

**Institution: Oxford Brookes University**

**Unit of Assessment: 14 Geography and Environmental Studies**

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

### **1.1 Unit Context and Structure**

Geography and Environmental Studies at Oxford Brookes combines research excellence with engagement and co-production of knowledge across international, national and local partners and key stakeholders. This is delivered most significantly by the Centre for Environment and Society (**CES**), which supports innovative thinking across the natural sciences, social sciences and humanities. **CES** provides a vibrant research environment that is designed to be world-leading, setting new agendas in Geography and allied disciplines and seeking policy and societal relevance and impact. Significant contributions to date include novel methodological advances in tracking UV radiation through time (**Fraser**), human origins and dispersals (**Parker, Parton, Preston**), evolution of diseases (**Underdown**), geopolitical approaches in the Arctic (**Medby**) and the legacy of megaevents (**Gold**). The impact of research findings has brought about changes in environmental and social areas such as working with the UN, European Commission and NGOs on torture prevention (**Carver**), engaging with NGOs and farming communities to address human-wildlife conflict (**Hill**), the UN for disaster risk communication (**Blackburn**), Jordanian Ministry of Culture regarding cultural heritage management (**Finlayson**) and the Home Office for detention and extradition (**Gerlach**). To support this, the UoA has adopted practices and structures that foster and consolidate the vitality of its wide-ranging research environment. The majority of members of the UoA are in the School of Social Sciences, but members are also based in the Centre for Development and Emergency Practice (CENDEP) (**Carver**) and School of History, Philosophy and Culture (**Gerlach**). Cross-disciplinary research has also led to links, evidenced by joint research grants, publications and events, with disciplines elsewhere in Oxford Brookes: particularly with the Global Politics, Economy and Society Research Centre in the Department of Social Sciences (e.g. **Medby** and **Chambers**), **Nowicki's** ESRC-AHRC funded work on UK-Japan housing, social care and health (with **Cho** and **Keivani**, Institute for Sustainable Development).

The **CES** was built upon the strategic aims for research and impact that were outlined in the 2014 submission and are supported at UoA, School and University level. It replaced a previous research centre ACCEND (Anthropological Centre for Conservation, the Environment and Development), and more closely reflects the research synergies and interests across the UoA. This has arisen from diversification of staffing and a related broadening of research interests and agendas following retirements and growth posts, including the appointment of seven ECRs (see section 2), working in a range of new and complementary areas of the discipline.

The **CES** now provides the focal point for research in UoA14. Led by two co-directors (**Fraser** and **Underdown**) and overseen by the School research committee. **CES** receives pump priming funding to promote crosscutting, multidisciplinary and outward facing research and associated impact. Underpinning this is a highly valued research culture that promotes inclusivity, collegiality, collaboration and engagement for staff and students spanning all career stages. The UoA has experienced growth from 13.4 to 19.98 FTE and enhanced its international research excellence through a commitment to support and promote high profile outputs, e.g. using targeted sabbaticals to increase the number of research-based monographs, from one in REF2014 to five for REF2020.

The creation of **CES** provides the formal environment that enables agenda setting, high quality scholarship and demonstrable impact focused research through three main research groupings, which have been strategically reworked from those present in the REF2014. The governing body of **CES** comprises representatives from each of the three research groupings, which includes ECRs (e.g. **Chambers**, **Nowicki**). This arrangement enables colleagues from ECRs to Professor (**Hill**, **Parker**) to direct collaboratively the different elements of the Centre's research and impact strategy (including allocations of internal QR funding within the Centre). Research is focussed across three main groups:

The first is **Human Origins and Palaeoenvironments (HOPE)**. This has promoted scientific advances at the interface between the natural sciences (STEM) and the humanities, arts and social sciences (HASS) in areas of Quaternary environmental change and human-environment interactions. Since 2014, **HOPE** members have published >80 articles in leading journals, >20 book chapters, edited books (e.g. **Finlayson's** *Diversity of Hunter Gatherer Pasts*; *Digging up Jericho*; and *Settlement, Survey and Stone*) and a major research monograph on early Neolithic Settlement in Southern Jordan (**Smith/Finlayson**). **HOPE** CAT A staff are **Finlayson, Parker** (Profs) **Fraser, Smith, Underdown** (Readers), **Williams** (Senior Lecturer, SL), **Preston** (Research Fellow, RF), **Parton, Satow** (Lecturers) **Fenn** (ECR). RFs moved to positions elsewhere (*Morley* - now A/Prof at Flinders University and *Russ* now in commercial archaeology) but both have retained associate status.

This group has a range of cross-cutting interdisciplinary expertise in palaeoclimates (**Fraser, Parker, Parton, Preston**), chronology (**Fenn, Satow**), archaeology and geoarchaeology (**Finlayson, Smith, Parker, Parton, Preston, Underdown**), anthropology (**Smith, Underdown**), stratigraphy (**Fenn, Fraser, Parton, Parker, Satow**) and palaeoecology (**Fraser, Parker, Williams**) and work is deliberately multidisciplinary in approach. Building on research developed in REF2014 we have continued to examine human-environment interactions on a range of scales tracing ancient human dispersals and adaptations in Africa (**Parker, Underdown**), Near East (**Finlayson, Smith**), Arabia (**Parker, Parton, Preston, Underdown**), and more recently Australia (**Parker**). Staff have advanced new high-precision chronological developments in optical stimulated luminescence, detrital zircon U-Pb (**Fenn**) and tephrochronology (**Satow**) as well as the development of novel biogeochemical proxies for measuring UV radiation through time and space (**Fraser**).

**Space and Temporalities (ST)** brings together research that extends our purview of issues in the humanities, arts and social sciences (HASS). Led by **Chambers** and **Nowicki** and interdisciplinary in nature, it explores themes that lie at the intersections between 'space' and 'temporality' from across the HASS. This group develops new understandings of contemporary as well as historical social, cultural and political changes, at multiple spatial scales, from the household to the global. **ST** staff have published four monographs ranging from *Festival Cities* (**Gold**), *Aging and Loss in Japan* (**Danely**), ethnographic research on fishing communities in coastal Sierra Leone (**Diggins**) and *Networks, Labour and Migration among Indian Muslim Artisans* (**Chambers**); four edited books (e.g. **Matsunaga's** *Globalizing Asian religions*; **MacClancy's** *Alternative Countrysides*), >40 journal articles and >20 book chapters. Research foci include culture, identities and divisions (**Carver, Chambers, Diggins, Danely, Gerlach, MacClancy, Matsunaga, Medby, Wignall**); urban histories, resilience and living (**Blackburn, Gold, Nowicki**).

CAT A staff include **Gold, MacClancy** (Profs), **Matsunaga** (Principal Lecturer), **Danely, Carver** (SL), **Diggins** (Lecturer), **Blackburn, Chambers, Gerlach, Medby, Nowicki, Wignall** (ECRs). **ST** has developed new insights that have advanced geopolitical approaches, for example, identity in political-territorial legitimisation processes in the Arctic (**Medby**). Historical and contemporary forms of research address the legacy of Olympic cities and Festival cities (**Gold**); issues of homeless households and temporary accommodation (**Nowicki**). Ethnographic works on family caregiving, death and the experience of compassion in the UK and Japan (**Danely, Matsunaga**), history of indentured labour, violence, and gendered migration West Africa (**Diggins**). **ST** research on carceral geographies engage with immigration incarceration and detention (**Gerlach**) and torture prevention (**Carver**) and have led to significant impact.

**Humans, Animals and Environments (HAE)** provides a forum for interdisciplinary research into livelihood economies, people-wildlife interactions, rural development and their relevance to conservation. This group encompasses staff that connect STEM and HASS and includes *Cheyne, Donati, Nekaris, Nijman, Svennsson* (returned to UoA5). Led by **Hill** with *Donati* and *Cheyne*, its research expertise includes: changing land use and impacts on livelihood strategies, people-wildlife interactions, and human-induced disturbances on wildlife populations. Group members have extensive experience of fieldwork across Africa (West, East and South) and Southeast Asia. Research students have worked in a range of countries including Guinea Bissau, Uganda, and

Columbia. Since 2014 one RF has moved to a position elsewhere (*Hockings* - now SL Exeter University) and *McLennan*, has continued working as a Research Assistant within the UoA).

Boundaries between research themes are dynamic to promote interdisciplinarity across the University. Notable examples include research on intersections with the Centre for Global Politics Economy and Society (**Medby, MacClancy, Chambers**), the University's Networks for Healthy Ageing & Care (**Danely** as social science lead), Migration and Refugees (**MacClancy**, chair), Children and Young People (**Wignall**) and CENDEP (**Blackburn, Carver**). We also encourage, and support links outside the University (see section 4).

## 1.2 Research and Impact Strategy

Our strategic aims have been to sustain and enhance areas of research excellence and develop new areas of intellectual inquiry through a supportive and stimulating research culture. The overarching objective for the unit during the assessment period has been to deliver the highest possible outcomes in research and impact, particularly in the areas represented by our three research clusters. These aims dovetail with the Faculty of Humanities and Social Sciences Research Strategy and University Research Strategy 2015-2020.

Our aims have been substantially delivered through five strategic objectives:

1. Create distinctive research groups that embrace and advance contributions to the natural sciences, social sciences and humanities, which shape and benefit the discipline.
2. Recruit and retain the very best researchers to develop research leadership and develop the next generation of researchers;
3. Pursue and support research of the highest quality that is, or has the potential to become, recognised as internationally excellent or world-leading;
4. Promote and support collaborations and partnerships across the institution and with external partners locally, nationally and globally.
5. Enhance the impact of our research in its broadest terms, and widen dissemination of our research for the benefit of our communities, whether local, regional, national or global, including our staff and students.

These objectives, which continue the aims set out in our REF2014 submission, have guided our activities in the current assessment period, and are shaping our plans for future development.

Our *strategic achievements* since REF2014 include: (i) boosting our staff return to 19.98 FTE (see section 2) through strategic investment as well as investing in and retaining core staff. This demonstrates our commitment to investing in people and developing research careers and incorporating excellence through our staff; (ii) increasing the number and quality of major outputs that demonstrate international research leadership (see REF2), including five books/monographs, including **Diggins** 2020 Amaury Talbot Book Prize, five edited books, over 140 papers in leading journals, over forty book chapters as well as a range of working papers, conference proceedings and news articles; (iii) a 60% increase in total research grants awarded compared to REF2014 (see section 3); (iv) increased capital expenditure in research infrastructure (section 3); (v) the launch of the *Centre for Environment and Society* as an interdisciplinary research centre to enable strategic development of research; (vi) increased significant research impact via existing and new research partnerships (see REF3).

Our *strategic objectives* beyond REF2020 are to: (i) Pursue and support research that has demonstrable potential to be recognised as internationally excellent or world-leading, through which significant impact can be demonstrated. This will be achieved in our established areas of expertise – Space and Temporalities (**ST**), Human Origins and Palaeoenvironments (**HOPE**) and Humans, Animals and Environments (**HAE**) as well as crosscutting and emerging research interests through contributions to the newly established University Research Networks. These include Healthy Ageing and Care; Children and Young People; Inclusion, Diversity and Gender, Migration and Refugees, Sustainable & Resilient Futures and Ethical AI and Data; (ii) increase external research grant income and funding through strategic collaborations and partnerships across the institution and with external partners locally, nationally and globally to enhance research excellence. Participation in interdisciplinary networks will promote grant capture and confirmed research grant awards post

REF2021 will support research in these areas (as detailed in section 3); (iii) enhance the impact of our research in its broadest terms, and to widen dissemination of our research for the benefit of our communities, whether local, regional, national or global; (vi) ensure that research is compliant with Open Access policy.

### 1.3 Facilitating Impact

Our impact goals are to: (i) embed our research with knowledge partnerships for non-academic beneficiaries and audiences through extended public discourse, enhanced understanding and capacity; (ii) deliver research-led expertise to shape public policy networks and areas of best practice across a range of scales from local to supranational; (iii) prioritise and extend public engagement as a pathway to impact across a wide variety of physical, political, social and economic issues.

Our emphasis has been on supporting active researchers to capitalise on their research using Gauntlett's Stairway to Impact model, which emphasises the researcher's role in targeted dissemination of usable research findings to stakeholders. Our focus has been on shaping public policy in a number of national and international areas, by working with policy makers and NGOs through consultancy and advisory work (e.g. **Carver** with the UN), as well as in participation in conferences and events with practitioners and other stakeholders (**Gold** International Olympic Committee adjudication panel), as detailed below and in the two case studies submitted (REF3).

Support to maximise research impact is available at School, Faculty and University level with allocated funding and resources provided from the central QR fund (e.g. **Hill's** stakeholder engagement with farmers in Uganda), pathways to impact funding from funders (e.g. AHRC **Finlayson/Smith**), impact accelerator funding (e.g. ESRC **MacClancy**) as well as Faculty and Departmental funding (**Carver** and **Hill**). Support for impact is delivered through the Faculty Impact Lead, underpinned by the university's Research Impact Steering Group and Research Impact Officers. Together the impact team offers dedicated sessions on planning, delivering and recording impact activity, often working in partnership with the university's Research and Business Development Office. Impact is embedded in our annual research planning process, which invites colleagues to document impact activities and is considered in workload allocations as well as applications for promotion. Research impact is embedded in ECR research training with dedicated sessions on 'Your First Three Years' programme. The University Impact Tracker tool, which provides a repository for impact activity is also available to all colleagues.

Our approach to achieving impact has had two strands. Awards from the Central Research Fund (CRF) Research Excellence and Impact scheme have supported **Hill (ICS1)** and **Carver (ICS2)** to facilitate engagement with policy makers and stakeholders. Our support for impact goes beyond funding ICS. For example, support has been provided for *Walkington's* research into student research, which draws upon practice in geography has exerted impact more widely in Higher Education and is submitted to UoA23. In parallel, we have developed impact activity more generally across the UoA by supporting the work of **Smith, Finlayson, Medby, Nowicki, Underdown** and **MacClancy** through the deployment of university, faculty and departmental funds. These smaller seed grants have mainstreamed impact work in the UoA, allowing the majority of colleagues to engage in some form of impact-related activity.

Our research has enabled a wide range of impact activities across the UoA to provide tangible benefits to numerous beneficiaries. **Hill's** research has **co-produced knowledge with stakeholders** centred on capacity building and training that improves the livelihoods of local communities in Uganda. **Carver's** work illustrates **how engagement with policy makers** relating to prevention of torture, particularly those in police custody, at International (UN), regional (Council of Europe), and non-governmental levels (DIGNITY, Freedom from Torture) can provide ways to address effective safeguarding across a number of territories.

Both of our ICSs have involved strategically planned dissemination, workshops and training events with a variety of users and stakeholders. For example, in **ICS1 beneficiaries include** local farmers, micro-finance NGOs including Village Enterprise, government and civil society organisations in



Uganda as well as guidelines for policy makers through the IUCN Guidelines for Human-Wildlife Conflict. In **ICS2 beneficiaries include** non- governmental bodies including the UN Special Rapporteur on Torture: the principal anti-torture mechanism under the UN Charter; the UN Committee Against Torture; European Committee for the Prevention of Torture: the CPT, a body of the Council of Europe.

Beyond our ICSs, evidence of our impact activities leading to change is documented through increased engagement with policy-makers, public bodies, foundations and the private sector. Examples of impact goals being realised through research, include **Nowicki's** collaborations with Dublin and Lewisham Councils on affordable housing, and **Medby's** membership of the steering committee of the UK Arctic-Antarctic Partnership, which led to her involvement in a policy brief on the UK's Arctic scientific involvement as well as developing the production of 'Melting Arctic: a ghost sonata' with award-winning theatre company Mechanimal (see section 4.2). **Blackburn's** co-developed research with Donovan and Bone (Kings and Cambridge) was incorporated into the 2019 UN Global Assessment Report on Disaster Risk Reduction. Beneficiaries of **Gerlach's** 2019 Measure of the Quality of Life in Detention (MQLD) report from across all seven Immigration Removal Centres (IRCs) include HM Prison Services and the Home Office.

**Finlayson and Smith's** AHRC funded work on Rewriting the Prehistory of Jordan is developing a new generation of Jordanian scholars and cultural resource managers working in early prehistoric research fostering a new research environment with Jordanian perspectives and agendas. This project was shortlisted for the Newton Prize set up by the UK government's Department for Business, Energy and Industrial Strategy. Many of the UoA's impact activities were featured in the faculty's inaugural 'Think Human' festival in 2018, and further developed in 2020's follow-up festival. In these ways we have created flexible and responsive pathways towards continued impact, supporting colleagues at every career stage with a view to ensuring the unit's future resilience and vitality.

#### 1.4 Open Access and Open Data

The UoA is committed to an open research environment (as per IES section 2) and follows the principles of the Concordat on Open Research Data. This UoA has gone beyond the Open Access requirements of REF2021 by making over 2,500 journal articles and conference proceedings articles published between 2014-2020, and more than 250 books and book chapters published between 2014-2020 Open Access, through either the Gold or Green routes, on Oxford Brookes' institutional repository RADAR. Examples include: (i) free downloadable monographs (**Smith & Finlayson, Diggins**); (ii) book chapters (**Danely, Gold, Hill, Medby, Parker/Parton/Preston**); (iii) primary interview transcripts (e.g. **Medby's** BA funded Barents Cooperation Bridge-Building in a Divided High North project); (iv) audio transcripts on cultural narratives (e.g. **Danely's** Dynamics of Japan's Ageing Prison population); as well as all journal articles as required by REF Gold and Green open access policy.

To enhance reproducibility, we have contributed to downloadable Supplementary Online Datasets to published papers e.g. Science Direct and Mendeley (**Parton, Preston, Parker**), international data repositories e.g. NEOTOMA for paleoecology datasets (**Williams**). **Underdown** has made available palaeofecal aDNA sequence data (PRJNA527177) from Bushman's Rock Shelter, South Africa via the National Centre for Biotechnology Information (NCBI) BioProject for comparison purposes. **Underdown** has also developed freely available Network Analysis A Python script via the Network X package for epidemiological transmission modelling e.g. the origins of HSV2 (Genital Herpes) in ancestral humans from fossil data. Moving beyond REF2021 we will deliver workshops and specialist training to be delivered by Open Access designated colleagues from the University Scholarly Communications and Research Team, for all staff on Open Data. This will include how to write a data management plan in the preparatory stage of a research project, producing metadata in a standardised format (e.g. Dublin Core) that is easily understood and communicated, and how to choose a repository.

**1.5 Ethics procedures**

The University, Faculty and School have well established research ethics procedures, through which research integrity is maintained. This process also considers legal obligations related to data protection and privacy issues. Applications are supported and checked at Faculty level before proceeding to the University Ethics Research Committee and can only proceed with approval. Our review process ensures that the dignity, rights, safety, inclusivity and well-being of all participants are given primary consideration. All staff and Research students receive mandatory ethics training and advice.

**2. People****2.1 Staffing Strategy and staff development**

Sustaining and enhancing research form the basis of our staffing strategy. We have successfully increased staff numbers returned in REF2021 from 13.4 FTE to 19.98 FTE; representing 99% of eligible staff. To achieve this we have restructured, replaced and recruited new staff of the highest quality that are aligned with our research objectives. This is underpinned further by our commitment to invest in and retain talented research-active staff. We have sought to improve the security of our researchers through the greater use of permanent contracts. Since REF2014 we have increased the number of CAT-A staff on permanent contracts from 71% to 92% to ensure academic stability and recognise and value their contributions.

Ten outstanding new academics were appointed on permanent contracts in key developmental areas with our demographic sustainability including eight at Lecturer level (**Blackburn** (from KCL), **Chambers** (Sussex), **Diggins** (Sussex), **Gerlach** (Oxford), **Medby** (UCL), **Nowicki** (RHUL), **Parton** (Oxford), **Satow** (Kingston)) and two appointments at SL (**Danely** (Rhode Island, USA), **Williams** (Aberystwyth)); these included 5 ECRs. Two additional ECRs were appointed on fixed-term contracts (**Wignall** (Sussex), **Fenn** (Oxford)). New appointments have been central to our strategic research objectives. We have ensured staff retiring (*Haigh, Markwick*) and moving institutions (*Donner* SL SOAS, *Padfield* – Lecturer Leeds, *Ersoy* - A/Prof to Delft) were effectively replaced.

Since REF2014 **HOPE** has increased from seven to ten staff (5.7FTE to 8.5 FTE). A research chair-level appointment (**Finlayson**, British Academy) provides additional research leadership, which along with the appointments of **Fenn**, **Parton**, **Satow** and **Williams** has strengthened research on Quaternary paleoclimatology, Earth surface systems, geochronology and geoarchaeology. The new **S&T** research strand comprising eleven staff (10.48 FTE) has been underpinned and strengthened by appointments in cross-cutting interdisciplinary Social Science areas including development and migration (**Blackburn**, **Chambers**, **Diggins**), care and aging (**Danely**), immigration and criminal justice (**Gerlach**), identity (**Medby**, **Wignall**), urban geography and inequality (**Nowicki**). **HAE** has increased from two to six staff since REF2014, which includes five returning in UoA5.

We have continued to invest substantially to support research staff at all career stages. Our demographic profile is young and dynamic (65% of staff under 40). Five appointed Lecturers have been promoted to SL (**Chambers**, **Medby**, **Nowicki**, **Parton**, **Satow**) and two ECRs appointed in REF2014 promoted to Reader (**Fraser**, **Smith**). On appointment, all academic and research-only staff take part in our distinctive three year training and development 'Your First Three Years' programme (led in the UoA by **Hill**); which underpins our commitment to build research capability (see IES section3). This provides mandatory Research Induction (research integrity, support and mentoring, impact, public engagement, knowledge exchange, consultancy, open access, data management, career development, internal funding schemes to support researchers), Applying for Research Grants, Managing Research Grants, Supervisor Training (for new and experienced supervisors) and Research Ethics. All staff also undertake mandatory Unconscious Bias training, with enhanced training for those involved in the recruitment or promotion of staff (and students). The UoA supports each member of staff with up to £3,600 through QR financial support (competitive bids up to £1,200 per year) to develop and enhance their research and impact goals. For example, **Parton** was able to attend conferences and networking events at the British Museum, which led to a successful RGS Theisger small grant application. **Medby** presented research on Arctic Frontiers, Tromsø, Norway, leading to a successful BA small grants bid. Mentors are assigned based on closely aligned research, with **Blackburn**, for example, working with **Gold**, **Williams** with **Fraser**,

and **Parton** with **Parker**. In addition, mentoring is available through the university scheme, which matches early career researchers with a senior researcher mentor from a different academic area. Staff, including ECRs, are allocated up to 640 hours (40%) for research and all allocations equate to significant responsibility for research (SRR) as outlined in our Code of Practice.

Since 2014, the UoA has used devolved QR funding to support an annual sabbatical scheme. All staff, regardless of their contractual status, can apply for a one-semester sabbatical, during which teaching and most administrative responsibilities are replaced. Sabbaticals are awarded following a competitive process and are timed strategically to support the completion of a particular output, external grant application, or impact-related event. For example, in 2018 **Smith** was granted a sabbatical in order to prepare a successful AHRC funded project on Rewriting the Prehistory of Jordan as co-I with **Finlayson**.

Staff have benefited from CRF Research Excellence Awards. Continuing his work on Olympic cities, in 2015 **Gold** undertook invited research for the forthcoming Tokyo Summer Olympic Games as a Special Appointed Professor at the Graduate School of Governance, Meiji University, Japan. Between 2017-19 **Hill** was awarded funds to enable public engagement and impact activities in Uganda. **Parker** was awarded funds to take up a visiting chair at the Australian Research Council's (ARC) Centre of Excellence for Biodiversity and Heritage (CABAH) in 2018, which has led to mentoring several new CABAH ECRs, a major ARC research grant application and three journal publications. **MacClancy** undertook work into Brexit and British residents in Spain, which led to the development of a successful ESRC impact accelerator award and a forthcoming research monograph.

Research activity is overseen by the Head of Department and Research Lead (RL) through the completion of an annual Personal Research and Impact Plan (PRP). This sets out research and impact goals, objectives and also highlights steps and support to achieve this. Continuing professional development and research skills training programmes are provided through Oxford Brookes Centre for Staff Learning and Development (OCSLD) and the Research and Business Development Office (RBDO). This is underpinned by the University's Code of Practice for the career management and development of researchers outlined in the **IES**. In addition, Vitae, which incorporates the UK GRAD Programme and UKHERD, is supported.

## 2.2 Research Students

Research students (PGR) are integral to our research culture and a healthy research environment. Eight PGR have completed PhDs in the assessment period (Note: This UoA does not have any Professional Doctorates). In addition, staff have co-supervised cross-University PhD completions in Planning, Architecture, Law, Politics and Education as well those with other Universities (OU, UCL, Nottingham). We will expand PGR numbers for the next REF period with nine current PGRs, which points to the continuing health and vitality of the programme. Within the ST cluster three are funded by the Sasakawa Foundation on topics relating to Japanese culture and society (supervised by **Danely** and **Matsunaga**). All students benefit from a supervisory team of three academics, which usually comprises one principal and two additional advisors who assist as required, particularly during registration, transfer, submission and completion. All supervisors are required to complete the University supervisor-training programme. The PGR Tutor (**MacClancy**) has oversight of student progress, ensuring a robust system of mentoring and support.

PGRs are automatically members of the University Graduate College and Faculty of Humanities and Social Sciences Doctoral Training Programme, established in 2018 to enhance the PGR experience. The DTP brings together 80 PGR students across the Faculty. Interdisciplinary in nature the DTP encourages interaction, communication and joint learning across the Faculty. The DTP offers advantages of a cohort-based postgraduate experience to all PhD, MPhil and MSc/MA by PGRs based around the Vitae's Researcher Development Framework. Research students play a full role in the research culture of the Department and Faculty, for example, *Raith* was a PGR member of the Faculty Athena Swan steering group, which achieved a Bronze in May 2020.

All PGRs receive desk/computing space in dedicated offices, and access to Faculty research facilities. All are invited to submit and showcase their work at the annual Graduate College Research Student Exhibition, which is open to the public as well as all university staff and students. Support is available for all PhD students to present work at international and national conferences. To support career development, research students undertaking teaching attend the compulsory 'first steps in teaching' run by the OCSLD can undertake the accredited associate teachers course gaining Associate Membership of the Higher Education Academy.

Our PhD research has generated outputs between 2014-2020 in leading journals including *Geology*, *J. Quaternary Science*, *Science of the Total Environment*, *Air, Soil and Water*, *Environmental Conservation*, and *Social Anthropology*. A PhD student's paper (Farrell) in *Nature* on Neanderthal behaviour, diet, and disease is in the top 5% of all research outputs ever tracked by Altmetric (69<sup>th</sup> highest ranked paper globally for all published works in 2017) based on impact outside of academic networks.

### 2.3 Equality and Diversity

To address the underrepresentation of women in academia and to specifically enhance their career prospects, the Faculty of Humanities and Social Sciences, within which the UoA is based, applied for and achieved Athena SWAN Bronze status in 2020. **Hill**, **Underdown** and PGR **Raith** were steering group members. The Faculty is committed to achieving future higher-level awards. Of the 22 colleagues (19.98 FTE) with SRR, 36% are women; compared with 30% in REF2014. The EIA demonstrated no significant difference in those with SRR across any of the protected characteristics nor any bias in the selection of outputs. Of note is that 65% of new Lecturer appointments during the current REF cycle are women of which five are on permanent contracts (**Blackburn**, **Diggins**, **Gerlach**, **Medby**, **Nowicki**). Of these three (**Diggins**, **Medby**, **Nowicki**) have already been promoted to SL. 25% of our Professors are women. The UoA also supports the Aurora-women in HE Leadership programme. Management structures ensure equality of opportunity for input, e.g. earlier career academics (**Chambers**, **Parton**) sit on the School Executive and Research Committees. All staff undertake EDI and unconscious bias training in accordance with our Code of Practice. We actively encourage ECRs to be members of selection panels (**Medby**, **Nowicki**) have all undertaken training) so they can help shape our future appointments. Staff undertake training and specialised courses organized by the 'Your First Three Years' e.g. Introduction to Project management, project management fundamentals, budget holder training, career management for research staff as well as undertake external CPD opportunities. Refurbishment of the new physical laboratories in 2018 (**Parker** and **Preston** steering group members) has provided dedicated disability accessible working spaces for staff, students and visitors ensuring DDA compliance.

Career pathways are provided on an equal basis for part-time staff, with pro-rata research allowances provided to those on fractional appointments (e.g. **Finlayson**, **Preston**, **Parton**). Staff returning from maternity or shared parental leave, during which there are 'Keeping in Touch' days, are able to work flexibly to enable phased return to work to ensure continuity of research careers

## 3. Income, infrastructure and facilities

### 3.1 Income

Focussing on grant income was identified as a strategic priority underpinning the aim of sustaining and enhancing our research base. Following RAE2014, we recognised that the funding landscape had become even more competitive and responded by implementing a rigorous internal review system, enabled by a Faculty Research Grants Panel (members include **Parker** and **Hill**) to increase grant application success rates. Applicants are paired with experienced and successful grant writers as mentors. Mentors read and provide advice on early drafts of bids, and final versions are reviewed by a member of the grants panel. ECRs are provided with intensive mentoring as part of this process. Grants Panel Chair and research grants officers provide training opportunities, such as research grant writing training for PhD students and early career researchers, workshops on seeking external fellowships led by those with experience of successful applications, and workshops on planning proposals and managing resubmissions. Early career researchers attend subject specific grant writing workshops run by proven winners of funding. Pilot research to develop larger grant applications is supported though Faculty and University levels, with 15 small grant awards



being made to the UoA since 2014 (total £36k). These awards have provided training and travel to support research capacity-building assistance, networking, workshops and successful research grant applications.

As reported in REF 4b the total grant spend since 2014 is £398,589, which is slightly less than for REF2014 and may reflect the larger proportion of earlier career appointments that are building grant capture momentum with smaller awards often as Co-I (see below). Research is also underpinned by income generated from consultancy, which falls outside of the REF income model, e.g. **Parker's** work for Qatar Museums (£58,000).

UKRI (NERC, AHRC, ESRC), along with BA funding is our primary research revenue source (40% of income). Examples include, **Finlayson & Smith's** rewriting the prehistory of Jordan (AHRC £202,000) and (**Fraser's** x 3 NERC awards as Co-I, see section 4). UK central government bodies and UK based charities e.g. Leverhulme accounts for 30% of our funding and non-UK based charities 20% e.g. Templeton Foundation (**Danely's** Enhancing Life project on the meanings of family caregiving and the experience of compassion in the UK and Japan). A number of these grants have been secured by staff at earlier stages of their careers (e.g. **Gerlach, Medby, Nowicki** (BA/Leverhulme Small Grants £23,000), **Parton** (RGS Thesiger Award, £8,000).

Projecting beyond REF2021, the UoA has already secured over £600,000 in new competitive grant awards, guaranteeing a further rise in research income in the next REF period and providing a strong platform for the research plans outlined in section 1 and providing evidence for the successful mentoring and development of our new appointments. ECR awards include: **Nowicki** (Co-I ESRC/AHRC grant, £49,700) led by **Cho** (UoA13); **Nowicki** (British Academy/Leverhulme Small Research Grant, £9,800); **Wignall** with collaborative partners in Sierra Leone and Cameroon (British Academy's Youth Futures Programme GCRF, £284,000). **Satow** has been awarded NERC in-kind facilities grant (£54,000) for dating tephros, which due to Covid lab restrictions has been carried over to the next REF period. An increased number of staff have contributed to our income, many of whom are ECRs and we are confident that they will acquire larger grants in the next period. Additional secured funds include: **Finlayson** and **Smith's** AHRC grant (£202,000), which extends in the next REF cycle and **Underdown** and **Parton's** Anglo-Omani Grant (£45,000). These secured funds bode well for the future vitality and sustainability of the research grant culture, research outputs and impact activities, especially by ECRs.

### 3.2 Infrastructure and facilities

The University invested c.£100,000,000 in the new John Henry Brookes building creating a significantly enhanced physical environment for research events. The building hosts the CES research seminar series and major conferences organised by staff e.g. Society for the Study of Human Biology Annual Symposium in 2018 (**Underdown**) on Human Biology and ancient DNA: Exploring Disease, Domestication and Movement; BA funded Vulnerability and politics of care: cross-disciplinary dialogues (**Danely** 2017 with colleagues in Global Politics) and the Faculty's Think Human festivals in 2018 and 2020.

Since 2014, significant capital funding via the University (£21,500,000) and a HEFCE STEM award (£4,100,000) has upgraded and enhanced research infrastructure and facilities. Laboratory facilities have been refurbished and are DDA compliant. The UoA benefits from laboratory facilities shared across two faculties, which provides a greatly enhanced research environment. These include dedicated facilities for sedimentology, debris flow-simulation, palaeoecology, geoarchaeology, bioarchaeology, large lithic collection as well as dedicated field store and walk-in cold stores. Laboratories house a Skalar Autoanalyser, Perkin Elmer AAS, Malvern Mastersizer 2000, a Bartington Multisus magnetic susceptibility meters, optical research microscopes and associated image analysis system. A rolling programme of capital expenditure allows planned renewal of equipment and new acquisitions include an Olympus Vanta XRF analyser and Agilent FTIR (Royal Society Award to **Fraser**).

The UoA also has access to a range of World class microscopy facilities including a Hitachi S-3400N variable pressure scanning EM, fluorescence microscopes) located in the Centre for Bioimaging

(UoA5), which is a "labs@location" partner with ZEISS and hosts the "imaging techniques" course for the Royal Microscopical Society. Specialist field equipment includes a Leica DGPS, and total stations for topographical surveying. These items are supported by ruggedized laptops with specialised software and high specification PCs with 'industry standard' GIS and image-processing applications. Our field capabilities include multiple coring systems (Russian corers, Cobra percussion corer, augers for sample collection and sub-surface topographic work). We have specialist facilities for solid and aqueous phase sample preparation, including membrane inlet Quadropole Mass Spectrometry for molecular analysis of gas concentrations from organics.

Through an inter-institutional agreement, we strategically merged our thin section micromorphology laboratory with Earth Sciences, University of Oxford in order to increase efficiency, capacity and effectiveness. Through this arrangement we have secured access for the processing of samples for research, which has been used by staff (**Parker, Preston** and research students).

The University Library underpins first class coverage in all research areas with dedicated subject Librarians, web-site guidance and provides on and off site support, including mobile technologies. The Library has membership to the SCONUL Access scheme, a reciprocal agreement with Oxford University for research access to the Bodleian Library, Open Athens, Web of Knowledge and bibliographic and full text access to the Oxford Brookes RADAR open access digital research repository. The Library provides training for research data management, including MANTRA, RIN, RCC, primarily aimed at PGR and ECRs, as well as research tools including Digimap and Endnote. The University provides a comprehensive range of IT facilities, teleconferencing suites supported centrally. All academic staff have individual offices, with hot desk arrangements for visiting researchers and PhD students. All staff members can apply to the Staff Development and Research fund. A mixture of University and QR funding not only facilitates the dissemination of research through national and international conference attendance, but it also supports the research process more broadly.

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

### 4.1 Collaborations, networks, partnerships

Our research, knowledge exchange and impact strategies (section 1) prioritise collaboration and aim to build and consolidate our research partnerships and networks (new and existing) with other academics and non-HEI stakeholders, contributing to national and international agendas within and beyond the discipline. The UoA fosters collaborations and partnerships across the institution and with external partners and beneficiaries locally, nationally and globally in order to maximise the reach and scope of our research culture and shape ongoing and future research. Research and impact across our groups involve: (i) collaborative research amongst colleagues, supported by funding for co-developed initiatives (e.g. **Underdown** and **Parton** University International Collaborative Research and Travel Award, which led to funding from the Anglo-Omani Society (£45K) to develop a research and training partnership with the Botanic Gardens of Oman, through the use of aDNA; (ii) cross-faculty interdisciplinary collaboration within Oxford Brookes, facilitated by research centres, joint projects and joint PGR supervision e.g. **Nowicki's** work on UK-Japan housing, social care and health with the Institute for Sustainable Development (Co-I ESRC-AHRC £49,700). Staff play leading roles in the University's institution-wide interdisciplinary networks to develop collaboration in areas including Healthy Ageing & Care (**Danely**, steering group), Migration and Refugees (**MacClancy**, steering group chair); (iii) Staff research collaborations with other universities and external organisations that contribute to national/international agenda-setting research. Major collaborations include: NERC GCRF c.£17,600,000 funded 'Tomorrow's Cities' Urban Disaster Risk Hub (**Blackburn** Co-I, led by McCloskey, Edinburgh and Pelling, King's); NERC c.£1.600,000 'Biosphere, Evolution, transitions and Resilience' programme (**Fraser** Co-I, collaborating with Leeds, Bristol, Nottingham, Birmingham); NERC c.£430,000 'Solar irradiance and vegetation dynamics at the K/Pg boundary' project (Fraser Co-I, collaborating with Nottingham, and OU); British Academy GCRF (£284,000) 'Youth Futures' Programme award (**Wignall** (PI) and Piquard (Centre for Development and Emergency Practice) collaborating with Ibrahim, Njala University, Sierra Leone and Mengue, Catholic University of Central Africa, Cameroon); ANR €850,000 funded 'NeoArabia' project (**Parker** and **Preston** Co-Is (**HOPE**) collaborating with CNRS Lyon, Bordeaux, Rennes); ARC-funded (c.\$33,000,000 AUD) 'Centre of Excellence for Australian

Biodiversity and Heritage' a world-class interdisciplinary research programme to understand Australia's unique biodiversity and heritage (**Parker**, AI, collaborating with Wollongong); **William's** and **Fraser's** QR GCRF collaborative research with The Geophysical Institute (Instituto Geofísico) of the Escuela Politécnica Nacional, Quito, Ecuador, which is investigating environmental, landscape scale responses to rapidly declining glaciers in the Andes, and linking these to future impacts on the social/economic vulnerability and livelihoods of the growing Andean populations. **Underdown's** (QR GCRF) collaboration with the University of Pretoria in South Africa has developed and expanded research and understanding into the origins and co-evolution of human infectious diseases in an urbanising world, especially Africa, which in recent years has seen outbreaks of Ebola and the Zika virus.

#### 4.2 Contribution to the economy and society

Our research has informed and demonstrably changed policy, institutions and behaviours of a wide range of contexts and stakeholders, at local, national and international levels. The breadth and range of these attest to the reach and significance of the unit's research and impact at present, but also point to the sustainability of this into the next REF cycle. In addition to the substantial impact related to public policy on Torture Prevention (**Carver**) and Human wildlife capacity building and training in Uganda (**Hill**), which are detailed in the UoA impact case studies, colleagues are involved in numerous other collaborations beyond academia. As part of her BA funded project on the Barents Euro-Arctic Region **Medby** has convened workshops and symposia with Government ministries from Norway, Sweden, Finland and Russia and the President of the Sami Parliament, Norway. Interview transcripts from this work are publicly available as Open Data.

**Medby** is a UK Arctic-Antarctic Partnership committee member, and contributed to a policy brief for the Grantham Institute (Imperial) on how the UK's climate is linked to conditions in the Arctic, and why UK Arctic science strategy is integral to understanding how global warming will change the Arctic. **MacClancy** has worked with British migrants in Spain in relation to Brexit with Ferbrache (Oxford), funded by the ESRC Impact Accelerator scheme. **Nowicki** has collaborated with Dublin and Lewisham Councils on affordable housing. **Finlayson** and **Smith's** AHRC funded work on Rewriting the Prehistory of Jordan is developing a new generation of Jordanian scholars and cultural resource managers working in early prehistoric research.

The Faculty is committed to public engagement activity to promote a greater public understanding of the humanities and social sciences. To this end it has hosted a festival Think Human, held in 2018 and 2020 with full participation from UoA 14 members, facilitating and promoting our engagement with external communities. Activities in this two-week long festival were hugely varied and range from the Human Library held in Oxford's Westgate shopping centre at which members of the public meet with our authors, including **Nowicki**, to ask questions and discuss their research, to producing plays based on our research, dance workshops, hosting external speakers, poetry reading and talks for schools. In 2020, **Medby** addressed how do we face the loss of Arctic sea ice through the production of 'Melting Arctic: a ghost sonata' developed with award-winning theatre company Mechanical. This production explored the far North through hypnotic songs, soundscapes, movement and interdisciplinary perspectives. In 2020, **Carver** co-hosted with Sushila Dhall (external psychotherapist from Refugee Resource) an event on conflicted feelings about torture across the world today, which explored and discussed the human cost of torture and how we can fight for a torture-free world.

#### 4.3 Contribution to the research base

UoA members contribute to the vitality and sustainability of the discipline through continued support to professional bodies and learned societies, demonstrating leadership within the discipline and wider research base. Recognition of our standing and influence in the current assessment period for example, includes election to learned societies (**Underdown** and **Parker**, Fellowship of the Society of Antiquaries; **Gold**, Fellowship of the Royal Society of Arts); advisory boards (**Medby**, International Arctic Science Committee (IASC) Human & Social Working Group (one of only two UK representatives) and UK Arctic-Antarctic Partnership's (UKAAP) Steering Committee; **Parker**, MOD Cultural Property Protection Working Group; **Finlayson**, corresponding member of the German Archaeological Institute, cultural heritage management advisor for Ministry of Tourism and

Antiquities, Jordan, and British Academy Middle East and North Africa Area Panel Member. **Gold** is a member of the International Olympic Committee adjudication panel, Advanced Olympic Research Grant Programme. **Fraser, Satow and Williams** (all members of **HOPE**) and **Blackburn (ST)** are invited contributors for sections of the Intergovernmental Panel on Climate Change's (IPCC) 6th Assessment Report (AR6). **Underdown** is serving as an Output Assessor for the REF sub-panel in Anthropology.

**Hill** is Chair of the Biosocial Society (BioSocSoc); **Underdown**, committee for Society for Study of Human Biology (SSHB) and Chair of RAI Education Committee; **Macclancy** and **Hill** RAI Council; **Hill**, IUCN SSC Primate Special Group member; **Fraser**, committee member and communications officer for the Geochemistry Group, Geological Society of London; **Gold**, Executive and Management Committees, International Planning History Society; For the RGS-IBG **Parker** sits on the Expeditions and Fieldwork Committee as well as chairing the Earth Sciences panel for Society's EXPLORE annual expedition and field research event, **Nowicki** is Treasurer of the Social and Cultural Geography Research Group, and **Blackburn** serves on the committee for the Development Geographies Research Group.

Our researchers shape intellectual fields through journal editorship (e.g. **Gold**, Editor in Chief, Planning Perspectives; **Danely**, Editor in Chief, Anthropology and Aging, **Finlayson**, Editor CBRL Bulletin), editorial board membership (e.g. **Gold**, Editorial board for Sustainability; **Parker**, Review Editor Frontiers in Earth Sciences; **Underdown**, Associate Editor Wiley Blackwell Encyclopaedia of Anthropology; **MacClancy**, RAI book series (Founding Editor), RAI Publishing Committee, **Finlayson**, Editorial Board Zeitschrift fur Orient-Archäologie; **Gold**, Editorial Board Routledge Planning, History and Environment series). Guest journal editorships include **Underdown** (Annals of Human Biology (2017, 2019), Journal of the Royal Anthropological Institute (2018)); **Parton** (Quaternary International (2015)). All staff engage in regular peer review of journal articles, >80 journals in the assessment period, including Nature, Nature Scientific Reports; PNAS, Proceedings of the Royal Society; Quaternary Science Reviews, Journal of Quaternary Science; Earth Science Reviews, Earth and Planetary Science Letters; Frontiers in Ecology and Evolution; The Holocene; Current Anthropology, Global Environmental Change, Transactions of the Institute of British Geographers, Environment and Planning A, B and D, AAG and Progress in Human Geography, amongst others.

We continue to influence and shape research investment through peer review of award/funding bodies nationally and internationally. Key examples include: UK bodies - NERC (**Fraser, Hill**), ESRC (**Hill, Medby**), AHRC early career awards (**Parker**), RGS-IBG (**Parker**, Expedition and small grants panel, **Parton**, Thesiger), Leverhulme (**Hill, Parker**), Primate Society of Great Britain and BioSocial Society (**Hill**). *International Bodies*: Advanced Olympic Research Grant Programme (**Gold**); Austrian Science Fund and Czech Science Foundation (**Fraser**); Deutsche Forschungsgemeinschaft (DFG) (**Finlayson, Parker**), Freie Universität Berlin TOPOI Excellence Awards (**Parker**); German Academic Exchange Service (DAAD) PRIME (Postdoctoral Researchers International Mobility Experience) (**Parker**), Israel Science Foundation (**Finlayson, Parker**), Irish Research Council for Humanities and Social Sciences (**Finlayson**), Estonian Research Council, Leakey (**Underdown**), National Geographic (**Finlayson, Hill, Parker, Preston, Parton**); NSF (**Williams**), Qatar National Research Fund and Research Council of Oman (**Parker**); National Research Foundation of South Africa (**Parker**). Co-operation in postgraduate training nationally or internationally has included: **Parker**, DTP training in Geoarchaeology, University of Ghent, Belgium; Additionally, academic staff have been external supervisors for PhD students at other institutions during the assessment period (Oxford; Open, Nottingham; Aberystwyth). Staff have also examined >30 PhDs externally including UCL, Cambridge, Reading, Bangor, Sorbonne.

Our international standing and connections are demonstrated by staff holding visiting positions at leading overseas institutions in recognition of their contributions to the discipline, for example: **Gold**, Special Appointed Professor, Graduate School of Governance, Meiji University, Japan (2015-); **Parker**, Vice Chancellors Visiting Professorial Fellow, Australian Research Council Centre of Excellence for Biodiversity and Heritage, Wollongong, Australia (2018-); **Macclancy**, Visiting Professor, Universidad de Santiago de Compostela, Spain; **Underdown**, Centre for Microbial



Ecology and Genomics, University of Pretoria, South Africa. **Danely** was awarded a SSRC Abe Fellowship, to focus on older ex-offenders in Japan and England and received a Templeton Foundation award as a contributor to the cross cutting Enhancing Life Research Project. **Diggins** was awarded the RAI 2020 Amaury Talbot Prize for most valuable work in African anthropology and shortlisted for the Eliot P. Skinner Book Award, by the AAA's Association for Africanist Anthropology. Our contribution to disciplinary development nationally and internationally of doctoral students and early career researchers moving to lectureships or equivalent positions elsewhere: **Donner** (S/L Goldsmiths), **Ersoy** (A/Prof, Delft), **Morley** (A/Prof, Flinders); **Padfield** (S/L Leeds), **Hockings** (S/L Exeter). Staff have also contributed, as independent assessors, to external senior promotion panels at seven UK institutions.