

Institution: University of Sheffield
Unit of Assessment: C-17 Business and Management Studies
1. Unit context and structure, research and impact strategy

1.1 Context

This Unit comprises Sheffield University Management School (SUMS), which is among the global elite of triple crown (EQUIS, AACSB and AMBA) accredited management schools, and the Department of Economics (ECN). Located within the Faculty of Social Sciences (Faculty) at the University of Sheffield (University), we have a shared focus on achieving positive societal impacts through ambitious and pluralistic intellectual enquiry, knowledge exchanges and collaborations with policymakers and other stakeholders that advance socially responsible policies and practices. We achieve substantial impact at national, supranational, and international levels. Our staff serve on key national policy bodies, including the Low Pay Commission (LPC), National Institute for Health and Care Excellence (NICE) Public Health Advisory Committee and the Department for Education (DfE) Academic Skills Panel, and influence the activities of bodies such as the European Commission and International Labour Organisation (ILO).

1.2 Strategy

We have fully achieved the strategic objectives set out in our REF2014 submissions, which were to:

- a) Increase grant capture by 100%. **Outcome:** The target increase has been exceeded, with the total value of research funding increasing by 385% from £2.7m in REF2014 to £13.3m in this assessment period.
- b) Be world-leading in the reach and significance of our research impacts. **Outcome:** We have broadened and deepened our stakeholder relationships and our impact on policy and practice, as evidenced e.g. by Williams' key role in the creation and implementation of European Union policy on undeclared work and our increased contribution to the work of national policy bodies, such as Brown's role as a Low Pay Commissioner.
- c) Sustain and grow timely PhD completions. **Outcome:** 140.5 doctoral degrees were awarded in the current assessment period compared with 77 in the REF2014 period, representing an **82% increase**.

During the assessment period, we also developed and pursued two additional strategic priorities:

1. We have made a substantial investment in new staff appointments at all levels (Section 2) and strengthened research capacity in the areas of **health and wellbeing, productivity and innovation, sustainability and work and employment**. We have developed these as cross-cutting themes that have informed our research funding application strategy of focusing on larger grants with high potential for impact and for positioning the Unit as a thought leader in key academic and policy debates (Section 3). We have had significant successes, including leading:

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- The Productivity Insights Network (PIN), a £1.4m flagship ESRC Network+ that involves 9 universities.
 - The £1.4m ESRC-funded Next Generation Services Project, focused on the use of Artificial Intelligence (AI) in the accountancy and legal sectors.
 - A €4m Marie Skłodowska-Curie Innovative Training Network (ITN-ETN), focused on the transition to the circular economy.
 - A €432k Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE) project, focused on promoting the circular economy in the food supply chain and involving 10 collaborators.
 - A £978k Science and Technology Facilities Council (STFC) Food Network+ project, bringing together researchers and industrial partners in the agri-food sector.
2. Our second additional strategic objective has been to build relationships with leading academic institutions outside of the UK to create a basis for research collaboration (Section 4). **709 journal articles** have been written with researchers at **471 academic and non-academic institutions based overseas**. Staff have co-authored articles with colleagues at some of the world's top non-UK universities and Business/Management schools, including Australian National University, Copenhagen Business School, Dartmouth College, Harvard, MIT, Peking, and Pennsylvania State.

1.3 Impact and engagement strategy

To maximise the reach and significance of our research impacts, we have: (a) engaged with a growing range of organisations (public, private, third sector); and (b) pursued impact at different scales, prioritising the supra/international and national levels, whilst not ignoring the local. We have also extended and deepened our engagement with organisations with which we have existing links. To that end, we have provided travel and financial support for joint initiatives, such as knowledge-exchange workshops. Our submitted impact case studies all reflect our shared focus on achieving positive societal impacts through world-class research. Four focus on the promotion of **socially responsible work practices** (*SCA-Emp*, *Informal economy*, *Undeclared EU*, *Undeclared Greece*), three on **environmental sustainability** and ethical and **sustainable business practices** (*CLEAR IDEAS*, *Reverse Logistics*, *AREC Model*) and two develop practical tools to enable **health care** policymakers around the world to extract better value for money from limited health care resources (*SF-6D* and *NICE Appraisals*). These case studies demonstrate the range of our impacts on government policy and the private and public sectors, both nationally and internationally (e.g. Brazil, China, European Union, South Africa).

1.4 Developing an open research environment

Reflecting our ambition to promote positive societal transformation, we are committed to the principles of **open research and scholarship**. To ensure maximum discoverability of our research, we aim to deposit all outputs in White Rose Research Online, our shared repository with Leeds and York (green route). The 1,653 outputs deposited over this assessment period were downloaded over 281,000 times. This is our preferred route, ensuring equity in publishing opportunities regardless of available funding; we also publish outputs in fully OA journals, and are supported by a faculty fund to do so, or hybrid where required for funder compliance.

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We also make valuable research resources freely available. Roberts' SF-6D health valuation algorithm (the basis of her ICS) is available free to public sector and charitable organisations; the output has been cited more than 1800 times and over 1300 free licences have been distributed in this assessment period. Hole and Pudney both share their advanced statistical modules for Stata, allowing researchers to freely use these for their own work; Hole's seven Stata modules have been downloaded more than 100,000 times. Bryan's toolkit to help organisations evaluate the cost effectiveness of wellbeing interventions is available to freely download from the What Works Centre for Wellbeing website. Heyes' labour inspection toolkit, developed in collaboration with the International Labour Organisation (ILO), is free to download from the ILO's website. In ECN all working papers are freely downloadable from the Sheffield Economics Research Papers series, and available via Research Papers in Economics, the world's largest database of economics research. Across the Unit, most seminars, workshops, and events are open to the public.

1.5 Research ethics and integrity

We place great importance on robust procedures for ensuring the ethical conduct of research, its appropriate governance, and raising awareness of obligations under relevant legal and professional frameworks. Reporting to the Research and Impact Committee, dedicated ethics officers (Orsini and Patterson) ensure that research integrity and ethics are embedded within our research environment and that colleagues are aware of ethical requirements. At induction, all new staff are informed of the Unit and Faculty requirements relating to research ethics and integrity and all staff are required to undertake appropriate ethics training. Within the mentoring system, staff are encouraged to discuss ethics considerations related to their research. All staff and postgraduate research students (PGRs) complete the University's online information security training (covering the protection of information, personal data, and research data) and must renew this training annually. All PGR students take a compulsory module on research ethics and integrity and are required to prepare a data management plan for review as part of the Faculty's Doctoral Development Programme. In addition, workshops and seminars take place throughout the year to ensure that research integrity and ethical conduct are further embedded in the research ethos of the Unit. All grant applications are internally reviewed by a minimum of two colleagues to ensure quality and integrity before being submitted to an additional stage of internal review at the University, or the external funding body, once feedback has been satisfactorily addressed. Members of the Unit play a key role in upholding the research integrity of the University's research process. Bhaumik is a member of the University's Research and Innovation Committee, which oversees research integrity. Brown chairs the University's ESRC internal peer review panel; and McGuinness and Taylor are members of this panel.

1.6 Future research strategy

Building on our successes to date, we have ambitious objectives for the next REF period:

1. We will further develop our research strengths and critical mass in the key areas of circular economy, critical accounting, employment relations, macroeconomics, finance, and work psychology through new appointments in these areas linked to our research centres and clusters.
2. We will develop platforms of themed activity aimed at improving our ability to respond to the increasingly thematically focused and interdisciplinary research funding landscape, as well as our ability to engage with colleagues in other parts of the University and researchers and

stakeholders outside the University. The platforms, which will build on our existing and emerging areas of research strength, will link researchers in different centres and clusters and develop synergies that will further strengthen our research and impact. Recent major awards starting after July 2020 show that we are already having substantial success. Examples include: McCann is PI on a £26.6m ESRC-funded Productivity Institute, which will advance knowledge on productivity and inform policymakers; Leaver is leading a £458k ESRC-funded project on sustainable local regeneration; Genovese is Co-I on a €3.6m Horizon 2020-funded project on the circular economy; Burchell is Co-I on a £1.2m project to create stronger evidence-based practice in adult social care, funded by the National Institute for Health Research (NIHR).

3. We will increase the number, quality, and overall value of our funding applications. In particular, we will prioritise submission of ESRC responsive mode applications that relate to our areas of research strength.
4. We will build upon our developing international research relationships, focusing on those with Berkeley, Copenhagen, Harvard, and Kobe, by involving more staff in collaborations focused on co-authored outputs and research funding applications. Recognising the important contribution to the vibrancy of the Unit, we will encourage and support staff exchanges and visiting academic appointments and also explore potential for joint PGR programmes.
5. As a civic university committed to benefiting our local community, we will build on our engagement with local stakeholders, such as Sheffield City Region and Disability Sheffield. We will also build on our impact successes by providing support for new and ongoing research with substantial impact potential, by deepening our engagement with our key partners (particularly UK policymakers and ILO), and by developing new relationships with employers, trade unions, NGOs, and policymakers to increase the impact of our research at local, national, and inter/supranational levels. Early successes in this regard include: in 2021, Vanino will undertake a funded 6-month secondment with the Department of Business, Energy and Industrial Strategy (BEIS) to collaborate with the Industrial Strategy Council on building evidence on successful local growth policy; Dickerson has been appointed to the Department for Education (DfE) Skills & Productivity Board, which will provide expert advice on skills mismatches; Williams has been re-appointed as lead expert to the European Platform Tackling Undeclared Work (2021-24).
6. We will further enhance the excellence of our PGR students' experience and equip them to be at the forefront of their discipline through cutting-edge training, increasing their involvement in appropriate centre and cluster activities, and securing an increased number of high-quality placements with our national and international, academic and non-academic partner organisations.

We have invested in research structures as the means for achieving our strategic objectives. Our research centres and newly emerging research clusters have been empowered to lead scholarship and shape research agendas, providing the intellectual arenas to nurture research ambitions and promote the collective interdisciplinary endeavours that are crucial for delivering our strategic priorities. The activities of the centres and clusters are diverse but coalesce around, and support, our key strategic themes of **health and wellbeing**, **productivity and innovation**, **sustainability** and **work and employment**. The centres are:

1. *Centre for Decent Work (CDW)* conducts impactful research on atypical work, employment relations, labour in the global economy, critical logistics and regulation and governance in the workplace and labour market.
2. *Centre for Regional Economic and Enterprise Development (CREED)* leads interdisciplinary initiatives responding to societal challenges and policy debates, including the regional dimensions of the productivity puzzle.
3. *Centre for Research into Accounting and Finance in Context (CRAFiC)* focuses on the construction of socially inclusive, environmentally sustainable, and financially resilient societies.
4. *Centre for Vocational Education Research (CVER)* is a multi-institution research centre funded by BEIS and DfE (with a total grant of £5m) which focuses on the nature, significance, and potential contribution of vocational education to individuals and the wider economy.
5. *Institute for Work Psychology (IWP)* is at the forefront of debates on occupational health, wellbeing, leadership, teamworking, creativity and innovation.
6. *Operations Management and Decision Science (OMDS)* focuses on logistics and the circular economy, resource efficiency and supply chain sustainability.

Our research clusters are newer developments that reflect emerging areas of expertise:

1. *Behavioural Research for Inclusivity, Sustainability and Technological Transformation (BRISTT)* is examining the impact of consumption, services and technology on societal wellbeing and the environment, exploring transformation in consumption across the themes of inclusivity and sustainability.
2. *Organisation Studies* contributes to debates in critical management studies in relation to inequality, power dynamics, the decolonisation agenda, and social care and health.
3. *Sheffield Household Finance Group* (which has evolved from the *Institute for Economic Analysis of Decision-Making (InstEAD)*, following a major investment from the University's Strategic Development Fund), conducts cutting-edge research on household debt and saving decisions and the intersections between the macro-economy and household finances, building on Brown's two-year Leverhulme Major Research Fellowship on household finance.

2. People

Our strategy in relation to people is based on recruitment of excellent staff and PGR students, high-quality support for development and reward for achievements, and robust processes to improve Equality Diversity and Inclusion (EDI) outcomes and enhance wellbeing.

2.1 Recruitment

Since REF2014, we have significantly strengthened our staff base, increasing the number of staff in teaching and research roles by 52% (from 92 to 144). The number of postdoctoral research associates has also increased (from 8 to 36), reflecting the growth in funded projects and

investment in capacity building which have been key to sustaining the vibrancy of the research environment.

As a research-intensive Russell Group university, our staffing strategy has focused on: (i) building on existing areas of strength and consolidating and widening thematic areas of expertise; (ii) investing in emerging areas of research strength, and (iii) building further capacity in interdisciplinary cross-cutting thematic areas. We have invested in research leadership through the appointment of leading senior scholars alongside lectureships for critical mass and future sustainability. The number of professors has doubled (from 23 to 45) and the number of lecturers has increased by 60% (from 43 to 69).

Our **health and wellbeing** theme has been strengthened through the appointment of an international scholar (Nielsen) to lead the flagship Institute of Work Psychology (IWP), a further professorial appointment (Hodgson) and lecturers (Brooks, Hildenbrand, Kelly, Na, Zheng) who are also contributing to research and impact relating to leadership, creativity, and innovation. Hodgson and Nielsen also contribute to our **work and employment** theme, which has been further strengthened through the fractional appointment of Wilkinson (thereby deepening our collaboration with Griffith University's Centre for Work, Organisation and Wellbeing), Elliott (bringing expertise in gender inequality) and readers and lecturers in employment relations (Adascalitei, Fox-Hodess, Xian, Yates), labour markets (Bryan, Nanos), health (Matheson, Orsini), and organisation studies (Allen, Fahey, Girei, Wright). Enhanced research capacity in **sustainability** has led to an excellent external funding record and interdisciplinary connections with the University's flagship Energy Institute and Grantham Centre. Professors have been recruited in the fields of technology, operations management (Linton, Toms) and food economics (Morgan), with further senior lecturer (Choudhary, Ruiz-Hernandez, Szejcowski) and lecturer (Ballantyne, Cantarelli, Marchand, Sgalambro) appointments. Professorial appointments related to **sustainability** have also been made in accounting (Belal, Leaver, Sikka) and finance (Atkins, Bhaumik, Mollah), alongside lectureships (Bruce, Chen, Jabbour, Ji, Katsiampa, Khalid). Investment in appointments in macroeconomics and time series econometrics at lectureship (Nadarajah, Perera, Van de Sijpe, Vella) and readership (Polito) level complements the appointments in finance.

Strategic investments in new areas have contributed to our success in research funding and impact. UKRI grant capture relating to **productivity and innovation** has been due to professorial appointments in economic geography (McCann), managerial economics (Glass, Webber) and entrepreneurship (Sena), alongside lectureships in entrepreneurship and economic geography (Brooks, Drencheva, Vanino). This is complemented by reader and senior lecturer appointments in the areas of industrial organisation and public economics (Rablen, Wenzel) and the appointment of Zimpel-Leal to a UKRI Innovation Fellowship.

Within marketing, the new research cluster *Behavioural Research for Inclusivity, Sustainability and Technological Transformation (BRISTT)* has been enabled through professorial (McLeay), senior lecturer (Kipnis, Osburg, Olya, Osburg, Wang, Yoganathan) and lecturer (Athwal, Cheng) appointments. McLeay also contributes to our **productivity and innovation** theme; Kipnis and Olya contribute to **sustainability**.

2.2 Development

Our strategy for staff development is based on seven key forms of support:

- protected time for research;

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- setting clear objectives and reviewing progress;
- training;
- mentoring;
- study leave;
- secondment opportunities;
- and support for knowledge exchange and impact.

The strategy is underpinned by the institutional-level Academic Career Pathway (ACP) framework, which provides a basis for driving research ambition through a coherent and transparent articulation of staff development and performance expectations across all career stages. The ACP framework underpins all staff development processes, irrespective of tenure or contractual status. For all Category A staff, excellence is expected across research, teaching, leadership, and professional standing/external engagement, with clear expectations for research activity for each career stage delineated against criteria of high-quality publications, grant income capture and PGR supervision. The ACP also explicitly recognises success in impact, which can be included in promotion cases.

To support the achievement of ambitions across these areas, all Category A staff receive, as a minimum, a workload allocation of 40% protected research and impact time. Impact leads in SUMS receive an additional workload allowance to enable them to progress their activities while ECN's workload allocation model provides staff with time to serve on policy advisory committees and for other external impact-related appointments. Staff on probationary contracts undertaking Higher Education Academy training receive a reduction in teaching and administration load (on a sliding scale of 30%, 20% and 10% over three years) to protect time for research and development. Probationary staff are assigned a senior academic probation advisor within their subject specialism, responsible for supporting probation objective setting aligned with the ACP, with monthly meetings to review progress and discuss training and development needs. During the assessment period, all staff members passed probation.

We have introduced annual 'research conversations', whereby colleagues meet with an appropriate senior staff member (e.g. Research Centre head) to develop research, publication and funding application plans for a period of up to 5 years, and to identify appropriate forms of support. This process sits alongside, and is complementary to, the University's Staff Review and Development System (SRDS). This involves a rolling annual process, with each staff member being assigned a reviewer (line manager/senior academic) with whom they agree objectives for the coming year. The process identifies challenges and the form of training and support required to enable objectives to be met. Progress is reviewed mid-year. Cases for exceptional contribution awards or accelerated increments, to recognise individuals who excel against ACP criteria, are made by Heads of Department. Promotion cases are brought to an annual internal departmental panel for consideration and where appropriate, progress to the Faculty and Institutional panels for review and confirmation. Some staff have progressed so well against the ACP criteria that they have been promoted more than once within the assessment period. Hole, for example, was promoted to Reader in 2015 and again from Reader to Professor in 2018.

Staff development is supported by extensive training and mentoring initiatives. During the assessment period, research centres/clusters have provided increased opportunities for mentoring and informal learning through writing retreats and reading groups, opportunities for critical discussion of early-stage research and internal feedback on papers prior to submission to journals. All staff members and PGR students can access advanced research methods training through the Sheffield Methods Institute (SMI). Dickerson is the director of the SMI. Staff development is also

supported by devolved budgets. All staff receive an initial annual research conference allowance, with additional funds available to support staff who have papers accepted at prestigious conferences. Within SUMS, a dedicated budget supports the development of strategic international collaborations. For example, Dr Ludek Rychly, a senior specialist from the ILO, is a visiting professor in the Centre for Decent Work and has collaborated on an edited book and facilitated impact activities related to the *Informal Economy* case study. CRAFiC has hosted a visiting professor from City University, resulting in two ESRC PIN awards.

Our study leave policy supports staff development at all career stages, enabling space to engage with ambitious research endeavours and collaborations (including internationally). All research-active staff are eligible to apply, with qualifying service being seven completed semesters for each requested period of study leave. Periods of leave (e.g. maternity, parental leave) qualify as part of the 'seven worked' to ensure no one is disadvantaged. A standard period of study leave is one semester, although staff who have had a significant leadership role can apply for two. Objectives for study leave are identified through 'research conversations' and the Staff Review and Development Scheme and are aligned with the ACP framework. Accountability for delivery of objectives is ensured via a post-leave report and departmental seminar. Over the period, 52 semesters of study leave involving staff at all career stages have resulted in publications in world-leading journals and successful funding applications related to our priority themes (e.g. a £615k ESRC-funded project on conflict and productivity led by Latreille; a £514k Health Foundation project involving Dawson and Finn).

Development opportunities are also afforded by our engagement and knowledge exchange activities. We have a strong culture of engagement and knowledge exchange, with staff working with a variety of public, private and third sector partners in the UK and overseas. Staff can apply for Higher Education Innovation Funding (HEIF) and Impact Accelerator (IAA) funding via the Faculty's Social Sciences Knowledge Exchange and Impact Opportunities Scheme. The Faculty has also funded Impact Associates to support the development of our impact. Our engagement with external bodies is further supported by the Advisory Boards of SUMS and ECN, which provide advice on areas of strategic importance. Staff are encouraged to pursue consulting opportunities related to their research (Section 4). They have worked with private sector organisations (including DLA Piper, DWF, Hovis, IBM, Jaguar Land Rover, Microsoft, Santander Siemens, and Whitbread/Costa), public sector bodies (e.g. the Arts Council, BEIS, Department of Health and Social Care [DHSC], Department for Work and Pensions [DWP], NHS England, Sport England and West Midlands police), trade unions (e.g. Trades Union Congress [TUC]), third sector organisations (e.g. Macmillan Cancer Support; Women to Work, Sheffield) and supra- and international organisations including the European Commission, European Trade Union Institute (ETUI), ILO and the Organisation for Economic Cooperation and Development (OECD).

Additional workload allowances and research associate support are given to staff who undertake significant impact and knowledge exchange activity. In some cases, engagement activities have led to high-profile external secondments. Notably, Williams has been seconded since 2016 as Lead Expert to the European Commission's Platform Tackling Undeclared Work. In 2019, we supported Grady, Senior Lecturer in Employment Relations, in a five-year secondment to UCU in her elected role as General Secretary.

We also encourage research-led placements for doctoral researchers and have secured several internships with the DWP and OECD, providing students with opportunities to understand the value of research in real world contexts. One DWP placement has led to employment at the DWP. PGR students have also benefited from placements with the Innovation Caucus, and the Alan Turing

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Institute. Some placements have been supported by EU Marie Skłodowska-Curie RISE awards. The 'Promoting Circular Economy in the Food Supply Chain' project, for example (Section 3), has involved a PGR secondment to Nefeloudis Food Additives company in Greece, aimed at helping the company to improve its environmental performance. The 'Policy and Decision-Making Approaches' project, has involved staff and PGR secondments to Softeco, Genoa, where they have worked on decision-making and software tools, and Stockholm's Stad, to share expertise regarding urban freight transport.

Staff at any career stage can access additional development support through the University's 'Think Ahead' programme, which provides mentoring and academic career development workshops and events, as well as a comprehensive suite of online materials. The University also offers development programmes for staff in (or seeking) leadership roles. During the assessment period, eight members of staff have benefited from these schemes.

2.3 Support for early career researchers

In addition to protected research workloads and one-to-one mentoring, we have a variety of mechanisms to enable ECRs to become independent researchers. These include: (i) an ECR network that organises skills workshops (e.g. on writing high-quality outputs, applying for funding) and provides on-going peer-to-peer support; (ii) workshops related to research funding; (iii) research centre workshops that enable ECRs to discuss their research; (iv) support in establishing external research networks; and (v) mentoring for research grant applications. The benefit of these mechanisms is evidenced by: (a) successful grant applications made by junior lecturers individually (Adascalitei, Drencheva, Monkhouse) or with more experienced colleagues (Gherhes, Shepherd, Yates); (b) publication of high-quality outputs involving junior lecturers and more senior colleagues (e.g. Nielsen and Shepherd, Brown and Gray); (c) junior lecturer involvement in conference and workshop organisation; and (d) the creation of effective networks. Notable examples of (c) and (d) include: Brooks, Hildenbrand and Topakas helped to organise Institute for Work Psychology conferences; Gray organised the InstEAD household finance workshops in 2018 and 2019, obtaining funding from the Royal Economic Society; and Vella organised the Sheffield Workshop on the Macroeconomics of Migration in 2018 and is now co-editing a volume on this topic with colleagues from the Markets, Organisations and Votes (MOVE) Institute at the *Universitat Autònoma de Barcelona*. She was also awarded a Marie Skłodowska-Curie Fellowship to study Fiscal Consolidation, Unemployment and Labour Mobility in the Euro Area at the MOVE Institute.

The effectiveness of these support structures is further demonstrated by the career progression of our postdoctoral researchers and research fellows to lectureships at Sheffield (e.g. Gray, Hastings, Van Landeghem) and at other institutions, for example University College London, and the Universities of Birmingham, Durham, Edinburgh and Leeds.

2.4 Support for postgraduate research students

Compared with REF2014, PGR **completions have increased by 82%** and annual completions have **doubled**. These improvements demonstrate the success of our PGR strategy, which has been based on: (a) recruiting high quality PGRs whose research interests align with existing and emerging areas of research; (b) investing in scholarships from a mix of funding sources (internal, research councils, sponsor-funded) to attract high-potential students and add to critical mass in priority areas; (c) a more rigorous confirmation review that has provided an effective springboard to completion; (d) preparing students for their future career by equipping them with a range of skills;

and (e) effective pastoral care. Co-publication with supervisors has been encouraged, resulting in **94 co-authored publications by our PhD students and their supervisors.**

2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	Total
10.5	12.5	26.5	19.8	20.7	25.5	25	140.5

Table 1: Completions

We recruit PGRs who have demonstrated excellence at undergraduate and taught postgraduate levels (the normal requirements for securing an interview are at least an upper-second class degree and a distinction at Masters level). During the assessment period we had 214 new PGR registrations. Reflecting our global reputation for research excellence, we have attracted international students diverse in age and experience, thereby enriching our research community. During the assessment period, 64% of students were from non-European countries and 8% identified as disabled. Almost half (48%) of our students were female and 51% of students were aged 30 years and over.

We have funded 116 PGR studentships to enhance critical mass in priority research areas and support emerging areas. Studentships have been awarded to support success in grant capture, offering PGRs opportunities to benefit from membership of a wider research project (e.g. Next Generation Services). SUMS studentships have also been awarded to support international partnerships with high profile international academic and non-academic partners (e.g. CREED is working with the OECD to support placements related to productivity and regional growth). We have secured studentships from UKRI (24 ESRC, 1 EPSRC), UK government departments such as BEIS and DfE, as well as the governments of Mexico, Thailand, and Zambia. Studentships have been awarded in collaboration with key partners and collaborators; for example, Burns and Girei were awarded an ESRC collaborative award to study partnerships among NGOs in the global south and north. We have also secured funding through the ESRC White Rose Doctoral Training Partnership (WRDTP), in collaboration with external partners including South Yorkshire Fire & Rescue Service and Sheffield University Teaching Hospitals. In addition, PGR studentships have been awarded in conjunction with the Grantham Centre for Sustainable Futures.

EU funds have been secured to support international PGR networks. Genovese leads the Marie Skłodowska-Curie European Training Network 'Realising the Transition to the Circular Economy', a €4 million research project funded by Horizon 2020, which supports 15 PGR students who work with experts and partners to examine how the transition towards a circular economy can be achieved. Toms is Co-I on another Marie Skłodowska-Curie ITN-ETN on 'Domain Specific Systems for Information Extraction and Retrieval', which involves a team of leading information retrieval experts from five EU countries, together with universities in the US, Japan, and Australia and 11 industrial partners. Two of the 15 PGRs are based in the Unit (we periodically host other PGRs within the network as well).

Measures have been introduced to ensure PGRs are fully embedded in the research environment of their respective department and research centre/cluster and to improve their experience and skills development, including regular skills development workshops, writing retreats, methods workshops and reading groups where PGRs discuss upcoming external research seminar papers. SUMS' PGR students undertake a Doctoral Training in Management Module, which runs throughout the first three years of the doctoral programme. ECN provides a specialised PGR module, which includes training in advanced econometrics, writing and presenting, publishing, LaTeX and Stata. Masterclasses are also organised for students on advanced econometric

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techniques and financial support is provided for PGR students to attend external courses run by the ESRC-funded Centre for Microdata, Methods and Practice based at the Institute for Fiscal Studies. ECN staff also play a key role in the Wellcome Trust Doctoral Training Centre (WTDTC), which funds five PGR students per year on a 1+3 basis, working across public health topics aimed at reducing the burden of chronic disease. Popli is co-director of this Centre and Dickerson and Roberts are part of the supervisor pool.

In order to encourage peer networks and learning, PGRs also have access to wider opportunities within the Faculty. The prestigious WRDTP provides access to the highest quality interdisciplinary training and support, including developing skills to engage beyond academia. Oates is director for the WRDTP pathway on 'sustainable growth, management, and economic productivity'. The Faculty has an outstanding reputation for the development and application of research methods in social science, led by the Sheffield Methods Institute (SMI), which promotes innovation in research methods and delivers a comprehensive suite of PGR courses throughout the year, covering skills such as communicating research, impact, networking and how to engage with policy and practice. Furthermore, the University has invested in a PGR publication scholarship scheme, providing a three-month maintenance stipend for students to write publications from their research.

PGRs in SUMS are allocated a personal tutor who takes responsibility for their pastoral care. SUMS has also introduced a 'buddying' approach, in which third-year students support new students. In ECN, the Director of Postgraduate Research Training oversees pastoral care and training provision. Every PGR has at least two supervisors. Inexperienced supervisors join teams led by more experienced colleagues and are provided with supervisor training. Oates has developed and delivered NARTI (Northern Advanced Research Training Initiative) events to prepare ECRs to act as supervisors. PGRs' progress is formally assessed through Biannual, Confirmation and Submission reviews. Biannual reviews take place in January and May while the Confirmation Review takes place by month 12 of the research programme and takes the form of a mock viva examination. PGRs are also encouraged to regularly present their ideas as they progress, often via internal seminars within the research centres/clusters. They are also required to present at annual departmental doctoral conferences, which facilitate interaction with academic staff and they are encouraged to present their research at WRDTP events (which involve the wider Sheffield/Leeds/York network), and at academic conferences. Funding is available to support PGRs with these activities, although many events have recently switched to on-line delivery because of COVID-19.

During the assessment period, the Unit appointed six PGRs (Brookes, Bruce, Drencheva, Gray, Marchand, Shepherd) to permanent lectureships. Other PGRs secured employment at universities, such as Aston, Cardiff, Leicester, LSE, Manchester, Nottingham, Waikato, Western Australia, and non-academic institutions in the UK and overseas, including Bloomberg, DWP, National Institute for Economic and Social Research and the Office for National Statistics. PGRs have also published in key academic journals, such as Accounting, Auditing and Accountability Journal, European Journal of Work and Organisational Psychology, Health Economics, Institutions and Money, Journal of Development Studies, Journal of International Financial Markets, Journal of Operational Research, Journal of Organisational Behaviour, Regional Science and Urban Economics, and Social Science and Medicine.

2.5 Equality, diversity, and inclusion

Our demographic composition reflects our strong commitment to EDI in relation to staff recruitment and development, which has included reviewing the wording of advertisements, and ensuring representative appointment panel composition. The number of female academic staff members (including RAs) has more than doubled during the assessment period and they now represent 43% of our academic staff, compared to 33% in 2013. The percentage of the professoriate who are female has increased from 19% to 34% in SUMS (an additional eight female professors have been recruited since REF2014, representing 50% of all professorial appointments). In 2019, SUMS appointed its first female Dean. Diversity in our academic staff has also increased significantly, reflecting our ambitions in relation to EDI, internationalisation of research and our ability to attract leading international scholars. 22% of our staff are now minority ethnic and the number of who are non-UK/British nationals increased from 38 to 81 during the assessment period while the percentage increased from 38% to 47%. Five per cent of staff have a declared disability.

Our commitment to EDI reflects the 'One University' ethos and pillar of the University strategic framework and the Faculty's EDI priorities of gender, race, disability, and wellbeing. We are committed to ensuring these priorities are reflected in all areas of our own staffing strategy to drive research quality through promoting an inclusive, fair, and vibrant environment in which the achievements of all staff are supported, recognised and rewarded. We have invested in training and development for EDI, including supporting staff to undertake University training on unconscious bias and staff in senior leadership roles to participate in race equality training delivered by Advance HE. In SUMS, there has also been a focus on gender equality through an active Athena SWAN Self-Assessment Team (SAT), with an unsuccessful submission in 2018 that has led to strategic objectives for further development towards resubmission, aligned with the University priorities for gender equality.

EDI is built into our governance mechanisms. Our EDI representatives have membership at both the Faculty EDI committee and Athena SWAN network for gender equality and bring EDI issues as standing items to our Executive Board meetings and staff meeting fora. Decision-making for resource allocation, reward and recognition takes place through committees. The composition of committees is actively considered when appointing to roles to ensure appropriate representation. SUMS' governance structures include a Senior Leadership Team with five female and two male members, and a wider Executive Board with a membership that is more than 50% female. Leadership roles are appointed through open expression of interest and recruitment and selection processes that ensure equity. In ECN, the Management and Strategy Group comprises six standing members, two of whom are female. The collective professorial leadership across the Unit ensures demographic representation, including protected characteristics.

Reasonable adjustments to support colleagues are incorporated within our wider set of human resource, risk assessment and occupational health policies in line with our EDI strategy and are appropriately resourced. Workplace assessments and reasonable adjustments are carried out for colleagues with protected characteristics, in consultation with them, to devise appropriate support packages. Support can include adjusted working arrangements (flexible and remote working), purchase of specialist equipment, learning technology support and support for mobility across campus spaces. For example, support for a staff member with visual impairment has included a dedicated package (designed with the individual) that includes employed help for reading aloud, campus/city familiarisation, support for accessing spaces and equipment across campus, and learning technology support. Equipment has been purchased to assist two staff members who have impaired hearing. We have purchased specialist equipment (e.g. stand/sit desks) to help staff

members manage musculoskeletal problems. During the COVID-19 pandemic, all staff have been supported with guidance for DSE workplace assessment when working from home and bespoke specialist equipment to meet individual needs has been provided where necessary.

In accordance with institutional policy, we have a range of processes to support staff returning from leave and with caring responsibilities. All staff are supported in transitioning back to work through phased returns, with appropriate line management support (keeping-in-touch meetings prior to return), return to work meetings to identify support needs (including adjustments, mentoring and work scheduling) and agree arrangements, and liaison with occupational health services, as necessary. Aligned with the University's HR policy, all staff are eligible to apply for flexible and remote working. During the assessment period, we have supported 15 colleagues in reducing their working hours to support flexible transitions back to work following maternity/paternity/adoption leave. The University's Women Academic Returners' Programme (WARP) provides additional resources to support research careers following parental leave or a career break. For example, we supported Ratcliffe's two successful applications to WARP and the funding financed research assistance that led to a publication in the *Scandinavian Journal of Economics*. Those returning from leave are given lighter workloads to facilitate their return. For example, Gil-Molto received a reduced teaching load on returning from leave, which, along with 'keeping-in-touch days' while on leave, led to a publication in the *Journal of Public Economic Theory*.

Where arrangements involve part-time working, workload allocations are managed to ensure proportionate reduction in target workload and maintenance of 40% work allocation for research. Attention is given to inclusivity with respect to scheduling of key meetings and consultation/decision-making fora to ensure these take place within core working hours and are sufficiently varied to accommodate part-time employees and those with caring responsibilities. In the case of remote working, connection and support are maintained with staff via line managers and mentors. All staff have been supported in flexible and remote working during the COVID-19 pandemic through close line management support and University HR policy to ensure safe working and wellbeing.

Staff have also contributed to the advancement of EDI beyond the Unit. SUMS' Dean (Finn) contributes to developing EDI strategy and policy at University level, through roles on Faculty Human Resource Working Group, Faculty Athena SWAN Network and University Strategic Framework Working Group on the theme of One University. We are represented on the Faculty EDI Committee (Finn, Collison, van Landeghem). Brown has served as a member of the Royal Economic Society Women's Committee, which aims to promote the role of women in the UK economics profession and was also a speaker and mentor at its early career mentoring events for female economists. Popli is a member of the White Rose Gender Equality College, a collaboration between the Universities of Sheffield, Leeds, and York to highlight gender equality challenges and provide academic teams with access to expertise and tools to support positive change within their research areas. Furthermore, specific research projects focused on EDI issues have been undertaken in collaboration with partners such as DWP, NHS, ILO.

Finally, EDI considerations were central to the construction of our REF submission. All members of our REF Committee have undertaken the required institutional EDI training, and our internal assessment processes and outcomes have been regularly checked for any effects of implicit or unconscious biases. Our REF Committee was balanced by gender, as were our internal reviewing panels, with outputs being reviewed by both a male and female reviewer.

2.6 Wellbeing

We are absolutely committed to protecting and enhancing the wellbeing of staff and students. All staff benefit from institutional initiatives such as Juice, our Health and Wellbeing service. As a key driver of wellbeing, workloads are regularly reviewed to ensure reasonable expectations in load (e.g. appropriate balance across different work activities). Workload is discussed in SRDS meetings and staff can discuss concerns with their line manager, mentor/probationary advisor or Head of Department at any time. In SUMS, workload is addressed as a standing item under health and safety at monthly Executive Board meetings. SUMS has also invested £25k in a 'Well-being Intervention', establishing a wellbeing steering group, an independent survey to identify staff concerns and a subsequent series of staff-led working groups focused on workloads, communications and values. During the COVID-19 pandemic, the wellbeing group produced a set of resources and guidance for staff on working from home and wellbeing. We have also arranged regular informal online social activities, such as pub-quizzes and coffee mornings, to maintain our community and collegiality under these exceptional circumstances. The Heads of SUMS and ECN have set aside dedicated online slots for staff to 'drop in' to discuss any issues or raise any questions.

PGRs are encouraged to attend workshops delivered by student support services – e.g. mental health awareness. PGR programme directors hold an annual wellbeing meeting for the new PGR students, which serves as an introduction to PGR study and academic support. Students are informed about support services offered by the University and advised to talk to the directors at any time about concerns they might have. In 2020, in response to the COVID-19 pandemic, we held special online wellbeing sessions with all PGR students to discuss new working practices, concerns and possible solutions. Pastoral support was supplemented by Faculty wellbeing advisors, offering one-to-one appointments and online drop-in sessions facilitated by the PGR Director.

3. Income, infrastructure and facilities

3.1 Income

The Unit has engendered a step-change in research funding, both in terms of projects led by colleagues and participation in research consortia. Since REF2014 we have attracted research income from funders including the EU, national governments, funding councils, and public, private and third sector organisations. Ensuring a broad, diverse base of research funding is an important aspect of our strategy for supporting sustainable research excellence.

Compared to REF2014, the number of awards has **almost doubled** (from 100 to 190). Our research income **increased by 385%** (from £2.7m to £13.3m), with the total value of awards during the assessment period exceeding £16m. This marked upward trend is the direct result of the successful strategy pursued since 2014 and is exemplified by major awards from the European Commission and UKRI. The strategy has been to support colleagues onto and up the funding ladder. All grant applications are internally peer reviewed prior to submission. This process has strengthened the quality of applications submitted, promoted knowledge sharing and learning internally and led to new collaborations. Events aimed at building consortia and developing project teams have produced numerous substantial successes (e.g. PIN and the Next Generation Services Projects).

Our researchers have secured funding for research on a wide variety of issues but have particularly focused on our four main areas of research strength (**health and wellbeing, productivity and innovation, sustainability, and work and employment**), which underpin our aim to achieve positive societal impacts through world-class research with potential to influence policy and practice. In doing this, we have also substantially enhanced the interdisciplinarity of our research

Our **health and wellbeing** theme has been supported by a variety of funding sources. Bryan and Roberts are leading a £363k Health Foundation-funded project, working with DWP and Public Health England (PHE) to disentangle relationships between mental health and work. Finn and Dawson were Co-Is on a further £514k Health Foundation-funded interdisciplinary project on mental health and employee retention, collaborating with the School of Nursing. ESRC successes relating to health and wellbeing include: Pudney is Co-I on a £1.1m project exploring how biomarkers and genetic information can improve understanding of society and health; Roberts was Co-I on a £198k project on the effects of commuting on health (this was also the basis of her Leverhulme International Academic Fellowship); and Bryan is Co-I on the £923k interdisciplinary What Works Wellbeing Centre: Work and Learning, which provides evidence on employee wellbeing to the UK government. Bryan is also Co-I on a £5.9m MRC-funded interdisciplinary 'SIPHER' consortium, which is encouraging policymakers to work together to tackle health inequalities. Pudney is Co-I on a further MRC-funded project (£382k) focused on developing the most appropriate ways to model preference-based health outcomes. This project has underpinned our *NICE Appraisals* impact case study and has been highly influential for NICE decision-making. Pudney is also Co-I and a member of the Scientific Leadership Group for the UK Household Longitudinal Study (Understanding Society), the UK's largest and arguably most important longitudinal survey.

Funding for health and wellbeing research has also been secured from NIHR: Matheson is Co-I on the £2.3m global RECHARGE project, assessing the burden of chronic lung disease world-wide and evaluating rehabilitation programmes in low-income countries; Dawson was Co-I on an £803k project examining compassion between patients and NHS staff and a further £474k project focused on openness and learning in the NHS. Also in the area of health and wellbeing, Nielsen has secured funding from various European sources, having been PI on a €442k ERASMUS+ project on European Safety Training, Co-I on a €3.9m Horizon 2020 project on multilevel interventions to promote mental health in SMEs and public workplaces, and Co-I on a SEK3.4m project on leader and employee perceptions relating to health promotion, funded by AFA Insurance. A final key project related to health and wellbeing is Montagnoli and Brown's £109k Leverhulme-funded research on the links between austerity policies and wellbeing in Europe.

In the area of **productivity and innovation**, McCann leads the £1.4m Productivity Insights Network (PIN), a flagship ESRC Network+ that is developing interdisciplinary insights on the 'Productivity Puzzle' from across the social sciences, with associated publications in *Environment and Planning A* and the *Journal of Economic Geography*. A further substantial initiative is the £1.4m ESRC-funded Next Generation Services Project (led by Vorley), focused on the use of AI in the accountancy and legal sectors. This project involves collaborations with computer scientists at Sheffield and design scholars at the University of the Arts London, collaborating with data scientists and law academics at three other universities. In addition: Linton is Co-I on a £10.4m UKRI-funded SUSTAIN Manufacturing hub, focused on improving the productivity and environmental performance of the UK steel supply chain; Roberts has won two awards (combined value: £1.8m) from EPSRC funding 'sandpits', targeted at encouraging innovative interdisciplinary

research on digital behaviours; and Toms is Co-I on a €4.1m Horizon 2020 Marie Skłodowska-Curie European Training Network focused on 'Domain Specific Systems for Information Extraction and Retrieval' and involving experts from 5 EU States, 3 universities in the US, Japan, and Australia, and 11 industrial partners.

Horizon 2020 awards are also supporting our **sustainability** research theme. Genovese leads a €432k Marie Skłodowska-Curie RISE project focused on 'Promoting Circular Economy in the Food Supply Chain', which involves 10 academic, private and not-for-profit organisations. Genovese also leads a further RISE project, 'Promoting Sustainable Freight Transport in Urban Contexts' (€283k), which is concerned with sustainable urban logistics solutions. Our sustainability theme has also been supported by major awards from the STFC and EPSRC. Choudhary leads two STFC projects: Food Network+, a £978k project bringing together researchers and facilities with research and industry in the agri-food sector; and a £226k project focused on technology and data science adoption for reducing food waste while enhancing the livelihoods of farmers in developing countries. EPSRC awards include: Bruce was Co-I on a £1m 'Plastics: Redefining Single-Use' project while Koh was Co-I on a £2.4m project focused on identifying sustainable functional materials, a £1m project examining the impact of material ageing on performance, and a £1.5m project that aims to advance the sustainability of road-rail energy storage. Koh is also Co-I on a £10m Leverhulme-funded 'Climate Change Mitigation Centre', a £15m BIG Energy Upgrade project funded by the European Regional Development Fund, which is advancing understanding of energy innovation, and the £8m HEFCE-funded N8 Agri-food programme, which aims to develop sustainable food systems. The awards have led to publications in journals including International Journal of Operations and Production Management, and British Journal of Management.

With regard to our **work and employment** theme, Williams has won £453k from the European Commission to support research contributions to the European Platform Tackling Undeclared Work. The research has influenced EU strategy on informal work and led to over 50 publications (e.g. in the British Journal of Industrial Relations, Work, Employment & Society and European Journal of Industrial Relations) and major impact that is captured in two of our ICS. Two other awards associated with work and employment have also contributed to our productivity and innovation theme. Both are funded by ESRC: (i) the £615k Managerial Competences, Engagement and Productivity - Developing Positive Relationships project, led by Latreille (with papers in journals such as British Journal of Industrial Relations); and (ii) the £1.5m Productivity Outcomes of Workplace Practice, Engagement and Learning Hub, which is working with businesses and policymakers to improve employee engagement (Latreille is a Co-I). In addition, Burns and Heyes are Co-Is on the £2.1m ESRC-funded 'Sustainable Care: Connecting People and Systems' programme, which involves six disciplines and is researching policy and employment issues relating to care provision in the UK and overseas.

In addition, we have made a substantial response to the COVID-19 pandemic. Burchell has secured £385k from UKRI to address the knowledge gap around measures required to organise volunteering responses to COVID-19. Matheson has received £133k UKRI funding to explore how quickly different areas of the UK are likely to recover from the economic effects of the pandemic and the impact on regional inequality. Bryan and Roberts' £363k Health Foundation project on the causal impacts of health on work has been awarded an additional 12 months of funding (to 2021) to explore the effects of the pandemic on disabled people in the labour market. PIN has hosted a series of webinars discussing the consequences of the pandemic for productivity and produced an edited book on the topic. We have also contributed to the ESRC Economics Observatory, an initiative by the economic research community to answer questions about the economics of the

COVID-19 pandemic and recovery. Brown is a member of its editorial board. Taylor has explored research on who can work from home and how their productivity is affected; Matheson has considered what the crisis means for the future of sport and fitness clubs.

3.2 Research infrastructure

The University has made significant investments in estates and infrastructure during the assessment period, including £4m for extension and refurbishment of SUMS' main building, £1m for a dedicated Doctoral Centre for SUMS' PGR students, and £3.1m for refurbishment of facilities for ECN. These investments have resulted in state-of-the-art research facilities including well equipped staff offices, meeting rooms and social areas, together with dedicated office space for PGRs and RAs. A £45m Faculty of Social Sciences Hub building is currently under construction to further enhance our research facilities.

Through the creation and development of our research centres and clusters, we have developed an organisational infrastructure that is sufficiently dynamic to support the delivery of our research strategy and objectives and agile enough to respond to the changing funding landscape. The strategic intention of the organisational infrastructure is fourfold. Firstly, to consolidate research strengths and critical mass by concentrating resources and devolving decision-making to research centres/clusters. Secondly to empower research centres/clusters to lead and shape research agendas in their respective fields through their collective achievements. Thirdly, to enhance the research environment, fostering research networks and international collaborations. Fourthly to provide an intellectual arena to nurture research ambition and build capacity to sustain the research environment into the future.

We have expert Professional Services support for research with a Research Hub comprising a manager, two research support officers and a PGR officer. The manager oversees all aspects of our research support and helps to develop and deliver the research strategy, in collaboration with the Associate Deans for Research (ADR) and Impact and Engagement (ADIE) in SUMS and Director of Research in ECN. The Research Hub provides support for research application costings, internal reviews and active grants, oversees research outputs and ensures compliance with funder open access requirements, manages the research support fund, and supports annual research planning meetings, research awaydays and PGR recruitment, scholarships, progression and completion.

Our marketing and communications officers support dissemination of research and research impact, manage departmental research websites, edit departmental research blogs and promote research to the media. Departmental IT managers oversee data management, provide specialised research computing support and support access to the UK Data Service Secure Lab service, which is key to much of our applied work. We provide desktops/laptops and specialist software. ECN also has two Windows remote desktop High Performance Computing machines for intensive processing and provides access to specialist databases (e.g. Eikon/Datastream).

Additional research support and expert advice is provided by Research Services at Faculty and University levels. The University provides comprehensive professional, legal and financial services, which include identifying funding opportunities, processing research proposals and grants and commissioned project contracts. All funding proposals are rigorously peer reviewed by specified reviewers within the Unit, and the University further ensures the quality of major grant applications through additional formal formative reviews at the Faculty and University levels.

Unit-level environment template (REF5b)

We have benefited from Faculty support for interdisciplinary research. Notably, in 2019 Roberts took on a new role as a Faculty-funded Professorial Research Fellow, resourced to drive forward major interdisciplinary projects within and outside of the Faculty. In this capacity, she is leading a Health Foundation funded project on the interrelationships between health and work and in 2021 will start a Nuffield Foundation project decomposing the disability employment gap. In addition, Leaver has served as co-director of the Sheffield Political Economy Research Institute (SPERI), one of the Faculty's five Flagship Research Institutes. We have also benefited from additional Faculty investment to extend the reach and significance of our impact. Social scientists at Sheffield are supported by a dedicated commercialisation manager and Birdi and Breslin have received University IP Development and Commercialisation funding to work with external software and marketing consultants to assess their respective toolkits for potential large-scale deployment. Several staff members have also made successful applications for Higher Education Innovation Funding (HEIF) and Impact Accelerator (IAA) funding, via the Faculty's Social Sciences Knowledge Exchange and Impact Opportunities Scheme. Additional funding is available for research which has strong potential to achieve impact as we aim to maintain a pipeline from our funded research projects. For example, IAA funding has enabled Bryan to produce a toolkit to help organisations evaluate the cost effectiveness of wellbeing interventions. It has also supported a prestigious IZA (Institute of Labor Economics) workshop on Evaluation of Labour Market Policies led by Van Landeghem, bringing together academics and labour market policymakers from throughout Europe. Faculty support for impact has also included the employment of an Impact Associate, who provides dedicated support to the Unit and advice in relation to the development and evidencing of research impact.

We also employ Research Associates to support research activities. SUMS has funded nine RAs to further develop critical mass and build capacity in relation to existing funding success, particularly in relation to productivity, innovation, AI and next generation services. Within ECN, departmental funds are used to employ a minimum of two full-time RAs. Research groups can bid for research assistance twice a year and bids are assessed on a strategic basis, with priority given to support for external funding bids and establishment of wider research networks. Bids are also judged on their contribution to RAs' career development.

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

4.1 Engagement and impact

Our engagement and impact activities focus on: (a) advising UK, international and overseas policymakers; and (b) working with private and public sector organisations to enable change. In both cases, our ambition is to influence and support changes in policy and practice, drawing on our research. We have achieved substantial impact and contributed in other ways to policy and practice related to all four of our main themes, with several examples of engagement and impact addressing more than one theme.

Health and wellbeing

Pudney and Roberts' work on health valuation methods has influenced health care decision-making all over the world. It has enabled health care financing bodies to extract more value for money from scarce resources, and ultimately to improve health-related quality of life. Pudney is a member of the Policy Research Unit in Economic Methods of Evaluation in Health and Social Care

Unit-level environment template (REF5b)

Interventions (EEPRU), which helps the DHSC to make decisions on what health care the NHS should provide. Pudney's methodological work has had a large impact on the way that NICE makes decisions about the cost effectiveness of health care, as evidenced by the *NICE Appraisals* impact case study. Also, Roberts' Short Form 6 Dimension (SF-6D) health valuation tool (*SF-6D* case study), has been adopted by national health reimbursement agencies in more than 20 countries, including China and the US. Since August 2013 more than 1500 commercial SF-6D licences have been purchased by all of the world's largest pharmaceutical companies, generating more than \$2.2 million in royalty income.

Our engagement has also influenced public health service provision and employer practices relating to occupational health and employee wellbeing. Nielsen has worked with government research and policy institutions in Italy (National Institute for Insurance Against Accidents at Work), Germany (Federal Institute for Occupational Safety and Health) and Denmark (National Research Centre for the Working Environment) to translate her research on employee wellbeing into guidance that has been published by the EU Occupational Safety and Health Agency and the European Foundation for Improvement in Living and Working Conditions. The guidance has led to improvements in workers' working conditions and wellbeing. Nielsen's research and impact also contributes therefore to our **work and employment theme**.

Important impact and engagement relating to health and wellbeing has also been led by Breslin, who has worked with South Yorkshire Fire & Rescue Service (SYFR) to improve their fire prevention strategies, using a modelling tool that has reduced risks for the most vulnerable members of the community. Breslin is working with the University's Commercialisation team to refine the modelling tool technology and build business networks for potential commercialisation.

Other important engagement activities relating to health and wellbeing include:

- Burns is a member of the Sheffield NHS Clinical Commissioning Group, supporting its experimentation with commissioning and provisioning of home care and Finn is an advisor to the Sheffield Mental Health Collaborative.
- Hodgson has led three evaluations for the Greater Manchester Health and Social Care Partnership, looking at access to primary care and the impact of new roles in the primary care workforce. Hodgson was also academic partner on a national evaluation of the GP Access Fund (Wave 2), commissioned by the DHSC, and is currently academic partner for a national evaluation of Continuity of Care in General Practice, commissioned by the Health Foundation.
- McIntosh, Roberts and Vorley have led a £2m evaluation of the Community Fund's £112m Fulfilling Lives programme (2013-2021), which supports people who experience multiple disadvantages, including mental ill- health and substance abuse.
- Matheson is a Steering Group member for the Centre for Black and Minority Ethnic Health, an NIHR-supported centre that works to reduce health disparities for BAME communities.
- Roberts has held expert advisory positions with NICE, including as a core member of the national Public Health Advisory Committee.
- Wang has delivered 24 Sigma Six training workshops for the Louisiana State University Health Sciences Center, leading to substantial improvements in patient flow and reduced operational costs.

Productivity and innovation

We have engaged with employers and policymakers to translate our research on productivity and innovation into impact. The CLEAR IDEAS (CI) methodology developed by Birdi has supported innovation and decision-making by organisations. Since 2014, more than 220 public, private and third sector organisations have attended CI workshops in the UK and overseas. The *CLEAR IDEAS* impact case study evidences significant innovations, including: informing Ofwat's policies for the UK water sector; co-production of a Special Educational Needs and Disability strategy for Sheffield Council; strategies for improving customer service in the Corinthia hotel chain (with impact in Russia, Malta, Czech Republic and Hungary); and new teaching strategies in a UK school, leading to improved OFSTED ratings. The CI digital toolkit has registered users in countries including the USA, Canada, Australia, Malta, Poland, Iceland, South Africa and Chile.

Key investments in capacity building, notably PIN and the UKRI Next Generation Services project, have further enhanced impact potential. Both represent examples of our response to national and international priorities and initiatives. The former engages with public, private, and third sector partners, with a remit of changing the tone of the productivity debate. The latter connects the social sciences, Innovate UK and the ESRC, by informing innovation policy and practice. PIN has led on knowledge exchange activities with policymakers across the UK. At the request of the Chief Economist of the Bank of England, PIN informed the work of the Industrial Strategy (IS) Council's Foundation Insights projects on the themes of skills, place, and sector. The IS Council subsequently asked PIN to bring together academic experts and Local Economic Partnership senior members to contribute to a discussion that directly informed the 'place' strand of the IS Foundation Insights project. PIN also co-hosted, with the Department for the Economy, an event on productivity growth in Northern Ireland and delivered workshops to staff at the Scottish Government to develop their understanding of productivity issues.

Other significant engagement activities relating to productivity and innovation include:

- Axtell is a member of the British Standards e-committee on Big Data and organised an ESRC seminar series on big data that involved participants from UK universities and the public (e.g. HSE, MoD) and private (e.g. BT) sectors.
- Brooks has served as an expert on OECD study missions to Krakow, Gdansk and Warsaw, investigating the potential role for an entrepreneurial ecosystems approach in government policy.
- McCann serves on the Industrial Strategy Council, which provides advice on the delivery of the Industrial Strategy, and the UK2070 Commission which is an independent inquiry into city and regional inequalities.
- McLeay is working with the Legal IT Innovators Group, legal service providers and their clients on exploring enablers and barriers to using AI in the legal sector.

Sustainability

Our research and engagement activities have led to important improvements in sustainability in the UK and other countries. Ballantyne, Cullen and Miera's tool to improve the management of reverse logistics has had significant impacts on major retailers, transportation and logistics services providers, and manufacturers. The tool has been used globally to reduce the number of returns,

cut operational costs, improve customer service, and limit the environmental burden through product recovery (*Reverse Logistics* impact case study).

Koh's research has influenced the content of China's National Development and Reform Commission (NDRC) policies in relation to clean energy, smart transport and logistics, circular economy, recycling, and waste-to-resource management, as evidenced by the *AREC Model* impact case study. As a result of Koh's research and engagement activities, China has made changes to global supply chains that support economic growth while minimising negative environmental impacts.

Other significant engagement relating to sustainability includes:

- Kedir regularly advises the UN's Economic Commission for Africa, Conference on Trade and Development, and Development Programme, and also the World Bank, via expert group meetings and providing inputs to their annual reports.
- Morgan has conducted research for DEFRA on the impact of trade policy changes on British food prices.
- Oates has presented her research on green consumption to the Scottish Government's Climate Change Policy Unit, with the intention of influencing its Low Carbon Behaviours team.
- Staff collaborate with and provide advice to NGOs, including Tax Justice Network and the Corporate Accountability Network (Leaver), Publish What You Pay (Haslam), Humanitarian Academy for Development (Balal), Share Action (Atkins), Compassion in World Farming (Alevizou).

Work and employment

There has been substantial national and supranational engagement and impact in relation to work and employment. As the lead expert for the European Platform Tackling Undeclared Work, Williams has influenced the content of European Commission policy guidance relating to undeclared work and the informal economy and advised EU member countries and candidate countries (*Undeclared EU* impact case study). Williams has organised 53 workshops, involving 1,450 participants from 30 European countries. Participants have included senior government officials from national tax, social security and labour authorities and senior officials from European-level trade union and employer federations and other staff (Hastings, Heyes, Kedir, Newsome) have contributed. Related to this activity, 103 practitioner-oriented learning resources and 120 transferable good practices have been produced.

Williams' role in the European Platform led to him being appointed to lead a mission to Greece to develop a strategy for tackling the undeclared economy, which was a condition of the European Commission's 2015 bailout for Greece. Williams was central to consultations with the Greek Government, Bank of Greece, trade unions and employer organisations that led in 2016 to the creation and validation of a national action plan (*Undeclared Greece* impact case study). The Greek authorities subsequently implemented most of the plan's recommendations. Associated with this activity, Heyes was the lead expert on an ILO technical cooperation project to address bogus self-employment in Greece. Heyes met with the Greek Government and social partners to develop an action plan that was validated in 2018.

Unit-level environment template (REF5b)

Our impact activities have led to improvements in the enforcement of labour standards. A training toolkit developed by Heyes on behalf of the ILO has been used to train labour inspectors in South Africa, leading to more effective enforcement of labour standards for informal sector workers (*Informal Economy* impact case study). The supply chain diagnostic toolkit, co-produced by Dibben, Cullen and Meira with practitioners, and used by organisations in the UK, Brazil, South Africa, and Ethiopia to self-assess HR, accounting, and procurement practices, has resulted in improvements in employment practices and competitiveness (*SCA-Emp* impact case study).

Our research and engagement activities have also resulted in improved EDI practices. Research conducted by Dawson and colleagues, which highlighted the poorer experience of minority ethnic staff in the NHS, led to the development of the NHS Workforce Race Equality Standard in 2016, which requires every NHS trust in England to publish relevant data annually, and a national campaign to improve the experience of BME staff.

Our researchers also have important UK policy advice roles relating to work and employment. Brown is a Low Pay Commissioner, responsible for advising the UK government on the National Minimum Wage and the National Living Wage. Dickerson is a member of the Prison Service Pay Review Body, which advises the government on pay within the England and Wales Prison Service. Dickerson and McIntosh were members of the BEIS/DfE Skills Policy Analysis Academic Panel, which advised the government on skills policy. Latreille serves on the Civil Mediation Council's Workplace and Employment Group. Taylor was an advisor on labour markets for the NHS Litigation Authority.

Knowledge exchange activities take place on a regular basis with DWP. Since 2006, ECN has convened the DWP-sponsored Work Pensions and Labour Economics Study Group (WPEG), which brings together a network of over 500 academics and policymakers. Taylor is the convenor and Brown is Steering Committee member. Staff are also regular contributors to the Faculty Sheffield Solutions seminars run jointly with DWP, where research on contemporary policy issues is discussed. Van Landeghem is a DWP associate researcher, working closely with policy and analyst colleagues on the evaluation of active labour market policies. He also works closely with the Flemish Ministry of Labour on the evaluation of labour market policies. In 2015, he was awarded a four-year University Vice Chancellor's Fellowship and won a two-year Marie Skłodowska-Curie Fellowship to research the evaluation of active labour market policies.

Other significant examples of engagement activity relating to work and employment include:

- Burchell influenced an employee volunteering strategic plan developed with the Department for Digital, Culture, Media & Sport (DCMS) in 2018 and has worked with national (e.g. DWP) and local organisations (e.g. six local authorities) to help them develop employee volunteering initiatives.
- Dickerson, McIntosh, and Roberts have conducted an evaluation of the £250 million Employer Ownership of Skills Pilot (EOP) for BEIS and DfE.
- McIntosh and Dickerson's work in our Centre for Vocational Education Research has fed directly into the Augar review of post-18 education (e.g. Dickerson chaired one of the Augar Review seminars) and Parliamentary select committees, and has been presented to policymakers and practitioners at events such as the International Conference on Employer Engagement in Education and Training and the Westminster Education Forum.

- Nielsen has led on the development of guidelines for sustainable return to work, which are available on the mental health at work website curated by MIND (there is also a COVID-19 version).

In addition to these four key areas, staff members hold other important advisory roles, demonstrating the breadth of our impact activities. Leaver sits on a DWP advisory board on outsourcing. McGuinness was a member of the Joint Independent Audit Committee for South Yorkshire Police and Crime Commissioner and Chief Constable (2012-15). Taylor is a member of the Department for International Trade, Overseas Development Institute Advisory Group and a member of the Money and Pensions Service Research and Evaluation group, which provides free and impartial advice on money and financial decisions to people in the UK (Brown is also a member). Van der Sijpe has influenced the approach of the CDC Group (the UK's government-owned development finance institution), which has been formalised via internal guidance, handbooks and training materials for staff and external investment committee members and his research is regularly referred to in development finance policy forums such as the EU, OECD, and UN.

4.2 Research collaboration

Our strategy for research collaboration has focused on: (a) developing relationships within the University; and (b) developing our national and international relationships with key strategic partners.

Staff have been active in contributing to interdisciplinary research across the University, facilitated by the development of the Faculty Research Hub and Faculty funding for networking. Examples of cross-disciplinary research institutes to which our staff contribute are the Crick Centre for the Public Understanding of Politics, Grantham Centre for Sustainable Futures, Healthy Lifespan Institute, and the Sheffield Political Economy Research Institute (SPERI). Leaver was co-director of SPERI in 2018. Other Unit staff have prominent leadership roles in two of the University's four interdisciplinary Flagship Research Institutes: Energy (Koh, Bruce, Ballantyne), and Sustainable Food (Choudhary). These activities have resulted in funding awards, particularly in the areas of health and wellbeing and sustainability (e.g. awards listed for Bruce, Choudhary and Koh in Section 3).

Collaborations with academics at other UK universities have been numerous and have led to awards from a range of funders. Examples include: Choudhary's collaboration with Hull, OU, Manchester, Southampton, and York, funded by STFC (£978k); Dawson's collaboration with Leicester, funded by NIHR (£474k); PIN, which involves 8 UK universities in addition to Sheffield (£1.4m); and Tom's Horizon 2020 award, in collaboration with Strathclyde (€4.1m). Funding has also been secured via collaborations with non-academic institutions. For example: Choudhary has collaborated with the Rutherford Appleton Laboratory to secure £226k STFC funding; Dawson has collaborated with the King's Fund and an NHS trust to secure £803k funding from NIHR; Latreille has collaborated with ACAS on research on conflict resolution, resulting in a £615k ESRC award on which ACAS' head of research is a Co-I.

We have also developed international research collaborations with key strategic partners including overseas universities (e.g. Berkeley, Copenhagen, Deakin, Harvard, IESEG School of Management France) and supranational organisations (e.g. ILO, OECD). Some of the strategic partnerships have led to Memoranda of Understanding (MoUs), notably with Harvard, the Centre for Work, Organisation and Wellbeing at Griffith, and the ILO. These MoUs have facilitated funding

Unit-level environment template (REF5b)

applications and knowledge exchange activities (e.g. 2019 CDW-ILO joint conference on the Future of Work). Our international relationships have resulted in several collaborative projects, a number of which are underpinned by funding awards:

- Brown has collaborated with researchers at Curtin University, Australia, RMIT Australia, NYU Stern School of Business on a project focused on 'Modelling Health', funded by the Australian Research Council (AUD367k).
- Bryan and Roberts are collaborating with Vrije University, Amsterdam on a project funded by the Health Foundation.
- Hole has an ongoing collaboration with Toulouse School of Economics and University of Gothenburg on using stated preference methods to estimate the value of a statistical life in different contexts.
- Leaver is working with researchers at Copenhagen Business School to develop a research network at the intersection of accounting, political economy, and economic sociology. Two Luminate awards have been secured with members of the network.
- Matheson's Global Health Research Group on Respiratory Rehabilitation, funded by NIHR, involves collaborators in India, Kyrgyzstan, Sri Lanka and Uganda.
- Nielsen has secured funding with Deakin and the National Research Centre for the Working Environment, Denmark, and has collaborated with the Universities of Bologna and Valencia to secure ERASMUS+ and Horizon 2020 funding.
- Williams has collaborated with research institutes in Croatia and Bulgaria to secure European Commission funding for research on undeclared work.

Such relationships have led to **709 journal articles** co-authored with researchers based at **471 overseas academic and non-academic institutions**. Staff have co-authored articles with colleagues at some of the world's top non-UK universities, including Amsterdam, Australian National University, British Columbia, Dartmouth College, Harvard, MIT Sloan School of Management (USA), Peking, Toronto, Tsinghua, and Utrecht.

Reflecting our emphasis on applied research with impact potential, staff have also co-authored articles with individuals from non-academic institutions based overseas, including Deloitte, European Investment Bank, Federal Reserve Bank of St. Louis (USA), Federal Reserve Board (USA), Finnish Institute of Occupational Health, KPMG, Montreal Health and Social Services Agency, National Research Centre for the Working Environment (Denmark), Pfizer Inc., Reserve Bank of New Zealand, UN Economics Commission for Africa and the World Bank. International collaborations have also resulted in joint PhD supervisions (e.g. with Harvard and Kobe).

4.3 Wider contribution to the research base and sustainability of the discipline

In addition to our collaborative engagement with, and impact on, wider society, we contribute in significant ways to the advancement of our academic disciplines at national and international levels. Our contributions, esteem and standing are exemplified by the following activities:

1. Several staff members have been members of **national and international funding panels**. We have engaged extensively with the ESRC in this regard: Taylor was a member of ESRC Grant Assessment Panel C (2016-2020); Vorley served as chair of the ESRC Network and Productivity

panels and was a member of the ESRC Innovation Fellowships panel; Brown was an ESRC panel member for commissioning the 'Understanding the Macroeconomy' Network (2017) and joined the 2020 ESRC panel for selection of the Research Methods Development awards; Heyes was a member of the ESRC Large Grants assessment panel (2018); and McCann was a member of the UKRI Strength in Places Fund assessment panel. Other notable contributions to panels include: Dawson served on the Commissioning Board of the National Institute for Health Research (NIHR), Health Services and Delivery Research Programme (2013-2018), Dickerson was an assessment panel member for the Philip Leverhulme Prizes in Economics, 2016 and 2019 and Roberts is a member of the Leverhulme Trust Research Awards Advisory Committee. With regard to panel memberships on **non-UK funding bodies**, Brown is a European Science Foundation College of Peer Review panel member, which has involved panel membership for a number of prestigious awards throughout Europe including the AXA Research Fund Post-Doctoral Fellowships and Chairs programs, the FP7 COFUND Marie Curie projects, and other programs in France, Italy and Georgia. Brown is also a member of the Czech Science Foundation's Scientific Review Panel for Social Sciences. Other non-UK funding panels to which staff have contributed include: Horizon 2020 EU-India Water panel (Choudhary); AFA Insurance, Sweden (Nielsen); and the Research Council of Norway's Welfare, Working Life and Migration programme (Newsome).

Staff members also regularly act as **funding application reviewers** for major national and international funders. During the assessment period, 12 staff members have served as members of the ESRC Peer Review College and staff have also reviewed for other UK funders and schemes, including British Academy, Carnegie Trust, EPSRC, NIHR, Leverhulme Trust, Medical Research Council and the UKRI Future Leaders programme. Staff have acted as reviewers for non-UK funders such as Austrian Science Fund; Czech Research Council; European Science Foundation; French National Research Agency; FWO Netherlands; Horizon 2020; Israel Science Foundation; National Research Foundation of South Africa; Netherlands Organisation of Health, Research and Development; NIHR; National Science Foundation (US); Polish National Science Centre; Research Foundation (Flanders); Social Sciences, and Humanities Research Council of Canada; Swiss National Science Foundation; and Vinnova, Sweden.

2. We have a strong track record of contributing to research publication processes through editorships of journals and book series. **Journal editorships** during the assessment period include B.E. Journal of Economic Analysis and Policy (Wenzel), British Journal of Industrial Relations (Dickerson), Bulletin of Economic Research (Brown), Competition and Change (Leaver), European Management Review (Lee), International Journal of Management Reviews (Breslin), International Journal of Sociology and Social Policy (Williams), Journal of International Development (Mosley), Spatial Economic Analysis (McCann), Work in the Global Economy (Newsome). **Associate Editorships** include Applied Psychology and International Review (Nielsen), British Journal of Management (Dawson), Bulletin of Economic Research (Polito, Thoenissen) European Journal of Finance (Yin), European Spine Journal (Popli), Health Economics (Roberts), Industrial Relations Journal (Heyes), Journal of Agricultural Economics (Morgan), Journal of Choice Modelling (Hole), Journal of Management Studies (Dick), Journal of Occupational and Organisational Psychology (Dawson), Organisation Theory (Dick), Organisational Research Methods (Dawson), Public Finance Review (Rablen) and Work & Stress (Nielsen). Our staff have served on **42 journal editorial boards** during the assessment period. In addition, Wilkinson is series editor for Springer Series in Work, Organisation and Employment and Elgar Footprints in HRM and Employment Relations.

Unit-level environment template (REF5b)

3. The academic expertise and disciplinary esteem of our staff is also reflected in the significant number of (career diverse) researchers who have been invited **to deliver keynotes to international academic audiences**. Examples include Atkins (African Accounting conference 2019, London); Hodgson (CABS Research Conference, 2019, and EGOS Colloquium, 2016); Hole (5th Workshop on Non-Market Valuation, 2017); McCann (European Regional Science Association Conference 2019, Lyon, and IED Institute of Economic Development, 2018); Nielsen (5th Wellbeing at Work Conference 2019 and INAIL 2019); Newsome (International Labour Process Conference, 2016); Oates (International Youth Marketing and Media Forum, 2017); and Pudney (9th Australasian Workshop on Econometrics and Health Economics, 2018, and EuroQol Academy Meeting, 2017).

There have also been numerous **invited presentations to practitioner and policy audiences**. As the coordinator of PIN, McCann has made invited presentations to BEIS, European Commission, Government of Wales Ministerial Advisory Board, All Party Parliamentary Group for Manufacturing, OECD, Fabian Society, European Parliament, Ministry of Housing, Communities and Local Government, Chatham House, Foreign and Commonwealth Office, H.M. Treasury. As lead expert for the European Platform Tackling Undeclared Work, Williams has made invited presentations to the European Commission, European Parliament and the labour and tax authorities of countries including Greece, Albania, Serbia, Montenegro, Kosovo, Azerbaijan, and Uzbekistan. As a Low Pay Commissioner, Brown has been invited to present to stakeholders including the OECD, Bank of England, and Resolution Foundation. McIntosh's expertise on vocational education has led to invited talks at the Westminster Education Forum, DWP, the 5th International Conference on Employer Engagement in Education and Training (2018), and the Skills Summit on Apprenticeships (2019).

4. Staff at all career stages have had **leadership roles in professional associations**. Fox-Hodess, an ECR, is a board member of the Research Committee on Labour and Labour Movements of the International Sociological Association (2018-2021). Among senior staff, Brown was an elected member of the Council of the Royal Economic Society (RES) from 2013-2018 and served on the RES Executive Committee (2017-18) and the RES Women's Committee (2010-15). Several staff have served on the Programme Committee for RES annual conferences. From April 2020 Brown is also President Elect of the Scottish Economic Society, taking over as President in April 2023. Other notable examples are: Burns is Deputy Chair of the Executive Committee of the Learned Society for Studies in Organising Healthcare; Cullen is a Trustee and Chair of Trustees, British Accounting and Finance Association, and has served as its President; Latreille is President of the International Employment Relations Association's European region, has served on the national steering group of the Professional Mediators' Association (PMA, 2012–2015) and chaired the PMA Academic sub-group (2013–2015); Morgan joined the Executive of the Agricultural Economics Society in 2020.

5. The Unit has organised several conferences and workshops that have showcased its research and involved leading academics or public figures from outside of the University. Speakers at ECN's annual Knoop lectures have included Andrew Dilnot, Vince Cable and Mariana Mazzucato. ECN has also organised an annual conference on the Economics of Vocational Education and an annual Sheffield Workshop in Macroeconomics (SWIM), co-sponsored by the Centre for Applied Macroeconomic Analysis at Australia National University. IWP organises a bi-annual international conference that attracts c. 200 academic and practitioners in work and organisational psychology. Due to the COVID-19 pandemic, the IWP2020 went online, increasing participation to almost 500 delegates. Our Centre for Decent Work organised the 2017 annual International Labour Process

Conference, which attracted almost 200 participants from across the world, and a 2019 conference on the Future of Work, hosted jointly with the ILO. Staff members have also participated in the organising committees of major conferences held elsewhere (e.g. International Conference on Systematic Innovation, British Accounting and Finance Association Conference, European Society of Population Economics Conference, International Congress of Work Psychology and Human Resources, European Academy of Occupational Health Psychology).

6. In addition to engaging with academic and policy and practitioner audiences, we are committed to **ensuring that our research findings are available to the wider public**. Staff have written numerous blogs for online content such as the Conversation, Open Democracy, SPERI and the European Financial Review while PIN has its own blog series. Furthermore, we have contributed 18 ESRC Festival of Social Science events during the assessment period. Most of our workshops and seminars are open to members of the public. Research centre/cluster and project websites are regularly updated to highlight key events, activities and incorporate short reports and blogs on outputs. Staff also have a strong track record in relation to **media impact**. Highlights include: McCann has twice been featured on Channel 4's Dispatches programmes and featured heavily in a BBC Radio 4 Programme on Brexit; Morgan is often called on to comment on UK food policy, e.g. on BBC Radio 4's Farming Today programme; Leaver's research has been regularly featured in the Financial Times and Guardian, while Perraton has made numerous media appearances (e.g. BBC Breakfast News, Sky News) to discuss the economic implications of Brexit. Roberts' work on 'irrational commuting' has attracted much media interest, and she has contributed to programmes for the BBC World Service and BBC Radio 4. Other research has featured in media publications including the Independent, Sunday Telegraph, Times Higher Education, and the Yorkshire Post.

7. Some of our colleagues are fellows of **academic and practitioner bodies**. Atkins is a Fellow of the RSA; Breslin is a council member of the British Academy of Management; Bruce is a Fellow of the Royal Society of Arts, and of the Chartered Institute of Logistics and Transport; Burns is deputy chair of the Learned Society of Studies for Organising Healthcare; Dibben and Heyes are Academic Fellows of the Chartered Institute for Personnel and Development; Dibben, Hodgson and McCann are Fellows of the Academy of Social Sciences; McCann is a Fellow of the Royal Society of Arts, the Regional Studies Association and the Regional Science Association International; Latreille is a Fellow of the Learning and Performance Institute; and Toms has been President of the Association for Information Science and Technology. Staff members also have ongoing visiting positions at overseas institutions. For example, Dibben and Nielsen are Adjunct Professors at Griffith University, Australia and Nielsen is also a Research affiliate at the Karolinska Institute.

8. The contributions of Unit members across the career range have been recognised through the **award of prizes**: Fox-Hodess - LERA Best International/Comparative Industrial Relations Paper (2018) and American Sociological Association Distinguished Scholarly Article (2018); Fahey - Management Learning Journal Paper of the Year (2014); Girei - Human Relations Paper of the Year (2014); Heyes - Association for Public Policy Analysis & Management Conference award for best Comparative Policy Paper (2016); Littlewood - British Academy of Management Conference, Best Full Paper Award (2014); McLeay - Article of the Year, Journal of Travel & Tourism Marketing (2018); Oates - Outstanding Paper, Emerald Literati Awards for Excellence (2017); Williams - Outstanding Paper, Journal of Small Business and Enterprise Development (2017).