

#### Institution: University of South Wales

#### **Context and mission**

The University of South Wales Group comprises the University of South Wales (USW), the Royal Welsh College of Music & Drama (RWCMD), Wales' sole conservatoire and a wholly owned subsidiary of USW, and The College Merthyr Tydfil (a further education college). USW formed in April 2013 following the merger of the University of Glamorgan and the University of Wales Newport and is an important player in the South Wales economy, generating £1.2 billion of Gross Value Added (GVA) annually and sustaining over 14,000 regional jobs. In 2016, an independent report (BiGGAR Economics)<sup>1</sup> found that for every **£1** generated by USW direct operations, the UK economy benefited by more than **£8**. Meanwhile, for each **£1** the USW Group received in funding, the corresponding financial benefit totalled over **£6**.

With campuses in Cardiff, Newport and Pontypridd, USW is a large and diverse organisation with 2,000 staff and 25,000 students from a broad range of backgrounds. Around half of our students come from our region, and the majority stay and work here after graduation, adding value to their communities and the regional economy, something we are particularly proud of. USW is a hugely positive force in South Wales, and our impact is felt globally.

In an area with higher-than-average rates of poverty and poor health as evidenced by the Welsh Index of Multiple Deprivations, with significant regional variations in economic structure and performance, USW embodies the Well-being of Future Generations (Wales) Act 2015, working to improve the social, cultural, environmental and economic well-being of the communities we serve. A public policy think-tank, USW offers independent advice to government, industry and third sector across the UK on health, education, economic growth, social policy, and governance (for examples, refer to Prof Esteves and waste recovery; Prof Wallace and Family Resilience; Prof McElroy and media policy in Wales; Prof Wardak and Justice in Afghanistan). Bringing together industry, communities, the public and the third sector, USW builds supportive relationships with civic leaders that enable positive change and maximise the economic and public value of our work. One example of our level of engagement is the 70,000 learner days we delivered as CPPD and Continuing Education in 2017/2018 (HEBCI Table 2).

Led by the Vice-Chancellor and Chief Executive of the USW Group, Professor Julie Lydon, the University Executive leads on the development and delivery of strategic plans, agrees policies and procedures, sets budgets and monitors financial and operational performance. During the REF period, there were four faculties; Computing, Engineering and Science; Creative Industries; Life Sciences and Education; and Business and Society (recently withdrawn). Historically, USW/RWCMD had separate research development agendas but the partnership is now entering into a period of greater confidence, where we are able to look beyond individual areas of consolidation and look to working with the synergies across the institutions. Our research is applied and provides solutions locally, regionally, nationally and internationally through partnerships with business, industry and governments.

Following REF 2014, the recently formed USW maintained the research strategy of the former institutions (research active staff coalescing in research institutes). Following Lord Stern's 2016 review, we developed a new, inclusive framework to support emerging researchers/research

<sup>&</sup>lt;sup>1</sup> <u>https://biggareconomics.co.uk/university-of-south-wales-1bn-boost-for-uk-economy</u>



areas, enabling succession planning and embedding our research leadership more flexibly alongside our learning and teaching structures.

The USW 2030 Vision<sup>2</sup> sets out our direction for the next decade; a bold and ambitious future pathway to ensure continued success and long-term sustainability. Our strategy is clear: we want to continue to positively change lives and our world for a better tomorrow. Working in collaboration with industry, our research and innovations tackle some of the biggest global challenges from energy to health to security. Our collective thinking and imagination make better futures for our students, our communities and our partners. This purpose connects our teaching and research with the world. It inspires us to find new, more effective ways to make society healthier, safer and more just, to sustain our environment, enrich our culture, and to change behaviours through research-informed professional practice.

# Strategy

USW is committed to growing and sustaining a thriving research culture and ethos of collaborative enquiry where staff and students are supported to achieve their fullest potential, where our research informs our teaching and has an impact on people and the economy. Founded in the South Wales coalfields, we are as proud of our heritage as of our applied research interests and scholarly activities, which span a rich variety of industrial, commercial and cultural fields. Across these, we remain committed to an ethos of collaborative inquiry, and to bringing the impacts of our research insights and innovations into the lives of the local, national and international communities and businesses we serve. The industrial connections that shape our research culture make it genuinely international (e.g. work by Prof Esteves), multilingual (e.g. work by Prof Ayisi and Prof Lewis) and outward-looking. We are committed to nurturing a pipeline of research talent and to maintaining a research environment that enables all our students and staff to thrive.

In 2018 we refreshed and refocused our Research Strategy<sup>3</sup>, becoming more succinct, with a series of measurable objectives:

- Prioritising People
- Maximising Impact
- Diversifying Income

Whilst developing the USW 2030 Vision we identified four interdisciplinary areas of strength, which align to our societal and global challenges and the sustainable development goals. In 2019, USW conducted a review of research activity and external partnerships, identifying clusters of excellence that address society's key challenges. The resulting strategy document identified four interdisciplinary '**Accelerated Development Areas**' (ADAs) for future focus:

- Sustainable Environment
- Crime, Security and Justice
- Health and Wellbeing
- Creative Industries

<sup>&</sup>lt;sup>2</sup> <u>https://www.southwales.ac.uk/about/our-strategy/</u>

<sup>&</sup>lt;sup>3</sup> https://www.southwales.ac.uk/documents/1202/USW Research Strategy ENGLISH 2018-2028.pdf



Our strategy identifies these as areas where we already have significant activity, expertise and reputation, with partnerships that help us deliver impact and reach. These will shape future research activity, whilst being sufficiently inclusive and flexible to enable new research themes and funding streams to evolve.

The value we attach to interdisciplinary research and our commitment to being a reliable partner has led to inclusion in many collaborative networks such as: Wales Institute of Social and Economic Research and Data (WISERD) (a national, interdisciplinary, social science research institute); PRIME Centre Wales (a research centre focusing on primary and emergency care, funded by Health and Care Research Wales); Wales Institute of Digital Information (WIDI) (with University of Wales Trinity St. David and NHS Wales); Advanced Sustainable Manufacturing Technologies (ASTUTE) (with 4 other universities across south and west Wales); <u>Clwstwr</u> (with 3 universities in Cardiff focusing on innovation in media production).

Research activity is overseen by a Research Committee, which reports to the Academic Board. The committee primarily develops, implements and reviews the Research Strategy and monitors and upholds good research practice and governance. The University Ethics Sub-Group (UESG), a sub-committee of the University Quality Assurance Committee, is chaired by the PVC Research. The UESG ensures that **research governance** complies with related policies and procedures, including the UK Research Integrity Office (UKRIO) Concordat to Support Research Integrity. The UESG receives reports from all Faculty Ethics Committees, which ensures compliance with all policies related to research governance and ethics. All policies and procedures related to the Concordat and research governance more widely are reviewed annually to ensure they are fit for purpose. Operationally, Research Innovation Services (RISe) provides day-to-day support for matters relating to ethics, research integrity, grant writing and research governance. This includes providing support, guidance, training, and awareness-raising events.

#### **Maximising Impact**

USW research makes a real difference, changing lives and our world for the better. Our researchers work across disciplines to help businesses, communities and policy makers benefit from our research. To support researchers in transforming ideas into impact, USW implemented its **Open Access** policy in 2015, followed by the 2016 appointment of a Research Librarian and the implementation of Pure; our Current Research Information System (CRIS) and an institutional output repository. This infrastructure allowed us to capture more of our research and make outputs and artefacts available to the widest range of users, while complying with standard open access protocols. The CRIS and repository are just two elements that support our researchers and make their work globally available. Considering USW's wide range of research activity, our approach is inclusive of all types of outputs, including peer-reviewed journal articles, conference papers, and practice-based and nontextual research from all subjects. We also encourage staff to enrich their research portfolios with impact activities and by giving specific information regarding their research expertise and experience. The Open Research landscape is changing rapidly and we are contributing to its ongoing development. With colleagues in Wales, we are supporting the transition to Plan S and the Transformative Agreements from publishers that are changing how published research is made openly available to researchers.



USW's Research Data Management policy, implemented in 2015, includes all data generated from research and ensures compliance with funder policies. 'Good data management' is embedded within our Governance Framework. Current support spans the full lifecycle of a research project with the Research Librarian and the Research and Business Engagement (RBE) team providing training and support for staff and postgraduate research (PGR) students. Our policy supports data archiving in a subject-specific repository with metadata stored in Pure. To further enhance our Open Research environment, we intend to launch an institutional data repository.

Besides making available the results of our research as wide as possible, our network of USW Exchange gateways for businesses to the university are pro-active in supporting local organisations build relationships with our researchers. We value highly industry-led collaborative research because of the in-built pathway to impact. We have invested our QR income specifically to accelerate impact from existing research. After a gap of some years, in 2020 HEFCW re-introduced innovation & engagement funding (Research Wales Innovation Fund), the equivalent of HEIF in England. This has enabled us to create a new Knowledge Exchange & Innovation Fund (KEIF) which is available to researchers to bid competitively to, for collaborative research projects with clear routes to impact such as the development of new products or services with local and regional business for economic growth. The competitive bidding process, with review and feedback, has been introduced for staff development.

# Our Research Impact Support Plan aims to maximise impact by:

- Creating an impact culture through the professional development of staff and doctoral students, highlighting the importance of creating impact from research and helping them to demonstrate this.
- Accelerate impact by securing knowledge exchange and innovation funding.
- Evidence impact by enabling the reporting and communication of impact.

USW actively supports researchers to provide expertise for the wider public good, enabling them to undertake industrial secondments, research-led fellowships within government, and expert leadership roles in a range of creative and professional organisations.

Internally we are developing our impact culture, through training that supports academics at all career levels. In 2019, we launched the Researcher Leaders Impact programme (based on the Advance HE Impact Toolkit) to promote leadership skills. Researchers have attended workshops and support is available to ensure research impact forms part of activity planning. The face-to-face workshops are complimented by an online Impact Toolkit, providing additional development resources. Additionally, we develop a culture of impact through our annual Impact Awards raising the profile internally and growing our reputation externally by celebrating the work of researchers and their external partners and how this makes a difference beyond USW.

The USW Exchange business hub was established in 2017 and supports industry to connect and grow networks, and benefit from shared USW insights and innovations. Exchange offers a wide range of USW engagement opportunities, including research collaboration, student projects and placements, Continuing Personal and Professional Development (CPPD) and



work-based learning, and facility hire. Key to all external relationships is a partnership approach focused on mutual trust and benefit, professionalism and integrity, and impact and vision. Exchange has already welcomed 5,855 visitors, hosted 120 events connecting with businesses, and recorded over 250 engagement opportunities. Our second USW Exchange gateway was opened at our Newport campus in 2019 extending our reach still further.

Our commitment to impact extends to our civic mission, which is core in our USW 2030 strategy. This is highlighted by our 2019 audit of civic engagement activities, including the impact of our research on South Wales communities. This was supported by HEFCW's Enhancing Civic Mission and Community Engagement fund, and resulted in a report, several case studies, and recommendations for future improvement. The case studies enabled us to disseminate the civic influence of our research, such as USW's participation in Clwstwr, which aims to facilitate innovation in the Welsh Screen sector. This fund was at the vanguard of our cultural activity with major arts and heritage partners with exhibitions such as 'Art of Regeneration' at Oriel y Bont and knowledge exchange symposia such as 'Activism' St Fagan's but in partnership with Amgueddfa Cymru-National Museum Wales (with whom we have a MOU).

# People

We have retained the <u>HR Excellence in Research Award</u> since 2013. Priorities are identified through the Steering Group and other researcher-led strategic groups, such as Faculty Research Committees and the Athena SWAN Self-Assessment Teams and considered against Quality Assurance Agency (QAA) indicators, Vitae Researcher Development Framework (RDF) subdomains, Concordat Principles and the RCUK statement of expectations. In 2018, the HR Excellence in Research Award Peer Reviewers congratulated us on our progress. reporting that: **"USW are showing evidence of embracing a 'learning culture' approach towards their development of staff as well as adopting a 'talent management model' appropriately designed for their context".** Sign up to the Researcher Development Concordat in 2020 was delayed due to COVID-19, but we intend to revisit this in 2021.

Our Strategic Equality Plan provides a clear framework for promoting Equality, Diversity and Inclusion (ED&I) and embedding the Equality Act 2010 within the USW Group. All staff undertake mandatory ED&I training annually. USW has a staff Disability, Health and Wellbeing Group, which reports into our Equality and Diversity Steering Group. We are certified as a 'Disability Confident Employer' by the Department for Work and Pensions and recognise that disabled staff members may require some practical adjustments, support or guidance to ensure, as far as possible, that all have equal access to opportunities.

We hold the Institutional Athena SWAN Bronze award and have invested in an ED&I Analyst and Officer to ensure that our equality work continues. In 2016, USW became a Stonewall Champion and in 2020 rose 19 places to 24th in the Stonewall Workplace Equality Index and was named a Top Trans Employer. Progress has been significant in this area, and Fairplay30 (FP30), our Equality Champions Scheme, won the Advancing Staff Equality award at the Guardian University Awards 2019 for 'having a profound impact on creating a culture of inclusivity'.



The FP30 network complements USW's current promotion of ED&I. ED&I issues are dealt with consistently but can also be referred informally to the FP30, a network of fully-trained staff who act as advocates for promoting equality and can help with the ED&I concerns of staff and students. Dignity at Work Advisors play a similar role, listening to those with concerns and triaging them to relevant support where necessary.

By engaging with these charters, we have developed frameworks for 'hearing the voices' of all staff and students, including our ECRs, contract researchers, mid-career and professorial staff. The challenges they face differ across discipline and career stage which we recognise. By taking this approach, our interventions are tailored to meet the specific needs of each group. An example is our work to address the STEM pipeline for women.

We **prioritise people** and support them to fulfil their potential through our Flexible Working Policy and, following a recommendation from the Equal Pay Working Group in 2018, amended this policy from the statutory 26 weeks in continuous employment, to a day-one right for all staff.

USW has three academic staff profiles, Teaching and Scholarship, Teaching and Research and Research Only. These are nationally agreed and allocate a minimum of 12.5% of time for research and scholarship activity. As part of the development of our culture, appointment panels for academic staff normally include a research-active member of staff and questions linked to research activity. Academic staff with Significant Responsibility for Research (SRR) have at least 20% time allocated to undertake research and scholarship, or research and impact activities; Associate Professors automatically have a minimum of 20% of time allocated for research and scholarship activity and Professors 30%. Time allocation for research is adjusted on a case-by-case basis to meet research project requirements.

During annual appraisals, objectives are agreed that align with the individual's skills and our university's strategic objectives. To ensure fair access to training, the RBE team runs a series of CPPD events, which map onto Vitae's Researcher Development Framework, across all campuses. Hosted by the Dean of Faculty, the Calendar of Events is launched annually at a lunchtime roadshow, highlighting the support available and providing a networking opportunity. The calendar offers 'bite-size' lunchtime sessions and in-depth, specialist workshops using external facilitators. These events support funding, impact and intellectual property agendas and provide one-to-one coaching for academics who are considering applications for Associate Professor/Professor. We conduct regular surveys to understand how the programme supports our academics' needs and adjust the calendar accordingly. We have a year-long, in-house Women's Development Programme, now in its fourth year. 100% of participants from the first three cohorts reported that the programme had a positive impact on their working lives. One of the reported strengths is that it brings academics from different disciplines together, helping them to form networks outside their areas of expertise. USW also leads the Wales Women in STEM initiative, which aims to identify and address the barriers that face women working in Science, Technology, Engineering and Maths (STEM). It brings together those who implement change within the sector and those who work to create a positive environment where women can thrive throughout their careers. A 2020 Equal Pay Review identified that USW does not have any equal pay gaps in relation to any of the protected characteristics of disability, gender, ethnicity, age, or sexual orientation and religion/belief.



We are an active member of the <u>Welsh Crucible</u>, an award-winning programme of personal, professional and leadership development opportunities for Wales' future research leaders. Twenty talented early- to mid-career researchers have participated in the programme, which facilitates and promotes research-inspired innovation and cross-disciplinary collaboration in Wales. As a result, two colleagues are now professors and three are associate professors. We also have established an Early Career Researcher forum that provides support and mentorship to staff.

The appointment of a Head of Postgraduate Research Studies and the introduction of the PhD Manager system has enabled us to harmonise processes and further develop our Graduate School. These changes have enhanced the PGR student experience and deepened our supervisors' skills. We remain dedicated to developing and supporting research talent and growing our next generation of academics by ensuring that our early career researchers have time and resources to pursue their research interests. We provide clear career pathways for promotion in line with the Researcher Development Concordat and ensure that training, development and impact opportunities are tailored to the needs of researchers at all career stages.

An independent review of our PGR student governance and support structures reported "good support was available to students" and "governance was in line with the sector". The Graduate School aligns its training provision for postgraduate researchers and their supervisors to the domains of Vitae's Researcher Development Framework (RDF) and ensures all research supervisors are appropriately trained. It also offers a Research Engagement Fund, which supports PGR students to attend relevant external training, engage with researchers/collaborators, and present their research at conferences. We are a member of Vitae and the UK Council for Graduate Education, both of which offer opportunities for professional development. We are a successful partner in the pan-Wales European Social Fund, the Knowledge Economy Skills Scholarships (KESS) programme securing 98 scholarships (84 PhDs,14 Masters by Research), with key business partners such as TATA, Thales, Welsh Water, and Wales and West Utilities.

- 69 with business
- 19 with Health Boards
- 3 with Health Trusts
- 7 charities

We were also founder members of the University Alliance Doctoral Training Alliances (DTAs) in both Energy and Social Policy, a network of over 150 doctoral students and 94 alumni across 19 universities, and currently have 11 students between Energy and Social Policy. Future Graduate School plans include:

- Reviewing supervision training in light of the UKCGE's recently published Good Practice Framework.
- Promoting participation in the UKCGE Research Supervisor Recognition Programme.
- Introducing an Annual Research Supervisor of the Year Award to raise the profile of research supervision at USW.
- Extending existing opportunities for public engagement activities



In both RAE2008 and REF2014, 28% of staff submitted were female, for REF2021 it will be 35%. Our current academic population consists of 863 staff of which 43% are female and 57% are male. 9.3% of academic staff identify as BAME and 4.46% of staff have declared a disability. In REF2021, 14.5% of staff submitted identify as BAME and 4.69% of staff submitted have declared a disability.

Prior to the publication of the 'REF2021: Guidance on Codes of Practice' in January 2019, we undertook our initial REF preparations against the University's REF2014 Code of Practice. The use of the framework from the previous assessment period enabled us to uphold the principles of transparency and fairness during the appointment of our REF Leads and while conducting our mock REF exercise in 2017/18. To ensure our REF processes are inclusive and in line with our Code of Practice, all those in REF decision-making roles attended 'unconscious bias avoidance' training facilitated by Advance HE.

Our REF2021 Code of Practice was developed in consultation with staff and staff representative groups. Its adoption provided assurance that the institution will comply with all guidelines and codes. The gender-balanced REF2021 Strategy Group developed a submission strategy in line with the REF2021 'Guidance on Submissions', including a review process to assess progress against equality recommendations in relation to output selection and special circumstances.

#### Income, infrastructure and facilities

**Diversifying Income** streams in order to grow the support for our research and innovation is the third part to our research strategy. One of the main interventions we make is through our Professional Research Support staff who are proactive in connecting funding streams with our academics. They give one-to-one support to ECRs as they write bids and to more experienced researchers who are accessing funding agencies for the first time. As a university we fund a minimum of 12.5% of academic staff time for research and scholarship activity rising to 20-30% for all staff submitted here: that investment totals around £13m per annum.

We use our QR income strategically: 15-20% is retained centrally to promote pan-university research activity, including the funding of roles to support impact activity, Open Access compliance, and the Head of Postgraduate Research Studies. It also provides funding opportunities that accelerate impact and promote PGR external engagement, finances publication costs in support of Welsh language and culture, and our REF preparations. The remainder is allocated to the Faculties based on performance at the last REF together with more recent performance in income generation activities. Thus, QR income incentivises research funding growth and underpins live projects with much needed additional support. This includes leveraging other funding – for example, by supporting strategic European-funded projects such as Flexible Integrated Energy Systems (FLEXIS), Smart Energy Storage Solutions (SESS) and the KESS programme. Other strategic programmes directly supported by QR include participation in the University Alliance's DTA's for Energy and Social Policy, where funding is used for PhD studentships and associated research costs, other examples include Co-director role in WISERD and membership to the Environment Platform Wales. QR funding is also used and matched by the Coleg Cymraeg Cenedlaethol to support Welshmedium research.

Run over three years, the university invested further funds through an Impact Investment Scheme (I2S) which received a total of 88 applications from across the institution. In all, 36



projects with over 30 external partners were awarded funding of £212,426. Following the I2S, a new strategic research investment funding scheme was launched in 2019 to help researchers attract further investment. Over £300,000 was awarded to 13 research projects, £132,763 of which came from HEFCW. This seed corn investment is intended to lead to researchers attracting further investment from external sources, including UK Research and Innovation (UKRI). In its first year, 55 project proposals were received and of those supported there were 21 planned external funding submissions worth over £4 million.

# **Facilities and Infrastructure**

Research and Innovation Services (RISe) provides a broad strategic and operational support service to academic staff, ECRs, postdoctoral research staff and PGR students, which includes support for funding applications, research excellence, research impact, PGR student lifecycle, governance, ethics, and writing data management plans. Many of the staff are active members of the Association of Research Managers and Administrators (ARMA), obtaining qualifications such as the Certificate of Research Management. We are founding members and former chairs of sector groups such as the Welsh Research Office Liaison Officers' group, an informal network of Welsh Higher Education Institutions. This group is supported by HEFCW and Welsh Government and exists to share best practice and contribute to the development of collaborative projects.

We have invested in Pure, which holds information on research staff, their publications and research activities. It provides a comprehensive picture of our research that supports REF preparations and many of our research management and reporting needs that helps us share our work openly.

PhD Manager was also procured to help maintain PGR student supervision records. PhD Manager has enhanced the quality of the feedback, as agreed objectives are clearly articulated and progress against milestones can easily be monitored.

USW has dedicated research facilities across its campuses. These include state-of-the art science laboratories and dedicated facilities for practice and research. Many have productive partnerships with leading industry organisations such as the BBC and the RWCMD has a range of partnerships that include the national theatre. Examples include:

- **Hydrogen Research Centre**: Jointly funded by USW and the European Regional Development Fund, the Hydrogen Centre is a focal point for new Research, Development and Demonstration of hydrogen energy technology in Wales.
- Centre of Excellence in Mobile and Emerging Technologies (CEMET): Provides Welsh SMEs with access to funded Research & Development. Working alongside businesses CEMET uses leading technology to create innovative products and services for business.
- Centre for Media and Culture in Small Nations: provides a comparative global framework for researching small nations as IP creators. The Centre leverages USW's infrastructural investment in screen technologies (e.g. motion capture suites, games



labs) and expert researchers to deliver ground-breaking Research and Development for the screen industries.

• **Hydra Minerva Immersive Simulation Suite**: is a high-tech experiential training tool that enables the monitoring of group dynamics, real-time leadership and naturalistic decision making in critical incidents. It provides a unique learning and research environment and is used to conduct realistic immersive, simulated scenarios.