

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

Structure and context

Chester Business School (CBS) first participated in the REF in 2014, and has since significantly invested in the vibrancy and sustainability of its research and impact in relation to **responsible enterprise** and **work-based learning for 'decent work'** (Sustainable Development Goal 8). CBS's research and impact infrastructure is now driven by a closeness-to-practice which ensures direct relevance to complex global challenges through co-production with interdisciplinary communities. This work is underpinned by **£742k** of competitively won, interdisciplinary research grants from highly selective bodies such as **The British Academy**, the **ESRC**, and the **Medical Research Council**. CBS now collaborates with researchers from Cambridge, Copenhagen, Imperial, Sydney, and Stanford universities, amongst others in the UK, US, Europe, Australia, and Vietnam.

CBS's pathway to impact has been delivered through **£34.74m** of regional SME growth and innovation grants (including ERDF, ESF, and various Local Enterprise Partnerships - LEPs), which has generated a GVA improvement of **£44.54m** for the region (Clatworthy 2021; Mickledore, 2020). This work has **(1)** supported 1,632 SMEs, 62 nascent entrepreneurs, and 131 pre-start-up businesses, **(2)** impacted >8,800 employees, the public services delivered to >1.1m residents, and **(3)** informed industry-wide professional body frameworks and development programmes affecting >130,000 practice-based learners in the UK and practitioners in >20 countries.

CBS achieved these substantial gains through consolidating its research focus and reorganising its academic groups to enable a greater focus on social and economic value:

- four disciplinary departments providing line and programme management across interdisciplinary programmes (**Analytics & Finance; Enterprise, Leadership & Management; Experience Economy; Sales & Marketing**);
- three departments focused on partnership working with organisations, agencies, and professional bodies to investigate and deliver workforce interventions and wider economic or social development (**The Centre for Work Related Studies, Strategic Economic Development**, and the **Business Research Institute and China Centre**); and
- two departments embedded within University sites to target economic and social development and inter-disciplinary research generation and utilisation: **CBS@Warrington** is located within the **Cheshire Science Corridor Enterprise Zone** which houses a significant cluster of science and engineering businesses; and **University Centre Shrewsbury**, a joint venture with **Shropshire Council and the Marches Local Economic Partnership**, addressing a cold spot for research and development (the 2nd lowest investment in the country out of 36 LEP areas).

CBS's two cross-cutting themes, **responsible enterprise** and **work-based learning for decent work**, are orchestrated through CBS's Research and Knowledge Exchange Committee, which comprises an Associate Dean, professors, heads of departments, early career researchers, with contributions from interdisciplinary researchers in the University and the University's Research & Knowledge Transfer Office.

Responsible enterprise

This vibrant cluster brings together research for responsible management, SMEs, and business growth. Specifically, **Moore** and colleagues examined the development of morals in small businesses and how these shape SME management practices (published in *Entrepreneurship &*

Regional Development). **Ullah** extended this theme by examining business growth particularly in relation to ethnic enterprise (published in *Journal of Small Business and Enterprise Development*).

Davies examined cultural adoption and stereotyping in purchasing decisions (published in *Journal of Business Research*) as well as the effects of unethical behaviour on trust (published in *European Journal of Marketing*). **Manning** explored social capital in SMEs, in addition to darker forms of enterprise in criminal organisations and open innovation (published in *Management Decision* and *Business Ethics: A European Review*).

Manning's research into the business ethics of social capital, networks, and unethical enterprise behaviours, underpinned the successful acquisition of the competitive **Medical Research Council** funded "**Prevention of Disease Using Trade Agreements**" (PETRA, £308k), an interdisciplinary collaboration with researchers in health and epidemiology. Initiated through CBS's ongoing involvement in the University's interdisciplinary ethics research network within the University, **Manning's** research specifically contributed awareness of unethical practices in business supply chains and networks which might impact the spread of disease, and ways in which these can be effectively safeguarded in practice. The project has created a pan-European, interdisciplinary network comprising researchers from Imperial, Cambridge, Sydney, and Monash universities, and senior staff at the World Health Organization, and Public Health England and Wales. So far, PETRA has provided resources concerning food security post-Brexit to the *Food, Farming and Countryside Commission* and in the *British Medical Journal*. This work highlights the increased risk of disease post-Brexit, due to differential standards and business practices in food handling and working conditions, and the need for such considerations in high level trade negotiations and agreements.

The sustainability of the research cluster has been underpinned by four professors (**Allman, Davies, Harris, and Manning**), two associate professors (**Hancock, Lam**), and five researchers (**Ullah, Omoruyi, Smith, Zhao, Qian**). There are three early career researchers in this cluster (**Omoruyi, Smith, Zhao**). Visiting professors, who mentor the team, have included **Mahon** from Maine Business School (US), **Britzelmaier** from Pforzheim University (Germany), **Millar** from the University of Twente (the Netherlands), and **Sun** previously of Oxford and Harvard universities. This cluster supports **31** doctoral researchers.

Reflecting the structure of CBS, the reach and significance of the research generated in the responsible enterprise research cluster has informed the successful acquisition and delivery of **£34.74m** worth of regional SME growth and innovation grants across the wider University including from the ERDF, ESF, and the Cheshire & Warrington and The Marches LEPs (see sections 3 and 4).

Work-based learning for decent work

The second cluster focuses on individual, organisational and system wide learning for 'decent work' (Sustainable Development Goal 8), specifically, learning which enhances workplaces to promote ethical governance, wellbeing, diversity, and inclusion. This cluster refined its earlier research into work-based learning with 100s of organisations in the UK and overseas, into the **International Centre for Thriving (Wall)**. The centre is a collaboration with the Chartered Institute of Personnel & Development (CIPD), the European Mentoring & Coaching Council (EMCC), and Lapidus International (the professional association for the use of creative practices for wellbeing). Jointly held conferences, roundtables, open workshops and seminars on CBS premises strengthen CBS's closeness-to-practice issues which informs ongoing research.

Research in this cluster takes a critical perspective to examining the micro-dynamics of behaviour in workplaces and spaces. Specifically, **Moore, Moss** and **Stokes** examined how these dynamics play out in practice to balance immediate operational demands, and longer-term uncertain demands (organisational ambidexterity) such as sustainable development, which have been published in *Human Resource Management*. This work was then extended by **Moore, Stokes, Wall** to explore how these micro-dynamics operate in relation to resilience and wellbeing in the workplace (published in *International Journal of Human Resource Management*). **Wall and Perrin** adopted similar critical apparatus in a peer-reviewed book to examine how wider political systems work across whole

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systems to influence the micro-dynamics of behaviour in work and education. This was then extended by **Wall** with colleagues in Australia (as part of an Australian Research Council project) and the US to examine how these micro-dynamics affect migrant workers in sites of workplace learning. **Lyon** adopted a similar critical perspective to examine how discourses shape the engagement of stakeholders in wider systems in attempting to tackle complex sustainability challenges balancing decent work and climate change in the context of tourism (published in *Tourism Management*).

Wall's research into the micro-dynamics of how ethical practices are expressed through work and learning has won 7 competitive grants and contract research worth >£320k (see section 3). **Wall** won a competitive grant to research the ethical and safe use of creative practices for wellbeing outcomes through an international consultation involving 20 nations. This led to a practice framework which was then adopted as the industry standard, informed professional body training and development opportunities, and has been translated into 20 languages. Informed by the cluster's work into how decent work and ethics are embedded in workplaces and policy, and initiated by visiting professor links in Vietnam (Tran), **Wall** was subsequently awarded a competitive British Academy bid (£266,077) with co-investigators in Hanoi, Tay Bac, and Phu Xuan universities. The project, "**Empowering Ethnic Minority Youth in Vietnam to Re-Vision the Future of Decent Work**" (Re-WORK), examines pathways to decent work with ethnic minority young people, employers and policy makers, and uses creative appreciative practices to revise employment and education policy and employment practices across Vietnam.

The sustainability of the research cluster has been underpinned by four professors (**Leong, Moss, Stokes, Wall**), three associate professors (**Lyon, Marmion, Perrin**), and five other researchers (**Hindley, Moore, Rowe, Talbot**). There are five early career researchers in this cluster (**Loibl, Nagirikandalage, Rowe, Rowlett, Scott**), and five researchers who are due to complete their doctoral training by 2021. Visiting researchers, who mentor and collaborate on research and impact work overseas, have included **Tran** from Deakin University in Melbourne, **Kovac**, previously of Purdue University and president of the National Society of Experiential Education in the US, **Stanton** from Stanford University, and **Giles** from the University of Massachusetts. The cluster supports **31** doctoral researchers.

Since REF2014, the reach and significance of the research generated in this research cluster informed the successful delivery of the Practice Assessment Record & Evaluation project and ongoing service funded by **Health Education England** (£1.9mn), which informs the ethics embedded within reflective practice, supervisory dialogue, and multi-stakeholder oversight of 130,000 professional learners across health and social care organisations in England (see sections 3 and 4).

Strategic achievements since REF2014

In addition to substantial improvements in research grant income (from £3k in REF2014 to **£742k**) and the acquisition of **£34.74m** of enterprise and innovation grants, CBS increased:

- the number of staff with doctorates by 178% (**9 to 25**)
- increasing supervisory capacity by 333% (**6 to 26**)
- the number of research outputs submitted by **74%** (**23 to 40**)
- the number of staff submitted by 208% (**6 to 18.5**)

CBS has also seen a marked increase in the number of postgraduate research degree awards, averaging **9.5 per year** compared to only 0.4 per year at REF 2014.

These achievements have been underpinned by CBS's ongoing commitment to equality, diversity and inclusion in terms of its staff and student recruitment, development, and culture. Through recruitment and promotions, CBS has maintained a higher proportion of women academics in business and management compared to other universities between 2014 and 2018/19 (University's Athena Swan application and HEIDI Plus data, 2020). In this period, **52%** of CBS's new appointments and promotions were women. Five of these were senior leader appointments, and

three women have been supported in their successful applications to the Aurora programme, Advance HE's leadership development initiative for women. In addition, **27%** of the new appointments and promotions identify as BAME, which is significantly higher than the local BAME community of 5% in Cheshire West & Chester area (CWAC, 2018). Finally, CBS researchers have taken an active role in leading university-level initiatives for LGBT+ staff and students as well as leading the roll out of preventative and responsive mental health training (see below).

Research and Impact Strategy and Objectives

As an early-adopter of the UN's Principles of Responsible Management Education initiative (one of the first 3 in the UK), CBS will continue to pursue the University's interdisciplinary research themes of 'Health and Wellbeing' and 'Sustainability and the Environment' alongside the 'Regional Economy'. Underpinned by the University's 'Citizen Student' agenda CBS promotes the co-development of social capital, the integration of research into teaching at all levels, and lifelong learning. As a business school connected to its communities, CBS aims to become a leader in co-produced research, innovation and enterprise, and by 2027/8, will deliver three core strategies:

Strategy 1: Strengthen closeness-to-practice of CBS's research culture and staff development

CBS will increase the proportion of CBS staff with professional body membership (other than AdvanceHE) from **47% to >50%**, and proportion participating in board memberships of social and economic growth bodies and agencies from **16% to >20%**. CBS will maintain its researcher development programme which integrates practitioners and researchers (see "*CBS's Researcher Development Hub for staff and students*" in section 2), and build staff research capability by increasing the proportion of doctoral-qualified staff from **42% to 60%**. CBS will continue to recruit practitioners and to provide inclusive staff support for doctoral study. All new appointees are expected to be doctoral-qualified at point of hire, or within a specified time period, and CBS will adopt the University's **Research Apprenticeship** programme. To engage communities of practice at the earliest stages of research and impact, CBS will maintain its **School Board** and **Business Advisory Council** to promote collaboration opportunities with external stakeholders (e.g. influential CEOs and civic leaders). These mechanisms will facilitate the co-creation of impact plans as part of CBS's performance metrics. This places CBS in a strong position to achieve Association to Advance Collegiate Schools of Business accreditation, strengthening its ability to attract and retain high quality research staff and students.

Strategy 2: Strengthen capacity for co-produced research in line with CBS research clusters and industrial strategies

CBS will increase research income from **£742k to >£1.2m** by the next REF in collaboration with our communities. This involves the further integration of the Strategic Economic Development department of the University into CBS to enhance current capacity for acquiring and delivering research projects with stakeholders. CBS will invest in new research capacity by appointing or promoting staff to professors to drive strategically aligned publishing and grant capture, and to embed mentorship opportunities for early career researchers. CBS will maintain the practitioner-focus of its doctorates, and increase the number of doctorates awarded from **42 to 49** by the next REF whilst maintaining a **top 10 position in PRES** (see PRES scores on page 9).

Strategy 3: Strengthen research impact reach and depth through co-production in enterprise, innovation, and by influencing communities of practice.

CBS will continue to deliver its substantial portfolio of enterprise and innovation projects, as well as seek additional funding in concert with our communities. Specifically, CBS will extend the reach of this research impact through aiming to secure **>£500k** of additional revenue funding on average, per annum. To support this, CBS will refine and directly connect individual and research cluster planning processes to promote longer term research and impact plans as well as workload planning allocations. CBS will appoint a research and knowledge exchange lead to build leadership capacity and drive strategic alignment between culture, research, and impact. These place CBS in a strong position to co-produce impact as part of the **Levelling Up** agenda in the North West, the North Wales-Liverpool City Region economic corridor, and the Marches LEP area.

2. People

CBS Research & Impact People Strategy

Since REF2014, CBS has pursued four core strategies:

(1) *Valuing practitioner expertise and networks*: 80% of academic staff are recruited directly from industry to deepen its research and impact with professional communities. CBS has recruited 5 new professors with strong connections and contributions to practice communities. For example, Schofield was on the Board of Enterprise Educators UK, and **Manning** has an advisory role to the Crime Commissioner's Ethics Committee. 16% of CBS academics contribute to local, regional or national boards including economic and social development agencies.

(2) *Rewarding research impact on practice knowledge and networks*: CBS has recognised significant contributions to academic leadership and practice or professional communities, and has promoted **10** staff to associate professor (4 women). For example, **Allman** is on the board for the Mersey Dee Alliance, **Lyon** is on the board of the Cheshire & Warrington Local Enterprise Partnership's destination promotion agency, and **Simpson** is a board member of the European Observatoire for Sport and Employment.

(3) *Building a vibrant and inclusive early career researcher development community*: CBS has invested heavily in supporting the doctoral training of early career researchers especially those with strong practice backgrounds. CBS has supported, or is supporting, **25** academics through doctoral training in the last REF cycle, **76%** of whom have focused on strategic practice issues through research-based professional doctorates. Importantly, **35%** of the researchers submitted in this submission have directly benefited from this support, and **29%** of these are early career researchers.

(4) *Enriching a vibrant and inclusive research culture connected to professional communities and bodies*. CBS sustains its inclusive culture through systematically developing staff and student awareness of diversity and equality. **CBS's Researcher Development Hub** (see below) was created as an open researcher development community which intentionally integrated research staff and students across disciplinary boundaries leading to research projects with other disciplines such as health.

As a result of the CBS's People Strategy, research staff and students are active citizens in driving infrastructures for decent work within CBS, the University, and the City of Chester. Since the last REF, CBS research staff and students have:

- established the **Equality, Diversity & Inclusion Group**, which has raised awareness of the accessibility of learning and research resources and the decolonisation of doctoral and research training
- established the **Forum for Research into Equality and Diversity** at the University of Chester
- established **Equality & Diversity Accredited Training** which was then adopted by the University and is available in all work-based learning programmes across the University
- led the University's involvement in Chester's **first and subsequent Pride events**
- co-led the wider University's **LGBTQ+ staff group**
- and, as a result of these successful activities, co-led the University achievement of the **Navajo Merseyside & Cheshire LGBT Charter Mark**.

CBS research staff initiated and led the roll out of the **preventative and responsive mental health training** (e.g. Mental Health First Aid training) to **27% of its staff** which is double that of other organisations (BIC, 2019). As a result, CBS contributed to the national evidence base for mental health training in the UK (MHFA England, 2018).

Evidence of the success of the People Strategy has been staff leaving to take up promotions at Liverpool University Management School, and Newcastle, Lincoln, and Leicester business schools; taking academic leadership role as deans; and to set up their own or join private consultancy enterprises.

Staff development for research and impact

Underpinning the strategic achievements above, CBS has sustained its vibrant research and impact environment through investing over **£450k in research and impact staff development including doctoral training** (e.g. QR, Erasmus+). This investment funded key strategic strands:

(1) Research events to share research findings, build relationships, and co-create ideas for research and impact with professional bodies and other stakeholders. These included open access and interactive annual research conference and research seminars where staff and students share their work and exchange ideas with practitioners and policy makers. For example, previous events included a roundtable and research seminar on thriving at work with a CIPD policy advisor. Since REF2014, there have been over 1,200 attendances at these events. In addition, the “Bringing Sport, Business and Media Together” project (£18,258.58, Simpson) funded an inter-disciplinary collaboration to examine and tackle the engagement of girls and women in sports organisations and employment especially in the Middle East and India, further building existing relationships with the Federation of Indian Chambers of Commerce and Industry, the UK Sector Skills Council for Active Leisure & Learning, and several UK universities.

(2) Research grant bidding opportunities: CBS created opportunities for staff to work in cross-disciplinary teams to apply for small grants. Previous grants utilised the work of the research clusters to develop proposals, which included for example “Nurturing the spirit of ubuntu at work: a collaborative approach to tackling multiple professional demands” (£2k), which investigated the use of arts-based practices with researchers and practitioners to balance workplace stressors. Similarly, another project examined “What can UK managers do to enhance the resilience of their employees?” (£2k), which was later translated into larger bids to collaborate with organisations in public and private sector organisations to research employee resilience (£30k). In total, **51** projects were supported, 43% led or co-led by women, and 25% included researchers from other disciplines (e.g. from health and the arts).

(3) Research network development with leading researchers in Europe, the US, and Australia. This included inward and outward visiting fellowship opportunities through various Erasmus+ and Santander International Research Excellence Awards. For example, “Ubuntu: exploring the potential for radical re-formulations of management education” (£3,458) strengthened the research relationship with Professor Tran, Australian Research Council Researcher at Deakin University in Melbourne, and delivered a series of articles about work-based learning and decent work. Another project built relationships with a Russian university to examine the extent to which negotiation work-based learning could be adopted in Russia (Talbot, Santander, £1,000). This later led to the Erasmus+ VALERU project (“Validation of non-formal/informal learning in Russian Higher Education”, £50k). Another example of international collaboration is with Pioneers of the National Society of Experiential Education in the US; Professor Stanton from Stanford and Professor Giles from Massachusetts who developed project ideas and mentored various staff (Santander, £5,000).

(4) Inclusive doctoral training support. CBS has invested in the research training of **25 academics** (56% women), including three in this submission (compared to 1 in REF2014). This level of support represents 25% of current staff base, and is reflected in the high proportion of early career researchers in CBS’s submission. 29% of academics submitted are either women and/or Black, Asian, Minority Ethnic colleagues. Since the last REF, CBS has supported £193k worth of doctoral training.

CBS’s Researcher Development Hub for staff and students

CBS’s Researcher Development Hub (The Hub) is a highly visible and vibrant researcher development community open to all researchers in CBS and their actual or potential collaborators across professional bodies, communities, and other disciplines. The Hub has successfully integrated

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disparate departments and distinctions between research students and staff to promote openness, curiosity, creativity and collaboration. It integrates researcher development opportunities for research staff and students across all departments within CBS, and links closely to other opportunities delivered by the central learning and research support teams of the University (such as the annual Research and Diversity Festivals), as well as other research communities across the University (such as health and education).

The Hub combines a highly interactive series of research and impact workshops mapped to the ESRC's doctoral training standards and toolkits, small group mentoring supported by an experienced professor, open research seminars freely available to CBS networks (often in association with the CIPD), evening and weekend writing retreats (both on site and off site to encourage the connection to other communities), and research conferences (also with support from bodies such as the CIPD and the Global Centre for Work Applied Learning in Australia, GCWAL). In these events alone, there were **>1,200** registered attendances since the last REF.

The vitality of The Hub was substantially stimulated by regular opportunities to connect and build relationships with leading practitioners from **professional bodies and experienced researchers** from leading international universities. In terms of researchers, CBS has hosted Professor Tim Stamford, Stanford University US; Professor Dwight Giles, University of Massachusetts US; Professor Carole Parkes, Special Advisor to the United Nations' Global Compact; Professor Kiran Trehan, University of Birmingham UK, and Professor John Mahon from the University of the University of Maine US. In addition, CBS hosted an extensive **Visiting Researcher programme** with institutions in China, resulting in 286 exchanges from/to China, substantially enriching the cultural diversity of The Hub. In terms of connection to professional bodies, The Hub has hosted research events by professional bodies such as the AGRH (Association Francophone de Gestion des Ressources Humaines) Congres, monthly CIPD events on site, the Lapidus International Research Day, and the EMCC's research conference. **The Chester Forum**, now in its 9th year, connects CBS with Chester Business Park residents such as the Bank of America, and facilitates dialogue about responsible and sustainable enterprise. These events have enabled CBS research staff and students to network and build relationships with 100s of practitioners.

The vitality of The Hub is driven by the openness of research staff and students to participate and interact with CBS's collaborative research opportunities. For example, in this REF cycle, staff and students participated in the **Edge of Experiential Education Symposium** with Stanford and Massachusetts universities (funded by the Santander International Research Excellence Awards), collaboratively developing research ideas and articles around the role of service learning to challenge workspaces and places. Similarly, research staff and students engaged in the **Beyond Text** project (Erasmus+, £280k, with UoA23 Education) which explored and documented the application of arts-based methods across Europe. This project enabled CBS research staff and students to engage in events across the UK, Spain, Estonia, and Finland to learn and apply arts-based research methods for research and impact alongside arts-based research practitioners. Research staff and students also engaged in the **Creative Practices for Wellbeing Framework** project (which co-developed a practice framework with multiple stakeholders and a professional body) and the **Creative Recovery** project (a national study into the use of creative practices under COVID-19). Both of these projects gave research staff and students a first-hand experience of using collaborative and participatory research projects in live environments.

CBS, in collaboration with CIPD, Lapidus International, and GCWAL, recognised the research projects of staff and students with actual or potential impact. The 7 awards included: The CIPD Prize for Impact on the Professions, The GCWAL Highly Commended Award for International Impact; The CIPD Health & Well-being Research Impact Award (Parkyn); The CIPD Equality & Diversity Research Impact Award (Johnson); The CIPD Championing Work & Working Lives Research Impact Award (Weston); The GCWAL Highly Commended Award for International Impact (Evans); and The Lapidus International Research Award (Rossetti). From 2018 onwards, CBS aligned its awards to the Sustainable Development Goals, for example, The Research Award for Championing Work & Working Lives (Russell), for Health & Well-Being in Organisations (Parkyn, Evans), for Promoting

Quality Education for All (Rowlett), for Sustainability in the Curriculum (Mburayi), and the Environment & Climate Change Research Impact Award (Hindley).

CBS's postgraduate research community and support

CBS's postgraduate research awards have increased from 2 in the previous REF cycle, to 57 research awards in this cycle, thereby increasing from an average of **0.4 to 9.5** research-based awards per annum. These awards include 42 doctoral awards (40 FTE in UoA17), 14 research-based Master of Professional Studies awards, and 1 PhD by publication. 6 doctoral graduates (2 FTE, 14%) were co-supervised with researchers in UoA3 Allied Health Professionals, UoA23 Education, and UoA14 Geography & Environmental Studies; indicating CBS's increased capacity and capability to tackle complex responsible management issues across disciplines.

CBS's postgraduate research is strongly aligned to the strategic research and impact vision to connect with practice and deliver value to its stakeholders: **72%** of CBS's postgraduate research awards (MProf, DBA, DProf) and **61%** of CBS's doctoral awards (DBA, DProf), were practitioner research projects informed by practitioners, and informed practice, for example, through EMCC policy and practice reports.

Doctoral awards (FTE in UoA17)	2013	2014	2015	2016	2017	2018	2019	Total
<i>Research-based professional doctorate (DBA and DProf)</i>	1	2.9	3	1	2	8.9	6	24.8
<i>PhD</i>	2	3	2	3	0.3	4.9	1	16.2
Total	3	5.9	5	4	2.3	13.8	7	41

CBS's doctoral research community now stands at **62** students and comprises **44% women** and **24% identifying as BAME**, the latter of which is significantly higher than the 5% BAME community in Cheshire West & Chester area (CWAC, 2018). To promote equality and diversity of CBS's doctoral community, CBS provides proposal development support at the application stage and utilises the Recognition of Prior Learning systems to value diverse and non-traditional backgrounds.

All members of the CBS postgraduate research community are part of The Hub. Workshops are fundamental within the first year to enable cohorts to form a cohesive bond and sense of research culture, followed by ongoing dialogue with supervisors to negotiate other activities that are relevant to their development as a practitioner-researcher. All members of the community can access Epigeum Research Integrity Training and related micro-credentialing, including in areas such as intellectual property and commercialisation for career and impact development.

In addition to each student having two supervisors balancing subject and methodological expertise, students can access support and guidance from the professional doctorate and PhD programme leaders, tutors, and a team of independent assessors for annual reviews. CBS hosts an open and inclusive Staff Student Liaison Committee which adopts creative methods to explore possible collaborative developments in the programme. External examiners have consistently commended this "open and transparent" approach and the quality of the doctoral research.

In the Postgraduate Research Experience Survey (PRES), CBS's doctoral students have consistently rated it above the sector and University's average scores. In 2019, the University ranked **8th for overall satisfaction** and of **3rd for research culture** (out of 38 institutions), and CBS scored above the institutional average in all main categories by 1 to 11% points. This places CBS's in a strong position nationally. The scores for main categories are summarised below.

Main PRES category	2017	2018	2019	2020
Supervision	100%	87%	95%	94%
Resources	100%	93%	94%	80%
Research culture	89%	69%	89%	78%

Progress/assessment	99%	90%	95%	82%
Responsibilities	92%	88%	95%	84%
Research skills	100%	93%	98%	91%
Professional development	93%	77%	100%	89%
Overall satisfaction	100%	80%	100%	94%

Key: Bold text represents scores above institutional and national averages.

In line with CBS's closeness-to-practice, its postgraduate researchers are often senior practitioners in organisations seeking to enhance decent work. These postgraduate researchers mostly secure organisational sponsorship which indicates the value generated through practice-oriented research for those organisations, for example, in terms of service improvement, business growth, or employee wellbeing and productivity. CBS postgraduate researchers secure bursaries, for example from the Institute of Chartered Accountants in England and Wales's Chartered Accountants' Company (£10,000, see UoC, 2020).

CBS's doctoral graduates have progressed on to: lecturing and academic leadership roles at Liverpool University Management School, Manchester Business School, Newcastle University Business School, and Pforzheim University in Germany; and influential leadership roles as consultants in private practice, Head of Research in a national ambulance service, global leadership of research at the EMCC, and policy advising at the CIPD.

3. Income, infrastructure and facilities

Income

Reflecting CBS's growing reputation for research which focuses on global challenges and social value, research income has grown substantially from £3k in REF2014, to winning a total of **£742k** including **from competitive, highly selective sources** such as **the British Academy**, the **ESRC**, and the **Medical Research Council**. These are significant given that the typical success rates for some grants is as low as 10%, and demonstrates an increasing positive reputation for significant research for global challenges. A breakdown is provided below.

UKRI

In terms of CBS's work-based learning for decent work research cluster, **Wall** secured a **British Academy** grant as PI for "Empowering Ethnic Minority Youth in Vietnam to Re-Vision the Future of Decent Work" (£266,077 across 2020-2021). In terms of CBS's responsible enterprise research cluster, **Manning** secured a **Medical Research Council** grant (£308,000, 2019-2023) as Co-I for the "Prevention of Disease Using Trade Agreements" interdisciplinary network, in collaboration with researchers in UoA3 Allied Health Professions (where the income is reported). Similarly, **Nagirikandalage** was awarded an **ESRC** award for "Exploring the Recent Trend Shift in Social and Management Research: Social Media Data and its Sampling Property", particularly in relation to the inclusivity of these methods (£5,170.80).

UK industry, commerce and public organisations

With a growing reputation for relevant and impactful research, CBS has won competitive research projects with a range of public and professional bodies, enabling deep impact on a range of communities in the UK and across 20 nations. **Lam** was commissioned by the West Cheshire & North Wales Chamber of Commerce to undertake a comparative study examining the internationalisation of regional SMEs compared to SMEs in China (**Lam**, 2017, £15,000). This work led to advice and guidance to the Chamber and its members (WCN, 2018; Lam, Harris, Sidsaph, Wang, Zhou, and Yang, 2018). In turn, this led to the Chamber offering enhanced provision in international trade and export CPD events for its 4,000 members. This project was linked to CBS's **Visiting Researcher** initiative with researchers and entrepreneurs from China (**Lam**, 2017, £96,131), which subsequently led to 5 doctoral studies in responsible enterprise and ongoing relationships to develop outputs.

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Sport England commissioned a national research pilot through Bury Council with stakeholders such as England Netball and Greater Sport who influence the engagement of women and girls in sports employment and physical activity (**Simpson**, 2016, £22,500); this work created an action plan for the council. Workplace wellbeing research projects were commissioned with Wirral Metropolitan Council (**Wall**, 2018, £3,688), Oxfordshire County Council (**Wall**, 2018-2020, £26,750), Wirral University Teaching Hospital (**Talbot**, £2,500), which drove practice and cultural change to embed everyday practices of wellbeing at work with >8,800 employees. Collaborative research with civic and business leaders and community inspirers as part of Cheshire West and Chester Council's West Cheshire Poverty Truth Commission generated £1.7m social value through redesigning social housing eviction processes from process to wellbeing oriented (**Wall**, 2018-2020, £4,986). Other contract research focused on service improvement, such as Church Stretton Council (**Omoruyi**, 2018, £2,448) and One Vision Housing Association (**Page**, 2014, £3,016).

Research income also included undertaking work for professional bodies. As part of a Higher Education Academy's National Teaching Fellowship grant, **Wall** examined the ways in which ethics can be embedded in workplace and vocational learning and practice development, collaboratively exploring human connectedness to place and people with ideas from African and Oriental philosophies (**Wall**, 2017-2020, £5,000). This work informed the re-development of reflective tools for the multi-disciplinary work-based learning programme supporting >6,000 practice-based learners in this REF cycle.

Wall was commissioned by Lapidus International (the leading professional body for the use of creative practices for wellbeing outcomes in organisations) to collaboratively research the effective, safe and ethical practices of professionals across multiple fields (**Wall**, 2018-2020, £11,000). This study led to a new professional framework for practitioners and the development of an industry-standard training programme across 20 countries (see impact case study). CBS also acquired a research scholarship from the Global Centre for Work-Applied Learning in Australia to raise awareness of responsible management in action research practice communities in Australia (**Wall**, 2017-2018, £3,000).

Infrastructure

CBS embeds connectedness and impact throughout its infrastructure. CBS's Business Advisory Council, composed of civic and business leaders, acts as a dynamic and proactive force, steering and reviewing all aspects of CBS's work, including research and impact. An Associate Dean with strategic responsibility for research and impact is then supported by research and impact representatives in each of the nine departments with responsibility for promoting research and impact work at the local level. Underpinning this work is CBS's Researcher Development Hub which is closely connected with professional bodies such as the CIPD, EMCC, and Lapidus International, and residents of Chester Business Park through the well-established Chester Business Forum.

In addition to a centralised Research & Knowledge Transfer Office, which provides research grant support, the Strategic Economic Development department is closely connected to the two regional LEPs (Cheshire & Warrington LEP and the Marches LEP) as well as the Mersey-Dee Alliance, stretching from North East Wales, through West Cheshire, to the Wirral. This department leads the translation of CBS research into economic and social regeneration impact projects. Since REF2014, this research and impact infrastructure has supported over **£34.74m** worth of impact projects funded by the ERDF, ESF, the Cheshire & Warrington LEP, The Marches LEP, and Health Education England. These large-scale projects promote culture change within regional businesses, and embed innovation capabilities within organisational structures, ways of working, skills, and create strong relationships with CBS beyond the life of projects. As such, CBS's projects are a regional platform to sustain impact over the long-term.

Key projects included: **The High Growth Centre** (2013-2015, £3.4m ERDF) supported pre-start or existing high growth businesses in the advanced manufacturing, automotive, engineering and environment sectors at Thornton Science Park; **Catalyst for Growth** (2013-2015, £4m ERDF), supported the Northwest's chemical sector financially through a competitive grants scheme with an overall objective of the creation and safeguarding of jobs in the region's chemicals sector; the

Business Growth Programme (2015-2021, £488k ERDF via the Cheshire and Warrington LEP and partners) supports SMEs with business growth activities such as growth boot camps and coaching across priority sectors; **Innovation 2 Commercialisation** (2016-2019, £960k ERDF) supported SMEs to embed innovation in their organisations and deliver new products, processes or services to the market; **Digital Solutions** (2018-2023, £3.5m ERDF via The Marches LEP) supports SME adoption of technologies for business growth through research services and new digital innovation networking groups; the **Centre for Research into Environmental Science and Technology** (2017-2023, £2m ERDF) supports environmental sector SMEs through innovation and research support plus two specialist cluster networks; **Building Skills and Growth Capacity** (2019-2022, £486k ESF) supports SMEs and microbusinesses in the Marches LEP area around workplace learning and skills; **Eco-Innovation Cheshire & Warrington** (2016-2021, with Lancaster University, £1.2m ERDF) supports SMEs to increase adoption and commercialisation of new low-carbon technologies and R&D; **Accelerate** (£14.8m Cheshire and Warrington LEP and ESF) supports the reskilling and upskilling of regional workforce for example in leadership and management and organisational wellbeing; and **Practice Assessment Record & Evaluation** (£1.9m Health Education England) which has rolled out ethical reflective practices to 130,000 practice-based learners across health and social care workers across the UK.

Facilities

Since REF2014, CBS relocated seven of its departments distributed over three sites on to one site, the **Queen's Park Campus**, co-locating with the **West Cheshire & North Wales Chambers of Commerce**. The site has benefited from £4 million investment in facilities, enabling closer collaboration across CBS departments and businesses, and intensifying the vitality of all of the research and impact activity (e.g. the Researcher Development Hub, research and impact projects, and professional body conferences). The new campus is also within walking distance of incubation and business support spaces at the **Riverside Innovation Centre** (a £5.5m investment), as well as researchers from UoA3 Allied Health Professions and UoA23 Education, encouraging interdisciplinary collaboration. As such, the Queen's Park Campus is a busy, corporate space for inter-disciplinary research with organisations and professional bodies, and within walking distance of the 100s of businesses in the vibrant Chester City Centre.

CBS maintains its presence in the **Cheshire Science Corridor Enterprise Zone**, through **CBS@Warrington** and at **Thornton Science Park** which are both located alongside a significant cluster of science, engineering, and sustainable energy businesses. In addition, CBS is now a core contributor at **University Centre Shrewsbury**, an ambitious joint venture with **Shropshire Council and the Marches Local Economic Partnership** to address their cold spot for research and development. CBS's research and impact work at these sites has strengthened the ability of CBS to inform start-up incubation and business support for environmental and technology-based enterprises.

Finally, a close collaborative arrangement between the University and **Storyhouse** (a £37m theatre, library, cinema and arts centre funded by Cheshire West and Chester Council, Arts Council England and MBNA) has enabled CBS to undertake interdisciplinary and co-produced research collaborations with diverse communities in an open, inclusive and approachable space. Two examples of the use of this space include (1) with a wide range of community health and arts-based health practitioners in the Lapidus International research projects (**Wall**), and (2) with local communities experiencing poverty in the Poverty Truth Commission Research & Development project (**Wall**). Storyhouse, as a strategic cultural partner, strengthens CBS's connection to, and co-production with, diverse communities who would not feel comfortable fully participating within CBS's other corporate spaces.

4. Collaboration and contribution to the research base, economy and society**Collaborations for economic and social contributions**

CBS's research and impact infrastructure involves a close connection to practice communities in relation to responsible enterprise and decent work: external membership and influence through CBS's Business Advisory Council, the collaborative and inclusive Researcher Development Hub delivered in connection with professional bodies, the Chester Business Forum in collaboration with residents of Chester Business Park, co-location with the West Cheshire & North Wales Chambers of Commerce, membership of the two local LEPs and the Mersey-Dee Alliance (MDA, 2020), presence at two major sites in the Cheshire Science Corridor Enterprise Zone, and in one of the lowest areas of research and development investment in the UK. These are all established routes to connect CBS's research and impact with practice communities. As an indication of the wider recognition of such developments, CBS was awarded **Educate North awards for employer engagement** (2017, 2018) and was shortlisted for the **Times Higher outstanding contribution to leadership development** (2019).

Evidence demonstrates that the impact projects have, within this cycle alone, supported **1,632 SMEs, 62 nascent entrepreneurs, and 131 pre-start-up businesses. 312.3 jobs** have been created and **113.9 safeguarded** including in areas where business growth is below the UK and West Midlands averages (Mickledore, 2020). The net GVA improvement of the projects has been estimated at **£44.54m GVA** (Mickledore, 2020). In addition, CBS's research and development work into poverty in Cheshire West and Chester Council, with civic leaders and people with lived experience of poverty, generated an **additional £1.7m social value** (CWAC, 2020). Other research and impact projects continue to create value, such as CBS's *Social Enterprise Design Sprint* which has improved capacity for collaboration between council members, local universities, local social enterprises, and young people. The use of the *Sprint* in Shotton (one of the most deprived areas in North Wales) has resulted in 4 new social enterprises and 62 new volunteers posts on community collaboration and rejuvenation projects. Since then, the social enterprises have written and submitted bids for over £500k, and are at the second stage of development for a £350k project to promote collaborative social enterprise in and around Shotton.

CBS's research and impact work has also raised the profile of ethical and responsible practices across a wide range of practice communities, specifically in relation to creating decent workplaces and spaces which are free from harm (Sustainable Development Goals 3 (Health & Wellbeing) and 8 (Decent Work). These include: enhanced working practices in Wirral Metropolitan Borough, West Lancashire Metropolitan Borough, and Oxfordshire County Council, impacting over **>8,800 staff** and improving the services delivered to **1.1m residents**; a new professional framework which has become the industry standard and thereby improving the practices of **400+ practitioners** using creative practices for wellbeing outcomes enhancing wellbeing (and preventing harm) with **1000s of participants over 20 countries**; the enhanced ethical standards of over **4,500 coaching professionals**; improved ethical working cultures at Cheshire Constabulary which then influenced national debate about decent workplace cultures in the Police; and improved supervisory dialogue for **130,000 practice learners and supervisors** in health and social care organisations across the UK (through the Practice Assessment Record & Evaluation project).

Collaborations for research and knowledge base contributions

CBS researchers are active contributors to a range of disciplines underpinning responsible enterprise and work-based learning for decent work. As part of CBS's commitment to the UN's PRME initiative, CBS is an early member of the **Inter-University Research Programme for Sustainable Development** (IURPSD) and the **European School of Sustainability Science Research** (ESSSR), which has significantly developed international, collaborative research networks and has led to the co-development of over £16m worth of funding bids including from the ESRC and HORIZON2020.

As a result, **Wall** was invited to become an editor of the **Encyclopedia of the United Nations' Sustainable Development Goals** (the largest publication of its kind with over 3,000 authors across

17 volumes, and with contributions from MIT, Columbia, Oxford and Cambridge universities) and lead editor of **The SAGE Handbook of Organizational Wellbeing** with researchers at Manchester Business School and Griffiths University in Australia.

CBS researchers are part of “**Pathways to Impact**” research groups exploring inclusive approaches to change and impact through Business Schools: one group is a collaboration between researchers at CBS and Copenhagen Business School, University of Glasgow’s Adam Smith School of Business, University of Sheffield Management School, Newcastle Business School; and another is with Auckland University of Technology and University of Waikato in New Zealand, University of Technology Sydney and Bond Business School in Australia, and Haskayne School of Business at the University of Calgary in Canada.

In addition, CBS researchers have established various research and impact networks as part of research projects: the project, British Academy’s “**Empowering Ethnic Minority Youth in Vietnam to Re-Vision the Future of Decent Work**” (Re-WORK) project has established a virtual network across Vietnam and internationally to examine young ethnic minority voice in understanding decent work. This includes investigators in Hanoi, Tay Bac, and Phu Xuan universities in Vietnam, but also leading researchers in Australia, the US and the UK. Similarly, the Medical Research Council’s “**Prevention of Disease Using Trade Agreements**” project has launched a European, inter-disciplinary research network to conduct inter-disciplinary research with researchers from Imperial, Cambridge, Sydney, and Monash universities, and senior staff at the World Health Organization, Public Health England, and Public Health Wales.

Speaker invitations: CBS researchers have been invited to give keynote and other speeches at, for example, the European Commission, Copenhagen Business School Denmark, Deakin University Melbourne, University of Sao Paulo, Oxford Brookes University Business School, Middlesex University Business School, the Chartered Association of Business Schools, University of Wyoming, Guangxi Normal University, South China Normal University, Dezhou University, South Central University of Nationalities, Dalian Minzu University; the Arab Knowledge Summit, Mohammed Bin Rashid Al Maktoum Educational Foundation, and the International Forum on Socio-Economic Sustainability, Dubai, UAE.

Key roles in international research networks, conferences or international bodies: CBS researchers have held a range of roles including: visiting professorships at Deakin University in Melbourne, Stockholm University, Moscow’s Institute of International Trade and Law, Aalto University Business School in Finland, and at the University of Sao Paulo; board memberships of the Spiritual Capital Development Company; member of the British Standards Institute/CIPD’s Human Capital Standards Committee; Vice-President of the EuroMed Research Business Institute; Track Chair for the Sustainable and Responsible SIG at the British Academy of Management; co-founding Track Chair of the Place Marketing and Branding track at the Annual Academy of Marketing Conference; SIG Co-Chair Place Marketing and Branding SIG Research Group at the Academy of Marketing; inaugural workshop lead for the Critical Management Studies Track at the British Academy of Management conference; co-organiser of the EMCC’s International Coaching and Mentoring Conference; co-organiser of the AGRH (Association Francophone de Gestion des Ressources Humaines) Congress; and a board directorship of the Universities Alliance for Lifelong Learning.

Journal editorships and review: CBS academics contribute to the research base through review panel roles including for *Journal of Organizational Behavior*, *Academy of Management Learning & Education*, *Academy of Management Perspectives*, *Journal of Business Ethics*, *International Journal of Management Reviews*, *International Journal of Human Resources Management*, *Journal of Cleaner Production*, *Business Ethics: A European Review*, and *Sustainability*. They have won various Emerald Literati Outstanding Paper and Highly Commended Awards, and multiple Outstanding Reviewer Awards. Special issues shaping the discipline, and edited by CBS academics include: “*Work-based learning and vocational learning as a Catalyst for sustainable development*”, “*Global perspectives on profound pedagogies*”, and “*sustainability in work-applied learning and management*”.

CBS's prestigious reviewing and memberships include the *UKRI Future Leaders Fellowship Peer Review College*, the *ESRC's Advanced Institute of Management*, the *Inter-University Research Programme for Sustainable Development (IURPSD)*, the *European School of Sustainability Science Research (ESSSR)*, and the *British Academy of Management*.

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