

Institution: University of Cumbria**1. Context and mission**

The University of Cumbria (UoC) was established in 2007 to catalyse individual and regional prosperity and pride within its region, building upon 150 years of higher education (HE) in Cumbria and Lancashire (Charlotte Mason College, Ambleside; Cumbria Institute of the Arts, Carlisle; St Martin's College, Lancaster; and the Cumbrian campus of UCLan). Since 2014, UoC has consolidated its place as a HE provider with an increasing emphasis on research and innovation.

Our academic community comprises of 7,944 students (5,978 UG, 1,966 PG); 1,797 partner students at overseas institutions (130 UG, 1,667 PG); 95 PGRs (31% full-time, 69% part-time); 391 academic staff (326.4FTE) of whom 67 (55.70FTE) are eligible for return to REF2021; and 555 (459.2 FTE) professional services staff. 30 staff members are currently studying for PhD at UoC and 13 are registered at other institutions.



Figure 1: Locations of the main and satellite campuses of the University of Cumbria.

UoC's regional focus is a key component of its strategy. We are distinctive in providing a 'distributed' model of HE to an area which is rural and sparsely-populated, yet contains several major industries (particularly in nuclear and manufacturing), as well as the UNESCO-inscribed Lake District National Park. In this context, UoC works across four main campuses (Lancaster, Ambleside, two Carlisle sites), and satellite campuses in Workington, Barrow-in-Furness (West Cumbria) and Tower Hamlets (London), all additionally supporting HE in low-engagement communities (Figure 1). UoC recognises the importance of place and is the only university operating a major campus within a National Park. *Strategy 2030* (see 2.5) aims to develop the specialisms and character of each campus.

UoC is structured around teaching into five *Academic Institutes*. In recognition that research activity crosses these boundaries, research leadership is located within four *Research Centres* and two emerging *Research Networks* (Figure 2, overleaf). These Centres and Networks are the engine of research activity, sustaining an inclusive, collaborative research culture, and enabling significant growth in research capacity, impact and outcomes.

Since REF2014, research capacity has expanded through 116% growth in REF-eligible Category A staff (Table 1; see 3.1), 80% growth in research income and 145% increase in PGR completions (Table 3; see 4.1), and production of 1112 REF-eligible outputs (growth of >400%). This has been supported by completion and continuation of ~£31.7M investment across our campuses (see 4.3), much of which has improved research infrastructure and facilities (REF5b). 11 *Professors of Practice* (working in industry, practice, and professions) have been appointed to support institutional strategies for teaching and research within each *Research Centre* (REF5b).

Research Centres facilitate access to resources, expertise, collaborators and external networks across the *Academic Institutes*. Each research centre has a *Centre Director* (0.1 – 1.0 FTE, dependent upon the stage of centre development) who leads strategic and operational planning (REF5b). In areas where research teams are still emerging, activities are organised through *Research Networks* (Figure 2). Research governance is provided through the *Research & Knowledge Exchange Committee*, chaired by a Deputy Vice Chancellor (DVC) and comprising *Centre Directors*, *Institute Directors*, representatives from each *Research Centre* and *Network*, the *Research & Knowledge Exchange* and *Graduate School* offices (Figure 2; see 3.2; 4.1). This enables effective co-ordination of research activity; facilitating cross and interdisciplinary research, sustaining research expertise in the *Academic Institutes*, and offering a platform for future development.

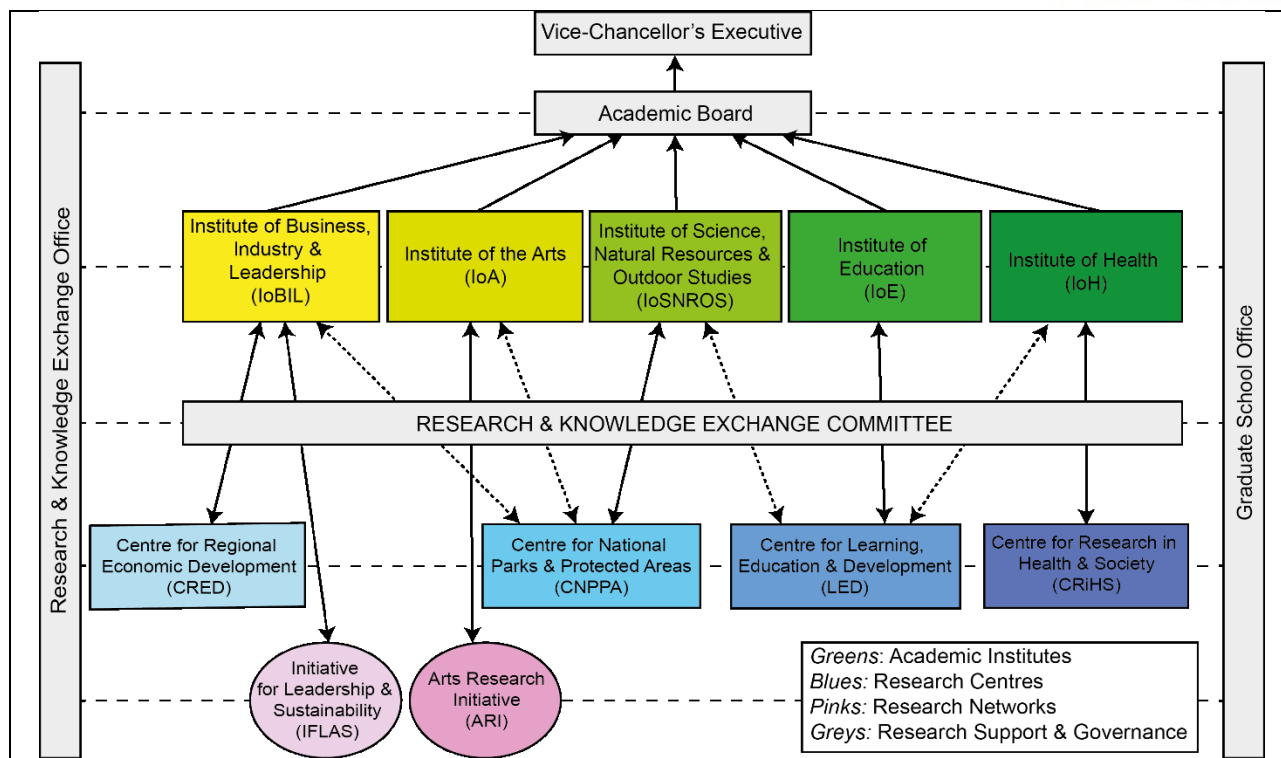


Figure 2: Research & Knowledge Exchange Committee leads research strategy and coordinates research activity through links between Research Centres/Networks and Academic Institutes. Arrows identify directions of research reporting and management (solid lines represent primary research connections, dotted are secondary) between Centres and Institutes. Dashed lines show connections between Research Support and Centres/Institutes.

The UoAs returned to REF2021 reflect a combination of prior track record (REF2014) and new areas considered of strategic importance, either reflecting global challenges or the priorities of our stakeholders and research users (Table 1, Figure 3). For example, the *Centre for National Parks & Protected Areas* (CNPPA) was established through partnership with the *Lake District National Park Authority* and to support the *UNESCO World Heritage Site Inscription*, comprising researchers returned in UoA14, UoA23 and UoA32. For REF2021, UoC is submitting a new unit (UoA20, 11.1FTE) building upon expertise in health-related social science, particularly enhancing interpretation in practice, identified in UoA03 for REF2014. Consolidation of researchers from UoA26 in REF2014 into UoA03 and UoA23 for REF2021 has enhanced research capacity supporting a critical mass of researchers within the CNPPA, LED and CRiHS.

Table 1: Units of Assessment and FTEs returned in REF2014 and REF2021

UoAs (2014)	n	FTE	UoAs (2021)	n	FTE
UoA03: Allied Health Professions	3	3.00	UoA03: Allied Health Professions, Dentistry, Nursing & Pharmacy	12	11.1
			UoA20: Social Work & Social Policy	12	11.1
UoA17: Geography, Emt. Studies & Archaeology	6	6.00	UoA14: Geography & Emt. Studies	11	10.60
UoA19: Business & Management Studies	3	2.80	UoA17: Business & Management Studies	11	7.95
UoA25: Education	5	4.72	UoA23: Education	12	9.8
UoA26: Sport & Exercise Studies, Leisure & Tourism	6	6.00	Redistributed to UoA3 & UoA23		
UoA34: Art & Design: History, Practice & Theory	6	4.28	UoA32: Art & Design: History, Practice & Theory	9	7.3
Total	29	26.8	Total	67	57.85

UoC's strong collaborative and interdisciplinary ethos generates researchers within Centres and Networks contributing to multiple UoAs (Figure 3). Research governance and structures (Figure 2) enable researchers to collaborate successfully within a vibrant, growing research culture.

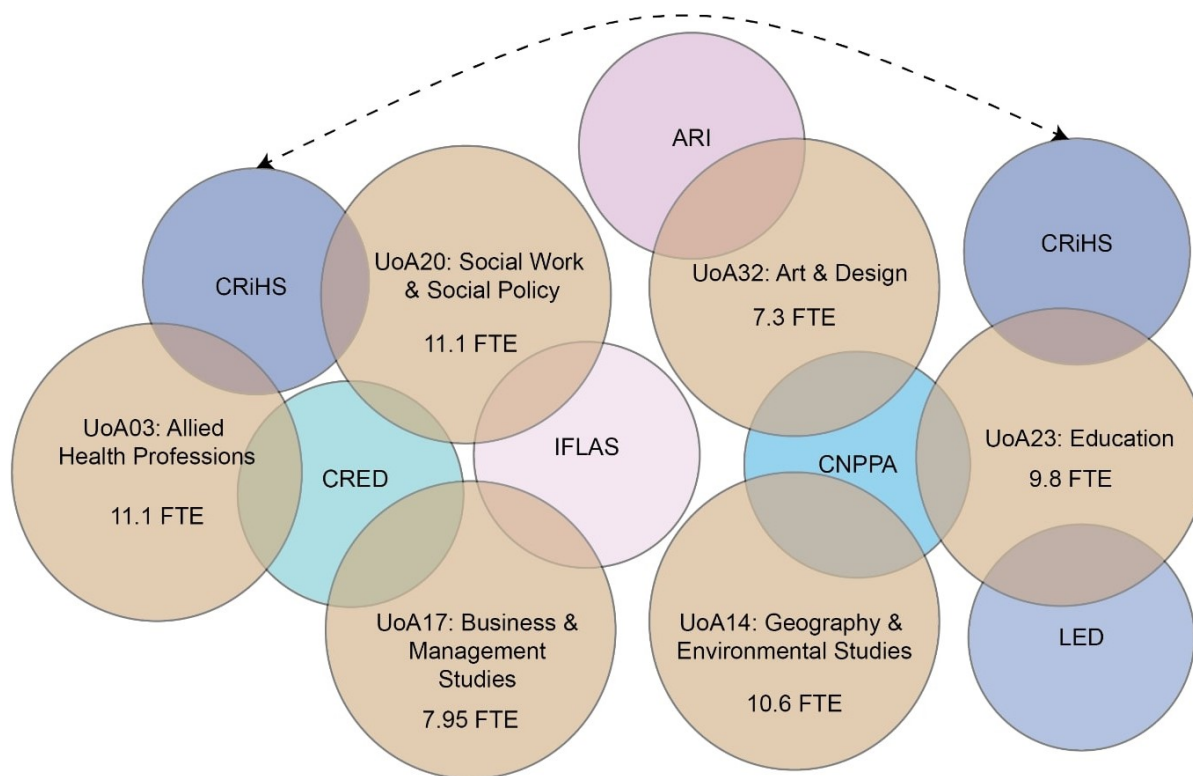


Figure 3: UoAs submitted to REF2021 associated with UoC Research Centres and Networks. Note that most Research Centres contribute to 3 UoAs, and the Research Networks to 1-2, reflecting a transdisciplinary research culture.

In 2014-2021, UoC has evolved from a teaching-focused institution with pockets of research activity towards a mature, comprehensive university where research is fully integrated into our academic portfolio, generating work that is relevant to academic communities, to the wider interests of businesses, public and third sectors.

2. Strategy

The *UoC Research Strategy 2014* outlined seven themes, with ambitions to develop and empower academic staff as researchers within every academic institute and to move towards a research-informed academic portfolio. These were consolidated within the [Research, Innovation and Enterprise Strategy 2018-2021](#) into three core strategic goals across the REF2021 assessment period:

1. Investing in researcher development and expanding capability to deliver a significant increase in active researchers;
2. Improving research infrastructure to demonstrate and evidence enhanced vitality and sustainability of the environment;
3. Utilising external partners and collaborators to grow capacity, and to support income generation.

The delivery of these core strategic goals has occurred across four themes:

2.1 Theme 1: Environment of Research, Innovation & Enterprise

Since REF2014, there has been considerable success in consolidating pockets of expertise previously located within separate UoC academic institutes into coherent, sustainable and vibrant research communities (Figure 4). The *Research Centres* and *Networks* (Figures 2-4) have transformed the research environment, offering research-active staff ‘homes’ within sustainable research groups operating with sufficient critical-mass, with access to a culture supporting research and knowledge exchange (KE) that is *disciplinary* (within a theme in a research centre/network), *interdisciplinary* (between themes in a research centre/network) and *transdisciplinary* (between research centres).

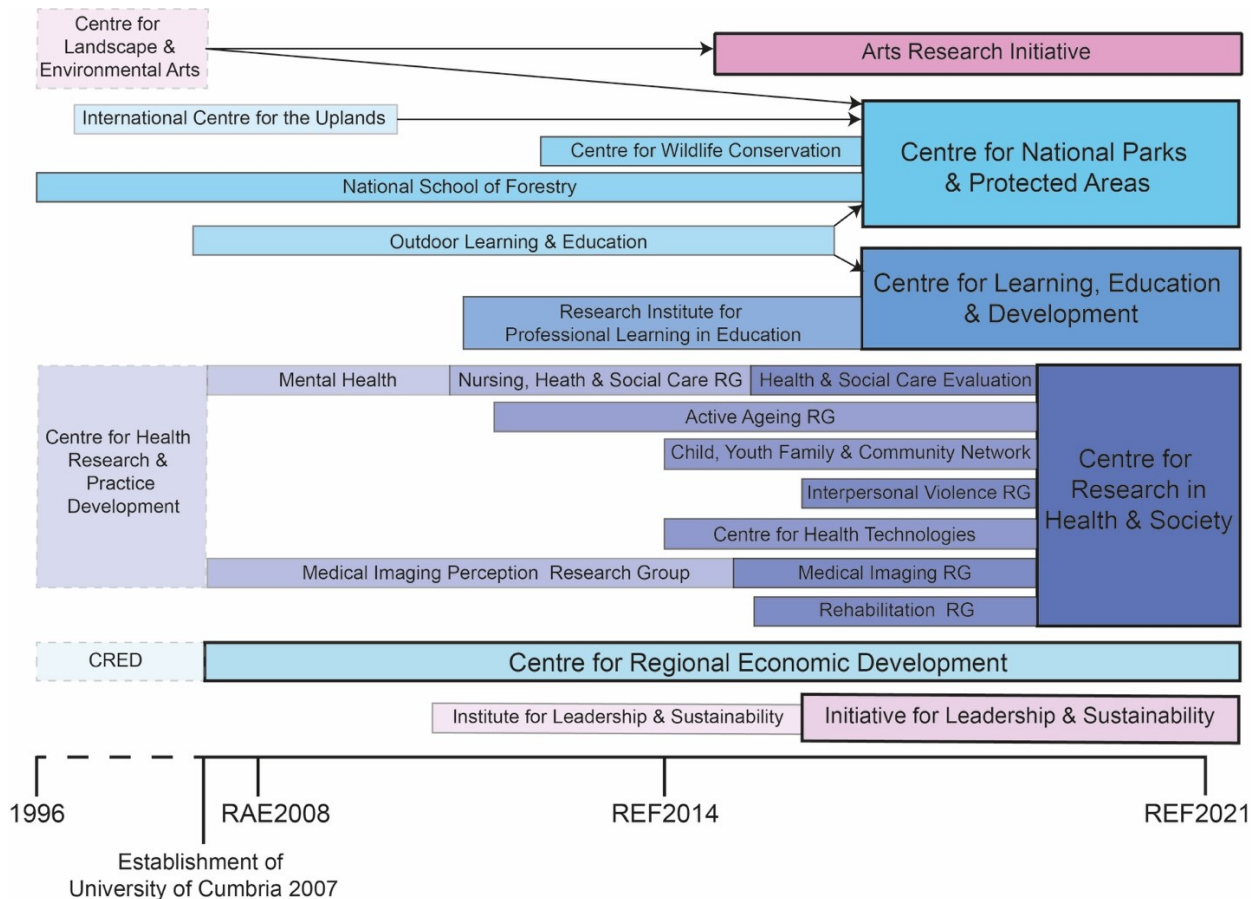


Figure 4: Timeline of developing UoC Research Centres. Dashed boxes represent research centres established at precursor institutions prior to UoC establishment.

Research Centres draw together pre-existing, often informal research groups that have evolved since 2014, offering efficiencies in strategic and operational management and consistency in research governance (Figure 4). This coordination insulates individual research areas against future changes in staffing and priorities, providing continuity and future sustainability. The two *Research Networks* (IFLAS, ARI) are now being considered as part of the forward strategy (see 2.5; REF5b UoA17, UoA32).

Investment of ~£1.5m of QR funding (Table 2) has focused on supporting researcher development. Funding is awarded according to specific criteria, monitored by the *Research and KE Office* (see 3.1).

Table 2: Investment of QR funding 2014-2020

Activity	Details and examples	Allocation
Internal Research Fund	366 awards supporting researcher development	£252,000
PhD studentships	Full studentships and fee-waivers	£1,018,066
Early Career Researcher (ECR) Fund	12 awards	£51,300
Global Challenges Research Fund	1 project: wildlife conservation in Gambia (Convery UoA14, Fenton UoA23)	£30,000
Strategic Priorities Fund	14 awards	£52,325
Corporate memberships	GuildHE Research, MillionPlus, Research and Enterprise Network for Universities, <i>Vitae</i> , Equality Challenge Unit, UK Council for Graduate Education.	£85,000

Increasing the number, inclusivity and involvement of *Visiting Scholars* (184% growth since 2014: 13 *Emeritus Professors*; 47 *Visiting Research Fellows/Professors*; 11 *Professors of Practice*) has enhanced research environment through offering skills/training, PGR supervision and peer review, but also providing wider sectoral and KE experience supporting research impact.

2.2 Theme 2: Excellence in Postgraduate & Doctoral Portfolio

UoC was granted *Research Degree Awarding Powers* in 2019, signalling a key progression in the expansion of our research capacity and capability. Since REF2014, the research environment has been enhanced by a 34% increase in the number of current PGRs registered with the *Graduate School* to 95. Of these, 31% are full-time, with 69% part-time students and 30 UoC staff working towards PhDs. This breakdown reflects UoC’s commitment to staff development (see 2.3; 3.1) and connections with professions where mid-career postgraduate study is normal. In recognition of this pathway, in 2020 we validated a new portfolio of qualifications: MRes, DProf, EdD and DBA. PGRs often represent partner organisations and other stakeholders, enriching the research environment (e.g. UN, international NGOs and industry in UoA17).

2.3 Theme 3: Research/KE Capacity and Capability of Staff

Much of the growth in research capacity since REF2014 has come through staff development initiatives (see 3.1). 52% of full-time academic staff and 80% of doctoral supervisors contributed to subject associations, learned societies or relevant professional bodies within the past three years. 40% of our full-time academic staff and 72% of our doctoral supervisors have prior experience of research within other HE or specialist research institutions. These two elements have fuelled UoC’s 116% growth in the number and diversity of researchers for REF2021.

Since 2014, despite turnover due to departures and retirements, the UoC professoriate has increased by ~24% (to 21), through appointment of 7 academic staff to Associate Professor, and 7 to Professor, mainly through meeting promotion criteria based on research and KE (see 3.1). This has increased the proportion of women within the professoriate (38% female, 62% male) offering research leadership (see 3.3). 67% of our academic staff are recognized as Fellow, Senior or Principal Fellow of the Higher Education Academy (sectoral average = 43%), reflecting an academic community that embeds research into teaching.

2.4 Theme 4: Collaborative Partnerships and External Engagement

We have consistently built on strong partnerships in teaching and KE to nurture new research activity. Research throughout every UoA exemplifies our focus on collaborative working with research users, stakeholders at local to international scales (REF5b). The [UoC Strategic Plan \(2017-20\)](#) focuses on UoC's role as a catalyst for regional development. This includes strategic partnership with the Cumbria and Lancashire LEPs, and the Borderlands Initiative. Industry partnerships includes Sellafield and BAE (facilitating growth in related research areas), and research engagement with international bodies such as the IUCN, (**Convery**, UoA14), UN (**Bendell, Murphy**, UoA17) and OECD (**Williams**, UoA32). UoC's ERDF-funded £4.1m *Cumbria Innovations Platform* and £2.3m *Eco-Innovation Cumbria* programmes have enabled SME's to utilise research and knowledge expertise across UoC and partner universities and facilitated a number of research partnerships generating impact.

2.5 Strategic Objectives from 2021

Future research, impact and KE will be shaped by the *University of Cumbria: Towards 2030 Strategy*, due for publication in Summer 2021. This marks a significant shift towards a longer-term vision for UoC compared to previous 3-year rolling operational plans. The future will continue to be driven by our strategic position within Cumbria and key stakeholder relationships and their priorities, but adopting an increasingly national and international focus, reflecting the growth in capacity and confidence of our researchers.

Our longer term strategic aims focus on the continued growth and excellence of our research, leading to high quality outputs and impact, with partnership and policy relevance locally, nationally and internationally. Our four main campuses have a growing identity which will be further enhanced over the period and will build on the growth we have seen in research activity in the past seven years. As part of a planned strategic approach, we will, within the next strategy period, grow our international academic reputation and relevance in research, expand capacity across research strengths, and increase PGR numbers.

We will continue our successful approach of developing existing staff towards REF-eligibility, to improve infrastructure and facilities, build partnerships to enable excellent research to flourish and to maximise its impact. We will place *social and economic impact* at the centre of our research impact strategy, building from our platform of partnerships across many sectors of the Cumbrian economy, and through leadership of schemes like the £2m *Back on Our Map (BOOM) project* with the Morecambe Bay Partnership (REF5b, UoA14), and engagement with *Eden Project North* to transform the lives of people within our region.

3. People

3.1 Staffing Strategy and Staff Development

The *Research & KE* and *Graduate School* offices (13FTE) coordinate and support research-related activity across the University, focusing upon academic staff and PGRs respectively (Figure 2). The offices manage the *Research Skills Development Programme*, research governance, policy and reporting, and support the preparation of research funding approvals and internal support. Whilst *Research Strategy* and *Research Objectives* are led by the *Research Centres* and *Networks*, contractual responsibility for *Staffing Strategy* and *Staff Development* rests within the *UoC Academic Institutes*.

Our *REF2021 Code of Practice* provides flexible frameworks for undertaking research activity on pathways for 'emerging' and 'significant' responsibilities for research (sections 2.10-13 of the *UoC REF2021 Code of Practice*). These pathways are evaluated via annual *Personal Performance & Development Reviews* (PPDRs), *mentoring*, and *research planning*. The PPDR includes specific discussion of research and KE objectives, agreement on support required and personal targets.

Research mentoring supports staff seeking to develop along research pathways. Our research mentoring guidance was updated after an evaluation survey in 2018, improving allocation and monitoring of mentoring, and to provide guidance to plan sessions. We have seen 13% growth in formal mentoring between 2018 and 2020. Academic staff can book up to 25 days pro-rata (Professoriate 35 days) of protected *Research and Scholarly Annual Leave* (RASA), linked to outcomes discussed within the PPDR process. Utilising these mechanisms, UoC has increased the proportion of eligible academic staff from 8.2% in REF2014 to 18.1% for REF2021. Tuition fee waivers are offered to UoC academic staff wishing to pursue a PhD within the University to begin establishing a research career; a key strand in our future growth strategy for research (see 2.5).

The research pathways framework supports progression for all academic staff towards conferral of Associate Professor and Professor, valuing excellent achievement and contributions to research culture and reputation. The annual *Future Leaders Development Programme* for academic and professional services staff provides coaching, facilitated training sessions and internal networking opportunities.

The *Graduate School* and *Research & KE* offices administer internal funding and offer infrastructural support for researcher development such as ethics, integrity and titles (Table 2). ECRs are supported through an annual *ECR grant scheme* for pilot or proof of concept work and/or collaborative research activity to help establish research independence. The annual *Internal Research Fund* focuses on developing individual research capabilities and enabling impact through targeted investment. The *Sabbatical Leave Scheme* allows staff beyond 3 years employment to request an extended period of research leave to undertake research or KE. In 2019, a new *Strategic Priorities Fund* was established to specifically support research impact generation and external engagement. Regular *Writing Retreats* are offered for staff and PGRs to provide a focused opportunity for participants to advance research writing within a supportive, social environment. This innovative format has proven popular and has been successful in increasing outputs including those noted in REF2.

Award of the *HR Excellence in Research* (2016; retained in 2018 and 2020) recognises UoC's commitment to the *Vitae Concordat to Support the Career Development of Researchers*. Our *Research Ethics Policy*, *Code of Practice for Research*, and guides on *Collaborative Working* and *Lone Worker Procedures* evidence our commitment to the *Universities UK Concordat to Support Research Integrity*. UoC signed the *Declaration on Research Assessment* in July 2020, recognising the need to improve the evaluation of outputs of scholarly research.

3.2 Approach to PGRs & Mechanisms for Support

The *Graduate School* supports all aspects of the PGR journey. The *Postgraduate Research Code of Practice* and our annually updated *Handbook* is provided to all PGRs. Each PGR is supported by a team of 2-3 experienced research supervisors, who must have received supervisor training and are research active. Development needs are identified and agreed jointly between the PGR and supervisors, and reviewed annually. PGRs are required to have completed development activities as a condition of transfer and are encouraged to attend the annual *Summer School*, the *Research and Innovation Conference* and to present at the *Student Research Conference*. The *Researcher Skills Development Programme* provides opportunities for PGRs to engage across disciplinary boundaries and, since October 2013, seminars have been aligned to the *Vitae Researcher Development Framework*. All students are encouraged to use the *Vitae Planner*.

UoC's *Teaching Opportunities for Doctoral Students* scheme, implemented in 2016, provides a systematic framework to offer PGRs the opportunity to develop skills and experience as a higher education teacher. After their first year (18 months if part-time), PGRs can request teaching experience and induction, mentoring and training. Across 2018-2020, PGR study rooms were renovated across all main campuses, providing high quality, dedicated study spaces (see 4.3).

3.3 Strategies, Activities and Collaborations to Support Equality, Diversity and Inclusion (EDI)

UoC has an *EDI Policy* and *EDI Steering Group* that works to ensure that the institutional culture is inclusive, prioritises staff and student wellbeing, and invests in people, as documented in the *UoC REF2021 Code of Practice* (section 1.3). UoC plans to submit to the *Athena Swan Charter* in 2021 for an Institutional Bronze level award on the basis of significant progress made in gender equality and EDI particularly since 2019. EDI themes are also embedded within research practice (REF5b), exemplified by **Elton-Chalcraft**, **Hallet** (UoA23), **Stuart** (UoA20), and others, demonstrating a commitment to EDI extending beyond metrics.

EDI policies are followed in all appointments and promotions, and staff are supported by centralised policies regarding research and scholarly leave, requests to work flexibly, reduce working hours, or adjust hours to suit changing personal circumstances (see 3.2). All staff are required to complete mandatory training modules including: unconscious bias; diversity in the workplace; inclusive, cohesive, and safe universities; recruitment and selection; and safeguarding. These support fair and equitable decision-making processes. A *Flexible Ways of Working Policy* recognises that flexibility attracts and retains skilled researchers, and supports health, wellbeing, and work-life balance. Procedural guidelines exist for numerous flexible arrangements including job share, working hours and phased retirement, and are open to all staff.

UoC has a *Health, Safety & Wellbeing Strategy 2017–2020*, *Risk Register* and *Action Plan* and in 2017 appointed two Mental Health Case Workers to support this strategy. As part of the *Compassionate Campus* campaign, training has been offered to all staff on suicide prevention and awareness. Our work on mental health at UoC was identified as best practice in the House of Commons Library briefing paper: *Mental Health Services for post-16 Students in England* (2017).

Annual publically available EDI reports (cumbria.ac.uk/about/equality-diversity-and-inclusion/equality-data-and-reports/) demonstrate that within a low-diversity region, UoC performs well against sector norms for staff and PGRs identifying with protected characteristics. Staff LGBTQ+, disability and BAME networks promote and support inclusion, and include collaboration with Cumbria Pride and Lancaster University. In our Workplace Equality Index feedback from Stonewall (2020), UoC scored highly for our monitoring of equality; in line with organisations placing in Stonewall's Top 100 employers'. This validates our reported data and REF Equality Impact Assessments, which utilise this diversity data. EDI Unit data for staff and PGRs (REF5b) has been analysed to identify specific actions, provided to Institute Directors, and discussed with the DVC (Health, Environment and Innovation) and Head of HR to inform forward strategy.

4. Income, infrastructure and facilities

4.1 Strategy for Generating Research Income

UoC's research income generating strategy is focussed on opportunities that build our reputation, capacity and capability at scale and pace. We seek, where possible, to partner with HEI's and organisations to optimise expertise, impact and networks. This strategy has been successful, enabling >80% growth and diversification of research income compared to REF2014. Reflecting our sectoral priorities and geography, UoC has extensively focused on income generation through enterprise or regeneration activities, which typically align with the KE elements of our research (Table 3, REF5b). Research Centre Directors and Theme Leads actively seek opportunities that are circulated, appraised, where possible drawing in ECR's to bidding teams. They are supported through the *Research & KE* and *Graduate School* offices who provide a central resource to support research applications and facilitate collaboration. Expertise is shared and mentoring support provided through the *Research Centres*. For example, CRiHS (UoA20, UoA3) run 'bidding workshops' led by experienced academic and business development staff.

Table 3: Overall summary of external income

Activity	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	Total
PGR Completions	7	7	7	4	13	4	12	54
Research income (all sources)	£363k	£332k	£270k	£350k	£528k	£375k	£234k	£2,452k
Enterprise income (all sources)	£1,346k	£1,538k	£947k	£1,200k	£1,001k	£1,077k	£1,191k	£8,300k

4.2 Supporting Activities for Generating Research Income

Since REF2014, UoC has progressively integrated research and KE support into a *Research & KE Office*, reflecting the focus of UoC on the application of research expertise to addressing real-world issues. Its key responsibilities are:

- Accessing research funding, KE programmes, commercial opportunities and commissioned research;
- Facilitating internal and external collaboration and partnering through the Research Centres/Networks;
- Proposal costings, approvals processes, financial and contractual management, compliance, and audit;
- Internal and external reporting on activity, post-award management and compliance.

The *Research & KE* (10.8FTE, plus 6FTE KE project managers and officers) and the *Graduate School* (2.2FTE) offices provide core infrastructural support for research activities, and since the establishment of the Research Centres/Networks, occupy a central role in facilitating and enabling research activity.

4.3 Infrastructure and Facilities Supporting Research and Enabling Impact

The University has invested heavily to support growth in research capacity and infrastructure, with ~£31.7M investment in capital and infrastructure projects since REF2014 (see REF5b in each UoA for details). We have prioritised investment offering dual functions underpinning teaching and research, acknowledging our transition towards research-informed teaching. Highlights include the STEM laboratory suite in Carlisle (REF5b, UoA14), medical imaging facilities and an ultrasound simulator laboratory, one of the largest installations of its kind in the world (REF5b, UoA3). The latter facility has enabled foetal research in UoA3 – one of *Discover Magazine’s* ‘Most Important Discoveries’ (2017). All PGR facilities have been upgraded across all campuses since REF2014.

With distributed campuses, UoC has invested heavily in remote access and video communication tools to facilitate research collaboration and impact activities. UoC works closely with Lancaster University to align research standards and practice regarding Intellectual Property and other academic standards. An *Open Access Policy for Research and Scholarly Outputs* was approved in 2015. Academic staff deposit their work in the institutional repository, *Insight*, as UoC has agreed on a green open access approach. Since 2017 there has been a 67% increase in deposits, a 70% increase of open access items with no embargoes and a 158% increase in the number of downloads. There has been a 211% increase in the number of researchers with an ORCID-ID between October 2018 and 2020. UoC aligns its work with UKRI’s emerging *Open Access policy*. UoC’s Head of Library Services engages with the Open Access Working Group of the GuildHE Research Network.

SUMMARY: Since REF2014, UoC has demonstrated and evidenced a strong upward trajectory of transformation to research organisation, governance, outputs and impact. This marks a step-change in research culture, reflecting a transition to a research-informed, mature university. Our future vision is of continued growth and development, and UoC looks towards REF2028 with confidence.