

<b>Institution: University of Derby</b>
<b>Unit of Assessment: 17- Business and Management Studies</b>
<p><b>1. Unit context and structure, research and impact strategy</b></p> <p><b>1.1 Overview</b></p> <p>The College of Business, Law and Social Sciences (BLSS) encompasses three schools: Derby Business School (DBS), the Centre for Contemporary Hospitality and Tourism (CCHT) and the School of Law and Social Sciences. UoA17 covers all four discipline areas within DBS: Accounting &amp; Finance, Marketing &amp; Operations, Economics and Management, in addition to Tourism which forms part of CCHT. DBS and CCHT are co-located at the main University of Derby (UoD) campus at Kedleston Road. Law and Social Sciences are returned under UoA20.</p> <p>We identified in REF2014 the following objectives:</p> <ul style="list-style-type: none"> <li>• To improve the quality and quantity of research outputs.</li> <li>• To increase the number of research staff within the UoA.</li> <li>• To better engage with industry to develop impact and funding and work more closely with networks, regional partners and professional bodies.</li> <li>• To increase our international research presence.</li> <li>• To improve the research environment by equipping and mobilising researchers with skills and support.</li> </ul> <p>In REF2014, UoA17 was developing its research culture, navigating the transition from a teaching intensive Unit with significant impact (10% at 4*, 30% at 3*), to a teaching orientated but more research focused UoA, strategically targeting activity across outputs, impact and environment for REF2021. The last REF showed that the UoA was building research capability, but at that point in time there was still limited engagement of large numbers of staff in research. In REF2014 11 FTEs, 35 outputs and two impact case studies formed our submission compared to 33.9 FTEs, 85 outputs and three impact case studies for REF2021.</p> <p>Since REF2014, research activity has been focused around two dedicated interdisciplinary research centres in DBS headed by experienced researchers, <b>Foster</b> (Centre for Business Improvement, CBI) and <b>Reyes</b> (Centre for Supply Chain Improvement, CSCI). These centres have provided and continue to provide direction and focus for increasing UoA17's research capability within the wider context of the UoD's Research Strategy (REF5a).</p> <p>The creation of the BLSS College structure in 2017, the appointment of a new PVC Dean in 2018 (<b>Omoteso</b>) and a new College Head of Research and Innovation in 2019 (<b>Cowling</b>), led to a consolidation of research activity. The strategy became one that aligned research activity with the evolving needs of specific academic policy and practice constituencies and on enhancing the quality, relevance and reach of the research within the UoA. This has led to the concentration of department-level research around a set of specialist fields supported by the activity of the two research centres and a new BLSS college structure which provides an effective governance structure for facilitating interdisciplinary and engaged research.</p> <p>Oversight and management of college research activity, including Post Graduate Research Students (PGR), is the responsibility of the College Research Committee (CRC). Ethical issues associated with staff, UG, PG and PGR student research projects are governed by a separate College Research Ethics Committee (CREC). The activities of both the CRC and CREC report into the University Research Committee (URC). Elements of research activity which are directly related to REF are managed by Unit leads (<b>Cowling, Foster</b>) who sit on the central university REF Steering Committee. All College research activity is supported by two dedicated research administrators appointed during this REF period.</p>

## 1.2 Research Strategy

The UoA's current and future research activity is underpinned by the College Research Strategy which is to deliver '**Better Business and Society**', that is research which informs and "makes a *real* difference to business and society", particularly in terms of supporting vibrancy and regeneration at a regional level. Specifically, our key priorities for UoA17 are to:

1. Strengthen our regional impact by influencing policy development and continuing to work closely with local partners to tackle real-life business challenges.
2. Invest in talent by recruiting, developing, supporting and retaining researchers.
3. Promote equality and diversity amongst our research staff, particularly in relation to senior research posts.
4. Continue to develop our PGR community through bursaries, post-doctoral positions and projects closely aligned to the UoA's research themes.
5. Increase research income with grants which support our research strategy and research themes.
6. Continue to improve the quality of our research outputs.
7. Develop a 'Regional Observatory' which will collect social and economic time series data for researchers within the Unit and wider College to use.

Our Strategy continues to differentiate us particularly at regional level, through a combination of research rigour, relevance, and engagement. Our focus on the County of Derbyshire, and the East Midlands region, with an emphasis on research, engagement and practice in relation to local business, remains a distinctive strength around which the broader UK place-based agenda has recently aligned.

Our high levels of business and community engagement have provided us with a strong platform to create impact by identifying issues that are of relevance to our external partners and communities. By actively engaging with our partners, we can genuinely claim to conduct applied research that has the potential to '*make a real difference*' outside of academia. Examples of such activity include our Innovate UK/ESRC funded Knowledge Transfer Partnership (KTP) with Chatsworth House which is evaluating the regional economic impact of their activities, two ERDF funded projects to support regional low carbon SME development and our lead role in the ESIF Productivity through Innovation programme in the Region.

Our Research Strategy is also supported by the University's wider Strategic Framework Pillar 2 which outlines how our research and knowledge creation can be a 'force for positive impact' in the region. This enables us to leverage the advantages we have as a regional University which emphasises its role as part of the wider socio-economic system of Derby, Derbyshire, and the East Midlands.

To build on the successful work of the CBI and CSCI and to support wider research activity within UoA17, in 2018 a central strategic investment plan of £6.3M additional research funding for all UoAs was approved. This, complemented with other existing College investments since 2014, has meant that around one-third of this funding has been dedicated to the expansion of the two existing research centres, slightly under one-third has been allocated to a significant expansion in our Doctoral programmes and students, and the remaining funds have been dedicated to 'Engagement' and 'International' Research Fellowships, research workshops, conference attendance, Senior Visiting Research Fellowships and an Early Career Research fund.

All of this investment has helped us to enhance our research environment, quality and quantity of outputs and impact activities. In particular, we have been able to make several research related appointments. This includes doctorally qualified faculty, three Associate Professors (**Bass, Paterson\***, **Michopoulou\*** \*both internal promotions), 12 senior Professors (**He, Cowling, Apergis, Fynes, Ramkissoon, Huang, Chen, Yekini, Omoteso**), including two new professorial research centre leads (**Foster, Garza-Reyes\*** \*internal promotion), and a number of postgraduate research/postdoctoral fellowship appointments. **Brindley**, the Dean of Research, appointed in 2016, is also included in our UoA.

The intention of the senior appointments has been to enhance research leadership and expertise within the UoA, to support the wider research activity of staff, particularly in terms of mentoring Early-Career Researchers (ECRs) and those new to research. Previously we have been held back by our limited capability in terms of experienced researchers.

Our Strategy has been to explicitly focus on giving our latent researchers the direction and support they need to engage on a more consistent basis with research activities, as well as providing a coherent strategic direction. Overall, this has meant that our short-term aim which was to substantially increase the numbers of staff submitted to the 2021 REF, has been achieved with an increase from 11 to 37 staff (33.9 FTE). Our professorial appointments for the UoA have also increased from one in REF2014 to 12 in this REF period which has enabled us to significantly increase our research leadership and mentoring capabilities.

Our current research priorities are channelled through the work of the two research centres and other distinctive research groups that have developed, based on our existing strengths, since 2014. The CBI and CSCI have been a focus for recruitment and research leadership, as well as being highly successful in developing more interdisciplinary, regional and international research. Funding connected to the UoA has attracted just over £1M during the REF period.

However, the UoA's research achievements go well beyond the activities of these centres as outlined below and we have invested strategically in broadening our research scope as well as strengthening our existing areas of excellence. Our recent recruitment of **Chen** as Professor of Organisational Behaviour and Human Resource Management, for example, has addressed an identifiable gap in research expertise and mentoring in DBS. As a specialist in human resource issues in China, his publications appear in the *Journal of Applied Psychology*, *International Journal of Hospitality Management*, *Journal of Organizational Behavior*, *Management and Organization Review*, and *Asia Pacific Journal of Management*.

### 1.3 Research Centres

#### 1.3.1. Centre for Supply Chain Improvement (CSCI)

Professorial Lead: **Garza-Reyes**

Researchers: Professor **He**; Senior Lecturers **Anosike**, **Liyanage**, **Smith**; Lecturers **Daniel**, **Liravi\***, **Nadeem\*** (former GTA); Research Fellow **Kumar** (\* staff awarded their doctorate during this period).

Visiting Scholars: **Frederico**, Federal University of Parana, Brazil, **Rocha-Lona**, Instituto Politecnico Nacional, Mexico, **Al-Najem**, Gulf University of Science and Technology, Kuwait, **Dieste**, University of Padova, Italy and **Luthra**, Government Engineering College, India

**Aim:** The CSCI aims to generate new knowledge that addresses the challenges that organisations are currently facing in the design, management and improvement of their supply chains and internal operations. The Centre's research is in direct response to industry needs and contemporary research streams and leads one of the Impact Case Studies for UoA17.

**Achievements:** Research by the CSCI has led to at least 150 outputs during this REF period (**Garza-Reyes**, **He**, **Anosike**, **Nadeem**, **Kumar**, **Liyanage**, **Daniel**) (e.g. articles in *International Journal of Operations and Production Management*, *International Journal of Production Economics*, *Production Planning & Control*, *IEEE Transactions on Engineering Management*). The work of the Centre has also been presented at numerous international conferences (e.g. *International Conference on Industrial Engineering and Operations Management (IEOM)*, *Production and Operations Management Society (POMS) Conference*) and through invited international keynote talks such as the *5<sup>th</sup> North America Conference on Industrial Engineering and Operations Management*, *2018 Production and Operations Management Society (POMS) Conference* and the *International Forum on Energy Sustainability and Business Models (Garza-Reyes)*.

The Centre works collaboratively with colleagues from other disciplines such as the College of Engineering and Technology (**Liyanage**), and external researchers from national and international institutions, such as the University of Warwick, University of the West of England, Universidad de Monterrey (Mexico), Instituto Politécnico Nacional (Mexico), and the Mexican Institute of Transportation. Industrial partners include Rolls Royce, Toyota, Bombardier, East Midlands Trains, as well as a range of SMEs across different industries such as logistics and distribution, warehousing, packaging and manufacturing.

The Centre's work has led to impactful applied research in organisations in Mexico, Thailand, China, India and Colombia where, as a result of implementing our research findings, transport, manufacturing and healthcare operations have been significantly improved in terms of operational efficiency and environmental performance. This has consequently resulted in the reduction of costs, emissions of harmful gases to the atmosphere and consumption of fuel as well as the increase in flexibility, dependability, consumer satisfaction and overall competitiveness of the organisations.

Research from this Centre is delivered as part of the MSc in Supply Chain Improvement and MBA Global. The Centre also has close links with professional institutes and international societies such as the Chartered Institute of Purchasing and Supply, the Chartered Institute of Logistics and Transport, the Society of Industrial Engineering and Operations Management, and the British Academy of Management (**He** as co-chair of Interorganizational Collaboration SIG and then as elected Council Member).

**Funding:** For this REF period this equates to approximately £263k awarded from various funding bodies, including the British Academy, British Council, Innovate UK and the Mexico's National Council of Science and Technology (CONACYT) (**Garza-Reyes**).

### 1.3.2 Centre for Business Improvement (CBI)

Professorial Lead: **Foster**

The Centre's aim is to support organisations in their goal to improve and maintain strong business performance through applied multidisciplinary research. Our work is focused on four areas of expertise:

#### **Area 1: Responsible Customer Engagement**

**Researchers:** Professors **Foster**, **Ramkissoon**; Associate Professor **Michopoulou**; Discipline Head **Lawson**, Senior Lecturers **Antchak**, **Azara**, **Hancock\***, **Wiltshier\***; Lecturers **Akbar\***, **Banwait\***, **Bostock**, **Gill\***, **Hanlon\***, **Miller**, **Sakellarios**, **Tomasella\***; PGRA **Pope**, PhD Student **Shang** (\* staff awarded their doctorate during this REF period).

This interdisciplinary research grouping draws upon research from colleagues in the Marketing Division within DBS, the Centre for Contemporary Hospitality and Tourism and the College of Life & Natural Sciences. Research focuses upon 'responsible' and sustainable interactions between customer/providers, developing long-term, valuable relationships with customers and obtaining robust, relevant consumer understandings. The Group has a particular focus on retail and tourism.

**Achievements:** During this REF period, at least 75 research outputs (such as articles in the *Journal of Marketing Management*, *International Journal of Electronic Commerce*, *Journal of Sustainable Tourism*, *Annals of Tourism Research*, *Public Management Review* and *Event Management*) have been produced, including a methodological marketing research text (**Lawson**, **Hancock**) used on undergraduate & postgraduate marketing degrees and showcased at a British Academy of Management research event hosted at the University in 2017. The International Journal of Spa and Wellness, established by the University in 2018 as the first journal in this area, is also managed and edited by colleagues in the group (**Michopoulou**, **Azara**).

Research has been presented at several conferences, including the Academy of Marketing (**Lawson**, **Hancock**, **Akbar**, **Banwait**, **Miller**, **Tomasella**) the European Association of Sports Management (**Bostock**), the British Academy of Management (**Lawson**, **Foster**) and the Travel



and Tourism Research Association (**Michopoulou, Azare, Wiltshier**). In 2019, the group hosted the international Tourism Naturally Conference (**Michopoulou, Azara**) as part of a consortium of founding institutions which include Colorado State University, the University of Pisa, Central China Normal University and the University of Sassari. In 2020, the Group held a funded Society for the Advancement in Management Studies Visual Methodology external event aimed at ECR and PGR students with guest speakers from Harvard University, the University of Birmingham and the University of Manchester (**Foster, Hancock**). Researchers have been invited keynote speakers at, for example, the Peak District Partnership (**Foster**), the Chartered Institute of Personnel and Development East Midlands (**Foster**), the International Robotics Festival on 'Tourism for all' (**Michopoulou**), the Annual Forum and Conference of Chinese Tourism Management Association (**Ramkissoon**) and LUX\* Resorts and Hotels (**Ramkissoon**).

Researchers work collaboratively with colleagues at national and international institutions such as Harvard Business School, Newcastle University, the University of Benghazi, Sheffield Hallam University, the University of Bologna and Stenden University of Applied Sciences. Activity within the group has also led to collaborations and advisory work with the private sector, such as PKF Cooper Parry (**Foster, Hanlon**), the Cathedral Quarter (Derby) Business Improvement District (**Foster**), Derby City Council (Future High Streets fund and City Vision Commission) (**Foster**), the Australian Environment Protection Agency (**Ramkissoon**), Derby County Football Club, England/GB Handball, Table Tennis & Volleyball (**Bostock**), Marks and Spencer and the Co-operative Group (**Gill**) and the Tanzania Tourist Board (**Michopoulou**). The group also works with other research bodies such as the British Academy of Management Marketing & Retail SIG (**Foster**), the Global Wellness Institute (**Michopoulou**), the National Research Council, Italy (**Ramkissoon**) and the Norway Research Council (**Ramkissoon**). Researchers within the group act as reviewers for several journals (e.g. *Annals of Tourism Research* (**Ramkissoon**), *Qualitative Market Research* (**Foster**)) and sit on journal editorial boards for, for example, *The Services Industry Journal* (**Ramkissoon**), *Journal of Business Research* (**Ramkissoon**), *Journal of Sustainable Tourism* (**Ramkissoon**) and *Events Management* (**Michopoulou, Azara**).

**Funding:** Work of the Cluster has generated approximately £79k of funding for the University during the REF period. Projects include: an exploration of temporary retail space funded by the Academy of Marketing (**Foster**), an Innovate UK KTP which focused on digital marketing with the management consultancy firm PKF Cooper Parry (**Foster**) and a methodological event funded by The Society for the Advancement in Management Studies (**Foster, Hancock**).

## **Area 2: Applied Economics & Enterprise Evaluation**

**Researchers:** Professors **Apergis, Cowling** (College Head of Research and Innovation), **Huang**; Discipline Head **Lynch**; Senior Lecturers **Athanasouli, Michaels, Powell, Wond, Yang**; Lecturers **Babajide\*, Dastidar, Hasan\*, Mustafa, Rambukwella\*** (previously GTA), **Zha\***; PGRA **Dimitriadou** (\* staff who have been awarded their doctorate in this period).

**Visiting Professor: Williams** (former Chief Economist at Lloyds Bank Commercial Banking, rotating Chairman of the Institute of Economic Affairs Shadow Monetary Policy Committee).

This interdisciplinary grouping draws upon research from colleagues in the economics, finance, entrepreneurship, evaluation and law disciplines. Research focuses upon applied economics, particularly microfinance, corruption, international and development economics, as well as the evaluation of impact in public and private sector initiatives. Research in this group forms one of the Impact Case Studies for UoA17.

**Achievements:** The Group has produced approximately 170 outputs (including articles in the *European Journal of Operational Research*, *Journal of International Money & Finance*, *Oxford Bulletin of Economics & Statistics*, *Research Policy* and *British Journal of Management*) during the REF period and staff have presented their work at key conferences such as the *World Finance Conference* (**Apergis**), *The Society for Institutional and Organizational Economics* (**Mustafa**), *International Research Society for Public Management* (**Wond** – panel chair) and the *Centre for Comparative Studies of Emerging Economies* (**Athanasouli**). Staff sit on several editorial boards

(e.g. **Apergis** Editor-in-chief for *International Journal of Financial Studies* and *Asian-European Journal of Economics and Finance*, Associate Editor: *Economic Modelling* and *Open Economics Journal*, **Cowling**, *International Small Business Journal*, *International Journal of Entrepreneurial Behaviour & Research*). Membership of key organisations include the Productivity Insights Network, Innovation Caucus, and Institute for Small Business and Entrepreneurship SME Finance SIG (**Cowling**) and the American Economic Association, and European Economic Associations (**Apergis**). The Group leads an economic seminar series open to all staff, students & external academics once a term (**Mustafa**). Speakers include researchers from the group and leading external speakers from, for example, Cardiff University, Aston University, Bournemouth University and the University of Lincoln.

Research relating to innovation in evaluation has resulted in an invited keynote at the Polish Department for Economic Development, advisory roles at international development organisations such as Islamic Relief and the Argidius Foundation and acting as a committee member for the UK Evaluation Society (**Wond**). Research leading to an e-transparency index which provides more accurate measures of corruption and evaluation of anti-corruption initiatives to minimize corruption, improve accountability and increase citizen inclusiveness has led to projects and high-profile collaborations with the World Bank and the UN (**Athanasouli**). In early 2020, **Powell** presented an economic evaluation on reforming UK Social Care Funding at a national policy webinar in April, organised by the UK think tank, *Politeia: Funding the Future - Retirement and Social Care, Framing the Policy on Social Care - What Should the Questions/ The Aims Be?* **Williams** also regularly speaks at national events such as in 2020, speaking alongside Sir Vince Cable at a webinar entitled: 'The Economy after Corona: Recovery or Intensive Care' and presenting on the economic impact of COVID-19 at conferences organised by the Chartered Institute of Housing.

At a more local level, staff are regularly asked to comment and discuss the economic impact of events (e.g. Brexit) at practitioner forums within the region, such as PKF Cooper Parry management consultants and Eversheds (**Michaels**). **Michaels** joined the D2N2 COVID-19 Economic Recovery Analytical Group (May 2020) and in June 2020 he presented a research briefing on COVID-19's impact on the D2N2 local labour market from an occupations perspective. The main findings have been included in the group's presentation to the D2N2 Economic Recovery Board. Staff have also conducted other economic evaluation studies for Derby and Derbyshire County Councils (**Lynch, Dastidar**) and Warwickshire County Council in conjunction with the School of Education at the UoD (**Lynch**). **Cowling** also leads the ESIF Productivity through Innovation programme in partnership with Nottingham and Nottingham Trent Universities. This scheme offers practical support to small firms to assist enterprise growth. This is aimed at enhancing and accelerating the innovative capacity of SMEs in the region through a structured programme of support. Alongside this, a dedicated evaluation team are conducting a real-time evaluation of the firm level impacts of support against a selected control group of firms who did not receive support.

**Funding:** The research Group has generated approximately £286k of funding during this period. In 2019, a 2-year management KTP with Chatsworth House (Devonshire Group) was secured to explore the economic impact the Group's activities are having on the region (**Powell, Lynch, Foster**). 90% of the project is funded by the ESRC. Commissioned work (**Cowling**) by Let's Do Business, a provider of government assisted funding programmes for local SMEs conducted a formal evaluation and CBA with a sample of assisted small businesses. The Report found that small-scale local interventions make a measurable impact to business outcomes. The formal report was cited as an example of good practice evaluation in an EC DG Region report in 2020. In addition, **Huang** secured a British Academy Mid-Career Fellowships in 2018-19 entitled 'Stock Connect: A New Model of Financial Market Integration'.

### **Area 3: Sustainable Business & Clean Growth**

**Researchers:** Professors **Fynes**; Associate Professor **Paterson**; Senior Lecturers **Baranova, Conway, Kelleher**; Lecturer **Nadeem** (formerly GTA)\*, **Daniel**; Project Researcher **Gallotta**\*; PGRA **Matthew** (\* staff who have been awarded their doctorate in this REF period).

This interdisciplinary grouping focuses on how low-carbon and pro-environmental business responds to the clean growth agenda. Applied research by the group has informed regional policy and business support projects, in addition to helping local pro-environmental firms find opportunity in the green economy through an EU funded business support programme (DE-Carbonise) and the Low Carbon Business Network. Work by this group features in one of the Impact Case Studies for UoA17.

**Achievements:** A key achievement of this grouping was securing the successful Low Carbon Project (2016-2019) and the DE-Carbonise project (2019-2022) which combined, attracted £340k of ERDF funding for SME business development within a wider project worth £1.6M involving collaboration with Derby City and Derbyshire County Councils and the UoD's Institute for Innovation in Sustainable Engineering (**Paterson, Baranova**). Published outputs by the group include articles in *Local Economy*, *International Review of Entrepreneurship* and *Business Ethics: A European Review* and a 2017 DBS edited book 'The Low Carbon Economy: Understanding and Supporting a Sustainable Transition' (**Baranova, Conway, Lynch, Paterson**). In addition, the group completed a regional study report of the skills' needs of the low carbon sector which was commissioned by Learndirect for the D2N2 Local Enterprise Partnership (£30k) (**Paterson et al**).

In order to embed the grouping's research into industry practice, the group works collaboratively with several external beneficiaries such as the LEP, Derby City and Derbyshire County councils and the East Midlands Chamber. The grouping has led on business focused events (such as the Going Green Market Place and annual Sustainability Summits) and staff have roles in strategic policy development (for example, as panel members on the Low Carbon Sector Advisory Panel, The Regional Energy Strategy Group and Council Energy Efficiency Grants Scheme). The grouping's activity has also been instrumental in establishing the Low Carbon Business Network (of 100+ firms; growing at c. 5% per month) which supports regional SMEs through events, resources and guidance in their endeavours to become sustainable.

**Baranova** is the co-track Chair for the BAM Sustainability SIG. In 2018, a BAM SIG Sustainability national event was held at the University to explore closer links between academic and practitioner communities. **Paterson** is an advisor for the D2N2 Local Enterprise Partnership Energy Strategy Group (2018-present), been a member of the D2N2 LEP Low Carbon Advisory Committee (2014-2018) and a contributor to the Clean Growth Local Industrial Strategy.

**Funding:** Total funding during the REF period equates to approximately £370k.

#### **Area 4: Accounting, Accountability & Ethics**

**Researchers:** Professors **Yekini, Omoteso**; Discipline Head **Johal**; Senior Lecturers **Conway, Coyle\***, **Hodgson** (PhD student); Lecturers **Adeyemi, Arthur** (\* have been awarded their doctorate during this REF period).

The most recently established research grouping explores financial accounting, management accounting, tax and tax management, auditing and assurance as components of accounting, in addition to corporate governance, CSR and accountability.

**Achievements & funding:** Research outputs include articles in: *The British Accounting Review*, *European Financial Management*, *Accounting Forum*, *Review of Quantitative Finance*. Staff review for several journals such as: *Quarterly Review of Economics and Finance*, *The British Accounting Review* and *The Accounting Forum* and **Yekini** was Guest Editor for the *Advances in Environmental Accounting and Management Journal*. Two national events have been organised by the group and held at the University: the *British Accounting and Finance Association*, Annual Conference of the Northern Area Group in September 2018 (**Conway**) and a research seminar in 2019 with guest speakers from the universities of Leicester, Lancaster, Essex and Nottingham (**Yekini**). In 2019, Professor **Omoteso** was elected as a Council Member/Trustee of the Chartered ABS and **Johal** was invited to talk at the CDAF Research Excellence Framework Workshop; Perspectives from a Head of Discipline. **Johal** also contributed to a funded Gatsby Charitable

Foundation benchmarking project in 2016 led by the School of Education which attracted approximately £9k of funding.

## 2. People

### 2.1 Staffing strategy and staff development

We continue to invest in our staff and have introduced several initiatives to support researcher development. Our staffing strategy focuses upon two areas: supporting and mentoring existing staff and growing research capability. Our staffing policy has therefore been to improve our research capability and performance, but more importantly strengthen our ability to support early-stage researchers who are the numerically dominant group.

The College employs only a limited number of fixed contract research staff and only one member of staff within the UoA has such a contract (**Kumar**). Within the UoA, all staff have a doctorate which reflects the wider College's remit to increase the number of doctorally qualified staff. At the time of submission, for example, 49% of DBS staff have a doctorate. This represents a significant increase from our last submission. In terms of promotional opportunities, suitably qualified research staff have been supported in their successful applications for permanent faculty contracts where opportunities have arisen (**Nadeem, Rambukwella**). Other staff have been promoted internally during the REF period (**Paterson** Senior Lecturer to Associate Professor), (**Michopoulou** Senior Lecturer to Associate Professor), (**Garza Reyes** Reader to Professor) and moved from part-time to full-time professorial contracts (**Apergis**).

Research leadership opportunities are also provided to staff in the earlier stages of their research career, such as the Chair of the College Research Committee and DProf Programme Leader (**Wond**) and the DBA Programme Leader and Chair of College Ethics Committee (**Baranova**). The UoA and wider College also have a very select number of faculty with joint appointments (e.g. **Fynes**).

Research excellence is an essential criterion in all new appointments and promotions. New hires are expected to add to the UoAs' research profile. We have recruited several staff included in the submission with doctorates who are at the early stages of their academic career (**Ali, Amoncar, Arthur, Daniel, Dastidar, Kumar, Mustafa, Zha**) and we have also supported a number of returned staff in the completion of their doctorate whilst at the University (**Hancock, Baranova, Wiltshier, Nadeem, Tomasella**).

In order to support these staff in their research activity and add to the research vibrancy of the UoA, a number of senior high-profile Professors/ Associate Professors have been appointed (**He, Bass, Cowling** (College Head of Research and Innovation), **Apergis, Fynes, Chen, Ramkissoon, Paterson** (internal promotion), **Michopoulou** (internal promotion), **Yekini, Omoteso** (PVC Dean), **Brindley** (Dean of Research), **Foster** (Head of CBI), **Garza-Reyes** (Head of CSCI - internal promotion), **Chen, Huang**). This has allowed the UoA to build a cadre of dynamic Professors and Associate Professors who can mentor staff and manage exciting research projects linked directly to major business challenges. These appointments have also been supported by a new UoD process for applying for Associate Professor and Professor status (REF5a, 3.4.1), including research, teaching and professional practice roles.

In addition to College level support, in 2018 the University's Early Career Forum (REF5a, 3.4.3) was established which several of our staff have benefitted from. This forum acts as a catalyst for shared learning and to stimulate interdisciplinary collaboration between ECRs. In 2019, a total of £27,517 was awarded to support ECR activity across the University. Three of the UoA's staff have received funding through this scheme (**Nadeem, Kumar, Athanasouli**) to support conference attendance and skills training.

As part of the Researcher Development Programme (REF5a, 3.4.4) ran centrally, staff & PGR students can access impact support where they can receive guidance on, for example, dissemination activities, influencing policy development and collaborating with external



stakeholders, as well as other research support such as how to publish. Staff from the UoA have also presented at the annual UoD Research and Knowledge Exchange Conference which forms part of this programme.

College decisions relating to providing direct, targeted support to staff, are based on two formal sources of information issued to all staff: a staff research survey and the Individual Research Plan (IRP). Information from these sources is fed into the College research strategy and enables the Unit to monitor our staff strategy. This information has led to several interventions such as training on qualitative research packages, journal editor workshops, additional workload 'buy-out' to support research time, conference attendance and seedcorn funding for early-stage researchers. The survey asks colleagues to self-classify where they feel they are in their research journey and state the type of support they need. Approximately half of staff regard themselves as at the early stages of research and around 20% regard themselves as more experienced researchers. This survey coupled with the IRP, introduced in 2017, informs our research staff development and wider research strategy, including workload planning, budgets, mentoring, PGR supervision and training. The IRP asks staff to document their research activity for the previous 12 months, their future research plans and developmental needs. The IRP process also recognises staff who are involved in impact activities through their external engagement with industry. Individual feedback is provided by senior research leads and this also informs appraisal discussions with relevant line managers. Staff are identified as being research active (as per the University's Code of Practice) if they have at least 320 hours for research in their workload. The annual Mock REF exercise co-ordinated centrally by the University has also provided further feedback to staff from internal and external assessors.

## 2.2. Equality & Diversity

In terms of the profile of staff submitted to this UoA: 3% have a disability, 35% are female, 51% are BAME, 44% of staff are 25-44 years old and 56% are aged 45-64. These figures are broadly the same as the profile of staff submitted for REF2014. Compared to all colleagues in the College and University, the percentage of females is slightly less (College 47%/ University 49%) but higher for BAME staff (College 17%/University 13%). Whilst we have made good progress in terms of appointing and promoting BAME research staff, we recognise that more needs to be done, particularly in relation to supporting female researchers into senior roles.

The University Executive and senior leadership are committed to embedding the Athena Swan principles into our institutional structure. The College has developed a specific action plan, aligned to the Institutional Strategy, to ensure that E&D issues inform all aspects of our Research Strategy with a particular focus on improving gender representation. This Plan includes:

1. Auditing applications for research roles and shaping adverts to attract diverse candidates.
2. Celebrating the research of female researchers through marketing and web profiles.
3. Targeting support to ensure more women and BAME colleagues apply for, and succeed, in internal promotions (to substantially reduce the gender gap in Associate Professor/ Professor by 2023-4 academic year).
4. Ensuring gender parity in research outputs and internal quality ratings through targeted support.
5. Ensuring equality in workload allocation for research staff with regular monitoring and adjustment where necessary.
6. Ensuring gender balance in the next REF submission, through recruitment, targeted support and promotion.

In terms of REF, all UoA members of the internal and external quality panels were required to undertake 'Unconscious Bias' training. The internal panel also had an equal representation of genders.

### 2.3 PGR Students

The PGR community forms an important element of our research strategy. During this REF period, we have focused our efforts on attracting better quality students whose research interests are clearly aligned with the Unit's business expertise. So, whilst the number of enrolled PhD and DProf students has not grown significantly, the projects and quality of students have improved as a result of a more academically selective recruitment process.

Each applicant is required to submit a research proposal which is reviewed initially by the Head of Research and Innovation (**Cowling**) and a research Professor in DBS (**He**) and then subject specialists. Applicants are then interviewed by the proposed supervisory team before being allowed onto the programme.

In 2018, the Doctorate in Business Administration (DBA) was launched, and we see this programme as an important activity to supplement the PhD and DProf programmes as it links academic research with professional business practice. This supports our 'Better Business' research strategy. Internal investment has also enabled us to recruit three PGRAs to the CBI to boost research activity in the research groups. Staff are also able to study for a doctorate, whereby fees are paid for by the College.

PGR student progress is reported and managed through the College Research Committee (PhD students, DBA & DProf research phase) or the DBA/DProf programme leader (taught phase only). All students at the University have two supervisors and supervisory teams must have at least two doctoral completions and be doctorally qualified. This allows for less experienced supervisors to work closely with more experienced staff. Where possible we have included less experienced supervisors on packages so that they have the opportunity to improve and develop their supervisory skills.

All supervisors are required to attend regular PGR training provided by the University and College. We have also developed bespoke DBS training (**Baranova**) for DBA supervisors which recognises the unique needs of professional doctorate students. Each student is required to complete several milestones throughout the programme. An online PGR management system was introduced by the University in 2018 (PhD Manager) and in 2019, the digitisation of the research ethical approval process (Ethics Monitor). This has streamlined the bureaucracy associated with progression such as the ability to upload and access information more easily. The University's MPhil/PhD programme was also successfully re-validated in 2019.

All new PGR students are provided with a College and University induction. The College induction showcases staff research, PGR projects and provides an opportunity for students to network. Each student is invited to UoA research centre meetings, where appropriate, which provides additional research support outside of their supervisory team. PGR students can also attend disciplinary research events held by the Unit, such as the Economic Seminar Series. Further support for PGR students is provided centrally through the University Research and Knowledge Exchange Office (URKEO), including a PGR conference fund, workshops which focus on developing PGR skills, regional doctoral network events and 3MT competitions (REF5a, 3.4.5). We have 32 PhD students and 59 DBA and DProf enrolled students linked to the UoA. We have also achieved 22 doctoral conferments, our highest since the REF/RAE assessments began. All PGR students are asked to complete PRES. In 2018, we achieved 100% satisfaction for Business and Management PGR students. Results of the PRES inform the PRES action plan which feeds into the overall Research Strategy of the College, managed by the CRC and the University Research Committee.

## 3. Income, infrastructure and facilities

### 3.1 Research funding

External research funding driven by UoA17's two research centres, has improved significantly since the previous REF. We have been awarded approximately £1M from a range of funders such as Innovate UK, the ESRC, the British Council, the British Academy, the ERDF and the private sector. This represents a ten-fold increase from REF2014 where we averaged £19k p.a.

In line with our research strategy, the primary focus has been on securing funding from sources which support impact work and external engagement with industry, particularly in the region. In monetary terms, approximately two thirds of our successful awards support this type of research activity. Where possible we have also secured funding to strengthen our international collaborations and engaged in interdisciplinary projects where business issues feature.

### 3.1.1 European Funding

ERDF funding (**Paterson, Baranova**) - Low Carbon Project (2016-2019) and the DE-Carbonise project (2019-2022) which combined attracted £340k of ERDF funding for SME business development in relation to decarbonising their operations and developing sustainable supply chains. These projects are part of a wider significant and successful ERDF project worth £1.6M involving collaboration with Derby City and Derbyshire County Councils and the UoD's Institute for Innovation in Sustainable Engineering (IISE).

### 3.1.2 Knowledge Exchange

*Innovate UK Knowledge Exchange Partnership (KTP)* with PKF Cooper Parry (2017/18, £70k) (**Foster, Hanlon**). This project explored how the company, an international business advisory organisation, could develop a 'zero touch' client engagement strategy.

*Innovate UK Knowledge Exchange Partnership* with the Devonshire Group/Chatsworth House (2020-2022 £160k, 90% funded by the ESRC) (**Powell, Foster, Lynch**). The project explores the economic impact of the Group's activities in the region and the implications this has for the heritage sector and visitor economy both locally and nationally.

### 3.1.3 Research Councils

Several projects have supported work in the areas of Operations Sustainability in relation to green lean approaches to improving organisational efficiency and environmental performance, adopting green technologies and sustainability standards in emerging economies, exploring energy efficiency opportunities through supply chain innovation and exploring sustainable transitions towards a low carbon economy. Funding for this research has been awarded from: British Council *Researchers Links* (£2k, 2017) (**Garza-Reyes**), British Council and Mexico's National Council of Science and Technology (CONACyT) *Institutional Links* (£80k, 2016) (**Garza-Reyes**), British Council *Researchers Links* (2016, £2k) (**Garza-Reyes**), British Academy *Advanced Fellowships* (2016, £101k) (**Garza-Reyes**), British Council *Researchers Links* (2016, £46k) (**Garza-Reyes**), British Council *Researchers Links* (2015, £2k) (**Garza-Reyes**), British Council-Mexico's National Council of Science and Technology (CONACYT) *Researchers Links* (2014, £30k) (**Garza-Reyes**).

A British Academy Mid-Career Fellowship was awarded to **Huang** (£111k 2018/19) 'Stock Connect: A New Model of Financial Market Integration'. This was the first comprehensive project to consider the profound implications of stock connect to the global financial markets and the barriers to its implementation.

The Society for the Advancement of Management Studies *Developing the Management Studies Community* scheme (2019/20, £4k) (**Foster, Hancock**). This funding supported a national event held at the UoD with speakers from Harvard, Birmingham and Manchester Universities which explored novel visual methodologies aimed primarily at PGR students and ECRs.

Funding from the Academy of Marketing *Research Funding* scheme (2016/17, £5k) (**Foster**) supported a study into *Value Co-Creation in Temporary, Independent Retailing: A Study of Consumer Value Perceptions of Pop-Up Stores*.

### 3.1.4 Charity Funding

*Gatsby Charitable Foundation project* (2015-2017 £9k) (**Johal**), led by the University's *School of Education* to conduct an evaluation of a group of pilot schools who have been implementing the eight Gatsby Benchmarks of good career guidance.

**3.1.5 Industry Related Funding**

*Let's Do Business* (2019/20- £15k) (**Cowling**) an evaluation of Let's Do Business (ERDF funded) investment programmes which provided total loan and grant capital of £1.5M to 385 primarily young, micro businesses in Sussex.

Learn Direct 2018 (£30k) (**Paterson et al.**) an assessment of key skills and training needs of the D2N2 low carbon and environmental goods and services (LCEGS) sector.

**3.2 Infrastructure and facilities**

Overall, the UoA has witnessed a considerable improvement in the research infrastructure and facilities since the last submission. This has been a direct result of investment and activity at both the College and University levels.

**3.2.1 College level**

Since late 2018, DBS have occupied new facilities in a dedicated area within the main campus. Previously, DBS staff had been dispersed. This new area includes dedicated meeting/board rooms with video conferencing facilities enabling meetings to be held with external stakeholders and those unable to visit the campus, such as overseas PGR students. These rooms are also used for research meetings, interviewing doctoral applicants and other research activity such as participant interviews. Additionally, we have a dedicated office for those staff who have research roles such as the two research administrators, visiting researchers and PGR assistants. The new DBS area coupled with CCHT staff relocating to the main campus from Buxton at the start of 2020 means that apart from three staff (based in other Colleges) all UoA staff are physically co-located in the same building. This has enhanced the research environment as it has provided greater opportunities for research collaboration, administrative assistance and mentoring and support for research active staff.

Two dedicated research administrators have been appointed during the REF period. These roles have enhanced the Unit's research environment by supporting research activity in relation to, for example, organising and promoting research events/activity, co-ordinating and monitoring funded research projects and the recruitment of doctoral students.

To support research activity, in 2016, DBS invested £440k plus the licence (£92k p.a) in a new Bloomberg laboratory open to all staff and students at UG, PG and PGR levels. The laboratory enables access to cross-asset, real-time data and historical time series analysis across all markets. In early 2017, access to the facility was extended to local businesses. All students and staff also have access to the latest versions of data analysis packages such as SPSS, STATA, EndNote, AMOS and Nvivo which can be used both off and on campus.

**3.2.2 Centrally**

Research at the University is governed by several policies, approved by Academic Board. This includes the University's Research Ethics Policy and Code of Practice which covers issues associated with for example, the ethical approval process, data storage, risk and consent. All staff and students are required to gain successful ethical approval from the relevant College Research Ethics Committee before commencing any research activity. In 2019, the University adopted a Statement on the Responsible Use of Research Metrics which makes the University's commitment to good practice in research metrics explicit with the aim of signing DORA in 2021/22. This has been developed by the University Bibliometrics Working Group which includes representatives from DBS (**Yekini, Foster**). In early 2020, the University updated their Research Data Management Policy. This policy provides a standard to safeguard the data arising from University research activities.

In addition, the University Professorial Council consisting of Professor /Associate Professor and ECR representatives from all Colleges (**Apergis, Michopoulou, Ali**), reports into the University Research Committee and VCE with the aim of providing strategic support for the implementation of policy and practice to enhance the research quality, intensity and environment at the University.



UPC also introduced a peer review process for funding applications above £20k, as a way of improving the quality and ultimately the success of applications.

URKEO acts as a central professional service for all matters relating to research across the University such as funding activity, PGR students, REF, knowledge exchange, impact, intellectual property, marketing and delivery/compliance (REF5a, 2.1). The University also has a dedicated Open Access Librarian and an additional £250k has been invested into Library resources extending, for example, journal access to staff and PGR students.

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

##### 4.1 Overview

A strength of the UoA is that we regularly collaborate with external stakeholders, particularly from industry, in a range of research-based activities, reinforcing our position as researchers who make a real difference to business. Our external academic collaborations have also significantly improved since the last census. We work with colleagues in approximately 40 different UK HEIs and 90 international HEIs in countries like Canada, UAE, China, Italy, South Africa, Libya and Australia. This represents a six-fold increase on the number of external HEIs we engaged with in our last submission. Furthermore, since the last census and as a direct result of mentoring by senior research colleagues, we have seen an increase in the quality and quantity of internal, multidisciplinary collaborations, particularly as real-life business issues are often complex, requiring an interdisciplinary approach. Our staff also regularly engage with the external academic community, as evidenced by the reviewing/editorial positions colleagues have and the official recognition staff have received for their contributions.

##### 4.1.1 Business collaborations and industry contributions

Our work with industry is a real asset to the Unit's research environment. We have forged strong, enduring relationships with both large and small organisations in a variety of industries which have led to excellent research-based collaborations, including colleagues operating in expert advisory roles. It means that our research is always industry-relevant at a regional, national and international level, providing us with several opportunities for pathways to impact.

**Foster** has been an active Board Member and Director for the Cathedral Quarter (Derby) Business Improvement District since 2017, an advisor to Derby City Council's City Vision Commission and Future High Streets Fund 2020 application which successfully progressed through the first round and an expert contributor to the Peak District Partnership's *Future Proofing the Peak District's Town Centres Call to Action Plan 2020*. **Baranova** is a Board Member for the Derby Local Enterprise Partnership. **Michopoulou** is a founding member of the Wellness Tourism Initiative, part of the non-profit Global Wellness Institute. **Paterson** is a member of the D2N2 Local Enterprise Partnership Energy Strategy Group, the D2N2 LEP Low Carbon Advisory Committee (2014-2018) and contributor to the development of the regional Clean Growth Local Industrial Strategy. In 2017, **Athanasouli** acted as a corruption expert for the European Commission advising on good governance in the Western Balkans. In 2018, she co-authored OECD advisory reports on curbing corruption in the private sector in Greece and is part of the United Nations Education for Justice Initiative which promotes teaching and understanding of ethics and corruption globally. **Cowling** hosted a *Regional Financing Opportunities* conference in March 2020 at the UoD which attracted senior UK policymakers from Innovate UK and the British Business Bank as well as private sector financial institutions and businesses.

The UoA's collaborative work with industry has been funded by both businesses themselves and research organisations. **Lynch, Powell and Foster** successfully secured a 2-year KTP with the Devonshire Group. The Project, also funded by the ESRC, is assessing the economic impact of the Group's activities, including Chatsworth House, on the region and more widely. Chatsworth are one of the University's strategic partners and the KTP specifically sets out to support the Group's achievement of its ten-year visionary plan of 'Benefiting our Shared Future'. Colleagues were commissioned by one of Derby's Business Improvement Districts to undertake an economic review of car parking in Derby City Centre (2016) (**Lynch, Dastidar**). In 2016-17, **Lynch and Yang**

undertook an unpaid similar economic impact review of the annual Buxton Music Festival, commissioned by the organisers of the event. **Cowling** was funded by the Let's Do Business Group to provide an assessment and evaluation of their small business support in 2019-2020. He is also currently engaged in an East Midlands wide package of support for regional SME through the Productivity through Innovation ESFR funding stream. This project brings together the Universities of Derby, Nottingham Trent and Nottingham. Drawing on our sustainability expertise and as part of our funded ERDF Low Carbon & De-Carbonise projects, colleagues provide workshops and tailored support to SMEs in the region (**Paterson, Baranova**). Expertise in this area led to **Paterson** leading a commissioned Learndirect study in 2018, which explored the key skills and training needs of the D2N2 low carbon and environmental goods and services (LCEGS) sector.

The College also has a network of visiting professors from industry. These include **Trevor Williams** former Chief Economist at Lloyds Bank Commercial Banking and rotating Chairman of the Institute of Economic Affairs Shadow Monetary Policy Committee.

Individual staff are active members of several professional bodies across all management disciplines including the British Accounting & Finance Association, Institute of Travel & Tourism, Chartered Management Institute, European Association of Sport Management, Chartered Institute of Logistics and Transport (UK), Chartered Institute of Marketing, the UK Evaluation Society and the Institute of Chartered Accountants (Nigeria). In addition, the wider College is affiliated with a number of professional organisations including the Institute for Small Business and Entrepreneurship, CBI, ACCA, PRME, the East Midlands Chamber and the Chartered Association of Business Schools. In 2019, DBS was successfully awarded the Small Business Charter accreditation and is currently engaged in the Leadership Programme of support for capabilities development in regional SMEs.

In addition, colleagues have been invited as key note speakers at a number of regional, national and international practitioner events including those held by: the Islamic Development Bank (**Apergis**, 2018), Derby City Council (**Baranova**, 2020), the East Midlands Chamber of Commerce Sustainability Summit (**Baranova, Daniel** 2019), the Peak District Partnership (2020) & CIPD Regional Branch (2018) (**Foster**), the Global Wellness Institute and Isle Access/ Visit Isle of Wight Tourism (**Michopoulou**, 2015, 2016), the OECD (**Athanasouli**) and the International Evaluation Conference/Polish Agency for Economic Development (**Wond**, 2017). Since 2013, the University holds a 'Logistics & Supply Chain Week' (**Lawson, Garza-Reyes**) in conjunction with the Chartered Institute of Logistics and Transport. This event, open to all staff and students, provides an opportunity to share information, the latest thinking in the industry and offers talks from leading experts at for example, Logistex, Eurostar and John Lewis.

#### **4.1.2 Academic contributions, editorships and esteemed society membership**

Staff linked to the UoA act as reviewers for a range of highly ranked journals. Examples include:

*Academy of Management Journal/British Accounting Review* (**Yekini**), *Journal of Management/Entrepreneurship, Theory & Practice/Journal of Business Venturing* (**Cowling**), *International Economic Review/Journal of Money* (**Apergis**), *Public Management Review* (**Wond**), *Annals of Tourism Research* (**Ramkissoon, Michopoulou**), *International Journal of Operations and Production Management* (**Daniel**), *Production Planning & Control* (**Kumar**), *Journal of Tourism Management* (**Wiltshier**), *British Journal of Management* (**He, Ramkissoon**), *Journal of Business Ethics/International Marketing Review* (**He**).

Colleagues also sit on editorial boards and act as editors for several leading international journals. Examples include:

*International Journal of Operations and Production Management* (**Garza-Reyes**, Associate Editor; **He**, Editorial Board; **Fynes**, Senior Consulting Editor), *Energy Economics* (**Apergis**, Editorial Board), *International Journal of Contemporary Hospitality Management* (**Michopoulou**, Editorial Board), *Journal of Travel Research* (**Ramkissoon**, Editorial Board), *International Small Business*

*Journal* (**Cowling**, Editorial Board), *Supply Chain Management: An International Journal* (**Garza-Reyes**, Guest Editor), *Production, Planning & Control* (**Garza-Reyes**, Leading Guest Editor), *Asia Pacific Journal of Management* (**Chen**, Senior Editor) and *International Journal of Human Resource Management* and *Journal of Business Research* (**Chen**, Editorial Board).

Several staff are also members of discipline related academic organisations such as the Royal Economic Society, Institute for Small Business & Entrepreneurship, British Academy of Management, American Economic Association, ATLAS and the Regional Studies Association.

#### 4.1.3 Academic recognition

Staff at different stages of their research career within the UoA have been recognised externally for their reviewing and contributions to academia. Examples include:

**Daniel** included in thinkers 360 'Top 50 Thought Leaders & Influencers on Supply Chain' (2020) and listed in 2000 'Outstanding Intellectuals of the 21st Century', International Biographical Centre (2017). **Amoncar** Best Paper Award, Entrepreneurial Marketing and SME track, Academy of Marketing (2017) and Best Paper Award, Business and Management Track, Asia Pacific Institute of Advanced Research (Australia) conference (2015). **Anosike** Best Research Paper Award, Circular Economy Track, Industrial Engineering and Operations Management (2019). **Foster** Articles selected for the *Journal of Marketing Management*, Editor's Choice 2014 Collection and Best Development Paper Award in the Knowledge & Learning Track, British Academy of Management (2016). **Fynes** Emerald Literati Award for Outstanding Reviewer *International Journal of Operations & Production Management* (2017) and paper awarded Emerald Literati Award in *International Journal of Operations & Production Management* (2015). **Garza-Reyes** Distinguished Service Award (2017)/Outstanding Researcher Award (2018)/Appreciation Award (2018)/ Best Track Paper Awards (2017, 2018, 2019, 2020) for the Industrial Engineering and Operations Management Society. **He** Best Presentation/Paper Award International Conference on Business Process Management (2018) and Highly Commended Paper Award, Award for Excellence 2017, Emerald Literati Network. **Kumar** Best Research Papers, Operation Management Track & Lean Management Track, Industrial Engineering and Operations Management (2020), Best Research Paper Award Industrial Engineering and Operations Management (2019) and Outstanding Contribution in Reviewing, *International Journal of Production Economics* (2019), *Journal of Cleaner Production* (2018), *Resources, Conservation & Recycling* (2018). **Nadeem** Best Research Paper Award, Lean Track, Industrial Engineering and Operations Management (2020), Best Research Paper Award, Circular Economy Track, Industrial Engineering and Operations Management (2019), Best Research Paper Award, Entrepreneurship & Innovation Track, Industrial Engineering and Operations Management (2018) and Best Research Paper Award, Circular Economy and Computing Track, Industrial Engineering and Operations Management (2017). **Omoteso** Outstanding Author Contribution in the 2015 Emerald Literati Network Awards for Excellence. **Ramkissoon** Outstanding Reviewer Award *International Journal of Hospitality Management* (2019), Outstanding Reviewer for *Journal of Business Research* (2018), Recognized Reviewer Award for *Annals of Tourism Research* (2018), Outstanding Reviewer for *Tourism Management* (2017, 2018), Outstanding Contribution to Sustainable Tourism Award, Chinese Tourism Management Association, Taiwan (2017), Outstanding Reviewer Award for *International Journal of Contemporary Hospitality Management* (2016). **Apergis** is ranked in the top 100 world list of economists based on the Scopus h-index and **Cowling** is ranked in the top 7% of economists in the world according to RePec.

In addition, colleagues regularly present their work at key conferences and have been invited as key note speakers at academic events including: 5th North America Conference on Industrial Engineering and Operations Management (IEOM), Mexico (2020) and Production and Operations Management Society (POMS) Conference (2018) Sri Lanka (**Garza-Reyes**); Leeds Beckett University and Shanghai Lixin University of Accounting and Finance, China (2019, **He**); International Conference on Green Development, Republic of Macedonia (2018, **Liyanage**); International Robotics Festival, Italy (**Michopoulou**, 2018); Minghsin University of Science and Technology, Taiwan and AMU, India and Royal University of Bhutan (2019, **Ramkissoon**).

#### 4.1.4 Academic roles

Staff have examined 40 external doctorates during the census period including students studying in the UK (for example, University of Liverpool, Cranfield University, Sheffield Hallam University, University of Southampton) and internationally (for example, University of Melbourne, Trinity College Dublin, University of Johannesburg, University of Limerick). Colleagues have also held external examining positions at UG/PG level at 28 institutions including Warwick University, University of Hong Kong, Aston University, Open University, University of Surrey and Liverpool John Moores University. Four members of staff hold active committee roles with the British Academy of Management: Council Member/Co-Chair/ Track Chair Interorganizational Collaboration SIG (**He**), Track Chair/ Co-Chair Sustainable and Responsible Business SIG (**Baranova**), Co-Chair Methodology SIG (**Lee**) and Secretary Marketing & Retail SIG (**Foster**). Other committee roles include: Council Member/Trustee, Chartered Association of Business School (**Omoteso**), the Scientific Committee for CERR (Colloquium on European Research in Retailing) and the Chartered Association of Business School DBA Steering Committee (**Foster**); Committee Member Entrepreneurial and Small Business Marketing Special Interest Group Academy of Marketing (**Amoncar**); Conference Co-Chair (2017,2019) and European Chair of the Global Council of the Industrial Engineering and Operations Management (**Garza-Reyes**); Conference Panel Chair International Research Society for Public Management (2018) and Director/Treasurer of UK Evaluation Society (**Wond**). A number of staff have visiting roles at other institutions including **Cowling** (Deakin University, Australia), **Garza-Reyes** (Universidad de Aguascalientes, Mexico), **Ramkissoon** (National Research Council of Italy, Stenden University of Applied Sciences, University of South Carolina) and **Chen** (City University of Hong Kong).

#### 4.1.5 Events and visiting academics

To foster collaboration, the UoA has hosted 16 international scholars, including doctoral students, during this period from institutions in Italy, Mexico, Kuwait, India and Brazil. The UoA has also held several external academic events to support research activity. Organised by **Mustafa** and open to all staff, PGR and PG students, the Applied Economics & Enterprise Evaluation research group hold a seminar series every term which showcases the work of colleagues but also prominent academics in the UK (for example, Cardiff, Aston). Two key tourism conferences have been held at the University (**Michopoulou, Azara, Wiltshier**): the Tourism Naturally Conference (2019) in partnership with Colorado State University, University of Pisa, Central Normal China University and Deggendorf Institute of Technology; the HE INC (Tourism, Hospitality & Events International Conference) (2018) co-organised with the University of Sunderland and the Centre for Research in Tourism Excellence. A funded Society for the Advancement of Management Studies workshop on Qualitative Visual Methodologies (**Foster, Hancock**) was held in 2020 with speakers from Harvard, Manchester and Birmingham universities. A similar British Academy of Management Marketing and Retail Special Interest Group event in conjunction with the Chartered Institute for Marketing, exploring qualitative methodologies and market sensing was held at the University in 2017 (**Foster, Hancock, Lawson**). In 2018, we hosted another national British Academy of Management event exploring organisational transformation towards sustainability and climate change (**Baranova**) which included speakers from Aston and the SME community in addition to showcasing the work of colleagues working in the low carbon arena. We have also held several logistics and supply chain research events (**Garza-Reyes, Nadeem, Kumar, Anosike**) including the 20th Annual Logistics Research Network Conference in 2015 and a 'How to get published in high-ranking journals' event (2019) led by visiting scholar Dr Luthra from the State Institute of Engineering and Technology, India.