

Institution: The Open University
Unit of Assessment: C-14 Geography and Environmental Studies
<p>1. Unit context and structure, research and impact strategy</p> <p>a. Unit context and structure</p> <p>Geography at the Open University (OU Geography) is a distinctive Human Geography department with a strong international reputation for leading critical theoretically-informed approaches to space, place and environment. Our collective vision is driven by a commitment to openness, with a research strategy focused on being: (1) <i>open to new geographical thinking</i>: to push the boundaries of conceptually-innovative scholarship across national and international audiences; (2) <i>open to engagement</i>: a co-productive approach, developing cutting-edge, meaningful research with a diverse range of communities, industry and third sector groups; (3) <i>open for publics</i>: harnessing our unique strengths in broadcast and digital media to expand the scope and reach of OU Geography's research expertise and capability. Our focus on making knowledge public and co-producing research with publics and stakeholders aligns with the OU's mission: 'open to people, places, ideas and methods' (OU Institutional Environment Statement: 1 (OUIES)). Our stakeholder-centred approach has delivered a step-change in research grant success with awards worth over £6.5m (section 3) taken up through OU Geography during the census period (average of £500K per person). We have quadrupled income from under £1m to over £3.6m, comparing REF2014 with REF2021.</p> <p>OU Geography is built on three thematic clusters with overlapping concepts, problematics and membership. These are: (1) Space and Power: rethinking the politics of place, scale and territory; (2) Culture and Practice: rethinking how relations between and among humans and technologies come together to make and remake places and societies; and (3) Environment and Politics: rethinking how institutions, practices, knowledges and materials shape an environmental politics which addresses contemporary environmental challenges. These share a central concern with the politics of space and spatial relations conceived through formal and informal institutions, practices, resources, knowledges and conceptions of agency. Each address spatial inequality in resources, materials, embodiments, experiences and opportunities.</p> <p>Geography is situated within the Faculty of Arts and Social Sciences and is supported by faculty research office, infrastructure and postgraduate provision. Our OpenSpace Research Centre provides the overarching framework for our research environment as the home to our research clusters. OpenSpace implements the Geography department's cohesive research strategy by maintaining an outward-facing profile of research through events and web presence; providing intellectual exchange, networking and research development through workshops, meetings and mentoring; and acting as a primary research environment for practical and academic support (for example with funding applications and academic writing). OpenSpace has an academic director (3-year term) working closely with the Head of Geography while the thematic clusters each have an elected lead. Geography staff also play active roles in the University's Strategic Research Areas particularly <i>International Development and Inclusive Innovation (Raghuram, Sondhi)</i>, <i>Citizenship and Governance, Space Science and Technology (Bhagwat, Kulkarni)</i> and <i>Health and Wellbeing (Lorne)</i>. OpenSpace events and activities are directed towards situating geographical thinking within interdisciplinary contexts and building links with other research</p>

areas within and beyond the University, with membership open to academics and researchers from outside the discipline.

b. Research and impact strategy

Our strategic aims for this census period were:

1. continue agenda-setting research in the 'Space and Power' and 'Culture and Practice' clusters and to build funded research in the 'Environment and Politics' cluster which cross cuts conceptually and methodologically with the other research clusters.
2. develop OpenSpace as a knowledge centre and intellectual hub providing a critical resource base and forum for exchange concerning approaches to space, place and environment. This acts as an interdisciplinary platform and voice for engaging the University's Strategic Research Areas and will give Geography a distinctive presence within the newly emerging Centre for Global Challenges within the School of Social Sciences and Global Studies.

OpenSpace strategy is made democratically in consultation with the full membership including postgraduates and associate members. We have focussed on embedding critical theorising of space and place in practical problem-orientated research. All three research clusters have strengthened their financial sustainability through increased grant income from diverse sources, fostering postgraduate research in our areas of excellence, and supporting long-term collaborations with non-academic partners such as Norfolk County Council, National Trust and NASSCOM, the world's largest IT sector trade body.

Space and Power: Since 2014, this cluster has continued to focus on elaborating new spatial registers of power which move beyond scale and territory by developing funded case study research exploring the interdependencies of global and local, problematising taken-for-granted notions of distance and borders through thinking space relationally. Allen (2016) has shown how a topological conception of the reach of power provides a more subtle account of how governments, corporations and NGOs register their presence through quieter forms of power than domination or control. Similarly, **Raghuram** has argued that the deeply contextual politics and practice of care across space challenges conventional notions of ethics, setting new theoretical, political and empirical agendas within geography and feminist theory. **Lorne** has recently problematised the inherently progressive political framing of openness through the rise of social innovation and its intersection with austerity localism.

This work, developed and delivered with stakeholders, addresses some of the most compelling issues today. ESRC-funded research on *Biosecurity Borderlands* has promoted a greater understanding of biopolitics of infectious diseases and demonstrated how diseases are multiple and heterogeneous, whereby securing life is less a matter of keeping out and more one of being prepared (Allen, **Bingham**). Migration has been addressed not as problematic but for revealing the intensities of connections and disconnections that shape digital work, education and health. The ESRC-funded *Gender, Skilled Migration and IT industry: a comparative study of India and the UK* (**Raghuram, Sondhi**) highlights what migrant lives can teach us about gendered digital labour markets and how knowledge of best practice can be transferred across countries, sectors and firms. This research on gender and skills has altered practices in the industry underpinning Impact Case Study 2. While international migration is widely problematised, internal migration is the focus of the ESRC-funded *Labour Geographies of India's New Services: The Working Lives*

of Agents in the ITES-BPM Sector, a group whose tenuous lives have come under scrutiny after COVID-19 (**Ray**). ESRC-Newton Fund-funded *Facilitating Equitable Access and Quality Education for Development: South African International Distance Education* (**Raghuram**) has drawn on and contributed to the OU's world-leading research on distance education, highlighting the spatial registers of power embedded in educational infrastructures. The Australian Research Council-funded *Tracing modes of infrastructure, financing and their effects on cities* (Allen, Pryke) has enhanced understandings of how water, buildings and roads as infrastructures are being transformed as modes of finance moving from one city to another.

Culture and Practice: This cluster is built on a sustained critique of conceptual binaries such as representation/non-representation, affect/emotion, material/immaterial, human/nonhuman, powerful/weak outlined at REF2014. A key focus for research is an examination and use of media, mediation and communicative and creative practice understood through conceptions of relational and topological space (See Space and Power cluster). How the geographical production of knowledge is shaped by media and mediation is key to **Newman's** work. While **Pile** builds on his 2014 exploration of affective communication understood topologically with implications for how humans are understood as entangled with more-than-human worlds. **Revill** has similarly examined topological dimensions of communication through his work on the political agency of sound. Through research bringing together issues of space, power, environment, creative practice and affective experience through design, **Lorne** creates an agenda for a politically progressive geography of architecture which starts from the multiple human and non-human actors that cohere and congeal to produce buildings. It explores how architects initiate and contribute to spatial projects prioritising social and economic objectives. Similarly, **Kullman's** work on disability communities and design explores disruptive architectural concerns, proposing an unstable politics of designed environments built through embodied and material practices and processes.

Co-productive engagement with stakeholders led to a suite of funded research exploring, for instance, understandings of how digital infrastructures generate social difference, how they facilitate access to educational and recreational experiences and the making and sharing of knowledge and information. ESRC-funded *Smart Cities in the Making: Learning from Milton Keynes* (**Bingham, Raghuram, Rose, Wigley, Zanetti**) has contributed to enhancing understanding of smart cities for academic and non-academic stakeholders on how smart activities can engage citizens, and creating new knowledge of 'smart' city activities that both encounter and create specific forms of social difference. Additionally, creative arts-based methods and practices have been used to explore entanglements between the spiritual and the social in cities. AHRC-funded *Spirited Stoke: Spiritualism in the Everyday Life of Stoke-on-Trent* has promoted a greater understanding of the role of religion, shining new light on the politics of identity and everyday life (**Pile, Wigley**). EPSRC-funded *Next Generation Paper* (**Revill, Van Duppen**) research explores how a mix of paper and screen-based media reshape tourist experiences of place. As part of a project partnered by the publishing industry, research examines the implications of 'poly-media' for gathering, making and sharing knowledge as itself an embodied creative practice. Openness to publics in culture, communication and creative practices is embedded in the AHRC-funded projects *Contextualising peace education in Africa* and *Decolonising peace education in Africa*. **Raghuram** focuses on how local arts can be used to enhance and deploy values and knowledge of peace and how they can be shared, understood and enacted across social divisions – intergenerationally, inter-group and across the global South and North.

Environment and Politics: This cluster shapes geographical thinking around the politics of environmental justice and sustainability, while engaging with entanglements of material social/cultural and human/nonhuman that characterise the environmental challenges of the Anthropocene (Allen and Carter, **Bingham**, Hinchliffe, **Revill** and **Van Lieshout**). **Bhagwat** engages with environmental values and cultures within a cultural ecology perspective focusing on human-environment interactions, while **Humphrey's** focus on environmental policy engages directly with issues of governance. Work initiated by Smith, **Revill** and Hammond has focused on public cultural understandings of contemporary environmental challenges such as climate change (Smith). Ernwein's recent appointment extends work on public engagement and environmental understandings into urban ecology. A grant awarded by Research England's Expanding Excellence in England (E3) fund extended interdisciplinary Astrobiology research at the OU (**Bhagwat** and Marino) leading a work package on international development and inclusive innovation developing ways of 'decolonising' fieldwork in environmental and earth sciences. Collectively, this work has contributed long-term ecological and historical knowledge of landscapes to the management of present-day tropical and coastal landscapes, proposing new ways of conducting fieldwork ethically in earth and environmental sciences.

Stakeholder engagement and co-produced knowledge has been central to success within the cluster. EU Horizon 2020-funded research *Examining the Agroforestry Landscape Resilience in India to inform Social-Ecological Sustainability in the Tropics* (**Bhagwat**, **Kulkarni**) brought together local conservation groups and farmers to promote a greater understanding of the resilience of tropical agriculture-forest landscapes to environmental and anthropogenic drivers of change. Research also enhanced knowledge of the challenges of governing the global environment and natural resources (**Bhagwat**, **Humphreys**) while simultaneously contributing richer accounts of local practices in sustainable management of nature and natural resources (**Bhagwat**, Kostelecký and Jehlicka, Morris, Smith, **Van Lieshout**).

The cluster combines a substantial portfolio of funded research building stakeholder and community engagement with the public reach of broadcast and digital media. Our work promotes public understandings of climate change and contributes to policies for coastal management through creative arts-based approaches. This funded research expands on relational approaches to space pioneered in the *Space and Power* cluster, critiquing received binary terms such as nature/culture, and the focus on media, mediation and creative engagement developed with the *Culture and Practice* cluster. AHRC-funded *Stories of Change: Exploring energy and community in the past, present and future* (Smith) generated creative visions for sustainable alternative energy futures. While the AHRC-funded *Earth in Vision: Pathfinding in digital broadcast environmental archives* (**Revill**, Smith) engaged a variety of publics, including school and university students to creatively collage and remake environmental TV material in order to curate new, alternative environmental narratives and understandings. The AHRC-funded *Listening to Climate Change: experiments with sonic democracy* (**Revill**) developed this approach further by initiating a series of creative engagements with publics, professionals and practitioners in deliberative forms of environmental decision-making involving multiple voices in coastal management.

Impact is essential to the design, development and implementation of all research projects. Our **impact strategy:** (1) builds, sustains and expands relationships with diverse publics, beneficiaries and constituencies; (2) works with project partners to ensure we build impact pathways, monitoring and evaluation into research design, project planning and the delivery of

clear and agreed impact objectives throughout the research cycle; (3) develops a robust broadcast and social media strategy to extend the reach and visibility of impact; (4) enables researchers to be informed by diverse publics and seek external support for future impact. The strategy embeds partnership from the early stages of project design, working with partners throughout the research process to deliver co-designed and jointly-delivered outcomes to create genuinely co-produced knowledge. The strategy stresses the importance of ensuring clear objectives linked to appropriate evaluation commencing, during and after research. Building feedback into the structure of research enhances long-term partner relations resulting in follow-on and further funding collaborations.

Building partnerships has also been essential for fostering a public research agenda underpinning our OU Geography Impact Case Studies *Sounding Coastal Change (SCC)* and *Addressing gender inequalities in IT: UK and India*. SCC researchers partnered with the National Trust, Norfolk County Council and Norfolk Coast Partnership and others based on the vulnerable coastal Area of Outstanding Natural Beauty in North Norfolk. The research develops creative engagement methodologies and deliberative decision-making processes whereby the research teamwork with project partners to engage a diverse range of 'voices' and publics in key environmental planning decisions. Working closely with project partners is also central to *Addressing gender inequalities in IT: UK and India*. **Raghuram** and **Sondhi** secured the first ever partnership between a UK university and the world's largest Information Technology (IT) sector trade body, National Association of Software and Services Companies (NASSCOM). NASSCOM represents over 90% of the Indian IT industry and its members control approximately 200 billion US dollars' worth of business. Research redefined the 'problems' women in the industry face, generating new programmes for addressing and rethinking these while establishing a pipeline for influencing public policy nationally and internationally.

OpenSpace has facilitated research with partnerships, co-production and impact built into design, execution, evaluation and feedback. Monthly open group meetings share experiences and good practice to build and sustain impact. Targeted individual feedback is provided on specific proposals, with 'pathways to impact', monitoring and evaluation major foci across all research. OpenSpace operates as a hub to organise sessions on how to improve dissemination of impact through social media, podcasting, blogging and digital broadcast. Establishing good practice to maintain meaningful collaborative relationships with partners is drawn from a growing body of shared experiences and expertise. Training sessions enhance our capacity in research engagement and impact, with OpenSpace providing a central focus for disseminating knowledge and advising on applying for funding to ensure new pathways to impact. It is supported within an open research environment promoted at Departmental, Faculty and University level by a robust ethics process (OUIES:4). We develop all researchers in terms of respect, diversity and values when engaging and working with individuals, groups, organisations and communities. This centralised approach increases efficiency and oversight, while promoting good practice rather than simple regulation.

Future research plans will further strengthen the practical problem-oriented dimension of OU Geography's long-standing reputation within and beyond human geography through problematising and rethinking notions of space, place and environment. Recent staffing additions (section 2) have allowed us to develop this approach with and around new personnel and leadership. We will continue to ground distinctive spatial-political theory in compelling cross-cutting contemporary issues and challenges related to climate change (Environment and

Politics/Culture and Practice), migration (Culture and Practice/Space and Power) and the contemporary city (Space and Power/Culture and Politics). Complex questions connecting diverse human and non-human geographies demand engagement with multiple forms of knowledge, the active participation and collaboration of varied publics, stakeholders and constituencies, and necessitates interdisciplinary research and problem-solving. This approach cultivates challenge-led research drawing together researchers and practitioners from different disciplines and skillsets into different problem-solving combinations.

Our **future Research Strategy** and **Impact Plans** have been informed and planned democratically via OpenSpace incorporating contributions of new staff recruited in 19/20. It coalesces around three priority areas:

1) *Research Themes*

- build suites of research around key contemporary issues and challenges where we have current and ongoing funding success specifically, climate change, migration and the contemporary city, while remaining responsive to new issues and supporting emerging research themes;
- encourage sustained and enduring external project partner relationships and follow-on funding for impact in relation to these long-term research themes;
- support ongoing research focused on decolonising knowledge and pluralising academic voices and perspectives as part of a continuing drive towards disseminating these initiatives widely and embedding them in our own research and academic practice;
- develop a core body of work on participatory, co-produced and arts-based engagement methods which help to fulfil the University's remit for open public knowledge transfer and dissemination while drawing on the Open University's expertise in media communication and engagement.

2) *Researchers*

- develop the research careers of new staff and ECRs and strengthen the grant pipeline by embedding a mix of junior and senior staff in future grant applications based around identified key contemporary challenges;
- maintain our efforts to diversify funding sources, and aim to engage all researchers as PIs/Co-Is;
- increase our doctoral student intake through close engagement with the priority areas set by the Doctoral Training Partnerships and through proactive academic support of candidates through the application process.

3) *Resources*

- develop OpenSpace as an interdisciplinary platform engaging with funding opportunities presented by University Strategic Research Areas and collaboration with other Research Centres to build and sustain research staffing, capacity and legacy;
- guarantee the legacy of current projects and upscaling of research through support and advice for appropriate follow-on and further funding and the dissemination of findings to new policy, user and academic communities through OpenSpace events, activities and media-based public engagement;

- ensure broad engagement with research by hosting post award events and providing a digital platform for research findings through OpenSpace.

OU Geography is exceptionally well placed to expand interdisciplinary connections and contacts, while uniquely positioned to extend our reach, capacity and expertise across digital and broadcast media. Enabled by the new School of Social Sciences and Global Studies, OU Geography will further advance original conceptual and methodological thinking across disciplinary boundaries. The research strategy builds momentum on existing grants from AHRC and ESRC running until 2024 underwriting impactful research throughout the post-REF 2021 research period. We will expand on this legacy of ongoing successes building further momentum in research culture, working with a diverse range of stakeholders across public, private and civil society sectors in both the global South and North. In doing so, we will draw on methods and resources generated at the OU including the development of Open Educational Resources. OU Geography's relationship with the BBC will enrich greater democratic access both informing, and being informed by, wider publics.

2. People

a. Staffing strategy and staff development

Since REF 2014, staff development has been driven by four key aims linked to our overarching research and impact strategy:

i. *Recruit early career researchers and build capacity within research clusters*

We have recruited five new staff at junior and ECR levels since December 2019. New staff have been recruited in order to contribute across more than one research cluster: (Ernwein, Gawlewicz, **Lorne** and **Sondhi** – *Space and Power*; Ernwein, Gawlewicz, **Kullman**, **Lorne**, **Newman**, **Sondhi** and **Van Lieshout** – *Culture and Practice*; Ernwein and **Van Lieshout** – *Environment and Politics*). These appointments replace staff who have retired (Allen, appointed Emeritus Professor); or left to take up prestigious and high-profile posts elsewhere within the discipline (Rose, Professor and Head of School of Geography and the Environment, Oxford; Smith, Director of the Royal Geographical Society; Jehlicka, Senior Researcher at the Czech Academy of Sciences) with Butcher now Professor and HoD at Birkbeck. These changes have enabled early and mid-career staff to step into research leadership roles.

ii. *Provide careful and sustained mentoring of all researchers and Post-Docs*

As a signatory to the Concordat to Support the Career Development of Researchers, we monitor and adapt procedures to conform to its seven principles (Bronze award 2013 and 2016). During the Covid-19 pandemic, OU's state of the art IT and video conferencing facilities have enabled us to stay in close touch with all our research students and colleagues formally and informally, enabling flexible and adaptive ways of responding to the situation. We support our researchers in developing their academic career trajectory and aspirations. In this aspect of our strategy, we have Faculty and University support for contract-based and fixed-term staff in terms of knowledge exchange, expert advice, mutual and peer-based support groups. In addition, we ease new and early career staff into full teaching and administration roles over a 24-month period to establish their research trajectory. Since 2014, OU Geography has existed as a vital platform for career development for both experienced staff and early career researchers, evidenced by promotions and those leaving the OU for elsewhere. Of the 13 postdoctoral

researchers based in Geography since 2016, four have moved on to full-time academic posts within the Open University while four have gained full-time academic posts in other UK Universities, Europe and the USA, with three moving on to further research contracts.

iii. *Support early and mid-career staff to take on research leadership roles*

Within the context of University-wide policies, OU Geography provides all staff with an academic mentor on appointment and a staff member who supports them through their probationary period. In the annual appraisal process, colleagues are encouraged to review and plan their longer-term goals, directions or priorities, including a research and scholarship plan and undertake appropriate development activities aligned with their core roles and responsibilities. All junior staff act as co-supervisors in PhD supervision teams, supported by an OU-wide training scheme preparing them to become lead supervisors. They are strongly encouraged and mentored to become co-applicants on bids as well as bid for their own funding. OU offers training programmes in bidding for research funding and all draft bids over £30K go through a rigorous internal review process. There is extra support for ECRs with smaller bids. We use the OU's 79 days per annum study or research leave allocation procedures to organise teaching responsibilities to maximise sustained research time. Through these measures we enable staff to build their research experience and portfolio towards initiating major research projects as PI/Co-I.

iv. *Support the promotion of existing/ mid-career staff.*

Academic promotion for teaching and research staff at the OU is criterion referenced in relation to teaching, research and academic leadership. Promotion decisions are made by University Committee. Through the appraisal process, workshop events and individual mentorship, staff are supported by Geography and FASS to tailor a career profile balancing research, teaching and leadership as appropriate. During the current REF period, **Bhagwat, Humphreys, Pryke, Raghuram, Revill** and Smith have been promoted to Professors, while Ernwein, Gawlewicz, **Kullman, Lorne, Newman, Sondhi, Van Lieshout** have been appointed as Lecturers. Together, these appointments and promotions strengthen OU Geography supporting our key research areas.

b. Postgraduate Research

Our Postgraduate Research (PGR) strategy aims to attract students to the OU by obtaining co-funding for PhD studentships. We have access to ESRC studentships in our Doctoral Training Partnerships (DTPs) with the Universities of Oxford and Brunel (ESRC-funded Grand Union DTP), and Oxford and Cambridge (AHRC-funded OOC DTP) which have dedicated Geography pathways. We have proactively responded to the adverse effects of national changes to fee structures impacting PGR recruitment early in the census period by directly engaging with the DTPs. This has enabled us to respond and adapt, alongside sourcing additional external funding. Grants from the Government of Ghana and Expanding Excellence in England (E3) programmes have enabled BAME PhD student enrolment.

Since 2018, Geography has introduced the practice of engaged recruitment to increase diversity amongst its postgraduate student cohort to shape the academic pipeline. This has resulted in diversifying the current OU Geography postgraduate student cohort with nearly 50% BAME representation and an even gender balance. Additionally, and in line with OU's overall student recruitment strategy, the OU PGR cohort is representative of geographic, age, and career stage diversity which contributes to enriching the research environment.

PGRs at the OU are part of the OU Graduate School (launched October 2016) and online training via the Graduate School Network, a bespoke *Virtual Research Environment* (VRE) built to OU's world-leading standards. It provides a range of academic, training and professional development resources, ensuring parity of experience for all OU research students regardless of physical location. Training includes core research methods and skills benchmarked against Research Council expectations for PGRs training across the stages of research from initial preparation, through the MPhil to PhD upgrade process, during data collection, analysis and writing up. There is a formal scheme for all students to build employability and gain structured and mentored teaching experience. All doctoral students have at least two supervisors; permanent office space, computing facilities and administrative support; encouragement and financial support of £1000 per year for full-time and £500 for part-time students for conferences and fieldwork expenses. Supervision practices are guided and informed by the University's Code of Practice for Supervisors and Research Students.

Drawing on OU Geography's practice of working across disciplines, our students work with PGRs in other disciplines, take part in peer-training group and organise student-led seminars which promote co-learning. Diverse collaborations and funding sources representing arts, social and environmental sciences result in a thriving research community. OU Geography hosts several visiting PhD students funded by China Foundation (China) and MITACS (Canada), enriching the Department's research environment as well as extending our networks and presence globally. Geographers at the OU are also key in shaping the institutional PGR environment. **Pile** is Associate Director of the ESRC-funded Grand Union DTP with Brunel and Oxford. **Sondhi** is named lead on the OU's submission to the ESRC consultation for the new social sciences PhD, and the AHRC OOC DTP's strand on Future Humanities Training.

Completed PhDs since 2014 demonstrate an excellent track record of national and international contributions to non-academic and academic sectors building on the strong foundations of the OU's public service mission. Collaborative experiences create non-academic career development pathways for our PGRs. Students are engaged with a wide range of policy debates during their PhDs and have consequently made careers in third sector organisations (Matilda Andersson, Media Analytics; Kim Hagen, National Deaf Children's society; Kellie Payne, Campaign to End Loneliness; Tarsh Thekaekara, The Shola Trust; and Oliver Zanetti, Nesta).

c. Equality and diversity

OU Geography embraces the principles of gender equality and social inclusion through staff recruitment and career progression, research design and management, recruitment of doctoral student and postdoctoral researchers, and in academic activities related to educational and other socio-economic impacts. The REF preparatory team consists of 3 professors and 2 junior staff of whom 2 are women and 3 men, 2 are Asian and the rest self-identify as White. As such the Department is committed to involving groups at all levels within management, research and dissemination.

The OU Geography leadership team ensures research activities adhere to equal opportunity procedures in decision-making and work allocation with the three clusters being led by new staff with steering by professorial staff. ECRs and junior staff are also encouraged to reflect on the value of their participation in these activities as part of their career building.

OU Geography has adopted a three-pronged method in recent recruitment to the Department (lead **Sondhi**): (1) *Targeted Recruitment*: contacting people from diverse and under-represented backgrounds directly and inviting them to apply; (2) *Widening recruitment*: circulating advertisements outside of Geography networks and 3) *Engaged communication*: develop advertisements, tweets and emails for recruitment aimed at under-represented audiences first. Adopting these practices to recruit doctoral students and faculty has resulted in a more diverse pool of applicants and the recruitment of postgraduates from non-standard backgrounds with a wide range of high-level professional expertise in, for example, the arts, and environmental management. OU Geography's lead has informed the OU's future plans to develop a good practice guide for recruitment of researchers, as specified in the OU's 2020 Athena Swan submission. This is in addition to existing practices which include attendance of reviewed and revised unconscious bias training undertaken as part of the mandatory online recruitment and selection training. **Bhagwat** acted as a member of the University's Academic Reference Group whereby Geography has taken a proactive role in the OU's adoption of the DORA declaration on the assessment of research. This has important implications for attracting, retaining and developing a diverse research community.

At Faculty level, **Sondhi** leads a working group establishing processes and practices to better support Black doctoral students. **Van Lieshout** is an active member of this group in the capacity as Postgraduate Convenor. At Institutional level, **Raghuram** is co-lead of the Decolonising Research and Teaching group which has been initiated by the Vice Chancellor's Executive, on the BAME network steering group and the University group on improving Black PGR students' experiences. **Raghuram**'s institutional EDI work extends into shaping research structures and agenda at EU-level to lead the anti-racist working group of IMISCOE (International Migration, Integration and Social Cohesion in Europe), a network of 56 European migration research institutes and centres. **Raghuram** has brought to the leadership of OpenSpace experience as member of the national Race Equality Charter panel and as member of the Race working group of the RGS-IBG. Most recently, **Raghuram** led on an inclusive conference policy which is being considered for the next RGS-IBG Conference.

Future EDI strategy will:

- Further equitable partnership with community members, firms and organisations ensuring our open research is representative of diverse groups;
- Follow the anti-racist research checklist established by the faculty research group of which **Raghuram** is a member;
- Actively mentor staff to ensure that all EDI concerns are addressed including the use of Safe Space policy which **Raghuram** is leading across the university.

3. Income, infrastructure and facilities

a. Income

Since REF 2014, there is a 407% increase in income to £3.6m compared with £888K in the previous census period. We have attracted approximately £6.5m in terms of external research funding (grant value). By building a strong bidding culture, and targeting a wide range of funders, we have built a diverse funding portfolio: four AHRC (£2m, £1.2m, £506K, £360K), four ESRC, (£596K, £446K, £90K, £87K), one EPSRC (as Co-I, value of award to Geography £114K), one EU Horizon 2020 (€ 171K), and one Research England Expanding Excellence (as Co-I, £428K,

total award £6.8m). These grants have supported a total of 13 early career researchers across seven funded projects to embark on their first postdoctoral research positions contributing to the dynamic research environment in OU Geography.

Early career academics are supported through OpenSpace Work in Progress meetings which offer opportunities for informal peer review of publications and draft research bids. These sessions, along with the legacy of existing research grants (e.g. academic and non-academic partnerships) will support the research funding trajectory of OU Geography into the next REF cycle. A key task is to facilitate seed-corn funding applications for pilot projects and bid development. OpenSpace seed-corn funding up to £2,000 is directed exclusively at ECRs as part of a process which includes informal mentoring and grant writing advice. OpenSpace then works closely with researchers to compete for other internal funding, for example, in association with University Strategic Research Areas (SRAs) particularly *International Development and Inclusive Innovation, Citizenship and Governance, Space Science and Technology and Health and Wellbeing* to provide internal funding for research development. Geographers have also been able to access internal funding through School, Faculty and University initiatives to support impact and further rounds of bidding in relation to ongoing funded research. Seed-corn funding has supported all successful research bids in Geography during the current REF period. During the academic year 2019-20 Geography staff were awarded in excess of £64K in Faculty and University seed-corn money either individually or in interdisciplinary teams to develop new bids and follow-on projects. This has leveraged six recent grant successes in excess of £2m of new external funding (**Pile** £36K, **Raghuram** £145K, £1.9m, **Revill** £79K, £24K).

b. Infrastructure and facilities

Since REF 2014, the OU has made investments in research infrastructure and information-technology support. The Faculty of Arts and Social Sciences, formed through a merger of two faculties, has continued to support OpenSpace as the hub of research in Geography at the OU. OU Geography researchers also benefit from the OU's investment in Strategic Research Areas which are interdisciplinary, cross-university research structures spanning International Development, Citizenship Studies, Space Science, and Health and Wellbeing (see OUIES: 1,8-9). SRAs have been at the forefront of supporting the interdisciplinary research culture at the OU, and geographers are involved in regular seminars, workshops and conferences around each SRA thematic area of expertise.

The University continues to create a technologically rich and sophisticated virtual research infrastructure. The OU's library provides staff and research students with online access irrespective of geographical location (see OUIES: 9). It is supported by a 24-hour helpdesk, online training sessions and study and discussion spaces. State of the art IT also facilitates blending remote and co-present working, helping support geography researchers with caring responsibilities, illness and disabilities, while allowing some research to proceed during the Covid-19 pandemic. It also enables some overseas and UK research collaborations to minimise carbon footprints and travel costs.

All Geography research outputs are uploaded to Open Research Online, one of the UK's largest open access research repositories (see OUIES: 3). Substantial research content is widely disseminated through online platforms such as OpenLearn and the OU's iTunesU site. A new research grant award management system enhances guidance to academics during the

development of funding applications and increases the quality of post-award support given to investigators.

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

Forging collaborations, networks and partnerships with diverse publics, stakeholders and constituencies is central to our research strategy at OU Geography. Driven by our commitment to openness, we have harnessed our unique capability as a Human Geography department able to inform, and be informed by, public audiences through broadcast and digital media working in sustained partnership with the BBC.

a. Research collaborations

OU Geography's interdisciplinary research collaborations work across and beyond the university to combine global reach and local embeddedness to open up new geographical thinking across our three thematic clusters. Our strong international reputation is exemplified through **Bhagwat's** EU-funded Horizon 2020 project, EARNEST, ensuring effective management of human-dominated tropical forest, with the Research England-funded *Astrobiology OU* project developing new experimental thinking with earth, environment and planetary scientists to explore just and equitable application of space technologies within international development in the global South. **Raghuram** has expanded the OU's world-leading educational research to lead transnational projects that maximise access to quality education in the global South, while **Pile's** research on the place of Spiritualism in the Everyday Life of Stoke-on-Trent with social psychologists provided the basis for agenda-setting geographical interventions into debates on emotions, affect and society.

Our conceptually-innovative collaborations have opened up possibilities for pursuing meaningful research across new spatial registers, practices and knowledges, such as **Revill's** *Mapping Music and Landscape Decision Making* (AHRC) connecting with musicology and rural policy, and Jehlicka and Smith's *Spaces of Quiet Sustainability* project working with sociologists and environmental studies scholars (Czech Science Foundation). The combination of theorising space and place with problem-orientated research has generated new collaborations spanning design, IT and publishing, anthropology, health and social policy, sociology as well as economic and environmental history (**Bingham, Lorne, Pile, Raghuram, Revill** and **Van Lieshout**).

b. Networks and partnerships

Geographers at the OU hold key leadership roles within international research networks to implement change driven by geographical thinking. **Humphreys** has been a leading member of the International Union of Forest Research Organisations (led by Yale University).

Humphreys is Academic Lead on Common Ground's Sustainability Research Network, chairing its annual International Conference on Environmental, Cultural, Economic and Social Sustainability, while also serving as a member of the Climate Change: Impacts & Responses Research Network advisory board.

OU geographers actively participate in research networking to embed spatial thinking within contemporary social thought and practice reaching across disciplinary and territorial boundaries.

Raghuram is one of eight Executive Board Members of IMISCOE, a European network of scholars concerned with migration and integration. Cochrane has contributed to rethinking spaces of urban governance as a member of the international Berlin-Britain Network based at

Humboldt University and consulting on transnational ESRC project 'Governing the Future City'. **Van Lieshout** is a member of the European network researching urban water history and subterranean heritage, and **Lorne** established the Political Studies Association speciality group *Space, Governance and Politics* foregrounding why geography matters for political sciences and public policy.

Our research partnerships have generated a wealth of outputs and joint publications.

Raghuram, Ray and **Sondhi** have collaborated with IT industry partners in India on a wide range of issues including contributing to the annual [India Migration Report 2018](#). Humphreys was lead author of a [report on the application of UN Sustainability and Development Goal 17](#) to forest conservation policy (with 10 co-authors, including **Bhagwat**), while **Bhagwat** was Lead Author for [thematic assessment on land degradation and restoration](#), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Bonn, Germany (2016-18).

c. Relationships with key research users, beneficiaries and other audiences

Following our research strategy to be open for publics, OU Geography has been an active supporter of the OU-BBC partnership, facilitating the production of popular BBC broadcasts and accompanying promotional materials, forging new connections between research and public education. Academic consultancies in this REF period include:

BBC TV production	Academic consultant	Total series viewers	OpenLearn programme visits	Enquiries to formal learning via OpenLearn	Accompanying materials: public requests
The Fifteen Billion Pound Railway (2017)	Bingham Revill	10 million	31,924	1334	35,000 posters
Five Billion Pound Super Sewer (2018)	Bingham Revill	7.75 million	3,801	188	N/A
Hugh's Wild West (2018)	Morris	14.39 million	38,131	913	N/A
Autumnwatch (2019)	Morris	7.28 million	124,494	2,642	96,780 calendars
Cornwall: This Fishing Life (2020)	Bhagwat Humphreys Johnson	13.7 million	25,465	899	30,000 posters
Springwatch (2020)	Morris	33.5 million	8057	608	N/A
Green Originals (radio) (2020)	Revill	7.47 million	N/A	N/A	N/A

(Data sources: BBC Audience Portal. BARB and Adobe Analytics, collected 3 weeks prior to 6 weeks after final transmission)

Our open approach to co-design has generated a host of creative outputs to build and sustain our roles and responsibilities as engaged public academics. Through AHRC-funded research, **Revill** worked with primary and secondary school students, composers and sound artists. The project's creative outputs garnered national attention featuring on the BBC R4 Today Programme. **Revill** was interviewed on air (18/07/18) and project sound works were featured on the 'Cerys Matthews Programme' Radio 6 Music (22/07/18) and 'The Field Recording Show – Sound and Space' 14/06/20 Resonance FM (London). The film 'Soundings' was shortlisted for the AHRC Research Film Awards 2019. The project was showcased by AHRC for both their interdisciplinary 'Connected Communities' initiative and their investment in 'Heritage' research.

Open engagement has been enabled through our research clusters working with a range of public institutions, transnational agencies and wider publics. In the *Space and Power* cluster, **Lorne** has worked with the English NHS and Greater Manchester Combined Authority, generating interdisciplinary policy reports to share learning on Greater Manchester health and social care devolution, with emerging findings frequently informing the governing body leading the £6bn initiative. **Lorne** also led the production of an evidence-based review on NHS and local government reforms funded by the Department of Health and Social Care to inform ongoing place-based reorganisation of health and care. **Raghuram** works with UNHCR to train refugee workers and in Campaign for Peace and Justice to change peace education. **Raghuram** is also working with universities and ministries of education in Zimbabwe to alter teacher training material.

In the *Culture and Practice* cluster, both **Revill** and **Van Lieshout** have worked with the heritage sector to ensure wider constituencies inform and drive our research agendas. Contributions include shaping the Research Framework for the UNESCO Derwent Valley Mills World Heritage Site. **Revill** provided three submissions of written evidence and gave verbal evidence to the Parliamentary Select Committee on Coastal Flooding and Climate Change 2019, with evidence provided cited in the Select Committee interim report (October 2019), while **Pile** led a public exhibition designed around public engagement as part of the *Spirited Stoke* (AHRC-funded project, 2014-2016).

In the *Environment and Politics* cluster, **Humphreys** gave three BBC interviews on climate change (October 2014, April 2019 and February 2020) and has presented his research among a wide range of audiences including schools, prisons, Extinction Rebellion campaigns, and engineering professionals. **Van Lieshout** has given invited talks to mining and local history societies and developed the public facing digital Atlas of entrepreneurship for the British Business Census of Entrepreneurs, while **Newman** produced guidance for visitors to the RGS-IBG archives offering researchers new ways of viewing and working on Geography's history.

OU Geography produces and hosts [Geography Matters](#), a series of open public-facing articles, videos and podcasts. The *Geography Matters* digital platform enables the rapid circulation of cutting-edge research insights through free, multimedia online materials engaging wider publics at a distance (6,559 unique pageviews). **Bhagwat** led on the production of materials on 'Eating for the Environment' (13,685 views) and Cochrane on 'From Brexit to the Break-Up of Britain?' (24,192 views).

d. Wider activities and contributions to the research base, economy and society

OU Geography continues to push the boundaries of geographical thinking within and beyond academia through our collective activities.

i. *Substantive roles in grant assessment panel membership across career stages*

Allen was member of the awarding panel for 'Leverhulme Prize in Geography' between 2016 and 2019. **Revill** was on NERC Climate Change Resilience grants assessment panels in 2018 and 2019, NERC Landscape Decision Fellowships panel in 2020, AHRC Changing Landscapes grants assessment panel in 2019 and on AHRC Climate Change Resilience: Living with Uncertainty grant assessment panel in 2020. **Revill** was on the Postdoctoral Fellowship award committee of Riksbankens Jubileumsfond, Sweden 2018-19 and the Postdoctoral Fellowship award committee of TU Berlin 2019. **Bhagwat** was Member of Assessment Panel for r4d Policy Briefs, The Swiss Programme for Research on Global Issues for Development (r4d) and **Bhagwat** was Member of Assessment Panel AHRC Follow-on Funding Highlight Notices for Changing Landscapes: Towards a new Decision-Making Framework for UK Landscapes and Land Assets, UKRI Strategic Priorities Fund (SPF) Highlight Notice. **Bhagwat** was Chair of Awards Committee, Society for Conservation Biology's Social Science Working Group (SSWG) Early Career Award, Washington, USA (2018-19). **Van Lieshout** was a member of the New Researcher's Poster Prize committee at the Economic History Society's annual conference 2019 and **Lorne** has served as a peer reviewer for RGS-IBG Small Grants Award in 2019 and 2020, as well as for the Independent Social Research Foundation.

ii. *Significant journal editorial responsibilities*

Our researchers shape international research agendas in and beyond the discipline.

Raghuram is co-editor for *The Geographical Journal*; co-editor, *Mobility and Politics*, *Palgrave Pivot* series; and Associate Editor for *South Asian Diaspora Journal*. **Bhagwat** was Associate Editor, *People and Nature*; Associate Editor, *Frontiers in Forests and Global Change*; and has co-edited Special Issues in *Sustainability* and the *Handbook of Indigenous Environmental Knowledge* for Routledge; Section Editor on 'Nature, class and social inequality' in the *Sage Handbook of Nature*. Researchers at the OU widely contribute to editorial boards, such as *Palgrave Communications*, and *Subjectivity*, **Pile**; *Social and Cultural Geography*, and previously *Gender, Place & Culture*, **Raghuram**, **Humphreys** and **Bhagwat** were members of Editorial Board of *Forest Policy and Economics*.

iii. *Conference organisation to steer research agendas.*

Bhagwat was Member, Conference Committee, Society for Conservation Biology, Washington, USA (2016-19). **Humphreys** was co-chair of conferences between 2017 and 2020 on 'Sustainability Lessons in the Global South: Priorities, Challenges and Risks' (2020); 'From pedagogies for sustainability to transformative social change' (2019); 'Forging solidarity: Collective sustainability solutions in a fragmenting world' (2018); 'Pathways to sustainability: Challenges and opportunities for state and business' (2017). **Raghuram** and **Sondhi** co-organised the IMISCOE conference, addressing the implications of the Covid-19 crisis on migration. **Kullman** led a guest workshop with architect Lars Lerup (University of California, Berkeley) on building the unfinished in architecture, design and planning.

iv. *Prestigious invited and keynote presentations.*

Allen was invited to reflect and respond at a panel session to celebrate the 20th anniversary of OU Geography's influential volume 'Human Geography Today' at RGS-IBG 2019. Allen also

gave an invited lecture on 'Border Topologies' at Political Studies Association Annual Conference Cardiff 2018 hosted by **Lorne**, and University of Exeter Annual Lecture 2017 on 'Topologies of Power'. **Raghuram** gave a keynote address on 'Academic mobilities and relational thinking' at the Beirut Orient Institute's Postcolonial Legacies, Scholarly Mobility and Research Capacity Building workshop in June 2017. **Raghuram** also gave a keynote on 'Who Cares? The (in)visibility of caring responsibilities and working in Geography' at the University of Oxford on 10th January 2019. In 2014 two sessions were organized at the RGS-IBG Conference to celebrate the 21st anniversary of Cochrane's publication 'Whatever Happened to Local Government?', which led to a symposium published in *Regional Studies*, *Regional Science*. **Humphreys** gave a keynote at Eighth International Conference on Interdisciplinary Social Sciences, Imperial College, London in August 2016. **Humphreys** gave a keynote at Institute of Chartered Foresters, Annual Conference, Cardiff in April 2015 and was a member of European Forest Institute expert panel 'The future of global forest governance' workshop in Bonn, in September 2018. **Humphreys** has been a regular contributing author to IUFRO Global Forest Expert Panel on Forests and Poverty.

The OU Geography *Doreen Massey Annual Events* attract leading national and international speakers from academia, politics and grassroots community groups to stimulate interdisciplinary discussion and shape agendas in conceptual and political thinking within and beyond geography. Channelled through our three research clusters, and generating key academic publications, previous events include: 'digital geographies', 'sharing the Anthropocene', 'Environment engagement and the politics of creative practice' and 'Provocations for the present: what culture for what geography'. The latter resulted in a themed edition of *Social and Cultural Geography* Bartolini, **Raghuram**, **Revill** (editors). OU Geography also worked with the Royal Geographical Society (with IBG), and colleagues from across the discipline and beyond the academy to host the 'Geography Matters: Celebrating Doreen Massey's ideas' event.

v. *Wider contributions and esteem indicators*

Allen, **Pile** and **Raghuram** became Fellows of the Academy of Social Sciences. Blowers received the prestigious Alexander and Ilse Melamid Medal by the American Geographical Society in recognition of 'outstanding work on the dynamic relationship between human culture and natural resources'. **Raghuram** received the RGS-IBG Murchison Award 2016 and **Raghuram** was also NUS senior visiting research fellow at the Asian Research Institute in 2019. **Bhagwat** was one of four Professors appointed in association with UNESCO Chair: Sustainable Heritage and Environmental Management, University of Bergen, Norway (2018-2021) and **Bhagwat** was part of the expert council for Future Fit Business, a charity promoting environmentally restorative, socially just and economically inclusive business. **Humphreys** received Honorary Fellowship of the Institute of Chartered Foresters in 2014. Jehlicka won a visiting scholarship at Ruralia Institute, Helsinki University, Finland (April 2019). Cochrane held a Leverhulme Emeritus Fellowship 2014-2016 and Allen held the Leverhulme Emeritus Fellowship 2019-2020. **Kulman** received the Design Studies Award, best paper 2016.

In summary, throughout the REF period we have focussed on embedding critical theorising about space, place and environment in practical problem-orientated research. OU Geography is a vibrant department with a strong international reputation for conceptually-driven approaches to critical Human Geography. Our commitment to openness harnesses the OU's unique broadcast and digital media capabilities generating and sustaining impactful and meaningful geographical dialogue with a diverse range of publics, audiences and constituencies. Current and future

research strategy will continue to lead innovative, inclusive and impactful research embedding engagement and co-production within our research practices through the next REF period.