

Institution: University of Bristol

1. Context and mission

Mission, Culture and Affiliations

The University of Bristol (UoB) is a research-intensive University located in one of UK's most dynamic city-regions. UoB has an international reputation for high-quality scholarship, ranking 49th and 58th in the last two QS World University rankings. In REF2014 UoB was ranked 5th in the UK by research intensity, and our research publications are among the UK top 10 in terms of the proportion of scholarly output in the 10% most highly cited worldwide (Scopus/SciVal, 2015-19). UoB has more than 120 Fellows of national and international academies, such as the Royal Society (48), British Academy (18), Academy of Medical Sciences (22), Academy of Social Sciences (26) and Royal Academy of Engineering (9). UoB has one of the largest concentrations of PhD research training in the UK, leading 28 funded centres and partnerships.

UoB is committed to supporting the production of high-quality research, fundamental and applied, across all disciplines, offering comprehensive support to colleagues at all career stages. Over 91% of our eligible staff were submitted to REF2014 (1137.70 FTE); all are being submitted to REF2021 (1,494.08 FTE). Colleagues benefit from a well-established research infrastructure, highly collegial and academically-led research culture, wide disciplinary spread, strong external connections, and from workload principles that provide generously for research. Together, these encourage, foster and facilitate the production of world-class research with academic and non-academic impact. The substantial funding received from UKRI's Research Councils, industry and charities is testament to UoB's research strength and disciplinary diversity. UoB's affiliations include membership of the Russell Group (RG), Worldwide Universities Network, GW4 Alliance, and Coimbra Group.

Context

UoB is passionate about economic and societal impact, successfully cultivating close relationships with many business and civil society organisations, regionally, nationally and internationally. We provide an excellent and supportive environment for all research.

The Bristol region hosts one of the UK's most significant and successful high-tech regional economies and UoB's business partnerships include major aerospace, fintech and high-tech companies, as well as SMEs and organisations such as the Met Office, GCHQ and NHS. UoB is a founding partner of the world's top University business incubator, SETsquared, and the award-winning Engine Shed (ES). We have supported numerous start-ups and scale-ups, and work closely with Bristol City Council (BCC), the West of England Combined Authority (WECA), and a wide range of civil society organisations, heritage bodies, schools, colleges, and social enterprises. Enhanced external links and collaborations lie at the heart of the development of the new Temple Quarter Enterprise Campus (TQEC) in Bristol City Centre. UoB hosts the National Composites Centre (NCC) and the multi-award-winning Bristol University Press (eight book awards; further five shortlisted since 2017).

Structure and Organization

UoB comprises 26 Schools across six Faculties: Arts; Engineering; Health Sciences; Life Sciences; Science; Social Sciences and Law. Multi- and inter-disciplinary research is spearheaded by the five University Research Institutes (URIs). UoB has grown during this REF period, to 3,480 academic staff by April 2020. In 2019/20 it had 2,263 postgraduate research students, 4,939 postgraduate taught students, and 20,311 undergraduate students.



Responsibility for development of research policy and delivery of strategic research goals rests with the Pro Vice-Chancellor for Research & Enterprise (PVC-R&E), assisted by three Associate PVC-Rs, the University Research Committee (URC) and Research & Enterprise Development (RED), a well-resourced central services division offering support for all aspects of research and impact. Input into research strategy from across UoB is ensured by URC, which includes the PVC-R&E, PVC-Health, Associate PVC-Rs, six Faculty Research Directors (FRDs) and representatives from RED, Finance, and the URIs. URC reports directly to UoB's Executive Board, chaired by the Vice-Chancellor.

In addition to recurrent funding available to RED and the URIs, a substantial (c£2m) discretionary Strategic Research Fund is available to the PVC-R&E and URC for investment in research initiatives. Significant additional, discipline-specific, financial and administrative support for research is provided more locally by Faculties and Schools, as detailed in the UoA submissions. All Faculties and Schools have their own Research Directors and Research Committees, along with dedicated Impact Directors or equivalent.

2. Strategy

UoB intends to build on its position as one of the world's leading research-intensive universities, to be exemplary in its approach to collaboration, and to be a beacon of good practice in innovation, impact and integrity. We have had considerable success delivering the goals outlined in our research strategies (2009-16, 2017-23). Interdisciplinary research has been enhanced; engagement and collaboration with external partners of all kinds (academic, business and community; regional, national and international) has increased substantially; impact, engagement and knowledge exchange (KE) have been embedded in our culture, as has Open Research; significant progress has been made in developing a more diverse and inclusive workforce and eradicating the gender pay gap; support for the career development of colleagues, particularly Early Career Researchers (ECRs) and Postgraduate Researchers (PGRs), has been strengthened; Bristol Doctoral College (BDC) has been developed, which, together with our many Doctoral Training Centres and Partnerships, has enhanced our PGRs' research environment.

Main strategic priorities during REF period

During this REF period, particular strategic emphasis has been placed on:

- fostering high quality multi- and inter-disciplinary research;
- enhancing our external research engagements;
- developing an infrastructure and culture to facilitate impact, engagement and KE;
- ensuring all academic staff and PGRs can realise their research potential and that inclusivity and diversity are embedded in our academic culture.

1) Fostering interdisciplinary research

To encourage, foster and support multi- and inter-disciplinary research, UoB has invested in a range of University-wide, cross-disciplinary URIs. In 2014, we had two; there are now five:

- Cabot Institute (Environment)
- Elizabeth Blackwell Institute for Health Research
- Brigstow Institute (Living well)
- Jean Golding Institute (Data)



• Bristol Digital Futures Institute

The URIs have quickly become recognised flagships for UoB's research, supporting a wide range of cross-disciplinary projects and providing a springboard for larger collaborations and connections between disciplines. Their leaderships and memberships draw on colleagues from across UoB.

The URIs are supplemented by seven funded Specialist Research Institutes (SRIs), which foster the growth of, and give greater external visibility to, UoB's internationally acknowledged, world-leading research in these areas:

- Bristol BioDesign Institute
- Bristol Composites Institute
- Bristol Heart Institute
- Migration Mobilities Bristol
- Bristol Population Health Science Institute
- Bristol Poverty Institute
- Bristol Quantum Information Institute

The disciplinary diversity of UoB and its ability to mobilise high-quality interdisciplinary research activity is exemplified by the composition of the UNCOVER and ReCOVer groups formed to conduct pandemic-related research (see annex).

2) Enhancing external engagement

UoB enjoys close relationships with many business, governmental and civil society organisations. We work closely with WECA, supported the development of the Local Industrial Strategy, and codeveloped the 2017 South West England and South East Wales Science and Innovation Audit for BEIS. We are now working with the Western Gateway on its plans to create an 'economic powerhouse' between the West and Wales.

In the business context, our focus has been on digital innovation, advanced manufacturing, aerospace, quantum technologies and life sciences. UoB hosts the National Composites Centre (turnover £30m pa; capital assets over £100m) and has a growing number of major strategic business partners (including Airbus, Rolls Royce, BT, LV=GI, Thales, Toshiba). TQEC's development in the city's enterprise zone is a catalyst for strengthening existing partnerships and developing new ones. Many business partners are major investors in our research. The Bristol region hosts one of the UK's most successful high-tech regional economies and a globally significant digital technology cluster. In addition to providing these industries with new talent and innovation support, UoB has played a key role in Bristol's rapidly developing innovation ecosystem. UoB is 5th for investment in UK spinouts and 1st outside London and Oxbridge; 50 new spinout companies were formed during this REF period, and our spinouts currently employ 600 people.

These services are supported through various enterprise spaces, such as SETsquared, ES and Unit DX. UoB was a founding partner of SETsquared, an innovation and enterprise collaboration with Bath, Southampton and Surrey, with Exeter joining during this REF period. In 2019, it was ranked Global no.1 University Business Incubator by UBI Global for the third consecutive time. SETsquared Bristol currently supports over 80 technology companies employing over 1000 people. ES, founded by UoB in collaboration with BCC and the Local Enterprise Partnership, provides space in which businesses, entrepreneurs, academics, social innovators and community



organisations can collaborate. By 2019 ES had worked with over 60 partners. Unit DX is a deeptech incubator created by the award-winning UoB start-up Ziylo (acquired in 2018 for \$800m by a global heathcare company).

UoB is committed to contributing to the economic regeneration of the less privileged parts of the city and to working with Bristol's vibrant civil society sector. UoB has senior representatives on many civic fora and has close links with BCC and a large number of community, heritage and creative arts organisations, schools, and small businesses, actively encouraging co-produced research projects. It has established an Inclusive Economy Initiative and is involved in more than 20 co-produced projects with BCC on the local economy, environment, digital connectivity and health. A City Fellows project is currently providing six NGO and Council staff with the opportunity to co-produce research.

Environmental sustainability is a key pillar of our vision. In 2015, we helped Bristol become the first UK city to secure European Green Capital status and we are a founding member of Bristol Green Capital Partnership. UoB and UWE Bristol were the first UK HEIs to commit to the Sustainable Development Goals Accord launched in 2017; we were the first UK University to declare a climate emergency. We are working with BCC to embed environmental sustainability in the One City Plan, the overarching strategy document for the City. UoB is also a founding member of Bristol Health Partners and is now one of only eight Academic Health Science Centres (AHSCs) in the UK. The spirit of partnership extends to many other Universities and organisations such as GCHQ, the Alan Turing Institute, the Met Office, the Heilbronn Institute, and the NHS. We also have an NIHR Biomedical Research Centre and are the only University with membership of all three NIHR Schools (Primary Care Research, Public Health Research, and Social Care Research).

As well as many external links developed by individual Schools, URIs and SRIs, and other research groups, UoB has a growing number of international partnerships. We are also a member of the GW4 Alliance with Bath, Cardiff and Exeter. GW4 has been instrumental in facilitating many collaborative Centres for Doctoral Training.

External engagement will lie at the heart of UoB's new campus. TQEC, scheduled to open in 2023, aims to be at the forefront of digital and business education and research innovation, and has already secured substantial funding, engaging a wide range of business and community partners:

- Bristol Digital Futures Institute is supported by a £100m award: £29m from the Research Partnership Investment Fund supplemented by £71m from 27 business partners including BT, Dyson, BBC, Airbus and Aardman.
- The Quantum Technologies Innovation Centre (QTIC+) is supported by £35m from WECA for the development and commercialisation of quantum and emergent technologies.
- MyWorld recently received a £46m UKRI Strength in Places award and, building on the city-region's strengths in media production and technology, is connecting regional and national partners with global tech giants such as Netflix, Google and Microsoft, and pioneering new digital formats and technologies.

3) Impact, engagement and KE infrastructure

Through RED, UoB has developed a culture and infrastructure that facilitates and supports coproduced research and external impact, engagement and KE.



The RED Partnerships team provides guidance and practical advice on partnership development. In 2018, a Partnerships and Alliance portal was launched, providing sector-leading best practice support for engagement, collaboration and partnering. Other teams provide professional expertise in stakeholder mapping, market analysis, community and civic engagement. PolicyBristol advises colleagues on working with policy-makers, increasing the external reach of their research at the local, national and international levels. RED's KE team manages the devolved funding for impact from the Research Councils and Wellcome Trust, and to date has secured more than £36m in collaborative funding. The team supports translational funding bids and works closely with colleagues on the Global Challenges Research Fund (GCRF) and Industrial Strategy Challenge Fund opportunities. Research commercialization is supported by another dedicated team, advising on the creation of IP, licensing, and spinouts.

UoB has one of the longest established public engagement teams in the UK, working in the last five years with partners from 23 countries as well as organisations such as We the Curious, SS Great Britain, and the Natural History Consortium. Along with UWE Bristol, we co-host the National Co-ordinating Centre for Public Engagement.

UoB's International Strategic Fund helps researchers develop sustainable international research partnerships. Since 2016, we have secured over £32m from the GCRF, and our GCRF strategy was one of 10 (from 107) commended by Research England as a benchmark for best practice.

4) Realising staff potential and embedding diversity and inclusion See 'People' section.

Research Ethics

UoB promotes the highest standards of ethical, scholarly and professional integrity, fully endorsing the Commitments of the Concordat to Support Research Integrity. A framework of policies, regulations and guidance has been developed, including an Ethics of Research Policy and Procedure and a Research Governance and Integrity Policy. The six Faculty Ethics Committees report to a University-wide Ethics of Research Committee chaired by a PVC. Training programmes promote awareness and embed ethical principles across our research community.

UoB played a leading role in the UK Reproducibility Network and in March 2020 launched a Centre for Research Quality and Improvement, supported by philanthropic donation. In 2019 a Research Improvement Group was established, tasked with enhancing research integrity across all Faculties.

As a signatory to the Declaration on Research Assessment (DORA) we have adopted a responsible approach to the use of metrics in research management and assessment, developing a set of institutional principles that underpin the use of metrics and indicators in our internal planning processes and revised promotions framework.

Open Research

We have established an institutional Policy on Open Access to Research Publications to mandate open access publishing. University policies for access to block grants from UKRI and the Charity Open Access Fund have favoured ECRs and PGRs.



The Research Data Management and Open Data Policy provides guidance on responsibilities associated with managing and preserving current or future research data and software. A publicly accessible Research Data Repository for datasets, and a sector-leading Research Data Service, working with the Jean Golding URI, helps researchers plan, manage and share research data. We have committed to the Concordat on Open Research Data principles, promoting and implementing these through the above groups/committees/services – for example, by including Open Research as a criterion in revised promotions procedures.

Future Plans

UoB will continue to support high-quality research, fundamental and applied, across all disciplines. The promotion of interdisciplinarity and development of the URIs and SRIs will remain a high priority, as will the deepening of relationships with external partners. We intend to grow and diversify our research income portfolio and enhance our responsiveness to research users' needs.

Despite the financial effects of the pandemic, our plans for further investments in academic staff, physical and research infrastructure remain in place, though some timelines are likely to be extended. Investment in TQEC has already begun, with an initial planned investment of c£500m. TQEC is already strengthening our relationships with businesses, government and local organisations, many of which will be co-located on the campus. All will have access to our research expertise and be able to work with us to tackle the issues concerning them.

We are committed to investing: £12m on a National Soil-Foundation-Structure Interaction Laboratory; £14m on a new Dental School; and further investments in our Humanities Centre. Our Advanced Computing Research Centre Strategy commits £2m per annum for the next 10 years to meet the increasing demands of AI, big data and simulation resources across UoB. An £8m investment in a cardiac research facility is also planned alongside a future £100m investment in a new University library and special collections exhibition space on the main campus.

An annual Strategic Research Fund (about £2m and growing) has been established to support strategic research initiatives, capacity-build in areas of emerging research excellence, respond to global challenges, and develop relationships with funders and policy-makers in the public, private and third sectors.

3. People

We recruit and retain scholars of the highest quality by providing an intellectually open, vibrant and collegiate research environment, ensuring all academic staff realise their full potential regardless of career-stage, FTE, and balance of research and teaching responsibilities. Staff surveys are conducted annually to canvass views and ensure that decision-making is well-informed. In 2019, UoB was one of only ten UK universities to retain its HR Excellence in Research Award.

Study Leave, SSRs and Workloads

To ensure working conditions conducive to high-quality research are preserved, we strive to maintain good student-staff ratios (SSRs) benchmarked against RG medians. Common principles on the equitable allocation of workloads have been developed, under which 40% of the time of Teaching & Research colleagues is normally dedicated to research. Provision for research/study leave is devolved to Schools.



During this REF period the promotions criteria and procedures have been comprehensively revised to recognise the full range of research contributions and take proper account of external engagement, impact-oriented research and work crossing disciplinary boundaries. They also seek to eliminate gender and ethnic disadvantage.

ECRs

We ensure that ECRs are well-mentored and advised on career development. Much of this work is undertaken at School level, augmented by wider networks and supports at Faculty and University levels. UoB's CREATE scheme (Cultivating REsearch And Teaching Excellence) offers a wide range of professional development programmes, enabling staff to enhance their teaching and research practices and gain national recognition with Advance HE, aligned to the UK Professional Standards Framework. CREATE programmes are available to all academics, including PGRs who teach. A range of ECR networks have been established to develop peer-mentoring.

Post-Doctoral Fellows

In 2016, UoB created Vice-Chancellor's Fellowships for post-doctoral, early- and mid-career researchers, offering salaries, mentoring and a bespoke programme of cohort-focussed development activity. VC Fellows have: secured major grants (including an EPSRC New Investigator Award); engaged local communities (securing access to a share of £33m to support social enterprises tackling inequality); and delivered commercial collaborations (Community Energy England Collaboration Award). Eight Fellows have secured permanent Lectureships, two have been awarded prestigious Henry Dale Fellowships, and one a UKRI Future Leaders Fellowship.

PGRs

UoB has one of the UK's largest concentrations of funding and support for PhD training, leading on 28 funded centres and partnerships. We were, for example, awarded nine EPSRC CDTs (highest number across the UK), and the Social Science SWDTP (partners: Bath, Exeter, Plymouth, UWE) has the joint largest allocation of funded PhD places.

Support for PGRs is led by an Associate PVC-R (PGR) and by BDC. In their 2016 review of the University, the Quality Assurance Agency for Higher Education highlighted, as an example of good practice, BDC's personal and professional development programme of workshops, seminars and online resources (open to all PGRs). BDC led the creation of a PGR hub with training and collaborative spaces, runs an annual Research without Borders Festival of Postgraduate Research and an annual Doctoral Teacher Symposium. It operates a PGR Ventures Fund to encourage innovation, creativity and leadership; it also spearheads the development of international and industrial PhDs, operating a new Industrial PhD Placement scheme funded by EPSRC's National Productivity Investment Fund.

Research-focussed Staff

UoB is an active member of Researchers14, regularly serving on the national awarding panel and acting as an external reviewing body, and was one of the first universities to sign the new Concordat to Support the Career Development of Researchers (working with other researchintensive universities on the Concordat review).

In 2018 Bristol Clear was launched to offer career guidance for researchers, providing a range of tailored resources including a mentoring scheme and information about careers and opportunities



at UoB and elsewhere. We have also invested in research-focused technical staff and are a lead signatory to the National Technician Commitment. A Research Staff Working Party (RSWP) reports to the University HR Committee and URC, and a Research Staff Reps Committee represents research staff on a range of University bodies including RSWP.

Equality, Diversity and Inclusion (EDI)

Our University Strategy includes firm commitments to EDI. Our goals are greater staff and student engagement, enhanced staff and student experience, and culture change. In 2019 an EDI Delivery Plan was launched (part of a University-wide People Plan) to build a more diverse and inclusive University community. Governance has been overhauled. An EDI Oversight Group has been established, chaired by a member of the Board of Trustees, and different members of the executive team given responsibility for different EDI areas, with the DVC/Provost acting as overall EDI champion. Each Faculty has established an EDI Committee and most Schools have active EDI Groups. In 2018 UoB helped shape Bristol's Equality Charter, a city-wide initiative co-designed by private, public and voluntary sector organisations. We became a member of the Race Equality Charter in 2019 and are also members of the Employers' Initiative on Domestic Abuse and the Business Disability Forum. We continue to hold an Athena SWAN Bronze Award and, at School level, hold nine Bronze and six Silver awards. We expect all Schools to have achieved at least a Bronze award by 2023. The DVC and two of five PVCs are female, as are three of the five URI Directors; of the six Faculties two have female Deans and four have female FRDs.

Staff Networks provide peer support across UoB, each sponsored by Executive Team members who meet regularly with staff. These Networks include Parents and Carers, BAME, Disabled, Staff Who Stammer, LGBT+, and Childless. Our TheirStories programme, which uses personal storytelling from staff as a vehicle for building workplace inclusion, improving employee engagement, challenging bias and developing a culture of belonging, won the national Universities HR award for initiatives that improved EDI. EDI training forms part of essential training for all staff.

We are developing an approach to staff development that helps colleagues understand how their own behaviours and attitudes influence our EDI culture. A newly-developed programme encompassing unconscious bias, microaggressions and active bystander techniques has been introduced as part of our Stand Up, Speak Out initiative. A programme on anti-racism has been launched and we have expanded our Acceptable Behaviour Supporters service, providing informal advice to staff experiencing unacceptable behaviour, bullying or harassment. There is an online Report/Support tool to track anonymous complaints.

In early 2019 we published an institutional statement on race equality and publicly committed to intensifying our efforts to address racism. We have since established an Anti-Racism Steering Group, co-chaired by the DVC/Provost and Head of Research Development (UK), to develop strategies to address individual, cultural and structural racism. As a member of Bristol's Race Equality Strategic Leaders Group, UoB works with public sector organisations in a city-wide approach to tackle race equality issues. We ensure that significant changes and improvements are delivered through partnership initiatives, sharing learning, resources and good practice. To reduce inequalities in accessing PGR training, we have instituted a £200k pilot, Opportunity Bristol, targeted at black and black-heritage PGRs.

UoB is a member of the Stonewall Diversity Champions programme. Our Stonewall Steering Group, comprising members of the senior team and the LGBT+ staff and student networks,



identifies actions to advance LGBT+ equality. We annually sponsor and participate in Bristol Pride and were named Best Employer in the 2016 Bristol Pride Awards. Rainbow lanyards are now commonplace across our campus. In 2019, we launched an LGBT+ Supporters programme and have reviewed all HR policies to ensure gender neutral terminology is used and same-sex couples included. A four-year programme to refurbish facilities across the campus, including increasing the number of gender-neutral toilets, is underway.

Disability Access Statements for our buildings have been developed, and Inclusive Design Principles introduced by Campus/Estates Division, who consult with our Disabled Staff Network from the earliest stages of design. We also provide web-based guidance on reasonable adjustments and briefing sessions on supporting disabled staff for HR Operations staff and managers. The government's Access to Work and the Mental Health Wellbeing Service have been promoted. An International Adviser role has been established within HR to offer online relocation support and ensure new colleagues from abroad are helped to settle in the UK.

In response to the pandemic, we have created an EDI Resources Hub for marginalised communities disproportionately affected because of existing inequalities. We have worked hard to provide reasonable adjustments to staff working at home, including the provision of specialist equipment such as desks or chairs (see annex).

Gender Pay Gap

UoB's 2016 Strategy targeted eliminating the gender pay gap (to within +/-3%) in the professoriate by 2023. By November 2019, we had achieved a 2-percentage-point reduction in the professorial gender pay gap to 5.5% and had narrowly surpassed the 2019/20 target of 28% female professors. In January 2020, the University and local UCU branch signed a collective agreement, the first of its kind in UK Higher Education, to eliminate the gender pay gap among academic staff over the next three years. A detailed analysis of gender employment and pay at the University was undertaken in 2018 and an inaugural Gender Pay Gap Report published, resulting in actions focused on three areas: flexible working, career development, and promotion.

An enhanced package of family-friendly measures for carers has been developed and our Women Returners' Scheme relaunched as a Returning Carers' Scheme, offering more inclusive support to staff seeking to re-establish their research following extended leave due to caring responsibilities. Childcare is now recognised as an allowable expense that can be reclaimed to facilitate conference/training attendance, a Women's Mentoring Network has been established and a Female Leadership Initiative launched. The work to eliminate the gender pay gap is being managed by a change initiative (the Academic Career Development Programme) running between 2020-22. This programme is gathering data on part-time working patterns, monitoring the gender pay gap, and identifying actions with timescales. Work has also been undertaken to tackle possible cultural biases in shortlisting by recruitment and promotion panels.

All job adverts across the University now include the 'Happy to talk flexible working' logo from the work-life balance charity, Working Families. There will be an equal pay audit in 2020/21.

Ethnicity Pay Gap

UoB is committed to addressing the ethnicity pay gap and improving the representation of BAME staff. A BAME Staff Advisory Group is helping to develop a more equal, diverse and inclusive environment, supplemented by RACE Matters, a virtual network aimed at improving the working



experience of BAME staff. We now report on the ethnicity pay gap using the methodology developed for gender reporting. The gap currently stands at 5.7% median and 8.6% mean in favour of staff who disclose as white.

Equity and Staff Wellbeing

UoB has taken steps to support staff wellbeing, signing the Time to Change Pledge to end the mental health stigma, setting up drop-in clinics run by the Staff Counselling Service, organising a range of sessions on managing mental health at work, and promoting Wellness Action Plans to facilitate conversations about managing mental health at work.

Reducing Casualisation

The University and Bristol UCU are united in their commitment to reducing casualisation, avoiding the unnecessary employment of staff on fixed-term contracts, and providing secure terms and conditions of employment and fair and equitable treatment to part-time colleagues. A Special Interest Group has been formed, populated by UCU representatives and senior University managers, to agree actions, set appropriate targets, and introduce greater security to staff on existing casual contracts. A University-wide Action Plan is being developed and guidance and resources provided to Faculties and Schools.

EDI and REF

EDI issues were taken into account at all stages of our REF processes. Our Code of Practice promotes inclusivity and recognises the diversity of our staff, as well as ensuring compliance with equality and employment legislation. The Code applies to all staff, including contract research staff and those on fixed-term or part-time contracts.

All individuals involved in decision-making received mandatory EDI training. Outputs proposed by staff were subjected to a rigorous review process based on the REF criteria. When selecting between and allocating outputs of equal starred quality, account was taken of the spread of outputs across individual members of staff and their protected characteristics. A REF2021 Staff Circumstances Panel was convened and eligible staff invited to submit an online form disclosing equality-related circumstances. To mitigate the risks of bias, all cases were considered anonymously, with decisions ratified by URC.

Indicators

1) Recruitment by age profile

736 staff (47% of 1571 headcount) within our REF submission joined (or re-joined) UoB between 01/08/2013 and 31/07/2020.

Age	Number of staff
20-29	25
30-39	398
40-49	201
50-59	86
60-69	23
70-79	3
Total	736



2) Professors and senior staff by protected characteristics (where data held)

Gender	Number of staff
Female	147
Male	387
Total	534

Disability	Number of staff
Disability	30
No Disability	504
Total	534

Ethnicity	Number of staff
Asian	24
Black	1
Mixed	6
Not Known/Blank	9
Other	6
Prefer not to say	22
White	466
Total	534

3) Average (mean and median) institutional gender pay gap for academic staff in 2019 The institutional gender pay gap for all academics at 31/03/19 was 8.4% median and 12.2% mean in favour of staff who disclose as male.

4. Income, infrastructure and facilities

Grant Income

UoB had the 4th highest success rate (36% award rate by number) in the RG for competitive research and innovation funding awards from UKRI in 2019/20 [source: UKRI]. Total income from research grants and contracts in 2018/19 was £173.5m, placing us 9th in the UK for income from research grants and contracts per academic FTE [HESA]; 47% of our research income is collaborative [HEBCIS]. Industry income has grown sharply: UoB had the 4th highest level of absolute growth in the RG between 17/18 and 18/19 [HESA].

Central Support for Research: Research & Enterprise Development (RED)

Comprehensive support for research is provided at University, Faculty and School levels. Centrally, support is provided by RED, organised in teams to which all Faculties have access: research development; research policy; research governance; contracts; partnerships and programmes. RED provides support for all aspects of research: horizon-scanning; identifying funding opportunities; application preparation; engagement, KE and impact; external partnership development; research and consultancy contracts; compliance; commercialisation. Many of RED's teams have Faculty-aligned roles to provide bespoke support for research development, impact development, innovation and commercialisation.

Financial Support

Financial support is also provided at all levels. Central support comes from the PVC-R&E and URC, with the Strategic Research Fund pump-priming institutional strategic research initiatives. A further fund is available to URC for distribution to support key Faculty and School initiatives. An International Strategic Fund supports the establishment and development of sustainable international research partnerships. These central funding sources are supplemented by research funds administered at Faculty and School levels.

Investments in Infrastructure and Facilities

Significant investments in physical research infrastructure have been made as part of the University's 10-year (2010-20) £525m capital investment programme. Research-related



investments during this REF period include a new Life Sciences building (£63.8m), Engineering extension (£17.3m), pre-clinical biomedical research centre (£5m) and refurbishments in Mathematics (£33.0m), Law (£7.4m), Management (£3.5m), Accounting and Finance (£3.4m), Humanities Centre (£14.8m) and RED (£3.5m). Investments of £62.3m have already been made in TQEC, with further investments of £400m+ planned. Investment has begun in Digital Engineering Technology and Innovation (£10m), and in 2018 NCC was awarded £36.7m for a Digital Capability Acquisition programme.

Investment is underway in the University's physical and digital research environment, including a rolling investment in high-quality academic infrastructure and a resilient, flexible, scalable and secure digital infrastructure, with £9.9m invested in high-powered computing during this REF period. UoB has a number of high-spec, state-of-the-art facilities, technically supported and available for use by external researchers and industry. Work proceeds to improve the connectivity, resilience and security of Bristol's core IT systems as part of the Infrastructure Modernisation Programme. A £1m Hewlett Packard Enterprise Catalyst award aligns with the UoB-led GW4 Isambard project, awarded £3m in 2016 and £4.1m by EPSRC in 2020 for a new ARM-based Tier 2 high-performance computing service to UK-based scientists.

Equipment Sharing

UoB ensures efficient equipment-sharing by organising resources into visible, accessible, managed and technically supported clusters. Examples are our Bio-imaging suite, Animal Services, Proteomics, Genomics facilities and Mechanical and Electrical Workshops, and that Chemistry hosts all NMR instruments, including those MRC-funded. This approach extends to GW4 where we work collaboratively through the Technical Infrastructure and Knowledge working group, and to other fields such as SafePod, enabling researchers at UoB and regionally to access confidential data in health and social sciences.