

Institution: University of the West of Scotland

1. Context and mission

1.1 Institutional context

SCOPE AND SCALE:

Over 20,500 students

(HEADCOUNT)

7,935 in Paisley

4,096 in Lanarkshire

2,525 in Ayr

1,497 in London

419 in Dumfries

136 nationalities
across our 5 campuses

4,300
international students

1,194 staff (FTE)

University of the West of Scotland (UWS) has demonstrated a rapidly increasing Research and Innovation (R&I) activity in this REF period. The annual UWS share of externally funded R&I awards has increased from GBP4,300,000 in 2013/14 to GBP15,000,000 in 2019/20, an increase of 350%. Whilst a total income of GBP122,000,000 (2019/20 Financial Statements) means UWS' income arises predominantly from teaching activities, we have led or been involved in world-class research across all 10 Units of Assessment (UOA). These successes are

even more significant when taken in the context of our rapid evolution. Historically, the institution has been delivering higher education in Paisley since 1897 as Paisley Technical School, becoming the Central Institution (Paisley College of Technology) in 1950. In 1992, it was granted University of Paisley status with a Royal Charter and degree awarding powers through the Further and Higher Education Act 1992. The following year it merged with Craigie College of Education in Ayr and after the merger with Bell College the Privy Council approved the name University of the West of Scotland for the institution in 2007. Today, UWS is a significant force in global knowledge creation, innovation and a leading provider of undergraduate, postgraduate and research degree education. UWS has four academic Schools (Business and Creative Industries; Computing, Engineering and Physical Sciences; Education and Social Sciences; and Health and Life Sciences), and we are a member of the association for modern Universities (MillionPlus).

1.2 Research focus

We are committed to undertaking world-class applied research that benefits the economy, society and the environment, aligned to the UN Sustainable Development Goals (UN SDGs). UWS maintains focused academic activity across all four main panels, demonstrating research excellence in 10 UOAs [Panel A (UOA 3; 1 of 6 UOAs); Panel B (UOA 7, 9, 11, 12; 4 of 6 UOAs); Panel C (UOA 17, 20, 23, 24; 4 of 12 UOAs) and Panel D (UOA 34; 1 of 10 UOAs)]. Within the Main Panel A, our focus on UOA3 reflects our status as the largest provider of nursing education in Scotland, while UWS' STEM legacy is clearly seen within the Main Panel B and activity across most UOAs. In Social Sciences as well as Arts and Humanities, UWS research focuses on areas that are of strategic significance to addressing social and economic exclusion, knowledge exchange and business innovation.

1.3 Achievement of Research and Impact Objectives

We set out to substantially expand our research footprint during this REF period. In addition to increases across all R&I activities, the average value has reached GBP149,000, up from GBP28,000 at the beginning of this REF period. UWS has developed its most robust pipeline of commercialisation and spin-outs ever, including two finalists and a winner in 2017 (Novosound, attracting GBP3,500,000 additional investment), and two further finalists in the Converge Challenge 2020. Building on our reputation of working closely with business, UWS has predominantly focused on high-impact areas and the 28 Impact Case Studies (ICS) in contrast to 19 in the previous REF period (47% increase) is a testament to our impact-focus. For the first time, in 2020, UWS won the Times Higher Education (THE) knowledge exchange/transfer initiative of the year award for a pioneering artificial intelligence (AI) drone collaboration with Thales and the CENSIS innovation centre, with numerous other awards exemplified in REF5b statements and Impact Case Studies (ICS).

1.4 Strategic Aims

Our current key strategic aims are to: (1) create new knowledge and relevant skills; (2) create exemplary business-to-university interaction; and (3) world-class research developments, innovation, spin-outs and knowledge exchange.

1.4.1 Review of Institutional Plans

We have exceeded expectations in our original plans. Since REF2014, UWS has been focusing on creating new knowledge with the motivation to (1) provide opportunities for business-to-university interaction, (2) be an anchor institution within the communities in which it is based, (3) achieve regional and international impact, resulting in world-leading research developments, innovation, spin-out and knowledge exchange. With our focus on UN SDGs, the key target communities include UK and global businesses, NHS and civic society. We have since developed the R&I Thematic Plan, which succeeds the previous Research and Enterprise Enabling Plan, setting out the route map to delivering the desired strategic aims. Priority areas have focused on local needs that can be applied globally, including ageing, sport, health, economics and the future of work and care. We have exceeded our objectives through continuous support for and investment in signature research capabilities across the 10 UOAs. These clear ambitions and plans build on the key focus of the Corporate Strategy 2014 to 2020 for all academic staff to contribute to peer-reviewed outputs and thus to increase their total number, and to create 15 UWS start-up and spin-out businesses by the academic year 2019/20. The Corporate Strategy Refresh 2017 to 2020 realigned the focus to increasing research and enterprise activities to achieve the UWS share of awards of at least GBP11,000,000, developing at least 50 industrial partnerships and increasing the number of research students by 10% annually.

2. Strategy

2.1 Vision

The UWS Strategy 2025 published in 2020 has set a vision for the institution to be recognised as a world-leading university ranked inside the top 200 by 2050. As a signatory to the UN SDG Accord, we believe in excellent, relevant and purposeful research, which underpins our strategic growth in support of UN SDGs. We have developed an international reputation for seamlessly bringing together industry, academics and students to resolve global challenges. During this REF period, UWS has been transformed, simultaneously increasing commercialisation of research, knowledge exchange and serving our communities. We will continue investing in R&I to further increase external funding, to develop global, national and regional impact through highly impactful collaboration, and to attract diverse groups of world-leading and early career researchers.

2.2 Research Impact

Sustaining investment in exceptional R&I across all academic Schools in areas of strength as identified in REF2014 has been the main mechanism in support of our drive to achieve global impact. In the second half of 2016, UWS introduced a new Vice Principal Fund to support Research and Enterprise Excellence projects that are (1) aligned with our strategic themes; (2) inclusive of our Early Career Researchers (ECR); (3) multi-disciplinary by nature; (4) aligned with external funding bodies; (5) tangibly supported by external organisations nationally and internationally and (6) enhancing existing or creating emerging areas of strength with a significant potential for developing signature research. The projects have received an investment of GBP1,000,000 per year for a period of four years and from 2017 onwards included a combined total of 57 funded PhD studentships. In addition, significant reinvestment (approximately GBP1,000,000) has been implemented to provide match funding for large grant applications and support strategic initiatives.

2.3 Interdisciplinary Research

Beyond the requirements of the external funding bodies, formation of interdisciplinary teams is a condition for all institutionally supported projects. Interdisciplinarity in the predominantly applied research that we are internationally recognised for is inherent to the nature of the challenges we are addressing. UWS' strategic direction is to maintain research and innovation activities that address UN SDGs and through multi-disciplinary teams we deliver at a scale and intensity that ensures sustainable impact.

2.4 Research Integrity and Ethics

In this REF period, we had 4 complaints, representing about 0.001% of the volume of active projects and all were investigated in line with UWS University Ethics Committee policy and Code of Ethics (CoE). None of the complaints were upheld. Our CoE establishes the University's approach to raising the ethical awareness of staff and students, and ensuring that all that we do is underpinned by global and future-focussed principles of fairness and openness. CoE includes references to our policies and guidelines that implement our commitment to these principles. It also sets out the mechanisms for ethical monitoring and review of all our activities. UWS research governance and ethics procedures recognise the importance of addressing ethics (including publication ethics, general principles of data confidentiality and access), while supporting the achievement of responsible authorship. We adhere to a number of external concordats to ensure an environment of research excellence (Governance of Good Research Conduct; Research Integrity; Open Research Data; Openness on Animal Research in the UK; Engaging the Public on Research; Career Development of Researchers; European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers through the HR Excellence in Research Award; Nolan Principles; UKRI Statement of Expectations for Equality and Diversity).

2.5 Open Research Environment

The implementation of our institutional strategy to support the open research agenda and ensure compliance with the REF open access (OA) policy began in 2016 with the purchase of PURE (Elsevier), our Current Research Information System (CRIS), aiming for 100% compliance primarily through the Green OA route. The system is also available as a research data repository to share open research data, in line with funders' requirements.

Of the 2,853 research outputs in scope of the REF open access policy and deposited by UWS authors in PURE, 2297 have open access versions available for download through the UWS Academic Portal, against 655 needed for REF2021 submission. This equates to 80% of in-scope outputs made openly available. Open access versions of an additional 520 non in-scope outputs can be downloaded from our portal and this number is steadily increasing, as the Library are advocating and implementing the best practice of making research as open as possible beyond funders' requirements. UWS has been signing transformative agreements with publishers to allow researchers to publish Gold Open Access in thousands of journals. Altmetric and PlumX are available to allow researchers to evaluate the impact of their work beyond the more traditional metrics. A series of REF newsletters was issued to raise awareness of the REF OA requirements and a programme of masterclasses was delivered to all academics to ensure familiarity with the PURE research management system. Training is available to all researchers, in person and via online resources, and support for all PURE users is offered by a dedicated team.

2.6 External Engagement, Collaboration and Societal Benefits

With four campuses in west and south-west Scotland and a campus in London, 8 PGR partner institutions across Europe, and membership of several major international networks, UWS engages with a broad range of regional, national and international communities, partners and stakeholders.

2.6.1 Regional and National Research Priorities

Since REF2014, our key themes of Health, Society and Sustainability and now alignment with UN SDGs emerged from our embeddedness in and contribution to Universities Scotland and Universities UK. **Internally**, the Vice-Chancellor's Executive Group (VCEG), Senate, University Research and Enterprise Advisory Committee (REAC), University Ethics Committee (UEC), and Doctoral College Board are the key formal vehicles for engagement with and responding to regional and national research priorities. The Professoriate group established by the Vice-Chancellor in 2014 and Early Career Researchers Forum, renamed Staff Forum for Research in 2020, represent further consultation mechanisms outside the formal research governance to identify and address key research priorities. **Externally**, UWS co-creates the regional research culture in Scotland through its membership in Scottish Research Pools: Energy technology Partnership (ETP), Marine Alliance for Science & Technology for Scotland (MASTS), Scottish Alliance for Geoscience, Environment and Society (SAGES), Scottish Informatics and Computer Science Alliance (SICSA), Scottish Research Partnership in Engineering (SRPe), Scottish Universities Life Sciences Alliance

(SULSA), Scottish Universities Physics Alliance (SUPA). The university was a founding member of many of the research pools and is a member of the first national graduate school, the Scottish Graduate School for Arts and Humanities and the Scottish Graduate School for Social Science, the largest facilitator of funding, training and support of doctoral students in social science. UWS is also a partner in the Scottish Police and Research Exchange (SPRE) and the Scottish Dementia Research Consortium.

2.6.2 Research Collaboration, Networks and Partnerships

Scottish research pools and membership in international networks including Scotland Europa and the Consortium of Applied Research and Professional Education (CARPE), a strategic alliance of European Universities of Applied Sciences, have been the main strategic enablers of research collaborations with other academic partners. Academia-industry research collaboration has been supported through our involvement in Scottish Innovation Centres (18 projects to the value of GBP911,512), which involves introducing a 'Gold-Silver-Bronze' approach to forming collaborations across 8 Key Performance Indicators (KPIs) with evaluation providing the basis for growth and expansion. Our strategic partnerships include 10 companies at Gold level (i.e., engagement across all KPIs), 7 companies at Silver level (i.e., engagement across two or more KPIs) and 33 companies at Bronze level (i.e., engagement in one KPI).

2.6.3 Institutional Contribution: Economy, Society and Communities

UWS added GBP955,000,000 to the Scottish economy in 2017/18 (Biggar Economics Report) - an increase from GBP576,000,000 in 2014 - a major achievement in a challenging political, social and economic environment. UWS' societal contribution is immense also due to being recognised as one of the UK's leading institutions in widening participation in higher education with around a quarter of all Scottish-domiciled undergraduate entrants to UWS from SIMD20 areas (Scottish Index of Multiple Deprivation). In Scotland, with campuses in Renfrewshire (Paisley campus), Ayrshire (Ayr campus) and Dumfries and Galloway (Dumfries campus), UWS is an anchor Higher Education Institution (HEI) in Ayrshire Economic Partnership, Lanarkshire Economic Forum and the Crichton Trust in Dumfries. We treat research as a basis for engagement with the communities we serve and the general public globally. Research Services, Corporate Communications and the UWS Events team provide researchers with resources, inspiration and support to help them develop new and exciting ways of engaging the public in their research. We offer support for all aspects of public engagement from outreach to collaborative research projects, including event management, training on grant application writing and funding, evidence and evaluation tools. The



institutional support for dissemination and profiling of our research through *PURE*, *The Conversation*, *EurekaAlert* and *AlphaGalileo* is further enhanced through our engagement with community groups regionally, nationally and internationally (including governmental Cross-Party Groups, industry boards, national and international advisory boards – as exemplified in REF5b statements).

Figure 1: UWS' rapidly increasing KTP portfolio.

Strategy: Examples of Success

- **Parasport research (UOA24):** Winning the Gold Research Impact Award at the Herald Commonwealth Games Awards 2014.
- **UNESCO World Heritage status application (UOA34):** Our research and campaigns for heritage protection of the Gdansk shipyard area have made a significant contribution to the Polish Government's application for UNESCO World Heritage status.
- **Sector-leading Knowledge Transfer Partnerships (KTP) centre (UOA17 and others):** According to Innovate UK, KTPs generate GBP7.5 of economic value for every GBP1 of

investment. Since then, our total number of KTPs has grown to the current 35, the UK's fastest growing portfolio and the largest in terms of Management KTPs

- **International Continuous Professional Development (CPD) centre (a):** UWS delivered 23 courses within the Chinese government's State Administration for Foreign Experts Affairs (SAFEA) scheme - fastest-growing in the UK and among the greatest-ever annual increases by any HEI provider.

3. People

3.1 Staffing Strategy and Staff Development

We are submitting 279 staff in REF2021 against 122 in REF2014. To achieve this, we have developed a range of mechanisms. Additionally, these have helped us to ensure that our people are engaged in the UWS vision, ambitions and truths. The University recognises that the recruitment of high-quality staff is critical to its continued growth and success and places a high value on the benefits of a diverse and multicultural community. All Category A eligible staff are on Teaching and Research contracts and a research mentoring Scheme has been introduced following REF2014 with self-nominated mentors and mentees matched according to individual needs and aspirations, benefitting 92 staff. Additional mentoring within research groupings is available to all members with a particular focus on newly recruited staff and ECRs. MyContribution, preceded by Professional Development Review process, is the main appraisal mechanism for all staff. It includes setting academic objectives annually with a minimum 6-month review and research objectives are among key categories. Several frameworks for incentives and rewards are in place to support the development of research including: (1) Salary recognition and reward procedure (104 approvals in this REF period, including 43 ex-gratia, 35 acceleration increments and 26 contribution increment); (2) Staff Appreciation and Recognition (STARS) Award (20 staff since REF2014, including 7 winners within Research and Knowledge Exchange category); (3) Additional annual leave purchase procedure from 2018 onwards (1 member of staff in 2020/21); (4) UWS reinvestment in research excellence through Vice-Principal's Research Fund (66 staff in project teams). Several other mechanisms support our staff, including: (1) Returners Scheme to complement the UWS family-friendly procedures (i.e., minimising the impact of extended leave on work activities); (2) Maternity, paternity and adoption pay and leave above the statutory level; (3) Childcare voucher scheme run by Sodexo; (4) Carer's fund providing caring support for staff; (5) Flexible working schemes (e.g., part-time working, job sharing and the opportunity to apply for flexible working hours).

3.2 Early Career Researchers



Figure 2: Dr Dave Hughes (CEO Novosound Ltd.; from ECR to multi-award-winning Executive).

researchers' Forum in 2018 (150 members, hosting regular events throughout the year); (3) dedicated professional development opportunities (e.g., UWS CRUCIBLE organised during the pandemic virtually) and (4) requiring ECR involvement as standard for all UWS-supported research projects.

In the current submission, 18.54% of FTE Category A eligible staff are ECRs, recognising their significant contribution to UWS research. Throughout the REF period, a highly inclusive approach has led to 24 taking up Lecturing posts at UWS, 48 promotions to Senior Lecturer, 14 promotions to Reader and 14 promotions to Professor. UWS' approach to supporting Early Career Researchers (ECR) includes: (1) ensuring ECR representation on main research committees; (2) establishing and funding an Early Career Re-

3.3 Postgraduate Research Students (PGRS)

During the current REF period, at any given time, approximately 90% of all UWS PGRS have completed within the maximum period of registration. Since REF2014 when UWS completion rate was around 47%, this sector-leading position has been achieved through the development of a centrally managed and systematic approach to monitoring progression. The progress began with the establishment of the UWS Graduate School in 2014, which in 2018 became Doctoral College (DC) to foster the collegial research environment across the University, with “Behaviours, Interactions and Wellbeing” representing its three key pillars. Support mechanisms like the flagship “3-minute Thesis Competition”, Vitae-aligned training programmes with UWS Academy and MyPGR Platform, an online progress monitoring platform, have been pivotal in achieving success (i.e., from 97 doctoral completions in REF2014 to 370 in REF2021). In this period, we have hosted UWS PGRS from >70 countries and currently this diverse population includes a cohort from the multi-million five-year doctoral scholarship scheme with the Algerian government designed to improve the teaching, learning and research of Algerian universities.

3.4 Equality and diversity

One of the UWS seven core values is ‘*shaping society*’. The Strategy 2025 confirms ‘*we remain committed to widening access, equality, diversity and inclusion.*’ and our REF Code of Practice has been designed with equality, diversity and inclusion at its heart. This has contributed to an improved gender balance. The imbalance in RAE2008 (73% male and 27% female) and REF2014 (71% male and 29% female) submissions was substantial. Submitting 40.3% females and 59.3% males, 0.4% unknown to REF 2021 resulted in a significantly reduced imbalance. The analysis of the participation levels of staff with a disability shows an increase from 1.1% eligible staff and 1.6% submitted staff in REF2014 to 4.6% eligible staff and 5.7% submitted in REF 2021. The percentage of submitted ECR staff with a declared disability has increased from 3.6% in 2014 to 7.9% in 2021. For submitted staff 18.8% are from ethnic minorities, an increase since REF2014 when 14.2% were known to be from ethnic minorities. ECR ethnic minority participation levels for submitted staff is 21.8% while 100% of the ECRs submitted for REF2014 were white. Research and Business Innovation teams within Academic Life have, since REF2014, developed robust support mechanisms targeting under-represented groups, as defined by the Equality Act, within the University. These include PROPEL, Grant Accelerator, REF Accelerator, UWS Crucible, Masterclasses to name but a few. UWS has further demonstrated its commitment to equality and diversity through attainment of: (1) Athena SWAN Bronze award; (2) HR Excellence in Research award; (3) Disability Confident Accreditation; and (4) Stonewall Diversity Champions Scheme. Staff Network for ethnic minority staff (BME Staff Network), LGBT Staff Network (UWS Liberty), Women’s network (UWS HighHER) are the existing major staff networks to offer peer support, with Men’s Network and Disability Staff Network in development. UWS EDI Leadership and Governance model was reviewed during 2020, refocusing EDI, enhancing visibility, delivery and communication.

People: Examples of Success

- **Rapid development of award-winning spin-outs (UOA 7, 9, 12):** Novosound, Fish diagnostics and Albasense – all shortlisted for the Converge Award with Novosound winning in 2017. During this time UWS has twice had the largest number of shortlisted spin-outs for the main award category.
- **‘Oscar of Higher Education’ (UOA11):** A partnership between UWS; Thales, and Scottish sensors and imaging innovation centre, CENSIS – scooped the prize in the highly-competitive ‘knowledge exchange / transfer initiative of the year’ category (Times Higher Education (THE) Award 2020).
- **The United Nations in Geneva (UOA34):** Showcases an award-winning documentary “*Colours of the Alphabet*” produced through a unique collaboration between academics at the University of the West of Scotland (UWS) and Newcastle University.
- **Doctoral alumni success (across UOAs):** Doctoral graduates are our ambassadors worldwide and some of the most recent graduates include: BAFTA Scotland winning Documentary Filmmaker and Managing Director, Blackwatch Media; Award Winning Filmmaker Producer / Director / Photographer and Executive Producer of BBC Scotland series “*The Logans: Band of Sisters*” (2019-2020) and “*Meet The Logans*” (2020); Senior

Scientist and Group Manager at Fraunhofer IPA, and Director of Smart Cities, Robert Bosch GmbH.

4. Income, infrastructure and facilities

4.1 Income Strategy

Focusing on large interdisciplinary grants has been at the heart of our income strategy and in relation to research income, our R&E Enabling Plan has set out our strategic position to increase large interdisciplinary grant applications with significant consortia nationally and internationally and diversify research funding sources. Through the VP Research Excellence Fund, we have invested GBP3,000,000 in key areas of research strength across UOAs. In addition, several funding support programmes have specifically been designed to increase research income through interdisciplinary collaboration across all academic Schools.

4.2 Funding Support Equality and Diversity

The support mechanisms (*i.e.*, UWS Academy, Doctoral College, Grant Accelerator, REF Accelerator and UWS Crucible) have been specifically designed to target key challenges in relation to equality and diversity and acquiring research funding. All of our HR procedures are reviewed through an Equality Impact Assessment (EIA) process to ensure appropriate support mechanisms are in place where there is any risk of disadvantage to those employees with a specific protected characteristic.

4.3 Operational and Scholarly infrastructure

In 2019, the new GBP110,000,000 UWS Lanarkshire campus was named as the most sustainable and inspiring higher education building in the UK at the Guardian University Awards and in the same year, won Campus of the Future at the annual Green Gown awards ceremony.

4.3.1 Estates, Physical and Specialist Research Infrastructure



Figure 3: Sport science lab at our new Lanarkshire campus.

The Lanarkshire campus investment was specifically made to create a truly dynamic and collaborative environment and includes Scotland’s highest specification environmental chamber to replicate environment extremes for athletes.

UWS is continually developing and investing in technology and equipment to maintain a leading position in areas of research strength. We see ourselves rooted in the local, national and global economies and are delighted to make our staff, facilities and equipment available to partners from business, industry and the public sectors for mutual advantage. All academic Schools maintain a portfolio of facilities and infrastructure supporting research and impact. We have heavily invested in research laboratories on the new Lanarkshire campus, including sports, biotechnology and digital engineering, and more than GBP250,000 in the development of the Beyond 5G Hub as well as GBP180,000 in the development of new spaces for PGR students to address their wellbeing and interdisciplinary interactions. Creating world-class signature capabilities by design has been central to the investment in functional thin films (Institute of Thin Films, Sensors and Imaging - ITFSI). The new GBP12,000,000 laboratories include a unique suite of 9 thin film deposition methods using specialist and tailor-made equipment. More than GBP1,000,000 investment in the UWS Immersive initiative and Advanced Laboratory for Manufacturing and Autonomous Digital Applications (ALMADA) has led to the development of specialist digital facilities. They were pivotal in UWS’ contribution to the Horizon 2020-funded project (RAPID) and the Digital Dairy Value chain bid led by SRUC (*i.e.*, among 17 successful Wave 2 bids to progress to Stage 2 of the Strength in Places Fund).

4.3.2 Technical and support staff

All of our laboratories are deployed for research and impact purposes with the help of technical and support staff who are often recruited from industry with regular training to ensure professional

standards. Across the institution, we have 34 technicians who maintain research infrastructure. In many areas, the need for highly qualified technical and support staff has been met by recruiting or retaining former students who are skilled in the techniques, tools and technologies of the specialist research area.

4.3.3 Shared Infrastructure

UWS participates in high-profile consortia to utilise shared facilities and infrastructure, including Scottish research pools, and we have signed agreements with other HEIs and industry partners to co-locate and share infrastructure for mutual and impact-focused benefits. Our Creative Media Academy has a teaching and research space at Film City Glasgow where UWS co-locate in a leading film and television production hub alongside the BBC and STV at Pacific Quay.

4.4 Research Infrastructure and Impact

Production-ready research infrastructure development has been at the heart of our efforts to deploy for impact. Due to specific requirements in STEM areas, the sector-leading growth of KTPs and a significant increase in commercialisation activities have thus been largely due to our approach to developing production-ready research infrastructure capabilities. In total, more than GBP10,000,000 has been invested in infrastructure to support our world-class research.

4.5 In-kind contributions

Working with our communities daily, we receive countless in-kind contributions but we are proud to have received 48 donations worth GBP521,434, enabling us to boost our research capabilities.

Income, Infrastructure and Facilities: Examples of success

- **Acanthamoeba keratitis (UOA3):** laboratory refurbishment and equipment is supporting UWS academics to commercialise the discovery of the world's first effective preventive treatment against both Acanthamoeba forma that cause serious debilitating infection of the cornea.
- **Toyota Mobility Foundation Challenge (UOA12):** KTP Project Wins USD1,000,000 Mobility Unlimited Challenge for Ultra-lightweight Intelligent Wheelchair with Phoenix Instinct Ltd.
- **Gravitational waves detection (UOA9):** UWS has been involved in supplying mirror suspension technology for the Advanced Laser Interferometer Gravitational-Wave Observatory (aLIGO) interferometer's mirrors. Our NEXUS® Ion Beam Deposition (IBD) System, the key equipment for this development, is now hosted at the University of Strathclyde and shared between the two institutions.
- **Major donation (UOA12):** Alumnus of Bell College (UWS Lanarkshire) donated GBP200,000 to enable the University to buy state-of-the-art equipment.