REF2021

Institution: 10007140 Birmingham City University (BCU)

1. Context and mission

BCU has a 178-year heritage of creative, professional, and practice-based education, founded in the Birmingham Schools of Art (1843), Music (1886) and Jewellery (1890). Now, as the self-styled University *for* Birmingham, we serve as regional anchor and civic university for the benefit of students, citizens, businesses, public bodies and third sectors alike.

Our core mission to transform students' lives is underwritten by a commitment to foster economic growth, social innovation and cultural vitality in our region, our nation, and far beyond. Through blue-sky and applied research, we create and disseminate new knowledge, developing forward-thinking graduates and catalysing innovation. Our new trans-disciplinary STEAM project harnesses our arts heritage with STEM subjects to fuel innovation in research, teaching and partnerships. Following the launch of STEAMhouse Phase 2 later in 2021, we are set to establish a partner STEAMhouse in India.

Our academic portfolio spans nearly half the REF2021 Units of Assessment, with fourteen UoAs returned and two under development. They are spread across all four of our Faculties:

- Arts, Design and Media (ADM), incorporating the Royal Birmingham Conservatoire: UoAs 27, 32, 33, 34
- Business, Law and Social Sciences (BLSS): UoAs 4,17, 18, 20, 21
- Computing, Engineering, and the Built Environment (CEBE): UoAs 11, 12, 13
- Health, Education and Life Sciences (HELS): UoAs 3, 23 (5 and 24 under development)

Each Faculty is led by a Pro-Vice Chancellor/Executive Dean (PVCExD) and comprises subject-based Schools/Departments, complemented by research centres and clusters. At the census date our academic workforce comprised 1,458FPE/1,187FTE (91.6% teaching and research, 3.5% research-only, 4.9% teaching-only). Additional visiting lecturers provide specialist subject tuition.

Our staff population includes career academics and those with other professional backgrounds; job descriptions reference research, enterprise, scholarship and teaching responsibilities. We do not expect all staff to conduct REF-returnable research; many engage instead in nationally recognised Knowledge Transfer/Knowledge Exchange (KT/KE) and innovation. Our REF2021 Code of Practice (CoP) defines Category-A staff with significant responsibility for research (SIGRES), linked to explicit workload tariffs and totalling c.25% of all academic staff (314FPE/295.6FTE) on 31/7/2020.

Research Accountability

The Deputy Vice Chancellor for Research, Innovation and Enterprise (DVCRIE) is responsible to the Vice-Chancellor, supported by a PVCExD with oversight of the REF2021 submission. In each Faculty, an Associate Dean for Research (ADR) reports to the PVCExD; individual UoAs house research clusters, as described in their REF5bs. Clusters are typically led by research professors, and support research careers, doctoral and postdoctoral education, and research partnerships.

Research Governance

Our research infrastructure brings together academics and professional services to increase research capacity and excellence, foster cross-disciplinary collaboration, ensure research underpins our teaching, and translate research into KT, innovation and enterprise activities. The infrastructure is designed to exceed the expectations of research funders, UUK and UKRI concordats, and the QAA quality code for doctoral training. Figure 1 shows the relationship

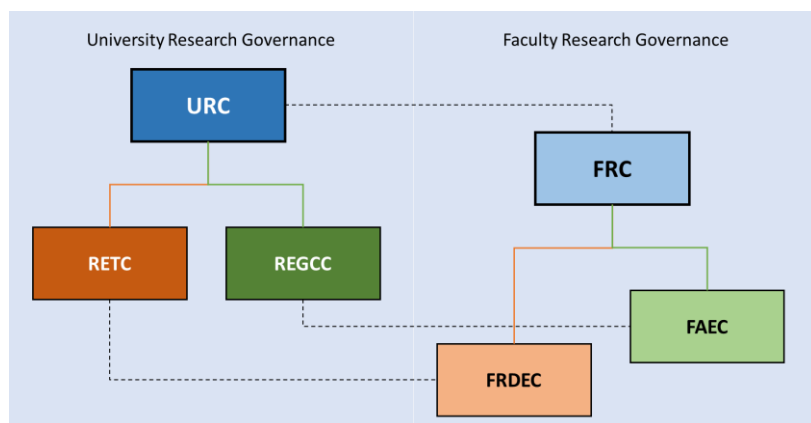between University and Faculty research governance:

Figure 1: Research Governance Committee Structure

Research Committee (URC) is chaired by the DVCRIE and reports to the University's Academic Board. URC determines institutional research strategy and policy. Its membership includes the four Faculty ADRs, key professional services directors, and research community representatives.

URC has two sub-committees: Research Environment and Training Committee (RETC), and Research Ethics, Governance and Compliance Committee (REGCC).

RETC maintains oversight of doctoral education and researcher development. Membership includes the Director of Research Excellence (Chair), the four ADRs, senior staff of the DRC, Faculty Research Degree co-ordinators, the Course Director for the PGCert Research Practice, with Library and Learning Resources representation. REGCC is responsible for policies and processes in research integrity and ethics, including data management and researcher training. Faculty committees for Research (FRC), Ethics (FAEC) and Research/Doctoral Education (FRDEC), shown in Figure 1, consider issues within their local populations.

We believe our arrangements have improved support for staff and PGRs, increasing the quality, volume and subject coverage of research submitted to REF2021.

2. Strategy

Internationally recognised research sits at the heart of our academic portfolio and yields impact via innovation and enterprise initiatives. Following RAE2008, we invested to protect historic excellence in Panel D subjects whilst accelerating growth in high-quality research for Panels A, B and C. Our REF2014 submission and outcomes improved significantly:

	UoAs	FTE	FPE	Doctoral Awards	Research Income	Overall GPA
RAE-2008	7	87.0	103	78	£11.32 M	2.31
REF-2014	11	122.0	151	85	£13.24 M	2.64

Table 1: Comparison of RAE2008 and REF2014 Submissions

Furthermore, research power increased by 60%, while five UoAs averaged more than 3.2 for Impact.

<u>Strategy 2014-2021</u>

Building on REF2014, we have invested significantly in academic staffing, doctoral student funding, professional services support, and research facilities. Our five-year REF2021 strategy was developed in 2015-16 with input from Professor Sir Graeme Davies (previously VC of Liverpool, Glasgow and London Universities and HEFCE CEO). We aimed to broaden disciplinary coverage to 13 or 14 UoAs (adding Psychology, Engineering and Sociology) and increase submitted FTE to 250+, thereby boosting research capacity and with it research-informed teaching and KT/enterprise activities.

<u>Impact of the Stern review</u>

The requirement to submit all Category-A SIGRES staff to REF2021 for assessment had little impact on our strategy. Our CoP articulates the academic workload/resource allocations that define SIGRES, grounded in established University policies.

<u>Strategic Growth of Research Capacity</u>

Outside the National Bargaining Framework, we have additional freedom to define contractual and operational relationships with staff. In 2015/16 academic job descriptions were reviewed and graded. In 2016/17 we implemented an Academic Workload Planning Framework so that: (i) academic staff assume a portfolio of activities suited to their development and career aspirations, and (ii) research and enterprise activity, outputs and outcomes can be resourced effectively.

All staff are encouraged to pursue scholarship, independent research, innovation, KE and enterprise activities, according to career stage. To HESA we therefore return most as 'teaching and research', with minimal teaching-only contracts. A proportion (c.25%) receive a research allowance to create outputs likely to be internationally recognised for originality, significance and rigour, under a common framework developed for URC by our Faculties; allowances are dependent on band, seniority and performance. Those c.25% of staff are submitted to REF2021 and reported to HESA.

Table 2 compares the scale of our REF2021 and REF2014 submissions, showing marked growth in all areas:

	UoAs	FTE	FPE	Doctoral Awards	Research Income
REF-2014	11	122.0	151	85	£13.24 M
REF-2021	14	291.0	311	263	£16.42 M

Table 2: Comparison of submissions to REF2014 and REF2021

<u>Research Support Infrastructure Improvements</u>

Investment in our research environment and professional services infrastructure has been key to our REF2021 strategy. We have diversified income sources, identified new innovation projects, won and invested more funding for doctoral students, and created a new cross-institution doctoral training programme.

In 2015 we established a new Research Innovation, Enterprise & Employability (RIEE) service department, home to our Research Office of 48 staff. There are three specialist teams, each led by an experienced Director. Details of their activities are given in Section 4 but in outline they are:

- Research and Innovation Gateway (RIG) team: supporting academic staff with pre- and post-award functions for funded research and innovation; ensuring compliance with UKRI Terms and Conditions.

- Research Excellence (RX) team: coordinating support for ethical review of research (staff and PGR); impact; research integrity; open access; research information systems; web/social media presence.

- Doctoral Research College (DRC) team: managing the PGR lifecycle from application to award; providing registry functions for PGRs; coordinating the PGCert Research Practice; overseeing training and development for PGRs, supervisors, examiners, and viva chairs.

RIG has been pivotal in increasing the volume, quality and success of funding applications, its compliance function significantly boosted by recent investment. Currently we have 217 externally funded projects. Of those, 168 are research projects with a total value of £27.8m, yielding £18.0m research income to BCU but predominantly in the next REF cycle.

The DRC has overseen growth in PGR numbers and accelerated completions. In July 2014 we had 300 PGRs; in July 2020, more than 500. Completions have, as Table 2 shows, tripled during the REF2021 cycle to 263 (excluding 5 PhDs by Published Works). We have invested more than £5m in UKRI-level bursaries for more than 100 PGRs, including matching of bursaries from the AHRC M3C/M4C Doctoral Training Partnership. Our PGCert Research Practice, focusing on core skills, is now mandatory for new PGR students.

Strengthened Open Access (OA) Support

The RX team supports academic staff and PGRs with all aspects of OA. Our new research repository was implemented in December 2016 based on ePrints, supported by a specialist Open Access Officer and registered with openDOAR. Our 'Open by Default' policy for research outputs encompasses all output types, exceeding the OA requirements of UKRI and REF2021 and boosting access to new knowledge and its impact. The RX team supports our research information systems; currently we are finalising implementation of a CRIS system using Pure from Elsevier.

Strengthened Impact Support

Three permanent appointments as Impact Officers are based in RX and work with academics and professional services staff to accelerate and articulate the multiple impacts of our research expertise, and to connect with external organisations.

Strengthened Research Integrity Support

Two permanent appointments as Research Integrity Officers ensure our research environment exceeds the expectations of the UUK Concordats of Research Integrity and the growing expectations of funders and public accountability. Through REGCC we undertook a comprehensive review of our Good Research Practice guidelines, creating new policies on research misconduct (staff and PGRs) and new guidance on the storage and disposal of research data. The appointment of two Research Ethics Officers underpins the review of research ethics applications by staff and PGRs by Faculty Academic Ethics Committees (FAECs). Working with FAEC chairs, those officers support our electronic research ethics application system (Infonetica's Ethics Review Manager platform).

Strategy After REF2021

A cornerstone of our future research strategy is investment in the physical and intellectual infrastructure of STEAMhouse 2 (c.£70m, including substantial LEP funding); its projects in research, innovation and doctoral education will increasingly have a cross-disciplinary and international flavour, with STEAMhouse India a significant partner.

We will develop new research clusters in Biosciences (UoA5) and Sports and Exercise Science (UoA24, subject of a REF2021 small unit exemption), the latter enriched by the Commonwealth Games 2022 legacy project. Diversifying the reach of research into our academic and student populations entail measured growth in the number of staff with SIGRES. However, quality and impact among existing and emerging centres will be paramount, as reflected in individual UoA and Faculty plans for the next research cycle.

Younger staff feature heavily in recent recruitment: 30% of Category-A (28% SIGRES) staff are 35 or younger. Because 20% of our Category-A staff are 55 or older, succession planning in key research areas has begun. Future recruitment will focus on achieving a balance of teaching, research and innovation ambitions, taking account of diversity imperatives.

Our PGR community will grow to 800-1,000 by 2027, with action to remove barriers to Level 8 study for hitherto marginalized groups. Building on the success of the AHRC Midlands 3/4 Cities DTP and participation in University Alliance DTPs, we will increase pooled training, networking and sharing of best practice for PGRs. We will secure new funding for full-time study via collaboration and investment from QR and institutional funds. Part-time PGR study – currently 54% of our PGR population – will grow. We will also offer more HESA D00 professional doctorates by part-time/distance learning for those in the professions.

We will continue to invest in our research environment to support the development of our staff and PGR students, and ensure we meet the increasing expectations of Concordats, funders and the QAA. Investment in research information systems will be leveraged to enable our research decision-making to be robustly evidenced and benchmarked.

Inevitably, some KPIs will be determined by our performance in REF2021. Fundamental, however, will be the work of seizing the innovation and enterprise opportunities created by our research. The interdependencies of research, innovation and impact call for a holistic approach based on realising the potential of all our staff and students, whatever their specific responsibilities.

3. People

As noted in Section 1, some of our staff engage in curiosity-driven research while others focus on demand-led and partnership objectives. Both models meet the Frascati definition of research and may deliver outcomes internationally recognised for originality, significance and rigour. Other staff engage in the transfer of new knowledge, pursuing KT/KE and other innovation activities with the private, public and third sectors. Such activities more commonly lead to national rather than international recognition. Our academic staff follow one of three parallel career development pathways, as shown in Table 3:

Level	Teaching Focused	Teaching and Research	Research Focused
1	Assistant Lecturer	Assistant Lecturer	Research Assistant
2	Teaching Fellow	Lecturer	Research Fellow
3	Senior Teaching Fellow	Senior Lecturer	Senior Research Fellow
4	Associate Professor	Associate Professor	Reader
5	Professor	Professor	Professor

Table 3: Academic Pathways and Levels

Staff can switch pathways as they progress, subject to strategic resourcing. If the relevant criteria are met, professorial recognition is available to all staff via the conferment process, regardless of pathway.

As noted in Section 1, our CoP defines which staff have SIGRES and are returned to REF2021. Our definition of SIGRES is linked to individual workload allocations of specific research allowance (RA) tariffs from Band 1 to Band 3 researcher. Staff with SIGRES have objectives to deliver research of REF-able quality, as detailed in our *Guidance on Applying Research Allowance in WAMS* document. Band 1 researchers demonstrating excellent performance through our annual individual performance review (IPR) may progress to Band 2 and ultimately to Band 3, which is normally associated with professorial status.

Development of Researcher Capability

The staff profile described in Section 1 means colleagues entering from non-HE professions may require particular support in developing research capability – typically, in undertaking a doctorate. Following completion, research independence may be established through allocation of post-doctoral workload tariffs. After becoming independent researchers, staff can progress to early-career researcher status; a Band 1 allowance in their workload indicates they have SIGRES.

Our staff development framework provides opportunities for all staff to enhance their research skills. Workshops and community events focus on writing for publication, developing grant applications, applying for fellowships, project leadership, dissemination, and impact. Training is small-group based and designed to be interactive and challenging, so supporting researchers to network and create communities of research practice. The wider programme includes mentoring, peer writing support, small grants schemes, and school and centre-focused research seminar series, often with cross-disciplinary contributions. Sessions are open to all staff across the University. On average, more than 200 academic staff engage with the programme every year.

Academic Conferment Process

The University's Academic Board confers the titles of Professor, Associate Professor and Reader, following a process accessible to all academic staff, whether full- or part-time. Titles are awarded in recognition of individual distinction, in accordance with established criteria and informed by internal and external peer judgement.

Professorial candidates must be able to demonstrate international reach and recognition in one of the following three categories, and either outstanding achievement or a very high level of achievement in one of the other two:

- Research, creative work, consultancy, professional practice or performance to the furtherance of a subject

- Learning and teaching
- Academic leadership

Most Professorships are remunerated according to a three-stage professorial grade. Associate Professor and Reader titles are pathways to a professorial title. The Reader title recognizes research, while an Associate Professorship may recognize research among other achievements. Recipients of both titles are mentored as to the steps and timescale required to achieve a Professorship. There is an established pay scale for Associate Professors and Readers. Conferment numbers since 2017-18 for the titles of Professor and Reader are shown in Table 4 (for the reason given above, Associate Professorships are not included):

Year	Reader Applications	Reader Conferments	Professorial Applications	Professorial Conferments
2017-18	8	6	15	7
2018-19	7	5	7	5
2019-20	12	9	17	5

Table 4: Professor and Reader: Applications and Conferments 17/18 to 19/20

Support and Training of Postgraduate Research Students

Our PGR community has grown by nearly 70% since 2014, with Doctor of Business Administration (DBA) and Doctor of Education (EdD) programmes complementing growth in traditional PhDs. Membership of the AHRC Midlands 3/4 Cities DTP secured doctoral bursaries for 47 students between 2014/15 and 2019/20. Institutional investment has funded 65 STEAM scholars on doctoral programmes, complemented by Faculty investment and enhanced support from charities and businesses. In the same year we developed a 4-year Graduate Research and Teaching Assistant (GRTA) model for PhD study, combining doctoral stipends with 0.25 FTE Assistant Lecturer contracts: a particular success among more mature PGRs in our Faculty of Health, Education and Life Sciences, where a number of GRTA graduates have subsequently been recruited as academic staff.

We have invested in designated PGR study spaces on both our principal campuses. Enhanced student representation on our research committees has grown partly through PGR-net, an inter-disciplinary network of PGRs. The brief of PGR-net is to provide representation on key research governance committees, and to facilitate our annual PGR student conference, RESCON. PGR-net is complemented by discipline-specific networks such as PGR Studio in ADM and the Doc Skills Hub in HELS, which provide training, networking and dissemination opportunities.

The improvement in PGR performance noted in Table 2, above, is partly the result of investment in supervisor capacity and capability. All new supervisors must undertake a dedicated training programme, while the unique SEDA-accredited Community of Practice programme, developed and delivered by the supervision community, prioritises the pedagogy of supervision. Since its launch in 2015, almost 200 supervisors have completed the programme, which in 2020 was revalidated by SEDA for a further 5 years.

BCU participates in the Advance HE Postgraduate Research Experience Survey (PRES) using the outcomes to benchmark against sector comparators and improve the quality of our provision. The survey has provided part of the impetus for the development of dedicated space for PGRs.

Equality, Diversity and Inclusion

The University has a comprehensive set of commitments and policies that encompass multiple aspects of equality, diversity and inclusion (EDI), from initial recruitment to dignity at work, workload allocation and academic progression. Flexible and family-friendly working is fully supported, including career breaks.

EDI policies and practice are coordinated and monitored by our Equality, Diversity and Inclusion Committee, reporting to the University Executive Group. The committee includes DVC, Executive Dean and Faculty EDI Committee representatives, together with key EDI professional services team members, EDI charter leads, and both staff and student union members. Its purpose is to identify key challenges, drive change, and hold the University to account. Informed by reports from each Faculty, professional service and BCUSU's EDI Committee, as well as the Stonewall and Athena Swan steering groups, the committee presents an annual report to the Board of Governors against the University's strategic EDI objectives.

In order to address the well-documented disparities that Black students and staff face in the HE sector and, we know, in our own University, research academics and students have taken a key role in developing our Anti-Racist Commitment plan.

Our approach to inclusion and equality for research careers is set out in our REF Code of Practice, which details the underpinning policies and procedures that ensure all staff can access opportunities to undertake research. Cross-university initiatives include the xCHANGE festival and our LGBT+ staff network; Faculty-led initiatives are ADM's Women's Researcher Network and BLSS's leadership of our Athena SWAN strategy, as well as shared support for the Aurora scheme.

Snapshot of Academic Staff Population

As noted in Section 1, our academic staff population of 1,458FPE/1,187FTE staff with teaching and/or research duties excludes staff on Visiting Lecturer contracts. Category-A eligible staff total 1,254FPE / 1,131.5FTE, with a breakdown by Faculty shown in Table 5:

Faculty	FPE	FTE
ADM	376	329.0
BLSS	259	246.3
CEBE	161	146.6
HELS	458	409.6
ALL	**1254**	**1131.5**

Table 5: Category A staff by Faculty

A breakdown by Gender is shown in Table 6. Variation between Faculties is driven partly by the historic predominance of (e.g.) male staff in Engineering subjects or female staff in subjects allied to medicine:

Faculty	Female FPE	Female %	Male FPE	Male %	Other FPE	Other %
ADM	177	47.1%	198	52.7%	1	0.3%
BLSS	124	47.9%	135	52.1%	0	0.0%
CEBE	39	24.2%	122	75.8%	0	0.0%
HELS	314	68.6%	144	31.4%	0	0.0%
ALL	**654**	**52.2%**	**599**	**47.8%**	**1**	**0.1%**

Table 6: Category-A staff Breakdown by Faculty and Gender

Table 7, below, analyses our Category-A workforce by ethnicity; as Section 2 explains, future recruitment strategy aims to improve the representation of non-white staff.

Ethnicity (6-way)	Cat-A FPE	% FPE
Asian	105	8.4%
Black	50	4.0%
Mixed	31	2.5%
Other	61	4.9%
White	946	75.4%
Unknown	61	4.9%
Total	**1254**	**100%**

Table 7: Category-A Academic workforce by 6-Way Ethnicity

Snapshot of PGR Population

A breakdown of our PGR population by gender is shown in Table 8. Whilst overall our PGR population is 55% female, there is considerable difference between Faculties, attributable primarily to the subject mixes noted above.

Faculty	%Female	%Male	%Other
ADM	47.9%	52.1%	0.0%
BLSS	53.3%	46.7%	0.0%
CEBE	36.1%	63.9%	0.0%
HELS	72.8%	26.5%	0.7%
BCU	**55.2%**	**44.6%**	**0.2%**

Table 8: Enrolled PGR Population by Faculty and Gender

A breakdown of our overall PGR population by 6-way ethnicity is shown in Table 9. It shows the benefit of our *Our Time* initiative, whereby doctoral students and postdoctoral fellows lead change in how we recruit, supervise and support PGRs from Black, Asian and other minority ethnic backgrounds.

Ethnicity	%FPE
Asian	18.3%
Black	11.6%
Mixed	2.5%
Other	4.2%
White	61.5%
Unknown	1.9%
All	100%

Table 9: PGR Population Breakdown by 6-Way Ethnicity

4. Income, infrastructure and facilities

Our Research Office is the principal service provider to Faculties for research support. Investment in its three teams, identified in Section 2, was £1.9m per year as of July 2020. All its staff have the opportunity to undertake continuing professional development.

RIG and DRC staff are embedded in Faculties, forming dedicated, local sub-teams and working closely with academic research leaders to support research funding and PGRs, as outlined in Section 2. Specifically, they service Faculty research-related committees, participate in research group meetings, maintain research information, administer small grants schemes, and support visiting professorships and seminar series. A key task is to foster researcher career development by organising events such as writing retreats and workshops.

Academics also benefit from the RIEE Compliance team. Its four staff provide expertise in quality assurance, risk assessment, due diligence and internal and external reporting. The RIEE Contracts team of two negotiates, advises on, drafts and reviews all research-related agreements, while the RIEE Knowledge Transfer team of six brings together academics, graduates, and businesses on innovative projects. Two Commercialisation Officers focus on the commercial exchange of research outputs and knowledge to the business community. Partnership activity in the UK and beyond is coordinated by a further team of six.

Our teams for supporting Impact, Research Integrity, and Open Access are outlined in Section 2. Investment in research systems includes our ePrints repository; Infonetica ERM for ethical review; Elsevier Scopus, for journal articles and metrics; Elsevier SciVal, for expertise, collaboration and benchmarking; Elsevier Pure, for research information management; Elsevier PlumX, for alt-metrics; Epigeum, for ethics and integrity training and ResearchConnect for funding opportunities. We also invest in membership of research-related organisations, including ARMA, Brilliant Club, EARMA, JISC, PRAXIS AURIL, UKCGE, UKRO, VITAE/CRAC, and Voice of Young Science. The total cost of systems and memberships exceeds £200k per annum.

Income

Our objective in this REF cycle has been to develop a diverse and sustainable stream of research income by securing challenge-led and enquiry-driven research grants. Supported by a robust infrastructure and the RIG team, external research income has increased in both value and diversity over this REF period. BCU staff participated in 263 externally funded projects with a total value of £72m and research income to BCU of £16.42m reported in REF4b.

In accordance with our mission and staff profile, we have pursued traditional sources of research funding as well as alternatives such as European structural funds and regional innovation grants, only a fraction of which are captured as research income. As noted in Section 2, there is a healthy research grant pipeline for the next REF cycle, currently set to deliver £18.0m of REF4b income from 2020-21 onwards.

Research Council funding

We have an established track record of securing AHRC funding. Our Music UoA has won significant awards: Dean (£683k), Coccioli (£383k) and Mawer (£369k). Researchers in Media have been partners in AHRC flagship programmes such as the Open World Research Initiative

(project value £3.3m) and WW1 Engagement Centre (project value £616k). We have also secured funding from the EPSRC and ESRC during the current cycle for research in Computing and Social Sciences. Under the recent UKRI Covid-19 highlight notice we have been awarded funding for projects focused on the challenges faced by BAME communities, an expanding area of research at BCU.

Industry-led funding & KTPs

Our alignment of support for research, innovation and enterprise activities has enabled us to join large, industry-led Innovate UK projects in STEM subjects. Grants have been won by Ward (project value £1.6m), Cheung, (project value £727k) and Lee (project total £352k). KTPs represent a significant area of growth in Innovation activity: 27 UKRI projects have been funded over the REF2021 period with a total income of £4.1m.

Fellowships

Investment in the mentoring of researchers has resulted in early career fellowships funded by the AHRC and The Leverhulme Trust, in addition to fellowships awarded with a focus on dissemination and impact, such as BBC New Generation Thinkers and HERA KT & Impact Fellowship, and those focused on archival work, such as the Bodleian Library and Huntington Library.

International funding

Building international research partnerships is key to our strategy. Over the REF2021 period we secured funding for and delivered a number of impactful research programmes in developing countries aligned to UN goals, e.g. bioenergy (Melville), citizen voice (Saber), access to education (Kendall) and nursing and healthcare (Notter). International funding is supported by a specialist Research Development Manager.

Through extensive partnership building, pump-primed in part by QR GCRF funding, our STEAMhouse India initiative brings together industrial, academic and third sector partners. This groundbreaking project will provide a unique platform to undertake collaborative research and knowledge transfer activities in India, enabling both regional and national engagement on the sub-continent while supporting trade and investment.

Investment in Laboratories and Research Equipment

Investment in research facilities happens on an annual cycle through Faculty capital investment plans and centrally coordinated university investment in research. Faculty investment generally requires that new facilities benefit both teaching and research. In 2016/17 and 2017/18 we ran two competitive research equipment investment schemes using retained QR funding totalling £750k. The scheme addressed equipment and software requirements for priority research that could not be met from Faculty resources. We also have a centrally held budget for strategic research projects such as the West Midlands National Park.