

**Institution: University of Liverpool**

**Unit of Assessment: 17 Business and Management Studies**

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

### **1.1 Context and Structure**

Since 2016, under its Strategy 2026, the University of Liverpool (UoL) has accelerated investment in an excellent research environment. In this context and under a new Dean, the University of Liverpool Management School (ULMS) has pursued a strategy designed to raise significantly the School's growing reputation, with research capacity integral to this, building upon the success of REF2014. ULMS has invested substantially since 2016, attracting a critical mass of staff capable of fulfilling its world-class research ambition. ULMS has become a School of research talent, delivering its vision to be: a *"globally connected School whose transformative research and teaching places it at the forefront of knowledge leadership, bringing us together with students, business and society in learning to make a difference."* ULMS now holds the triple-crown (EQUIS, AMBA and AACSB accreditations) and is an Athena SWAN Silver Award holder.

Since its founding in 2002, ULMS has been on a growth trajectory. In RAE2008, ULMS was the highest-rated new entrant in its Unit of Assessment. In REF2014, its research profile was reinforced by a strong assessment of its Impact (100% at 4\*/3\*). At the heart of ULMS' research vitality and sustainability are 132 research-active (i.e. Category A submitted) academics (129 FTE), an increase of 54% from 2014. This growth has ensured a balance in research talent spanning the research career lifecycle. New professorial appointments (22), bringing a depth of expertise signified by field-leading publications, are balanced by investment in high-potential Early Career Researchers (ECRs) (36), and a focus on developing talent from within the School. Overall, 85 of the 132 have been recruited since 2016; 64% of those recruited prior to 2016 have been promoted or were already Chairs. This growth has led to a more balanced staff composition and one that ensures equality and diversity. The professoriate has grown by 3.75 to 29.2 FTE, while ECRs have doubled in number. Women account for 34% of staff submitted and international faculty 62%, compared with 20% and 45% respectively in REF2014.

To deliver managed, high-quality growth, the School has supported recruitment with change to its structure and investment in research capacity-building. It has moved from three broad-based Subject Groups to six that are focused on disciplinary excellence: Accounting & Finance; Economics; Marketing; Operations and Supply Chain Management; Strategy, International

Business and Entrepreneurship; and Work, Organization and Management. Each has a Subject Group Head (SGH) with responsibility for recruitment sustaining existing contemporary and relevant School research agendas (such as Econometrics, Supply Chain, Entrepreneurship and Organization Theory) whilst simultaneously building forward-looking areas of research (including R&D and Innovation, Macroeconomics, Organizational Behaviour and Psychology). Quality and capacity-building investments have transformed the research environment; these include support for five newly-developing research centres and clusters, strong staff development processes, a research-focused workload model and enhanced research office, and research and impact support schemes. All these investments are detailed below.

Investment in research capacity-building since 2014 exceeds £34M with an additional £14.44M in buildings to accommodate growth. The School's annual research budget has increased by over 350% since 2014 to £822,250. Evidence of the effects of this investment can be seen in comparison with REF2014: for example, a portfolio of 111 Financial Times 50 (FT50) publications in this REF period among those staff submitted, compared with 11 for REF2014. Through the dual strategy of recruiting world-leading senior scholars, and a cohort of high potential ECRs supported in an enabled research environment, ULMS is now sustaining its research capacity, using investment to enable staff development at all levels. This is demonstrated in its commitment to support ECRs: 29% of ECRs have publications in the FT50 and half of ECRs are on PhD student supervisory teams.

ULMS' research strategy retains a strong commitment to impact, evidenced through the development of interdisciplinary Research Centres and Clusters (Entrepreneurship; Supply Chain Research; Sports Business; Econometrics & Big Data; Organizational and Employee Wellbeing) that unite distinct disciplinary strengths across Subject Groups around shared empirical agendas relevant to contemporary business, social and economic issues (see section 1.2.2.2). These areas of impact contribute to the University's research focus on improving health, responsible enhancement of wealth and ensuring social justice globally and locally.

## **1.2 Research & Impact Strategy**

### ***1.2.1 Research and Impact Objectives and Strategy***

ULMS has demonstrated a strong commitment to its REF2014 aims of enhancing research quality, visibility and impact through developing disciplinary excellence and cross-cutting thematic research. A strategic review in 2016 led to a new vision, underpinned by our commitment to create a world-leading research and impact environment whilst retaining a collegial research culture. Our vision encompasses five strategic objectives to:

1. Develop a critical mass of research-active faculty in the core disciplines of the School, capable of researching and publishing at the highest levels to deliver disciplinary excellence and a world-leading reputation;
2. Promote a collegiate and collaborative research culture that supports academics at all career stages, with a focus on ECRs and equality and diversity, in the development of excellent, innovative and distinctive research;
3. Invest in ongoing excellence in impact and research relevance in relation to policy and practice, following ULMS' strong REF2014 assessment of impact;
4. Support interdisciplinarity through cross-cutting thematic research and encourage methodological diversity and expertise; and
5. Strengthen support for postgraduate research students as a critical component of a vibrant research community.

These objectives have driven research investments with an emphasis on sustainability and vitality. In line with the University's Strategy 2026, these objectives will continue to drive investment. Supporting investment is detailed below.

### **1.2.2 Building Sustainability: Research Leadership and Investment in Expertise**

The School has a matrix structure, with six Associate Deans who work across the six School Subject Groups, one of whom is the Associate Dean Research (ADR) (*Prof Gatrell*). Together with the Dean and the SGHs, they form the School's Leadership team. Research and Impact are led by the ADR working with the Dean and the SGHs.

#### **1.2.2.1 Subject Groups: Building Disciplinary Leadership and Expertise**

The Subject Groups form disciplinary homes for both research and teaching, providing the infrastructure necessary to ensure a vital and sustainable research environment. Each has been developed through substantial investment in external recruitment and internal promotion. The SGHs are responsible for recruitment and development against identified core areas of group-level expertise, and in particular for delivery against Objectives 1 and 2, drawing on all the recruitment, support, incentive schemes and infrastructure available within ULMS, consistent with the policies and practices laid out below in Section 2: People. Each is supported by a Subject Group Director of Research (SGDoR), to provide strong group-level research leadership.

### **Strategy, International Business and Entrepreneurship (SIBE)**

SIBE delivers world-leading research spanning Strategy, International Business, Innovation and Entrepreneurship, with 56 papers published in FT50 journals since 2014 (compared with two,

REF2014). Of its 28 members, 10 are Professors and seven are ECRs. This is augmented with 23 PhD students.

Under the leadership of *Prof Tom Elfring*, investment in recruitment has enabled the Group to enhance its strength in Strategy and International Business (*Profs Balogun, Cornelissen, Maitland, McNulty and Raggiozino; Ganotakis, Kunst, Papageorgiadis, Prociou, Wolf, Wu*), to build a depth of expertise in Entrepreneurship (*Profs. Blackburn, Elfring, Munoz and Jayawarana; Giordano, Smith, Southern, Venugopal*) and to extend expertise in R&D and Innovation (*Prof Sofka; Akbar, Borah, Brennecke, Ellwood, Speldekamp*). *McNulty's* reputation in Boards is recognized through his AHRC award (total value £278,000) to research business judgement and the courts. *Balogun* and *Cornelissen* are recognized for their expertise in strategy process and practice research. *Elfring* brings knowledge regarding corporate entrepreneurship and venturing, having previously received funding over €750,000 from bodies including the Science Foundation in the Netherlands, and as Chair of boards, including Syntens Rotterdam. In recognition for his research on the behaviour of small firms, *Blackburn* holds the Queen's Award for Enterprise Promotion and works with the OECD on advice for agencies on inclusive entrepreneurship. Since 2016, *Munoz* has attracted £350,000 to support his research on sustainable entrepreneurship internationally, with a focus on Latin America. *Sofka's* expertise in innovation is recognized through his involvement in commissioned reports on innovation for the European Commission.

### **Work, Organization and Management (WOM)**

Research in WOM is concerned with understanding organizations, workers and society. Group members pursue research across organization studies, organizational behaviour and Human Resource Management (HRM) for the purpose of enhancing health and well-being among workers, and improving sustainability within management and organizational settings. With 29 papers in FT50 Journals since 2014 (compared to eight in REF2014), WOM now has a strong track-record in institutional work studies, advancement of qualitative methodology, and research on work-life experiences, leadership, employee well-being, personality development and assessment, and inclusive and strategic human resource management practices. Of its 24 faculty, there are six Professors and eight ECRs. The Group is augmented with 26 PhD students.

Recruitment under the leadership of *Prof Yves Guillaume* has enabled the Group to deepen its strengths in Organization Studies and Theory (*Profs Gatrell, Zundel and Suddaby; Belfrage, Cole, Liu, Nilsson, Marechal, Rowe*), to build additional depth of expertise in Organizational Behaviour and Organizational Psychology (*Profs Guillaume and Woods; Daher, Lyubovnikova, Miraglia, Radcliffe*), and also in HRM with a focus on inclusive practices, cross-cultural and

international HRM, high-performance work systems, psychological contract and employee voice (*Prof Donnelly; Davies, Hughes, Li, Otake, Pereira Costa, Raheem, Yang, Xu*). *Suddaby* was named in Thompson Reuters "World's Most Influential Scientific Minds" in Business and Economics each year from 2014-2017. *Gatrell* is recognised for research on employee well-being, having won a Leverhulme Research Fellowship for research into fatherhood and employment (2018-2019). She is the 2020 winner of the British Academy of Management (BAM) Medal for Research. The appointment of *Guillaume* facilitated development of organizational behaviour research, particularly the relationships between leaders and followers, and its impact on the effectiveness of leadership approaches. *Woods* has a global research reputation in personality development and dynamics at work, having authored two of the three leading international review articles on the topic (2013 and 2019).

### **Economics**

The Economics Group builds on a strong tradition at Liverpool stretching back to the 1930s and the work of Nobel prize winner, Ronald Coase. Economics undertakes theoretical and applied work in Macroeconomic Policy, Econometrics & Big Data, and Applied Microeconomics. Under the leadership of *Prof Joep Konings*, the Group has 23 members, with four Professors, four ECRs with additional recruitment underway, and 22 PhD students. Strategic research investment has re-established the Group's global reputation with, for example, six FT50 publications (compared with none in REF2014), and has created critical research mass in Macroeconomics with an emphasis on the future of macroeconomic policy (*Profs Chu, de Groot and Konings; Han, Gorn, Kim, Liu, Marchesiano, Mitra, Murakozy*), extending the traditional strength in Econometrics with an emphasis on AI and big data (*Emeritus Prof McCabe; Bu, Rao, Li and Lui-Evans, Burn, Geng and Lonsky*), and developing applied microeconomics with a focus on natural experiments and policy evaluation (*Prof Forrest; Buraimo, Garikipati, Tena Horrillo*).

Group members make direct contributions to public policy making, including industrial policy in Europe and with the European Commission, OECD and World Bank (*Murakozy; Konings*); monetary policy at the European Central Bank, IMF and Bank of England (*de Groot, Jackson, Konings*); development policy in India (*Garikipati*) and Central Asia (*Geng*); UK government policy (*Forrest; Gu*) and legal bodies (*Forrest*). *Gu* was awarded £130,861 as Co-I on an ESRC joint programming initiative grant (£622,972) for self-organizing cities. *Murakozy* has been awarded £87,176 as part of an ERC starter grant (£1.3M) for minimum wages and inequality. The Group organizes three annual workshops, on applied macroeconomics; econometrics & big data; and theory and computation (most recently on blockchain and cryptocurrencies).

**Accounting and Finance (A&F)**

The A&F Group is growing in strength and research quality through investment in staff and databases under the leadership of *Prof Alex Kostakis*. Group members have published 150+ peer-reviewed journal articles during this REF period, including 12 FT50 papers (compared with one in REF2014). Five of the Group's 25 research-active faculty are Professors and four are ECRs, with recruitment ongoing. The Group is augmented by 28 PhD students. Investment has focused on the development of three areas of research strength: Empirical Asset Pricing (*Profs Cai, Kostakis and Henry; Ahmed, Avino, Fu, Kim, Laws, Stamatogiannis, Wese Simen, Yang, and Ye*), Corporate Finance and Market-Based Accounting (*Prof Florakis, Ahmad, Pappas, Poletti-Hughes, Sainani, Sun, Zhang, Zhao*) and International Finance and Banking (*Prof Milas; Ellington, Kallinterakis, Michalski, Stentella Lopes*). Research within these areas is evidence-based and practice-relevant.

With Kostakis's publications in field-leading journals such as the *Review of Financial Studies*, *Management Science* and *Journal of Financial and Quantitative Analysis* the Group has developed an international reputation in empirical asset pricing. *Cai* contributes to the Group's international reputation as a member of the organizing committee of the International Accounting and Finance Doctoral Symposium. Group members have made significant contributions towards identifying common risk factors across alternative asset classes, modelling the behaviour of commodity prices and volatility and developing econometric tests for stock return predictability. *Florakis* leads on the Group's historical strength in Corporate Governance. He is an editor of *Corporate Governance: An International Review*, a leading journal in the field. *Milas* continues to lead International Finance and Banking and is an invited member of the Monetary Roundtable organized by the Monetary Policy Committee of the Bank of England. The Group has invested significantly in databases (see Infrastructure, Section 3) along with a new 40-terminal Bloomberg Suite, creating an environment supportive of world-class empirical research.

**Operations and Supply Chain Management (OSCM)**

Research in the OSCM Group makes original contributions to the theory and practice of Operations and Supply Chain Management, through development and application of models, analytical techniques and technologies that underpin the achievement of excellence in the design of operations and supply chain systems. The Group has 18 research-active faculty members with five Professors, eight ECRs and a 26-strong PhD cohort. In this REF period it has 288 Scopus entries averaging 16 publications per individual, six FT50 Publications (compared with one in REF2014), and group members have brought in over £1M external research funding to ULMS (from a total funder value of awards of £4.525M – see also Centre for Supply Chain Research), with additional external funding of £864,000 as PI or Co-I.

Under the leadership of *Prof Andy Lyons*, investment in staff has enabled the Group to develop depth of expertise in four themes: transport and logistics (*Profs Bektas and Song; Iris, Xing*); agri-food supply chains (*Prof Lyons; Hernandez, Li, Sharifi, Singh*); sustainable supply chains (*Prof Cousins; Lam, Li, Meehan, Pinnington*); agile operations (*Prof Lyons; Narayanamurthy, Sharifi*); and supply chain technologies, analytics and risk (*Profs Bektas, McHale and Song; Guo, Hedenstierna, Zhan*). In transport and logistics *Song* (with *Lyons*) was awarded £107,672 from the Royal Society and £41,177 from BEIS for logistics modelling research. A survey of research papers in transportation and maritime journals between 2000 and 2015 (published in *International Journal of Shipping & Transport Logistics*, 2018) ranked *Song* as No. 1 in the UK. *Bektas*, a world authority on logistics optimisation, was previously part of an EPSRC award for £1.16M for last-mile urban freight logistics in 2016, and since joining ULMS has been awarded £238,759 from Innovate UK for research on last-mile efficiency in logistics. *Cousins*, leading research into sustainable supply chains, was ranked the 8<sup>th</sup> leading SCM researcher in the world and the leading researcher in the UK, based on a survey of the seven top supply chain management journals (see Babbar et al., 2019, SCM research leadership: the ranked agents and their networks. *Supply Chain Management: An International Journal*. 24 (6), 824-854). *Lam* has been awarded a Leverhulme Fellowship (£46,541). Agile operations is a long-established area; funded projects within the period include a £366,891 ERDF grant (*Lyons, Sharifi*) researching agile behaviours across SME supply chains.

### Marketing

Marketing is the newest Group in ULMS, established as a separate Group in 2019 and under the leadership of *Prof Pippa Hunter-Jones*. Its 14 research-active faculty include two Professors and five ECRs, with active recruitment to develop the Group further. It currently has 14 PhD students. Key research strengths in Marketing lie in the application and development of Marketing Theory to the study of vulnerable consumers and marginalised groups (*Prof Hunter-Jones; Al-Abdin, Sudbury-Riley*) as well as to industrial, B2B (Business to Business) and digital (*Ashman, M.Guenther, P.Guenther, Raddats, Cartwright, Karimi*) and the sociology of consumption (*Prof Parsons; Daskalapoulou, Kerrane, McGouran, and Pirani*).

In developing existing service marketing research at ULMS, *Hunter-Jones*, with *Sudbury-Riley* and *Al-Abdin*, apply service learning to improve the experiences of those providing and using palliative and end-of-life services. They have received funding from hospice and hospital groups (£177,284) through, for example, collaborations with East Cheshire Hospice and the Liverpool Clinical Commissioning Group. *Hunter-Jones* and *Sudbury-Riley* were part of a University of Liverpool team that was awarded £1.9M under the Prime Minister's Challenge Fund, tasked with transforming primary care and improving healthcare access in South Cheshire. They have also

won funding from the Leverhulme Trust Visiting Professor Scheme (Tom Baker, University of Alabama, £11,210). *Parsons* works in the area of vulnerable consumers and marginalised groups and is Co-Editor in Chief of the Journal of Marketing Theory. ECRs are developing funding through success with, for example, BA small grants (*Cartwright, Pirani*).

### **1.2.2.2 Research Centres and Research Clusters: Supporting Interdisciplinarity and Impact through Cross-Cutting Thematic Research**

Research Centres and Clusters are led from the Subject Groups, bringing together research expertise across the School and University to facilitate internal and external research partnerships, around common cross-cutting research themes and projects. They support Objective 4 (interdisciplinarity and methodological diversity), and Objective 3 (excellence in impact). They enable strength in impact by applying externally-focused, real-world expertise in areas relevant to contemporary business, social and economic issues. The **three Research Centres** (Entrepreneurship, Supply Chain Research, Sports Business) drive much of the School's external research activity and deliver against well-established School research agendas, with a focus on gaining funding and producing impactful research. The **two Research Clusters** (Econometrics & Big Data; Organizational and Employee Wellbeing) are in an earlier stage of development, bringing together researchers delivering impact in newer areas of expertise. Each Centre/Cluster is led by a Director responsible for allocation of ULMS funding to support their development. An example is the PhD Entrepreneurship Academy run by the Centre for Entrepreneurship. The School also supports interdisciplinary research in other areas. For example, *Ellwood* leads the Management School's collaboration with the University's £10M Leverhulme-funded interdisciplinary Centre for Functional Materials Design (also with the involvement of *Brennecke*). *McNulty's* research on business judgement and the courts is in collaboration with colleagues in the Law Faculty at the University of Leeds. Tables 1 and 2 show the Subject Group disciplinary strengths (core expertise) that underpin the Centres and Clusters, cross-university interdisciplinary partnerships, and the areas of impact they are delivering. The areas listed show the extent to which ULMS' research impacts on two areas of social importance: Economic and Social Development, and Individual and Organizational Welfare, consistent with the University's commitment to research addressing health, wealth and justice globally and locally.

The **Centre for Supply Chain Research** led by *Bektas, Cousins and Song* draws on the logistics and supply chain expertise in the OSCM Group to work in interdisciplinary teams across the University. These include the Centre of Excellence for Sustainable Food Systems; Institute for Risk; Digital Innovation Facility and the Centre for the Study of International Slavery. Internationally, *Hernandez* and *Li* are leading multi-partner H2020 projects on agri-food supply

chains (a €1.3M project on Agriculture Production Systems (RUCAPS) and a €1M project on the application of emerging technologies and on food security issues (GOLF). *Lyons, Hernandez, and Li* have been partners on two EC Interreg agri-food projects (£214,146 and £87,926 respectively). *Meehan and Pinnington* are working with the Crown Commercial Services and the Home Office on modern slavery in supply chains, as well as the Centre for the Study of International Slavery and the University's Heseltine Institute for Public Policy, Practice and Place. They have recently been awarded AHRC funding (£77,000) for research on the impact of COVID-19 on modern slavery. The Centre's members are delivering impact in a variety of different sectors, including SMEs, social housing, humanitarian relief and modern slavery (see Table 1).

**Table 1: Research Centres**

	<b>Centre Supply Chain Research</b>	<b>Centre Entrepreneurship</b>	<b>Centre Sports Business</b>
Core Expertise	Logistics, Supply Chain & Business Agility (OSCM)	Entrepreneurship and Small Firms (SIBE) Business Dynamism/ Regional Development (Economics)	Sports Economics (Economics) Sports Analytics (OSCM)
University Partnerships	- Centre of Excellence: Sustainable Food Systems - Institute for Risk and Uncertainty - Digital Innovation Facility - Centre for International Slavery	- Heseltine Institute for Public Policy, Practice and Place	
Impact to 2021	- Value-based procurement in Social Housing	- Enhancing Livelihoods of Rural Women (India) - Entrepreneurship and growth in LCR	- Match Fixing - Making gambling safer
Impact in Development	- MoD procurement; - Modern Slavery; - Humanitarian Logistics & disaster relief (satellite big data analytics)	- Rural Entrepreneurship (Chile); - Entrepreneurial activity and Sanitation (India) - Developing Social enterprise LCR	- Sports Policy and Governance

The **Centre for Entrepreneurship (CfE)** led by *Munoz* and *Blackburn* undertakes problem-based, impact-driven research by engaging with local, national and international academics, practitioners and policy-makers to examine the human, ecological, economic and cultural aspects of entrepreneurship and small firms. It draws together academics from SIBE with those from Economics (for example, *Konings*, *Murakozy*) and Finance (for example, *Cai*) to explore themes such as the internationalisation of SMEs, social inclusion and social enterprises, sustainable venturing, transformational entrepreneurship, young people and entrepreneurship, and social investment and entrepreneurship. *Southern* brings together work in the Centre with the University's Heseltine Institute (as above) as a Principal Investigator focused on research in the Liverpool City Region. The CfE has a track-record of delivering research-informed growth programmes, equipping entrepreneurs in the Liverpool City Region (LCR) with business skills. *Giordano* has received ongoing ERDF research grants (£1.8M awarded since 2014) to support this programme. It is delivering impact locally and increasingly internationally, for example, through research in entrepreneurship and growth in the LCR, social enterprise regionally, rural entrepreneurship in Latin America, and entrepreneurship and sanitation in India (see Table 1).

The **Centre for Sports Business** has, for many years, delivered international sports-related executive education (providing a stream of income for the Centre). More recently, led by *Forrest* (Economics) and *McHale* (OSCM) it has developed a strong research base in sports economics and sports analytics. *McHale*, for example, has created the EA SPORTS Player Performance Index, the official player rating system of the Barclays Premier League. *Forrest* and *McHale* have together used their research on sports economics and analytics to develop two significant areas of impact through influence on policy makers and legal bodies (see Table 1). They have contributed to the identification of match-fixing by assessing the processes used by UEFA for monitoring betting markets, and have influenced government policy on problem gambling through work with betting organizations and casinos. *Forrest* was Co-I in an EC funded project to identify sports betting risks (€238,896). Others (*Buraimo*, *Tena Horillo*) have explored overseas market development for Premier League football clubs, while work with the Spanish Football Association investigates the performance of football clubs in European and domestic tournaments.

Table 2: Research Clusters

	<b>Econometrics &amp; Big Data Cluster</b>	<b>Organizational &amp; Employee Welfare Cluster</b>
Core Expertise	Econometrics in applied contexts (Economics, A&F, SIBE) Marketing Analytics (Marketing)	Human Resource Management and Change (WOM, SIBE) Gender, Diversity and Equality (WOM, A&F, Economics) Service Innovation (Marketing)
University Partnerships	- Geography - Computer Science - Institute for Risk and Uncertainty	- School of Medicine
Impact to 2021	- Changing Patent Filing Practice	- End of life care; - Menstrual hygiene (India); - Currency Internationalisation
Impact in Development	Policy evaluation: regional, industrial and social - Value of Developer Contributions - Monetary Policy - Exchange Rate Policy	- Gender inequality & family friendly policies - High Performance Work systems (NHS); - Improving work experiences of BME (NHS); - Glass Ceiling Latin America; - Improving Organizational Leadership

The **Econometrics & Big Data Cluster** led by Economics and A&F (*Bu, Wese Simen* and *Ye*) draws on ULMS' long-standing expertise in data analytics in the two Groups, but also increasingly Marketing (for example, *M.Guenther, P.Guenther*) and Strategy (for example, *Papageorgiadis, Ragozzino, Wu*). Researchers in this cluster work on the development of algorithms, data warehousing, and machine learning in a variety of applied contexts from scanner data, stock market information, oil and equity prices, marketing assets, and financial to operational data sets and exchange rates. Members of Economics and A&F work in collaboration with the Institute for Risk and Uncertainty, and also collaborate with Computer Science (*Bach, Gorelkina*: Game Theory) and Geography (*Gu*: developer contributions). This cluster has developed impact in exchange rate and monetary policy through engagement with the European Central Bank, the Bank of England, the National Bank of Belgium, and the International Monetary Fund. The cluster is involved in policy evaluations with impact on regional, industrial and social policy from connections with, for example, the European Investment Bank and the European Bank for Reconstruction and Development (see Table 2).

The **Organizational and Employee Wellbeing Cluster** led by *Miraglia, Yang and Parsons*, brings together research expertise from WOM (HRM, OB and Organization Theory), SIBE (for example, *Balogun, Wolf*), Marketing (for example, *Hunter-Jones, Parsons, Sudbury-Riley*) Economics (for example, *Burns, Garikipati*) and Finance (for example, *Poletti-Hughes*) to shed light on how organizing and managing affects production, working life and health, and how to thrive and flourish, whether as organizations, employees or self-employed/gig economy workers. Research focuses on two central themes of People and Change Management practices (facilitating productivity and organizational and employee well-being), and Equality, Diversity and Wellbeing (enhancing employee diversity, equality and wellbeing through research into gender, diversity, work-life relationships and health). Research in the People and Change Management theme is increasingly impactful, applying business and management principles to settings such as Healthcare with, for example, *Hunter-Jones, Al-Abdin* and *Sudbury-Riley* working directly with the School of Medicine (Planning for future care with patients with advanced cancer: Liverpool Clinical Commissioning Group: £51,587), and others (*Otaye, Donnelly, Yang*) working in partnership with NHS Trusts. Research in the cluster is currently delivering strong impact in the second theme, with a growing stream of impact in the first (see Table 2).

### **1.2.3 Delivering Impact**

Delivering impact is core to the School's research ambitions, with the focus in the School's vision on "learning to make a difference" (Objective 3). The School's impact strategy is embedded throughout its research activities and ensures investment in staff and infrastructure to extend impact in terms of scale and quality beyond that achieved in REF2014. The School's Impact Director Chairs the School Impact Steering Group (a sub-committee of the School Research and Impact Committee), which administers an impact budget and workload allowances to support the extension of reach and significance of impactful work. Through this investment, ULMS has a growing body of impact projects which are sufficiently developed to generate cases for REF2021 and beyond (see Table 6, Section 4). UoL has a database (Elements repository) that enables tracking and auditing of impactful research projects. The School has developed 46 impact projects in this REF period, 50% of which have been identified as sufficiently advanced to receive School funding.

#### **1.2.3.1 Stimulating Impact**

The School strategy for enabling impact has led to a number of supporting investments and incentives. Since 2014 we have drawn on the expertise of the ULMS Advisory Board, in which leading business experts advise on impact development in the Centres and Clusters. For example, Dr Rick Parry (Chairman, English Football League; former Chief Executive Liverpool Football Club) advises on impact developing in the Centre for Sports Business. Chris Gray

(Northwest Lead, Accenture), an expert on diversity, advises on cases related to diversity and well-being.

Individually, researchers are encouraged through University promotion criteria and in annual performance development reviews to develop impactful work. In addition, drawing on existing impact expertise in Research Centres and Clusters, a mentoring system helps individuals developing new areas of strong impact. Individuals can request leave for impact development as part of the School's sabbatical scheme.

The School's Impact Steering Group organizes mentoring and workshops regarding: facilitating impact development (2017); building and extending impact with external impact advisers, providing feedback on impact work under development (2018), and evidence of impact (2019). This activity is supported by the dedicated Impact Officer in the School Research Office, as well as impact specialists in the Humanities and Social Sciences (HSS) Faculty Research Office and University's Research, Partnership and Innovation (RPI) team. The ULMS External Engagement team is responsible for developing links with business and identifying research partners, collaborating closely with relevant individuals in the RPI team.

The Impact Steering Group makes annual calls for new potential impact work. Work considered to be sufficiently developed is incentivised through a £1,000 payment into an individual's research account and assignment of a mentor. Progress is monitored by the Steering Group which also provides feedback and guidance. Individuals may apply for support for more developed work from both the School and HSS Faculty (allocated from HEIF funding) with funds for impact reach, development and evidence tracking, and for RAs to support impact activity, plus event management support from the ULMS Marketing team. This support extends to international impact activity. For example, *Garikipati* has received support for impact work in India, and *Belfrage* and *Poletti-Hughes* for impact projects in Latin America. Impact funding in this REF period has totalled £222,633.

#### **1.2.4 Future Strategy**

Future strategy will continue investment in high-quality growth and capacity building consistent with the School's five objectives. Investment in managed growth will continue to build a research-active faculty of around 170 FTE. Investment will be focused in A&F, Marketing and Economics, as the most recently created Groups in the School. By 2024, ULMS will have expanded into a larger building in addition to the extension opened in 2016. Investment in impact and the cross-cutting themes in the Research Centres and Clusters will continue to extend their reach and significance and ensure ongoing connection with contemporary social challenges.

Recent investments to sustain and enhance the research environment will continue to follow a growth trajectory. These include, for example: from 2020-2021 increasing support for the number of PhD scholarships annually from 10 to 15 (see Section 2.4); from 2019-2020, a significant investment in databases (see section 3.1: with an additional £250,000 annually); and also from 2019-2020, the introduction of an additional £2,500 per individual probationer support fund (Section 2.3).

Future strategy also involves building on the School's existing reputation for world-class research and enhancing its strong international representation through journal editorial boards and international academic collaborations (see Section 4).

### **1.2.5 Open Access**

The University has a substantial Institutional Fund available for staff who are not externally funded but whose work would benefit from 'gold' open access. ECRs in particular have benefited from this fund (*Nilsson*, Research Policy (2016); *Ellington*, Journal of Banking and Finance (2018)) as well as more senior individuals (for example, *Smith*, Business History (2018))

ULMS faculty offer open access research data where possible. For example, *Milas*, in his blog piece for *The Conversation*, (2019: 29,000 downloads) provides data used in his (2014) paper in Journal of International Money and Finance. *Papageorgiadis* and *Sofka* provide open access data from their (2020) paper on the Patent Enforcement Index (PEI), allowing scholars, patent managers, attorneys and policy makers to use PEI in their research. Additionally, the dataset *Papageorgiadis* created for his (2019) study regarding the effect of European intellectual property institutions on Chinese outward foreign direct investment is available in open access for free download via the Centre for Open Science.

### **1.2.6 Research Integrity and Ethics**

All research in ULMS upholds the strictest standards for research integrity and ethics. We are supported by the University, which embraces the UK Concordat to Support the Career Development of Researchers. This is aligned with the University's Research and Impact Strategy, to create an environment that supports researchers in improving the quality and impact of research at all career stages. Similarly, the University has a strict ethics policy, enforced through the University Committee on Research Ethics. ULMS faculty contribute to these University committees. For example, *Brenneke*: HSS Faculty Ethics Working Group; *Hunter-Jones*: STOP COVID-19 Steering Group; and *Lam*: the Concordat Steering Group. However, integrity and ethics are about an appropriate culture and not just policies for enforcement. ULMS has its own 14 member trained Research Ethics Committee Chaired by a

School Director of Ethics (reporting into the ADR), supporting ethics approval for new research projects, and reporting to the University Committee on Research Ethics. To support an ethically aware research environment the Director of Ethics delivers ethics training workshops for staff and postgraduate students. Epigeum certification is required by all staff/students before applying for ethical approval. ULMS' commitment to research integrity was commended by the EQUIS accreditation panel in 2019.

## 2. People

### 2.1 Staffing Strategy

A strategic review of ULMS in 2016 recognised that the scale of growth needed to meet its ambition required external recruitment accompanied by internal promotion and staff development. As a result, the School has undergone a period of managed substantial growth. Careful implementation of our strategy has established an environment that demonstrates sustainability through targeted investments, and vitality through an enhanced and inclusive research culture for staff and students. The creation of a critical mass of research-active faculty with a balance of expertise and experience in all Subject Groups has entailed a large international recruitment drive. This balance of expertise and experience has enabled mentoring and development, particularly among ECRs, to create a pipeline of talent supported by an active promotions strategy that has moved forward the School's equality and diversity agenda. Consistent with the University's Strategy 2026, the goal is to be a destination of choice for established and aspiring research leaders, attracted by our vibrant environment and career opportunities.

### 2.2 Building Sustainability: Recruitment and Promotions

Since 2016, 85 staff on research tracks have been recruited, delivering current staffing of 32 Professors, 9 Readers, 36 Senior Lecturers and 55 lecturers (Table 3). This distribution of experience across the School creates strong support for ECRs. Recruitment includes 22 new Professors (19.2 FTE). A significant number of research-active faculty present for REF2014 have retired or taken advantage of University VS schemes (30%); another 24% have left, typically for promotions (for example, *Richter* and *Cook*, School Directorships, Surrey and Hull, *Lindebaum* Chair-Cardiff, *Akbar* Chair-Hull).

**Table 3: Recruitment and Promotion by Group**

	<b>SIBE</b>	<b>WOM</b>	<b>A&amp;F</b>	<b>Economics</b>	<b>OSCM</b>	<b>Marketing</b>
<b>Total</b>	<b>28</b>	<b>24</b>	<b>25</b>	<b>22</b>	<b>18</b>	<b>15</b>
<b>Professor</b>	<b>10 [1]</b>	<b>6 [1]</b>	<b>5 [1]</b>	<b>4</b>	<b>5</b>	<b>2 [1]</b>
Women	3 [1]	1				2 [1]
International	6	4	4 [1]	2		
<b>Reader</b>	<b>2 [2]</b>	<b>2 [2]</b>		<b>3 [3]</b>	<b>2 [1]</b>	
Women	1 [1]	1 [1]		1 [1]		
International	2 [2]	2 [2]		3 [3]	1	
<b>Senior Lecturer</b>	<b>8 [4]</b>	<b>7 [4]</b>	<b>12 [1]</b>	<b>4 [1]</b>	<b>3 [3]</b>	<b>2 [2]</b>
Women	1 [1]	5 [3]	1 [1]	1 [1]	1 [1]	1 [1]
International	2 [2]	4 [4]	11	3 [1]	2 [2]	
<b>Lecturer</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>12</b>	<b>8</b>	<b>10</b>
Women	1	7	2	4	1	9
International	8	5	7	10	7	6

**Key: [promotions] (Categories of International/Women not mutually exclusive)**

All recruitment to Subject Groups is driven by fit with areas of in-depth research expertise (see Section 1.2.2). For ECRs (and those in mid-career) this ensures a pool of senior faculty able to provide strong mentorship. Table 3 details recruitment and promotions since 2014, also specifying numbers of women and international staff (not British citizens). Four of the six new Subject Group Heads (SGHs) are international. Overall, 29% of staff are British, 30% from the EU, and 25% from Asia. 7% have dual nationality. The remaining 9% are from North and South America, the Middle East, Africa and non-EU European countries. 30% of staff are self-declared BAME.

Women comprise 34% of the School's research-active FTE. Women comprise 46% of Lecturers, 28% of Senior Lecturers, 33% of Readers and 21% of Professors. Internal promotions since 2016 contribute strongly to these percentages and to the intellectual development of the School. Two of the four individuals promoted to Chair are women (*Hunter-Jones* and *Jayawarna*), three of the eight individuals promoted to Reader are women (*Brennecke*, *Garikipati*, *Otaye*), and eight of the 15 individuals promoted to Senior Lecturer are women. A number of colleagues promoted to Chair and Reader in this REF period originally joined ULMS as Senior Lecturers (*Jayawarna*, *Marchesiani*, *Otaye*, *Li*) or Lecturers (*Florakis*, *Zundel*, *Hunter-Jones*, *Brennecke*, *Garikipati*, *Papageorgiadis*, *Gu*, *Belfrage*, *Sharifi*). 40% of these are women, and 69% are international. Furthermore, consistent with the School policy of development to enable internal promotion, the pipeline of women being prepared for promotion to Chair is strong. SIBE and WOM, areas in which there are traditionally more women, are ahead with the other Groups still using on-going recruitment to develop a better gender balance. To support equality and diversity in recruitment, appointment panels are Chaired by the Dean, and include the SGH and the ADR, with additional members to ensure a gender balance. Members have received EDI (equality, diversity and

inclusion) and unconscious bias training. Potential recruits meet a wide range of staff, both senior and junior, to ensure fit with expectations of citizenship and collegiality (Objective 2).

### **2.3 Ensuring Vitality: Enabling Environment and Staff Development**

The goals for staff development are to create conditions that enable research staff to deliver against University and School ambitions for world-leading research, with investment supporting all aspects of research and impact. These investments also enable individuals to achieve personal ambitions, including completion of probation for ECRs, promotions, and building global research reputations. Clear indications of their success are offered by metrics such as promotions (Table 3 above), and the greatly increased numbers of publications in journals recognised as world-leading by, for example, the FT50 list.

The School's Research and Impact Committee, Chaired by the ADR, provides robust research governance structures. These ensure that all research-related policies, practices, and support schemes are applied consistently, fairly and transparently across the School. This ensures an ULMS-wide research environment that supports all five School objectives, building a strong, collaborative and collegial community of scholarship. The ADR is supported by Directors of Impact, Ethics, Funding and Peer Review, as well as the Doctoral Director. Each Chairs a related committee/support group and sits on the Research and Impact (R&I) Committee with the ADR. They are joined in the committee by the six SGDoRs, who ensure consistent implementation of research systems and processes across Groups, and by the Research Office Team Leader and Impact Officer (Table 4).

**Table 4: Research Governance**

	<b>Research &amp; Impact Committee Membership</b>	
	Chair: Associate Dean Research: <i>Gatrell</i>	
		<b>School Membership</b>
	Research Team Leader Impact Officer	Research Office
	Subject Group Directors of Research: <i>Bektas</i> <i>Belfrage</i> <i>Cai</i> <i>De Groot</i> <i>Raddats</i> <i>Smith</i>	Subject Groups
<b>Sub-Committees reporting to Associate Dean Research</b>		
Ethics	Director Ethics: <i>Brennecke</i>	
Impact Support Group	Director Impact: <i>Garikipati</i>	
Doctoral	Doctoral Director: <i>Jayawarna</i>	
Funding	Funding Director: <i>Florakis</i>	
Reading Programme	Director Peer Review: <i>Donnelly</i>	

The R&I Committee makes recommendations on resource allocation such as sabbatical leave and research budgets. The School research budget is managed by the Research Office with oversight of allocations to individuals, Subject Groups and Research Centres/Clusters.

### **2.3.1 Investment in an Enabling Research Environment**

As part of the 2016 strategic review, ULMS developed a new workload model that allocates 40% of time (up from 30% in 2014) for research and provides ring-fencing for this through more generous teaching and leadership/administration allowances. The model also includes workload allocation for impact development, and activities such as editorial roles in leading journals. These allowances are accompanied by a research leave policy; all staff are eligible for a one semester sabbatical every three years. Staff apply through a formal process to the R&I Committee to ensure fairness and transparency. Applications need to be based on development of world-leading outputs, extension of impact reach and significance and/or funding. Since 2014, 35 study leave applications have been approved and taken (20 were male and 15 female, broadly reflective of the gender balance at School level). Over a third of these have supported development of research outputs that have enhanced CVs leading to promotion (for example,

*Belfrage, Florakis, Gu, Jayawarna, Marechal, Papageorgiadis, Radcliffe, Raddats, Rao*) or enabled individuals to take more senior positions externally (for example, *Akbar, Johns, Goyal, Moxham*). In addition, 16 shorter sabbaticals have been granted for impact (50% female), 10 of which have resulted in impact cases submitted to REF2021. Faculty can also organize teaching into one semester, where possible.

All research-active staff have access to a conference/research support scheme of £2,500 p.a. Individual research budgets are augmented through an incentive scheme. This rewards publications in FT50 (£2,000), other publications considered by the Reading Group as significant (£1000) and highly assessed funding applications (with a percentage of funding amount, whether successful or not). As described above, impactful work is also funded. There is an additional Professorial role allowance of £2,500 p.a. since all professors carry some form of leadership role. Others receive a financial role allowance that varies by nature of leadership/administrative role (e.g. £1,500 for a Programme Director). This allowance encourages individual leadership development, and supports promotion opportunities, since demonstration of leadership is important for promotion to Chair and Reader.

The School operates a pump-priming fund of up to £40,000 a year, managed by the School's Funding Steering Committee, again with a formal application process to ensure transparency and fairness. The fund supports ECRs with primary data collection (Section 2.3.2 below), and also those with early-stage research showing potential for subsequent funding bids.

### **2.3.2 Support for ECRs**

ECRs play a significant role in the life of the School, contributing to its vitality and future. Strong emphasis is placed on support (Objectives 1 and 2). New ECRs are placed on 3-year probation with clear targets for research and teaching set by their SGH for confirmation in appointment.

The probationary support includes:

- Additional research workload allowances to facilitate their transition from PhD into a faculty role: 25% in Year 1 (65% research allowance in total); 12.5% in Year 2 (52.5% allowance in total).
- Building capacity through targeted funding: Annual research support totalling £5,000 p.a. (composed of the £2,500 conference fund, plus an additional £2,500 p.a. usable for research related expenses), since role and publication incentive allowances are more likely to benefit experienced staff.
- Access to publication incentive payments in addition to the £5K.
- Early PhD supervision experience where possible (over half of those on probation are second supervisors).

- Protection from administration roles.

Support for ECRs continues post-probation to facilitate promotion to Senior Lecturer. This includes on-going mentoring to support research outputs and building external visibility, and encouraging additional CV-enhancing activities such as administrative roles to build management and leadership experience (for example, *Avino*: Joint Honours Liaison; *Wolf*: MBA Projects Management). ECRs attend workshops on relevant external funding schemes, for example, workshops on ESRC New Investigator awards, and are encouraged to attend other School funding related workshops (see 3.1.1 External Funding) and to develop funding experience through pump-priming applications to ULMS Funding Committee. Following pump-priming, they are encouraged to apply for small grant schemes, such as British Academy/Leverhulme and others. Successes include *Lam*, *Cartwright* and *Pirani* (British Academy Grants of up to £10,000 each). *Lam* was subsequently awarded a Leverhulme Research Fellowship in 2020.

All ECRs have access to University and Faculty support schemes, such as the ECR and Returners Fund, to support network building and collaboration, and the Faculty ECR Network. All early career staff can apply for University seed-corn funding schemes to support emergent research projects. Many School ECRs have been awarded funding from these schemes. For example, *Nilsson* £1,100 (2017) and £600 (2018); *Lam* £2,000 (2017) and £2,000 (2018); *Fu* £1,942; *Liu* £2,000; *Daher* £2,000; *Zhan* £1,980; *Geng* £2,000.

### **2.3.3 Personal Development and Promotion**

The research leadership provided by SGHs and SGDoR prioritises staff development processes. These include community building/development activities such as monthly group meetings and bi-annual away days with a strong focus on research; an active seminar series with typically bi-monthly events, including leading international scholars, journal editors and brown bag lunches to support paper development and mentoring and advice on appropriate conferences, publication outlets and revise and resubmits. The seminar series and high-profile international conferences (for example, Academy of Management, European Group of Organizational Studies (EGOS), Strategic Management Society, European Economic Association) are used to facilitate international network building, particularly for ECRs. Supported by the research budget and the ULMS Marketing team, this Group-based research activity extends to workshops and mini conferences, such as those organized by OSCM, including “Social Media in Operations and Supply Chain Management” (2019) and “COVID-19 and Modelling in Management Science” (2020).

Annual Professional Development Review (PDR) discussions and research action plan meetings support staff development against clear, role-related promotion criteria. A mentoring scheme supporting career planning, and critical choices (conferences, journals, funding, networking, editorial boards, etc.) exists for all staff. There are clear University research policy principles with an expectation that for promotion to Reader/Chair staff will require world-leading outputs. All staff outputs are assessed by the School Reading Panel. Significant research-related impact in policy and practice is also recognised.

To ensure equal opportunities for promotion and principles of equality and diversity, PDRs are expected to include an explicit discussion about promotion plans, with encouragement for those who are ready to put themselves forward. All promotion cases are discussed in the School's annual Promotions Group Chaired by the Dean and with the SGHs to maximise potential and support for promotion. Constructive feedback is provided on how to strengthen applications, backed up by mock interviews in preparation for University Promotion Panels.

Promotion to more senior levels requires experience of administration and leadership beyond expectations for outputs and impact. To create opportunities for everyone to develop their CVs in this way, the School has job descriptions for all major roles, for example, ADR, Subject Group Directors of Research, Directors of Ethics and Impact. All such roles are advertised School-wide with an application and interview process to ensure equality of opportunity. Now 39% of the research roles, including the ADR, are held by women whereas in 2014 only two women held research roles. The School continues to seek a better balance through its Athena SWAN work.

Development is supported by mechanisms designed to create a collegiate environment and celebrate success, such as annual research awards (£1,000 for impact, output and/or funding achievements), one for ECRs and a further award for senior staff from each Subject Group. Successes, such as large funding awards or best paper prizes, are shared in School newsletters.

Where relevant, the School supports leadership development through external programmes and workshops. For example, the BAM/CABS (Chartered Association of Business Schools) Development Programme for Research Directors has been attended by ULMS members (*Zundel*), and supported with sessions from ULMS staff (*Balogun, Gatrell*). Internally, there is a University leadership programme attended by all newly appointed SGHs. The HSS Faculty runs an annual programme for those in other leadership roles, such as SGDoR. ULMS has encouraged women moving into leadership positions to attend this (50% of ULMS attendees to date) and other career development programmes designed specifically for women, including

Aurora Leadership Development Programme (4 attendees since 2014) and Springboard for Women Programme.

Support from the School's External Engagement team and its Advisory Board stimulates exchanges between faculty and business and public and third sectors. For example, Board members from HSBC and Accenture have recently supported leadership practice research (*Guillaume* and *Daher*). The External Engagement team have sourced companies including North West Precision Engineering and Senar Precision Engineering to support ERDF funded Collaborate to Innovate research (*Lyons*), and local Chambers of Commerce to support HR practice research (*Huadong* and *Miraglia*). The School also hosts open events on contemporary organizational and socio-economic issues. This includes conferences such as 'The Business of Equality' (2018), and 'Applications of Big Data and Analytics' (2018: in collaboration with HMRC and the Operational Research Society), and regular Business Breakfasts for local business leaders, for example: "Productivity and Growth" (2019 *Konings*: research on regional high growth); "Big Data" (2019 *McHale*: research on analytics). Other engagement is encouraged through outlets including the Financial Times and The Conversation (for example, *Ellington & Costas*, see <https://theconversation.com/uk/search?q=ellington%2C+costas>). Economics offer an "Insights" series providing a layperson's account of Group research findings and contribute to policy debate forums including VoxEU. *de Groot*, for example, has contributed to the ESRC funded Economics Observatory on coronavirus and the economy with a piece on negative interest rates.

#### **2.4 PGR Recruitment, Training & Supervision**

ULMS provides an environment for its PGR students that supports the establishment of academic careers to the highest standards. It benefits from the University of Liverpool-led North West Social Science Doctoral Training Partnership (NWSSDTP: the ESRC-funded Liverpool, Manchester, Lancaster and Keele University consortium) for which *Gu* is institutional lead and *Radcliffe* Business and Management Pathway lead. PGR recruitment, training and supervision are led by the ULMS Doctoral Director and supported by the Doctoral Committee. ULMS has 140 PhD students, 106 in Liverpool (40 home/EU and 66 overseas), and 34 at its Chinese partner institution, XJTLU, who are co-supervised by ULMS faculty. Since 2014 ULMS has maintained Liverpool-based PGR numbers, focusing on establishing a PGR environment (Objective 5) that supports the recruitment and development of high-quality PGR students, as a key component of the School's research sustainability and vitality. Growth has largely come from XJTLU (registration of students from 2016) with these students only recently reaching completion and graduation.

#### **2.4.1 Funding**

Funding for PhD students comes primarily from two sources: ULMS Scholarships (Graduate Teaching Fellowships: GTFs) and ESRC NWSSDTP studentships. GTFs were introduced in 2016 for 2017 enrolment to support recruitment of high-quality students. They provide PhD students with a 4-year stipend. GTFs offer an apprenticeship route providing training and support to develop teaching and assessment skills alongside research competence. Prior to 2016, there were on average only six sponsored PhD students annually, some only receiving partial funding. Since 2017 funding for 10 GTFs a year has been provided, including international fees where needed, with funding increasing to support 15 GTFs from September 2020. These numbers are boosted annually with ESRC-funded studentships from the NWSSDTP.

New PGR recruitment processes have supported quality and EDI aspirations, with quality assessed through research proposals and gender-balanced interview panels. 56% of GTFs are women, and 69% international. Using this process, ULMS has also won increasing numbers of studentships competitively from the NWSSDTP, with 32 overall since 2014, and 18 in the last three years. 10 of these NWSSDTP studentships are part of the 'CASE' studentship scheme in collaboration with partners including, for example, Unilever, Alder Hey Children's Hospital, the South Cheshire GP Alliance and Bank of England.

All GTFs receive additional funding as part of their stipend to support conference attendance, as do NWSSDTP funded students. Additional investment has been made in PGR facilities, with individual working space, IT support and dedicated communal areas. There is also a PhD conference attendance fund, offered competitively to all (both funded and self-funded) through application to ensure equity of allocation.

All PhD students have been given a blanket extension of 6 months to their registration date in response to COVID-19.

#### **2.4.2 Integration and Supervision**

ULMS treats all PGR students as apprentice academics, irrespective of funding status, with Subject Groups forming their disciplinary home. Integration into the ULMS research culture is assured through participation in Subject Group meetings, seminar series, workshops, away days and social events. PhD students have a voice through the PhD Forum, PGR student representation on the Doctoral Committee, and regular meetings with the Doctoral Director.

To ensure quality of supervision and support, mandatory supervisor training is provided by the Liverpool Doctoral College. Students undertake an annual Development Needs Analysis (DNA), and progress is assessed annually via Independent Progress Assessment Panels.

Research students are encouraged to attain a good work-life balance and can access mental health and wellbeing services offered by the University and the School, including the University PGR Peer Wellbeing Ambassador Network programme. If a student learning difficulty or disability is identified, the Disability Support team ensure reasonable adjustments.

### **2.4.3 Research Training and Development**

PGR students are offered an exceptional range of training and developmental opportunities, including training in core research methods through modules on the ULMS NWSSDTP Business and Management and Economics pathway programmes. Students are then funded to attend relevant courses at NWSSDTP institutions (and, in case of need, elsewhere) following the identification of training needs in the DNA. They have access to all support and training offered by the University's Liverpool Doctoral College, including any training offered through Engage@Liverpool. The new University partnership with the ESRC's National Centre for Research Methods is enhancing training provision for social science methods. Core training offered by ULMS includes the Concordat on research integrity, ethics, impact, and EDI. Research methods courses are augmented by an academic skills seminar series ('Academia 101'), held monthly to discuss topics such as career planning, and application and interview insights.

Methods training is further provided by Northern Advanced Research Training Initiative (NARTI). This is a self-funded network of Northern research-led universities of which ULMS is a member and which facilitates events (workshops, conferences) to share expertise and training in advanced research methods, offering grants to support these activities. ULMS uses NARTI to support PGR students in gaining experience of organizing/attending academic conferences. ULMS supports PhD students in gaining grants from NARTI and also the Society for the Advancement of Management Studies. This has funded two ULMS PGR student-led conferences, involving leading international journal editors (Organization Studies, Journal of Management Studies) to advise on paper development (£6,000 and £8,000 respectively).

Development of PhD students is furthered through work on conference papers and outputs with their PhD supervisors. Following the creation of the PhD conference funding scheme to support international PhD network building, 119 joint student-supervisor conference/workshop papers were presented between 2017 and 2019, also at high profile conferences such as the European Group for Organizational Studies and Academy of Management. Examples of co-authored

publications include *Boumparis* (Journal of International Money and Finance, 2017), *Horner* (Research Policy, 2019) and *Xing* (European Journal of Operational Research, 2019). ULMS also co-funds an annual paper development workshop in collaboration with Hanken (Finland) and VU Amsterdam (The Netherlands).

The emphasis placed on training and development enhances students' employability. Of those whose destination post-PhD is known, 84% have remained in academia, with students taking lectureships in leading UK institutions (including Manchester, Nottingham, Royal Holloway, Cranfield) and also internationally (including Trinity Dublin, Dublin Institute of Technology, Monash, EM Lyon, Peking, King Saud Riyadh).

## 2.5 Equality and Diversity

Equality and Diversity is integral to the ambition and practices of the University and ULMS, and intrinsic to ULMS Objectives 1 and 2. In recognition of its EDI practices, the School holds the Athena SWAN Silver award. The School follows good practices embedded in the University Equality Framework, including recruitment, promotion and flexible working policies, to ensure an inclusive environment that embraces individual differences and extends equal opportunities to all staff, including:

- Development of job advertisements/person specifications to attract a demographically diverse range of applicants, and adhering to selection procedures, including the 'Disability Confident' scheme.
- During recruitment, shortlisting of candidates by members of the interview panel who have completed the University's diversity and equality and unconscious bias training. This training has to be updated every three years.
- Teaching scheduled during core working hours (10-4pm), with access to a carers' car park for staff with caring responsibilities.
- Supporting disabled staff through reasonable adjustments, such as lighter teaching loads and special equipment.
- Promoting the University's diversity and equality committees, working groups and networks during induction and through high profile print and online communications. This includes the Female Early Career Researcher Network, PGR and ECR Networks, Networks for Disabled, BAME, LGBT staff and Parents and Carers.
- Access to breast-feeding and baby-changing facilities.

- Participating in the new University RISE (Research in an Inclusive and Sustainable Environment) initiative to explore ways of mitigating differential impact of the COVID-19 pandemic for gender widening inequalities and to address under-representation of BAME colleagues.

Results of these initiatives are seen in the improved gender composition and international diversity in the School. As the diversity of the faculty has increased, so has interest in research and impact in equality and diversity which is a key research focus of the Organizational and Employee Wellbeing Cluster. For example, *Poletti-Hughes*: glass-ceiling in Latin America; *Burn*: discrimination and protected characteristics; *Otaye*: diversity management; and *Parsons*: social inequality.

The School has developed local family-friendly policies and schedules with research events held usually during core working hours (10-4pm), to enable attendance by staff with caring responsibilities (including PGRs). ULMS draws on its research in parenting and diversity (*Gatrell*, *Radcliffe*), appointing *Radcliffe* to the role of ULMS Family-Friendly Adviser, providing guidance to all staff and PGR students on family-friendly policies.

Transition back to work for those returning from leave, including maternity, adoption or carer leave, is supported by meetings with colleagues, SGHs and the School's Family-Friendly Adviser. There is a workload allowance for individuals returning from maternity/shared parental/paternity leave. Women returners can join the University's 'Female Returners Network' and apply to the University ECR and Returners fund to pump-prime renewal of their research. The School actively promotes these in online communications.

Opportunities to work part-time are offered, with workload set pro-rata to ensure fair allocation and access to the same development opportunities as all others. To date this opportunity has been taken up by one male (Professor) and one female (Senior Lecturer). Three other members of faculty have part-time positions with ULMS, also holding appointments with other institutions.

Consistent with the University commitment to DORA (see Ref 5a), the School has a Director of Peer Review (*Donnelly*) who Chairs the ULMS Peer Review Reading Programme for outputs. This is governed by the Institution's 2016 Code of Practice for the Annual Assessment of Research. Work accepted for publication is reviewed independently, and in-depth, by two subject experts chosen by the relevant Subject Group Head. All SGHs have completed EDI and unconscious bias training and consider balance of seniority and gender. In the event of a

disparity of opinion between these two reviewers, the output is moderated by a third, additional reviewer, selected by the Director of Peer Review.

A REF Governance Committee (as part of the Institution's REF Code of Practice) has been formed to finalise the selection of outputs for submission, with all individuals involved having completed EDI and unconscious bias training. This committee consists of seven female and nine male colleagues. The Governance Committee includes an external observer from outside the School, at least one representative from the School's Equality & Diversity Committee, and one ECR (as defined by the REF guidelines).

### **3. Income, infrastructure and facilities**

#### **3.1 Research Funding**

ULMS' funding strategy seeks to match funding sources to the nature of research in the School. EU Funding has been a focus since much of the School's research is applied. The Research Centres for Supply Chain Research and Entrepreneurship play a key role (Section 1.2.2.2 ). Research Clusters are at an earlier stage of development and are working on streams of research for future funding support. ECRs (29% of those submitted) are encouraged to obtain experience and capacity building through applications to small grant schemes, such as those offered by the British Academy. More senior individuals are encouraged to apply for fellowships (for example, Leverhulme) to support capacity building. They are supported by the School's Director of Funding and the Funding Steering Committee, which identifies funding opportunities for individuals and provides peer review of funding proposals. The School funds Research Assistants to support ambitious grant writing activity. Investment was enabled by a £500,000 award to the School for a Brett Chair in Management held by the Dean of the School. ULMS has benefited from external funding (particularly EU projects) and significant internal University funding since 2014.

##### **3.1.1 External Funding**

Funding support is targeted at increasing the number of external funding applications and our overall success rate. In the previous REF period 125 applications resulted in 48 awards, totalling £2.8M. In the current REF period, 259 applications have been made, with a total funder contribution of £40.475M. 78 have been awarded, with a total funder contribution of £14.925M (£2,393,569 income to ULMS). Members of the School have continued to secure funding from the EU; UK Research Councils (predominantly ESRC, AHRC and Innovate UK); and charities such as the British Academy and Leverhulme Trust. Experienced faculty are supported to submit large grants, for example, to AHRC (*Meehan*), Innovate UK (*Bektas*), ESRC (*Radcliffe*), and to

contribute to cross-Faculty large grant applications (*Garikipati*, Nuffield Foundation; *Li*, Royal Society; *Lyons*, BBSRC).

EU funding has been a focus for the School's applied research. Successes in this period include two major European Horizon 2020 projects led by the Centre for Supply Chain Research (€1.3M RUCAPS, €1M GOLF), their two EC Interreg projects (total of just over £300,000 in funding) and continuing ERDF funding (£1.8M) for the Centre for Entrepreneurship. The School strategy for managing a drop in such funding opportunities following Brexit has been to develop global collaborations through applications to the Newton Fund via BEIS (*Song*, China; *Kumar*, Vietnam, Brazil, Thailand), to international funders (*Garikipati*, Korea Rural Community Corporation), and international exchange schemes (*Song*, Royal Society; *Hunter-Jones*, Leverhulme). In the face of Brexit-related uncertainty over future participation, the School has been involved in a number of awards involving international partnerships (total income of £2,204,954 to the University) that provide the basis for future collaborative applications, including in Europe post-Brexit. Other successes include Leverhulme fellowships (*Gatrell* 2018-19, *Lam* commencing 2021).

ULMS faculty are involved as co-investigators in large-scale University projects amounting to almost £13M in this REF period. These include *Haycox's* involvement in health economics research funded by Cancer Research UK and NIHR (£2.5M to the University), the contribution of *Ellwood*, *Giordano*, and *Jones* as co-investigators to the £10M Leverhulme-funded Centre for Functional Materials Design, the contribution of *Lyons* and *Hernandez* to an EC grant with Geography and Planning (£214K), and the contribution of *Gu* to an ESRC grant with Geography (£276,000). More recently *Lyons* and *Narayanamurthy* have contributed as co-investigators to a NERC funded project on packaging with Chemistry (£740K).

There are regular development activities for funding, including seminars to raise awareness of schemes; grant writing workshops to build capacity; writing retreats to support application development; and peer review of applications. The ULMS "Write-It Programme" offers focused support for less experienced faculty in developing bids.

Through such support, and in line with our commitment to equality of opportunity, we have dramatically closed the gender gap in terms of funding applications to external schemes, achieving 50% male/female investigators on externally funded projects in 2018/19. The proportion of female principal investigators has remained above 20% of applicants in each academic year and we seek to increase this to closer to 50% in each year.

The University's Consultancy team supports members of staff to engage in research-led consultancy. Work totalling over £367,800 has been contracted to the School's staff in this REF period.

### 3.1.2 Internal Funding

Investment in building a sustainable and vibrant research culture at ULMS has been significant, amounting since 2014 to more than £34M, with an additional £14.44M spent on buildings (Table 5).

**Table 5: ULMS Research Investment 2014 - 2020**

Research workload allocation: 30% 2014 – 2016; 40% 2016 to date	£25,030,671
Sabbatical leave awarded	£1,311,392
Research Activity Support (conference funds, role-related research allowances, incentives, etc.)	£4,207,104
Internal impact awards (including incentive)	£222,633
Journal Open Access awards	£22,736
Research seed-corn, pump-priming and funding incentives (school and faculty)	£310,800
Databases/servers/specialist software	£2,427,870
PGR studentships, facilities and support	£3,145,506
New buildings	£14,440,000

The University offers seed-corn and pump-priming schemes such as the Overseas Development Assistance (ODA) seed-corn fund and the Industrial Strategy Challenge Fund (ISCF), through which numerous staff members have been awarded funding, exceeding £100,000 since 2014. For example, ISCF: *Karimi*: with Computing and Linguistics for Unilever on Online Data (£19,000); ODA: *Ellwood*: food security, Mozambique (£8,840) and *Narayananmurthy*: Satellite Big Data Analytics for disaster relief, India (£9,550); Knowledge Exchange: *Pinnington*: Modern Slavery Crown Commercial Service (£9,685) and *Southern*: Social Enterprise Networks (£6,000). The University has also offered small grants to support COVID-19 research with £64,000 allocated to members of ULMS in 2020. Projects include, for example, *Giordano, Blackburn and Southern* (£12,000: Impact of COVID-19 on small business in the LCR), *Hernandez* (£9,900: Pandemic Resilience in South America Livestock Production Systems), *Meehan and Pinnington with Boyle (Heseltine Institute)* (£25,000: Developing learning and resources to strengthen the resilience of the LCR economy).

### 3.2 Infrastructure and Facilities

Excellent staff have to be supported by an excellent research infrastructure and environment. All research activity (funding bids, award management, knowledge exchange and impact, consultancy) is supported by the University RPI Directorate which also manages access to seed-corn funds linked to the ISCF and ODA research and manages allocation of COVID-19 research funding. The HSS Faculty Research Office offers advice, bid development support and peer review, and the University Research Support Office offers costing support, contract management and post-award administration. The University also offers support schemes, such as the ECR and Returners Fund that ULMS has benefited from (see 2.5 above).

ULMS itself has invested significantly in research infrastructure and facilities, with the development of the Subject Groups and enhanced space through new buildings and PGR facilities, but also investment in a School-specific server to support the big data processing requirements of Economics and Finance, and significant investment in infrastructure through databases (recent additions include Refinitiv Tick History & Eikon, Board Ex, Orbis and Zephyr, which complement an existing comprehensive subscription to WRDS-based databases including CRSP, Compustat, Factset, CSMAR, OptionMetrics, DealScan, Audit Analytics, TRACE).

The School's dedicated Research Support team supports the ADR. It has been strengthened since REF2014 (doubled from 4 members to 8), enabling recruitment of an Impact Officer and a Senior Grant Writer to support funding applications. This team (1) maintains research information systems; (2) services research committees; (3) administers all research support and incentive schemes; (4) supports impact; (5) organizes events including writing retreats, workshops and mini conferences (with ULMS Marketing team); and (6) supports external funding activity.

## 4. Collaboration and Contribution to the Research Base, Economy and Society

Making wider contributions to the economy and society regionally, nationally and globally is fundamental to the School's research and impact strategy (Objective 3), and the University's investment in addressing societal challenges and delivering public benefit.

### 4.1 Engagement with Key Research Users and Beneficiaries to deliver Impact

Our impactful research extends beyond the specific cases submitted for REF2021. With 46 impactful research projects developed between 2014 and 2020, ULMS demonstrates a powerful contribution to policy and practice. Among the submitted impact case studies, *Belfrage* and

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*Nilsson* have convinced central bankers in Brazil of the virtue of a regional and trade-oriented form of currency internationalisation capable of supporting sustainable development. *Forrest* and *McHale* have changed UK policy and regulation on gambling to protect problem gamblers. *Hunter-Jones*, *Sudbury-Riley* and *Al-Abdin* have helped develop new practices to improve end-of-life care. *Meehan* has worked with social housing organizations to change national public procurement in social housing and healthcare. Table 6 lists further examples of current impactful research recognised by the School Impact Steering Group, in addition to the submitted case studies. Much of ULMS impactful research (for example, *Radcliffe and Gatrell*, *de Groot*, *Munoz*) involves collaborative projects, enabling partnerships to enrich the research of the School.

**Table 6: Impactful Research Projects**

Partner(s)	Area of Impact
WOMBA (Work, Me and the Baby), Working Mums (the #1 job and community site for working mums in the UK), and Business in the Community	Changing organizational attitudes regarding gender and family-friendly working ( <i>Radcliffe, Gatrell</i> )
Liverpool City Region Combined Authority	Advancing social enterprise in a metropolitan city region ( <i>Southern</i> )
European Central Bank	Monetary policy simulator for advising Central Bank policymakers ( <i>de Groot</i> )
Mexican Business Council	Gender diversity on boards of directors in Mexico ( <i>Polletti-Hughes</i> )
Chilean Development and Production Agency	Fostering entrepreneurship in rural Chile ( <i>Munoz</i> )
The Crown Commercial Service, The Cabinet Office, The Home Office	Government policy and modern slavery ( <i>Meehan, Pinnington</i> )
The Liverpool Combined Authority	Place-based approach to modern slavery: regional policy and the Modern Slavery Act ( <i>Meehan, Kennedy</i> )
UK Ministry for Housing, Communities and Local Government, the Land Economics Foundation, Scottish Land Commission, Shelter Scotland and the Greater London Authority	Policy on developer contributions ( <i>Gu</i> )
Satsure ( <a href="https://www.satsure.co">https://www.satsure.co</a> )	Big Data Analytics platforms for: timely logistical planning and execution in disaster relief (80 evacuation rescue missions 2018 Kerala floods); agri-insurers to conduct assessment of crop acreage and yield for calculating indemnity payments (Northern India); institutional investors to conduct initial assessment of potential sites for solar photovoltaic projects ( <i>Narayanamurthy</i> )

**4.1.1 Wider Contributions to Economy and Society**

**International** collaborations confer economic and societal benefits overseas. Beyond the benefits from international partnerships in the School's impactful research in the submitted case

studies and above in Table 6 (for example, *de Groot, Munoz, Narayanamurthy*), examples include the Horizon2020 project led by *Li*. This brings together researchers across disciplines (economics, management, science and engineering) to address global food security challenges through innovation in agri-food supply chain management, and involves key international research alliances and industrial partners from countries such as France, Spain, Portugal and China, including Dalian Maritime, Hong Kong Polytechnic, Michigan State, Tianjin, Valencia and Zhejiang universities. *Hernandez* (£150,800) is leading a project with international partners from seven countries across Europe and South America, exploring how to manage the high risk, uncertain conditions faced by agricultural production systems. *Meehan* (2017-2021) collaborated with University of Windsor, Ontario on a CAD\$1.6M project funded by the Government of Canada on enhancements to patient value and health system sustainability. *Venugopal* has engaged with organizations in India, including Samagra Empowerment Foundation, Genrobotic Systems, Basix Municipal Waste Management, and LooTel, to understand how they improve sanitation conditions across nine Indian states. *Ellwood* has supported transformation of management practices in food security and poverty alleviation in Mozambique, working with the Baixo-Limpopo Irrigation Scheme. *Poletti-Hughes* (2020) has worked with business women and the Mexican Chamber of Deputies to endorse a Government White Paper that guarantees gender parity on Boards of Directors within six years. With colleagues from Princeton University and the New York Fed, *Konings* developed path-breaking work on exchange rate pass-through using granular data on prices and exports. He also collaborates with the National Bank of Belgium and the European Central Bank. *Murakozy* collaborates with the World Bank and the European Commission. *Sofka* is the lead author of the annual Research and Innovation Observatory Country Report of Germany for the European Commission's Joint Research Centre between 2014 and 2018.

**National** collaborations stimulate exchanges between faculty and industry and the public and third sectors. Beyond the impact case studies and Table 6, there are the following examples. *Meehan* and *Pinnington* are working with the Home Office, the Cabinet Office and Crown Commercial Services to prevent modern slavery within businesses and supply chains. Collaborators include NGOs such as the Ethical Trading Initiative. *Meehan* also sits on the reference group for Metro Mayor Steve Rotheram's 'Liverpool City Region's Fair Employment Charter'. *Lyons* has engaged in a systematic analysis of procurement in the defence sector, leading to a project developing new procurement techniques with the Ministry of Defence. *de Groot* works, through ESRC funding, with the Bank of England on low interest rate environments. *Radcliffe* and *Gatrell* have collaborated with Zurich Insurance (4,500 UK employees) and Nationwide (18,000 employees) to enhance their family-friendly policies.

ULMS is also committed to policy-relevant research which benefits the **regional** economy and society. In addition to the regional impact demonstrated by the ERDF-funded Growth Catalyst programme (Centre for Entrepreneurship), *Lyons* has improved regional industrial performance in manufacturing operations and supply chain systems in over 100 SMEs throughout the North West, approximately 10% of such SMEs. *Southern's* research collaboration with the LCR has brought national organizations, including Big Society Capital, Power to Change and Social Investment Business, together with the LCR Combined Authority to create new ways of bringing finance to social enterprise, and supported the Metro Mayor in launching the city region's first social investment fund (Kindred). As a result of its work with SMEs in the region, ULMS is a holder of the Small Business Charter award. ULMS has been actively engaged in COVID-19 related activity in the LCR, with policy briefs for the Heseltine Institute (*Meehan, Southern*) and LCR-related University COVID-19 funded projects (see Internal Funding above, for example, *Giordano et al.* and *Meehan et al.*)

#### **4.2 Research Collaborations, Partnerships and Contributions to the Discipline**

Involvement within a globally connected research community is core to ULMS' sustainable and vibrant research culture and is supported for colleagues at all levels through School research funding to form proactive international research networks.

##### **4.2.1 Collaborations and Partnerships**

Staff are involved in a wide range of partnerships with collaborators from other institutions, nationally and internationally. Key examples are the international partnerships (involving other academics and industry) built around the H2020 projects in the Centre for Supply Chain Research, and key institutionally-based research-partnerships held by members of the Economics Group, listed above. There are many others. For example, *Brennecke* is an Associate Member of MelNet, the Melbourne-based consortium of universities expert in social network analysis (<http://www.melnet.org.au/people>); *Karimi* works on various projects on consumer behaviour and digital platforms internationally, including universities in Spain, Canada, Taiwan and Lebanon. *Daher* works with American University of Beirut (Lebanon) on Knowledge is Power. *Munoz* collaborates on sustainable development in Chile with Universidad del Desarrollo (Chilean Economic Development Agency). *Miraglia* is Co-PI on the REaL-PAL (Relationships, Exchanges and Leadership: Implications for Performance Appraisal and Learning) project funded by the Portuguese Foundation for Science and Technology (€240,000).

ULMS engages in a wide range of international partnerships (57 staff hold or have held 140 international honorary positions). The outcomes of joint projects are a key indicator of the success of these partnerships. Since 2014, 58% of outputs eligible for the School reading

programme for potential consideration for REF2021 have been published with international co-authors and there have also been collaborations on 37 special issues. Examples include *Lam* and *Lyons*, International Journal of Operations & Production Management with Cheng and Yeung, Hong Kong Polytechnic University; *Marechal*, Organization Studies, with Linstead (York) and Griffin (Texas A&M); *Bektas*, Computers and Operations Research with Gilbert (Montreal) and Vigo (Bologna); *Florakis*, Corporate Governance: An International Review, with Aguilera and Kim (Korea University); and *Zundel*, Academy of Management Learning and Education with Holt (Copenhagen Business School), Contu (Massachusetts) and Vince (Bath).

#### **4.2.2 Contribution to the Sustainability of the Discipline**

ULMS makes many significant contributions to the sustainability of the Management discipline through our community citizenship (see section 4.2.3) and by responding to contemporary problems identified as national and international priorities. Our contribution to the latter includes applied research on key issues such as sustainability, health and social justice through funded projects dealing with, for example, sustainable supply chains and agriculture. In its impact work, ULMS demonstrates how Management Studies contributes to global and national priorities via projects on modern slavery, parenting and work, livelihoods of rural women and social entrepreneurship. Engagement also includes equine and human welfare via the Horseracing Industry Conferences, organised by ULMS (2018, 2020). Interdisciplinary research in ULMS' Centres and Clusters reaches out across the University to Health, Engineering and Humanities. ULMS has addressed national and international priorities through being proactive in University funded COVID-19 related activity in the LCR. ULMS has also won external funding for applied COVID-19 research. For example, British Academy Small Grants: *Pappas*: Earnings management in the times of COVID-19 (£9,993); *Zhan*: COVID-19 Social Media Infodemic in the Pharmacy Industry (£9,012).

#### **4.2.3 National and International Community Citizenship**

Staff are committed to supporting the work of learned societies including the Academy of Management (AoM); BAM, CABS and REF2021.

Many staff members hold positions within the divisions and interest groups of AoM. *Otaye* is a member of the Executive Committee, Gender and Diversity Division. *Wolf* is treasurer of the Strategizing, Activities and Practice Interest Group and *Balogun* a member of its Advisory Board. *Suddaby* served on the History Division executive and also as PDW Chair. *Marachel* is a member of the Critical Management Studies Division Ethics and Inclusion Committee. *Li* is a member of the Outreach Committee and *Yang* a member of the Best Dissertation Committee.

Within BAM, *Gatrell* was a Council member (2013-2019), *Lyubovnikova* is Co-Chair of the Organizational Psychology Interest Group, *Jayawarna* Chair of the Entrepreneurship Group, and *Papageorgiadis* Treasurer of the International Business Group. In addition to these, *Gatrell* is Chair of CABS Research Committee. *Blackburn* is Chair of the REF Sub-panel Business and Management, and *Balogun* a member. *Balogun* and *McNulty* are Trustees of Society for Advanced Management Studies, and *Blackburn* a Trustee and the Treasurer.

In recognition of their collaborative contributions to the research base the following colleagues have been awarded prestigious Fellowships. *Balogun* and *Gatrell* are Fellows of the British Academy of Management, and *Suddaby* of Academy of Management. *Balogun*, *Blackburn* and *Gatrell* are Fellows of the Academy of Social Sciences (AcSS). *Konings* is Fellow of the Belgian Academy of Sciences and Art. *Poletti-Hughes* is Fellow of the National Research Institute of Mexico.

Examples of involvement in research councils include: *Miraglia*, reviewer for Social Sciences and Humanities Research Council of Canada; *Guillaume*, reviewer for Research Foundation Flanders Belgium, as well as ESRC Peer Review College; *Milos*, Leverhulme Trust project evaluator and ESRC project evaluator; *Stamatogiannis*, member UKRI Future Leaders Fellowships Peer Review College and reviewer for British Council-Newton Fund Researcher Links. Academic community leadership has been particularly strong regionally through the collaborative enterprise of NARTI. *Gatrell* Chaired NARTI (2012-2018), with *Radcliffe* and *Jayawarna* members of the NARTI board.

Staff also sit on various boards and committees. For example, *Balogun*: Advisory Board of Liverpool Health Partners; *Cai*: Liverpool LEP Professional & Business Services Board; *Hunter-Jones*: Council of Governors Alder Hey Children's Hospital; *Konings*: the Committee for Social Economy, and Steering Group Research Policy Center Regional Economy and Entrepreneurship (both Flemish Government); *Maitland*: St George's Hall, Liverpool.

#### **4.2.4 Building the International Community**

ULMS staff serve on the board of 101 refereed journals and hold (or have held) board roles at leading journals including Academy of Management Journal, Academy of Management Review, Strategic Management Journal, Journal of International Business, Journal of Management Studies, Organization Studies, Journal of Business Venturing, Journal of Organizational Psychology, Journal of Operations Management, International Journal of Operations & Production Management and Human Relations. *Jones* and *Gatrell* were Co-Editors in Chief of International Journal of Management Reviews. *Gatrell* was previously Associate Editor and is now General Editor of Journal of Management Studies. *Blackburn* is Editor in Chief of the

International Small Business Journal, and also the Editor of the Routledge book series in Entrepreneurship and Small Business. *Parsons* is joint Editor in Chief of Marketing Theory and *Florakis* of Corporate Governance. *Donnelly* is Associate Editor of Work, Employment and Society. *Zundel* has been senior Associate Editor of Organization Studies since 2014. *Cornelissen* is Editor of the new journal, Organization Theory. *Woods* is Associate Editor of Journal of Organizational and Occupational Psychology.

ULMS staff are actively involved in international conference organization. Those listed above as holding elected positions at AoM and BAM, for example, carry significant responsibility for annual conference programme organization. For example, as Treasurer of the Academy of Management Strategizing, Activities and Practice Interest Group, *Wolf* supports organization of the annual conference Interest Group arrangements, including sponsorship and events. In their roles at BAM, *Lyubovnikova* and *Jayawarna* chair conference tracks. Involvement is also significant at EGOS. *Brennecke* is convenor of the standing working group on “Multilevel Network Research”, *Marachel* is co-convenor of the Pre-Colloquium Postdoctoral and Junior Faculty Workshop since 2016, and *Balogun* is on the Advisory Board for the Strategizing, Activities and Practices Research Community Platform.

ULMS staff regularly organize or are part of panels, workshops and symposia at conferences. At the Academy of Management 2019 conference, for example, members of ULMS were involved in 17 professional development workshops and symposia. Staff regularly contribute keynote speeches at conferences relevant to their expertise. For example, OSM faculty contribute keynotes to conferences in logistics (for example, *Bektas*: 2015: EURO Working Group on Vehicle Routing and Logistics, Vienna; *Song*: 2018 Conference of International Joint Research on Innovative Container Supply Chains, Ningbo); Sports Business Centre members deliver keynote speeches on sports-related issues (for example, *Forrest*: 2016: New Horizons responsible gambling conference, Vancouver; *McHale*: 2019: International Symposium on Forecasting, Greece); individuals from the Centre for Entrepreneurship give keynotes on aspects of entrepreneurship (for example, *Blackburn*: 2019: Plenary to the 11th Congress of the Academy of Entrepreneurship and Innovation, Montpellier). Others are invited to contribute keynotes based on their impact (for example, *Papageorgiadis*: 2017: PATLIB17 conference, European Patent Office, Munich; 2018: IP Law Europe Summit, Montreux, Switzerland; and *Garikipati*: 2019: European Research Conference on Microfinance, University of Paris).

ULMS has run 16 conferences since 2014, focusing on specialist conferences that match research expertise. These include: European Sports Economics Association 10th Anniversary Conference (2018: *McHale and Forrest*), the Centre for Port and Maritime History Annual Conference (2015: *Song*), the Forecasting Financial Markets 24<sup>th</sup> International Conference

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(2017: *Laws*), the Organizational Learning Knowledge and Capabilities Conference (2018: *Jones*); the annual academic conference of the Institute for Quantitative Investment Research (INQUIRE: 2019: *Florakis*), and the 10th International Conference on Systematic Innovation & the 9th Global Competition on Systematic Innovation (2019: *Lam*).