

**Unit of Assessment:** C15 (Archaeology)

## 1. Unit context and structure, research and impact strategy

### 1.1 Unit context and structure

The submitting unit is housed within a single department in the Faculty of Humanities and Social Sciences at the University of Winchester - the Department of Archaeology, Anthropology, and Geography. Of the 12 submitting members of this UoA, nine predominantly teach archaeology (**Everill, Finneran, King, Knul, Marter, Roffey, Soar, Thorpe, and Wilkinson**); two predominantly teach anthropology (**Bernasek and Dawson-Hobbis**); and one geography (**Jeffers**), with the close relationship between the disciplines allowing for significant cross-fertilisation in terms of both research and teaching. The majority of the submitting members are part-time, with only four on full-time contracts (**Jeffers, Roffey, Thorpe and Wilkinson**), and the unit's total FTE stood at 9.8 at the census point in July 2020.

The unit also hosts a specialist geoarchaeological consultancy (ARCA) directed by **Wilkinson**, which was founded in 2005 and offers a range of services to clients. Although operating on a commercial basis, ARCA's work is often published as research – including the development of new models and methods – and it provides a dynamic bridge between the unit's research environment and professional practice, as well as additional financial investment in the unit's equipment and facilities.

The story of Winchester's Department of Archaeology, as it was constituted until recently, is of steady growth in staffing and research profile. Submitting to UoA58 for RAE1996, there were only 3.8FTE Category A, research-active staff members included, achieving a rating of 2. By the time of RAE2001 this figure had increased to 4.7FTE (in post), achieving a rating of 3a. Revisions to the grading system and panels for RAE2008 make direct comparisons difficult, however 4.75FTE (five individuals) were submitted to UoA33 as Category A, research-active, at the 2007 census point (**Finneran, King, Roffey, Thorpe, and Wilkinson**) with 75% of the overall submission being rated at 2\* or 3\*. **Everill** was appointed in 2008, becoming the sixth submitted member of UoA17 for REF2014, in addition to the above-named, and bringing the submitted FTE up to 5.4, collectively achieving 76% overall rated 2\* or above, including 3% rated 4\*.

In response to REF2014, the University's *Research and Knowledge Exchange Strategy* (2015-2020) was reframed towards advancing the institution's reputation for research, and the Department of Archaeology was well placed to benefit from this. The University allocated an annual sum of £3000 for research expenses, pro-rata, of REF QR funding to all individuals who helped generate this income through submission to REF2014 (**Everill, Finneran, King, Roffey, Thorpe, and Wilkinson**). Further QR funding streams were available to the UoA and all its members. Over the course of this REF cycle, the UoA was awarded £161,595 of QR funding to develop its strategic aims relating to research, impact, and environment - as identified by the UoA Working Group comprising all Unit

members. Additionally, members of this Unit also successfully applied for £4,881.66 in Fast Track funding to support individual research activities.

As a consequence of this strategic investment, **Marter** has received support that has allowed him to develop his international research profile in the area of conflict archaeology and be included in this REF submission. In addition, the selection process for recent appointments in the Department has also placed greater emphasis on research activity and **Soar** (2017) and **Knul** (2019) have been appointed – in both cases replacing non-research-active staff and bringing new research strength in Classical Archaeology and in Geomatics, respectively. In 2017, **Bernasek** and **Dawson-Hobbs** were appointed with the addition of an anthropology programme, and in 2018 **Jeffers** joined an existing geography programme that was subsequently incorporated as the Department of Archaeology, Anthropology and Geography that same year.

## 1.2 Research and Impact Strategy

The current research strategy of the UoA, operational into 2020 and building on the priorities detailed in our REF2014 submission, has focused on eight areas:

- 1) Outputs and research quality
- 2) Interdisciplinarity
- 3) External income generation
- 4) Impact
- 5) Collaborative projects
- 6) Research environment and infrastructure
- 7) Open access
- 8) Equality and diversity

### 1.2.1 Outputs and research quality

Keen to see the continued upward trend in the rating of our research quality, the UoA deliberately targeted increases in both quantity and quality of research outputs, recognising the importance of embedding and strengthening a research culture throughout the unit. Through the provision of sufficient time away from other duties and mentoring by more senior colleagues, those without a 3\*/4\* publication were supported in the writing of such a publication. In REF terms the aim was to ensure that a minimum of 20 x 3\*/4\* publications were produced by Category A staff.

As a result, four periods of research leave (see 2.3) have been supported through internal funding since REF2014. Using mentoring, research leave allocations and internal financial research support, our relatively small unit has submitted more than 30 peer-reviewed journal articles, 21 chapters, and 5 books for external assessment in this REF cycle, with 48% achieving a rating of 3\* and above according to internal and external peer review.

### 1.2.2 Interdisciplinarity

Archaeology is by its very nature an interdisciplinary subject, and staff in the UoA carry out their research alongside historians, agronomists, physicists, biologists and geoscientists, and have, quite naturally, outputs in journals grounded in these (and other) disciplines. The UoA established a strategic objective to include at least four outputs that are demonstrably interdisciplinary (by **Everill, Wilkinson, Jeffers**). With the composition of our UoA including colleagues whose expertise extends to the archaeological application of biological and social anthropology, physical geography and palaeobotany (**Dawson-Hobbis, Knul, Bernasek, Soar**) we are well placed to do so. In addition to these areas, recent research activity on improving psychological wellbeing of combat veterans through participation in archaeology (**Everill**) has established a new interdisciplinary research locus within the UoA.

### 1.2.3 External income generation

Conscious of the relatively low income (£199,270) submitted to REF2014, we made this a strategic priority. We achieved significant improvement over this REF cycle, and the research income reported to HESA is £529,317, representing a 267% uplift since REF2014 (see section 3.1.1. for further detail). An additional £52,494 awarded for collaborative projects involving **Everill** did not come directly to us, and therefore does not feature in the income figure. The unit's research environment also benefitted from the £543,842 consultancy income generated by the UoA's commercial research unit ARCA, which is integral to the unit's research environment and provides one impact case study for REF2021 (see section 3.1.2).

### 1.2.4 Impact

Despite the value we place on a research environment that genuinely embraces impact and contribution to society, the unit achieved a disappointing grade for impact in REF2014. Consequently, this was an area particularly highlighted for improvement with a single strategic objective to produce two impact case studies (ICS) that achieve at least 3\*, to better reflect the quality and breadth of our ongoing work with regard to impact.

Early in this REF cycle, four potential ICS were identified, one of which built on a case study submitted to REF2014. Changes in staffing, combined with collective decisions to not develop the REF2014 ICS further and (based on feedback from our external assessors) to target the next REF cycle for one of the new ICS, left the UoA with the two strongest case studies. Internal funding was made available to both ICS authors (**Wilkinson and Finneran**), via the UoA, in order to help strengthen the demonstrable impact and gather supporting evidence, and both ICS authors also successfully applied for nearly £50,000 of internally disbursed HEIF funding each to support the knowledge exchange elements of their work.

While the strategic focus was on preparation for REF and the gathering of supporting data, the unit continued its engagement with society beyond academia through a wide variety of community-focused fieldwork projects (**Everill, King, Marter, Roffey, Thorpe**), and the development of a significant new research area investigating the mental health benefits of archaeology and heritage (**Everill**). Members of the unit, through the normal delivery of our research activity, naturally maintain flourishing networks involving a range of groups and societies beyond academia, such as national parks, professional practice, religious institutions, heritage bodies and trusts, local government and community archaeological and metal-detecting societies (see section 4.3). However, the unit also engages with non-traditional partners, with research collaborations also involving colleagues at the Ministry of Defence, and groups representing serving military personnel and veterans.

### **1.2.5 Collaborative projects**

Most staff research within the UoA is in the form of collaborations with other institutions (see sections 4.1, 4.3), so no specific strategic objectives were set in this area. Existing collaborations were supported through ongoing fieldwork projects and via conferences, with new collaborative relationships developed over the course of this REF cycle (see section 4 for details). International collaborations remain a key strength, as evidenced through the outputs submitted and one of our Impact Case Studies. Despite our size, we are perhaps the only UK Department to maintain a profile in the Southern Caucasus across multiple, unrelated archaeological projects, and we are also actively engaged in collaborative projects in Western Europe and the West Indies. Thus, despite its relatively small size, the UoA has developed research collaborations in three different continents (Europe, America, and Asia).

### **1.2.6 Research environment and infrastructure**

The infrastructure underpinning the UoA's research is of very high quality in terms of equipment and facilities, and the REF2014 panel made positive observations in this regard. Significant investment from the University and from ARCA over this cycle has further improved our situation, providing us with an inventory of equipment and facilities in support of our research (see section 3.2) that would be the envy of many departments in the UK. The key strategic objectives for research environment were focused on increasing the number of Postgraduate Research (PGR) student completions from that achieved in the REF2014 cycle, alongside progress in terms of external income generation. PGR completion numbers have demonstrably improved since REF2014 – more than doubling, from 3 to 6.75 – while, as has been noted above, external income is also considerably higher.

### **1.2.7 Open access and research integrity**

The strategic objective with regards to Open Access was to maintain compliance with the REF policy on Open Access. Engagement with Open Science is another priority area for future development, and Unit members will be provided with training and support to prepare high-quality datasets where possible for open access deposit. Research integrity is central to the unit's ethos. All research within the unit is conducted in accordance with appropriate institutional and discipline-based regulatory frameworks, and the unit is committed to the Concordat to Support Research Integrity.

### **1.2.8 Equality and diversity**

The 5.4 FTE entered for Archaeology to REF2014 were entirely male (not least because at the census point only 0.50 of the 6.50 staff FTE was represented by female staff). During this REF cycle, attention to this lack of diversity has resulted in 4 out of the 5 new appointments made being female, thus supporting improvements in gender balance and representation within the UoA. Whilst still being a work in progress, 2.5 of the unit's current total 9.8FTE are female (26%).

## **1.3 Future Research Strategy**

Over the next five years the unit seeks to prioritise sustainability in our research strategy, recognising that it is likely to be a challenging period for research. However, the unit continues to foster a research focus across its membership and the development and growth of new projects are supported. The six strategic priorities, outlined below, will be reviewed once the full impact on Higher Education of Covid-19 and the UK's departure from the European Union is clear, but our focus will be on strategic growth and increased impact.

### **1.3.1 Outputs and research quality**

The quality of research outputs generated by the unit has seen significant improvement over this REF cycle. However, to maintain this going forward the unit needs to see a higher number of its members producing publications of the highest possible calibre. This key strategic priority is indivisible from what follows, as it is intrinsically underpinned by many aspects of the unit's research environment, and is therefore the headline objective. An increase in the quality of outputs will be driven by the unit's Readers and Professors **Finneran**, **Roffey**, and **Wilkinson** who will mentor colleagues through peer review of draft outputs, prior to submission.

### **1.3.2 Interdisciplinarity and collaborative working**

These two elements are among the foundations for successful large project design and execution and both benefit from, and encourage the formation of, research networks. Existing networks will be supported through the award of new/renewed Visiting Research

Fellowships, recognising the key role of external partners in our research (including projects in the South Caucasus involving **Everill**, **Wilkinson**, **Knul**, and in Germany involving **Marter**). The unit will invite external partners including colleagues from these projects to Winchester to present talks on their research to staff and PGR students, and thus also provide an opportunity to discuss new or expanded research collaborations (in 2021, **Everill** begun collaborating with colleagues at Aarhus University as part of his work in West Georgia). Support for the development of new collaborative/interdisciplinary research networks will be prioritised in internal funding applications submitted by the UoA.

### 1.3.3 External income generation

Further to progress detailed in 1.2.3. above, we will target continued growth in this area by encouraging more bids, to be submitted by more members of the unit. Development of these bids will be supported through enhanced mentoring and peer review processes by the Unit's Readers and Professors **Finneran**, **Roffey**, and **Wilkinson**; and using internal funding to conduct pilot research and provide teaching replacement so that Unit members have more time to devote to funding applications. The unit has already commenced this plan for the new REF cycle with bids submitted and awaiting outcome: **Everill** has two bids worth £22,773 being considered by the British Institute at Ankara on projects related to Georgia, whilst **Wilkinson** submitted a grant application to the Leverhulme Trust to support a research project in collaboration with colleagues from Royal Holloway on the environments of initial human expansion into Eurasia.

### 1.3.4 Impact

Moving into the next REF cycle, the unit plans to take a more holistic view of impact and societal benefit across all our research in line with the RKE Strategy 2020-2030. Archaeology naturally lends itself to particular types of impact and engagement, but in monitoring individual research plans, unit members will be asked to reflect on the strengths and weaknesses of their research in this regard, as well as recording all relevant data. This approach will enable an early identification of strong candidates for future Impact Case Studies, with preliminary focus on continuing the two included in this REF submission, as well as developing the impact potential of the work conducted by **Everill** and **Marter**. More in general, this approach will also facilitate a recurring process of review, reflection, and adjustment to impact and societal benefit over the lifespan of a research project, and it will ensure that impact is more naturally embedded in the development of new research initiatives.

### 1.3.5 PGR community

The unit targets another increase in research student numbers and further growth in the number of successful completions over the next REF cycle. Wherever possible PGRs will be recruited through funded studentships, which enable full-time doctoral research and



allow the students a more significant engagement with – and contribution to – the wider UoA research community.

### 1.3.6 Staff development

Looking ahead, the unit's continued growth in terms of research will depend on the development of its membership, of which nearly half are newly promoted Senior Lecturers or lower grades. Underpinned by the principles of Equality, Diversity, and Inclusivity, the UoA will support skills development and opportunities for promotion among its newer members, including research mentoring from Professors and Readers; peer-review of funding applications for all members; support new unit members in acquiring experience of PGR supervision to completion, growing existing professional networks and exploring opportunities for collaborative working (**Bernasek, Dawson-Hobbis, Jeffers, Knul, and Soar**).

## 2. People

### 2.1 Staffing and recruitment policy

Growth in staffing has been a key development during the current REF period, in addition to the appointment of research-active staff (see section 1.1) replacing two colleagues whose focus was mainly teaching-based and who left to work elsewhere. This has enabled the unit to broaden the research base as well as adding strength in key research areas. Running alongside recruitment of new staff have been programmes to support and develop the research careers of both existing and new staff.

The strategic development of the Department of Archaeology, as it was in 2014, has seen it expand to include new undergraduate degree offerings in Anthropology and Geography and the appointment of research-active colleagues to teach on these programmes – a number of whom naturally sit within a UoA15 research profile. The new appointments that impact on the unit were made at Lecturer - **Soar, Bernasek, Dawson-Hobbis, and Knul** (with the last-named achieving a first permanent academic appointment, while **Bernasek** and **Dawson-Hobbis** have since been promoted to Senior Lecturer) - and postdoctoral fellow level (**Jeffers**), while a criterion in each appointment was the potential for developing existing or new research projects. The other members of the unit comprise two Senior Lecturers (**Everill** and **Marter**); a Principal Lecturer (**Thorpe**); two Readers (**Finneran** and **Roffey**); and two Professors (**King** and **Wilkinson** - the latter was awarded the title in 2019). As a result, there exists a good balance in the staffing across the UoA, and opportunities for ongoing development.

### 2.2 Staff Development Strategy

In line with the *Concordat to Support the Career Development of Researchers*, research mentoring is available to all staff in the unit. The University supports this through the provision of time for mentoring by Readers and Professors in its workload allocation model

(50 hours p.a. and 75 hours p.a. pro rata, respectively). Experienced colleagues acting as mentors may undertake activities such as commenting on manuscripts in preparation, giving feedback on conference presentations, providing support with PGR supervision, helping with public engagement activities and providing input in the preparation of funding applications and impact planning and activities.

To facilitate the embedding of a research culture across the University, staff are also encouraged to participate in the Winchester Research Apprenticeship Programme (WRAP). This has run across the University since 2010, and the Faculty of Humanities and Social Sciences' aspect of the programme was led by a member of this Unit (**Everill**) for the first six years. The WRAP programme provides an opportunity for undergraduate students to work on 'live' research projects, normally spending a week on the project in order to obtain research experience and skills through one-on-one mentorship from academic staff, and receiving a bursary of £220 for the week. In return, members of staff get research assistance and experience of managing and mentoring those appointed. Over the period of this REF cycle, members of the unit have been vigorous supporters of the programme and have led a variety of such projects. These include archive research at the Hampshire Record Office relating to the military and its impact on the city of Winchester during WWI (**Marter**) which employed eight research apprentices over four years; compiling a database of WWII military aviation crash sites in Hampshire (**Marter**) which employed six over four years; post-excavation research for the Meonstoke Roman villa excavation project (**King**) which employed four apprentices over three years; and archive research for the 'archaeology of the royal hunting lodges' project (**Everill**) which employed one apprentice for a two week period. In total, 37 research apprenticeship weeks (a total sum of £8,140) were offered to our undergraduate students and supervised by Unit members over the course of this REF cycle.

Staff also participate, on an annual basis, in an Individual Review and Development Scheme (IRDS) process with their line manager. As part of this process staff are encouraged to set objectives for the coming year and to reflect on those from the previous year. These objectives include research and career development goals. The review process identifies training and support needs including those necessary to facilitate successful achievement of objectives. Alongside the IRDS process, staff also complete Research Planning Forms in which they set out their research plans for the coming year. These forms are reviewed by their UoA Lead who provides formative developmental feedback and, in addition, highlights anything requiring further discussion to the line manager in the IRDS to ensure that formally agreed research objectives are achievable, supported and resourced. Staff are also encouraged to make full use of a wide range of additional development opportunities available to them and organised through the University's Research and Knowledge Exchange Centre. Events include workshops on grant writing provided by external consultants, and Open Access seminars covering a range of topics such as open data, pre-registration of research and registered reports, and pre-print archiving systems.

### 2.3 Research study leave



Study leave to provide staff with dedicated non-teaching time to focus on research activity, is underpinned by internal and external research funding. In addition to teaching replacement funded through external income, academic staff are able to use internal QR funding to support this – whether that be for a small number of taught sessions or for an entire semester. The process of applying for teaching replacement is through the UoA, which ensures that the proposed purpose of study leave is in line with the strategic goals of the unit. Over the course of this REF cycle four, one semester, periods of study leave were supported by internal QR money: **Marter** (14/15); **King** (17/18); **Everill** (18/19) and **Roffey** (19/20), while **Wilkinson** has received some externally funded (from ESRC and the Leverhulme Trust) teaching buyout to support his research projects. Each of these resulted, or will result, in research outputs and, in the case of **Marter**, provided significant support in the development of his research profile by providing time to build effective networks with partners in the UK, Germany and the Netherlands. In addition, these periods of study leave have also provided a very effective mechanism for generating developmental opportunities for our current or recent PGR students. The benefits are felt, therefore, not just in terms of individual research activity, but in the teaching experience – and therefore employability – of our PGR students.

## 2.4 Research students

The Department of Archaeology's submission to RAE2008 reported 10 PGR students at the census point (1 FT and 9 PT), and five successful completions over the cycle. Over the REF2014 cycle, we achieved a modest increase to 4 FT and 13 PT PGR students, but with only three completions. At the census point, in July 2020, members of the unit were Director of Studies for 17 PGR students (4 FT and 13 PT); and acting as Second Supervisor to a further 5 (2 FT and 3 PT) whose Director was in another UoA. Three of the PGR students currently being directed or supervised by members of this UoA (and a fourth, who completed in 18/19) are also in receipt of an internal studentship. This funding matches the general terms of a research council doctoral award and has attracted a large number of applications in recent years. A fifth PGR student within the unit is also currently in receipt of one of the University's 175<sup>th</sup> anniversary fee-waiver studentships. More significantly the REF cycle has seen 7 PGR completions (reported as 6.75 as the PhD awarded in 2013-14 was partially shared with History, see Table 1), and with two more since July 31<sup>st</sup> 2020 the indications are already of continued growth and improvement over the next cycle.

Academic year	Number of PhDs awarded	Number of Prof Docs awarded
2013-14	0.75	0.0
2014-15	1.00	0.0
2015-16	2.00	0.0
2016-17	1.00	0.0
2017-18	0.00	0.0
2018-19	2.00	0.0
2019-20	0.00	0.0

Table 1: PGR completions and awards over the REF cycle

## 2.5 Visiting Research Fellowships

In addition to existing links with professional practice, public and third sector – fostered and maintained through the Department's consultancy, research networks, student placements, and engagement of external speakers – the unit appointed a number of Visiting Fellows to strengthen relationships with non-academic organisations including Dr Stuart Needham (2016 to present). Dr Needham was Curator of the European Bronze Age collections at the British Museum from 1977 to 2007 and has worked with **Thorpe** on the excavations of Bronze Age barrows at Petersfield Heath, Hampshire, work which is now at the post-excavation stage.

Professor Davit Lomitashvili (2015-20) was Senior Scientist at the Georgian National Museum in Tbilisi on appointment, before becoming Deputy Director of the National Agency for Cultural Heritage Preservation of Georgia. Formal connection with these two organisations, through **Everill's** annual excavations at Nokalakevi, enabled the University of Winchester signing of, respectively, a Memorandum of Understanding in 2011 and a Memorandum of Cooperation in 2017.

Independent and early career researchers were also recognised through the award of Research Fellowships, including Dr Lawrence Owens (2019-present) and Dr Katie Tucker (2014-17). Owens was appointed to support his work and maintain the department's connection with the Naqada Regional Archaeological Survey and Site Management Project, following the sudden death of our friend and colleague Dr Geoffrey Tassie in 2019. Tucker completed her PhD on osteoarchaeology at the University of Winchester in 2012, before undertaking a variety of research projects including analysing burials from cemeteries and caves in Ethiopia; analysing Neolithic commingled remains from Jordan in collaboration with the Deutsches Archäologisches Institut; and cataloguing the human remains from the Heiliges Geist medieval hospital, Berlin. Other Visiting Research Fellows over this REF cycle include Dr David Bomgardner (2015-20), who was appointed in connection with research on Roman amphitheatres, and Dr Ralph Haussler, in connection with research into the archaeology and epigraphy of Celtic religion.

## 2.6 Equality, diversity and inclusivity

While we continue to focus on equality, diversity and inclusivity, we are pleased that our Unit membership has gone from 0.5 FTE female colleagues at the time of REF2014, with none entered in that REF submission, to 25% female in this submission.

As a small university, strategy in relation to supporting and promoting equality and diversity is centralised and covers all aspects of the institution's operations (5a, 3.2). It is led by the HR Department and the Director of Equalities and Staff Development. The UoA is committed to the University's values in supporting and promoting equality and diversity in research careers. As a relatively small UoA, data which potentially identify colleagues

with Protected Characteristics cannot be included in this statement. However, moving forward, we will be working closely with HR and the Research and Knowledge Exchange (RKE) Centre to address any equality and diversity issues arising from the REF Equality Impact Assessments.

In compliance with the REF2021 Code of Practice, all members of the UoA took part in bespoke mandatory training in conscious and unconscious bias in relation to REF. This was led by the Director of Equalities and Staff Development and was in addition to online training in Equality and Diversity which all staff are required to undertake.

### 3. Income, infrastructure and facilities

#### 3.1 Income

All staff at the University of Winchester who submitted to REF2014 were allocated a personal research budget of £3000 per year, pro-rata, from QR funding for much of this REF cycle. In addition, all staff have opportunities to apply through their UoA for further funding, managed centrally and disbursed at multiple points in the annual calendar (See REF5b,a, 4.1). These sums typically support teaching replacement, as outlined above, Open Access charges, conference attendance, travel, fieldwork, and post-excavation work including radiocarbon dating and specialist analysis. As well as benefitting from £166,476 of internal research funding over this REF cycle (plus approximately £100,000 of internally-allocated HEIF funding for **Finneran** and **Wilkinson** to deliver KE outputs from two existing research projects), the unit has been successful in terms of generating external research income.

##### 3.1.1 Research grants

Five members of the UoA successfully submitted – as Principal or Co-Investigator – 14 funding bids, generating £600,944 for the unit and our research partners over this REF cycle, with £529,317 in research income coming into the unit. Of these, by far the biggest (£398,025) was awarded by the Leverhulme Trust to **Wilkinson** as PI for his collaborative (with the organisation listed in Section 4.1) and interdisciplinary *Pleistocene Archaeology, Geochronology and Environment of the Southern Caucasus* (PAGES) project. This project employed three postdoctoral research assistants, one based at Winchester, and established a geochronological and palaeoenvironmental framework for this important region.

**Wilkinson** also achieved significant success through Historic England, being awarded a total of £75,090 across project design and full application stages for a proposal to map Pleistocene deposits in England to model the potential for Palaeolithic archaeology. Disbursed over several years, £40,736 of this funding has been received within this REF cycle. This award also contributes to one of the Impact Case Studies being submitted by the unit and is explained further in that document.

**Roffey's** research on medieval religious practice secured £9,873 across two successful funding applications. Other areas of notable grant success for members of the unit, beyond the headline HESA-reported figures, include **Everill's** role as Co-I in a collaborative and interdisciplinary research project on archaeology and mental health/wellbeing, which secured a total of £56,999 in awards from the Society of Antiquaries and the MARCH Mental Health Network, most of which went to the PI's institution, Solent University.

### 3.1.2 Consultancy income

Founded in 2005, and based in the Department of Archaeology, Anthropology and Geography, ARCA is a specialist geoarchaeological consultancy offering a range of research services on behalf of archaeological units, planning and environmental consultancies and local authorities. ARCA's work is often published as research, including the development of new models and methods. This includes recent work to produce deposit modelling, which has also contributed to planning policy within a number of local authorities and forms the basis of one of our Impact Case Studies. Specialist staff employed by ARCA combine academic expertise with experience of delivering high-quality commercial solutions, while also opening up a range of opportunities for students – including undergraduate and PGR students – to undertake geoarchaeological research and analysis as the focus for their dissertation or doctoral thesis under **Wilkinson's** guidance. Income from ARCA not only pays for specialist staff to work within the Department, but also contributes to the purchase of field equipment which also benefits the wider research and fieldwork of the unit (see below). Since REF2014, ARCA's turnover has totalled £543,842 – an average of almost £78,000 per year – and, with the consultancy having recently been awarded a significant contract to provide geoarchaeological services as part of the Central Winchester Regeneration Project, it will form a key element of the unit's work for the next REF cycle.

### 3.2 Infrastructure and facilities

Immediately prior to REF2014 the University invested £267,808 in the construction of four new archaeology laboratories to benefit students and staff (one for osteological research and teaching; one primarily used for geoarchaeological research/ consultancy; one for artefact research; and a processing laboratory), as well as a purpose-built artefact and human bone store that meets the guidelines of the Chartered Institute for Archaeologists (of which the Department has been a Registered Organisation since 2009). Over this REF cycle further laboratory space has been added to the facilities available across the University and a new teaching/ research laboratory – equipped with 30 high- and 30 low-power microscopes and a high specification fume cupboard – was opened within the Medecroft building in 2019 at a total cost of £667,693. Further, the University provided additional investment to equip the laboratories with analytical apparatus including gas chromatography, (portable) XRF, laser granulometry, muffle furnaces, a calcimeter and

new wet chemistry facilities. This sustained University investment over the last two REF cycles has seen the facilities available to staff, postdoctoral researchers and PGR students significantly improved and expanded, to the extent that they are on a par with the best of Archaeology departments in the country.

Furthermore, as a result of combined capital investment from the University and the use of surplus generated by ARCA, the UoA has been able to continuously update field survey equipment and specialist software. With significant investment on new field equipment over this REF cycle alone, the UoA is also as well-equipped in these respects as any in the UK. Current equipment includes a pulse EKKO Pro ground-penetrating radar system (with 50, 100, 250 and 500 MHz antennae); two Geoscan magnetometers and two Geoscan resistivity meters; a Leica System 1200 RTK GPS, a Leica GS16 Smartnet and an R200 (with base station) RTK GPS, and two Zeno dGPS GPS; two Leica total stations and a Leica multistation (robotic total station); Leica BLK360 imaging laser scanner; Bartington MS2 and MS3 magnetic susceptibility meters (with 2 field and 2 laboratory sensors); an Atlas Cobra/Eijkelkamp mechanical auger ('vibra corer'), two sets of manual Eijkelkamp augers and a Russian auger; a DJI Inspire drone with Zenmuse X5R camera and sufficient excavation equipment to equip a team of 70.

Specialist software includes EKKO Project and GeoPlot geophysics processing software (on networked and dedicated research laptops), RockWorks geological utilities software (7 licences), and SCC (Survey Control Centre) for the processing of 3D point cloud data. This investment in infrastructure has significantly boosted the UoA's vitality and long-term sustainability, and has enabled advanced survey and analysis of sites in Armenia (**Wilkinson and Knul**), and Georgia (**Everill**).

All Category A staff above 0.7FTE have individual offices, with others having allocated desks within larger, shared offices. All staff are individually supplied with regularly updated desktop computers and networked access to standard software packages such as the Microsoft Office and Adobe suite of programmes, as well as ArcGIS and open-source specialist software (Google Earth Professional, QGIS, Past, C2, Inkscape). The University's Library subscribes to a large number of online databases (e.g. British and Irish Archaeological Bibliography), journal repositories (accessed via EBSCO) and other resources (e.g. Edina Digimap) that are vital for modern archaeological research, while the Library is stocked with a good research collection of archaeological monographs. Many research projects involving staff, PGT and PGR students also utilise nearby archives, for example located at Hampshire Record Office, Winchester Museums Service and Hampshire County Museums.

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

##### **4.1 Research collaboration**

Archaeology is naturally both interdisciplinary and collaborative, and staff in the UoA undertake research alongside colleagues from a wide range of disciplines. International

collaborations remain a key strength of our UoA, despite its relatively small size and, as previously mentioned, we are perhaps alone in maintaining a research profile in the South Caucasus across multiple archaeological projects. **Wilkinson's** research on the Palaeolithic of Armenia and Georgia has led to collaboration with colleagues at the Armenian Institute of Archaeology, Royal Holloway, Scottish Universities Environmental Research Centre and the Universities of Connecticut, Dresden and Oxford. **Everill** has, since 2002, co-directed excavation at the multi-period site of Nokalakevi, western Georgia, and works collaboratively with colleagues at the Georgian National Museum, Tbilisi, and the National Agency for Cultural Heritage Preservation of Georgia. Since her appointment, **Knul** has also developed her own research profile in the region, working with colleagues from the Max Planck Institute for the Science of Human History, Jena on ZooMS and aDNA study of vertebrates from sites in Armenia and Georgia. **Knul** and **Wilkinson** also collaborate with the Universities of Bournemouth, California (Davis) and Liège in their investigation of the Middle–Upper Palaeolithic cave site at Trou Al'Wesse, eastern Belgium.

**Finneran** has long-standing collaborations with colleagues at the University of the West Indies; Barbados Museum and Historical Society; Barbados National Trust; Bequia Heritage Foundation; St Vincent National Trust; and the Garifuna Heritage Foundation developed through his work on post-colonial archaeology on Barbados, St Vincent, and the Grenadines, and with indigenous Caribbean groups, particularly the Garifuna of St Vincent. Finneran also works with colleagues at Pernambuco State University Brazil on post-colonial archaeology and Tongjin University, Shanghai, China on cultural heritage. Significant international collaborative work is also being undertaken by **Marter**, alongside hessenARCHAEOLOGIE (The Federal State Archaeological Service of Hessen) and Saxion University in the Netherlands, which has seen the investigation of sites relating to the European air war, as well as the training of students from across Europe at the International Summer Academy at the Glauberg, Hessen.

The excavation of a medieval leprosarium at Magdalen Hill, on the outskirts of Winchester, led to a research collaboration between **Roffey** and colleagues from the Department of Microbial and Cellular Sciences, University of Surrey, using DNA from burials to reconstruct the entire genome of the ancient leprosy bacterium. Another novel collaboration has developed through recent research on improving the psychological wellbeing of combat veterans through participation in archaeology, through which **Everill** has worked with colleagues from psychology and sociology at Solent and Bournemouth University respectively.

#### 4.2 Recognition by, and contribution to, the research base

UoA members are active contributors to the peer review process that underpins academic endeavour, including publication and funding awards. This contribution includes a role as archaeology editor within the multidisciplinary *Hampshire Studies* (**King**), sitting on an editorial committee (**Finneran**, on *Annales d'Ethiopie*), and a journal advisory board (**Roffey**, on *Endowment Studies*); and providing peer review of papers. Members of the



unit have reviewed a number of papers since REF2014, assisting colleagues at a variety of journals including:

*Advances in Archaeological Practice* (**Everill**), *African Archaeological Review* (**Finneran**), *Antiquaries Journal* (**Dawson-Hobbs** and **Finneran**), *Antiquity* (**Everill**, **King**, and **Thorpe**), *Archaeological Journal* (**Everill**), *Archaeological Prospection* (**Wilkinson**), *Azania* (**Finneran**), *Britannia* (**King**), *Built Heritage* (**Finneran**), *Dialogues d'Histoire Ancienne* (**King**), *Environmental Archaeology* (**Wilkinson**), *European Journal of Archaeology* (**Soar**), *Ex Novo Journal of Archaeology* (**Everill**), *Geoarchaeology*, and *Geomorphology* (**Wilkinson**), *Hampshire Studies* (**Roffey**), *International Journal of Paleopathology* (**Dawson-Hobbs**), *International Journal of Osteoarchaeology* (**Dawson-Hobbs** and **King**), *Island Studies Journal* (**Finneran**), *Journal of Anthropological Archaeology* (**Soar**), *Journal of Geography in Higher Education* (**Wilkinson**), *Journal of Roman Archaeology* (**King**), *Proceedings of the Ussher Society* (**Wilkinson**), *Religion* (**Bernasek**), *Royal Society Open Science* (**Wilkinson**), *Social Studies of Science* (**Everill**), *The Classical Review* (**Soar**), *The Holocene* (**Wilkinson**), *World Archaeology* (**Soar**).

Unit members have also been asked to provide peer review of book proposals for British Archaeological Reports (**Dawson-Hobbs**, **Finneran**, **King** and **Roffey**), Elsevier (**Everill**), Oxbow (**Roffey**), Oxford University Press (**Thorpe**), Routledge (**Bernasek**), Springer (**Wilkinson**), and Thames & Hudson (**King**). Furthermore, peer review was requested for applications to the Agence nationale de recherche: France (**Wilkinson**), AHRC (**Finneran**), Austrian Academy of Sciences (**Thorpe**), Austrian Science Fund (**Bernasek**), British Academy, British Institute in Eastern Africa (**Finneran**), Deutsche Forschungsgemeinschaft (**Wilkinson**), EU Horizon 2020, Society of Antiquaries (**Finneran**), Swiss National Science Foundation (**Bernasek**), and UKRI Future Leaders Fellowships (**Everill**). **Bernasek** was also on the advisory board for an AHRC and ESRC-funded project called 'Re/presenting Islam on campus' 2015-2018 (AH/M00841X/1).

UoA members hold Fellowships of the Society of Antiquaries of London (**Everill**, **Finneran**, **King**, and **Roffey**), and the Royal Anthropological Institute (**Everill**, **King**), and **King** is also President of the Association for Roman Archaeology. Committee memberships include Winchester Excavations Committee (**Roffey**) and ClfA Human Osteoarchaeology Special Interest Group (**Dawson-Hobbs**).

As well as regular conference attendance and presentations, Unit members have been invited speakers at a number of events. **Thorpe** gave the keynote address at the launch of the book *Secrets of the High Woods*, and was an invited speaker at the conference for the 20<sup>th</sup> Anniversary of the discovery of Seahenge, Norfolk, and the 3<sup>rd</sup> International Annual Meeting of the LOEWE project Prähistorische Konfliktforschung - Prehistoric Conflict Research. **King** gave a keynote lecture to the Roman Period Working Group of the International Association for Archaeozoology conference at Basel in 2018, and **Marter** was invited to speak on European Aviation Archaeology at the Saxion University 'International Week' in Deventer, Netherlands in 2015, 2016 and 2017. **Finneran** organised and chaired a heritage session at the 2019 International Association of Caribbean Archaeologists conference Bridgetown, Barbados; was an invited Panel

member for the 'Museum Detox' session at TAG UCL 2019; and an invited discussant for a British Academy seminar on African heritage 2020.

### 4.3 Contribution to economy and society

In addition to the work detailed in the impact case studies and in relation to ARCA, other research conducted in the unit has made a contribution beyond academia. A key example, and one that is likely to form the basis of a future Impact Case Study for the unit, is **Marter**'s work on a range of fieldwork projects in both the UK and Germany that have focussed on wartime aviation heritage. This work has included attempts to influence the way in which wartime crash sites are recorded and protected, through the delivery of lectures to the RAF Museum in November 2018 ([www.rafmuseum.org.uk/cosford/whats-going-on/events/trenchard-lectures-in-air-power-studies/](http://www.rafmuseum.org.uk/cosford/whats-going-on/events/trenchard-lectures-in-air-power-studies/)) and in February 2020 ([www.rafmuseum.org.uk/london/whats-going-on/events/legacy-of-war-roundtable-aviation-crash-sites/](http://www.rafmuseum.org.uk/london/whats-going-on/events/legacy-of-war-roundtable-aviation-crash-sites/)). In 2014 and 2015 the excavation of an RAF Halifax Bomber (LV881) crash site in Hessen, brought together participants from a range of European HE institutions. Interaction between relatives of the aircraft's crew, local people, professional archaeologists, wartime veterans, serving airmen and students created a dialogue that reflected on differing views of the meaning of conflict and its legacy. Visits to local sites associated with the crash and its aftermath, such as the arrest cells at Flugplatz Giessen, transit camps at Dulag Luft (Oberursel) and Dulag Luft West (Wetzlar) emphasised the importance of establishing approaches to aviation archaeology that encompass more holistic heritage-based approaches to the subject. In a similar vein, two seasons of fieldwork at former RAF Melbourne in Yorkshire, where Halifax LV881 operated from (and home of RAF 10 Squadron) have sought to gain a greater understanding of the operational life of a wartime bomber station. Interviews with 10 Squadron veterans continue to record witness testimony from the Squadron during its operational life and are contributing towards a multi-disciplinary project to record the archaeology of a wartime squadron. The project has used traditional archaeological recording techniques (excavation and measured survey), and data collection (building, for example, databases of missing aircraft from 10 Squadron) and aims to provide new insight, preserve the personal histories of the squadron, and provide some closure for family and surviving crew members.

In addition to this, **Everill**'s interdisciplinary research on archaeology and mental health/wellbeing, has also involved working closely with veterans and veteran-focussed initiatives, and was featured in an article in *The Times* in late March 2020 (<https://www.thetimes.co.uk/article/soldiers-dig-deep-to-defeat-their-demons-w7zw3v9hx>) as well as local press. Funding from the MARCH Mental Health Network in 2019 enabled the hosting of a 'sandpit' event with key stakeholders in this sector at Solent University in February 2020. The predominantly non-academic participants included representatives from the Defence Archaeology Group, Operation Nightingale, Breaking Ground Heritage, Waterloo Uncovered, Combat Stress, Test Valley Borough Council, Wessex Archaeology, and Historic England, as well as veterans who had participated on one or more of the initiatives. Discussion centred around the need for guidelines to inform policy and practice, and led ultimately to the award of a much larger grant to develop guidelines for involving

participants with mental health needs in heritage. These guidelines will be determined through a collaborative DELPHI consultation and ultimately hosted by Historic England.

The unit's contribution to wider society, particularly in the region, can be evidenced through **King**'s longstanding association with (and now Chair of) the New Forest History and Archaeology Group that has seen him direct a number of community fieldwork projects in the Forest, and **Everill**'s excavation (2016-17) of a Scheduled Ancient Monument near Lyndhurst which involved collaboration with the New Forest National Park Authority; Historic England; Natural England; and the Forestry Commission. Further excavation was carried out by **King** and **Thorpe** at Meonstoke, Hampshire, working alongside the Meon Valley Heritage and Archaeology Group. **Thorpe** also worked at Petersfield with Petersfield Museum and the People of the Heath community project; as well as being a member of the Steering Group for the *Secrets of the High Woods* project run by the South Downs National Park Authority and an Advisor to the *Foundations of Archaeology* project run by the Cranborne Chase AONB. **Dawson-Hobbis** contributed to the *Kings & Scribes* exhibition which opened in May 2019 at Winchester Cathedral – and sits on the *Mortuary Chests* Project Board at Winchester Cathedral – but has also worked with Bristol City Museum and Art Gallery on the *Skeletons: Our Buried Bones* exhibition and with Avon Archaeology Ltd.

However, it was the unit's long running excavation of the medieval leprosarium and almshouse at Magdalen Hill, outside Winchester, (directed by **Roffey** and **Marter** from 2008 to 2015) that was a key element of our engagement with the local community, as well as the Department's principal training excavation. The discoveries made at the site generated a huge amount of interest among the wider community, with popular Open Days each year often attended by the mayor and other local dignitaries. There were also a number of articles/ broadcasts about the project in the regional and national media and in 2014, **Roffey** and **Marter** received the Vice-Chancellor's Community Engagement Award at that year's Graduation ceremony.