

Institution: Durham University
Unit of Assessment: Business and Management (19)
<p>a. Overview</p> <p>Durham University Business School (DUBS) has 85.2 FTE staff working in all core business disciplines (including economics and econometrics). Our world leading research is concentrated in the following research clusters: (1) Accounting; (2) China Development; (3) Critical Studies; (4) Economic Growth; (5) Entrepreneurship (6) Finance (7) Leadership & Followership; (8) Operations Management; (9) Organizational Dynamics & Ecological Studies. Responsibility for coordinating and developing research activities is held by the Deputy Dean, Research (DDR) – a member of DUBS's senior management team – who provides guidance and direction through regular research committees at which all these clusters are represented. DUBS's research clusters provide the foci for collaborative work, indeed DUBS's research is also associated with many of the university-wide institutes and centres. All clusters are headed by a professor who encourages the organization of workshops, conferences, and other collaborative work, using an annual budget of £5,000 per cluster to bring world-renowned researchers to Durham. This research structure has been complemented by an investment of £7 million in new facilities at Durham's Queens Campus (including a state-of-the-art experimental laboratory), along with a £16.6 million upgrade to the primary DUBS location in Mill Hill Lane, Durham City. These investments have created high quality facilities for researchers at Durham, ensuring that there is a setting conducive for excellent research to be sustained for the foreseeable future. All of these investments in the infrastructure, facilities and staff within DUBS – allied to the development of research clusters – support a long-term vision for an increasingly vital and sustainable research environment, enabling world-class research and attracting high quality PhD students.</p>
<p>b. Research strategy</p> <p>Building on RAE 2008</p> <p>In the 2008 RAE, DUBS indicated five key strategic priorities for the next five years: (1) extending the international impact of research; (2) deepening capability in the key areas of research strength; (3) developing new, complementary areas of research strength; (4) expanding research-income capacity; (5) investing in research degree programmes. In June 2009, DUBS, with the Faculty of Social Sciences and Health, instigated an external Research Review. Subsequently, a revised School Research Strategy was produced. Prior to 2008, research had been more loosely organized through various groupings, which, due to expansion and staff changes by 2009, no longer fully captured the research within DUBS. Furthermore, these arrangements did not provide the organizational capacity for the type of research environment DUBS now required. Thus, the structure of current research clusters, headed by the new post of DDR, represents both the deepening of existing capability (priority 2) – clusters 3,4,5 and 8 were created by building upon existing strengths within DUBS; as well as the development of new, complementary areas of research strength (priority 3) – represented by the other clusters.</p> <p>For example, DUBS has extended the international impact of its research and deepened capability (priority 2) by building upon world-leading expertise in the area of Organizational Dynamics & Ecological Studies. Led by <i>Polos</i>, DUBS secured an 876k EU grant – a multi-institutional and interdisciplinary project covering police forces across ten European countries, enabling this group of researchers to improve their international network and lay the groundwork for high impact and internationally significant research. Also, DUBS's longstanding expertise in entrepreneurship has been extended through the recruitment of new senior staff (<i>Hughes M., Scholes</i>) and through the development of high impact research. This progress can be demonstrated, in part, through the £1.3 million of government funding secured by this cluster.</p> <p>In terms of developing complementary areas of research strength (priority 3), there has been significant investment to solidify clusters of expertise in previously less well-developed areas such as Leadership & Followership and Critical Studies. In the former, this development is evidenced through the appointment of world-leading researchers (<i>Lord, Schyns</i>) and the creation of an experimental laboratory. Added to this, the significant capacity building work achieved by other members such as <i>Clark</i> (through the development of the ESRC Doctoral Training Centre [DTC], EU COFUND, ESRC RDI grant which helped to establish the Northern Advanced Research</p>

Training Initiative from 2010-2013 and the editorship of *Journal of Management Studies* [JMS]), have enabled DUBS to achieve a leading role in the contribution to institutional, regional and national research infrastructure. Meanwhile, in Critical Studies the appointment of new professorial staff (*Ellis, Humphreys, Learmonth, Tadajewski*) has started to build a new area of research excellence. This has been recognised through the development of a bi-annual conference, which in September 2011, attracted 70 guests from outside Durham and three external speakers.

A further key change since 2008 is that the directors of the clusters now hold significant formal responsibilities – and receive 100 hours of workload allowance to recognise their contributions. These responsibilities include issues designed explicitly to pick up on some of the 2008 strategic priorities. One example is the requirement to develop annual plans detailing how their cluster will progress: (i) international networks – in order to extend DUBS's international profile – for example, organizing international conferences in Durham (priority 1); (ii) collaborative outputs between staff within their cluster (priority 2); and (iii) settings where Early Career Researchers (ECRs) and PhD students can get further support and development (priority 2 and 5). Thus, the current cluster arrangements have enabled DUBS to:

- Advance a clearer vocabulary of research structures and research strengths.
- Facilitate increasingly collaborative and interdisciplinary research.
- Improve research leadership and mentorship.
- Take a more strategic view about new staff appointments, enabling appointments to be linked to strategic fit.
- Focus the recruitment of PGRs around the research clusters.
- Engage practitioners both to disseminate research and enable impact and engagement with outside stakeholders.
- Reinforce the research-teaching link at all levels.

The overall success of this strategy – to deepen existing areas while also introducing new, complementary areas of research expertise – is demonstrated in a number of ways; not least by the fact that Durham faculty have published internationally renowned and agenda-setting research. Examples of such work include: in **Critical Studies** *Ellis's* work (in *Organization Studies*) finds a number of interpretive repertoires of boundary construction used in managers' identity discourse. *Humphreys's* article (in *Human Relations*) explores leadership critically through an analogy with jazz. In **Economic Growth** *Cozzi's* research (in *Economic Journal*) studied the dynamic evolution of different economies in which redistributive policies are a prominent feature. *Harris's* research (in *Research Policy*) explores R & D policy and its relationship to government policy. In

Entrepreneurship *Westhead's* research (in *Journal of Business Venturing*) was the first to identify an inverse U-shaped relationship between the proportion of failed businesses relative to the number of businesses owned and the number of opportunities identified in a given period.

Scholes's research (in *Human Relations*) reports the first representative pan-European survey of managers' perceptions of the impact of private equity on industrial relations. In **Finance** *Lau's* use of behavioral economics field experiments (in *Econometrica*) have direct implications for attempts to elicit time preferences. *Kruiniger's* research (in the *Journal of Econometrics*) considers Maximum Likelihood based estimation and inference procedures for linear dynamic panel data models with fixed effects. In **Leadership & Followership** *Dietz's* work on trust (in *Academy of Management Review*) was the first article to provide a framework and recommended processes for guiding organization-level trust repair after a major failure. *Schyns's* meta-analysis (in *Leadership Quarterly*) integrates different conceptualizations of destructive leadership and analyzes the relationship between destructive leadership and outcome variables. In **Operations Management**, *Ding* applied a dynamic programming policy improvement to develop an effective dynamic allocation heuristic (in *Management Science*). Her results allow manufacturers to resolve related questions concerning, for example, whether the service capacities of the contracted vendors are sufficient to deliver an effective post-sales service. And in **Organizational Dynamics & Ecological Studies** *Polos and Hannan's* work (in *Administrative Science Quarterly*) was the first paper to show that a simple model of organizational evolution can explain the main patterns of age dependence and reconcile the apparently conflicting theoretical predictions between organizational age and failure.

In terms of the other 2008 priorities (4 and 5), DUBS's doctoral programmes have continued to grow strongly (priority 5), and increases in research income capacity (priority 4) have also been made. Indeed, the research clusters are important in the medium-term for developing research

funding in that they will be key to facilitating the sort of collaboration required in order to achieve the requirements of funders. Cluster directors are also central to organizing departmental level peer review for funding bids. In addition, major infrastructure investment decisions have been taken as a direct consequence of the research interests associated with the clusters. Most notably, the Director of Leadership & Followership led the development of the experimental laboratory.

Five year plan including priority development areas

Durham University aims “to be widely recognised as one of the top 5 universities in the UK and the top 50 in the world”. DUBS seeks to mirror this aim in the business school sector. Indeed, the further development of research clusters increases the probability that world-class staff will be attracted to work at Durham. This is not only because of the opportunities the clusters bring for collaboration within sub-disciplines, but also because outstanding clusters enhance the reputation and world prominence of DUBS. Another aim of the University is to “deliver research in every discipline that addresses questions and issues with the potential to make significant impact on knowledge, people or the economy, or to enhance or change society for the better”. To this end we intend to make more explicit links between our research and stakeholders in industry and in wider society. Further developing the research expertise already represented within the research clusters is the chief priority for research over the next five years. The key issue, then, is encouraging the clusters to develop further.

Recruitment of Staff: Over the next five years DUBS plans to recruit a further 25 FTE academic staff at all levels; growing, in particular those clusters where we have yet to reach critical mass (e.g. operations management) as well as those clusters which already have particularly strong staff (e.g. leadership & followership). This represents an investment of £2.5 million in new staff over the next five years.

Enhanced management of research clusters: We plan to make further management changes in the research clusters. For example, we will require every cluster to have its own external advisory board (on the model already provided by Economic Growth and Policy), with the cluster directors to take responsibility for issues including PhD recruitment, ECR mentoring, and developing impact narratives. So all research clusters will produce more detailed annual plans to be monitored by the research committee.

Expand opportunities for interdisciplinary research: A further key priority development area is the encouragement of interdisciplinary working, as many of the major problems facing society cut across traditional academic boundaries. We will build on existing collaborations with University Institutes and other disciplines to broaden the base of interdisciplinary working and to target new funding streams. For example, *Jamasb* is the deputy director of the Durham Energy Institute which also has other DUBS members (e.g. *Ellis*). *Learmonth* is a member of the steering group for the University’s Centre for Sex, Gender and Sexualities and, in 2012, spoke at the Centre’s conference. There are also a number of fellows of the Wolfson Institute of Health and Wellbeing (*McMurray* and *Redman*), whilst the Institute of Hazard, Risk and Resilience is central to the Tipping Points project (*Clark*).

New Initiatives

a) Experimental laboratory: This facility opened in early 2013. Its state-of-the-art equipment, such as eye-tracking, sound proof rooms and skin conductance devices, allows researchers to carry out experiments in a world-class research environment. Led by *Schyns*, the laboratory will be used regularly by individuals from many DUBS research clusters, as well as helping to foster deeper interdisciplinary links especially with colleagues in Education, Psychology and Medicine & Health. This unique facility is a major attraction for academics within Durham and externally to come and work with DUBS academics. **b) International Business Group:** This new research cluster has been approved by the research committee and is very recently established. Led by *Sousa*, it brings together approximately 15 academics and PhD students in this area.

Priority Development Areas

a) Operations management is a sub-discipline of the business school which is relatively underdeveloped at DUBS. The research cluster currently has three members but we wish to expand the cluster because it holds particular potential for developing inter-disciplinary links with STEM subjects and gives us greater access to EPSRC funding as well as new industrial research

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grant streams; b) **The Economics and Management of the Energy Industry.** We wish to develop further expertise in this area so that we can strengthen links with the Durham Energy Institute (*Jamasb* has recently been appointed its deputy director). Developing this area should complement our priority of operations management, further improving our interdisciplinary links with STEM subjects; c) The **Leadership & Followership** research cluster is already particularly strong. Over the next five years we would like to see it become widely acknowledged as a clearly world-leading centre for this research area.

c. People, including:

i. Staffing strategy and staff development

Significant growth in faculty has occurred overall since 2008 at all levels – an achievement that both reflects and strengthens the vitality and sustainability of the research environment. Senior Professors with proven international experience and strategic fit have been particularly targeted (e.g. *Lord*, *Schyns* and *Snape* to the Leadership & Followership cluster and *Humphreys*, *Learmonth*, *Ellis* and *Tadajewski* to the Critical Studies cluster). Such staff have an important role in mentoring more junior faculty, and in leading on major grants. Within this overall growth, however, the pattern of recruitment has seen different trends within the sub-disciplines. The growth in faculty has been strongest in new clusters while there has been a small reduction in overall faculty numbers within Economics, and a significant overall reduction in Accounting and in Finance. Thus, the recruitment strategy has been guided primarily by a conscious attempt to recruit individuals who have research specialisms which reinforce the emerging research clusters. For example, new appointees since the RAE head Critical Studies (*Tadajewski*); Leadership & Followership (*Lord*); and Operations Management (*Fernandes*).

DUBS has an annual-hours based workload model designed to protect research time for all research-active staff: 40% (research), 40% (teaching) and 20% (administration). In addition, research leave is available every seven terms – research leave being prioritised for staff demonstrating that their research contributes to strategic priorities. 30 members of staff have taken research leave during the REF period, and one notable impact of such leave is its enabling of international collaborations. For example, *Basu* collaborated both with William Gavin (a Vice President of the Federal Bank of St Louis) and with John Donaldson at the Columbia Business School USA; *Dietz* was able to work with Nicole Gillespie at the University of Queensland, Australia; and *Redman* collaborated with Edward Snape who (at the time) was at the University of Hong Kong. DUBS has also maximised opportunities for senior academics to bring in independent postdoctoral researchers. For example, *Bhatanachareon* is a postdoctoral fellow on the Leverhulme “Tipping Points” project; *Mallett* and *Burrows* were ESRC AIM postdoctoral fellows and both are now faculty members; and *Getachew*, *Jokisaari* and *Knoll* were appointed as postdoctoral fellows to improve research strengths and ongoing vitality of clusters. Also, DUBS has provided resources to secure visiting fellows who enable our researchers to collaborate with distinguished academics from other countries. Indeed, 47 visiting fellows have been at DUBS during the REF period, including Robert Liden (University of Illinois at Chicago); Remus Illes (National University of Singapore), Zhigang Yuan (University of Fudan, China) and Adrian Wilkinson (Griffiths University, Australia). In addition, a generous scheme for conference funding (an approximate total of £700k over the REF period) is in place which enables faculty members regularly to present at international conferences. Conference attendance enables staff to develop their work in an international context and forge new relationships with colleagues from across the world, whilst further enhancing the reputation and vitality of DUBS’s research environment.

DUBS has also strengthened the mentoring support for all faculty, especially for ECRs. In addition to providing lighter teaching loads, DUBS’s own ECR workshop series and the university-wide professional development scheme have been made available to ECRs. DUBS’s ECR workshops offer, for example, advice on publications from invited journal editors and guidance about career and research skills development to improve career progression. DUBS also pays for ECRs to take up training opportunities e.g. those provided by the Advanced Institute of Management and the British Academy of Management. Meanwhile, mentoring of ECRs has also been improved. They receive support for developing publications including informal peer review. These measures have improved retention of new junior staff enabling them to integrate within a research cluster. Indeed, such measures reflect the aspirations of *The Concordat to Support the Career Development of Researchers* (www.researchconcordat.ac.uk). The formal introduction of research mentoring has been supported through a requirement for all faculty to produce Personal

Research Plans as part of the Annual Staff Review process. The training and development of staff in respect of research has also been improved since 2008. For example, the wider University's Centre for Academic and Researcher Development (CARD) provides high-quality professional development relevant for researchers.

DUBS is committed to actively promoting equality of opportunity for all staff and students, in line with, and as set out in, the Durham University Strategy. We believe that where equality of opportunity exists all staff and students work in a more rewarding and less stressful environment, where prejudice and harassment are not accepted so that high performance and achievement are more likely. We aim to make full use of the talents and resources of everyone within our community. Our approach to Equality and Diversity is managed through the University's Diversity and Equality Advisory Group (DEAG) which is chaired by a Pro-Vice Chancellor and has senior level representation from across our academic and professional services. DEAG reports regularly to the University Executive Committee and University Council. Durham University has identified the key diversity challenges facing it and has a series of diversity objectives in place to address these, progress against which is monitored and reported regularly to key University committees.

Successes so far have been recognised by external agencies and the University holds an Athena Swan University wide Bronze award, the Two Ticks Positive about Disabled People award and are a Stonewall Diversity Champion. In DUBS specifically, 21% of all staff submitted to the REF (and 15% of submitted professorial staff) are women. We are aware of the gender imbalance within the School and are already making progress to address it. For example, between January and July 2013 four new female professors have been appointed (*Hashimzade, Hall, Hyde, van der Laan*).

The principal mechanism by which standards of research integrity are maintained is DUBS's research ethics committee, which meets bi-annually. Building on the ESRC Framework for Research Ethics and principles of good practice from relevant professional bodies, the committee reviews, monitors and audits research and research-related teaching undertaken by staff and students. This includes the provision of reviews and advice to staff prior to application to major funding bodies. Research ethics training is provided to all staff and research students at induction, and supplemented by departmental training. Ethics awareness/training sessions have been run by the chair of the ethics committee for specific clusters and PhD workshops on ethics are run twice a year to which all new PGR students are required to attend. DUBS has also introduced an annual audit of staff research practice and has a dedicated intranet site for ethics containing the latest information on guidance and best practice. Throughout the year there are a number of ongoing discussions with colleagues as to ethical approaches to research which speak to a "practice and culture of ethicality" rather than a one-off approach. Particular attention is given to research involving humans and human data, the vulnerable, informed consent, avoiding conflicts of interest, funding sources, and risk assessment. Annual reviews of the committee's own work and development are considered at the Board of Studies, and ultimately reported to the University Ethics Committee. The committee comprises of DUBS's wider faculty, external members, and includes colleagues (*Moore and McMurray*) with research interests in ethical practice.

ii. Research students

The graduation of 103.2 research students represents a significant increase on the RAE 2008 (when 48.65 students graduated). Since 2008, all faculty have received a generous workload allowance for their doctoral supervision work and wherever possible, new students have been recruited to areas of strength in line with the research clusters. The increase in the number of doctoral students can also be attributed to the number of studentships awarded in REF period, when 28 studentships were awarded through internal doctoral scholarships. DUBS also has two pathways in the ESRC Doctoral Training Centre (DTC) hosted jointly by Durham University and the University of Newcastle. These pathways are in Economics as well as in Business and Management, and they allow DUBS to bid for ESRC studentships. The DTC has helped to improve the quality of training provided by the provision of faculty-wide courses and networking opportunities. Also, the quality of students at DUBS has improved due to the rigorous peer review process used in the DTC selection process. Indeed DUBS has been at the forefront of developing the ESRC DTCs. *Greatbatch* and *Clark* co-authored (with Thorpe from the University of Leeds) a report recommending University-level accreditation and laying the foundations for the ESRC DTC framework (see p.2 for further details).

Year	PhD Programmes			DBA Programme	Totals
	Acc & Fin	Econ	Bus Stu		
2008/09	4	8	4	3	19
2009/10	2	3	3.7	3	11.7
2010/11	6	6	4	0	16
2011/12	11.5	6	2	10	29.5
2012/13	13	6	4	4	27
	36.5	29	17.7	20	103.2

Table 1: Numbers of completed doctoral students

To support the strong growth in student numbers, a dedicated PhD workspace with 35 places has been created in the refurbished Mill Hill Lane site along with another 30 spaces housed in the nearby Islamic Finance Doctoral Training Centre (IFDTC). These facilities will ensure that doctoral students have ample space to work near their supervisors.

Third year PhD students are encouraged to attend the ECR programme (see p.5) to improve their career prospects and integrate in to the department. Indeed, PGR students are increasingly integrating into research clusters. They are presenting papers at research seminars and conferences organized by clusters and several papers have been co-authored by faculty and their PhD students, including the student who was awarded the 2013 doctoral student of the year. Such developments show how DUBS has committed itself to developing its most able PhD students into faculty through mentoring and support. *Guo* and *Chau* are two such examples. Graduating through the Durham doctoral programme they went on to secure full-time posts within DUBS. It is this model for the development of our highest quality PhD students that we seek to replicate across the clusters over the next REF period. Indeed, ensuring the supply of “home-grown” faculty who have been through our doctoral programmes is a key way to ensure the sustainability and increase the vitality of our research environments.

d. Income, infrastructure and facilities

Research funding

DUBS regards funding as a means to build research capacity, not as an end in itself. We have secured a number of major grants over the REF period, building capacity in complementary ways. Taken together such grants reflect the type of School we wish to be: international, interdisciplinary and affecting real-world practice. Indeed, our total research spend during the REF period grew from £2.3 million in RAE 2008 to £3.9 million. The variety of sources of our research income reflects the breadth of research interests within the School. Examples include:

- **UK government:** Policy research is a major area for DUBS. Highlights include *Mawson*, who was awarded £40k from the Regional Improvement and Efficiency Partnerships to examine child poverty in the North East; and *Stone* who was awarded £200k from Business Innovation Services to conduct an economic evaluation of the “Enterprise Finance Guarantee” and 25k from UK Commission for Employment and Skills to report on encouraging small firms to invest in training.
- **RCUK:** As well as securing AHRC, EPSRC and ESRC grants, DUBS has also been very active in the pursuit of Knowledge Transfer Partnerships (KTPs). KTPs encourage the co-production of knowledge by sponsored research students and industrial partners mediated by an academic. There have been thirteen KTPs completed since 2008 with a total value of £1,079K. The outputs from the KTPs have directly improved and strengthened relationships with local/regional organizations, translating such relationships into research.
- **EU government bodies:** The 2011-2014 EU COMPOSITE project (see page 2) funds a comparative study of police forces across Europe. The grant enables internationalisation with a strong policy and practice focus and is anticipated to have a major international impact within the next few years. Outputs from this project include reports for local and national police forces and more traditional academic outputs. Another significant example involves DUBS on a multidisciplinary EU grant entitled “Securing the European Electricity System against Accidents and Malicious Attacks”.
- **UK Charities:** Leverhulme-funded “Tipping Points” investigates how tipping points occur in situations such as the financial collapse and ecological devastation due to climate change (see

page 9 for further details).

- **Other sources of funding:** The subscription and other income generated by the Institute for Local Governance (ILG). The ILG started its operational programme in April 2010, as a bridging organisation between all local authorities and other public bodies in the North East of England who pay to be members. The ILG's facilitates connections between research and practice, identify research requirements and then source them. The ILG is currently facilitating the delivery of 11 projects funded through the ILG's subscription income, and has delivered a further 13 research projects utilising the partners and related stakeholders.

Strategies for generating grant income

Our strategy is to build on successes in key areas/grants, by expanding the range and scope of staff who are PIs or CO-Is on large grants. Accordingly, a key objective is to increase the proportion of grant-active staff. We have sought to do so by (i) making a research funding track record a key criterion in our professorial hiring policy. Examples of this are *Hyde*, *Jamasb* and *Fernandes*, new recruits (in 2013) who have particularly strong track-records in research income; and (ii) by encouraging more existing staff to apply for research funding and supporting them in doing so. Indeed, *Hyde*, *Jamasb* and *Fernandes* along with our more established professors will play an integral role in peer reviewing grant applications and mentoring staff in related sub-disciplines who are seeking to become PIs for the first time. More generally, the aim of increasing grant awards requires: *awareness* (of relevant funding opportunities), *support* (to enable them to make high-quality applications) and *incentives* (for them to do so). To promote awareness and support, a DUBS research officer was appointed in 2011, one of whose roles is to identify funding opportunities, communicating these in a targeted manner to relevant faculty and providing administrative support to individuals making applications. Also, a 'Dragons Den' event was last held in February 2013. The aim of this event was to match potential PIs to relevant experts across the University. Following the most recent Dragon's Den, small grants were awarded to *McMurray*, *Slack* and *Sousa* for preliminary research in preparation for full grant applications.

To ensure long-term sustainability there is also DUBS-specific support for research grants. This includes: (i) a strong mentoring system, particularly for ECRs, as senior academics within DUBS guide individuals to the support networks outlined above; (ii) the availability of seed corn funding (a total of 20k in competitively awarded grants of up to 2.5k individually); and (iii) the practice of research clusters setting out in their annual plans how they will provide support (e.g. peer review) to individuals applying. The overall aim in all such activity is to identify schemes to which faculty members might apply *proactively*, so that staff's intentions can be tracked, supported and followed up. Finally, incentives to apply for grants are provided via the annual appraisal process, which requires staff to address research income objectives and incentivises those who have already been PIs to continue their success with increasingly larger bids. These incentives include research income targets that staff on probation are encouraged to achieve. One example of the success of this policy is *Wells* who was awarded a 260k EPSRC grant whilst on probation.

Furthermore, at University level, grant basics and the support on offer are included in the PGcap course that all ECR staff take, as well as by a number of central University programmes (for example, tailor-made funding and grant-writing workshops). Finally, at a University level, a seed corn fund of up to £25,000 per project is available for piloting research. Successes included *Redman* (£19,143 in 2012 to support the development of an ESRC bid to study service climate within TONI and GUY hairdressers) and *Greatbatch* (£8,425 to carry out preliminary research on management accountants in children's social services with the next step being securing an externally funded project).

Infrastructure and facilities supporting the research environment

Building up research capacity requires large investments in infrastructure. Following its growth over the past five years, DUBS completed a £16.6m redevelopment of its main school site in Durham in 2013. The result is an enlarged and reconfigured building with state-of-the-art facilities ensuring the sustainability of our research environment for the long-term. This development enables the whole school to be physically consolidated from four sites to two. There have also been other large investments to improve the facilities that researchers have at their disposal. An example is the portable experimental laboratory to enable faculty to study participant behaviour in the field. Purchased in 2010, at a cost of over £10k, it included a portable projector and 30 net-book

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computers. This portable laboratory allowed DUBS researchers to design solutions for complex policy issues, thereby provide insights into on-going debates on economic and social policy in the UK and abroad. *Lau*, for example, used it to conduct experiments in Denmark which led to important outputs in Finance. Another example is the completion in 2013 of an experimental laboratory as part of the £7m redevelopment of Queen's campus (see page 3 for further details).

DUBS has also invested in its own dedicated and well-resourced business library. Resources spent on library-related facilities for business and management and economics increased by 31.6% between 2008 and 2012, and the amount spent in the academic year 2011/12 on books, journals and other serial publications was £246,785. DUBS academics have access to over 300 online databases including Business Source Complete, EconLit, Fame, Global Economic Monitor, Mintel and Marketline Advantage. They also have access to subject training and one-to-one library support as well as training provided as part of the Researcher Development Programme. Indeed, 111 DUBS staff have attended sessions provided by professional library staff since 2008. This support is in addition to a general enquiries service and the intranet subject specific web pages highlighting key resources and research guidance. There is also support provided by an onsite specialist IT team. An example is the research collaboration and communications portal which allows academics to interact and collaborate effectively and quickly whilst at their workstations or around the world.

DUBS research is also supported by a range of professional staff within the school who specialise in corporate relations, fundraising, public relations and marketing, and by staff at a university level who specialise in issues such as research grant capture, business innovation services and media communications. These staff support activities such as conferences and web marketing; they also help establish links with corporate and public sector partners and support research briefings and the showcasing of research findings. Examples of these activities include the development of the DUBS corporate forum, a regular event involving academics and business leaders in a process of knowledge exchange.

e. Collaboration and contribution to the discipline or research base

Interdisciplinary research

Our vision is to be a leading research centre in a national and global network of business research. We are strongly outward-facing; our aim is to help develop capacity and ideas within the discipline, but also to act as a conduit with other disciplines. To this end we experiment with new forms of business research which cross and disrupt conventional boundaries. While there has been research conducted with colleagues from many departments, the following examples of interdisciplinary work are highlighted because they demonstrably represent instances of the discipline being reinvigorated and sustained:

- The £1.7m Leverhulme Trust "Tipping Points" project, spearheaded by *Clark* and *Greatbatch*. The project includes partners from Geography, Mathematics, English Studies, Law, Anthropology and Biology. In July 2012, the project's conference was held at DUBS, attracting an international audience from all the above disciplines.
- *Moore* and *Redman* have worked with colleagues in the Department of Theology on a Sainsbury's grant (£120k) on Receptive Ecumenism (RE). RE represents a fresh strategy (focussed on taking responsibility for change in one's own tradition) both for intra-Christian ecumenism and for wider positive engagement between diverse traditions in the pluralist context.
- *Fernandes* has secured a 1.2m EPSRC grant in to the digital gaming industry collaborating with Computer Science. He is a member of Durham's Institute for Advanced Research in Computing, and has received a small grant to develop his research in this area.
- DUBS is also involved (through *Clark*) in the 2009 EU COFUND project (€9,912,558) which enables internationalisation and inter-disciplinarity across the University. In 2013, COFUND II was awarded to the University for a total of €19,215,125. Indeed, during the REF period DUBS have developed a particular strength in securing research training and capacity building grants. For example, *Clark* has also won ESRC RDI grants (see p.2 for further details).
- *Aftab's* £376k ESRC grant involves the Geography department at Durham and Economics at Stirling. This interdisciplinary research quantifies the economic and environmental benefits of using spatially targeted nonpoint pollution regulation by making use of recent advances in surveillance science and risk profiling.

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- *Wells's* £260k EPSRC grant involves a partner from Chemistry; her MacroBioCrude project seeks to provide an innovative technology pipeline for the utilisation of an underused but sustainable biomass source. It contributes to the portfolio of renewable feedstocks that will be needed to supply HGV diesel and aviation kerosene to the transport sector.
- The IFDTC is a joint venture between DUBS and the School of Government and International Affairs (SGIA). The IFDTC allows DUBS's doctoral students to benefit from training from SGIA staff – especially those whose work engages with Middle East Area Studies.

These interdisciplinary projects enrich the research environment by strengthening connections into other units of Durham University as well as into other UK and international universities, extending research networks and accessing those of others in different disciplines. Interdisciplinary working also enhances DUBS's ability to respond to emerging research themes and to offer a distinctive approach to research users beyond the academy.

Industry/commerce/third sector collaborators

The nature of the research most DUBS researchers conduct brings them into close contact with industrial, commercial or third sector bodies. DUBS faculty have collaborated with many leading organizations in their sectors and in doing so develop research vitality by getting access to empirical data. For example, Alliance Boots gave *Moore* access to data that was subsequently used to produce a REF output. Also, *Ellis's* work with BP was driven by the organization's desire to establish key account management best practices and to compare these with its own procedures in handling corporate client relations. DUBS researchers also have strong collaborations in the local region. This is evident in DUBS's success in KTP grants that were all conducted with North-East Based organizations including private sector and public sector bodies. DUBS's regional collaboration is also evident in the work of the ILG. The Institute's collaboration has included, for example, a study of public sector procurement policies.

DUBS academics are also active in a wide range of advisory positions with international and local bodies. This work is important as part of our wider engagement and networking strategy. For example, *Basu* was an invited Visiting Scholar at the Federal Reserve Bank, St Louis, USA in 2011; *Clark* is working with a number of professional associations in management consultancy; *Fernandes* is a Board Advisor, Chongqing International Investment Corporate Group, China Technical Board of Shepherd Engineering Services; *Harris* is special advisor to the Parliamentary Commission on Banking Standards; *Moore* is a non-executive director, Traidcraft plc and Traidcraft Exchange; and *Reinhorn* is a member of the Fiscal policy working group, North East Chamber of Commerce. All these sorts of connections enrich the research environment by strengthening links with "real life" practice in organizations. They also have many advantages for research at DUBS. For example, they facilitate access for fieldwork; but perhaps, most crucially, they improve the chances of enhancing the engagement and impact of our work on business practice.

National and international academic collaborations and their success

National, and especially, international collaborations are of strategic importance to DUBS, in that such collaborations lead to DUBS's research ideas being known and taken up across the world. Indeed, DUBS has established a number of formal collaborative arrangements with other similar international institutions. One of the most notable examples is its collaboration with the University of Fudan, China. DUBS collaborates with Fudan in running a joint DBA programme on which 45 students are currently registered. Further evidence of external collaboration is that 48% of submitted outputs were co-authored with researchers based outside the UK. Furthermore, DUBS academics have had visiting positions at other universities including: Columbia (*Basu*), Copenhagen (*Clark*), Chongqing (*Fernandes*), IESEG School of Management Lille-Paris (*Redman*) and Bodø Graduate School of Business, Norway (*Westhead*).

Journal editorships, conferences, seminar series and research-based continuing professional development and contributions to learned societies and professional associations**Journal Editorships**

DUBS academics have acted as editors of a range of top journals. DUBS values how editorial work enhances the vitality of the research environment. It brings staff into direct contact with debates

about the direction of research, sensitising them to changing research agendas. These factors better enable staff to plan and manage their own research in order to maintain and spread best practice and to identify emergent research themes. Such activity in turn enables faculty to build contacts and enhance their own and their cluster's networks. Most notably, in 2009 DUBS was awarded £966k by the Society for the Advancement of Management Studies to base the editorial offices of *JMS* at DUBS. As an FT-listed journal, the location of the office in DUBS has contributed significantly to the profile of the school. *Clark* was editor of *JMS* 2008-2010; in 2008 *JMS*'s impact factor was 2.558; by 2010 it had risen to 3.817. Examples of other journal editorships include: *Basu* (managing editor of *International Journal of Economic Research*); *Carroll* (editor of *Industrial and Corporate Change*); *Tadajewski* (editor of *Journal of Marketing Management*); *Ellis and Wells* (both associate editors of *Journal of Marketing Management*); *Grugulis* (editor of *Work, Employment and Society* [Durham 2011-2013]); *Reed* (editor of *Journal of Economic Psychology* [Durham to 2010]); *Schyns* (associate editor of *British Journal of Management*); *Wright* (editor of *Journal of Behavioral Decision Making* [Durham to 2011]). In addition, Durham faculty have had 51 appointments on editorial boards including *Human Relations* (*Snape*), *JMS* (*Humphreys, Clark*); *Leadership Quarterly* (*Lord*) and *Organization Studies* (*Hannan, Humphreys, Learmonth*).

Conferences and Seminars

The range of international conferences held at DUBS has ensured that prestigious scholars from across the world have enhanced the vitality of the research environment. For example, the Leadership cluster was involved with the "Tipping Points" conference with a plenary led by *Abrahamson* (Columbia University) as well as a Northern Leadership Academy Academic Conference. The critical Studies cluster has hosted two conferences, whilst the economic growth cluster hosted three, and the organisational ecology cluster hosted three conferences (in Durham, Copenhagen and Budapest). DUBS academics have reciprocated and been keynote speakers themselves at significant international conferences. Examples include *Lord* (Society for Industrial and Organizational Psychology Conference, Houston 2013), *Moore* (Association of Professional and Applied Ethics, Sydney 2010), and *Humphreys* (JazzDag, Rotterdam 2013). Finally, DUBS has a regular programme of seminars at which external speakers present their latest research. There have been 65 business and management seminars and 76 economics, finance and accounting seminars held at DUBS during the REF period.

Learned and Professional Associations

DUBS academics have also played leading roles in learned societies and professional associations. These include the **British Academy of Management (BAM)** (with *Clark* [a BAM fellow] acting as Chair (2009), vice president (2010) and president (2011). During his term of office, BAM, achieved its highest ever membership, and its finances and governance structures were improved. *Learmonth* acted as a BAM council member from 2009-2011 and as chair of the Special Interest Group committee from 2010-2011. **The ESRC** (*Clark* is Vice Chair of the ESRC's Training and Skills Committee and *Mawson* is a member of the advisory board of their third sector research centre). **The British Accounting and Finance Association** (*Oldroyd*, is chair of the Technical Committee of the Financial Accounting and Reporting Special Interest Group). DUBS staff also serve on executive or advisory committees. These include the **US Academy of Human Resource Development** (*Elliott*), the **Institution of Mechanical Engineers' Manufacturing Excellence Awards** (*Tsinopolous*), the **Institute of Economic Affairs** (*Dowd*), the **African Academy of Management** (*Adegbite*), and the **Egyptian National Authority for Quality Assurance and Accreditation of Education** (*Salama*). They have also been appointed fellows of prestigious learned associations including the **Royal Geographic Society** (*Mawson*), the **Academy of Social Sciences** (*Mawson, Clark*), the **American Psychology Association** (*Lord*), the **American Academy of Arts and Social Sciences** (*Hannan*) and the **Leadership Trust** (of which *Clark* was a founding fellow). Through *Dixon*, DUBS also has a key role improving standards in research. He is a member of peer review teams for **EQUIS, AMBA** and **AACSB**; a member of AMBA's and AACSB's International Accreditation Board and an Academic Award Assessor for the **Association of Commonwealth Universities**.

Postgraduate collaboration

DUBS is a member of the ESRC-funded North East DTC (see p.5) and the IFDTC (see p.8). DUBS is also involved in postgraduate collaboration through *Clark*'s CO-Fund award (see p.9) and through over 40 external examinations of PhD theses in other institutions during the REF period.