

Institution: Cardiff University

Unit of Assessment 17: Business and Management Studies

1. UNIT CONTEXT AND STRUCTURE, RESEARCH AND IMPACT STRATEGY

1.1. School strategy and objectives

Cardiff Business School is a strong and sustainable research community that enables colleagues to thrive and make distinctive and important research contributions to their disciplines and beyond. Since 2014, the School has developed a holistic strategy based upon a Public Value ethos that prioritises real-world social scientific research of international relevance, underpinned by intellectual curiosity and oriented towards **our five flagship Grand Challenges - Decent Work, Fair and Sustainable Economies, Future Organisations, Good Governance and Responsible Innovation**. These challenges are central to our research strategy and feature heavily throughout this statement, in addition to being reflected in our ten impact case studies (S1.7).

We have worked to sustain a vibrant and interdisciplinary research culture that integrates international academic excellence with tangible and widespread impact; **an environment where collegiality, inclusivity and participation are the dominant values, and our scholars can contribute not only to their research base but also to society**. Since REF2014, we have extended the intellectual, social and economic impact of our research, while striking a balance between autonomy and support, so colleagues develop fulfilling and rewarding research careers.

The development of the Public Value Business School at Cardiff from 2014 onwards was a considered response to the soul-searching following the financial crisis (2007/8) and fears of culpability regarding ethics in business education. The strategy was influenced by close working with two social scientists: John Brewer of Queens University, Belfast (author of ‘*The Public Value of the Social Sciences*’); and Mark Moore at the Kennedy School of Government at Harvard University (author of ‘*Creating Public Value*’).

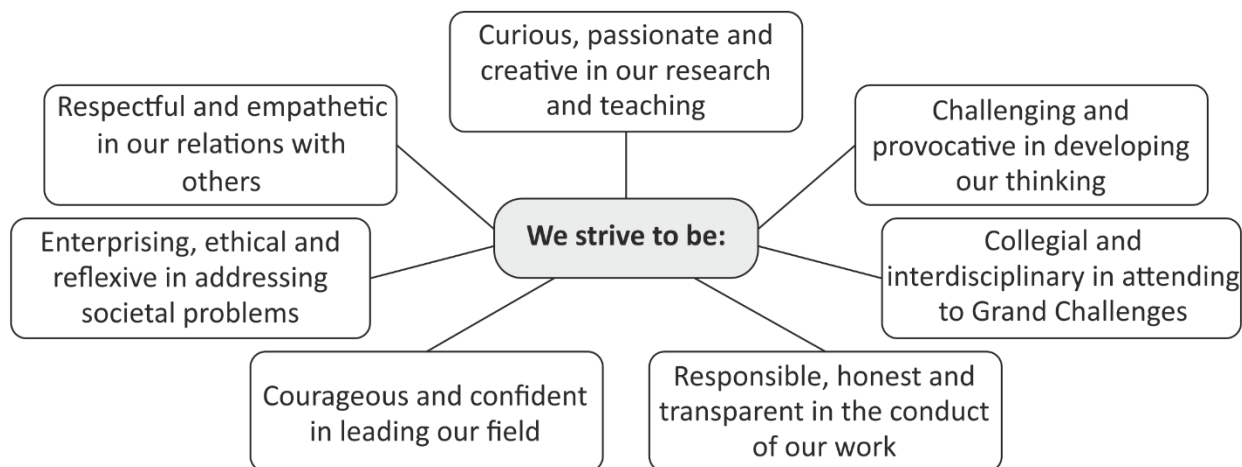
Public Value stakeholder workshops, attended by Brewer and Moore, enabled us to collectively, and thoroughly, debate what kind of Business School we were and could be. This inclusive process of strategy development (detailed in Kitchener and Delbridge, *Academy of Management Learning and Education* 2020), helped us clarify our core purpose – to deliver economic and social value through interdisciplinary research and education oriented towards Grand Challenges. Key developments in the School’s strategy during the REF period can be found in Figure 1.

Figure 1. The Development of the Public Value Business School 2014-2020

<div>2014</div> <div>Dean Martin Kitchener leads Public Value strategy development through iterative workshops</div>	<div>2015</div> <div>Shadow Management Board created, Director of Public Value appointed, Grand Challenge themes identified</div>	<div>2016</div> <div>Formal launch of Public Value strategy, Public Value Engagement Fellowships and Public Value Entrepreneurs in Residence programmes established</div>
<div>2017</div> <div>AACSB re-accreditation with commendation for Public Value, first Public Value Annual Report, Small Business Charter Accreditation</div>	<div>2018</div> <div>Dean Rachel Ashworth appoints Deputy Dean for Public Value, and new Associate Deans for Technology, Systems and Data, and Doctoral Studies</div>	<div>2019</div> <div>Awarded Best Large Responsible Business of the Year by BITC, publication of Public Value edited collection</div>
<div>2020</div> <div>Launch of Public Value MBA, Race Equality Committee established. Cohort 2 Public Value Entrepreneurs in Residence recruited</div>		

Our strategy prompted a systematic articulation of our organisational culture coordinated by the School's new representative internal body, the Shadow Management Board (S1.3) which reinvigorated the School's core values for strategic and operational implementation (see Figure 2).

Figure 2. Business School Values



We have gained external recognition for our distinctive strategic orientation. Our 2017 re-accreditation from the Association to Advance Collegiate Schools of Business (AACSB) noted that ***“Cardiff Business School has developed a unique and compelling vision focused on Public Value which is culturally embedded within the School, including in its research, teaching and engagement programs”*** and commended us for our ***“interdisciplinary research with socio-economic impact”***. We feature in the ITN film produced for the Chartered Association of Business Schools on ***‘Business Schools for Good’*** (our film can be viewed here https://www.youtube.com/watch?v=GaVO_IQOp9w) and, beyond higher education, ***we were awarded the Best Large Responsible Business in Wales 2019 by Business in the Community*** for our implementation of Public Value principles and practices. We produce a regular *Public Value Report*, which aids internal monitoring of the School's performance regarding economic activity, carbon footprint, and supply chain.

1.2. School research strategy and objectives

Since 2014, we have worked to strengthen our position as a leading international centre for business and management research, with 184 research active (Teaching and Research [T&R] and Research [R]) staff, who have generated **£15m of research income, an increase from £10.4m in 2014**.

The School encourages a diverse range of research and methodologies across the full range of business management and economics disciplines, so colleagues can develop expert mainstream and specialist knowledge. We are known for critical, challenging and theoretically informed research, demonstrated by the leading role we have played on the boards of international theory journals such as *Academy of Management Review*, *Perspectives on Public Management and Governance*, and *Organization Theory*.

Our research strategy is key to the achievement of our Public Value ambitions and our sense of purpose has allowed faculty to broaden the scope of their research endeavours. Our values have evolved into important Public Value principles for research: **co-creating knowledge, developing interdisciplinary connections, sustaining a culture of collegiality, and inclusive engagement** (see S3).

In 2015 we began to orient our discretionary research support towards five broad and inclusive Grand Challenges and prioritised collaborative research projects involving early career colleagues. This placed us at the forefront of internationally significant interdisciplinary research focused on areas such as *Responsible Innovation* where Tim Edwards and De Luca, with colleagues from Computer Science, ensured that technology-driven innovations designed in

Africa (water) and Latin America (species conservation) were consistent with community preferences and sustainability.

Launched in 2016, our Public Value Engagement Fellowships (PVEFs) provide seedcorn funding and workload hours to enable colleagues to develop new engagement relationships based on the co-creation of research and teaching. For example, the partnership between Jean Jenkins, her students, and Anti-Slavery International produced collaborative research to support Baroness Young's Modern Slavery (Transparency in Supply Chains) Bill. We have strengthened existing relationships and created new partnerships (with United Nations, Highways England, and the International Red Cross), deepening our engagement with a wider range of stakeholders drawn from the full spectrum of economy and society.

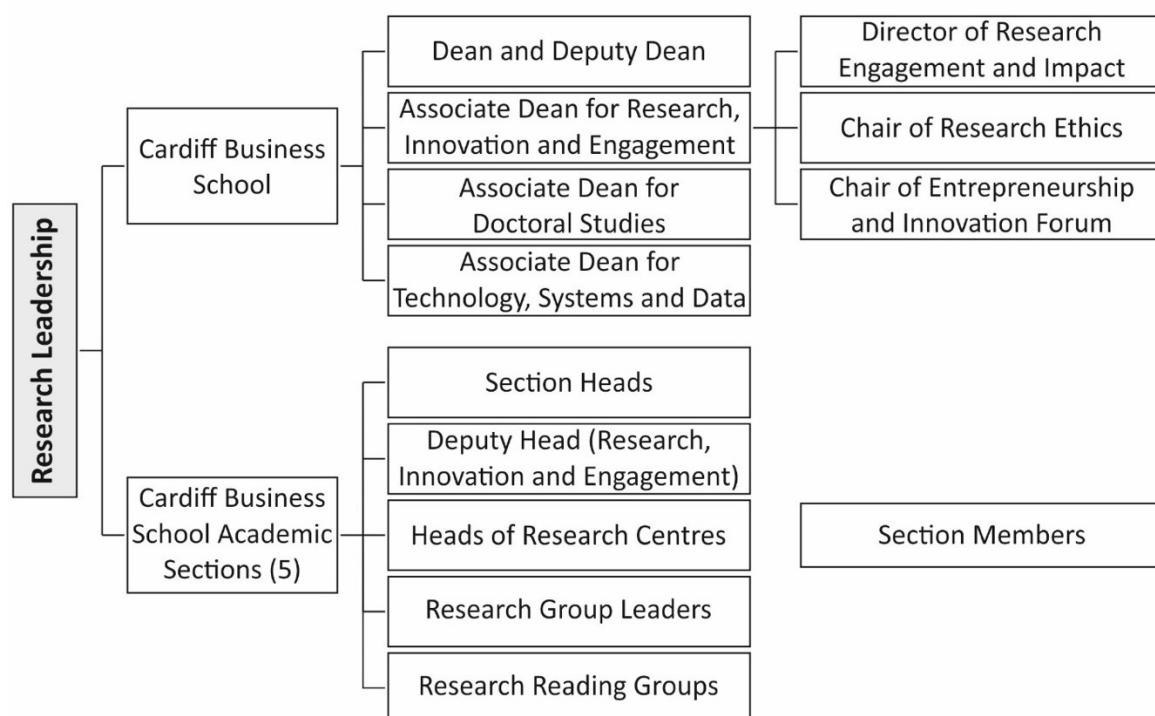
Our Public Value orientation was boosted by Cardiff's University's commitment to the San Francisco Declaration on Research (DORA). In our preparations for REF2021, and more broadly, we have actively embraced the opportunity to **move beyond journal rankings and metrics to consider research studies on their merits, informed by REF criteria, and viewed in relation to social, economic and environmental impact**. Our recruitment and promotion processes do not refer to journal rankings.

1.3. Research leadership and supporting structures

Cardiff Business School is one of ten Schools within the Arts, Humanities and Social Science (AHSS) College; one of three Colleges within Cardiff University. We benefit considerably from the strategic objectives and research culture established by the Pro Vice-Chancellor for Research, Innovation and Enterprise, the University Deans for EDI and Research Culture and Environment, and the AHSS Dean for Research and Innovation, such as opportunities to secure funding for cross-department interdisciplinary research (S1.5).

At School level, **research leadership is distributed, which ensures strategy is developed and tested from the bottom-up** (see Figure 3). The Associate Dean for Research, Innovation and Engagement (ADRIE) is our lead research champion and institutional liaison, but colleagues across the School contribute to the development of the School's research strategy.

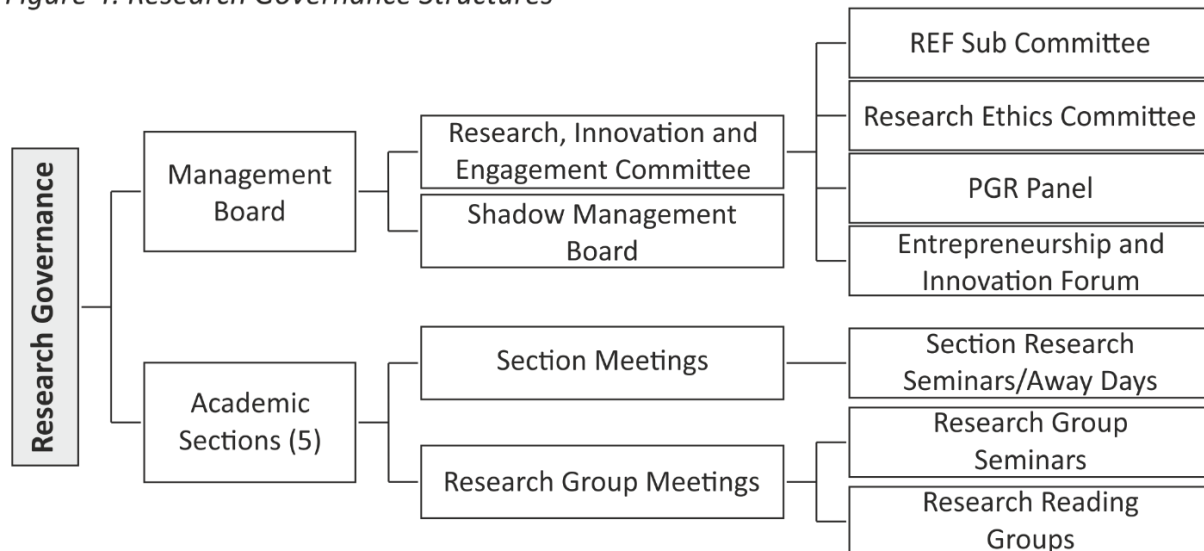
Figure 3: School Research Management Structures



Since 2014, two additional Management Board positions have been created with research responsibilities including a **new Associate Dean for Doctoral Studies** (upgraded from Director of PhD Programme role) and a **new Associate Dean for Technology, Systems and Data** to promote Big Data research activities and strengthen the use of data in decision-making.

Research governance is provided by Management Board and our Research Innovation and Engagement Committee (known as Research Committee) which is a deliberative forum for research strategy and its implementation. Chaired by the School's ADRIE, members include T&R and R staff representatives from each academic section, PhD students, the Chair of the School's Research Ethics Committee, Associate Deans for Doctoral Studies and Technology, Systems and Data, and our Director of Research Engagement and Impact (DRE&I) (see Figure 4).

Figure 4: Research Governance Structures



Strategic discussion and oversight of research also sits within the remit of our Shadow Management Board, which was introduced in 2015.

Case Study: Shadow Management Board (SMB)

Public Value prompted the establishment of a Shadow Management Board to widen participation in strategic decision-making. The Board's design was Informed an Athena Swan action plan and our research on accountability and governance (see Downe and Ashworth impact case). SMB includes faculty and professional service representatives and influences School decision-making by providing constructive challenge while developing its own policy proposals. The School's research strategy has been a priority focus for the SMB since its inception. The current Dean was the inaugural Chair of the SMB, while the current chair is former Associate Dean for Research, Mike Reed.

Faculty in the School are organised within five large academic sections: Accounting and Finance (AF); Economics (ECON); Logistics and Operations Management (LOM); Management, Employment and Organisation (MEO); and Marketing and Strategy (MS) that meet frequently. Each section co-ordinates activities, such as research awaydays, seminars and reading groups, and holds a research budget.

We have introduced Deputy Section Heads for Research, Innovation and Engagement (DSHRIEs) for each of the five academic sections who perform a key role at Research Committee, along with additional section representatives to ensure good research engagement. Members of our Research Office also attend Research Committee to provide advice on implementation and due process.

1.4. REF preparation process

The development of our REF submission illustrates our distributed and consultative approach. The process was coordinated by a REF Sub Committee, jointly chaired by the Dean and ADRIE and included the DSHRIEs, Associate Deans for Doctoral Studies and Technology, Systems and Data and Doctoral Studies, the School's DRE&I and the AHSS Dean for Research and Innovation. Three previous Associate Deans for Research (Mike Reed, Delbridge and Naim) were members,

providing continuity and experience, while the Committee's way of working reflected our open and transparent approach to the development of the School's REF submission.

Our output reviewing process was aligned with the REF2021 Code of Practice, overseen by REF Sub Committee and managed by the DSHRIEs. As previously, the School double reviewed outputs against REF criteria without reference to the CABS or any other journal list. A proportion of interdisciplinary outputs were subject to external review, while a further sample of outputs was third-reviewed. The Sub Committee also monitored progress on the REF impact case studies, while a working group contributed to our Environment Statement.

1.5. Research communities

Our research strategy supports faculty to develop discipline-specific expertise and insight, while engaging in collaborative research across disciplines. Colleagues can contribute to a range of research communities and groups:

- Externally funded research centres. Substantial and sustained ESRC, EPSRC and industry awards fund these internationally recognised centres of excellence, including the Wales Centre for Public Policy (WCPP) funded by the ESRC/Welsh Government; the Centre for Advanced Manufacturing Systems at Cardiff (CAMSAC) funded by the EPSRC/Welsh Government; and the PARC Academy Institute of Manufacturing, Logistics, and Inventory funded by DSV-Panalpina.
- Internally funded disciplinary communities of practice. These well-reputed and long-standing groups are oriented around the School's core disciplinary strengths and academic sections. They meet regularly to hear from international speakers and progress individual and collective research agendas. For example, each year our Employment Research Unit (ERU) and Centre for Organisation Research (CORGies) host a joint PhD conference to support Early Career Researchers (ECRs) and their development.
- Internally funded Business School interdisciplinary research units. Resourced by our *Agenda Setting Events* funding, these reflect Public Value priorities. For example, the Cardiff Corporate Governance Group held its inaugural conference in 2018 focused on Responsible Corporate Governance with keynote speakers such as Brian Cheffins (Cambridge), Jonathan Kalodimos (Oregon State) and Nadia Massoud (Melbourne).
- Match funded Arts, Humanities and Social Science research centres. Faculty contribute to prestigious College-wide institutes and groups, including the ESRC-funded Wales Institute of Social and Economic Research and Data (WISERD) (Melanie Jones, Jean Jenkins, Davies) and Welsh Government/NESTA funded Y Lab (the Public Services Innovation Lab for Wales) (Delbridge, Downe). We were pivotal to the development of the highly innovative Social Science Research Park (SPARK; and the new building known as sbarc | spark); the first dedicated and purpose-built facility for interdisciplinary social science-led research and innovation of its kind, representing £56.5m of University investment (S3).
- Match funded University Research Institutes. Colleagues make significant contributions to these high-profile institutes with strong connections to the School's strategy. For example, Bosangit is collaborating with colleagues from the Sustainable Places Research Institute, which is co-directed by Peattie, on a £200,000 UKRI-funded project focused on sustainable tourism within Mayan communities, while Beynon is Ambassador to the Data Innovation Research Institute.

1.6. Research outcomes

The School's research performance reflects our challenge-oriented and partnership-focused Public Value strategy. Our submission has depth and breadth in research publications, **while our research income has grown by 44% from £10.4m to £15m (2014-2019), pump-primed by over £300,000 of School seedcorn funding.**

Research income is derived from a range of sources including **£4.2m UKRI awards**. We were awarded **four Horizon 2020-funded projects** such as COGOV, which is focused on 'Co-production and Co-governance: Strategic Management, Public Value and Co-creation in the Renewal of Public Agencies across Europe'. We have attracted **substantial ERDF funds**

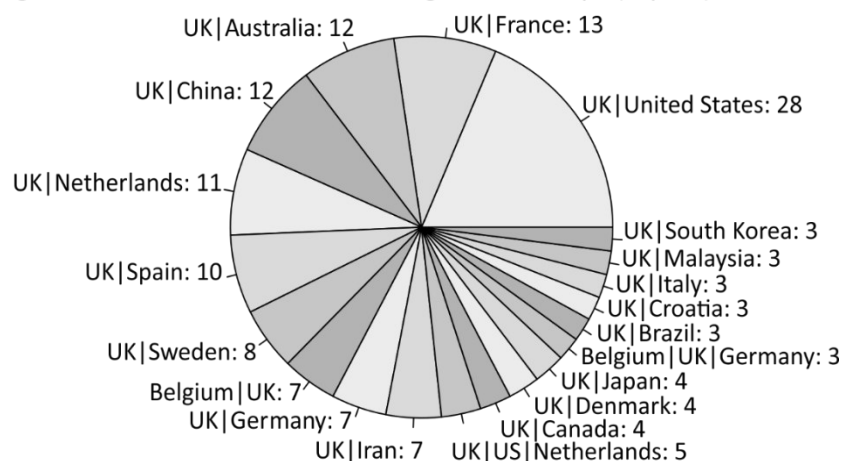
including a five-year project ensuring that Welsh SMEs and social enterprises maximise opportunities arising from the roll-out of superfast broadband provision. **13 years of successive EPSRC research funding** has sustained our Advanced Sustainable Manufacturing Technologies institute (ASTUTE) which supports SMEs (S3). Finally, we have almost doubled our **Knowledge Transfer Partnership (KTP) awards from six to 11 since 2014**, worth a total of £630,000.

In 2014, we signalled our aspiration to enhance international research collaborations with leading and developing universities across the world. This ambition has been achieved through:

- University and School strategic partnerships - which prompted collaborations with KU Leuven (Delbridge, Sarah Jenkins, Kitchener), Xiamen (Xiao) and Melbourne (Hardy and Thomas) and discipline-specific collaborations, such as between public management researchers at Cardiff University and Aarhus (Andrews, Ashworth, McDermott) and logistics colleagues at Cardiff University and Politecnico Milano (Gosling, Kumar, Lynch, Purvis, Syntetos).
- Elite international research networks - including the *Centre for Interuniversity Research on Globalization and Labour* (CRIMT) which enables colleagues such as Doering, Hann, Hauptmeier and Nash to develop international connections.
- Visiting Fellowships – such as our long-running Montague Burton Visiting Fellowship programme which has hosted renowned international scholars since 2014, including Peter Gahan (Melbourne), John Budd (Minnesota), Lise Lotte Hansen (Roskilde), and Cathie Jo Martin (Boston). On average, we host fifteen international visitors at any one time, compared with 8-10 in 2014.
- ECR workshops - we have hosted joint PhD conferences, for example with FGV-EAESP, Sao Paulo, Brazil, while the School was a founding partner in an annual ethnography workshop for doctoral students and ECRs with EM Lyon, Esade Barcelona and VU Amsterdam.

Figure 5 shows how we benefit from a diverse set of geographical collaborations which have generated research publications and other research outputs.

Figure 5. International Co-Authoring Relationships (top 20)



Since 2014, we have further **sustained and deepened collaborations with partners** such as the Trades Union Congress, International Labour Organization, Confederation of British Industry, Institute of Directors, the Office for National Statistics, and the Association of Certified Chartered Accountants. The Institute of Directors (Wales) is now headquartered with the School, enabling us to work closely with business leaders and attend UK Government round-tables.

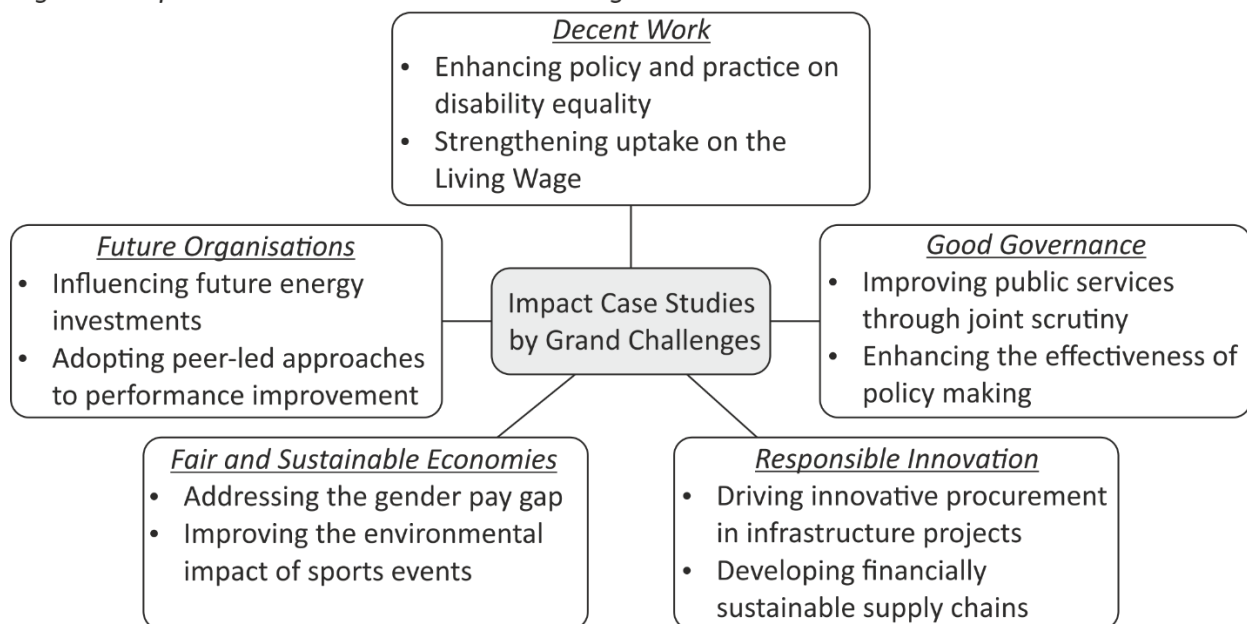
Public Value has prompted us to forge relationships with new partners to address Grand Challenges, such as our **institutional partnership with the world's first Future Generations Commissioner, Sophie Howe (an Honorary Fellow of the School)**, prompting joint work on topics such as responsible public procurement.

1.7. Research impact

Led by our DRE&I, our research engagement and impact strategy **ensures faculty have the opportunity and support to coproduce impact, while remaining prominent within their disciplines and international networks**. The DRE&I has led a programme of activity which has raised the profile of research impact, delivered one-to-one advice on designing pathways to impact in UKRI funding applications, and guided the narrative development of impact cases.

We have been successful in gaining ESRC IAA awards (S3) and provide generous impact funding within our Research Committee funding programme. The School sits within a wider ecosystem that is highly conducive to research collaboration and the coproduction of impact with local, national, and international partners, including the Welsh and UK Governments, the Office for National Statistics, Cardiff Capital Region Board, and Nesta. Our broader impact and engagement strategy is anchored to our five Grand Challenges, which are reflected in our ten impact case studies (Figure 6).

Figure 6. Impact Case Studies and Grand Challenges



Colleagues are currently being supported to co-produce future impact cases. Our REF2021 impact case authors have shared their learning and future cases are in development focused on sustainable food supply (Ocado, Yeo Valley), forecasting for social good (Wales Ambulance Service and United Nations High Commission for Refugees) and disability equality in the legal profession (Law Society). Our two cohorts of Public Value Entrepreneurs in Residence (PVEiR) have facilitated research connections, including the collaboration between Yaina Samuels and Yousafzai on female entrepreneurship (S4).

1.8. Research ethics, academic integrity and open access

Public Value ensures that the School adopts an ethical and responsible approach to research. Our School Research Ethics Committee (SREC) provides oversight and governance in liaison with the Cardiff University Open Research and Integrity Ethics Committee (ORIEC). The Chair of SREC is a member of ORIEC and reports directly to Management Board, reflecting the Committee's independence and status. Discussion of research ethics and academic integrity takes place at induction and both staff and students undertake Epigeum online ethics training, in addition to University research integrity training. Ethics review processes align to the ESRC's Framework for Research Ethics, with independent review by two members of the SREC.

Cardiff University has formally recorded open access compliance on research outputs since 2014 and supports Gold open access via a substantial institutional fund. The School follows an enhanced version of the University's open access process and promotes open access training. We proactively monitor publication acceptances to enhance our compliance.

1.9. The future

Medium term strategic developments will be shaped by COVID-19 and its severe social and economic consequences. Our Public Value commitment means we are ready to respond to these challenges and proactively support the post-COVID social and economic recovery. For example, Henley is leading the Wales Productivity Forum within the ESRC Productivity Institute, while colleagues are coordinating government inquiries on the impact of the pandemic on disabled people, BAME communities and women entrepreneurs (Foster, Ogbonna, Edwards). In the School, wellbeing is a continued priority as colleagues respond to the challenges of homeworking and wider COVID-19 pressures. We have also begun to address research-related gender disparities that have been exacerbated as a result of the pandemic (S2).

Overall, the School will continue to sustain a dynamic, inclusive and collegial research culture, so that researchers can influence their disciplines and the wider world. Throughout the next REF period we will:

- **Progress internationally relevant social science research in each of our Grand Challenge areas** through a targeted programme of internal funding, our PVEFs and via the significant opportunities from our prime membership of the University's Social Science Park (SPARK).
- **'Walk the talk' by practising research-informed social, environmental and economic responsibility** to reduce our carbon emissions, improve sustainability in our supply chain, and promote ethical governance so we can make further progress towards an **inclusive, low carbon and high wellbeing research environment**.

2. PEOPLE**2.1. People strategy**

The challenges currently facing our society - environmental, technological, economic and health - require strong organisational resilience that builds from people-centric workplaces. Colleagues are central to our School and Public Value mission. As demonstrated in RAE 2008 and REF2014, we have long prioritised the development and support of our staff, and we continue to benefit from high levels of continuity and retention. Since 2014, **staff turnover has remained constant at around 2% of faculty, compared to the HE sector average of 8% of academic staff** (UCEA, 2019). Colleagues report that they stay with us for a range of reasons:

2.1.1. Appointment of ECRs

Continuity in the School reflects a long-standing practice of appointing promising ECRs on open-ended contracts and providing an environment that enables them to become scholars of international standing. This 'home grown' approach is evident within our Management Board. Nine of the 11 members of Management Board joined Cardiff as ECRs, including the Dean, Deputy Dean, along with the majority of Associate Deans and Section Heads, while 40 of our 67 Professors joined Cardiff as students (five), research assistants (13) or junior lecturers (22).

Since 2014, we have appointed 60 junior lecturers to ensure the School has an open, outward-facing and international research culture. Colleagues have been appointed from over 20 countries, researching topics that include: sustainability in Chinese corporations (Li); working conditions for Uber drivers in South America (Zorzoli); green supply chains in India (Mogale); and developments within the EU's circular economy (De Angelis).

2.1.2. A culture of collegiality

Collegiality is demonstrated by extensive co-authoring between colleagues but also through an enthusiastic non-transactional commitment which is evidenced in staff surveys. This includes providing advice on research development and supporting colleagues who are experiencing extenuating circumstances. It can be seen in vibrant research seminar activities at Section, School and College level, with high levels of engagement in research-focused annual away days, conferences and reading groups. We place a strong emphasis on collegiality within our recruitment and induction processes.

2.1.3. Continuity in School leadership

Since the School's creation in 1987, only internal candidates have been appointed as Dean, even under external recruitment processes. Successive Deans have understood the School's history and strengths and prioritised collegial relationships. This has produced greater transparency and consistency in decision-making, inclusive forms of strategic change and left us less vulnerable to higher turnover rates.

2.1.4. People-focused policies and practices

These have been extended since 2014, informed by our own research. We have embedded our Returners' Leave Scheme for colleagues returning to research and protected research time for ECRs on Grade 6 Lectureships (S2.2). Following in-school research, revised workload allowances and independent study weeks were introduced to create additional time for research. Committees apply consideration of workload and wellbeing in their decision-making, while staff development policies extend beyond standard mentoring approaches.

Case Study: Safeguarding Workload and Wellbeing during COVID-19

At the outset of the COVID-19 crisis, the School initiated a policy of designating Fridays as Wellbeing Days, without online meetings and emails, when colleagues would be encouraged to undertake activity that boosted their wellbeing. Wellbeing Fridays were subsequently implemented across the University from April-June. The School has continued to designate Friday as a *Quiet Day* and introduced *Quiet Weeks* over the summer period to provide meeting-free time to focus on research or take annual leave. We have also incorporated a one hour lunchbreak within the academic timetable to aid student and staff wellbeing.

2.1.5. Career progression opportunities.

The School has a 95% success rate in the University Promotions process, with 70 members of staff promoted to senior lecturer (33 female, 37 male), 22 to Reader (11 female, 11 male) and 21 to Professor (seven female, 14 male) since 2014. This compares favourably to the 2008-mid 2013 period when just 34 staff were promoted (only seven to Professor).

2.2. Staff profile

We employ 217 faculty, 184 of whom are eligible for REF2021, with colleagues evenly distributed across the five academic sections of the School. Lectureship appointments are open-ended, with the majority of academic staff (175) employed on T&R contracts, and 18 on Teaching and Scholarship (T&S) contracts. We have 24 R-only staff whose appointments are supported by externally funded research projects, nine of whom have significant responsibility for research. 12 work in the ESRC-Welsh Government funded Wales Centre for Public Policy (WCPP). The School also provides fractional appointments to facilitate part-time working.

T&R faculty work to a standard University Workload Allocation Model with a 40:40:20 split between research, teaching and administration/citizenship. A Workload Allocation Model Standing Panel with representatives from across the School and the trades unions, oversees the implementation of the model. Administrative roles have respective workload allocations, and adjustments are made for research project responsibilities. ECRs work to a reduced teaching load (67%) without administrative responsibilities so they can progress publications, build their international profile and develop as fully rounded academics. The 40% allocation for research for T&R staff has been retained during COVID-19.

2.3. Equality, Diversity and Inclusion (EDI)

2.3.1. Promotion of EDI research

We enthusiastically promote equality, diversity and inclusion and our approach is evidenced by our **prioritisation of equality-focused research, proactive policy making and equality outcome achievements** linked to the Grand Challenges of *Fair and Sustainable Economies* and *Decent Work*. Faculty have extended the reach and significance of their EDI research since 2014 including scholarship on: disability at work (Wass and Melanie Jones; Foster), equality and inclusion in public services (Andrews and Ashworth), diversity in the accounting profession (Edgley and Sharma), BAME leadership within the FTSE 100 (Ogbonna), the gender pay gap

(Parken and Ashworth); and women and BAME entrepreneurs (Yousafzai, Tim Edwards, Henley). PVEFs have been awarded to scholars researching disability for a second year running, while several of the School's REF2021 impact case studies have an EDI focus. Research expertise in EDI leaves us well-placed to implement University EDI policies.

2.3.2. EDI structure and organisation

Since 2014, the School has mainstreamed EDI with responsibilities distributed across the School and embedded within agenda items for all committees. The School has its own EDI Officer to support policy implementation. This includes coordinating an objective procedure for agreeing reasonable adjustments which has enabled us to support seven colleagues to balance their work commitments to date.

2.3.3. Embedding EDI

The School ensures colleagues are afforded equal opportunities to excel and progress. Examples include:

- Our Returners' Leave Scheme which supports colleagues with protected characteristics when they return from paternity/maternity/adoption leave or after caring responsibilities. Colleagues receive six months protected time to complete or re-establish research, and arrangements can be adapted according to need. The School has approved 15 applications for Returners' Leave including two cases where leave was granted twice.
- A new system where PhD applications are circulated School-wide that has resulted in a more equitable allocation of supervision positions, the proliferation of interdisciplinary supervision panels, and a greater opportunity for ECRs to gain supervisory experience.
- The application of EDI principles and Extenuating Circumstances processes to Research Committee funding schemes at all stages.
- The award of PVEFs to an ECR who joined three months previously, and to a faculty member who was on maternity leave.
- The incorporation of EDI into REF preparations. Each member of our diverse and inclusive REF Sub Committee undertook EDI-training aligned to their REF roles. Informed by the University's REF2021 Code of Practice on inclusion, transparency and staff engagement, the Sub Committee received gender and career grade profiles produced by the Associate Dean for Technology, Systems and Data that informed the development of our submission.

2.3.4. Priorities

The School has taken a proactive approach with the establishment of a new Committee to prioritise and lead action on race equality. We are determined to make progress on this aspect of EDI during the forthcoming REF period.

Case Study: Race Equality Committee

Recent events have underlined that inequality, disadvantage and discrimination remain prevalent within society and are reflected within organisational structures, behaviours and practices. In response, the School has established a *Race Equality Committee* that includes staff and students and reports directly to Management Board. Informed by our own research (Ogbonna, 2019), the Committee will ensure our workplace culture, learning environment, education curricula and teaching practices are diverse, inclusive and non-discriminatory, while addressing attainment gaps and amplifying BAME voices within the School.

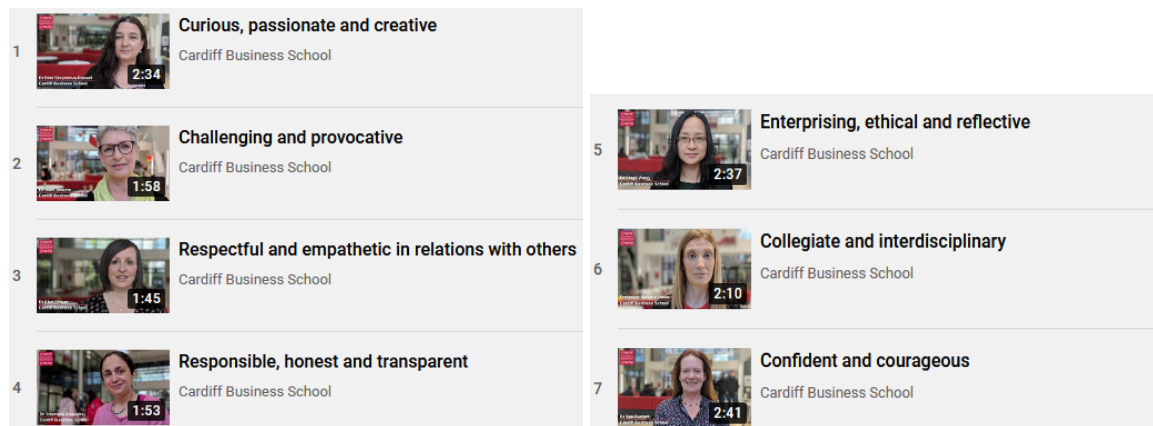
As one of the first three Business Schools to obtain a Bronze Athena Swan accreditation, we are due to submit our re-accreditation in 2021. An EDI Action Group is developing the School's future objectives for gender equality, which include the need to achieve a greater representation of women at senior levels and address COVID-related impacts on research.

We have made progress since 2014 with a significant number of women among newly promoted senior staff, including the Dean, Thomas, Wass, Daunt, Foster, Jean Jenkins and McDermott to Personal Chairs and Dhanani, Harris, Sarah Jenkins, Koenig-Lewis, Le, Purvis, Yousafzai, Slater,

Wang, and Yani-De-Soriano to Reader. We have privileged ECR appointments in external recruitment which has produced an overall 50:50 ratio of men and women appointed during the REF period. Nevertheless, there is greater diversity in some disciplines relative to others.

We celebrated International Women's Day (2018) with videos from seven women from the School who volunteered to explain and promote our values. The films can be seen in [this YouTube playlist](#) (Figure 7).

Figure 7. Promoting our Values: International Women's Day (2018)



2.4. Staff development

2.4.1. HR policies

Colleagues that join the School begin with induction linked to the University's **'Your First 90 Days' programme, which involves a welcome session that emphasises Public Value, collegiality and citizenship.** Research Office colleagues advise faculty on support structures, funding opportunities and research processes. The session provides an opportunity for interdisciplinary interaction and collaboration, as colleagues meet counterparts from across the School.

Each new colleague has a 'buddy' for day-to-day guidance and a mentor for bespoke career advice. ECRs have a probation mentor to support them in meeting their three-year review period requirements, while undertaking University Academic Practice modules, completing doctoral supervision training and publishing research outputs. The Business School has a strong track record of probation completions (99%), with probationers often meeting requirements ahead of the three-year deadline.

Colleagues receive ongoing support from the School as their service continues. The Cardiff Academic provides clarity on expectations which are translated to social sciences by AHSS, and then to business and management by the School. **Each member of staff has an annual Performance Development Review (PDR) with their line manager that reviews progress, objectives and career plans.** Line managers provide guidance to their colleagues, supported by an in-School Line Management Development Programme. PDRs incorporate discussion of training and development, while every colleague is a member of a discipline-based research community and can draw on support, insight and experience from fellow colleagues. Mentoring is standard practice, with an expectation that colleagues will be mentors and mentees.

Case Study: Research-Informed Line Management Training

Since 2014, our research has been put into practice in recognition of the pivotal role that line managers play in advancing careers (McDermott et al., 2015). Drawing on our strengths, the School now provides a supplement to the generic line management training in the form of a bespoke Line Manager Development Programme, which has been very well received. The four-day programme delivered by faculty members with research expertise focuses on effective line management, and incorporates sessions on stress and mental health from MIND and peer coaching techniques.

2.4.2. Reward and recognition

Effective performance is viewed holistically, highlighted in PDRs and rewarded through the Outstanding Contribution Award process or a Senior Salary Review (SSR) for Professors. Faculty are encouraged to progress their careers via the University's promotions process, where the School has been successful in achieving a 95% success rate (S2.1).

Given the size and scale of the School (3500 students and 217 academic staff), it is important to view performance holistically. We consider research 'in the round' and celebrate the publication of research outputs; research funding; engagement relationships; societal and economic impact; and doctoral supervision. The Professorial SSR values effective performance across four activities - research, teaching, leadership and international - while all promotion applicants pass through a test of citizenship known as the Citizenship Gateway.

We have enjoyed considerable success at the University's Celebrating Excellence Awards for initiatives that have enhanced the Student and Staff Experience (Kumar), and the University's Research Impact and Innovation Awards (Syntetos, Naim). We plan to introduce our own School awards during the forthcoming REF period to recognise a wider range of contributions.

2.4.3. Researcher development opportunities

Colleagues highlight that they benefit from the sharing of expertise and we encourage a range of research-focused activities to sustain this peer support:

- International conferences - we have hosted around 80 conferences since 2014 ranging from home-grown events (e.g. *Interdisciplinary Approaches to Taxation Conference*), to large-scale society conferences. We partnered with the Network for Advancing and Evaluating the Societal Impact of Science (AESIS) to host the first international conference on the impact of social science and humanities research, and we will host the *ISBE* conference in October 2021. The 2020 *Logistics Research Network Annual Conference on Sustainable and Resilient Supply Chains during Crises* was our first online conference, drawing a record number of delegates.
- Writing workshops - these are led by eminent international scholars, including some of our fractional appointments such as Courpasson (EM Lyon), Hardy (Melbourne), and long-term academic partners (Sarosh Kuruvilla, Cornell). With EM Lyon we initiated the European Organization Theory Development annual workshop series which we hosted in 2015. Journal workshops led by esteemed journal editors, such as Gerardo Patriotta, *Journal of Management Studies* (2019) are popular with colleagues.
- Away days - each section convenes a research-focused annual away day where colleagues make short presentations and return energised and inspired. We have found innovative ways to sustain activities during the pandemic – for example, Morgan's 'pitchinars' encourage MS faculty to 'sell' their research ideas and receive feedback via Zoom.
- Reading groups - these are led by ECRs and reflect the diversity in our research. They include Scott's Consumer Behaviour group for the GW4 university network (Bristol, Bath, Exeter, Cardiff), Purvis' journal club for LOM colleagues, and a new group in the MEO section focused on Marxism.
- Development programmes - Colleagues value their access to programmes such as the *Welsh Crucible scheme*, while *Cardiff Futures* (an internal leadership development programme led by the Vice-Chancellor) has been attended by nine School colleagues, including two DSHRIEs. It supports ECRs to develop their careers and shape University policy. Eight senior colleagues, including the Dean and Deputy Dean, have attended the University's *Professorial Development Programme*. Research-only colleagues benefit from the *Cardiff Researcher Programme* which outlines the University's expectations of its researchers and provides workshops, online modules, career advice and one-to-one coaching.

2.5. Support for research

The School provides financial support for research, in addition to workload hours, while our Research Handbook is a useful online resource. Consistent with good practice in business and management, **the School provides an Individual Research/Scholarship Budget (IRB/ISB) for**

faculty set at £3,000 per annum, which supplies resource for conferences and research expenses. Since REF2014, the School has removed IT spend from the IRB to focus the budget on research. Research-only colleagues are provided with an Individual Research Fund (IRF) (£1,000).

Pump-priming support comes via competitive applications to the School's Research Committee. Since 2014, we have provided seedcorn, impact, international visitor and agenda-setting conference funding of £327,000 through 143 awards, with the majority going to ECRs. We have protected financial support for research, despite COVID-19, both in terms of IRBs and Research Committee spend.

We offer to organise teaching to provide concentrated research-focused time and, since 2014, we have introduced block-teaching arrangements and independent study weeks to support wellbeing and create additional research capacity. **Our Research and Scholarship Leave Scheme gives faculty with five years' service the opportunity to take leave for 12 months.** Applications are reviewed by a sub-group of Research Committee and successful candidates are provided with an additional £3,000 IRB. **Since 2014, 29 staff members have been awarded research leave.**

We became aware of an impression that research leave necessitated international travel that was deterring colleagues with caring responsibilities from making applications. Once we clarified international travel was not a compulsory element of research leave, applications doubled from six per year to 12 in 20/21. **The School has maintained its research leave programme, despite COVID-19,** with nine colleagues awarded leave and proceeding as planned, and a further three deferring to 21/22. Colleagues in the School have benefited from the University's Research Leave Fellowship Scheme (URLS) which enables them to focus on large scale studies, writing projects or develop new technological expertise. The associated Cardiff Disglair Lectureship programme facilitates research leave while supporting postdoctoral researchers to transition into their first posts. We were awarded a Disglair Lectureship in 2019 won by Zorzoli.

2.6. Impact and engagement support

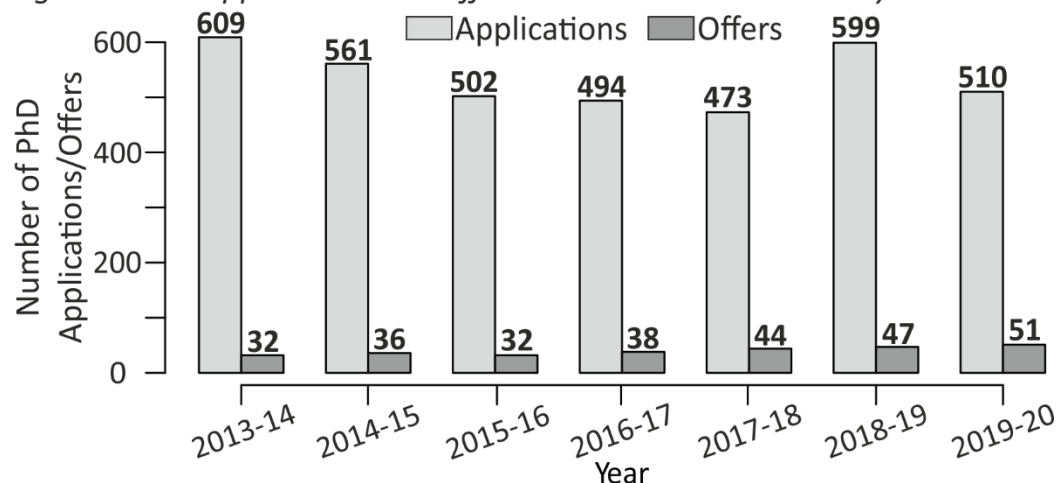
Our strategy prioritises engaged, collaborative research with societal and economic benefits. We have supported faculty to coproduce impact through the provision of Research Committee funds, AHSS impact awards and 150-hour workload reductions for our impact case authors. **Colleagues gained an additional £75,382 through ESRC IAAs, with four of our impact case studies focused on the real Living Wage, equality and disability at work, the gender pay gap and public accountability, benefiting from the funding.**

Our PVEF programme enables colleagues to develop engagement relationships by providing funding (£2,000), time (150 hours), and a Fellowship title for 12 months. Eleven Fellowships have been awarded to date, focused on Grand Challenges, including 'Career experiences of disabled people' (Foster, *Decent Work*), 'Democratising forecasting' (Rostami-Tabar, *Future Organisations*), and 'Measuring climate change emissions from SMEs' (Li, *Fair and Sustainable Economies*).

2.7. Doctoral studies at Cardiff Business School

As in 2014, our aim is to continually enhance support for a dynamic doctoral community of creative, talented researchers to sustain vitality within the School. We re-oriented our PhD programme around Grand Challenges to meet our REF2014 objective to align staff and student interests, while our proactive promotion of the programme via the University website, findaphd.com, and social media increased the quality of applications and diversity of student intake (see Figure 8). We currently have 180 PhD students.

Figure 8. PhD applications and offers since 2013-14 academic year



The PhD application process is EDI-compliant with part anonymised applications and a reasonable adjustment consideration at application, interview and study stages.

We are a major partner in the ESRC Wales Doctoral Training Programme (DTP) that was established in 2016, leading two ESRC collaborative pathways in Business and Management and Economics. We offer Pathway Studentships along with Public Value Studentships, supported by Anne Whipp and the Hodge Foundation, and funded opportunities from the ESRC, Welsh Government, Welsh Water, Costain, Transport for Wales, Panalpina, Coleg Cymraeg and the Institute of Directors, amongst others.

In 2014 we stated an ambition to develop international partnerships to enhance doctoral student mobility. Students benefit from our membership of the **European Institute for Advanced Studies in Management (EIASM)** and the **European Network of Doctoral Programmes in Business Administration (EDAMBA)**. Two recent graduates (Haiyan and Reynolds) were commended as top 10 entrants in the annual EDAMBA doctoral dissertation competition, while the 8th EDAMBA-EIASM consortium at ESADE Business School resulted in new School supervisory training with Dr Stan Taylor in May 2019. Student mobility has been boosted through the opportunity to visit leading overseas institutions (e.g. The Wharton School, University of Pennsylvania, and St Gallen University), while PhD students can engage in flagship internship initiatives (e.g. with UK and Welsh Government).

With **Swansea and Bangor**, we initiated an annual **Welsh Postgraduate Research Conference** to showcase and develop the research of doctoral students. The conference involves around 80 students making presentations and connecting with leading partners such as Centrica and the ONS. Students particularly valued sessions on coproducing impact, so a bespoke ESRC course on *Business Knowledge and Engagement Credibility for Social Science ECRs and PhDs* has been organised for 2020/21.

2.8. Doctoral programme and related support

PhD students are an integral part of the School community. A new **Associate Dean for Doctoral Studies post was introduced to ensure the PhD programme has strategic priority and prominence** at Management Board, while doctoral students are represented on all committees, in addition to coordinating their own student-staff panel.

Our twin track PhD programme has **Business Studies and Economics pathways**, which are led by the Associate Dean for Doctoral Studies and a respective Deputy PhD Programme Director (one for Economics and one for Business Studies). The Business Studies pathway involves one year of intensive dedicated research training on the MSc Social Science Research Methods, plus three years on a PhD topic (1+3). The Economics Pathway comprises a four-year programme based on a 2+2 format. With two years of advanced dedicated course work, the first at MSc Economics level in core subjects and the second, the Masters of Research in Advanced Economics, involves enhanced study in microeconomics, macroeconomics and econometrics plus specialist areas.

Our **doctoral students are supported with resources including dedicated office space, IT facilities, plus a budget of £1,050 in support of their fieldwork**, while each academic section coordinates seminars and activities to encourage doctoral student participation. Expert supervision and guidance is provided through a panel of two to three supervisors. **Since 2014, all students have a research plan that outlines the development of their thesis and highlights their Public Value contributions.**

Progress is supported via an annual review, led by an independent chair, that considers wellbeing issues and makes recommendations for adjustments or extensions as appropriate. Annual reviews are supplemented with interim reviews and supported by a Postgraduate Research Extenuating Circumstances Panel. Pastoral care is provided by School Student Support and Wellbeing Services, the Deputy Directors for Business Studies and Economics, the Associate Dean, and Dean.

Training and development provision includes:

- A bespoke training and development plan – this is developed by each student and incorporates initiatives from the School, Doctoral Academy and University. Students attend doctoral training, workshops and seminars organised by our academic sections, such as the recently introduced 'PhD Development Seminar Series' to connect PhD students and researchers during lockdown. Attendance at international workshops, e.g. the European Doctoral Education Network (EDEN) is encouraged.
- Doctoral Academy workshops - these are delivered in Cardiff with partners such as the GW4 Alliance, and include induction events, online training platform sessions (i.e. Coursera, EdX, LinkedIn Learning), and student-led events (Images of Research, 3-minute thesis).
- School career development and writing workshops - such as Hardy's ECR-focused sessions and journal workshops.
- Conference induction - students have a conference strategy that prepares them for the conference circuit via attendance at doctoral-specific sessions (e.g. at the *British Academy of Management*).

Case Study: Cardiff Doctoral Student Opportunities

Violina Sarma was a Doctoral Student at Cardiff Business School between 2014 and 2020 and focused her thesis on collaborative decision-making for hierarchical forecasting. Violina was awarded the Cardiff Award 'Above and Beyond Award' for 2019/20 and passed her viva successfully in September 2020. She is employed as a Research Associate at the School and has written a blog with 5 tips for making the most of being a PhD student.

Diego Bermudez started his PhD in 2017 which is funded by one of the School's Public Value Doctoral Studentships. His research on payment technology processes based on systems theory led to an internship with Welsh Government focused on the analysis of the sustainability and resilience of the public procurement process in Wales. Diego is an active student representative and student mentor.

There is a strong sense of community within the doctoral student cohort which we encourage through welcome sessions, virtual social events, and an annual dinner. **During COVID-19, we have supported our students with enhanced communication, repatriation, extensions, and adjusted progress monitoring processes.** Our Doctoral Studies Manager established an AHSS Doctoral Managers' Forum to share best practice between Schools, while the School developed a doctoral mentoring scheme in conjunction with the Pro Vice-Chancellor Student Experience's Doctoral Wellbeing Working Group.

Supervisors are supported so that our students receive the highest quality advice and guidance. PhD supervision is appropriately credited within the University's Workload Model. It is a probation requirement for ECRs to undertake supervisory training and colleagues usually serve as successful second or third supervisor before becoming primary supervisors. **Since 2014, the School has instigated a new training workshop on viva chairing**, so all faculty have an opportunity to examine and chair viva examinations.

Case Study: Doctoral Supervision Training

Leading-edge supervision training has been provided in order to prepare colleagues for their responsibilities. In 2019, the School initiated a series of workshops for doctoral supervisors, led by Doctoral Education expert, Dr. Stan Taylor. These best practice supervision sessions were attended by 40 academic colleagues and form the basis of the UKGCE good supervisory practice framework. The School and the Doctoral Academy are piloting an OUP-Epigeum online module based on Dr Taylor's workshops which will enable colleagues to begin to gain recognition for research supervision from UKGCE.

Our average PhD completion rate over the last six years exceeds the AHSS average at 70% and we are delighted to see doctoral graduates progress to faculty positions in leading international and UK institutions, including Bristol, Cardiff, Copenhagen, Edinburgh, Exeter, Grenoble, King's College London, Liverpool, Lisbon, Madrid, Melbourne, Missouri, NEOMA, Nottingham, Pompeu Fabra, Swansea, Sussex, Xi'an Jiaotong, Zhongnan.

Table 1: PhD Completion Rates 2010/11-2015/16

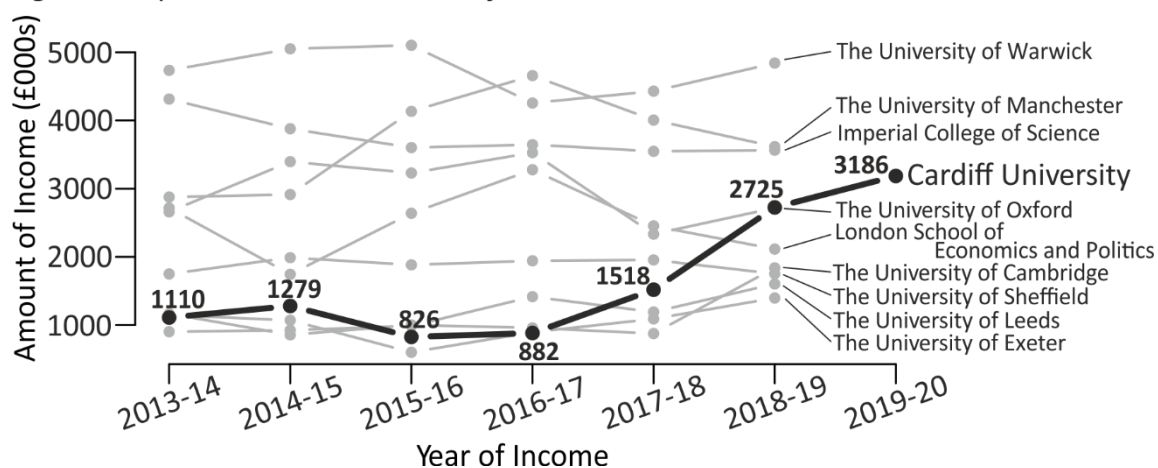
Student start year	Intake	Withdrawals and transfers	Submitted in 4 years	Submission rate
2010/11	27	3	14	58.3%
2011/12	22	3	16	84.2%
2012/13	21	6	10	66.7%
2013/14	23	0	15	65.2%
2014/15	16	0	14	87.5%
2015/16	20	2	11	61.1%
Six-year average	129	14	80	69.6%

3. INCOME, INFRASTRUCTURE AND FACILITIES**3.1. Overarching strategy**

External funding enables us to achieve our Public Value ambitions and prioritise real-world social scientific research of international relevance, underpinned by intellectual curiosity and oriented towards our five flagship Grand Challenges.

We secured a 44% increase in research income between 2014-2019, following a sector-wide dip between RAE 2007 and REF2014. This includes £4.2m from UK Research Councils and reflects our prioritisation of Grand Challenges which enabled us to achieve particular success in securing Global Challenge, ESRC Impact Accelerator and Knowledge Transfer Partnership funding awards (S1). It also comprises the substantial re-investment in established centres of excellence such as WCPP and ASTUTE. Data published in a recent report by the Chartered Association of Business Schools (Research Income for Business and Management: HESA Data from 2008/09 to 2018/19) **placed us in the top five within the Russell Group for our overall research income** (see Figure 9).

Figure 9. Top 10 RG Business Schools for Research Income Generation



Research funding has enabled us to promote and extend a core set of principles that are fundamental to Public Value research: **co-creating knowledge; developing interdisciplinary connections; sustaining a collegial research culture; and inclusive engagement.**

3.1.1 Co-creating knowledge

Our strategy advances a model of collaborative research, where researchers and stakeholders are equal partners in the co-creation of knowledge. Research funding supports this model of co-creation by underpinning established centres of research excellence.

Addressing the *Responsible Innovation* Grand Challenge, since 2013 our logistics experts have sustained a long-term collaboration with global logistics firm, DSV-Panalpina, to develop sustainable supply chain solutions and produce leading-edge research. Led by Syntetos, the PARC Academy Institute for Logistics, Manufacturing and Inventory supports the co-location of Business School researchers with five Panalpina staff. The value of this joint venture is demonstrated by extensive research outputs and an impact case study on financially sustainable supply chains, but also by its longevity. The mutually beneficial relationship was reinforced in 2019 when **Panalpina and new parent company DSV committed a further five years of funding via an investment of £720,000.**

Researchers have addressed the *Fair and Sustainable Economies* Grand Challenge through CAMSAC - a centre of excellence for broad-based, cross-disciplinary research in advanced manufacturing technologies, processes and systems. Focused on the economic and environmental sustainability of manufacturing firms and their supply chains, funded projects like ASTUTE demonstrate important advances in collaborative research with a wide range of SMEs, **while collaborations with Costain and Highways England** produced co-authored research outputs and an impact case study focused on innovative procurement in infrastructure projects.

3.1.2 Developing interdisciplinary connections

Interdisciplinary relationships are central to addressing our five flagship Grand Challenges. Research funding allows us to promote interaction between disciplines through our new social science-led research park (SPARK) and via our interdisciplinary research groups.

Our commitment to interdisciplinary scholarship is seen in our active leadership and participation in the creation of the world's first social science-led research park (SPARK) to co-locate several hundred social scientists and their research partners to work on societal challenges. The School has supported SPARK since its inception, seconding a leading organisation theorist (Delbridge) to spearhead its design and development over the REF period. This significant personal commitment enabled the vision to become a reality, and as a result, **research centres such as the WCPP and WERU will be located within this purpose-built, £65m, 12,000 m² building from 2021 onwards.** The conception of SPARK exemplifies the Public Value research principles elaborated in this section of the statement.

Our *Responsible Innovation Network* (RIN) encourages collaborative relationships to 'promote the understanding, practice and diffusion of responsible innovation'. Interdisciplinary teams from the

Business School have secured internal and externally funded Global Challenges Research Fund (GCRF) awards totalling over £100,000. These projects have supported female and refugee entrepreneurs and engaged Cardiff schoolchildren in the responsible use of social media.

Addressing the *Good Governance* Grand Challenge, our *Corporate Governance Research Group* is one of the leading interdisciplinary centres of its kind, bringing accounting and finance organisation studies and legal scholars together with public policy and governance specialists to address and prevent corporate governance failures. Supported with our internal Public Value funding, the group has organised conferences focused on board-level diversity, corporate governance in emerging markets, responsible financial investment, and behavioural finance.

3.1.3 Sustaining a collegial research culture

Public Value promotes collegiality in research (S2). Through research funding we have been able to prioritise and develop two key aspects of collegiality – the creation of opportunities for ECRs to engage in research projects and the provision of altruistic academic leadership and peer support.

As one of the School's major research centres, WCPP provides an excellent illustration of a nurturing and developmental research environment where ECRs have thrived and advanced their careers. The success of our Public Policy Institute for Wales led to its transformation in 2016 to the WCPP (a 'What Works Centre'), after receiving a **significant re-investment (£7.3m) from the ESRC, Welsh Government and Cardiff University**. The Centre now has 20 staff (17 Academic/Researchers, three Professional Services) and is central to our mission to address Grand Challenges through its promotion of evidence-informed policy in *inter alia* waste recycling, homelessness, sustainable procurement and EU migration. Recognised as an exemplar in evidence-based policy by the OECD, its success can be seen in recurrent funding, research outputs, two Impact Case Studies related to *Future Organisations* and *Good Governance*, a runners-up award in the 2019 ESRC Impact Awards, and a Cardiff University Impact and Policy Award (2017).

The Centre **creates important opportunities for researchers to collaborate with leading policy experts and advise ministers and public service leaders** to make evidence-informed policy decisions. WCPP researchers operate with a high degree of autonomy. Colleagues are provided with development opportunities and benefit from the experience of their leads, while belonging to an academic section of the School for wider engagement with research and teaching. Several Centre researchers have developed independent research strands and form part of the University's REF submission (Connell, McKillop), with some advancing to more senior positions (Denny) and Future Leader Research Fellowships (Healy).

Colleagues provide **academic leadership and foster collegiality through KTP projects which have almost doubled from six in REF2014 to 11 projects valued at £630,000**. This fruitful mode of funding has facilitated relationships with organisations, such as Ocado, Active Quote, Qioptiq, Centrica, Shine Food Machinery and Panalpina, whilst also providing a highly beneficial experience for ECRs and serving as a strong platform for future applications. For example, the KTP with Ocado resulted in a succession of collaborative projects.

Research mentoring has also been provided through our internal **Cardiff University Undergraduate Research Opportunities Programme (CUROP) and Cardiff University Student Education Innovation Projects (CUESIP)**. These small but significant projects facilitate collaborative research with in-built peer support and provide project leadership experience while giving undergraduates a paid opportunity to work with faculty. **We have been successful in securing 35 of these awards since 2018** for projects focused on ethical marketing, community engagement, inclusive classrooms and festival legacies.

3.1.4 Inclusive engagement

Public Value necessitates a holistic approach to engagement in order to secure input and investment from a full range of stakeholders. Through external research funding we have been able to advance these aspirations since 2014 and work with partners that reflect the full spectrum of economy and society.

Our success is exemplified by the *Welsh Economy Research Unit (WERU)* which has been in existence since our inception in 1987 and sits at the forefront of its field in evaluating economic, social, and environmental impacts. An authoritative source on regional economic analysis, with specific expertise on Wales, the Unit addresses the *Fair and Sustainable Economies* and *Future Organisations* Grand Challenges, contributes two impact case studies, and publishes the journal *Welsh Economic Review*. **The Unit's success is underpinned by a mix of awards that enable a locally responsive, relevant, and self-sustaining research model.**

Since 2014, **the team has secured 16 research grants, generating an income of £1.64m**, working in conjunction with Welsh Government, Natural Resources Wales, General Dynamics, RWE Npower, National Museums of Wales, UK Sport, Arup, Kronospan and additional stakeholders. The inclusive approach is demonstrated in a £1.1m European Union-funded project on the economic impact of Superfast Broadband, which has highlighted the plight of rural businesses disconnected from the digital economy. This evidence prompted Welsh Government to enhance business support to digitally excluded organisations across Wales.

This kind of inclusive engagement can be seen in research across the School. Projects addressing the *Decent Work* Grand Challenge have been able to give voice to under-represented and excluded communities, and include research from: Jean Jenkins on the **employment conditions of garment workers at the sharp end of supply chains in India and Bangladesh** (ESRC £500,000); Foster on workplace **experiences of disabled people in the legal profession** (DRILL £160,000); and Hann with Citizens UK to assess the impact of the real Living Wage on those in poverty (ESRC Collaborative Studentship). In the area of *Good Governance*, Kitchener's COGOV project COGOV profiles case studies of **co-production in social care that themselves are co-produced with service users** (H2020 £250,000), while in the field of *Responsible Innovation*, Tim Edwards' GCRF project with Computer Science colleagues focused on **alleviating poverty while addressing climate change** in Ethiopia and Eritrea (ESRC £30,000).

3.2. Institutional investments

We have been proactive in shaping and contributing to collaborative University institutes. In addition to our role within SPARK, colleagues addressing the *Decent Work* Grand Challenge have been heavily engaged with WISERD; a national, interdisciplinary, social science research institute, supported by ESRC and Welsh Government funding. Our engagement with WISERD enables us to gather and analyse data on inequality in the workplace (Melanie Jones, Parken), and focus on labour exploitation in supply chains (Jean Jenkins and Davies).

Business School colleagues also **initiated the development of Y Lab, a partnership created between the University and NESTA (£1.8m investment)**, reflecting an emphasis on *Responsible Innovation* and *Future Organisations* in the context of public services. Linked to the School of Social Sciences, Y Lab again exemplifies our vision of interdisciplinary, challenge-focused research.

3.3. Infrastructure, facilities and support

3.3.1. Infrastructure

We have been working to sustain and extend the culture and conditions that enable the co-creation of internationally relevant social science research through **a combination of facilitative leadership, excellent professional services support, facilities and resources.**

The School's leadership on research is distributed so **colleagues benefit from a multi-layered research infrastructure.** In addition to the Pro Vice-Chancellor for Research, Innovation and Enterprise and AHSS Dean for Research and Innovation, members of the School's Management Board advise on research, while the ADRIE facilitates the development of research strategy, policy and practices via the School's Research Committee. Research Centre leaders play a significant role in capacity building and researcher development and our collegial culture is vital in sustaining the School's thriving research environment and providing day-to-day peer support and mentoring.

Research advisory services operate at School, AHSS and University levels. **Researchers can access in-house professional service support from the School Research Office**, led by a Research Services Manager, with staff dedicated to impact, research ethics and research funding.

The Office enables colleagues to identify opportunities and provides advice on grant eligibility, ethical approval, finances and submission. 'Cardiff Research Information Sessions' (e.g. on applications for UKRI funding), are also organised by Research Office colleagues. The School's Doctoral Programme Office is co-located with the Research Office and facilitates the development of ECR initiatives, including conferences, and in-house training sessions.

The School's **External Engagement and Events team has been strengthened since 2014**. The team coordinates our Executive Education provision and eases knowledge flow between the School and key partners to facilitate research relationships, including the long-standing connection between the School and DSV-Panalpina. Essential advice comes from the School's Communications Officer who profiles our research online and via social media, while a new recording studio in the School supports podcasting and digital engagement.

Our School teams work closely with AHSS and the wider University to provide seamless support for academic colleagues and to signpost to additional support. Within AHSS, the Research team supports the ten Schools with specific funder training programmes and enables ECRs from the School to network with a larger cohort of their peers.

University Research and Innovation Services colleagues provide specialist advice and support for managing large bids including specialist multi-institution costing and pricing, contract negotiation, match funding, commercial development, due diligence and funder relationship management. This support is specialised around key funders such as ESRC, Marie Skłodowska-Curie and European Research Council fellowships and Horizon 2020. The Research Systems team provides researchers with technical solutions for managing research information, while colleagues regularly attend and present at the Cardiff University Innovation Network (CUIN).

3.3.2. Facilities

The capital costs of social science research remain relatively low and researchers deploy their IRBs to facilitate their research needs. Our School's **Information Services Committee ensures that we are meeting technology and software requirements** through the resourcing of databases, such as the Financial Times, IBIS, Morningstar and SNL Financial. The School makes an annual investment of £250,000 on databases, which is supplemented by a further £250,000 per annum from University Library Services for sources such as Datastream, Bloomberg, Economist.com, Proquest, and OECD Library.

In common with the sector, **the School has dedicated librarians and library facilities**. Staff and students have access to approximately 60,000 books and 2,000 journals, while the library houses a number of specialist collections, including one of the country's few European Documentation Centres, an Annual Reports Collection and Archive and an international statistics collection.

The School has invested in the creation of good working and meeting spaces. We have benefited significantly from the addition of a £13.5m Postgraduate Teaching Centre (PTC), which was awarded BREAM status due to its eco-design and offers excellent facilities. These include our Executive Education Suite which provides a comfortable and contemporary space for networking, impact and engagement activities. Since 2014, we have instigated a sustainable refurbishment programme for our staff building at our Aberconway site. A collaboration with two local social enterprises and the local Institute for the Blind allowed the School to modernise and refresh working spaces through a circular supply chain. The School is keen to further upgrade its facilities for PhD students and an investment case will be submitted to the University Executive Board in 2021.

3.3.3. Funding support

In addition to the advisory support outlined above, we provide pump-priming resource to facilitate collaborative research that generates knowledge with economic and social benefits. Since 2014, the School has spent over £300,000 within three funding streams to support **i) research, impact or engagement activities ii) agenda-setting events, workshops and conferences and iii) international relationships**. These investments have strengthened our research performance as, besides producing research outputs, they have prompted successful research grant capture. For example, **Jean Jenkins' 2014 seedcorn project focused on working conditions in the**

garment industry led to ESRC awards totalling over £500,000, while Wang's seedcorn project enabled her to secure an ESRC-funded Wales DTP Studentship on Food Poverty and Blockchain.

We support colleagues to strengthen research bids and grant applications through:

- A School Peer Review scheme involving 50 of our leading researchers and an AHSS SuperTrack peer review process supported by experienced ESRC panel members.
- A series of research information sessions where colleagues (Melanie Jones, Wallace, Henley) advise on grant capture and share experiences from UKRI award panels.
- Access to an institutional library of successful grant applications.

4. COLLABORATION AND CONTRIBUTION TO THE RESEARCH BASE, ECONOMY AND SOCIETY

4.1. Introduction

The School's Public Value strategy necessitates outward-facing, proactive and collaborative relationships with partners and colleagues from other academic disciplines. We view success in terms of our impact on core intellectual disciplines and our influence on the wider economy and society. We address the REF reporting requirements for this section by showing how colleagues have combined their intellectual contributions to their scholarly communities with the generation of social and economic impact relative to our Grand Challenges (S4.2.1-S4.2.5) including a COVID-19 postscript (S4.2.6). We then provide examples of high-level recognition of our work, before outlining our future research strategy (S4.3-S4.5).

4.2. Grand Challenge contributions

4.2.1. Decent Work

Since 2014, we have **extended our long tradition of research in the field of employment and organisation studies, with the production of research outputs and two impact case studies** focused on enhancing policy and practice on disability equality in employment (Wass and Melanie Jones) and strengthening uptake of the Real Living Wage (Heery, Hann and Nash).

The world of work faces a series of challenges regarding job quality, employee wellbeing, the impact of technology and workplace inequalities. In the field of employment relations, Hann and Nash conducted a succession of surveys with ACAS exploring levels of employee participation with analysis of key findings published in the *Industrial Relations Journal*, while Gooberman, Hauptmeier and Heery have **established Cardiff as a centre for research exploring the role and impact of employer organisations**.

Our research exploring the 'hidden' or ignored aspects of work and organisation has been recognised by major awards. These include the study of how deception is normalised at work by Sarah Jenkins and Delbridge which was awarded **the biennial Roland Calori Prize for Best Paper 2017-18 in *Organization Studies* in 2019**, while Pandeli, Marinetto and Jean Jenkins presented the first analysis of experiences of prison employment in *Work, Employment and Society* (2019) and were awarded the **2020 Sage Prize for Innovation and Excellence**.

Our research on EDI in the workplace has broken new ground and includes collaborative research with the Institute of Chartered Accountants in England and Wales which has been reported in *Critical Perspectives on Accounting* (Edgley and Sharma), international comparative perspectives on disability published in the *European Journal of Industrial Relations* and *Work, Employment and Society* (Foster) and the career experiences of BAME FTSE CEOs (Ogbonna) published in the *Human Resource Management Journal* and presented at the House of Lords.

Since 2014, the School has been highly proactive in influencing policy debates on *Decent Work*. Building on our research expertise on the real Living Wage, the Dean is a UK Living Wage Commissioner and independent chair of the Welsh Government's new Social Care Forum. These activities have enabled the School to directly impact the campaign for the Real Living Wage and promote improvements to working life nationally and locally. **The Business School also represented the University in the successful campaign to designate Cardiff as a Living Wage City in 2019.**

Decent Work Case Study: Job Quality in Social Care

Sarah Jenkins benefited from seedcorn funding and research leave to undertake research in collaboration with the Wales Cooperative Centre exploring employment practices, job quality and employee ownership in cooperative organisations in settings, such as social care. The research resulted in the coordination of a Social Care Action Group of stakeholders to enhance the working conditions of social care workers and influence the implementation of recommendations from the Welsh Government's Fair Work Commission. External recognition of the work has followed, as Sarah is a core member of the research team that has been awarded an ESRC/Health Foundation UK Centre Award for Evidence Implementation in Adult Social Care.

4.2.2. Fair and sustainable economies

Since 2014, we have invested in research that emphasises the need for fair and inclusive economies that deliver financial and environmental sustainability. A stream of **research projects and research outputs feature here, along with two impact cases studies focused on addressing the causes of the gender pay gap (Parken and Ashworth) and the enhancing the environmental impact of sporting and cultural events (Munday and Collins).**

We have a sustained reputation for analysis of economic policies and their impact, through the work of our macro and regional economists working within WERU and the Julian Hodge Institute of Applied Macroeconomics (JHME). For example, Munday advised Welsh Government Committees on regional economic modelling (2015-16), while Calvin Jones informed Welsh Government's nature-friendly COVID-19 economic recovery plans, and Le and Meenagh regularly supply the UK government with forecasting analysis.

We have a **burgeoning body of research outputs, especially in green and sustainable logistics**, with Harris and Naim publishing their cutting-edge work in the *International Journal of Production Economics*, *Journal of Cleaner Production* and *Management Decision*, while work reporting the impact of economic activity on the environment has been published in *Energy and Environment and Planning C* (Calvin Jones). Finally, Wass, Melanie Jones, Foster and Parken secured **ESRC research funding to determine why certain groups continue to be excluded from full economic participation**, while publishing their work in journals such as *Human Resource Management*, *Industrial Relations Journal* and *Gender, Work and Organization*.

Recent ECR appointments reflect our commitment to this Grand Challenge. Ferns has published well-received research on corporate responses to the climate emergency in *Organization Studies* and *Journal of Business Ethics*. Li has secured a Public Value Engagement Fellowship to partner with the Federation of Small Business to help Welsh SMEs measure carbon in their supply chain. Meanwhile, Kaya is investigating the gender pay gap by sector in collaboration with ESRC Centre WISERD, and with research funding from the Centre of Manpower Economics.

Colleagues have been engaged with University Research Institutes to investigate aspects of the sustainable economy and accelerate impact. The Water Research Institute, co-directed by Munday, focuses on sustainable water management for people and ecosystems, and the Sustainable Places Research Institute, co-directed by Peattie, **sources responsible solutions to diminishing resources and the climate emergency.**

Finally, **informed by our research on maximising community benefits from procurement (Harland, Walker) and in line with our Small Business Charter responsibilities, the School has been leading efforts to review procurement structures and processes.** This has involved reviewing our supply chain, partnering with the Future Generations Commissioner for Wales to develop an overarching framework for public procurement in Wales (Lynch), and contributing to Cardiff University's Procurement Steering Group (Calvin Jones).

Fair and Sustainable Economies Case Study: Addressing Financial Exclusion

Ahmad Jamal researches at the intersect of marketing, ethnicity and consumption and has developed a specific reputation in the field of Islamic finance with research findings reported in the *Journal of Business Research*. Ahmad coordinated with Cardiff University colleagues in the Schools of Computer Science and Informatics and Social Sciences, the Islamic Banking and

Finance Centre UK, Tesco and Asda to secure funding from Innovate UK to support members of BAME community through a digital platform - Assadaqua Community Finance (ACF). Additional funding led to the launch of an entrepreneurship programme for Muslim women, while Welsh Government has endorsed ACF as a key partner in addressing the inequalities experienced by BAME communities.

4.2.3. Future organisations

Since 2014, we have promoted research that addresses the challenges facing business organisations, involving the need to navigate technological change, demographic shifts, the climate emergency and transient populations, while working collaboratively to meet societal and economic demands. This involves challenging both theory and practice to inform the remodelling of business with action-oriented research programmes that develop solutions to complex problems. Colleagues have published a wide range of articles in this area **while developing two impact cases focused on driving sector-led service improvement (Downe) and influencing future energy investments (Calvin Jones).**

Our research activity reflects a renewed emphasis on the efficacy of alternative business models. Developed with organisations such as Social Enterprise UK, this includes research on Fairtrade towns, published in the *Journal of Business Ethics* and the *European Journal of Marketing* (Peattie, Samuel). The challenges of digitalisation and technological change have been highlighted in articles published in the *Journal of Business Research* and *Journal of Economic Behavior and Organisation*, offering insights into use of social media and behaviour within the mobile gaming market (Dineva, Jang, Regianni). Our seedcorn projects also reflect this future-focus, such as a new study on materialism and wellbeing within increasingly fragmented consumer-oriented societies (Moldes Andres).

We support smaller organisations to face their future challenges, including SMEs and social enterprises. Our commitment in this area is demonstrated by the **Small Business Charter Accreditation awarded by the Chartered Association of Business Schools** in recognition of the emphasis on entrepreneurship and focus on SMEs in our teaching, research, and engagement activities. Our popular future-focused monthly Breakfast Briefings have provided opportunities to develop and sustain collaborations with the small business community, while Directors of Business in the Community, the Institute of Directors, and the Wales Cooperative Society each contribute to our International Advisory Board.

The School's commitment to future-focused collaborative research is demonstrated through a **major pro bono project, where our Deputy Dean worked with Wales' Future Generations Commissioner to establish the actions that public organisations must take to be cognisant of future skills needs.** This included recommending how compulsory schooling might change and develop so national curricula enable pupils to respond to tomorrow's economic, community and citizenship challenges.

Future Organisations Case Study: Tackling Food Poverty

Yingli Wang has expertise in e-logistics, technological innovation and inclusion in digital supply chains. Her research has a direct impact on her local community as she is highly active within the South Wales Food Poverty Alliance, for whom she produced a strategic report - *Call to Action on Food Poverty in South Wales* - and has personally supported the development of the first social enterprise to address food poverty in Cardiff, the Dusty Forge. She was awarded the *Societal Impact Award* in Cardiff University's Impact and Innovation Awards for 2020 and her community operational research has been presented to the World Economic Forum in Geneva and published in the *European Journal of Operational Research*.

4.2.4. Good governance

Since 2014, our research on Good Governance has advanced considerably covering multiple themes including:

- a) The composition and effectiveness of corporate boards
- b) Transparency and accountability in company reporting
- c) The role of evidence in public policy making

- d) Public management and governance
- e) Contemporary ethics and values within public organisations

Research outputs from scholars in accounting and finance and organisation studies have reflected these and other governance challenges, profiling issues of board independence and CEO background (Mira and Goergen), behavioural finance (Eshraghi) and the role of sense making within Corporate Boards (Pye). **We launched a new interdisciplinary Cardiff Corporate Governance Research Group**, prompted by successive governance scandals and behaviours and practices exhibited at the time of the worldwide financial crisis. The group held its first international conference in 2018.

Colleagues have further extended the School's reputation for research in public management and governance through a series of publications in journals, including the *Journal of Public Administration Research and Theory*, *Public Administration* and *Public Administration Review*, in addition to management journals, such as the *Strategic Management Journal* and the *British Journal of Management*. Cardiff editors (Andrews; Martin) have also shaped **the strategic direction of journals in the field, such as *Journal of Public Administration Research and Theory* and *Policy and Politics* during the REF period.**

We have been ranked in the Shanghai World Rankings top ten for research on public policy and governance consistently since 2014, peaking at 4th in 2017. Our strong reputation in this field has extended since 2014 with the transformation of the Public Policy Institute for Wales into the WCPP (S3.1.3) and is demonstrated **by a critical mass of research outputs, in addition to two impact case studies on improving public services through joint scrutiny (Ashworth and Downe) and enhancing the effectiveness of policy making (Downe).**

The School has actively promoted the concept and practice of *Good Governance*. WCPP has hosted a series of high-profile collaborative roundtables, while colleagues sit on a range of governance boards and committees (e.g. Farrell advises the HM Inspectorate of Constabulary and Fire and Rescue Services). Research on responsible finance has been reported in Forbes, Financial Times, Harvard Business Review and the Boston Globe. We reformed our own corporate governance system by establishing the Shadow Management Board to widen participation in decision-making.

Good Governance Case Study: Responsible Finance

Arman Eshraghi has examined corporate behaviours that promote diversity and consumer protection. He elaborated understanding of corporate misconduct, the monitoring role of boards of directors and the optimal design of corporate boards to support diversity. His current research published in *Corporate Governance* and *Accounting Organization and Society* analyses the stewardship behaviour of institutional investors and explores the range of psychological dilemmas they experience in coping with risk and uncertainty. This research has significant implications for the fiduciary responsibility of institutional investors, as detailed in a recent article in the Financial Times. Arman has also been creating tangible societal impact by convening advice surgeries on financial literacy for those experiencing homelessness in Cardiff.

4.2.5. Responsible innovation

Since 2014, we have accentuated our focus on the drivers and outcomes of innovation processes, along with the social, financial and behavioural consequences of technical and technological change. Scholars from logistics (Kumar), marketing (De Luca) and organisation studies (Tim Edwards) have collaborated **to produce research outputs in this area, while two impact case studies focus on innovative procurement in infrastructure projects (Gosling and Naim) and developing financially sustainable supply chains (Syntetos et al.).**

We have **one of the largest Logistics and Operations Management research groups in the UK with a worldwide reputation** for co-created knowledge on innovation in transport, logistics and supply chain operations. CAMSAC has promoted the co-creation of knowledge in manufacturing (S3.1.1), while ASTUTE (S3.1) has resulted in a £200m investment for West Wales and the Valleys, plus a further £15m to support manufacturing adaptation that delivers long term environmental and social sustainability.

We have **deepened our reputation for research on the social impact of innovation** coordinated through the School's interdisciplinary *Responsible Innovation Network* (RIN) (S3) and our newly established *Centre for Innovation Policy Research* (CIPR) which will co-create knowledge by working with the Innovation Advisory Council for Wales on the future Welsh Innovation Strategy (Delbridge and Henderson). Recent studies include Rostami-Tabar's applications of forecasting to scenarios of social good, which have coproduced impact with the International Red Cross and the Welsh Ambulance Service.

Finally, the School has promoted the concept of *Responsible Innovation* within the University and wider Cardiff region. This can be seen through our collaborations with the Schools of Computer Science, Maths and Engineering on Blockchain and Artificial Intelligence, but also in our initiation of the new Social Science Park (SPARK). **Our research has prompted the development of new £10m Challenge Fund involving Cardiff Capital Region and Y Lab** which will create commercial opportunities by developing solutions to three societal challenges: accelerating decarbonisation; improving the health and wellbeing of the region's citizens; and supporting, enhancing and transforming communities.

Responsible Innovation Case Study: Evaluating Citizen Science

Research conducted in the Brazilian Rainforest by Tim Edwards and colleagues from Computer Science examines the educational and emancipatory effects of citizen science in the Ribeiro Valley, Sao Paulo, Brazil. A School seedcorn grant prompted research that was subsequently supported through GCRF, Fundacao Getulio Vargas and ESRC IAA funding. It investigates enquiry-led learning and explores how this can be designed around student collaboration to enable a supportive social infrastructure for curricular innovation focused on technical developments. Working with Brazilian academics (particularly ecologists) and local community activists, the research has shed new light on the opportunities and limitations of citizen science and technical innovation.

4.2.6. Grand Challenges COVID-19 postscript

The global pandemic required an urgent collaborative response from academics, industry and government and our Public Value approach ensured we were primed to play our part. Here we provide just several examples of the ways our researchers reacted to this unprecedented global crisis.

Decent Work - COVID-19 has exposed pre-existing pay inequalities and, in response, **Hann, Nash and Heery produced 'live' research reports to inform the Living Wage Foundation so they could design their high-profile campaign to enhance pay for key workers.** Concurrently, on the Living Wage for Wales Leadership team, Heery and Ashworth have been liaising closely with Welsh Government Ministers and officials to address issues of low pay in areas, such as social care.

Fair and Sustainable Economies - the economic effects of the pandemic have been felt acutely by the small business sector. Henley's analysis of the impact on the self-employed illustrated that female and older business owners have been particularly badly affected. With Southampton colleagues, **Henley has been awarded UKRI emergency COVID-19 research funding to conduct further investigations and is Co-Investigator at the ESRC £32m Productivity Institute.** Munday is currently auditing the effectiveness of COVID-19-related business support for Welsh Government.

Future Organisations - in response to the grave disparities between communities in COVID-19 contraction and mortality rates, **Ogbonna led a review for the First Minister of Wales to determine the influence of socio-economic factors on the impact of the virus on BAME communities.** His report revealed discrimination and a lack of representation combined to produce societal and economic inequalities with tragic consequences. Ogbonna has since been appointed to lead the implementation of a new Race Equality Plan for Wales. Foster is leading an investigation for Welsh Government into COVID-19 impacts on disabled people, while Tim Edwards has been asked to examine effects on women entrepreneurs.

Good Governance - WCPP responded rapidly to support decision-makers in Wales. This involved preparing briefing papers to support the work of Wales' Counsel General, Sir Jeremy Miles and

convening high-level policy roundtables with participants, such as the former Prime Minister Gordon Brown, Rebecca Heaton (UK Committee on Climate Change) and Paul Johnson (IFS). **WCPP will lead a new £2m ESRC-funded International Public Policy Observatory** located within sbarc | spark to aid policy makers leading the COVID recovery.

Responsible Innovation - shortages of protective healthcare equipment during the COVID-19 crisis necessitated a rapid reaction from the manufacturing sector. Our logistics researchers contributed to the national healthcare effort when they **re-directed Welsh-Government-funded equipment for a 'Remaker Space' for Cardiff Business School to Panalpina HQ in Milton Keynes to manufacture PPE for the NHS.**

4.3. Recognition of our contribution to social science research

A strong research base is central to our ability to deliver economic, environmental, and social impact. Since 2014, Cardiff Business School faculty have continued to make notable contributions to their disciplines. These contributions are evidenced by significant research outputs and grant awards, but also through a series of prestigious honours and achievements.

4.3.1. Awards

Our leading status in social science is reflected in a series of prizes and awards that reflect:

- a) Substantial career contributions – including Hardy's prestigious Joanne Martin Trailblazer Award from the *Academy of Management*, Eshraghi's *Development Bank of Japan Shimomura Fellowship* and Kumar's Distinguished Professor Award from the *Industrial Engineering and Operations Management Society*.
- b) Recognition of outstanding scholarship - including the Tamer Cavusgil Award (2019) for the article that has most advanced *International Marketing Management* (Robson), Beryl Radin Award for Best Article in *Journal of Public Administration Research and Theory* 2018 (Andrews), the Roland Calori Prize for Best Paper in *Organization Studies* 2019 (Sarah Jenkins and Delbridge), the 2020 Sage Prize for *Work, Employment and Society* (Pandeli, Marinetto, Jean Jenkins), the most downloaded paper in the *International Journal of Production Economics* 2015 (Harris), Outstanding Article in the Non-Profit field 2018 (Lee), inclusion in 50 Years of *Journal of International Business Studies* Anniversary Issue (Wang), and Cardiff University Research Innovation Awards 2016, 2019, 2020 (Found, Kumar, Naim and Syntetos).
- c) ECR achievements – including Scott's Sidney J. Levy Award (2018), Yau's award for the Best Paper in *Industrial Marketing Management Journal* (2018), Flynn's Outstanding Paper Award for the *Journal of Small Business and Enterprise Development* (2018), and Best Case (2016), Best Dissertation (2020) Awards for Gomes and Musilek from the *CMS Division of Academy of Management*.
- d) Doctoral awards - Wirardanti was one of three doctoral students shortlisted for the MEL Palgrave Macmillan Prize for the *Best PhD Thesis in Maritime Economics and Logistics* (2019), while de Matos won a *University of Pavia Best PhD Thesis Prize for International Political Economy, European Integration and Related Fields* (2019). ESRC Postdoctoral Fellowships have also been awarded to Reynolds (2020) and Soehardjojo (2019).

Colleagues have won numerous Best Overall Paper Awards at conferences, including Andrews at the *International Research Symposium in Public Management* (2018), Beynon from the *International Conference of Global Innovation and Knowledge Academy* (2016) and the *Irish Academy of Management* conference (2018); Henley at the 40th *Annual Institute of Small Business and Entrepreneurship* conference, Calvin Jones' Moss Madden Medal from *Regional Science Association* (2014), and Reynolds, Koenig-Lewis and Doering at the *Institute of Place Management Conference* (2017). Best papers were won by numerous ECRs such as Mardon at the *Consumer Culture Theory Conference* (2016). Rostami-Tabar at the *International Symposium of Engineering and Operations Management* (2017) and Xue at the *International Symposium on Global Manufacturing in China* (2015).

4.3.2. Editorial contributions

Since 2014, colleagues have held new and prestigious Editor or Associate Editor positions **in over 20 peer-reviewed international journals, while a further 66 colleagues have contributed as members of journal editorial boards.** Colleagues continue to contribute as editors or editorial board members to journals that include the *Academy of Management Review*, *Academy of Management Learning and Education*, *Accounting and Business Research*, *Asian Journal of Shipping and Logistics*, *British Accounting Review*, *British Journal of Industrial Relations*, *British Journal of Management*, *Critical Perspectives on Accounting*, *European Journal of Finance*, *Human Relations*, *International Journal of Management Reviews*, *International Marketing Review*, *Journal of Business Research*, *Journal of International Business Studies*, *Journal of Heuristics*, *Journal of International Marketing*, *Journal of Management Mathematics*, *Journal of Management Studies*, *Journal of Product Innovation and Management*, *Journal of Public Administration*, *Organization Science*, *Organization Studies*, *Organization*, *Perspectives on Public Management and Governance*, *Policy and Politics*, *Research and Theory*, *Sustainability Science and Work*, *Employment and Society*.

Examples of individual contributions include Delbridge and Wilmott as Associate Editors with *Academy of Management Review*, Daunt as Associate Editor of the *Journal of Services Marketing*, Demir as Associate Editor for the *Journal of Management Mathematics*, Eshraghi as Senior Editor at *Finance Research Letters* and Gilmore as Series Editor for *Dialogues in Critical Management Studies*. Melanie Jones and Robson are Associate Editors at the *British Journal of Industrial Relations* and *Journal of International Marketing*, while Syntetos is Co-Editor in Chief of the *Journal of Management Mathematics* and Associate Editor of the *Journal of Operational Research Society*. ECR contributions include Social Media Editor at *Management Learning* (Cara Reed) and Editorial Assistant at *International Review of Economics* (Regianni).

4.3.3. UKRI panels and learned societies

Colleagues are expected to contribute to UKRI peer reviewing colleges and we are **well represented on UKRI Research Grant Assessment Panels** for the ESRC (Naim) and ESRC (Downe, Henley, Melanie Jones, Slater). Delbridge and Henley are UKRI Future Leaders Fellowship panel members, whilst Delbridge is contributing to the ESRC COVID-19 assessment panel, ESRC task and finish group on Business Engagement and the REF2021 Business and Management Studies Sub-Panel. Colleagues also advise non-UK Research Councils in Australia, Brazil, Canada, China, Ireland, Japan, the Netherlands, New Zealand, and Norway.

We encourage **active leadership within learned societies**, such as the *Academy of Management*, *Academy of Marketing Science*, *American Economic Association*, *American Marketing Association*, *American Society of Quality*, *Association of Business Historians*, *British Accounting and Finance Association*, *European Group of Organization Studies*, *European Operations Management Association*, *Financial Management Association*, *International Association of Maritime Economists*, *International Research Symposium for Public Management*, *Production and Operations Management Society*, *Regional Studies Association* (RSA) and the *Royal Economics Society*.

Henley is the Deputy President of *ISBE*, De Luca is the only non-US member of the *Product Development and Management Association* Board of Directors, Edgeley chairs the Welsh Technical Sub-Committee for the *Institute of Taxation*, Munday is the lead for the *RSA in Wales*, while Syntetos is the Director of the *International Institute of Forecasters* and elected secretary to the *Committee of Professors in Operational Research*. Walker was President of the *International Purchasing and Supply Education and Research Association* until 2017 and has played a leading role in its annual conference since 2014.

Career contributions have been recognised through the award of distinguished fellowships such as to the *Academy of Social Sciences* (Hardy, Kitchener, McDermott, Morris, Reed), the *Institute of Mathematics and its Applications* (Syntetos), the *Learned Society for Studies in Organising Healthcare* (McDermott), the *Learned Society for Wales* (Henley, Kitchener, Morris and Reed), the *National Institute of Economic and Social Research* (Dixon), *Institute of Labor Economics* (IZA) (Melanie Jones), *Royal Academy* (Willmott), *Royal Society for Arts, Manufacturers and Commerce* (Collie), and *Royal Society of Arts* (Tim Edwards).

4.3.4. Professional and partnership associations

We encourage widespread engagement with professional associations, including with the *Chartered Institutes of Logistics and Transport, Management, Marketing, Personnel Development and Purchasing and Supply*, the *Association of Chartered Certified Accountants* and the *Institute of Chartered Accountants for England and Wales*. **Public Value has prompted engagement with new associations, such as the Centre for Climate Change and Social Transformations, Global Labor Association, International Societies for Business and Society and the Circular Economy, the Group for Organizations and the Natural Environment, Sustainable Transitions Research Network, and the UN World Tourism Association.**

4.3.5. Advisory roles

We continue to provide active service to public bodies. De Widt is Independent Adviser to the *Welsh Government Local Government Finance Distribution Group*, Farrell chairs *Academi Wales*, Foster is a mentor to *Disability Rights Wales*, Melanie Jones is the *Economic Intelligence Partner to ONS*, Martin sits on the *ESRC What Works Council* and is Chair of the *Building a Resilient Britain: Working Group on Supporting Services*, while Morgan chairs *International Advisory Boards at Copenhagen and Split Business Schools*. Paczos is a member of the *COVID-19 Advisory Group to the President of the Polish Academy of Sciences*. Potter is the Chair of the *Chartered Institute of Logistics and Transport Wales*, and he, Beresford, Wells and Zhou have informed UK and Welsh Parliamentary inquiries on the impact of Brexit on UK ports, the automotive industry and international trade.

4.3.6. Contributions to Business and Management community

The School has consistently demonstrated a **strong commitment to strategic leadership and capacity building within Business and Management**. Since 2014, we continue to actively engage within the British Academy of Management (BAM), Chartered Association of Business Schools (CABS), EFMD, UNPRME, and Society for the Advancement of Management Studies (SAMS). For example, Ashworth is the inaugural Chair of CABS' *New Deans Network*, Kitchener has been appointed as Co-Chair of the *CABS Business Schools and the Public Good Taskforce* while Thomas was a member of SAMS Council.

Case Study: Leadership Contribution to Business and Management

In 2020 Rick Delbridge was awarded the *British Academy of Management Medal for Leadership* in recognition of his outstanding research and capacity-building support for Business and Management research. His contribution is illustrated through leading roles on the BAM/CABS Development Programme for Directors of Research and SAMS Council. The medal reflects his advocacy for Business and Management within the social sciences as a Fellow of the Academy of Social Science, a member of the Board of the Campaign for Social Sciences, and panel member of several UKRI awarding bodies including the Strength in Places Assessment Panel chaired by Dame Kate Barker and Sir Peter Bazalgette. Rick was a member of the REF2021 Interdisciplinary Advisory Panel for assessing interdisciplinary research and after completing his term as Associate Editor of *Academy of Management Review* in 2014, he established JMSSays in the *Journal of Management Studies* with Roy Suddaby (2015).

4.4. Additional sources and mechanisms of support

Grand Challenges cannot be addressed in isolation and through a single disciplinary lens. Since 2014, the School has amended its existing structures to facilitate collaborative research, the coproduction of impact and co-creation of knowledge.

4.4.1. Strategic engagement opportunities

a) International Advisory Board - established in 2006 to support and guide our strategy and facilitate research and engagement opportunities, we extended its membership in 2018. Recent recruits include **a new Chair, Adele Blakeborough OBE, Chair of the Social Business Trust**; Cerys Furlong, entrepreneur and Chief Executive of Chwarae Teg, an NGO that promotes gender equality; Erin Gill from Arup, a global consultancy firm that is employee-owned and oriented towards social value; and Derek Walker, the Chief Executive of the Wales Cooperative Centre and leading expert on the foundational economy.

b) Public Value Entrepreneurs in Residence (PVEiRs) - we have recruited two cohorts of PVEiRs since 2014 who have been actively engaged in facilitating research, including Amanda and Eifion Griffiths from Melin Tregwynt who have supported student action research projects.

4.4.2. Faculty networking opportunities

a) Breakfast briefings - we facilitate collaboration and engagement through these monthly sessions oriented around Grand Challenges that run with dual contributions from academia and practice. Our briefings regular draw in advance of 100 delegates and help to profile the School's research. Recent topics included briefings on homelessness, sports governance, gender pay gaps, water sustainability, and COVID-19 sessions on job quality and working from home.

b) Stakeholder roundtables - we actively facilitate problem-oriented roundtables that involve faculty and stakeholders. Discussions have been convened on public procurement, Brexit, the funding of health and social care, and waste to wealth (with *Business in the Community*).

c) High profile conferences - since 2014, we have hosted around 100 events per year that range from focused and smaller-scale workshops to major international conferences. These have covered topics such as global commodity chains, interdisciplinary perspectives on taxation and forecasting for social good. We will be hosting conferences for the *Logistics Research Network* and *ISBE* in 2021.

4.5. Closing statement

Cardiff Business School is a strong and sustainable research community that enables colleagues to thrive and make distinctive and important research contributions to their discipline and beyond. Building on our success, we have developed a holistic strategy based upon a Public Value ethos that prioritises real-world research of the highest international standard, underpinned by intellectual curiosity, and **focused on our five Grand Challenges - Decent Work, Fair and Sustainable Economies, Future Organisations, Good Governance and Responsible Innovation**. Our strategy relies on a vibrant and interdisciplinary research environment that enables the integration of international academic excellence with tangible and widespread impact.

The School will continue to maintain and extend its dynamic, inclusive and collegial research culture, so that researchers can influence their disciplines and the wider world. During the forthcoming period, we will:

- **Progress social science research of international standing in each of our Grand Challenge areas** through a targeted programme of internal funding, our PVEFs, and via the significant opportunities from our prime membership of the University's Social Science Park (SPARK). We will support the rapid co-creation of knowledge and evidence required to support the social and economic COVID-19 recovery. We have already diverted resource to enable colleagues to make the vital policy and practice contributions that are required and have turned our attention to the implications of pandemic for our five Grand Challenges.
- **'Walk the talk', by practising research-informed social, environmental and economic responsibility** to reduce our carbon emissions, improve fairness within our supply chain, and enhance awareness of ethical issues, sharing our learning with the Business and Management community. We will address the climate emergency and, informed by our research, re-double our intellectual efforts to contribute and develop sustainable approaches and solutions through our scholarly contributions. We remain determined to practise a greater level of social, environmental and economic responsibility within our own Business School operations and make further progress to an **inclusive, low carbon and high wellbeing research environment**.

These aspirations will not be straightforward to achieve but with a clear Public Value purpose and strategic direction, expert social scientists collaborating to address Grand Challenges, high levels of internal continuity and collegiality, and partners ready and willing to co-create knowledge, we will be well placed to build on success, meet these challenges and make significant progress toward a better future.