

Institution: University of Leicester

Unit of Assessment: UoA14 Geography and Environmental Studies

1. Unit context and structure, research and impact strategy

UNIT CONTEXT AND STRUCTURE

The **Critical and Creative Geographies (CCG)** research group, comprising all human geographers and GIS researchers at the University of Leicester (UoL), forms our UoA14 submission. CCG has an outstanding reputation for excellence in critical research, which questions established theorisations and looks at the world in innovative ways. Our research addresses substantive research questions across many sub-disciplines of geography; what unites it is this critical perspective, the application of creative methodologies, and a commitment to using our research to support progressive social change through formal policy channels, community empowerment, and activist-scholarship.

Highlights include:

- Lees's international, agenda-setting work on gentrification and policy interventions to
 defend low-income groups against displacement. Her *Planetary Gentrification* (2016)
 [Output 1] was lauded as 'Theoretically inspirational...an excellent role model to show
 how critical comparative studies can be done for fruitful knowledge production' (Lin
 2016).
- Brown's significant contributions both to the conceptual and public understanding of the international anti-apartheid movement. His book *Youth Activism and Solidarity* (2017) [Output 1] has been commended for framing 'lessons of that campaign ... to more effectively and equitably organise solidarity in new contexts' (Kelliher 2018).
- **Gulliver** leads the only dedicated environmental noise and health team in the UK. The Centre for Environmental Health & Sustainability (CEHS: established in 2018 with an institutional investment of £5M), of which he is Deputy Director has attracted grants worth £1.5M in just 2 years. This includes **Gulliver**'s £515k EU grant for the 'Equal-Life' project, which is developing a novel approach to multi-modal environmental exposures on children's mental health and development.
- Securing £3.17M of research funding and publishing 211 outputs which have been cited 3102 times (SciVal) with 14.5FTE members.

Since REF2014, Geography merged into the School of Geography, Geology and the Environment (SGGE). The CCG group, currently led by **Brown**, is one of SGGE's four research groups. Our modus operandi is to be democratic (staff, ECRs and PGRs are seen as equal, we manage ourselves horizontally), visionary (both as academic and public geographers) and transformational (using our work to better society). Our workshops and weekly seminar series invite (inter)national speakers to inspire new lines of enquiry and grow collaborations.

We have created a supportive, inclusive, and collegial environment that fosters intellectual curiosity and inspires researchers to pursue novel and societally-relevant research. This has enabled a track record of setting research agendas internationally in three key fields:



gentrification and housing justice, critical environmental futures, and global sexualities and migration. Here the CCG group is positioned at the forefront of critical human geography's concerns with inequality, social justice and liberation.

RESEARCH AND IMPACT STRATEGY

Revision of REF2014 aims

In REF2014, we stated that our strategic priorities were the:

development of **cutting-edge theory in urban, rural and cultural geographies** - from local communities to global environmental challenges; developing the next generation of geographic information science, geospatial analysis methods and remote sensing applications from forthcoming space missions.

We have achieved these ambitions, but also refined the focus of our research priorities, in the light of opportunities afforded by the formation of SGGE, staff changes, and our dynamic responses to the research funding landscape. We increased research income per FTE, improved recruitment of funded PGRs and postdocs, improved output quality and developed the key intellectual strengths of the group. In our commitment to urban and rural geography, we have built a larger cluster of researchers investigating **gentrification and housing justice**. We have begun to grow a team capitalising on **Brown**'s international leadership in **geographies of sexualities** and we have led on the prioritisation of interdisciplinary migration research across the University. In alignment with the School's strategy, our **critical environmental futures** team have driven innovative research collaborations with ecologists, earth observation (EO) scientists, geologists, and public health researchers. By focusing on these strengths, we have built a more vital and sustainable research environment that integrates impact and public engagement into our research.

Vision and strategy

Our research vision is to deliver high-quality, theoretically-sophisticated, empirically-rich research addressing substantial societal challenges that can have meaningful impact, creating positive social change. To achieve this, our strategy is to:

- Further-develop our research strengths in **gentrification and housing justice**, **critical environmental futures**, and **global sexualities and migration** and to deliver impact in these areas.
- Recruit and support outstanding staff by prioritising investment in existing and emergent research strengths.
- Recruit and develop outstanding PGRs, and to support early-career staff to supervise them.
- Apply for larger grants from research councils and charities, but also continue to diversify and increase our research funding portfolio by using local seedcorn-funding schemes to build larger discipline-specific and interdisciplinary teams that then underpin proposals for more substantial external funding.

Developing Impact

Our research has had major impact at a local, national and international scale, through collaborations with policy-makers, businesses, NGOs and community groups. It has



contributed to the University's position in the top 3% in the Times Higher Education World Impact Rankings 2020. Research by Gulliver, Matulis, and Upton contributed to UoL's ranking of first in the world for work towards the UN's Sustainable Development Goal (SDG) of 'Life on Land'. Additionally, 33 publications by members of this UoA contributed to impact on SDGs 'good health and wellbeing' and 30 publications to 'Sustainable cities & communities'. In REF2014 we planned to formalise an impact strategy and create additional funding to support impact development; both aims have been achieved. CCG members are supported with impact planning through dedicated training sessions and liaison with School Impact Champions. The two ICSs returned in this UoA demonstrate that our research is having clear impacts on policy in the UK and internationally (Lees ICS1), as well as commercially (Upton ICS2). Both ICSs benefited from financial support from the University's Impact Development Fund, and from periods of study leave/reduced workload to consolidate impact in the UK, Southern Europe, and Mongolia. A recent award to Lees through our ESRC Impact Acceleration Account will fund the Leicester Urban Observatory which she co-founded in 2016 (to facilitate knowledge exchange between urban researchers, Leicester's Planning Department, and critically - Leicester's publics), by establishing an 'Urban Room' in Leicester to enable citizen science, civic engagement, and impact. To ensure the vitality of our research impact, ECRs have been supported with awards from the GCRF Impact Accelerator (Matulis) and the Wellcome Trust Institutional Strategic Support Fund (WTISSF, Di Feliciantonio).

Fostering Interdisciplinary Research

CCG members are actively engaged in leading interdisciplinary research within our School and beyond. Across UoL, interdisciplinary collaborations are nurtured by the Leicester Institute for Advanced Studies (LIAS, IES 2.2). LIAS provide small grants to support the formation of interdisciplinary teams exploring collaborations and developing larger funding applications. Through this scheme, the UoA has attracted £66k of institutional investment. **Brown** and **Di Feliciantonio** collaborated with clinical academics on a project about infectious disease screening for recent migrants and **Upton** collaborated with psychologists on the resilience of cared for children in Bangladesh, Kenya and South Africa. CCG researchers also led the creation of an interdisciplinary 'Migration, Mobility and Citizenship' research network. Recently, CCG researchers have initiated LIAS interdisciplinary projects on COVID19. **Bennett** and **Brown** participated in an interdisciplinary research network on 'Solidarity in Diversity' funded by the Belgian FWO (2015-20), sustained through a Marie Sklodowska-Curie Action (MSCA) Innovative Training Network (2021-25). CCG members also critically reflect on the conduct of such research to inform future practice, both for ourselves as researchers and for funders such as GCRF (**Upton**, Kalimantan Lestari project, 2020-23).

ACHIEVEMENTS BY RESEARCH THEME

Brief descriptions of our thematic clusters are given below, highlighting significant research and impact achievements:

Gentrification and housing justice [Busa, Di Feliciantonio, Lees, Phillips, Portelli, Tate, Wilde] has attracted £1.44M of external funding in this REF period. It is known for internationally leading research examining the ways in which both cities and rural areas are being reshaped in the interests of elite groups, and particularly for questions relating to gentrification and housing justice – emphasised by Lees and Phillips editing the first *Handbook of Gentrification Studies* (2018) (SciVal Field-weighted citation impact 4.95), noted for setting 'new research agendas on a variety of topics' (van Gent 2019). Creative



methodologies, scholar-activism with grassroots organisations, and a focus on policy and practice is a distinctive feature of their work.

Lees [Outputs 2, 3, 4] has mapped the displacement of tenants and leaseholders from London council estates which has informed extensive impact work with the London Tenants Federation and local communities to assist them resisting displacement [ICS 1]. Alongside Lees, a group of ECRs, including Di Feliciantonio [Outputs 1, 2; O1 has a SciVal FWCI of 2.04], Portelli [Output 1] and Wilde [Output 2], have theorised the impact of the financialisation of housing on renters' subjectivities and the implications of this for housing justice movements in Barcelona, Dublin, London and Rome. Phillips [Output 1; SciVal FWCI 4.36] has conducted international research on rural communities in the UK, France, Japan and North America and developed a comparative model for understanding rural gentrification (featured as a forum debate in *Dialogues in Human Geography*, 2018).

Critical environmental futures [Brown, Coles, De Sabbata, Gulliver, Last, Matulis, Phillips, Tate, Upton, Thornton] is internationally known for innovative collaborative research on contemporary environmental challenges in diverse geographical contexts, with research income of £1.2M. Its members work at the complex intersections of socio-economic, political and environmental change to facilitate the emergence of environmentally just and sustainable, rural and urban futures. Their theoretically innovative, interdisciplinary, and activist scholarship encompasses environmental governance, lived landscapes, political ecology and environmental health.

Upton [ICS 2; Outputs 1-4] has developed innovative interdisciplinary analyses of resilience and the impacts of environmental change on pastoral livelihoods in Central Asia and East Africa. This has built upon UoL's excellence in satellite-based EO to allow nomadic herders, government agencies, and the insurance industry to make better, contextual decisions on sustainable resource use, which support local livelihoods and values. **Phillips** [Outputs 1, 2] is part of the Programme Coordination Team for UKRI's 'Landscape Decisions' Programme (worth £739k to UoL). This strategic initiative addresses how land can best be managed for the benefit of society and is developing innovative, interdisciplinary solutions to 'real world' problems about land use. Since being appointed Deputy Director of the CEHS, **Gulliver's** research has developed new methods for monitoring environmental exposures and health outcomes related to mental health in children [Output 1].

Global sexualities and migration [Bennett, Brown, Di Feliciantonio, Dickinson, Last, Madge]. This theme combines transnational research on sexualities and migration, with specific attention to the experience of LGBTQ migrants and diasporic groups within 'multicultural' communities. **Brown**'s international leadership in the field is exemplified by publication of *The Routledge Companion to Geographies of Sex and Sexualities* (2016) described as 'an impressive marker in the field' (Miles 2017).

Brown [Output 3] has redefined international, interdisciplinary debates about 'homonormativity', arguing that the social inclusion and legal recognition of LGBTQ people over recent decades cannot be reduced to an effect of neoliberalism. **Di Feliciantonio**'s study of the migration of HIV+ gay men has reframed understandings of why men relocate after receiving an HIV diagnosis, informing the work of LGBTQ sexual health providers in Italy and the UK. With European partners, **Brown** and **Bennett** have secured a MSCA Innovative Training Network (£449k) on 'Solidarity in Diversity', examining social solidarities in superdiverse communities.



Research governance and integrity

The development and implementation of our research and impact strategy is the responsibility of the School Research Committee, and includes: Director of Research, Head of School, REF lead, Research Group leads, Postdoctoral and PhD student representatives, and technical staff. The HoS and Research Director monitor success through scrutiny of output grades (in line with the University's Output Quality Review Policy [IES 2.7]) and grant application and success rates, as well as through bi-monthly 1-2-1 meetings with the Dean of Research. Our commitment to maintaining and embedding a culture of research integrity is rooted in adherence to the requirements outlined in the Concordat to Support Research Integrity (IES, 2.7). We ensure that all researchers observe these standards, promote an ethos of professionalism, and embed best practice in all aspects of their work. All research projects are scrutinised for research ethics and GDPR compliance upon award. The School has a dedicated Ethics Officer, who offers guidance and advice on applications. All research ethics applications are approved by the Research Ethics Committee (chaired by **Phillips**). The University's Information Assurance Team ensure data protection and security protocols are legally compliant.

Open research

Embedding a culture of open research is a strategic priority as we seek to increase global engagement with our research. We do this by: (i) ensuring our publications comply with REF and funder open access requirements and institutional policy (IES, 2.6); (ii) utilising open scholarly infrastructures to disseminate outputs and data; (iii) incorporating open research outputs/data in funding applications; and (iv) explicitly recognising how open research, including open data, is critical to the sustainability of the unit. We have made codes, preprints, conference papers, and reports openly accessible and our researchers have edited open-access journals, including *ACME* (**Di Feliciantonio**), *Urban Planning*, and *Sustainability* (**Lees**). **Portelli** organised a 3-day seminar at Harvard (2019), which facilitated debate about the importance of urban activists accessing urban scholarship. This led to a series of coauthored articles between academics and activists published in the open-access *Radical Housing Journal* to enable sustained knowledge exchange.

FUTURE RESEARCH AND IMPACT PLANS

Over the next 5 years, CCG will actively shape geographical and interdisciplinary debates about major challenges facing humanity and the planet. Our work will continue to develop theoretically innovative critical social science to offer creative solutions around housing, environmental issues, sexual politics, and migration.

Specific future research trajectories are:

- The **gentrification and housing justice** cluster will set new research agendas around climate/environmental gentrification, anti-gentrification policy making, the post-COVID city, the urbanisation of the rural, and developing machine learning applications to track gentrification-related displacement.
- The critical environmental futures cluster will lead international and interdisciplinary work on geographies of the Anthropocene, disaster gentrification, landscape futures, and mutualistic cities, including through innovative arts-based methodologies.
 - Through the new EU-funded Equal-Life project (£515k), Gulliver will study the long-term effects of the interactions between the environment and children's



- mental health and cognitive development; stimulating new collaborations on urban public health.
- We will capitalise on the opportunities afforded by hosting the UKRI Landscape Decisions Programme (£739k) and the £100M+ investment in Space Park Leicester [IES 2.4, 4.4] to create opportunities for large, interdisciplinary grant applications in these areas.
- The global sexualities and migration cluster aims to sustain and develop the vitality
 of geographical research on global sexualities at Leicester. Utilising the ESRC IAA
 investment in the Leicester Urban Observatory, we aim to utilise Leicester's history of
 migration and unique social geography as a living laboratory for life in medium-sized
 cities.

Cross-cutting these themes, we will:

- Develop innovative methodological approaches to digital geographies by coordinating emerging collaborations between critical human geographers, data scientists, and the expertise of CEHS.
- Recruit and support outstanding staff, with a prioritisation of investment in expanding our capacity and expertise at the interfaces between spatial data science and critical digital geographies, as well as in health geographies.

COVID-19. Our staff have responded proactively to the crisis by leading, interdisciplinary COVID-related research projects on track and trace technologies (**De Sabbata, Matulis**), sexual politics and intimacy in lockdown (**Brown, Di Feliciantonio**), and evaluating whether the needs of migrants were incorporated in pre-COVID-19 pandemic planning guidelines issued by supranational organisations such as WHO and the World Bank (**Brown**) – attracting £20k internal pump-priming funds in total. **Brown** and **Upton** were also part of an 'Advanced Study Group' convened by LIAS in July 2020 to shape an internal funding call for interdisciplinary Pandemics research (2020-2022). Subsequently, **Brown, De Sabbata, Di Feliciantonio, Matulis** and **Upton** secured Pandemics projects worth £89k (we note the leading role of ECRs in this).

2. People

STAFF

Staff composition

CCG consists of 12 T&R staff: 4 (28%) are ECRs (**De Sabbata**, **Last, Matulis**, and **Wilde**), 2 (17%) are Associate Professors (**Bennett** and **Tate**), and 5 (42%) are Professors (**Brown, Gulliver, Phillips, Lees** and **Upton**).

Over the REF period, UoA14 staff have secured £640k to employ PDRAs and attract independent fellows. We have recruited 9 PDRAs on UKRI and Leverhulme Trust research grants, plus 6 independent postdoctoral fellows (compared to no such fellows in REF2014). We have had significant success recruiting MSCA fellows to work on Gentrification and Housing Justice (Annunziata, Sakizlioglu, **Portelli, Busa**) and Global Sexualities and Migration (**Di Feliciantonio**). Thornton's success in securing the only ESRC Postdoctoral Fellowship at the University in 2018 has been particularly pertinent for the Critical



Environmental Futures cluster, sustained through Thornton's PDRA position on a major GCRF project.

Staffing strategy

We aim to make research-led appointments, whilst retaining our strongest researchers, to underpin our goal of delivering outstanding research. The size of the CCG group is similar to the number of human geographers and GIS specialists returned by Leicester in REF2014.

CCG has been enriched by the appointment of **De Sabbata**, **Gulliver**, **Last**, **Matulis** and **Wilde**. **De Sabbata** adds expertise in quantitative human geography, with specific interests in the analysis of 'big data' from social media and creative data visualisation. **Last** and **Matulis** have expanded our interests in critical and creative methodologies in the geohumanities through their expertise in creative writing about nature and the environment. **Wilde** is conducting ethnographic urban research in the UK and Venezuela, broadening our core cluster of urban researchers investigating housing justice globally. **Gulliver**, a quantitative geographer with a focus on environmental epidemiology, was appointed at Professorial level as a University-led strategic investment to form the interdisciplinary **CEHS** which he codirects. This was a major strategic investment (£5M) designed to link atmospheric and environmental research with health researchers. **Gulliver's** own research focusses on GIS-based methods of assessing environmental air pollution and noise exposures. His appointment strengthens the applied GIS research and methodological expertise of the Critical Environmental Futures cluster.

Staff development and promotion

The establishment of the CCG group and the new School have enhanced the support given to researchers at all career stages, in accordance with the Researcher Development Concordat (2019). CCG works collectively to foster people's research potential through discussing emerging ideas on new research, providing peer review of papers and grant applications, and encouraging staff to utilise internal seedcorn funding to develop ideas and new transdisciplinary research collaborations.

Support for professional development is integral to the CCG group. All staff have an annual Performance Development Discussion (PDD) with a Professorial colleague. Research review and planning is a core component of this discussion, in addition to public engagement and impact. PDD reports are reviewed by the HoS to identify whether interventions such as workload adjustments or additional mentoring are needed, thus providing tailored support for professional development and advancement at all career stages.

Generous financial arrangements within the University allow overheads from grants to be shared between the School and PIs, facilitating further research investment, teaching buyouts, dissemination activities, and equipment procurement. We run an active Study Leave programme, allowing permanent staff to apply flexibly for relief from teaching and administration to meet their specific research objectives. Since REF2014, 70% of eligible staff returned here (including 83% of women) have benefitted from a period of study leave, with resultant outputs contributing to career progression and our research priorities. For example, Coles' sabbaticals have led to a major international ESRC-funded research project 'Reconnecting the Nexus' (RCTN) and production of a monograph. Staff are supported to undertake field research activities through short 'leaves of absence' critical to fulfilling their roles in major research projects. Upton has benefitted from this to enable fieldwork, network



building, management, and dissemination activities for major GCRF and UK Space Agency projects in Mongolia, Kenya and Kyrgyzstan.

Since REF2014, there have been seven internal promotions: one to Associate Professor (**Brown**) and six to Professor (**Brown, Comber, Kraftl, Madge, Phillips** and **Upton**). These reflect the significant research achievements and contribution of geographers at Leicester and are testament to the School's leadership development strategy, which is supported by University-level initiatives such as the Future Leaders Programme (FLP). The FLP was successful in developing the leadership skills of **Brown**. Under his direction, CCG developed a more coherent and ambitious research strategy and raised its profile across campus and externally. Weekly meetings of the research group have helped bond it as a collective and, by delegating specific leadership tasks to early- and mid-career researchers, which ensures that the group's work and vision is sustainable.

Early career researchers (ECRs)

ECRs have a mentor with whom they meet regularly to discuss research plans, teaching, and career development, augmented by a formal annual review process to ensure equity and transparency. ECRs receive help with grant and output writing through their mentor, informal networks within the CCG group, and the University's Research and Enterprise Division (RED). ECRs also benefit from reduced teaching loads in the first three years of their employment. Training opportunities are afforded through a comprehensive university—wide programme encompassing aspects of research design, methods and analysis, as well as training delivered by the Doctoral College (IES, 3.2). ECRs are encouraged to apply for study leave. **Matulis**'s sabbatical supported him to develop novel film outputs with Filipina co-researchers, and complete his first monograph. The School has a Research Staff Advisory Group to support the professional development of postdoctoral staff, who are represented on the School's Research Committee.

RESEARCH STUDENTS

Over the REF2021 period, our doctoral completion per FTE has doubled from 0.8 to 1.65. Human geography at Leicester benefits from two UKRI DTPs: the ESRC Midlands Graduate School and the AHRC Midlands4Cities. Since joining the ESRC DTP in 2016, we have secured more than half the ESRC-funded studentships for human geography across the Midlands Graduate School DTP. These funding streams have led to a growth in UKRI-funded PGRs during this REF period. We have hosted visiting international PGRs from Argentina, China and Europe.

Supervision and monitoring

Students are allocated two supervisors and many have external supervisors through their funding or project partnerships. Students meet with their supervisors at least once a month, and these meetings are recorded to monitor engagement and record actions. Progress is assessed at three and nine months, and then annually until the viva, by the PGR Tutor and a panel independent of the supervisory team.

In the 2019 PRES survey 81% of our PGRs' agreed with the statement 'my confidence to be creative or innovative has developed during my programme' and 90% agreed that their 'skills in critically analysing and evaluating findings and results have developed during my programme' (both higher than the sector average). The 2019 PRES survey shows 92.3% of our PGRs were highly satisfied with the quality of supervision they received, with particularly



positive feedback from female students (95.9%). **Lees** actively mentors first generation PGRs from working class backgrounds.

Training and development

PGRs complete a training needs analysis (TNA) and are supported by an extensive training programme informed by the Researcher Development Framework, facilitated by the Doctoral College. We organise discipline-specific advanced training on research methodologies, techniques, and academic writing. All PGR students attend our weekly research group meetings, and vibrant seminar programme. PGRs are actively engaged in demonstrating in the classroom and field courses; they are given preparatory training for teaching in Higher Education and accredited First Aid training. PGRs serve on several RGS-IBG research group committees.

There is a monthly PGR Student Forum, chaired by the PGR Tutor, where 'Training' is a standing agenda item. Students raise issues in this meeting and PGR Tutors are responsible for identifying any training gaps in the School or wider University.

PGR Achievements

Several of our PhD students have been externally recognised for their research. Van Allen received the Emerging Scholar Award at the 2019 Inclusive Museum Conference. Steele was awarded an OBE (2016) for her long-standing commitment to enabling community-led regeneration. She was also a highly commended runner-up for the 2019 William Sutton Prize for Social Innovation. Two PGRs secured ESRC overseas institutional visits in 2020/21, and another obtained a UKRI Policy Internship with the NI Assembly. We support PhD students to publish high-quality outputs. During the current REF period, students have published in journals including *Annals of the AAG*, *Journal of Historical Geography*, and *Social & Cultural Geographies*. Our PGR community also make important contributions to public engagement. For example, Thornton curated an exhibition on conservation in tropical peatlands at Newark House Museum, Leicester.

PhD graduates during this REF have gone on to secure Leverhulme Early Career Fellowships (Emery), ESRC Postdocs (Thornton), and other postdoctoral positions (Hewitson, Isyaku, Smith), as well as academic posts in the UK (Barker, Sykes) and internationally (Janchivlamdan).

Equality, diversity, and inclusion (EDI)

CCG has a strong commitment to EDI, and leads many aspects of the wider School and University's EDI work. **Matulis** serves as dedicated EDI Champion for the School and proactively ensures that all aspects of the group's operations, including professional development strategies, are informed by EDI best practice. Equality impacts are a standing item for all School committees and actions are monitored by the EDI Champions. These include implementing policies that have benefitted staff, for example, returning to full-time work following a period working part-time while children were young, as well as temporary flexible working arrangements to manage care responsibilities and a phased return to work after extended sick leave.

All staff returned in this UoA are white, but 6 (41%) are international migrants. Members of the School (Byron and **Last**) play a leading role in the Royal Geographical Society's Race, Culture and Equality Working Group. We have also increased the diversity of our PGR cohort, with 36% of awards in this REF cycle being made to BAME students. PRES surveys over the



REF period shows that 91% of BAME students agreed that 'overall, I am satisfied with the experience of my research degree programme'. This provides clear evidence of the success of our EDI strategy in providing an intellectually stimulating, inclusive, and supportive environment for minoritised students.

Only 4 (28%) of the Category A staff returned in this UoA are women; however, 42% of REF outputs and both ICSs are from women and 75% of female staff returned in this UoA are at Associate Professor level or above. **Upton** and **Madge** were both promoted to Professor during this REF cycle. Our School is preparing an Athena SWAN Bronze application for 2021. By recognising and rewarding the leadership and professional standing of female colleagues, we hope to attract more female ECRs in future. We are encouraged by the near equal split of doctoral awards (54%M:46%F) – which we hope indicates a snapshot of the unit in the future.

Four staff in this UoA (28%) identify within the LGBTQ spectrum. There is also a much larger group of LGBTQ-identified staff and PGRs within the School who meet informally under **Brown**'s mentorship, with a view to enhancing the School's reputation as a centre for geographies of sexualities research and a supportive environment for LGBTQ people. The existence of this support network has contributed to recruiting new PhD students and postdocs.

We are submitting all eligible staff in our REF return. UoL's REF Code of Practice specifies how our REF return has been compiled with due regard to EDI. In advance of this, we ensured a diverse mix of staff were involved in output quality review. We have a supportive process in place for declaring staff individual circumstances in relation to our REF submission, guided by our EDI Champion (**Matulis**) and University's EDI team. We have robust support structures in place so that even staff facing substantial challenges have been able to produce outputs for REF.

3. Income, infrastructure and facilities

INCOME

The formation of CCG, and the new School, have helped the group to increase their *per capita* research income per year over the REF period (from £27,318 to £28,805 Income/FTE/yr). In REF2014, 24.39 FTE staff were returned in the UoA17 Geography submission, including physical geographers (now returned in UoA7).

Strategy for generating research income: We use internal seedcorn funding schemes (primarily via LIAS, CAMEo [IES 2.2], and the WISSF to develop new research collaborations and grow projects. We also capitalise on support provided by RED, with several staff actively participating in local 'funder groups' including the GCRF (**Upton**), ESRC (**Lees**), and AHRC (**Matulis**). By cascading the insights from these funder groups, we have improved the quality of our funding applications through focused internal peer review. A key part of our strategy has been to diversify our funding streams – in addition to the AHRC and ESRC, we have secured funding from BBSRC, EPSRC, MRC, UKSA, GCRF and NERC. Overall, this strategy has enabled us to improve the success of our external funding applications and to collaborate on the submission of larger, higher value applications.

Key research funding awards



<u>UKRI</u>: We have attracted £1.57M in funding from UKRI (principally AHRC, ESRC and NERC). In 2019, a team from the School (Balzter, **Phillips** and Whelan) secured funding to host the Programme Coordination Team (PCT) for the UKRI Strategic Programme Landscape Decisions, which is developing national interdisciplinary capability and engagement with Defra and other stakeholders.

Key UKRI awards include **Lees**'s (ESRC, 2016) grant on 'Gentrification, displacement, and the impacts of council estate renewal in C21st London' (£370k), which facilitated significant research on the scale and social impact of the displacement of tenants (and leaseholders) from London council housing estates. This research has expanded the field of gentrification studies, to consider how the state has pursued the gentrification of public housing. Through her antigentrification toolkit and https://estatewatch.london/, this work has had significant impact by providing evidence for council tenants to challenge plans for the 'regeneration' of their estates.

Phillips has secured two significant ESRC awards, the 'ORA Gentrification Project' (£141k) and 'Explorations of comparative ruralism in the UK and Japan' (£50k), which have enabled international comparative research on rural gentrification in the UK, USA, France and Japan. **Phillips** has also contributed to five small projects from the AHRC Connected Communities programme (total value to Leicester £36k), which have utilised creative, participatory research methodologies to explore community heritage and asset mapping in rural communities. This has enabled members of those communities to reevaluate their relationships to place, and rethink the futures they envisage for rural life. Consequently, this work has made intellectual contributions at the intersections of rural geography, critical environmentalism (**Phillips** Output 2) and creative methodologies.

<u>UK Central and Local Government</u>: This includes considerable success across the GCRF arena (**Coles, Gulliver, Madge, Matulis, Upton**) and several grants from the UK Space Agency (**Upton**; ICS2), totaling £387k. These grants have strengthened existing collaborations in Mongolia and Kenya (**Upton**), as well as advancing new collaborations and impact in Brazil (**Coles**), Kyrgyzstan (**Upton**), the Philippines (**Matulis**), and South Africa (**Madge**). Our GCRF work spans the range of human geography, from **Matulis**'s work in the geohumanities, exploring uses of creative 'nature writing' with marginalised Filipina women, through to **Upton**'s collaborations with EO scientists and industry to increase the resilience of nomadic herders in Central Asia and East Africa.

<u>UK charities</u>: **Bennett/De Sabbata** and **Brown** have received funding from the Leverhulme Trust, totaling £144k. **Brown's** research on the historical geography of young Londoner's antiapartheid activism in the 1980s has resulted in a monograph (Output 1), several papers (Output 2) and significant public engagement work in Britain and South Africa (outlined in Section 4). **Bennett** and **De Sabbata's** project uses novel digital techniques to explore young people's everyday negotiations of multicultures in Leicester – exemplifying how cutting-edge GIS and digital geographies are integrated into our critical and creative approach.

<u>EU funding bodies</u>: We have secured funding from H2020, the European Space Agency, and the MSCA programme, totaling £789k. **Gulliver** is work package leader on the 'environmental exposome' for the H2020 Equal-Life project (£515k), a toolbox for assessing the impact of environment on mental health and cognition of children and adolescents. We have had significant success recruiting high-quality ECR researchers through the MSCA Fellowship scheme. **Lees** has hosted four MSCA Fellows (including **Busa** and **Portelli**), which has enabled her to lead comparative research on gentrification and the financialisation of housing in



Italy, Spain, Greece, Portugal, Turkey, Morocco and the US. **Brown** secured a MSCA Fellowship for **Di Feliciantonio** to research the experiences of migration within Europe of HIV+ gay men who relocate their lives after receiving an HIV diagnosis.

INFRASTRUCTURE AND FACILITIES

All staff in this unit are housed in a dedicated building on the main University campus which integrates offices, laboratories, and teaching spaces for the whole School. Our research is underpinned and enabled by world-class infrastructure and resources including high performance computing platforms and software for applications in geographical information science and remote sensing.

Investment

£6k was invested by our School in creating a new seminar space where staff and PGRs meet to collaborate. £5k was invested in updating our VR Theatre, directly contributing to research projects by **Bennett, De Sabbata** and **Matulis**. A multimedia exhibition space was created within the School in 2019 (£500k) to facilitate creative research methodologies and showcase creative research outputs.

The University has invested £5M in staff and computing facilities to establish the Centre for Environmental Health and Sustainability (CEHS), for which **Gulliver** is Deputy Director. This strategic investment has enabled us to focus our existing excellence in GIS research in relation to urgent issues of environmental health. CEHS provides seedcorn funding to initiate new research within its remit, including funding for a scoping study to develop a multivariate environmental index for health in urban areas (**Tate**).

Operational and scholarly infrastructure

Our research is underpinned by the contribution of professional and technical staff, including a dedicated cartography unit staffed by two design technicians. Their expertise extends beyond conventional cartography to providing specialist design work that supports the group's use of creative research methods and dissemination. The School also has two IT technicians who support specialised hardware and software needs including GIS applications and computer-supported laboratory and field instrumentation.

We have utilised the University's impact development funds to ensure the social impact of our research is maximised. This has enabled **Lees, Matulis**, and **Upton** (total £52k) to develop, extend, and document the impact of their research in the UK, the Philippines, Kenya, and Mongolia [see ICS 1 & 2]. Similarly, **Phillips** and **Lees** have made use of the University's £1M ESRC Impact Accelerator Award to enhance the impact of their research (inter)nationally. In particular, **Lees** received an IAA rapid response grant (£7k) to develop her toolkit for housing activists, developed in London, for use in Southern Europe.

Human geographers in this UoA have been proactive in engaging with the Leicester Institute for Advanced Studies (LIAS) to foster innovative interdisciplinary research addressing global challenges. **Brown** and **Upton** have hosted LIAS Visiting Fellows: **Upton** hosted Batbuyan Batjav from the Centre for Nomadic Pastoralism Studies, Mongolia, helping to extend her long-standing collaborations in Central Asia. **Brown** hosted Dhiren Borisa, an early-career geographer of sexualities from India, which has generated new collaborations. **Brown** and **Di Feliciantonio** formed a LIAS-funded team (with clinical academics) developing interdisciplinary interventions around health screening for infectious diseases, including HIV,



amongst recently arrived migrants in the UK. This work has also received pump-priming from Leicester's WTISSF (£3k). This interdisciplinary collaboration has already been scaled up, with **Brown** co-leading the formation of a new LIAS research network on 'Migration, Mobilities and Citizenship'. **Brown** is a member of the network's core leadership group (as is Byron, a teaching-focused academic, importantly this initiative is enabling her to restart her research career) and its advisory board is chaired by the Leicester's Director of Public Health. This network has enabled UoL to lead high profile national research programmes on migration and COVID-19.

We have access to Leicester's award-winning library (IES, 4.1), which has benefited from £28M investment since 2014 to improve access to special collections, databases, and e-journals. **Brown** is collaborating with the Library archives team on an impact project to digitise papers relating to anti-apartheid exiles in Britain which will be open access.

Future strategies for generating research income and investment

We will continue to use seedcorn-funding opportunities to establish new collaborations, grow research initiatives, and expand the impact of our research. CCG will continue to lead disciplinary-specific and interdisciplinary initiatives capable of attracting large grants within an increasingly 'post-disciplinary' funding environment. We will actively recruit new postdoctoral fellows to expand our capacity and reputation in core research areas. Over the next REF cycle, many recent investments will come to fruition. In particular, we expect our leadership of the Leicester Migration, Mobility and Citizenship research network, and our proactive leadership of COVID-related interdisciplinary research, to attract significant funding. **Phillips** leadership of the Landscape Decisions programme will provide new opportunities for large-scale research projects, as will **Gulliver**'s leadership of CEHS. Finally, UoL's international profile in EO, and the £100M+ investment in Space Park Leicester (IES 2.2, 4.2), which drove **Upton**'s successful collaboration through the SIBELIUs project, will create new strategic opportunities for innovative collaborations between critical human geographers and EO scientists, not just around environmental issues, but also humanitarian and geopolitical concerns.

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

Collaboration with and contribution to the research base

Through our leading role in local, national, and international research collaborations, we are developing critical, impactful research outputs across a range of contemporary challenges such as gentrification and housing justice (Lees, Wilde), environmental justice (Coles, Upton, Matulis), sexual politics and health (Brown, Di Feliciantonio), and migration (Bennett, Brown) and involving both senior and ECRs. These networks secured ~£2.9M in the current REF period and encompass international academic, NGO, and policy partners in the US, Italy, the Netherlands, and Turkey (Lees); Peru (Wilde); Brazil (Coles); Mongolia, Kyrgyzstan, Kenya, Indonesia (Upton), Belgium, India, Ireland (Brown), as well as colleagues in UK universities. Examples which exemplify the quality and significance of these academic collaborations, include:

Coles [Output 1] collaborated with colleagues at Universidade Estadual Paulista (UNESP) in Brazil on a major Newton ESRC grant '(Re)Connecting the Nexus'. This collaboration developed new ways of conceptualising ecological/resource interdependencies through critical



challenges to 'nexus thinking'. **Coles** and colleagues then deployed these new conceptual tools to reimagine and decolonise contemporary approaches to the food/water/energy nexus.

Brown [Output 3] initiated a European-wide network of sexualities researchers through the biennial European Geographies of Sexualities Conference in 2011. Since 2014, that network has matured and enabled more stable collaborations, including recruiting **Di Feliciantonio** as a MSCA Postdoctoral Fellow and Dr Dhiren Borisa securing a four-month LIAS Visiting Fellowship at Leicester in 2019. Borisa subsequently obtained his first permanent academic post at the OP Jindal Global Law School, enabling new collaborations, and helping to raise the profile and legitimacy of geographies of sexualities research in India.

In 2015, CCG were invited to participate in a five-year research network on 'Solidarity in Diversity', funded by the Flemish FWO, focused on how social and political solidarity can be fostered across intersectional social difference. This has integrated us into an interdisciplinary network of researchers across Europe. This has resulted in a successful application for a MSCA Innovative Training Network (led by Oosterlynk, Antwerp).

Collaboration and contribution, beyond the academy

CCG has a strong commitment to public engagement and ensuring that our research expertise is used for social, cultural, economic and policy impacts, locally (where we are deeply embedded in community and policy networks within the city), nationally, and internationally. Many of our collaborations utilise our research to assist communities to critique policies that risk disadvantaging them. CCG members work with communities in participatory, collaborative ways to identify problems which need researching, working with them throughout the research cycle. Since 2014, collaborations beyond the academy include: commercial EO companies and partner NGOs in the UK and government bodies in Mongolia, Kyrgyzstan, and Kenya (Upton); social housing tenants/renters in London and southern Europe, the GLA, DCLG (Lees, Wilde); and LGBTQ community development and sexual health projects in India, Italy, and the UK (Brown, Di Feliciantonio). The significance and impact of these activities is exemplified through the following:

Lees' leading research on gentrification-induced displacement in London has been drawn on by community groups and social movements in the UK, Sweden, and Southern Europe; by non-profits in the US (the Annie E. Casey Foundation); and political organisations (Green Party, Labour Party), to advance demands for better protection of public housing tenants from dispossession. As a result of this work in 2020 Lees was appointed Chair of the London Housing Panel (funded by the GLA and Trust for London), and to present at a Knowledge Sharing Session on 'Integrated Planning and Housing to Create Future Cities for All', UN-Habitat Global Future Cities Programme. Wilde has provided policy advice and briefings for Action4Renters, the London Renters Union, StART, and the New Policy Institute.

The Mikiko Pamoja Project, a Kenyan NGO that **Upton** has advised, was awarded a UNDP Equator Prize in 2017 for their work on the sustainable conservation of mangroves. **Upton's** SIBELIUs project is working directly with government bodies in both Mongolia and Kyrgyzstan to improve the nature and relevance of satellite—derived information delivered to vulnerable herding communities and local government bodies. This supports changes in herders' land use, decision making and resilience, as well as governance and practice in key statutory bodies. **Upton** has also collaborated with leading Maasai and Mongolian NGOs to examine the ethics and practice of UK-funded research partnerships with indigenous peoples. This resulted in a co-developed 'best practice' case study for UKRI (Maasai partner) and an invited



presentation to the International Development Committee at the UK Houses of Parliament (Mongolian partner). Visual 'photovoice' outputs from the GCRF Resilient Pastoralism project were co-developed with local herders and used in policy debates.

In addition to co-leading the CEHS, **Gulliver** is Deputy Director of a new Health Protection Research Unit (HRPU) funded by the National Institute for Health Research and is leading the development of the first national toolkit for environmental noise burden of disease assessments, a commercial tender via Public Health England. He is also a member of the British Standards Committee developing a new UK method for the calculation of road traffic noise.

Brown's research on the historical geographies of British anti-apartheid activism [Outputs 1 and 2] led to extensive public engagement work. **Brown** has been an academic advisor on three Heritage Lottery Fund projects working with community groups to preserve the heritage of British protest movements, including one that led to a co-authored popular book, Singing for our Lives (2018). Work from Brown's anti-apartheid research [Outputs 1, 2] has been included in exhibitions in Australia, Britain and South Africa, including the highly successful Disobedient Objects exhibition at the V&A (over 416,000 visitors) and the Nelson Mandela Centenary exhibition at the Southbank Centre (over 25,000 visitors). Through his initial research, Brown gained access to a significant privately held archive of the correspondence and documentation of the City of London Anti-Apartheid Group. He was able to negotiate the deposit of this collection in the archives at the Bishopsgate Institute in London, where it is now available as a resource for other researchers. Significantly, representatives of the Pan-Africanist Congress (PAC, from South Africa) began exploring this archive, with **Brown's** support, in 2020, as part of an effort to reconstruct an archive of South African pan-Africanists in exile during the apartheid era. With support from the ESRC IAA (£4k), this material will be digitised and made open access.

Leadership, recognition, and esteem

Geography at Leicester has a long-standing commitment to making an active contribution to the academy (inter)nationally. Consistent with these commitments, staff hold leadership positions within the discipline and beyond. Below we offer selected examples of our staff's leadership, recognition and esteem.

Journal Editorship.

Several members of staff have served as editors of leading Geography and interdisciplinary academic journals: *Geography Compass* (**Bennett, Tate**); *Geoforum* (**Lees**); *Social & Cultural Geography* (**Brown**); *ACME* (**Di Feliciantonio**). Staff at every career stage also serve on the international editorial boards of a further 15 human geography and GIScience journals, e.g. **Lees** on *Transactions of the Institute of British Geographers*, and interdisciplinary journals such as *Art in the Public Sphere*. **Brown** and **Di Feliciantonio** serve on the editorial board of *Gender, Place and* Culture, demonstrating the exceptional international reputation of Leicester for geographies of sexualities. We estimate that the 14.5 staff returned in this UoA review in excess of 200 papers per year for academic publications across Geography, Anthropology, Computer Science, Media Studies, Sociology, and Urban Studies.

Prizes and Awards.

Since 2014, several early- and mid-career researchers have been recognised for the high quality of their research: **Bennett** was awarded the 2020 Sage Prize of Innovation and Excellence for her research on living multicultures; **De Sabbata** was awarded the Highly



Commended Paper Award (2016) from the *Journal of Documentation* for their work on geographical dimensions of relevance; **Di Feliciantonio** was awarded the (2018) Gabriele Zanetto Prize for best early career geographer by the Association of Italian Geographers and the (2016) Best PhD Thesis award by the Global Network on Financial Geography (FINGEO).

Fellowships

Last was awarded a World Social Science Fellowship in 2014, by the International Social Science Council, for Global Social Governance. **Phillips** and **Lees** are Fellows of the Royal Society of the Arts and **Lees** is a Fellow of the Academy of Social Sciences.

Invited Keynotes and Seminars

Lees has given over 40 (inter)national keynotes and plenaries since 2014. Bennett gave an invited keynote lecture on living multicultures at KU Leuven in Flanders. Brown and Di Feliciantonio have both given keynote lectures at the European Geographies of Sexualities conferences. Di Feliciantonio has been invited to speak at the Italian Conference on AIDS and Antiviral Research. Coles was invited to give a keynote at the Goldlab Symposium in the USA (2017). De Sabbata has given keynotes on volunteered geographic information and internet geographies to the AGILE conference and the Internet Governance Forum. Phillips has given invited keynotes on rural geography and gentrification at conferences organised by the Association of Japanese Geographers, the Geographical Society of Finland, and the Congress of Canadian Federation of Humanities and Social Sciences.

Members of the UoA have, between them, given over 50 invited research seminars in the UK and internationally at universities in France, Germany, Greece, Ireland, Italy, Morocco, the Netherlands, Sweden and the USA.

Conference organisation

Members of the UoA play an active role in conference organisation. Key examples include: hosting the GlScience Research UK conference, 2018 (**De Sabbata**; **Tate**). **Last** co-organised Decolonising the Anthropocene, 2015. **Brown** and **Di Feliciantonio** have been members of the scientific committee of the European Geographies of Sexualities Conferences (in 2015, 2017, 2019), with **Di Feliciantonio** playing a central organising role in 2015. **Portelli** organised an international conference on Urban Activisms, as part of his MSCA Global Fellowship, at Harvard in 2019.

Committee Membership

Members of the UoA provide research leadership through RGS-IBG research groups and their membership of other committees/boards. For example, **De Sabbata** was appointed as Secretary of the RGS-IBG GIScience Research Group; **Phillips** is a member of the RGS-IBG Rural Geography Research Group committee; and **Tate** is on the National Steering Committee of GIS Research UK. **Tate** is also on the National Steering Committee of GEOSTATS UK. **Brown** is the Human Geography judge for the RGS-IBG Steer's Dissertation Prize (2020/21).

The research expertise and leadership of many members of staff is recognised through their membership of national and international peer review panels, including: AHRC and ESRC (**Brown, Coles, Lees**); UKRI Future Leaders Programme (**Brown; Lees**); ERC Advanced Grants (**Lees**); Irish Research Council (**Brown; Coles; Lees**); National Science Foundation, USA (**Brown; Lees**); and SSHRC (**Brown; Lees**).



Our research fuses critical social science, which challenges established paradigms, with innovative creative, digital, and quantitative methodologies. We are committed to using our research to support progressive social change through formal policy channels, community empowerment, and activist-scholarship, locally and (inter)nationally. We offer agenda-setting, creative solutions around housing, environmental issues, health, sexual politics, and migration. We exemplify the University of Leicester's mission to be 'Citizens of Change'.