REF2021

Institution: University of Northumbria at Newcastle

Unit of Assessment: UoA 17 Business and Management Studies

1. Unit context and structure, research and impact strategy

1.1. Our Identity and Distinctiveness

Over the course of the last REF cycle, Newcastle Business School's (hereafter, the School) research has transformed in terms of the volume, quality, range and impact. While this reflects the transformation in Northumbria University's priorities, it also shows the way in which the School has restructured both its activities and staff recruitment policies to ensure that research becomes a much more prominent dimension of its profile. The transformation has been the result of careful planning, infrastructure investment, career development initiatives for colleagues at all levels and extensive faculty recruitment. Another key dimension of this work has been a greater emphasis on national and international interests, to a large extent reflected in the School's commitment to the UN's Sustainable Development Goals and deep concern with business ethics and corporate behaviour. The core themes of our research revolve around the questions: *How can we embed responsibility in business practice; how can innovation and entrepreneurship reshape regional economies; and how can the public sector embrace new ways of working?* The School also plays a significant role in a city-region challenged by the legacy of de-industrialisation but that is also characterised by export-led business, ethical companies, innovative entrepreneurs and a commitment to responsive public services. Above all, it wants to be regarded as '**a force for good**', disseminating its research internationally, nationally and regionally.

1.2. Research Strategy 2014 – 2021

Supported by University investment, the School aimed to grow both research volume and quality and in 2014, set the objective to return two thirds of academic staff to REF2021. A substantial increase in research power was stretching but achievable. This objective was informed by our performance during REF2014. Our 2014 submission achieved a rise in our GPA from 1.80 (RAE2008) to 2.54 (REF2014) with the Panel stating that '*a significant proportion* [was] *internationally excellent or world leading'.* However, the feedback from REF2014 also recognised that ours was a *'comparatively small unit'*. Emphasising three interdisciplinary Signature Interest Groups (SIGs) informed our people strategy (section 2.1), providing critical mass for addressing our research questions. Conducting research that achieves sustainable and meaningful change for our research partners and stakeholders requires investment in research support (section 2.1.5), underpinned by appropriate governance structures (section 1.5). It also requires a clear strategy for impact through building collaborations with our external partners (section 1.4) that would also secure additional external research income (section 3.1). Therefore, in addition to raising research quality, our strategy supported the impact of our work (section 1.4).

Interdisciplinary research generates new ideas for stakeholders as exemplified in the Living Laboratory (section 1.3.2) and in the impact case studies selected from across the School.

1.2.1. Our Transformation

The focus of the strategy from 2008 to 2014 had been to increase the number of doctorally qualified staff and increase the quality and quantity of outputs. By REF2014 we were by GPA, the 8th most improved Business School. To maintain this trajectory required a step change in scale and ambition, building a research environment that will sustain this momentum. The University's transformational growth strategy of volume with quality prioritised substantial investment in new posts that would '*support investigator-led disciplinary research*' (REF5a), providing funds for significant and sustained investment in the Business School. Delivering a fundamental shift in the research power of the School, our UoA 17 submission represents the work of **166 Category A staff (159.1 FTE)**, **representing 74% of Business School colleagues** and *exceeding our target of two thirds*.   The remaining 26% without significant responsibility for research and on a development trajectory, include colleagues undertaking in-service doctoral study (section 2.1.3). Over a six-year period, this represents an almost seven-fold increase from the 23.2 FTE Category A staff submitted to REF2014 and substantial investment in the academic staff base that has grown from 130 FTE to 215.1 FTE over the same period. In support of our academic community, the University has also invested in a doctoral Research Development Fund Studentship Scheme (RDFSS) committing £1.65 million to the Business School for fully funded doctoral studentships (section 2.2); supported our recruitment of University Research Fellows and further enhanced our physical infrastructure.
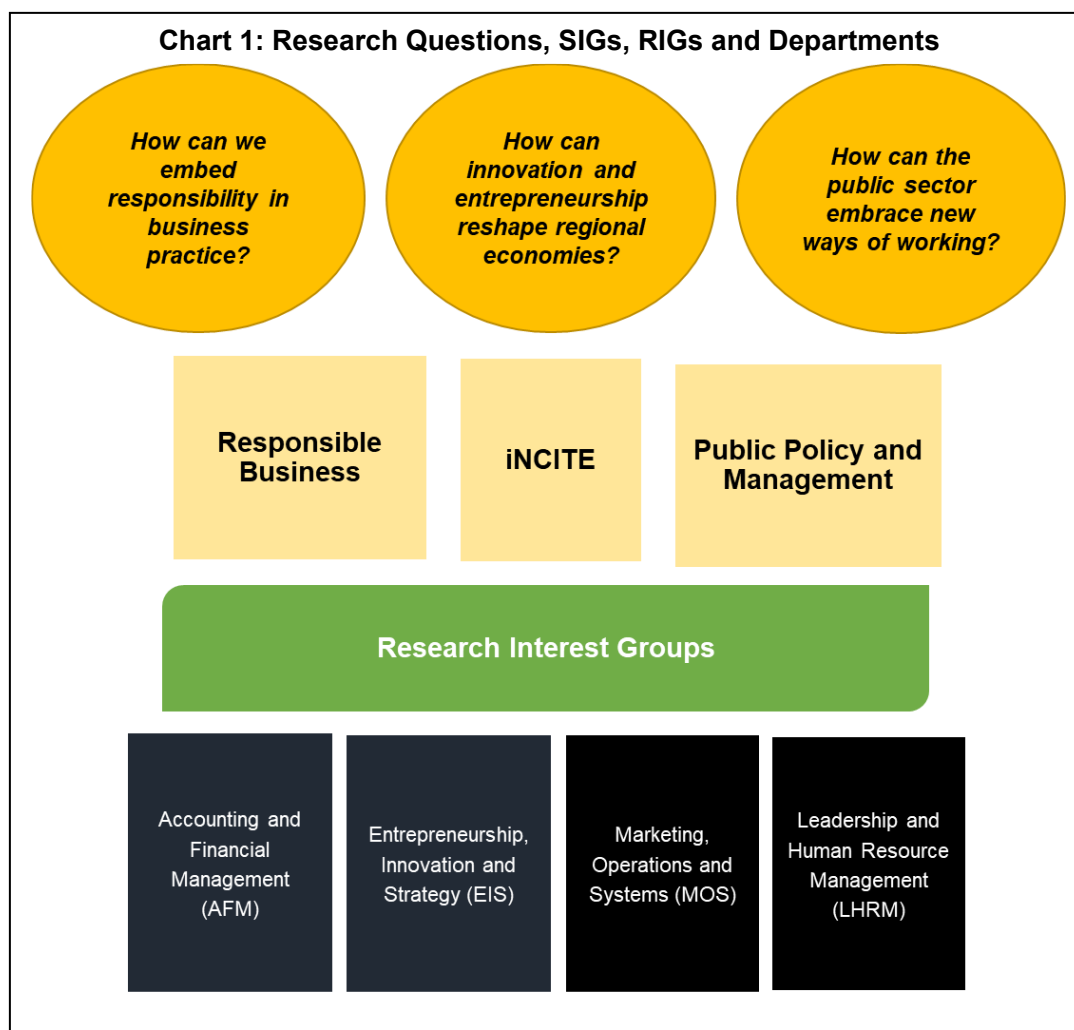
1.2.2. Evidence of Progress Since REF2014

Since 2014, we have further built research capacity to support our research priorities by developing early career colleagues into independent researchers, investing in additional staff, and improving the quality of our research contribution. We have delivered against our objectives in a way that maintains the centrality of our values and sustains an environment that supports our entire academic community. As set out in Table 1 (Research Intensity and Scale), our submission includes 31 Early Career Researchers (ECRs) compared with 8 ECRs submitted in 2014. Further, we have seen a near doubling of RCGI (from £1.0 million over REF2014 to £1.8 million over REF2021) and our first 'million' plus funded project (Euro 1 million GETM3, funded under **Horizon2020** Research and Innovation Programme).

Table 1: Research Intensity and Scale		
REF Period	**2014**	**2021**
Academic Staff Base (FTE)	130.0	215.1
Size of Submission (FTE)	23.2	159.1
% of staff submitted	*18%*	*74%*
Impact Case Studies Submitted	3	9
PGR Completions	64	106
RGCI Income Secured (£m)	£1.0	£1.8
ECRs Submitted	8	31
Size of Professoriate	12	34

1.3. Research Organisation

Chart 1 (Research Questions, SIGs, RIGs and Departments) illustrates our research organisation. To address our broad research questions, we revisited the research clusters from REF2014 and reorganised around three main interdisciplinary SIGs. This reorganisation allowed us to build on existing strengths, contribute research relevant to the UN Sustainable Development Goals and sustain a vibrant research culture during a period of rapid growth. Therefore, whilst two of our research SIGs continue our long-standing work in **Responsible Business** (section 1.3.1) and in entrepreneurship (**Innovation, Regional Transformation and Entrepreneurship - iNCITE** section 1.3.2), we have added a third in **Public Policy and Management** (section 1.3.3). The School's formal support for interdisciplinary research is channelled through these overlapping areas and through the University Multidisciplinary Research Themes (MDRTs), particularly those of **Human and Digital Design** (*Önkal* is Steering Group Chair for Human and Digital Design multi-disciplinary theme and *R. Wilson* is Co-Convenor) and **Global Development Futures** (*Mordue* is a member of the steering group) (REF 5a)**.** Recognising that collaborative activity also occurs at the intersection of subjects that fall within the business and management discipline, the SIGs are complemented by our smaller and more organic **Research Interest Groups** (RIGs) (section 1.3.4). The RIGs provide a platform for exploring emerging areas and a recognisable group identity that brings scholars together to support outputs, funding applications and doctoral students. The research groups involve colleagues across departments. Academic colleagues can have overlapping membership of groups reflecting interdisciplinary collaboration. This structure facilitates relationships with our stakeholders in business and the wider community through, for example, seminar series, sponsored doctoral students and funded research. Each signature area is led by a team of experienced researchers who lead collaborations with external partners (*e.g* North East Initiative on Business Ethics -NIBE) and companies (*e.g* Sage UK) to enhance our learning and extend our reach.

Chart 1: Research Questions, SIGs, RIGs and Departments

How can we embed responsibility in business practice?

How can innovation and entrepreneurship reshape regional economies?

How can the public sector embrace new ways of working?

Responsible Business

iNCITE

Public Policy and Management

Research Interest Groups

Accounting and Financial Management (AFM)

Entrepreneurship, Innovation and Strategy (EIS)

Marketing, Operations and Systems (MOS)

Leadership and Human Resource Management (LHRM)

The research plans of the SIGs and RIGs are taken into account by Heads of Department, feeding into recruitment decisions. The School comprises four subject departments: Accounting and Financial Management (AFM); Entrepreneurship, Innovation and Strategy (EIS); Marketing, Operations and Systems (MOS); and Leadership and Human Resource Management (LHRM). Research within each department is led by a professorial Research and Knowledge Exchange (RaKE) Director who is supported by the wider professoriate and senior academic staff in mentoring and supporting all academic colleagues within their department. The Directors consider allocations of research hours, sabbaticals (prior to consideration by the sabbatical committee) and conference funding. The hours allocated to research (now, on average, 40% of workload) have more than doubled from 2014 to 2020 and a total of 122 sabbaticals have been supported over the REF2021 period (section 2.1.5).

1.3.1. Responsible Business Signature Area

Research within this well-established area addresses the ways in which responsible business practices are embedded in organisations, especially with respect to business ethics and corporate

behaviour. Responsible business was included in the Risk, Ethics and Governance research cluster (REF2014) and in RAE2008 within International Business and Governance. We have been ranked in the world's top 50 by citation in two published studies of research in business ethics. More than 90 academic colleagues and research students combine long-standing areas of expertise such as Corporate Governance and the Virtues with more recently developed areas including Spirituality in Management and Sustainable Working Futures. The group embraces new ECRs (*e.g. Shin, Prado* and *Vu* in Corporate Social Responsibility) and additional professorial appointments over the cycle (*Blenkinsopp, Collins, Haynes, Varley*) adding to existing professorial leadership (*Beadle, Brzeszczynski, Fitzgerald, Harvey, Shrives*).

Responsible Business areas of specialism and interdisciplinary themes:

Character and Virtues (*Beadle, Angus Robson, Nicholson*) Beadle's long-standing contributions on virtue ethics are supplemented by the work of Angus Robson (on banking and on care work) and Nicholson (on moral agency in corporate philanthropy).

Corporate Governance (*Shrives, Sorour, Collins, Price, Salama*) Contributions in risk reporting, corporate governance (Impact Case Study, Sorour*: Reforming corporate governance policies, practices, and institutional culture in Egyptian maritime companies*), comparative disclosure and accounting regulation.

Financial Crime (*Harvey, Sproat*) Their research on money laundering includes **FCDO** grant funded anti-corruption work. These researchers, together with colleagues from the Law School, are also part of the *Financial Crime and Compliance RIG.*

Employment Relations and Migration (*Fitzgerald, Silles, Bader*) Embraces Fitzgerald's trade union and migration work (Impact Case Study, Fitzgerald: *Supporting UK trades unions to advance social justice and inclusion for migrant and blacklisted workers*), Bader's work focuses on expatriate experience and Silles' work on women and labour markets.

Responsible Tourism (*Mordue, Carnegie, Varley*) Includes Mordue's research on wind farms (Impact case Study, Mordue, *Improving understanding of tourism and landscape to shape policy and planning for windfarm developments*), Varley's work on food tourism and sustainability and Carnegie's work on museums.

Socially Responsible Investment (*Brzeszczynski, Ghimire*) Focuses on the comparative performance of SRI stock relative to the overall market.

Spirituality in Management and Law (*Burton, Vu*) Includes Burton's applications of Quaker decision-making practices to Boards (Impact Case Study, Burton: *Embedding responsible practices into business by taking inspiration from the Quakers*) and Vu's work on applications of mindfulness in business.

Sustainability and CSR (*Hope, Shin, Vu, Li, Haynes, Salama*) includes comparative studies of CSR reporting (Shin), CSR in developing countries (Vu), Business Planning for Sustainability (Hope), sustainability through closed loop supply chains (Li) and financial and

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market responses to Carbon Disclosure (Salama). Haynes' 2017 interdisciplinary paper on the Circular Economy (with Murray & Skene) in the Journal of Business Ethics has been downloaded over 31,000 times since publication and is being heavily cited.

Sustainable Working Futures RIG (*Blenkinsopp, Edgell, Yeoman, Bader, Hesselgreaves, Collins*) includes Blenkinsopp's research on graduate careers, Edgell's work on the ageing workforce, Yeoman's research on meaningful work, Bader's research on changes in recruitment practices and Hesselgreaves research in work extensification.

1.3.2. The Northumbria Centre for Innovation, Regional Transformation and Entrepreneurship – iNCITE Signature Area

40 academic colleagues and research students in iNCITE consider how governments at all scales but especially at a city and regional level promote innovation and entrepreneurship in support of economic and social transformation. We seek to build an understanding of core underlying innovation and regional development processes, evaluate existing policy and work with partners to develop new policies and strategies to address key regional challenges. Examples of current research engagement in the region (also drawing from colleagues in Public Policy and Management) include collaboration with the North East Local Economic Partnership (LEP) on a regional entrepreneurship strategy with participation in a programme led by Massachusetts Institute of Technology (MIT), work with the regional tourism sector, and engagement with the Newcastle-wide North East Policy and Evidence Hub, a civic and university partnership with University of Newcastle, North East LEP, North of Tyne Combined Authority and Newcastle City Council. Of course, the North East of England is not alone in facing the challenges of a legacy of de-industrialisation. We have sought to share our research with other regions across the UK and further afield, such as through our involvement in **EU Marie Curie** collaborations on talent management and the role of universities in regional innovation. Several new professors have been recruited over the cycle (*Charles, Liddle, Shutt, Bosworth, Newbery, R Wilson, Martin*) alongside three research fellows (*Wong, Kummitha, Bottomley),* bringing additional experience, networks and relationships with funders and international partners.

iNCITE areas of specialism and interdisciplinary themes:

The governance of science and innovation policy and regional development: (*Charles, Cunningham***)**. Work includes leadership of an edited book on historical clusters (*J Wilson, Charles)*, and research on smart specialisation and innovation ecosystems (*Charles, R Wilson, Cunningham*).

Universities, commercialisation and regional engagement: (*Cunningham, Charles, Guerrero, Johnston, Pearce*) This theme includes the roles played by universities and individual academics within regional and national innovation systems and the effects of changes in the governance of higher education systems and institutions. Current projects include participation in a seven country **Marie Curie ITN** on universities and regional

innovation (Charles), a study for the EU Joint Research Centre on the role and responsibilities of PIs (Impact Case Study, Cunningham: *Changing managerial practice to enhance professional development for Principal Investigators of major projects*), collaboration between Cunningham, Guerrero and David Urbano (UA Barcelona) on the entrepreneurial university and research on university community engagement as part of the civic university agreement between both universities in Newcastle and local partners and the large GETM3 project (**Horizon 2020 MSCA RISE**) on global entrepreneurial talent management.

Entrepreneurship and SME development, rural enterprise (*Cabras, Bosworth, Newbery, Nyuur*) Work by Cabras on the role of pubs and microbreweries in rural areas has been supported by the Society for Independent Brewers (SIBA) (Impact Case Study, Cabras: *'It's our shout!': Enabling rural communities to save their local pubs and foster community cohesion, wellbeing, employment, and business opportunities*). Bosworth and Newbery are leading a research project on rural entrepreneurship for the Department for Environment, Food and Rural Affairs (DEFRA).

Creativity and place (*Mordue, S Wilson, Prescott*) Includes the development of creative and cultural industries and their role in placemaking.

Digital infrastructures and innovation *(Whalley, Gerli, Dawson, Bosworth)* includes telecommunications policy and application of digital technology innovation, innovative tech-start-ups and digitally enabled co-working.

The Living Lab (*Wilson, Martin, Jamieson, Lowe*) provides an approach to innovating relationships between stakeholders in multi-agency contexts. The Lab team have successfully enabled organisations working with challenges as diverse as flooding and innovation services in the health service. Current work includes Service Innovation in the EU (**Horizon 2020 CoSIE project**) and digital records and learning health systems for care in the NHS (Great North Care Record project).

1.3.3. Public Policy and Management Signature Area

The School has one of the largest groups of public policy and management scholars (34 with 27 doctoral students) in the UK. The research group considers future ways of working within the public sector. This embraces public sector leadership and reform, partnerships and networks, comparison of different governance arrangements, public and social value, relational contracting, a systems approach to complex questions, the effectiveness of regional networks and digital connectivity between public bodies and clients. Led by professorial staff recruited immediately post REF2014 (*Liddle, Shutt, Blenkinsopp*), the SIG has built on earlier work by *Fenwick* (local government and public sector leadership), *Waring/Wainwright* (NHS and information systems) and *Whalley* (telecommunication policy and regulation). Their work is complemented by three Research Fellows (*Dilaver, Gerli and Goumagias*) all of whom work on Digital 'activity' in the context of broader Public Policy research area in furtherance of the Human and Digital Design

MDRT. PPM researchers collaborate with Amsterdam City Council and Amsterdam Economic Board together with CIPFA International through the Centre for Partnering in looking at developing measures of social and public value. Attracted by our strength in this area, more recent appointments include: *Mackenzie,* public sector work and organisations, *Wagner*, climate policy and networks, *Corduneanu*, public sector motivation, and *Yeoman***,** meaningful cities. Academics within PPM collaborate closely with those in the Living Lab, particularly in complex commissioning research.

PPM areas of specialism and interdisciplinary themes:

Public Sector Leadership, Partnerships and Entrepreneurship (*Liddle, Shutt, Elliott, Johnston*) Comparative research on city leadership and Universities in Newcastle, Amsterdam, and London. Work with the Cabinet Office National Leadership Centre (*Liddle, Lowe, Blenkinsopp* and *Hesselgreaves*) on engaging and developing senior public sector leaders. Social, public and relational partnering with the Centre for Partnering, in collaboration with Blavatnik, Oxford, Cardiff, Stirling and MMU.

Regional Development and Public Policy (*Liddle, Shutt, Johnston*) The team has successfully secured **UKRI Research England** funds (2020) and provided research for the North East LEP (2020) on regional public finance. Other research includes developing an evidence base on regional social and economic indicators and public policy; assessing the NE and Amsterdam City Region post-Brexit; the Borderlands and Brexit (With Prof Keith Shaw, Social Sciences); conceptualising and operationalising vulnerability (with Dr Addidle, Teesside), the NHS Regional Plan (with the School of Nursing, Northumbria), Reform of Public Services and research on LEPs and Local Industrial Strategies.

Complex Commissioning (*R Wilson, Martin, Hesselgreaves, Lowe, French, Harrison, Hawkins*) This group have created a new complexity-informed paradigm for the funding, commissioning and performance management of social interventions called Human Learning Systems (Impact Case Study, Lowe: *Transforming public services through new commissioning and management priorities*). In support of a Community of Practice, the team is undertaking action research programmes with public and voluntary sector funders and delivery organisations to explore how this paradigm is being implemented.

1.3.4. Research Interest Groups

Outside of the Signature Areas, all colleagues have the opportunity to create their own Research Interest Groups. The groups receive financial support for seminars, visiting speakers and workshops. In 2019/20 £27,500 was available for these groups and, despite the impact of Covid-19, the School provided the same level of funding in 2020/21, enabling these groups to maintain momentum in the virtual sphere. Examples of independent RIGs include: **Behaviour, Branding and Digital Insights; Business History; Critical Perspectives in Management Studies; Decisions and Analytics;** and, **Global Operations and Supply Chain Competitiveness.** Some

RIGs, such as **Sustainable Working Futures, Financial Crime and Compliance** and **Complexity and Learning Systems** are aligned within a signature area.

Business History provides an example of the range of research activity taking place within the RIGs. The group (*J Wilson*; *Batiz-Lazo*; *Perchard*; *Wong*; *Buchnea*; *Jones*; and *Salama*) has well-established links to leading global centres in the field at Copenhagen Business School, the Centre for Business History in Scotland (University of Glasgow), and the Centre for the History of Business, Technology and Society (Hagley Museum and Library, USA). Its members include associates in other parts of the School (*Burton*, *Charles*), as well as in Law and History. It established the highly successful and impactful transnational business history collective seminar series (*Batiz-Lazo*; *Wong*; *Buchnea*; and *Jones*), as well as running its own seminar series attracting global names in the field. It is leading on a number of vertically integrated project initiatives with the University of Southern-Eastern Norway (*J Wilson*; *Wong*; *Perchard*; *Buchnea*; and *Jones*), with University College Cork and University of Glasgow (*Perchard*; *Buchnea*; *J Wilson*; and *Wong*). *Perchard* is also co-leading a large **AHRC grant** and one with the **Social Sciences and Humanities Research Council of Canada** (together totalling around £1.8 million). *J Wilson* is leading on a book project on industrial clusters (involving *Perchard*; *Charles*; *Wong;* and *Buchnea*). Business History staff are also involved with important public and policy engagement work with strong industry links (*Batiz-Lazo* – the ATM Industry Association; *Perchard* – the Aluminium Federation). There are two business history PhD projects associated with the group both bridging understanding between business history and organisational change and identity (one on Deutsche Postbank supervised by *J Wilson* and *Batiz-Lazo*; and another on the role of history in organisational identity post mergers and acquisitions supervised by *Buchnea* and *Wong*), and *Batiz-Lazo* has recently secured €44,000 with a doctoral student on the history of fintech (supported by the **Spanish Ministry of Science**).

1.4. Supporting Impact

Strategic investment in impact that achieves meaningful change for our external partners and stakeholders is primarily embedded within our SIGs and tailored to their specific plans. However, we also encourage RIGs and individual researchers to volunteer innovative ideas and approaches. We have committed time and financial resource to impact pathway development, running impact awareness workshops and supporting colleagues to attend external impact events. Particularly with respect to influencing policy, we seek to build lasting collaborations both with international organisations (*e.g*. Global Integrity Washington, Enterprise Educators Foundation East Africa, General Federation of Trade Unions) and local policy makers (*e.g.* North East LEP) as a basis for further research impact. Our research is informing large international organisations (such as the EU through developing Principal Investigator skills - *Cunningham*) as well as regional development (Tees Valley Combined Authority through marketing and branding *-Apostolidis;* Northumberland

County Council through impact of wind farms - *Mordue; and* the Institute for Local Government and Gateshead MBC through citizen engagement - *Myers* and *Hesselgreaves)*.Our regional transformation initiatives provide a rich seam of impact evidence arising from the increased scale and range of our work. The nine submitted Impact case Studies reflect that diversity and the applied focus of our work.

At an operational level, support for the development of impact (including ambitions beyond REF) has been systematic and on-going and the University has invested in Impact Managers and Faculty-facing impact coordinators who have, over a number of years, been working with individual researchers to support evidence collection. This has meant that from an early stage, impact has been built into project design. The School has supported a professorial academic impact lead (*Fitzgerald*) who advises research active staff on embedding and achieving impact, from identifying pathways, to engaging stakeholders and to collation of evidence. In addition, there has been budgetary support to fund both impact activity and evidence gathering (for example *Burton* visiting companies across the UK to advise on deployment of Quaker principles in management, *Sorour* to work with ports authorities in Egypt) and *Liddle, Shutt and Cabras* who engage with Parliamentarians over different regions' policy. Pathways to impact have also been supported, for example *Harvey* attending academic advisory meetings with the Law Commission.

1.5. Research Integrity, Open Research and Open Data

Research impact within the School has been supported through the University's Open Access (OA) policy. All outputs are available as green open access to reach the widest possible audience. Academics enter new scholarly outputs through their personal portal on Elsevier's Publications and Research (Pure) system that has improved management and accessibility of our open-access institutional repository (Northumbria Research Link). Beyond the collective OA agreements in place with some publishers, gold open access processing charges for outputs, where high-quality research will reach a larger target audience, have been resourced by central University funding. During the REF period, 66 Gold Access articles (£47,358) were funded on behalf of the School, outside research grant support. Open access archiving of data in the University's Research Data Repository is supported by the central Scholarly Communications Team.

Research is underpinned by appropriate structures of governance. The University maintains high standards in research quality and integrity across all research activity undertaken by academic staff and students. All staff and students are required to obtain research ethics clearance through an online tool. Every project is ranked for its ethical sensitivity with additional procedures enabling greater scrutiny for more sensitive projects. The School has a Director of Research Ethics and each Department has a Departmental Ethics Lead who reviews ethics applications and provides advice and guidance. The University continually updates guidance such as the annual Research

Ethics and Governance Handbook. There is an annual Research Ethics Audit carried out across the University that tests the robustness of our processes. Data integrity includes principles of data management and compliance with General Data Protection Regulation (GDPR) and how this legislation applies to research. Courses for both research ethics compliance and data protection are provided for research students and as part of mandatory staff training.

1.6. Future Strategic Aims and Sustainability (2021-2028)

The School is refreshing its mission based on the evidence we have accumulated over the past several years of working as '**a force for good'** emphasising the value of applied research, interdisciplinary interactions and positive impact on society. Our findings feed into research informed teaching, ensuring that our research also inspires our graduates, influencing the next generation of business leaders. Through the mechanisms set out in section 2, we will continue to recruit, develop and retain high-quality academics. Setting out a nurturing culture means maintaining a positive environment for ECRs to achieve their personal research goals and advance their careers, achieving associate and professorial titles. Applying the most progressive equality, diversity and inclusion (EDI) principles to the way we operate, developing a broadly representative and cosmopolitan workforce at all levels, we will continue to actively promote the diversity of our School; and we will provide support and mentoring for junior and mid-career staff.

We will deepen and intensify our external engagement networks (section 4) so that our research contributes to the public good whilst ensuring that our voices influence policy making at local, national and international levels. The School has close relationships across business and government enabling us to respond quickly to new challenges and opportunities. Building on the success of the Living Lab, we plan further investment in facilities through introduction of an innovative new Behavioural Sciences Lab to further the work of the Decisions and Analytics Research Interest Group. These facilities will support an expanded range and number of clients as they tackle increasingly complex decision making.
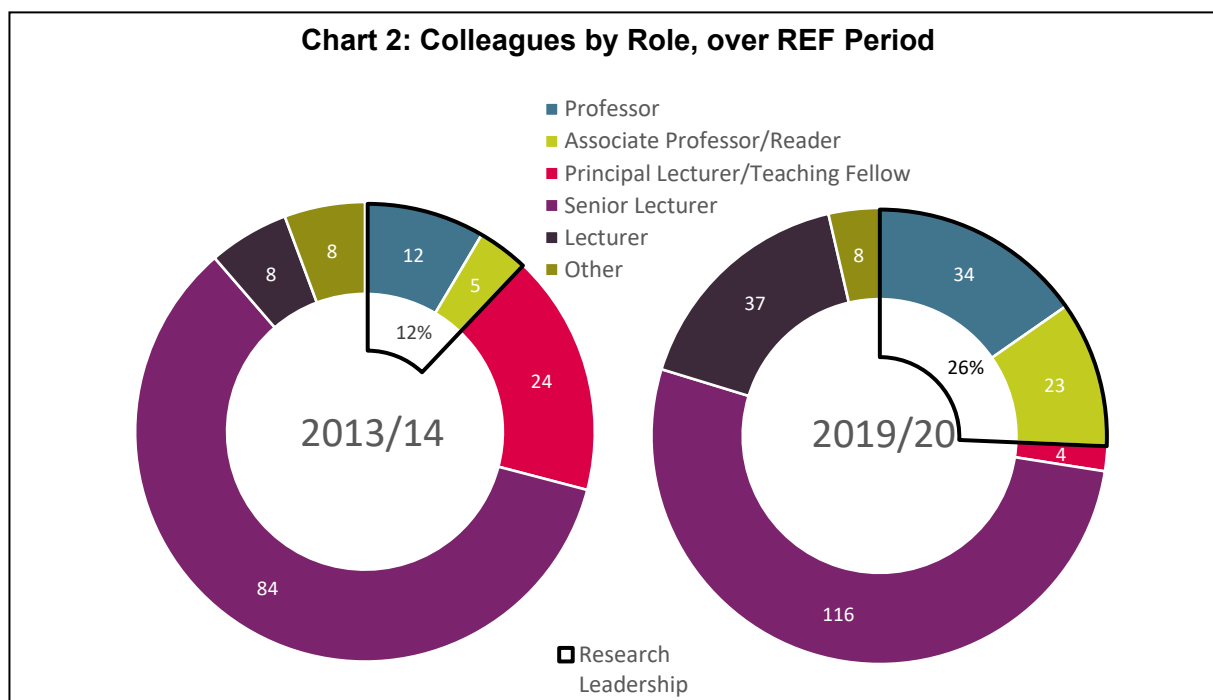
We aim to achieve:

- 100% submission of all Business School academic colleagues to REF2028 by enabling staff currently on a development trajectory to have a significant responsibility for research.
- Continued growth in secured research income with more awards of £500k plus.
- Support for ECR colleagues through further enhancement to our existing sector-leading Research and Enterprise Development Programme (section 2.1).
- Further expansion in the number of doctoral students to ensure a 1:1 ratio with staff submitted to the next REF.

Meeting these challenges will require resources. To help achieve our aims we will seek to increase our involvement with key funders with a target of doubling research awards to a total of £8 million for the next cycle. As evidence of ability to meet this ambitious target, *Liddle* and *Shutt* (Public Policy and Management) recently secured £470,000 **UKRI** funding for research on Local Government Commissioning and Procurement under Covid-19.
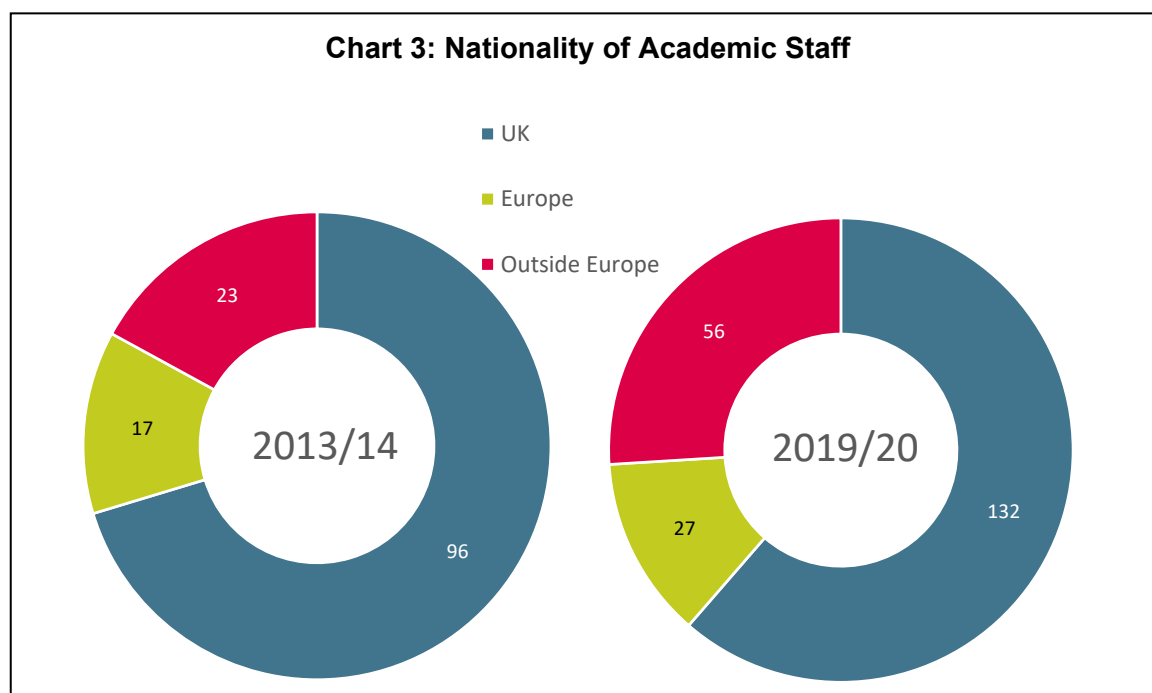
2. People

2.1. Academic Staff Strategy and Staff Development

The University has made a very major investment in the Business School since 2014. Our strategy has been to focus this investment on development and retention of existing staff and on strategic recruitment of experienced and early career researchers aligned with our three signature areas of *Responsible Business, iNCITE* and *Public Policy and Management*. As seen in Chart 2 (Colleagues by Role, over REF Period), the result of this investment over the REF period has firstly, seen the proportion of colleagues in research leadership roles expand from 12% to 26% of all staff (17 colleagues to 57); and secondly, seen staff numbers increase by a third, from 141 (130 FTE) to 222 (215.1 FTE). We have 23 women in senior research leadership positions, including nine professors (four in REF2014). At the same time, the proportion of ECRs has expanded at the Lecturer grade from 6% to 17% of all staff, a fourfold increase from 8 to 37, with 31 submitted to REF2021. Our research skills development of existing staff has included the successful completion of 35 staff doctorates (section 2.1.3).

Chart 2: Colleagues by Role, over REF Period

- Professor
- Associate Professor/Reader
- Principal Lecturer/Teaching Fellow
- Senior Lecturer
- Lecturer
- Other

2013/14: 12, 5, 24, 84, 8, 8 — 12% Research Leadership

2019/20: 34, 23, 4, 116, 37, 8 — 26% Research Leadership

2.1.1. Recruitment, Probation and Mentoring

All new appointees to the School follow a standardised University selection and interview process that includes a research panel discussion. For research sustainability, new colleagues are appointed according to their fit with the established academic areas of strength as well as research attainment or promise. An early School recruitment priority, in line with the University's research strategy, was to expand the professoriate. Such an expansion was vital to recalibrate our research quality, enhance our RGCI and grow the community of doctoral students. Five 0.2 FTE senior staff (professors and associate professors) also contribute to our strategy. Professors *Reimann, Galvin, Bozionelos* and Associate Professors Dr *Guerrero* and Dr *Yeoman* play an active role through subject development, mentoring staff, running workshops, co-publishing and contributing to income generation. The School benefits from the continuing involvement of our emeritus professors, visiting professors and fellows (*e.g.* aligned with PPM are Professor Alex Murdock who was Director of Third Sector Research Centre and Professor Hiroko Kudo of Chuo University Tokyo; aligned with iNCITE are Professor Al Link, University of North Carolina, Greensboro and Professor Erik Lehmann, University of Augsburg).

Chart 3: Nationality of Academic Staff

- UK
- Europe
- Outside Europe

2013/14: 96, 17, 23
2019/20: 132, 27, 56

As indicated in Chart 3 (Nationality of Academic Staff), we have further diversified the **international nature of the School** increasing the proportion of staff from outside of Europe from 16.9% to 26.1%, drawing academic colleagues from some 41 different countries. Staff from Europe and outside of Europe make up 46% of our REF submission and of the senior research leadership, 16 are from countries outside of the UK (ten associate professors and six full professors).

New colleagues are supported through probation both by their line manager and by an experienced departmental research mentor. Beyond probation, mentors provide on-going support through, for example, reviewing colleagues' annual **Personal Research and Innovation Plans (PRIP)** and peer reviewing draft outputs and grant applications. They will also advise on annual promotion rounds (section 2.1.5). New recruits' probation normally lasts for 22 months and 12 months for those with prior academic experience. The probation period enables colleagues to agree research targets appropriate to their career stage; these include journal submission and, where appropriate, grant application that will support their subsequent career development.

Workload is targeted as 40:40:20 (research, teaching, management) with lighter initial teaching loads. Line managers and research mentors work closely together in supporting staff through probation and maintain informal as well as formal contact. They also help guide new colleagues' integration within Research Signature /Research Interest Groups.

2.1.2. Early Career Researchers (ECRs)

Our retention of an **HR Excellence in Research Award** is a tribute to the quality of the ECR support and development that we provide (REF5a). We have invested in the development of new ECRs increasing from 8 in REF2014 to 31 in REF2021. All are recruited on permanent contracts and are supported to establish their research direction and collaborations through additional research time allocation for their first two years post-doctoral award. To **foster ECR progression and development into future research leaders**, we ensure that opportunities are provided for ECRs to gain experience with research management. This includes inclusion in supervisory teams, PGR progression panels and mock vivas. Financial support is provided to attend and present at conferences in support of their network building and skill support is embedded in our Research and Enterprise Development Programme (section 2.1.5). We particularly encourage collaboration between mentors and ECRs. Examples include *Angus Robson* being supported by *Beadle* to secure an output in 'Journal of Institutional Economics', *Worst*, supported by *Callahan* to achieve her first post-doctoral output in 'Human Resource Development' and *Callahan* again supporting *Keshtiban* in securing a grant for conducting research with the 'Society of Gender Professionals in Cambodia'. We also encourage ECRs to establish themselves in national and international networks, for example, *Watson,* who is now on the Board of Trustees for the Institute for Small Business and Entrepreneurship (ISBE) and who is pioneering a programme of activities for ECRs in entrepreneurship.

The ECR voice is represented through University, Faculty and Departmental Research and Knowledge Exchange committees and via implementation of feedback from the Careers in Research Online Survey (CROS). We are realistic in anticipating that ECRs may look for opportunities elsewhere and in implementing the Concordat to Support the Career Development

of Researchers (REF5a) and the Vitae Researcher Development Framework (REF5a), we encourage ECRs to work with partners at other institutions as they develop their research identities and employability skills. Several former ECRs now occupy senior roles in other business schools. Examples include Ferry who is Professor of Accounting and Head of Department at Durham and Adegbite who is Professor of Accounting and Corporate Governance at Nottingham.

2.1.3. In-Service Doctorates

The provision of structured in-service doctoral training with full fee remission and sabbatical support (section 2.1.5) provides colleagues on a development trajectory, with the skills required for research. This was a strategic objective that commenced with RAE2008 to increase the proportion of staff with doctoral qualifications and provide a support mechanism for mid-career colleagues. Additionally, we offer a bespoke Graduate Tutor (current cohort of six) doctoral recruitment scheme that enables practitioners to develop academic careers whilst teaching their discipline. This has been especially important in some discipline areas such as accounting where few practitioners have a doctoral qualification on application. Since 2013/14 the proportion of staff with doctoral qualification has risen from 67% to 82% (Chart 4: Staff with Doctorates).

Chart 4: Staff with Doctorates
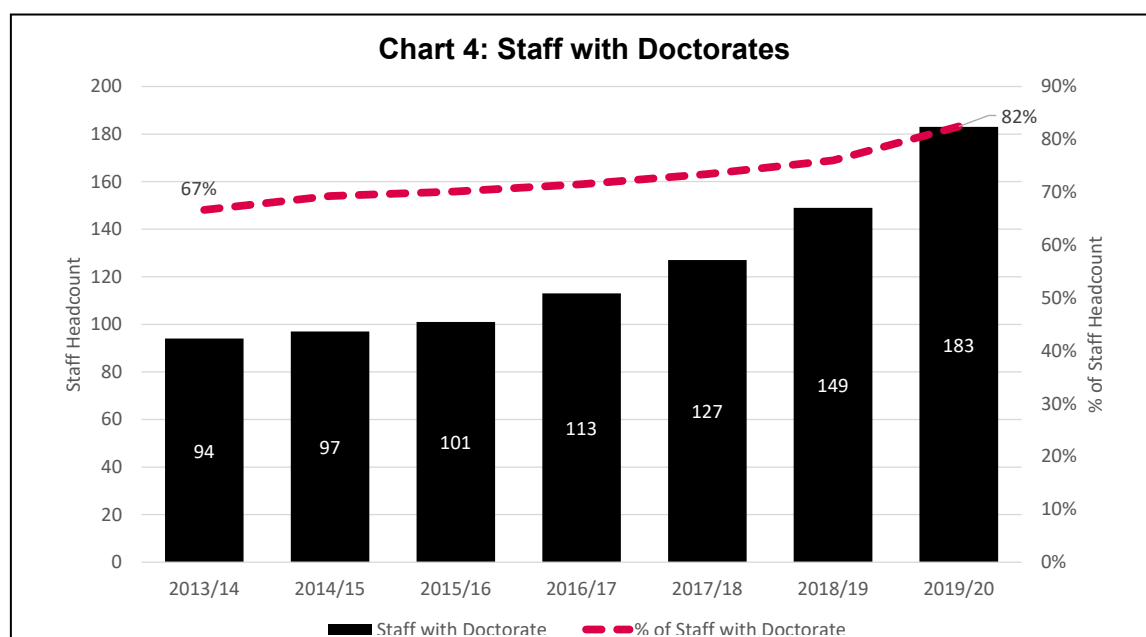
2.1.4. Career Development - Appraisals and Promotion

The School provides an inclusive and comprehensive approach to research support and academic development of all colleagues. All academic staff work with their mentors on an annual personal PRIP that supports their **Performance and Development Appraisal (PDA).** Such planning supports their growth and consequent long-term retention. Having successfully completed probation, academic colleagues transition to an annual (with opportunity for mid-point evaluation) PDA process with their line manager. This developmental and confidential process provides

space and time to discuss research plans and goals in the context of academic duties and responsibilities, achievements and support needs and including sabbatical application (section 2.1.5).

For those with more experience, the PDA also provides a structured plan for internal promotion to Associate Professor and Professor. The University Appointments Board issues an annual call for applications for promotion (REF5a) with decisions informed by external reviews from academics at leading institutions of colleagues' accomplishments. It honoured this commitment during 2020. Applications are scrutinised at both Faculty and University level against EDI objectives in order to ensure equity and parity throughout the process particularly for those with protected characteristics or who are working part-time (section 2.3). Support and information sessions on the progression process are open to all and allow for clarity and transparency. Within the School, senior colleagues undertake CV gap analysis against promotion criteria and review and feedback on progression plans and applications. Over the last three years eleven colleagues have achieved promotion from senior lecturer to associate professor (including *Shokri, Hope, Johnston, Bader, Sorour*) and three associate professors returned in REF2014 have subsequently attained full chairs (*Beadle, Fitzgerald, Thompson*).

2.1.5. Research Support and Sabbaticals
The University encourages all colleagues (full and part-time) to spend one semester in seven on sabbatical (REF5a). To facilitate this, research mentors and line managers include sabbatical planning in colleagues' PDA and PRIP discussions. Target-led applications are made following the annual call and reviewed by committees at Faculty and University levels with feedback provided. Applications made by colleagues returning to work after a period of absence or in support of doctoral completion are prioritised. The Business School has supported a total of 122 semester long academic sabbaticals in this REF period. Heads of Department receive reports against targets at the completion of the sabbatical period.

The School provides a variety of research development activities. Most notably, the School runs an innovative **Research and Enterprise Development Programme (REDP)** structured around two spines. The first spine is a training pathway to accompany doctoral study (for all PGR researchers), and the second a development pathway for ECR colleagues. In 2019, *Jones*, inaugurated the offsite '**Baltic' sessions** (once a month for a half day) as a complement to the second spine. Located in the Baltic Centre for Contemporary Arts to provide a creative thinking space, the sessions transitioned to a virtual basis in response to Covid-19. These events bring researchers from outside the University to discuss their passion for aspects of research practice such as the importance of impact, engagement, and partnership building. ECRs report having found these sessions inspiring.

Growing and nurturing academic colleagues requires financial support in addition to skill development and mentoring. The School has invested a total of £1.1 million over the five years from 2015 to 2020 in a dedicated research budget that is managed through Departments. These funds are to promote and support conference attendance, extend invitations to external speakers, support interdisciplinary workshop organisation and other engagement events. In addition to these funds, the School has invested £240,000 over the REF cycle in Research Assistant support; maintained a £120,000 *p.a*. fund for conferences with a further £27,500 *p.a*. for the Signature Areas and Research Interest Groups to support specific external profile building activity such as the Responsible Business Seminar series.

From 2018/19 the Faculty has also set aside an annual £44,000 to support the creation of a virtual **Knowledge Exchange and Innovation (KEI) Platform**. This initiative was designed to respond to staff requests for seed-funding of events and activity that would lead to collaborations resulting in RGCI, Knowledge Exchange and impact activity. For example, in 2018/19 the KEI platform supported research leadership and positioning through events such as 'Day 1. After BREXIT? The Future of Urban and Regional Development in the North and the UK to 2030' (*Liddle* and *Shutt*), and a 'Closed Loop Supply Chain Management Workshop' (*Reimann*). The former work led to the book 'The North East After Brexit', published in 2019. The Platform has also supported research grant development by supporting colleagues to build contacts with funders *e.g.* Sage and The Department for Business Energy and Industrial Strategy - BEIS (*Sutherland*, *Hesselgreaves* and *Wales*).

2.2. Postgraduate Researcher Students (PGR)

PGR students are financially supported through University funded studentships, industry collaborative studentships, overseas governmental organisations and self-funding. Additionally, we provide doctoral studentships as part of match funding for large bids, integrating PGR students with strong, agenda-setting research and networks. For example, *Önkal's* **Marie-Curie ITN grant** employs an international PhD student on their project evaluating the effects of behavioural nudges on enhancing mental well-being in older people. Recent university funded PGRs (30 RDF funded students have been awarded over the REF period) have been aligned with our signature areas, for example in the areas of whistleblowing, family businesses, board gender diversity, city leadership and local industrial strategies. Collaborative studentships share support between the University and an external partner, examples included projects jointly supported by Northumbrian Water (Responsible Business) and Your Homes Newcastle and Newcastle Council (Public Policy and Management).

Table 2: Doctoral Awards		
		REF2021 Total
PhD	Staff	25
	Not Staff	45
	PhD Total	**70**
Professional Doctorate (PD)	Staff	10
	Not Staff	26
	PD Total	**36**
All Awards	Staff	35
	Not Staff	71
	Total Awards	**106**

As set out in our strategy, a vibrant doctoral community is an integral part of our research structure. The number of PGR students registered in the Business School has increased from 109 in 2014/15 to 164 in 2020/21 and, as in Table 2 (Doctoral Awards), since 2014, 106 doctorates have been awarded compared with 64 during the REF2014 cycle and 39 during RAE2008. As noted in section 2.1.3, a key part of our strategy has been to support staff doctoral enrolment and over the REF cycle, 25 staff have completed PhDs and 10 have completed professional doctorates (PD).

2.2.1. Student Recruitment and Progression

All doctoral advertisements include the following text: *Northumbria University takes pride in, and values, the quality and diversity of our staff and students. We welcome applications from all members of the community.* Applications are reviewed by Doctoral Programme Leaders and are then allocated to the relevant research area by Department Directors of RaKE. Candidates are invited to interview (face to face, online or by telephone) by a panel of at least two members of academic staff who (as is the case in all recruitment) must have completed EDI and unconscious bias training. A decision is reached on the basis of the proposal and the interview performance.
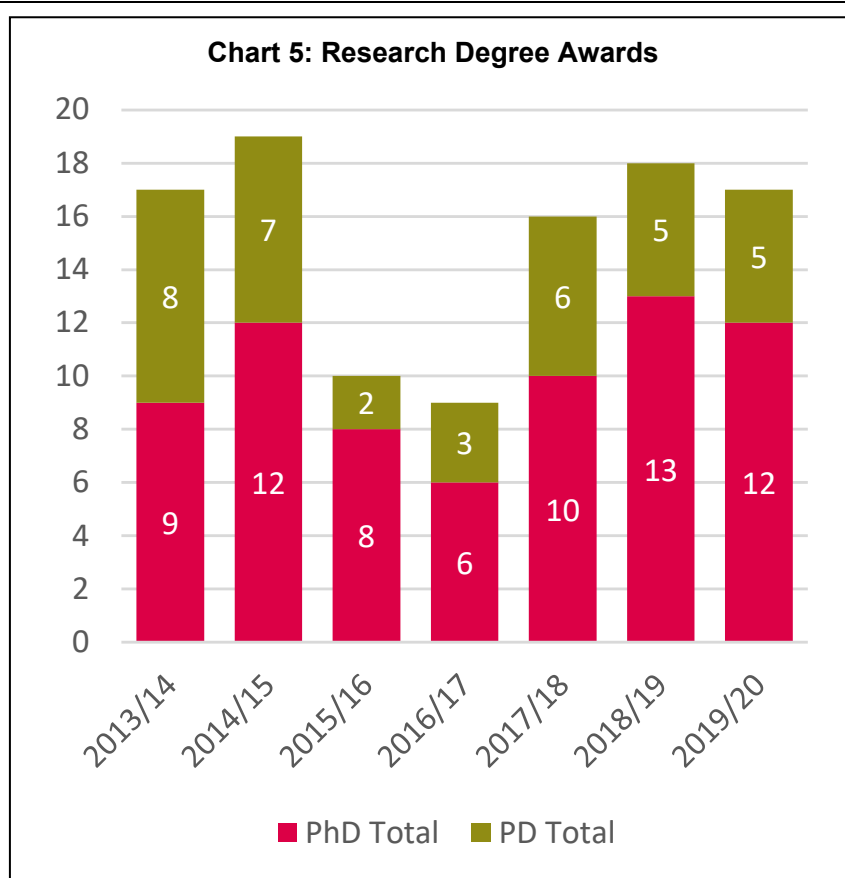
Each doctoral student is guided by a supervisory team (normally two or sometimes three members). The principal supervisor is the director of the student's programme of study, the second (and any additional) supervisor may provide specific methods or analytical support. All supervisors have the relevant subject expertise, research experience, and supervisory skill and are required to attend supervisory training/updates every three years. Students are also supported by a dedicated doctoral programme management team.

Monthly meetings are documented to record progress and objectives using our online e:Vision tool. Student progress is monitored through key milestones. Initial Project Approval (PA) for PhD students is undertaken within four months, as is the equivalent research proposal assignment

submission on the professional doctorate. Formal Annual Progression (AP) is assessed by a panel comprising a chair and subject expert internal examiner who remain with the PGR student throughout. Progression requires submission of a written report and viva. Although it is also a formal exit point, the meetings are highly supportive and developmental, reviewing progress, setting objectives and identifying training and resource needs. The process is overseen by the Graduate School, established in 2008 to provide a dedicated central support and administration function for PGR students (REF5a).

2.2.2. The Professional Doctorate (PD)

Chart 5 (Research Degree Awards) illustrates the relative numbers of PhD and PD awards. The School offers two professional doctorates: Doctor of Business Administration (DBA) and Doctor of Business Leadership (DBL). The Professional Doctorate comprises two block-mode taught elements (one on philosophy and methodology, the other primarily focused on analysis) delivered by external academics as well as by the School's professoriate and other senior researchers. The DBA is particularly attractive to part time students who are working in senior management roles in both the public and private sector and who see the doctoral qualification as a way of enhancing their leadership ambitions. For example, a current part-time DBA student is the Commandant of the Special Security Unit (SSU), a specialised counterterrorism and security unit of the Sindh Police in Pakistan. Whilst closer to home, another leads the Probation Service in Northumberland. Professional Doctorate alumni currently hold senior positions in industry (*e.g.* Gale, CEO NEL Fund Managers; Ives, Chief Executive Hambleton District Council) and in academia (*e.g.* Klasen, full professor at Offenburg University).

Chart 5: Research Degree Awards

Year	PhD Total	PD Total
2013/14	9	8
2014/15	12	7
2015/16	8	2
2016/17	6	3
2017/18	10	6
2018/19	13	5
2019/20	12	5

■ PhD Total   ■ PD Total

2.2.3. Student Training and Support

The School offers a Research and Enterprise Development Programme (REDP) that provides all doctoral students with a structured training pathway (section 2.1.5). In addition, students enrol on the University's **Professional Development and Researcher Training Programme** that aligns with **Vitae Researcher Development Network** and is mapped against four learning domains: intellectual abilities, personal effectiveness, research governance, and engagement. Training is mixed between attending sessions and interactive courses accessed through our e-learning portal. While most courses are optional (covering areas such as presentations, academic writing, career planning and networking), those relating to induction, progression and research ethics, including data protection, are mandatory. The University's Research Innovation Services (RIS) also provide dedicated resources and support for doctoral students including two bursary funding schemes open to all postgraduate research students: Conference Bursary Scheme and Postgraduate Research Events Support Scheme. As part of our commitment to the Concordat to Support the Career Development of Researchers and to Vitae's Researcher Development Framework, Doctoral students' employability is supported through the opportunity to work as associate lecturers (having completed the required University PGR teaching scheme) generally providing seminar support up to a maximum of six hours per week.

Towards the beginning of their second year of study (full time) and third year (part-time), PGR students in the School engage in a **Research Summer School**, held annually in Dublin; moving on-line in response to Covid-19 for summer 2020. To help mitigate the impact of Covid-19 on PGR students during 2020, those on University bursaries were given funded 6-month extensions and others offered no-fee extensions. Research students are integrated into departments and our signature research areas and are welcomed to participate in research seminars and the Baltic sessions (<u>section</u> 2.1.5). Through the **Northern Advanced Research Training Initiative (NARTI)**, PGR students have attended doctoral colloquia (*e.g.* at York, Lancaster and Newcastle Universities) and discipline and / or method workshops hosted by the collaborating Northern universities. Colleagues from our Business School have been involved in developing and leading some of these sessions (*e.g. Cunningham*). Students also participate in other doctoral development opportunities such as ISBE doctoral days. PGR students organise a two-day Faculty annual Doctoral Conference (held on-line in 2020 in response to Covid-19) with prizes for the best poster and full paper submissions. Doctoral students are encouraged and supported by their supervisors to present their work at external conferences and to secure their first publications. For example, Haque, PhD student, and their supervisor *Bian* received the best paper award on track at the American Marketing Association Annual Summer Conference 2019.

2.2.4. PGR Environment and Engagement

The University's performance in the Higher Education Academy's Postgraduate Research Experience Survey (PRES) is positive in all areas, and particularly relating to progress and assessment, research skills, and professional development. Within the School our doctoral students have also been highly complimentary about how we have supported and facilitated the development of a visible doctoral community who are fully part of our research activity. Senior academics in the School worked with PGR representatives to design our **dedicated doctoral suite**. In addition, the University library offers a research commons area for interdisciplinary networking and collaboration (<u>section</u> 3.2).

2.3. Equality, Diversity and Inclusion (EDI)

The Faculty of Business and Law was awarded an **Athena SWAN Bronze Award** in November 2019. Our job-share faculty director(s) of EDI are *ex-officio* members of the faculty executive team, reflecting our EDI commitment. As part of our reflective self-assessment, we initiated an Equity Challenge Project (led by *Callahan)*, a research-based culture change initiative that has embedded gender-mainstreaming principles into research practices, from student projects through to staff publications and bidding. The Equity Challenge Project members have also led on a wide range of research relevant initiatives to improve the position of staff with protected characteristics within our School. The project has, amongst other initiatives, reviewed progress against our EDI objectives: workload planning and allocations; and the support and mentoring of

junior staff to gain recognition and achieve career progression. Changes that have been implemented include:

- Modification of sabbatical application forms to create fair research expectations for staff (most frequently women) on fractional contracts;
- Establishing a network and role model system to provide support for LGBTQ* colleagues;
- Updated knowledge exchange proposal forms to embed research into CPD bids, such as for the Northern Women Leadership Programme that explored how women in leadership roles can, and will, help shape the future of the region.

Their research has also resulted in a number of journal articles, most recently on intersectionality and the experience of vulnerability during lockdown (*Abdellatif* and *Gatto*) and a successful grant application. The group is now recognised as a RIG.
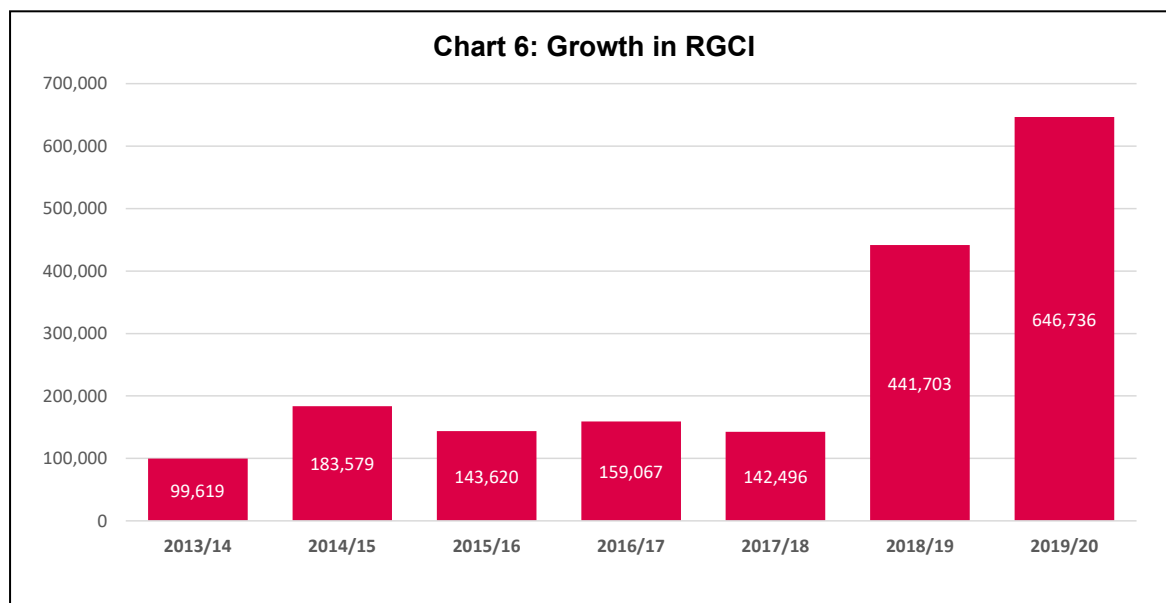
We have a REF2021 Code of Practice approved by Research England that has been enshrined and explicitly followed. For this REF we are submitting 65 women, 41% of our submission (94 men, 59%), a significant improvement on REF2014 when we submitted eight women representing 33% of our submission (16 men, 67%). 52 colleagues (32%) in our submission identify as BAME. The REF submission was managed by the UoA lead (*Harvey,* female), with support from the co-lead (*Beadle*, male) and the four departmental RaKE Directors (*Haynes* and *Liddle* (females) and *Cunningham* and *Nath* (males). Outputs were selected on the basis of quality, balancing across the research areas, regardless of gender or other protected characteristics, following a combination of personal, internal and external peer assessment.

3. Income, infrastructure and facilities

3.1. Research Income and Growth Strategy

The School's strategy of creating a critical mass of high-quality researchers, consolidating our funding experience, has resulted in very significant increases in award income and grant expenditure. Over the REF2021 period, increasing grant applications across the School has resulted in many more research awards, particularly over the past couple of years. As illustrated in Chart 6 (Growth in RGCI), RGCI income over the period totalled £1.817 million nearly double the amount for REF2014. The value of applications submitted has increased from just over £1.0 million in 2013/14 to £12.6 million in 2019/20 and the value of research awards has risen from £313,000 in 2013/14 to £1.179 million in 2019/20. The total over the **REF period is £3.994 million**. We have created communities of researchers through the support of the SIGs and RIGs to facilitate collaboration and engagement with external stakeholders and research users. At the start of the REF period, meetings were held with each of the research areas to establish a framework of support that would enable these groups to determine plans for engagement, impact

and grant application that could then be aligned with allocation of pump-priming budgetary support (section 2.1.5).

Chart 6: Growth in RGCI

Year	Value
2013/14	99,619
2014/15	183,579
2015/16	143,620
2016/17	159,067
2017/18	142,496
2018/19	441,703
2019/20	646,736

3.1.1. Funding Success – European, Government and Charities

The first significant EU funding success was our £846,000 Global Entrepreneurial Talent Management 3 (GETM3) project in 2016 (PI *Pearce*) (iNCITE), funded through **Horizon 2020 Research & Innovation Staff Exchange**. The research aims to support economic development by investigating current issues in the employability and management of graduates at a regional, national and global level to enhance business performance and economic development in transitional regions / countries. PI *Cunningham* (iNCITE) secured € 65,000 from the **EU Commission** for a project on the role and contributions that scientists play as principal investigators in realising the scientific potential of the EU funded framework. PI *R Wilson* secured £131,000 **Horizon 2020** funding to investigate Co-creation of Service Innovation in Europe (COSIE). *Önkal and Egdell* are Co-I contributors to a Horizon 2020 research and innovation programme under the **Marie Sklodowska-Curie ITN grant scheme** (£303,000). This project evaluates the effectiveness of behavioural nudges on mental well-being for the 60+ age group and is supporting doctoral student exchange and cross-country collaboration. *Damij* is leading the School's contribution (€ 140,000) to a **European Union EACEA-Knowledge Alliances** funded project 'Enabling SMEs to gain Competitive Advantage from the Use of High-Performance Computing'. *Perchard* is Co-investigator on an AHRC main grant (£655,000), exploring the history and legacy of the nationalised British coal industry, and a Social Sciences and Humanities Research Council of Canada network grant (CAD 2.490 million), a large transnational project exploring the impact of deindustrialisation on civil society.

Government and local government organisations have also supported research. In 2018, PI *Harvey* (Responsible Business), secured £266,000 from **Department for International Development** (DFID now FDCO) to investigate how knowledge of beneficial ownership can strengthen anti-corruption practices and procedures in Nigeria. *Apostolidis* (iNCITE) received £40,000 from **Teesside Combined Authority** to improve citizen satisfaction, marketing and branding across the Tees Valley. *R. Wilson* (Public Policy and Management) secured £37,000 from the **Institute of Local Government** and from Gateshead Metropolitan Borough Council to fund an evaluation of Making Every Contact Count (MECC). The School has initiated major research into improving support for SMEs. Colleagues from different discipline areas combined in an important collaboration with Sage in partnership with and funded by the Business Basics Fund in the **Department for Business, Energy & Industrial Strategy**. £281,000 was provided to conduct research into factors encouraging and frustrating digital adoption amongst SME clients and their accountants across the UK (*Sutherland, Hesselgreaves, Wales,* and *Lillystone)*. While the **Department for Transport and Industry** provided £44,000 for research that would expand a digitally-enabled service for student-led consultancy to SMEs (Impact Case Study, Coates: *Improving the performance of Small/Medium Enterprises in North East England through Northumbria University's Business Clinic*).

Charities and foundations have provided important sources of research support, particularly to researchers in the Living Lab. *Hesselgreaves, Lowe* and *French* (Public Policy and Management) received £266,000 from **Lankelly Chase** for their research on place-based systems change that will help the charity to reduce disadvantages in the communities with which they work. Similarly, *Lowe* has a £131,000, 3-year grant from the **Tudor Trust** for research into the new approach to public management developed by the Living Lab – called the Human Learning Systems (HLS) approach (Impact Case Study led by *Lowe*: *Transforming public services through new commissioning and management priorities*). This work explores alternative approaches to the funding, commissioning and performance management of social interventions / public service.

Smaller grant applications can also stimulate innovative contributions. For example*, Beadle* (Responsible Business) secured £9,000 (**BA/Leverhulme**) for a project on Meaningful Work and Career Choice. *Cabras* (iNCITE) has, over a period of years, received small sums from the Society for Independent Brewers (**SIBA**) (£50,000 in total) to fund his research on pubs as the heart of rural communities. *Dawson* (in collaboration with Universities of Aberdeen and Stirling) secured a **BA/Leverhulme** Grant of £9,000 for research exploring the role of people as internal agents of change within organisations. **Think Forward Initiative** (jointly funded by ING, together with partners Deloitte, Dimension Data, Centre for Economic Policy Research, Dell/EMC and Amazon Web Services) provided £8,200 for a project on nudging (*Önkal).* Her research uses risk scenarios

to nudge people's financial awareness and examines how simple interventions could lead to improved financial planning.

The Business School has a record of successful Knowledge Transfer Partnerships (KTPs). Examples include **Thomas Swann** (*Sutherland, Bradshaw*), **Parker Hannifin** ((Impact Case Study, *McLeay: Utilising customer-centric strategic marketing to improve product innovation and increase revenue at a multinational manufacturing corporation)*, **Lear** (*Bennett*), **Reproflex** *(McLeay)* and **Sports Aid Trust** (*Sutherland, Skoumpopoulou*).

3.1.2. Support for Grant Application

To firmly embed grant application as part of routine activity takes time and requires continued investment in the support of RGCI activity. The School is supported by a dedicated Research Development Manager who provides guidance on funding opportunities and helps co-ordinate multi-partner funding initiatives. Processes of grant application development, as well as grant management, are coordinated by the University Research and Innovation Services (RIS) office (REF5a). Funding calls, tailored newsletters summarising current opportunities and UKRI and UKRO funding related news are disseminated via email, call briefing events and workshops, social media and dedicated intranet pages accessible to all staff. Additional resources are available on the University intranet including funder information packs, templates for letters of support, bitesize guides and examples of previous successful grants on a range of funding topics. The RIS pre-award team assist PIs with preparation of budget data and additional external (to the School) peer review to maximise success rates. The post award team assist with contracts and coordination of legal and procurement advice. This team also support research investigators by monitoring spend, submission of claims and provision of financial reports to funders. Departments hold research away days allowing staff to work on publications and grant writing. Additional programmes are designed to develop colleagues at different stages of research. The University provides **an ECR Programme, Fellowship Ready and Next Generation of Large Award Holders programmes.** Since 2017/18, 19 researchers have benefitted from this programme. In addition to these grant application workshops, RIS colleagues offer faculty specific drop-in sessions with one-to-one support for less experienced colleagues, this is particularly helpful at early stage application development.

3.2. Infrastructure and Facilities

The Business School occupies a striking building, completed in 2007. Known as 'City Campus East', our home comprises 24,000 square metres of purpose-designed academic accommodation providing future-proof social spaces, classrooms, lecture theatres, hub areas and exhibition space. It provides outstanding facilities for both staff and students, considerably enhancing the research environment. Research outputs are displayed on walls and screens throughout the building. Prior

to Covid-19 the building was used extensively to host research seminars and community events, research conferences (section 4.6) and business networking and innovation events. This will resume when it is safe to do so, in the interim activity continues on-line for public facing events, to maintain research, the University campus has been adapted to Covid-secure working. As an example of on-line engagement, our events team recently supported *Harvey* to run the closing stakeholder consultation for the Law Commission in connection with their proposed revisions to the Proceeds of Crime Act (2002).

Over the REF2021 period, the School has equipped the **Living Lab** to enhance our research on complex decision making. The Living Lab consists of AV equipment and collaborative workspace and enables organisations to innovate their relationships with employees, partners and customers. This Lab supports some of the funded research described in section 3.1.1. More recently, the School has invested £21,000 in a **Behavioural Science Lab** to further support the work of the *Decisions and Analytics RIG* and other colleagues engaged in behavioural research. When safe to have research participants on campus, the Lab will, via behavioural experiments, enable empirically rigorous work on misinformation-trust synergies, risk perceptions, judgmental forecasting, information (mis)use and decision biases.

The School has provided £880,000 for the development of a bespoke business clinic. **The Business Clinic**, informed by staff research, provides free consultancy advice to small and medium-sized enterprises (SMEs), multinationals and not-for-profit organisations. Over the first five years of operation, the Clinic has supported over 220 external organisations. The School's Clinic is participating in the Chartered Associate of Business Schools' funded trial on how technology can improve micro business productivity.

Our excellently resourced central University Library supports School research. The University has made considerable investment in the library during the REF2021 period, particularly in creating a well-equipped Research Commons. This provides dedicated library space at the heart of campus for interdisciplinary networking, collaboration, and digital scholarship. The Research Reading Room provides individual study places including some larger desks equipped with Macs, standard PCs and some PCs with dual screen monitors. There are three collaborative spaces accommodating 12-14 people with presentation facilities, plus two research consultation rooms for one-to-one support or interviews.

The Library works in partnership with academic staff to develop and maintain a multidisciplinary collection with specific investment in **Business and Management resources of just over £1.5 million** over the REF cycle. Investment in ejournals for Business and Management includes subscriptions to a range of resources such as FT.com and The Economist, whilst investment in

databases includes subscriptions to Bureau Van Dijk (Fame & Osiris), Business Source Premier, Mintel, Brad Insight, Estates Gazette Interactive, National Bureau of Economic Research Working Papers, Passport (Euromonitor) and World Advertising Research Centre (WARC). In addition, researchers in the School benefit from access to multidisciplinary databases, ebook and ejournal packages. These include Science Direct, Sage, Emerald, Taylor & Francis, Wiley, OUP, Springer, Nature and Science journals, JSTOR Arts & Sciences and Nexis.

The Scholarly Publications (SP) team manage the institutional OA fund (section 1.5) and provide guidance for OA compliance, particularly for funded research. Additionally, the team offer support in preparing a manuscript and the effective sharing of research, how to register for and make use of an Open Researcher and Contributor ID (ORCID), and how to use our institutional Pure repository. The University Library has also invested in a new Institutional Research Data Management Repository (powered by Figshare) and offers drop in advice on meeting funders' expectations, uploading and sharing research data, writing a data management plan and other queries relating to data management.

3.2.1. Capital Investment

In addition to the specific investments discussed above and the investment in the dedicated PGR suite (section 2.2.4) there has been general capital investment of £260,600 expanding IT labs and other internal building improvements that enhance our environment. IT Services provide technical infrastructure and equipment (£47,200 investment), user support and training, remote desktop access is available for all staff and students. The School continues to maintain its investment in the 'Trading Room' that incorporates Bloomberg terminals (and DataStream) providing financial market data (£30,000 *p.a.* investment). Accessible to students, this facility also supports the Socially Responsible Investment research of, for example, *Brzeszczynski, Ghimire, and Chandorkar* and provides a valuable real time resource for our economists, supporting, for example, the work of *Szczgielski*. Researchers have access to all usual data analysis packages such as NVivo, Stata, eviews, and SPSS. Further investment is available for access to specialised databases that specifically enhance certain research outputs (Hong Kong Stock Exchange Data Set; Institute of Grocery Distribution Analysis Tools; and Kompass On-line Business Database) and for the purchase of relevant software equipment such as digital recorders and voice recognition software.

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

4.1. Impactful Research

Our Business School values applied research and multidisciplinary interactions that positively impact on society and on the next generation of business and community leaders. We seek to contribute to international agendas, public policy, local economies and to business improvement.

We support this through a variety of mechanisms to encourage colleagues' and groups' research to be outward looking in their research activity and through our accountability for our work. These have already been discussed but include workload support for research and knowledge exchange, University support through RIS to develop partnerships and collaborative research proposals critically supportive conversations around colleagues' Personal Development Appraisals and Personal Research and Innovation Plans, the criteria for research sabbaticals, funding support and career progression, the focussed support for the work of Signature Areas and Research Interest Groups and ongoing accountabilities through departmental, faculty and University committee structures for Research and Knowledge Exchange.

These mechanisms have supported our ability to respond to the needs of our research users. Examples of the range of ongoing partnerships include the Cabinet Office National Leadership Centre *(Liddle, Shutt, Blenkinsopp* and *Hesselgreaves*), Innovate UK *(Önkal)*, Department for Environment, Food & Rural Affairs (DEFRA) *(Bosworth* and *Newbery)* the Joseph Rowntree Foundation *(Burton)*, the Trade Union Congress *(Fitzgerald* and *Beadle)* and the Institute of Chartered Accountants in England and Wales (ICAEW) *(Haynes)*. Evidence of our work being used by partners is detailed within our impact case studies included with this REF submission. The impact case studies of *Coates, Mordue* and *Cabras* make contributions to the local economy, those of *Burton, McLeay* and *Sorour* focus on business improvement, while those of *Lowe, Fitzgerald* and *Cunningham* contribute to the development of public policy. In the following sections we detail examples of collaborative research and contributions at international, national and regional levels and to the academy through service and support.

4.2. Contribution to the International Community

We contribute to a range of international networks and partnerships, many of which have been built and sustained over an enduring period of time. For example, the one million Euro **EU RISE** project involved a network of university contacts in Poland, Slovenia, South Korea and Ireland built up over many years by *Pearce*. Her GETM3 project also includes eight international industry partners, micro start-ups and industry bodies.

Public Policy and Management (PPM) colleagues work with our partners at the Amsterdam University of Applied Sciences (AUAS). A joint 5-year NU-AUAS Research Strategy (led by *Cabras*), has been supported by pump-prime funding and produced a number of joint grant applications. *Blagburn*'s funded research on business failure and recovery has led to the submission of a joint bid (with *Cunningham*) to host a stand-alone workshop for the European Council of Small Business. Collaborations are enhanced through international research secondments, for example, *Shutt* through a semester long secondment with AUAS furthering comparative work on public value (section 1.1.3). The **Living Lab** is part of a wider European

network of living labs (ENOLL) and works with partners worldwide including Monash University. *Fitzgerald*'s work on migration and moral panic is the result of a long-standing collaborative relationship with the Polish Academy of Science.

Within iNCITE, *Charles* is part of a **Marie Skłodowska-Curie Innovative Training Network** (ITN) with the Universities of Stavanger, Linkoping, Aalborg, Twente, Aveiro, Lincoln and the Autonomous University of Barcelona, this ITN further demonstrates service through training the next generation of creative, entrepreneurial and innovative early-stage researchers. *Newbery* is a founding member of the Enterprise Educators Foundation East Africa (EEFEA), with 30 institutional members from Kenya, Tanzania, Uganda, Sudan and Ethiopia.

As part of our contribution to international society *Bian*, as an expert in counterfeit consumption studies, provided expert comments on a WTO trade dispute between two nations. In Australia, *Dawson*'s research on organisational change fed into the development of new products in healthcare and *Whalley*'s work with a Canadian telecommunication think tank sought to bring about regulatory improvement. *Fitzgerald* was a national UK expert for the European Commission with regard to the Posting of Workers Directive, *Varley* represented the Adventure Tourism Sector in Europe in discussions with the European Commission about the sector's significance, not least for sustainability.

4.3. Contribution to the National Community – Shaping the Economy and Society

At national level, our research has contributed to public policy through expert advisory roles. Public Policy contributions include *Wanjiru's* membership of the Export Guarantees Advisory Council, one of eight experts advising the Secretary of State for Trade and Industry on relevant aspects of policy on UK exports, she has recently been called as expert witness to the House of Commons International Trade Committee. Both *Newbery* and *Bosworth* are members of the DEFRA rural academic panel, providing expert oversight on the rigour of evidence being provided to civil servants and Ministers. *Bosworth* is also a member of the North East Rural Innovation Steering Group, chaired by Lord Curry of Kirkharle. *Harvey* was one of a small number of academics advising the Law Commission on the review of the confiscation regime in Part 2 of the Proceeds of Crime Act 2002. The empirical anti-money laundering research by *Harvey* is the only academic research included in the House of Common's Library briefing paper on money laundering law. *Beadle* provided evidence on the ethics of the 'Wild Animals in Circus (Wales) Bill' presented to the expert ethics panel hearing of the Welsh Sennedd's Climate Change, Environment and Rural Affairs Committee. *Whalley* has contributed to a number of UK digital related consultations, including the Ofcom annual plan. Contributions to national level organisations also include *Perchard*'s role as Advisor to the UK Aluminium Industry and *Batiz-Lazo* as adviser to the ATM Industry Association.

Other policy work includes *Fitzgerald* and *Beadle*'s research into the Trade Unions and the 2016 EU Referendum. This was facilitated by the TUC whose General Council have received a summary of its results with recommendations for union campaign structure. As a result, Northumbria is now one of a small number of universities contributing to the British TUC's 'Leading Change' Programme for senior union leaders. *Perchard*'s research has contributed to the Scottish Government's Independent Review on the Policing of the Miners' Strike in Scotland, which has led to the preparation of legislation by the Scottish Government to overturn unfair criminal convictions against striking miners in 1984-85.

Expert consultancy at national level includes *Cabras*'s work for the Society of Independent Brewers (SIBA) building on his research identifying trends and future trajectories for the UK craft beer industry. *Newbery*'s consultancy work evaluates the Innovate ICURe programmes supporting researchers as they commercialise research. *Fitzgerald* provided the blacklisting Claimant Solicitors' Steering Group with expert research analysis on the working patterns and wages of blacklisted construction workers (in the High Court Construction Industry Vetting Information Group Litigation). *Fitzgerald* also presented evidence to the Labour Party's Policy Commission on Industrial Policy (2019).

The MADE project is an example of the School's engagement with British business (*Sage UK Ltd*). Based upon *Hesselgreaves'* research in coaching, this project offers accountants across England free digital coaching skills training with the overarching aim of boosting small business productivity and economic growth. Subject to trial results, roll out of the digital coaching skills training will be supported by BEIS.

Several charitable foundations in the UK, including the Lankelly Chase Foundation and Tudor Trust; local authorities, including Plymouth and Gateshead; NHS organisations, such as Newcastle Hospitals Trust; and national organisations such as NHS England have adopted *Lowe* and colleagues' "Human Learning Systems" to the funding, commissioning, and performance management of social interventions. This encourages movement away from target-setting towards high-quality learning and peer-based reflection. This approach has enabled organisations to save money and create more effective services for the public. Lowe's leadership has led to his secondment into the independent, not-for-profit **Centre for Public Impact** (CPI).

4.4. Contribution to the Regional Community
Charles is Deputy Chair of the working group on 'Entrepreneurship' and *J Wilson* is Deputy Chair on the 'Internationalisation' Working Group of the **North East Local Enterprise Partnership** (NELEP). Both provide academic advice for the respective policies in these areas, as well as

sense-testing NELEP's aspirations. Alongside other regional universities, we are members of the North East Covid-19 Economic Response Group, which was established by the NELEP at the beginning of the coronavirus pandemic to support business resilience and ensure a collective response to the economic impact of Covid-19 on the North East economy. *Charles* has been working with the LEP and other regional stakeholders on an entrepreneurship strategy for the region as part of a project led by Massachusetts Institute of Technology. *Charles* is extending this work into more detailed research with NELEP on local variations in the entrepreneurial ecosystems.

In response to Covid-19*, Liddle* and *Shutt*'s project on improving local government procurement involved working closely with Northern Members of Parliament on recovery planning. Procurement accounts for £100 billion (47%) of local authority spending. Leveraging these resources to the greatest social and economic effect is now crucial in promoting an agile crisis response, maintaining community resilience and helping local businesses stay afloat. Other contributions and partnerships in the region include *Fitzgerald*'s work with migrant communities, collaborating with the Police and Crime Commissioner, Police Forces and NGOs. *Mordue*'s research on wind farms has been influential in reassuring the local government planning authorities that windfarms do not negatively impact on tourist numbers, thus enabling them to pursue their sustainable energy objectives. *Cabras*' research has been used in support of community efforts to retain and indeed reopen local public houses.

In Responsible Business *Beadle* is a trustee of the North East Initiative for Business Ethics (NIBE). Our work with NIBE includes Responsible Business Seminars enabling researchers, professional and business leaders (most notably Paul Polman, former CEO of Unilever) to share their work with public audiences. *Harvey* brings her money laundering research into service on the Management Committee of the North East Fraud Forum that aims to bring the public and private sectors together to reduce financial crime and for the Regulatory Oversight Committee of the Association of International Accountants. *Sproat* uses his research on fraud to advise the Counter-Fraud Professional Accreditation Board (CFPAB) and, *Callahan* is on the North East Women Partnership Advisory Board that seeks to research and change future work practices in the North East that will lead to the development, recruitment, retention and promotion of women leaders.

4.5. Contributions to the Academy

Our researchers make a range of contributions to national and international scholarly societies. *Callahan* has been recognised by the Academy of Human Resource Development as Outstanding HRD Scholar for 2020. International roles include: UN Principles for Responsible Management Education (PRME) Climate and Environment Working Group – co-chair and UK and Ireland PRME Chapter chair (*Hope*); *Whalley* holds the vice-chair of the International Telecommunications

Society. At a European level, *Cunningham* is Scientific Board member for the University Industry Innovation Network. National appointments include the Regional Studies research network on Place Leadership *(Liddle)*; *Liddle* and *Charles* are Fellows of the UK Academy of Social Sciences and *Liddle* is Fellow and former Honorary Chair of the UK Joint University Council while *Elliott* Chairs its Public Administration Committee.

Several colleagues undertake significant roles with journals with a number fulfilling appointments as journal editors and advisory board members. Notable amongst them are *Bian*: Editorial Review Board for the Journal of the Academy of Marketing Science, *Cui*: Editorial Board of International Marketing Review; *Cabras*: Editorial Advisory Board International Journal of Public Sector Management, *Callahan*: Editorial Board of Human Relations and incoming Co-Editor in Chief of the International Journal of Management Reviews and Editorial Board of Human Relations. *Whalley*: Editor of Digital Policy Regulation & Governance, *Haynes*: Editorial Board of Accounting, Auditing and Accountability Journal and four other journals, *Liddle*: Chair of the Editorial Advisory Board for the International Journal of Public Management, and International Editor for the Local Economy Journal, *Cunningham:* editorial boards for Long Range Planning, Irish Journal of Management, International Journal of International Property Management; editorial advisory board*,* Journal of Knowledge Management*,* editor Journal of Technology Transfer; *Beadle*, Editorial Board of Philosophy of Management*; Önkal*; Member of Editorial Board of Futures & Foresight Science; *Newbery* is co-editor of the International Journal of Entrepreneurial Behaviour & Research and *Bosworth* and *Newbery* are joint Chairs of the Rural Entrepreneurship Network special interest group at the Institute of Small Business and Enterprise (ISBE). *Perchard* is an editor of History Workshop Journal.

Our researchers also support the vital work of funding bodies in reviewing and selecting projects for funding. For example, colleagues are members of the ESRC Peer Review College including *Bian, Charles, Cabras, Haynes* and *Liddle.* Colleagues also act as reviewers for the Agence Nationale de la Recherche, AHRC, ESRC (*Perchard*), Estonia Research Council (*Cunningham)* and EU (Horizon 2020 and Marie Curie Programmes) (*Charles* and *Cabras*), the European Science Foundation (*Charles* and *Önkal*) and Leverhulme and the British Academy (*Cabras, Liddle* and *Önkal*). *Pearce* does service for EU Commission's Research Executive Agency (REA). Both *Liddle* and *Charles* are panel members of UKRI Future Leaders Fellowship programme. *Charles* is a member of the nominations committee of the Academy of Social Sciences.

Colleagues have collaborative relationships that have been established over many years. For example, *Shutt* has built up collaborations with a Chinese University Business School- Zhejiang University of Technology in Hangzhou (where he holds a visiting chair) and at the University of Economics in Prague. *Bian* is a visiting Professor at Tianjin University and at Wuhan University of

Technology, collaborating on a funding proposal to the National Natural Science Foundation of China; *R Wilson* served as Visiting Research Fellow at Monash University until 2019, *Martin* is a Visiting Professor at Universities of Denver and Michigan engaging around Learning Health Systems. *J Wilson* is a visiting professor at Copenhagen Business School engaging on business history. *Beadle* is Visiting Professor at the National Centre for Circus Arts. *Önkal* is Honorary Senior Research Associate at UCL and was an Academic Visitor at Nuffield College, Oxford University in 2018.

In addition to the forgoing, colleagues regularly contribute to conferences as keynote speakers, editors and as members of conference Scientific Committees. Table 3 (Summary Contributions to the Academy) provides a summary of our contributions to scholarly leadership over the period. A significant number of colleagues have led conferences, been an invited Plenary or keynote speaker and a third are members of Journal Editorial boards, providing further evidence of the research trajectory that we have described in this statement.

Table 3: Summary Contributions to the Academy	
Activity	**Occurrence**
Conference organisation or chairing	62
Plenary or keynote speakers	98
Journal editorship (chief or main)	17
Member of journal editorial board	65
Visiting Titles	48
National and international advisory boards/committees	36
Service to National / International Grant Reviewing/ Other Expert Panels	32
Research prizes and honours (including PGRs)	51

4.6. Conferences and Events

The School has hosted or co-hosted significant national and international conferences together with some important community engagement events. For example, in 2015, we co-hosted the Technology Transfer Society Conference with TU Dublin which was held in Dublin and co-organised the Doctoral Colloquium for the Irish Academy of Management annual conference. In Summer of 2016 we hosted the large and prestigious (450 delegate) Academy of Marketing Conference. Equally important in terms of our contribution to academic community development, we also hosted the Regional Studies Association Early Career Conference in October of the same year.

Demonstrating engagement with local as well as academic community, in early 2017 we hosted the ESRC Brexit and The North event; and, co-hosted a conference on the Economic Technological and Societal Impacts of Entrepreneurial Ecosystems with the University of Augsburg that took place in Augsburg. Also in 2017, the School hosted the UK and Ireland PRME Chapter conference, welcoming over 70 delegates from 40 institutions and seven different countries. In 2018 we co-hosted the Leeds Beckett / Northumbria conference on Combined Authorities and Mayoral Government, held in Leeds. In the same year we hosted the 13th Global Brand Conference in May and this was swiftly followed in June by the University Forum for Human Resource Development (UFHRD) conference. In both September 2018 and September 2019, we hosted the National Public Administration Committee (PAC) Conference for the Joint University Council, Learned Society for Public Administration, Social Policy and Social Work Education. In addition, in November 2018, the School hosted the Law Commission's symposium that opened its consultation on changing the 2002 Proceeds of Crime Act and hosted the closing 'virtual' event in November 2020.

Led by *Liddle* and *Shutt*, in March 2019 the School hosted a 'Brexit-One day after' event that attracted 70 academics and policymakers / practitioners to discuss the future of regional economic development. In May 2020, they ran a virtual policy learning event between policy makers and practitioners 'After Brexit? The Future of Cities in England and in the Netherlands. Taking Stock and assessing New Opportunities: Amsterdam and Newcastle to 2030'.

Fitzgerald has hosted events on hate crime and awareness raising events for businesses with regard to Modern Slavery in the UK in conjunction with Stronger Together Tackling Modern Slavery in Supply Chains. *Cunningham* and *Charles* hosted the 2019 BAM Entrepreneurship SIG on Academic Entrepreneurship: Core Challenges and Future Research Agendas, 2019 also saw the Institute for Small Business and Entrepreneurship (ISBE) Annual conference in November. This event, in collaboration with Newcastle University was co-Chaired by *Newbery* and *Rusk* and welcomed 500 participants from academia and local business. They also hosted a symposium on Entrepreneurial Place leadership in partnership with ISBE. In March, 2020 with the University of Augsburg, we co-hosted an international research workshop on Trends and Developments in University Management. *Whalley* had organised the 23rd biennial International Telecommunications Conference 'Digital societies and industrial transformations: Policies, markets and technologies', for 2020, it will run online in 2021.

4.7. Future Contributions

Sustainable partnerships are key to improving the wellbeing of societies and their environments. Our future strategy is to enhance international activities and partnerships alongside deepening those with our regional stakeholders. Refreshing our strategic ambitions to be '**a force for good'**

requires that we maintain continued relevance of our research to those who will use that work. Our School has a strong sense of place within the North-East region, this shapes our identity where we provide a rich resource for regional wealth creation and improving opportunities for more disadvantaged communities. Positioned in this region the Business School looks outwards to serve the research community and society as a whole including business, the public sector and civil society internationally, nationally and regionally. We endeavour to respond to the challenges of continuing to sustain relevant research in a rapidly changing world, enabling us to initiate and support path-breaking applied research projects that provide radical and realistic solutions to future challenges. Post Covid-19, flexibility and adaptive learning are now vital for protecting communities and managing their response. This includes thinking through recovery and mitigation strategies and building a preparedness platform for 'what comes next'. The School is well-placed to contribute to this debate, as a result of its substantial investment in a research base that is already thinking about the extensive application of its research to the challenges we face in a post-Covid world. The commitment to applied research is especially noteworthy, alongside our commitment to sustainability and ethical business behaviour, highlighting the drive for a 'recover better' strategy.