

Institution: University of Nottingham, Archaeology

Unit of Assessment: Sub-panel 17, Geography, Environmental studies and Archaeology

a. Overview

The research of the unit comprising the Department of Archaeology is focused in six themes: bioarchaeology, archaeological materials, historical archaeology, prehistoric archaeology and underwater archaeology, with a cross-theme in Mediterranean archaeology. The unit comprises twelve FTE lecturers, thirteen category A staff for REF2014 and three research-active technical support and teaching-only staff. The unit is particularly noted and internationally recognised for its leadership in large, usually collaborative, research projects, relating to excavations of settlements, surveys of terrestrial and submerged settlements and landscapes, and the innovative use of cutting-edge scientific techniques combined with social interpretation in the analysis of bioarchaeological remains and archaeological materials. Historically, the geographic scope of its research has spanned Europe, the Mediterranean and the Middle East. New initiatives and appointments have expanded that scope into central Asia, China, North America and south Africa.

b. Research strategy

i. Context

In RAE 2008, the unit defined three principal strategic aims for the period 2008-13: firstly, to further develop our research strengths in bioarchaeology, materials science and underwater archaeology; secondly, to promote important projects and initiatives through field-based research and research centres; and thirdly, to provide robust support for staff to develop their individual research profiles to engender a creative research culture by collective and individual initiatives. Between 2008 and 2013, completion of research projects and delivery of their outputs, together with staff changes and new initiatives have resulted in a reorganisation of the unit's research structure into groupings focused on the following six themes: bioarchaeology, archaeological materials, prehistoric (Palaeolithic to Iron Age), historical (Roman and medieval) and underwater archaeology, with a Mediterranean cross-theme. Participants in projects usually benefit from inclusion within both a period and material- or environmentally specific research group.

ii. Implementation of research strategy, 2008-13

The period between 2008 and 2013 has been particularly successful for publication of planned outputs resulting from major research projects and for the launch of exciting new research projects, funded from both research councils and new diversified sources from industry and private donors. The realisation of the strategic aims from RAE 2008 can be summarised as follows.

• Further development of research strengths in bioarchaeology, materials science and underwater archaeology

The research strengths in these fields have been developed by a combination of major publications and new staff appointments. Within the bioarchaeology research strand, **Sykes** published her planned outputs, *Extinctions and Invasions: a social history of British fauna* (Windgather), and published her research on the pan-European diffusion of Fallow deer in leading journals. The bioarchaeology research grouping has also been strengthened by the appointment of two new lecturers: Dr Alexandra Livarda, an archaeobotanist, and Dr Hannah O'Regan, a specialist on human origins. For archaeological materials/materials science, **Julian Henderson** published his planned book, *Ancient Glass: an interdisciplinary exploration* (CUP), and has published a series of articles in leading journals and an edited volume on early European and Middle Eastern glass. **Weeks** has completed and published in leading journals his work on copper production and exchange systems in Iran (c. 6000-3000 BC). **Pearce** continued to publish his fieldwork on the chronology of the early copper mine at Monte Loreto, Liguria, Italy. In the field of underwater archaeology, **Jon Henderson** continued the publication of his research on crannogs in southwest Scotland, in journal articles and an edited volume, and has developed the major new underwater survey project at Pavlopetri, Laconia, in Greece (see section iii below).

Promotion of important projects and initiatives through field-based research and research centres

Within the prehistoric research strand, **Weeks** has continued his research at Mamasani, Iran, and has successfully reconstructed the relationship between palaeo-climate and Neolithic settlement in the area, from analysis of lake sediment cores, with strategic funding from the 'Dean's Fund', Faculty of Arts, University of Nottingham. The award of a Leverhulme Fellowship **£31,800**)



enabled Pearce to publish *Exploring the north Italian early Neolithic* (Accordia). **Gallou** has continued publication of the Mycenaean cemeteries at Epidaurus Limera, in a series of articles, an edited volume, and in a book, *The Mycenaean Cemeteries at Epidaurus Limera in southeastern Lakonia* (INSTAP), currently in press. **Georgiadis** has published his book on the Aegean island of Kos, *Kos in the Neolithic and Early Bronze Age* (INSTAP). The research and publications by Gallou and Georgiadis were enabled largely by postdoctoral Fellowships, funded by private donors through the *Centre for Spartan and Peloponnesian Studies* (CSPS), at the University of Nottingham. **Jon Henderson's** underwater archaeology projects in southwest Scotland and at Pavlopetri have been enabled through the facilities of the *Underwater Archaeology Research Centre* (UARC), and the Pavlopetri project is a joint project with the CSPS.

Delivery of major projects and initiatives in historical archaeology has comprised publication of major works on northern and eastern Europe and the Mediterranean, in the Roman and medieval periods. **Bowden** has continued his planned publication of the results of the Butrint excavations, with Richard Hodges, notably Butrint 3: Excavations at the Triconch Palace (Oxbow). He has also continued to develop his survey and excavation research at the Romano-British town of Venta Icenorum (Caistor, Norfolk), through the award of £67,734 from the British Academy, and partnerships with regional government and volunteer groups. The provisional results have been published in a range of leading journals. Poulter has continued the post-excavation analysis of his major excavations at the early Byzantine fortress at Dichin, Bulgaria. Interim publication of the results has proceeded through journal articles and edited volume contributions, while full publication has been delayed due to the death of a key member of the post-excavation team. He has also begun his planned excavations of a sixth-century hill-top fortress at Dobri Diyal, in the Danube valley, Bulgaria, and has published interim results. The Centre for Late Antique and Byzantine Studies (CLABS) at the University of Nottingham has provided a supporting environment for the completion and development of these projects through seminars and contextual advice provided by members of staff and colleagues from other British and European institutions.

Loveluck implemented his planned research initiatives. He wrote and published the book, Northwest Europe in the Early Middle Ages, AD 600-1150: a comparative archaeology (CUP). He also continued his surveys and excavations at the fifth- to eleventh-century harbour settlement at Stavnsager, East Jutland, Denmark, funded by the British Academy (£30,900 spent in REF2014 cycle) and East Jutland Museum and archaeology service). Interim results have been published In leading journals and edited volumes. Publication of his landscape surveys in coastal Flanders has also continued. The completion of these projects has benefitted from presentations by Loveluck and debates ensuing from them, during seminars and events of the Institute for Medieval Research, at the University of Nottingham. Julian Henderson has continued with the post-excavation analysis and publication of his research on industries in the Islamic city of Raqqa, Syria, during the early medieval period. The current civil war in Syria has delayed the progress of the final publication of the excavation report. The research has been informed by Julian Henderson's prominent role in the Institute for Middle Eastern Studies at the University of Nottingham (see section d below).

Provision of robust support for the development of staff research profiles and the engendering of a creative research culture by collective and individual initiatives Between 2008 and 2013, robust support for development of research individually and collectively has been provided through a range of mechanisms. In addition to the support provided by the specific research institutes and centres stated above, staff have also benefitted from considerable support provided by the University of Nottingham. Loveluck was successful in being awarded a grant from the 'Dean's research fund' of the Faculty of Arts, to support the completion of the book for CUP (£4,000) in 2009-10. Bowden benefitted from the University 'New Lecturer's Fund' (£7,300) for the support of his research on the Roman town at Caistor, in 2008-9. He also received support from the University's 'Knowledge Transfer Challenge Fund (£1,000), in 2009-10. Jon **Henderson** has also benefitted from University funding to match income derived from private donor or industry sources (£43,233). Since 2010, the Centre of Advanced Studies (CAS) for the Faculty of Arts has been the principal vehicle for the provision of research support to individual and collective initiatives in the Faculty of Arts. Through support from CAS King was successfully awarded a University of Nottingham 'Early Career Research and Knowledge Transfer award' (£6,500) on 'Experiencing the pre-modern townhouse'. Sykes and Julian Henderson have



received funding for collective enhancement of research culture both within the unit and for the benefit of their collaborative research: **Sykes** was awarded a network support grant (£1,000) through the CAS to develop the network which has resulted in the successful AHRC award in August 2013 on 'human-chicken interaction' (£1,576,505) which includes a new PDRA for the unit; and **Julian Henderson** received a grant from CAS (£7,000) to develop the research network for the Silk Road project (see section d for further discussion of research infrastructure).

iii. New projects and developing initiatives, 2008-13

As a result of our enhanced research culture and infrastructure and the arrival of new colleagues following retirements (see section c below), the unit has exceeded the goals it set for itself in RAE 2008 through the development of additional research projects and initiatives.

Within the bioarchaeology strand, **Sykes** has continued to lead research on fallow deer with a large group of international collaborators, which resulted in the award in 2011 (as PI) of £644,846 from the AHRC, to conduct the *Dama International: Fallow deer (Dama dama dama) and European Society* project. This explores the diffusion of Fallow deer from Asia into Europe, using DNA and isotope techniques. Following the award of an AHRC 'Science in Culture Large Grant' (£1,576,505) in August 2013, **Sykes** will also co-direct (and CoI) the project 'Cultural and Scientific perceptions of human-chicken interactions', between 2014 and 2017. **O'Regan** has begun her *Quantifying the Mosaic: African palaeoenvironments* project, funded by the Leverhulme Trust (£222,780) exploring the environments inhabited by early hominins. **Livarda** has pursued her archaeobotanical research, especially relating to spices and condiments in western Europe, during the Roman period and Middle Ages, and has begun new excavations of the Minoan town at Palaikastro, Crete.

For the archaeological materials strand, **Julian Henderson** has undertaken analytical research, using isotopes, on Bronze-Age Hittite glass from Anatolia; from Ugarit, Syria and from central and western Europe. He has also begun 'The Silk Road project', on the archaeology of east-west links along the Silk Road from China to Europe, using archaeological materials as markers of provenance and exchange. To date, the project has led an international workshop and four PGRs are undertaking PhD research on Silk Road themes. **Faber** has analysed the Iron Age- to early medieval Charnwood Forest pottery industry (Leicestershire); and salt-glazed stoneware from the Morley potteries in Nottingham.

Within the underwater, prehistoric and Mediterranean strands, **Jon Henderson** and **Gallou** have initiated a major underwater survey of the Bronze Age harbour/port settlement at Pavlopetri, Laconia, Greece (*Pavlopetri Underwater City project*). The project is undertaken in partnership with the underwater ephorate of the Greek government and the University of Sydney, funded by £85,000 from public sector and private donors, and £21,070 from HEFCE 'Higher Education Innovation (HEIF) funding. At the request of the Sicilian authorities (Soprintendenza de Mare), **Jon Henderson** has also surveyed a shipwreck, from the fourth century AD, and the site of the sea battle of Trapani, from the era of the Carthaginian wars. Within the prehistoric and Mediterranean groupings, **Gallou** and **Georgiadis** have begun excavations on Bronze Age sites on the island of Kythera, Greece in 2011; and **Pearce** will begin the excavation of a Copper-Age 'Beaker' settlement, in Liguria, Italy, in 2014.

Within the historical archaeology strand, **Orengo** has focused his research on the western Mediterranean in the Roman period, especially on landscape and economic development, using palaeo-environmental data, morphological evidence and cutting-edge GIS analysis. **Loveluck** was co-chair of the 'Early Medieval' working group for English Heritage that produced the *Maritime and Marine Historic Environment Research and Conservation agenda for England*, 2009-2013. **King** has begun a major new project, *Experiencing the pre-modern town-house*, using three-dimensional digital virtual reality as a research tool, and expanding the unit's research scope into the period, c. 1500-1800; and **Taylor** has published his survey of the west front of Lincoln Cathedral.

- iv. Principal objectives for strategic development of research and plans, 2014-19 In the next five years, the unit plans to develop its research in five main areas:
- -To consolidate and develop existing strengths across the research strands and to bring current research projects and initiatives to fruition and publication (all staff).
- To develop an increasingly global dimension to the unit's research activities, both east-west and north-south over the *longue durée*, from human origins in Africa (**O'Regan**) to exchange between Europe, the Mediterranean and the Middle East (**Julian Henderson, Pearce, Livarda, Bowden, Poulter, Jon Henderson, Gallou, Loveluck, Sykes, Weeks, Faber, Georgiadis**), trade along the Silk Road and Spice routes (**Julian Henderson, Jon Henderson, Livarda, Loveluck**) and trans-



Atlantic links with early Colonial America (**King**). This new strand will be supported by the integration of archaeology within the University of Nottingham campuses in China and Malaysia and consolidation of existing links with American universities: Harvard (**Loveluck**); Boston University (**King**); and Mediterranean universities: Padua and Genoa (**Pearce**) and Thessaloniki (**Livarda, Gallou**).

- -To research the cultural biogeography of plants and animals (Sykes, O'Regan, Livarda).
- -To explore the origins and dispersal of technologies and their impacts on the environment (**Julian Henderson**, **Pearce**, **Weeks**).
- -To continue to develop collaborations and knowledge exchange partnerships with non-HEI institutions, with an emphasis on integrating PGRs/ECRs for their career development (all staff).

c. People, including:

i. Staffing strategy and staff development

During the review period for REF2014, Archaeology has aimed, and has the continued objective to maintain and develop existing period-based, material-specific and geographical research and teaching strengths. Major changes have occurred in personnel due to replacement of retiring colleagues but staff continuity and retention among younger staff has been excellent. The unit has twelve FTE Lecturing staff, thirteen category A staff submitted to REF2014, and three Teaching Associates (Taylor, Faber, Georgiadis), who support and initiate research in their own right. Georgadis was formerly a postdoctoral research fellow in the Department. In the review period, the record of promotions has been excellent, with Jon Henderson, Loveluck, Weeks, Bowden, **Sykes** and **Forbes** promoted to Associate Professor or Reader. Prestigious Fellowships were also awarded during the review period to **Pearce**, who was appointed to a Leverhulme Trust Research Fellowship: Sykes, who was awarded AHRC-funded research leave; and Nikita, who held an AHRC Research Fellowship. The University of Nottingham has also implemented the Concordat on Career Development of Researchers, resulting in a new annual 'Personal Development and Performance Review' (PDPR). This involves setting goals relating to research funding, publication and knowledge exchange, among others, and guidance is offered on how to meet these goals, including training by the Professional Development Unit (PD). All appointments at the University are governed by its Equal Opportunity Policy on Disability, Gender and Race to ensure appointments and promotions are based on merit.

Between January 2008 and July 2013, retiring colleagues and one younger lecturer, who resigned, were replaced with the aim of consolidating and developing existing strengths, and enhancing the unit's research and teaching scope by appointing experts in new fields. Dr Lloyd Laing (early medieval archaeology) was replaced by Dr Chris King (Lecturer), an expert on medieval and early modern England, and on the archaeology of buildings, thus expanding the medieval research focus and restoring the unit's historic strength in buildings archaeology. He also helps expand the unit's research on global east-west links with his work on early Colonial north America. Dr Claire Newton (archaeobotany) was replaced by Dr Alex Livarda (Lecturer), an expert on archaeobotany, especially relating to spices and condiments, which again helps meet the strategic aim of exploring east-west links over the longue durée; Professor William Cavanagh (Aegean prehistory) was replaced by Dr Chrysanthi Gallou (Lecturer), also an expert in Aegean prehistory, and a former postdoctoral research fellow in the unit; and Dr Hamish Forbes (anthropology and ethnographic archaeology) was replaced by Dr Hannah O'Regan (Lecturer), an expert on human origins, who expands the unit's research and teaching into the Palaeolithic and also helps meet the increasingly global scope of the unit's research, with her current research in South Africa. The promotions and new appointments in the review period have consolidated and expanded the breadth of research strands/groupings since 2008.

All FTE lecturing staff are provided with regular research leave, with one semester in a three year cycle. There is also an opportunity to apply for a matching semester from the Faculty of Arts, Dean's Fund. The School of Humanities has a staff development policy, which aims to support the professional and personal development of all staff in the School. Support is delivered through courses at the Professional Development Unit (PD). The School also provides all lecturing staff with an allowance of £500 per annum for conference participation in the United Kingdom, and a £1,000 allowance for international conferences. Internal funding is also available from the Centre for Advanced Studies (CAS) to provide development funding for research initiatives; for example, the grants awarded to **Sykes, Julian Henderson** and **King** (see section b).

The last five years have seen a significant increase in the number of postdoctoral Fellows



(independent researchers) and Research Assistants (linked to projects). Between January 2008 and the end of July 2013, **twelve** Postdoctoral Research Fellows (PDRFs) and Research Assistants (PDRAs) have been based within Archaeology at Nottingham. The Research Fellowships have been funded by the British Academy (**Nikita**), the AHRC (**Nikita**), Marie Curie FP7-MCF (**De Rijk**, **Boschetti**), Leverhulme Trust ECF (**Monteil**), the Costopoulos Foundation-Alphabank (**Gallou, Georgiadis**), and the University of Nottingham Advanced Research Fellowship scheme (**Orengo**). The Research Assistantships have been linked to major collaborative research projects, funded by the AHRC, the Leverhulme Trust, the British Academy and Hewlett-Packard: namely *Dama International* (**Madgwick, Miller**); *Stavnsager early medieval port* (**Johnson**); *Caistor Roman town project* (**Bescoby, Monteil**); *Butrint post-excavation analysis project* (**Johnson**); *Connected Communities research initiative* (**Johnson**); *Quantifying the Mosaic* (**Reynolds**). All PDRFs and PDRAs are mentored by senior members of staff who guide them on research and teaching development. **Gallou** has since been appointed as a Lecturer, and Georgiadis as a Teaching Fellow in the unit.

ii. Research students

The unit continues to consider postgraduate researchers (PGRs) as the newest members of its research community, and it takes their personal and professional development seriously. It has been highly successful in supporting them to completion. Between 2008 and July 2013, there were fifteen completions and successful awards of Doctorates, in historical (especially medieval) archaeology (6), prehistoric archaeology (3), bioarchaeology (2) archaeological materials (2) and underwater archaeology (2). Five of the Doctorates were geographically focussed on the Mediterranean world. During the review period, Archaeology has also expanded the scope of research undertaken by its PGRs to include a wider range of prehistoric research themes, focusing especially on the Middle East. Further strides have been made in attracting researchers on themes linked to historical archaeology, bioarchaeology and materials. These successes have resulted in an aggregate total cohort of 22.25 FTE PGRs supervised within the unit, between 2008 and July 2013. Eight students received full-time funding from the AHRC during the review period; others received full-time funding from the University of Nottingham.

The unit received one PhD-studentship annually from the AHRC in BGP1. **Four** new PhD students will begin their Doctoral research in September 2013, with two funded 50% by the AHRC-funded place and 50% by the University of Nottingham, and one international student funded 100% by the University of Nottingham. From 2014, Archaeology will benefit from its inclusion in the successful 'Midlands Three Cities' AHRC BGP2 Consortium. The AHRC will fund 205 PhD studentships, accompanied by both a student and cohort development fund, which all consortium partners match on a one-to-one basis. This delivers 410 studentships for the consortium for Arts and Humanities, which will play a major role in the future sustainability of the research in the unit.

All PhD students within Archaeology have two supervisors, one of whom acts as the principal and take the lead in supervision. A student will have at least ten supervisions a year, 70% with the principal and 30% with the secondary supervisors. An annual review system monitors progress of each student. The review is conducted on the basis of a written summary of annual progress, chapter drafts, a thesis plan, bibliography and completion timetable. The review is then conducted by a member of academic staff in Archaeology, who is neither the principal or secondary supervisor. Any problems encountered are discussed with the student and supervisor team, and appropriate steps and training to resolve any problems are undertaken, and a work plan for the following year is agreed. All students are also required to undertake a training programme run by the Social Sciences and Arts Graduate Centre (SSAGC). In 2012, in response to the new AHRC Research Training Framework and in support of the Concordat to Support the Career Development of Researchers, the SSAGC designed a Faculty Training Programme, tailored to the specific stages of the PhD, including provision of a 'development needs analysis' for each student in the annual review process. The SSAGC was nominated in THES for its 'outstanding support of early career researchers' in 2009 and 2011.

All PGRs attend and participate in the weekly research seminar. It is also compulsory for them to give a seminar on their research at the annual Postgraduate conference, to foster internal discussion and supportive critique. Where research students use specific scientific techniques they may be trained both in our laboratories and those of partners. For example **Sykes** obtained an AHRC Collaborative Research Training (National Scheme) award for the 'Archaeological Fish Resource' (£39,900) to train PGRs from around the UK; and students are trained in isotopic



analysis at the British Geological Survey (BGS).

Research students often study an element within a broad research theme pursued within centres and institutes within the University (see sections b and d). They are all affiliated with these centres and are encouraged to participate fully in their activities (seminars, conferences).

d. Income, infrastructure and facilities

Development of research projects, both individual and collaborative, is supported by the Centre for Advanced Studies (CAS), through pump-priming of pilot projects (see section bii). Mentoring to assist the development of research grant applications is provided by the Director of Research within the unit, the Director of Research of the School of Humanities and by CAS. Mentoring and peer-review is also delivered through a peer-review college for the Arts and Social Sciences (members include **Bowden, Loveluck, Pearce,** and **Sykes**). The School of Humanities recognises the level of work needed to produce major grant applications, and they are viewed as outputs of research leave. The School and Research Graduate Services (RGS) provide post-application support to Principal investigators, including advice on financial management.

Staff initiatives and the research infrastructure have resulted in a significant increase in acquisition of research council funding in the REF2014 review period and an increase in funding obtained from private donors. The overall drop in income from the review period for RAE2008 is due to a focus on delivery of outputs from major research projects for REF 2014 and the departure of the Trent and Peak Archaeological Unit from the University. Overall, Archaeology has spent income totalling £1,396,000 between January 2008 and July 2013 and received £148,793 as research income-in-kind (NERC-NIGL isotope facility, NERC-AHRC national radiocarbon dating facility). Notable individual awards from research councils include Bowden (£67,020, British Academy), Julian Henderson (£144,300, Marie Curie FP7-MCF), Nikita (£184,400, British Academy; £64,980, AHRC), O'Regan (£222,780, Leverhulme Trust), Sykes (£644,846, AHRC), Weeks (£112,200, Marie Curie FP7-MCF). The unit has also been successful in diversifying its income base to include private donations to fund research: notably for Cavanagh, Gallou and Georgiadis (£151,900, from the Costopoulos foundation, Nireus Georgiadis and Evangelia-Sevasti Antonini) and Jon Henderson (raised £85,000 from various sources for *Pavlopetri*).

Research is also supported and disseminated through the research centres within the School of Humanities and two Faculty/cross-Faculty institutes. Colleagues from Archaeology play leading roles in all these bodies. They include: the *Centre for Spartan and Peloponnesian Studies* (**Gallou**, Deputy Director; **Georgiadis**, **Nikita**); the *Centre for Late Antique and Byzantine Studies* (**Poulter**, Director; **Bowden**, **Loveluck**, **Orengo**); the *Underwater Archaeology Research Centre* (**Jon Henderson**, Director; **Loveluck**). The institutes comprise the *Institute for Middle Eastern Studies* (**Julian Henderson**, Director 2010-12) and the Institute for Medieval Research (**Loveluck**, Treasurer 2009-12; **King**, Treasurer 2012-13, Director, 2013-14).

The University has invested in the construction of a new building for the School of Humanities, which houses the Department of Archaeology, costing £8 million. This included new laboratories for the analysis of archaeological materials and bio-archaeological remains. A new laboratory was also constructed to house the micro-probe research facility in Archaeology. New storage facilities house the reference collections to facilitate research in bio-archaeology and archaeological materials. This investment in laboratories and storage facilities cost the University £392,460, and has provided essential infrastructure for undertaking the *Dama International* and *human-chicken relations* projects.

e. Collaboration or contribution to the discipline or research base

i. Collaboration

Archaeology at Nottingham has long been epitomised by the leadership of, participation in and publication of large-scale collaborative projects of primary research. All members of staff within the unit are involved in such collaborations. Selected representative examples include: the *Dama International* project (**Sykes** et al.), with twenty collaborative partners in the United Kingdom, Greece, Italy, Belgium, Ireland and the United States, comprising academic institutions, government institutes and industry groups (e.g. British Geological Survey, British Deer Society); and the *Silk Road* project (**Julian Henderson** et al.) involving partners from the United Kingdom, China, Kazakhstan, India, Turkey, the United Arab Emirates, Italy and the Netherlands. The *Dama*, *Silk Road* and the new *Human-Chicken Interaction* projects have all benefitted from funding for pilot-development of the networks from which they have grown, via grants from CAS at the University (see section biii-iii). All national and international primary research projects are also



conducted in partnership with a national archaeological or heritage agency or academic partner. For example, the projects at Pavlopetri (Jon Henderson, Gallou) and Palaikastro (Livarda) are conducted via the British School at Athens, and the projects on Kythera (Gallou, Georgiadis) are undertaken with the ephorate of Piraeus. Projects in Italy, in Liguria (Pearce) and Trapani (Jon Henderson) are undertaken with Italian state archaeological services (Soprintendenze). Other survey and excavation projects are conducted with the following partners: Mamasani (Weeks), Iran, with the Iranian centre for Archaeological Research; Stavnsager (Loveluck), Denmark, with East Jutland Museum service; Butrint (Bowden), with the Albanian Institute of Archaeology, and Dobri Dyal (Poulter), Bulgaria, with the Bulgarian Academy of Sciences. These collaborations result in large multi-authored volumes or journal articles: e.g., Life and Economy at Early Medieval Flixborough (Evans and Loveluck 2009, 41 contributors): and Butrint 3, Excavations at the Triconch Palace (Bowden and Hodges 2011, 14 contributors).

ii. Contribution to the discipline & research base

The Department of Archaeology at Nottingham makes a considerable contribution to the wider discipline and research base of archaeology. **Julian Henderson** is the Archaeometry <u>editor</u> for *Journal of Mediterranean Archaeology and Archaeometry*. **Loveluck** was Archaeology editor for *Early Medieval Europe*, 2009-12. **Sykes** is co-editor (Zooarchaeology) of the *International Journal of Osteoarchaeology*. The following staff are members of editorial boards: **Gallou**, *Childhood in the past*, **Loveluck**, *Nottingham Medieval Studies*; **King**, *Nottingham Medieval Studies*; **Pearce**: *Origini*, *Padusa*, *Opera Ipogea*; **Poulter**: *Archeologia* (National Journal of Archaeology, Poland); **Weeks**: *Proceedings of the Seminar for Arabian Studies*. All staff acted as referees for leading international journals or academic publishers (e.g. Oxford University Press).

Loveluck was <u>assessor</u> of all applications in medieval and post-medieval archaeology on the Humanities panel, for the *Newton International Fellowships*, 2009-10. He also served on the expert review panel for archaeology (three members) for the *Social Sciences and Humanities Research Council of Canada* (SSHRC) for the *International Partnership project awards* (up to 1.5 million UK pounds (£) per project), 2012. The following staff members served on peer-review colleges for research councils: **Julian Henderson**, NERC peer-review college until 2008-10; **Pearce**, AHRC, Italian MURST; **Poulter**, AHRC; and **Orengo**, computer applications and quantitative methods in archaeology review College, 2011-12.

The following colleagues have served as <u>reviewers</u> of applications to British, American and European research councils. **Bowden**, Leverhulme Trust, Irish Research Council for the Humanities and Social Sciences; **Jon Henderson**, Irish Research Council for Humanities and Social Sciences; **Julian Henderson**: AHRC, NERC, Italian, Canadian and Portuguese research councils; **Livarda**, Wellcome Trust; **Loveluck**, British Academy, AHRC, Irish Research Council for Humanities & Social Sciences; MacArthur Fellowship program, USA; **O'Regan**, NERC, The Leverhulme Trust; **Pearce**, Austrian FWF, the US National Science Foundation, The Leverhulme Trust, Research Foundation, Flanders; **Poulter**: Austrian Science Fund, Danish Research Council, Humanities; **Weeks**, NERC and **Faber**, Portuguese Science Foundation.

Colleagues have acted as <u>external examiners of Doctoral theses</u> at the following institutions: **Bowden,** University of Sheffield; **Julian Henderson**, University of Sheffield; **King:** University of Oxford, Boston University, MA, USA; **Loveluck,** Boston College, MA. USA; **Pearce:** University College, London, University of Cambridge; Universities of Genoa and Padua, Italy; **Poulter**, Trinity College, Dublin; **Sykes**, University of York; University of Exeter; University of Leicester; **Weeks**, Universities of Oxford, Liverpool, University College, London and Aarhus, Denmark.

Principal roles in the following <u>leading academic and professional societies</u> (among others) have been undertaken by: **Pearce**, Secretary, European Association of Archaeologists, 2011-2014, also appointed a 'Corresponding Fellow of the German Archaeological Institute', 201 **King**, Secretary, Society for Post-Medieval Archaeology, 2011-present), council member, 2004-present; **Bowden**, member of Councils of Society for the Promotion of Roman Studies 2008-2010, Society for Medieval Archaeology, 2007-2009; **Faber**, committee member of Ceramic Petrology Group, 2009-10; **Jon Henderson**, executive committee member, Nautical Archaeology Society; **Julian Henderson**, member of council and editorial committee, Royal Archaeological Institute; **Sykes**: 2007-11: committee member, Association for Environmental Archaeology, 2007-11; member of British Deer Society Research Committee, 2010-present; and **Weeks**, committee member, Society for Arabian Studies, 2005-10; Trustee, British Foundation for the Study of Arabia, 2010-present.