Institutional level environment template (REF5a)

REF2021

Institution: University of Huddersfield

1. Context and mission

The University of Huddersfield (UoH) was designated university status in 1992. It is a member of UUK and Yorkshire Universities and a signatory to the UPP Civic University Agreement. UoH is a major employer in the Leeds City Region and considered an anchor institution. Regional challenges impact on the establishment of private and public sector collaborative research initiatives, where GVA per capita falls 10-15% below the national average (excluding London) and limits the extent to which organisations are prepared to commit.

The University's seven academic schools undertake a broad range of research with particular emphasis on STEM, humanities, social sciences, business, art and design. Over the REF period, total research spend p/a has more than trebled, reaching £17M in the FY19/20. We have a number of well-established REF and RAE assessed research areas, whilst others, including drama, law, architecture, sports science and psychology, will make their first submission in 2021. Schools are supported by seven support services overseen by the Vice-Chancellor's Office. 43% of our 1922 FTE employed staff are academics, 15% of which are professorial level. All academics are expected to be research active and this is reflected in job descriptions and workload allocations. By 2025, the end of the current strategy period, all staff are expected to publish research of at least 2* quality, building on the previous 2013-2018 strategy, requiring staff to publish at, or better than, national level. All academic staff, except a very small number on practitioner contracts, are returned to HESA categories of Teaching and Research or Research Only. No academic staff are on teaching only contracts.

In 2019/20, overall student numbers (UG, PGT and PGR) were 14,857 (FTE) of which 16% were international and 5% postgraduate researchers. Total turnover in 2019/20 was ~£174M of which £18.8M was combined Research (£16.9M) and Enterprise (£1.9M) income.

Historically, focus has been on teaching quality, with UoH rated Gold in the 2017 TEF, and presented with the Advance HE [Global Teaching Excellence Award](). Our 2008 Strategy shift towards research, resulted in an unprecedented increase in research power in the 2014 REF, with 262 academic staff submitted, representing a 143% increase on 2008 - the third strongest performance in the UK.

REF2021 encompasses two institutional Strategy Map periods. The 2013-18 research aims were:

- To strengthen and enhance our research capability
- To contribute to economic, social and cultural development
- To enrich teaching through research and innovation excellence

Performance targets included: a four-fold increase in research grant and contract income; doubling of high-quality outputs and PGR completions, and increasing the professoriate by 40FTE. Our mature research disciplines in engineering, music, humanities and social sciences were major contributors, achieving recognition, e.g. through two Queen's Anniversary prizes in music and rail.

The University's 2025 Vision is to be 'an inspiring, innovative university of international renown', by becoming research intensive and recognised in world top 300 rankings. Our Institutional Strategy is to increase research activity through international and end user partnerships and developing the necessary supporting environment for academic staff.

2. Strategy

University Research Strategy

The University Research Strategy sits beneath the overarching institutional Strategy Map. Our ambition is to deliver excellent research and impact that contributes to important advances in human knowledge and improvements to the global quality of life. The University Research Committee, chaired by the PVC R&E reporting to Senate, is responsible for its oversight and delivery.

Our Research Strategy embraces interdisciplinary societal and economic grand challenges organised into thematic Areas of Strategic Research Importance (ASRIs). These are defined as themes where we evidentially have expertise, critical mass and assets to develop new and emerging areas of research (e.g. engineering systems, data science, materials, health and wellbeing, productivity, security, sustainable environment and creativity). The ASRI portfolio is overseen by the University Research Committee and informs internal resource allocation (University Research Fund, URF) and institutional support. Over the REF period, the University has invested ~£7.9M URF to support delivery of the Research Strategy.

The 2013-18 research aims described earlier were all achieved. By 2025, the University aims to accelerate this research intensity by increasing its number of international research partnerships, the volume and quality of research outputs, citations and research income, and strengthening relationships with industry and end users of research. To facilitate this, the University has a delivery plan to create a supportive research environment, aspects of which are detailed below:

Research Integrity

The University is committed to the principles of the Concordat to Support Research Integrity and since 2013 has produced annual integrity statements demonstrating institutional compliance with principles. The institutional Code of Practice for Research, research ethics and integrity policy and annual statements are publicly available on the University website. The annual narrative statement is approved by University Research Committee, reporting to Senate and University Council. The current action plan responds directly to the revised 2019 Concordat. Our Code of Practice for Research is adapted from the UK Research Integrity Office's Code of Practice for Research and supports researchers in conducting research of the highest quality. The Code provides general principles and standards for good practice in research, including excellence, honesty, integrity, co-operation, accountability, safety, training and skills.

All academic schools have designated Research Integrity Champions and Research Ethics and Integrity Committees operating within the University Research Integrity framework. School research ethics, integrity activities and associated action plans are reviewed annually by URC. Governance web pages provide key information and access to training for staff and students. The University recognises the importance of training to raise awareness and enable cross-UoA

discussion. All UoAs and Central Service Staff have attended 1-day workshops and on-line research integrity Epigeum training packages are available to all staff and students.

The University of Huddersfield Press is committed to promoting research and publication integrity, as defined in the COPE Code of Practice. The Press ensures that all research outputs are thoroughly reviewed by expert reviewers. All of our journals adhere to the COPE guidelines for best practice.

Open Research

The University is committed to ensuring publicly funded research is openly accessible, transparent, collaborative and efficient. We have invested in access to systems to facilitate Open Research, including but not limited to the Elsevier PURE management information system and a University Data Repository and content management system (Box). All staff are encouraged to adopt a unique ORCiD identifier to facilitate sharing and establish transparent and trustworthy connections between researchers. Specific Open Research activities are summarised below.

Open Access (OA) is an institutional priority as set out in the OA Policy. During the REF period, an internal OA audit was commissioned to review current OA processes and procedures. As a consequence, a central OA Manager was appointed to improve information and assist in the delivery of mandatory central training for staff and students and to support the wider open research strategy. The Elsevier PURE management information system became the single point of truth for all research outputs and for OA compliance checks. UoH participates in the annual Open Access Week to raise the profile and importance of OA to staff and students. The UoH Press, established in 2007, supports emerging researchers and helps foster research communities by providing a platform for developing academic areas. OA publishing is actively promoted by UoH Press e.g. *Music Beyond Airports*, a collection of essays developed from papers given at the 2019 *Ambient@40 International Conference*, has received over 12591 downloads and 586 eBook views as a result of our utilisation of standardised metadata, international indexing platforms and a tailored promotional campaign.

UoH supports the Concordat's principles on Open Research Data and broadening opportunities for high-quality research findings, to be widely disseminated and freely available. The UoH Research Data Management Policy outlines the expectations for fulfilling our commitment to the Concordat, including requirements for data curation. Guidance and advice for researchers on managing the open access of data, including issues arising from ethics considerations and IP rights, is available to staff. A dedicated RDM officer is employed to assist academic staff in making data open and accessible. To date, resources have been focused on externally funded research projects providing RDM support for grant holders, including data storage and publication of DOIs for datasets. Data sets , including the AHRC project 'Mixing it - Diversity in Second World War Britain' and EUICIT Open Access transcripts, are externally accessible via the PURE portal.

Interdisciplinary Research

The University recognises the importance of interdisciplinary research from both an innovation perspective and individual researcher career development. A number of centrally funded initiatives have been implemented to support this, e.g. the University Research Fund (URF) has

supported ASRI development and the establishment of interdisciplinary research institutes such as the Secure Societies, Materials and Skin Integrity & Infection Prevention institutes. The URF has also supported interdisciplinary research projects, identified through challenge 'sandpits', that focus on the Global Grand Challenges and UK Industry Strategy Challenges – all seven academic schools have proactively secured funding for challenge-based projects. Over the REF period we have invested ~£3.6M of URF to support interdisciplinary research. Specific initiatives include PhD stipends for projects with cross-school supervisory teams. Our EPSRC Multidisciplinary Research Equipment grant (EP/T02433X/1) and EPSRC DTP awards (EP/N50967X/1, EP/R513234/1) have been strategically invested into multidisciplinary materials related research across three academic schools - Computing & Engineering, Applied Sciences and Art, Design & Architecture.

Collaboration

The University Strategy Map addresses the importance of research collaboration, with specific aims to increase partnerships and collaborations with end users of research and international partners. By 2025, our target is for 15% of research outputs to be generated in collaboration with end users and 60% with international collaborators - current achievement is 5.6% and 45.5% respectively. To facilitate collaborative relationships, URF funding (£1.4M) has been invested in ECR and academic staff sabbaticals, exchanges and international conference attendance. Our QR GCRF funding (£532k) has supported partnerships with Universities and end-users in ODA countries and research has been undertaken in countries including Ethiopia, Indonesia, Uganda and Jamaica. Our collaborative ODA research was awarded a Newton Prize (2019) and over the REF period we have secured 37 EU grants with 349 international collaborators.
The University has strong national and regional collaborations and is an active partner in Yorkshire Universities (YU). As YU partners we have participated in Science and Innovation Audits for Medtech and more recently rail. HEIF CCF funding (£5M) was secured for the Translate and GrowMedtech schemes and 4 of our academic schools have secured funding. A Medtech Leadership Board has been established and MoU signed with partners across the region and UoH is an active collaborator and partner. The University has also collaborated in two Strength in Places applications (Medtech and advanced manufacturing) with HEI partners and end-users.

Delivering Impact

The University's Research Strategy commits to delivering excellent research with impact. This commitment is recognised in academic promotion criteria, which evidences the importance of enterprise, impact and public engagement. Our aim is to conduct research that delivers direct economic and societal benefits to the communities we support, and we are committed to the principles of the Concordat for Public Engagement with Research. UoH is a signatory of the UPP Civic University Agreement to drive regional and local impact and in 2019 conducted an institutional Joseph Rowntree impact assessment and a UNIAC Public Engagement Audit to inform development of our Public Impact and Engagement strategy. Research Strategy impact aims are:

- To increase our economic impact by becoming a focus for productivity improvement, impact and enterprise regionally, nationally and internationally;
- To enhance our societal impact as an anchor and civic university to engage with key communities and enhance quality of life, effectiveness of public policy and services and the well-being of individuals.

- To develop <u>impact tracking and evaluation</u> methodologies which can be used to monitor long term economic and societal impacts of our research.
- To embed <u>responsible innovation</u> approaches in our research practice from project design and execution to delivery, dissemination and ongoing impact monitoring.
- To secure increased external funding for research impact delivery.

Section 3 outlines our commitment to supporting and enabling researchers to deliver impact from their research.

3. People

General Strategy and Profile

On 31st July 2020, total Category A staff numbers were 821.58FTE. Of which, 552.13FTE were SRR or IR (a 67.2% staff submission across 18 Units of Assessment); more than double the staff submitted to REF2014 (233.7FTE). The tables below show staff percentages by key indicators:

Key Staff Indicator	Percentage of total FTE	Percentage of submitted FTE
Permanent	91.5%	92.4%
Fixed-term	8.5%	7.6%
Atypical contract	0%	0%
ECR	4.1%	5.2%

Disability Indicator	Percentage of total FTE	Percentage of submitted FTE
No known disability	89.1%	89.4%
Disability declared	4.6%	3.4%
Unknown	6.4%	7.1%

Gender Indicator	Percentage of total FTE	Percentage of submitted FTE
Male	55.6%	62.9%
Female	44.4%	37.0%
Other	0%	0%

Ethnicity Indicator	Percentage of total FTE	Percentage of submitted FTE
White	62.9%	55.8%
Black	2.3%	2.2%
Chinese	6.1%	7.5%
Asian	7.7%	8.6%
Other/mixed	17.7%	22.3%
Unknown	3.3%	3.7%

Our average institutional mean gender pay gap is 7.22% with a median of 0%.

Staff greater than or equal to 0.5FTE are expected to hold a PhD and be research active and are allocated time to conduct research (20% minimum). Currently, 77% of staff have a PhD with the remainder studying or exempt. Academic staff are expected to publish 2* quality research by 2025 and this is mirrored in the REF Code of Practice for staff selection where SRR staff must

hold a doctoral degree, be undertaking high-quality research of an international standard, and be a member of a University Research Centre or Institute.

Staff Development and Support

The University received the HR Excellence in Research award in 2011 and has undertaken its 8-year review. Biannual reviews evaluate our progress against the Concordat to Support Researcher Career Development and the current Action Plan is overseen by the University Research Careers Oversight Group – notable commitments and actions include:

Commitment	Actions
Development of merit-based recruitment, reward, recognition and promotion criteria	• New merit-based matrix promotion system implemented in 2020, recognising and rewarding research, teaching, enterprise, impact and public engagement • San Francisco Declaration on Research Assessment signed in 2019 and merit-based principles adopted in recruitment and promotion
Support mechanisms for career development of researchers through mentoring, training and peer networks	• Staff have annual research appraisal and development plans. • Research mentoring scheme has been implemented. • Central training mapped against Vitae Researcher Development Framework (RDF). • Networks for staff PGRs and research only staff are planned.
Professional development of staff	• A CMI Research Leader Development programme established to embed leadership-knowledge, skills and behaviours. 152 academic staff have enrolled and 75 have Chartered Management status. • Sabbatical Policy supported by schools and central funding.
Flexible working and well-being	• University Flexible Working Policy and Procedure to support personal working needs. Parental, Adoption and Dependant's Leave and Sickness Absence policies to support staff with caring responsibilities and health issues. • Specialist Occupational Health team supports staff experiencing ill health - includes our Mental Health First Aid network and DSE provision. • UoH is accredited by the Workplace Wellbeing Charter and Silvercloud resources are available to support wellbeing of staff.

External surveys (e.g. CROS, PIRLS, and CEDARS), monitor staff satisfaction and inform the HR Excellence Action Plan targets e.g. 2019 CROS scores relating to recognition and value average 48%, an increase on 2017 (33%) and above national average. Similarly, for induction, CROS scores have improved from 54% in 2017 to 73% in 2019. Our 2018 institutional survey of PGR and academic staff (50% response) informed the HR Excellence Action Plan.

We are committed to supporting independent researchers and, where possible, aim to appoint staff on indefinite and permanent contracts. We currently have 82 (8.5%) academic staff on fixed term contracts and institutional HR redeployment strategies are in place. The University provides

bridge-funding for staff on fixed-term contracts when continuity of service and security of employment is necessary.

Early Career Researchers (ECR)
5.2% of submitted staff were categorised as ECR - it is believed that this is an under-estimate due to voluntary declaration. Initiatives to support ECRs include:

- URF funding to attend international conferences, present research and develop international collaborations.
- Exclusive PGR scholarships to facilitate supervision responsibilities and to be part of supervisory teams for DTPs.
- URF interdisciplinary challenge funding to promote collaborative working
- Senior staff assigned as research mentors.
- ECR attending key research committees for development purposes.
- Commitment in HR Action Plan to ensure researchers on fixed term contracts allowed a minimum of 10 days per year professional development
- Assistance in bid development for ECR fellowships and leadership awards.

Post Graduate Researcher Development and Support

The Graduate School was established in 2013 and is governed by Graduate Board, chaired by the Dean, which reports to University Research Committee. The importance of the PGR community was recognised as a KPI in the University Strategy (2013 – 2018) when we successfully increased our PGR community to 1000+ FTEs. Over the REF2021 period, 995 completions have been recorded and current PGR headcount is 1383.

PGR scholarships are available through several schemes including: VC's Fee Waiver Scholarship, EPSRC DTP awards (EP/N50967X/1, EP/R513234/1, EP/T51813X/1); EPSRC NPIF, Industrial CASE studentships, Leverhulme DTC, AHRC Heritage Consortium CDT, University Alliance DTAs in Applied Biosciences for Healthcare, Social Policy and an associated EU COFUND scheme. Internal QR and URF funding has been allocated strategically to support bursaries in priority research areas URF funding (£380k) has supported 19 student transitions from Masters to PhD.

Student Engagement and Training

UoH is a member of the UK Council for Graduate Education. We collaborate with external partners to provide a wide choice of training for PGR e.g. the North-West and Yorkshire Training Group, the University Alliance DTA programme, the NPL Postgraduate Institute and the Network of Expert Researcher Developers. PGR student enrichment is supported by our investment in international conference attendance, development of PGR concepts and ideas, and provision for an annual PGR Conference. A PGR Careers Officer also mentors students with career choices.

PGR feedback and consultation is managed through Graduate Council which meets six times a year. Our Researcher Environment Team coordinates PGR induction and training requirements and coordinates PRES surveys. All PGR courses are mapped to the Vitae RDF and designed to support students through their entire research journey. In addition, RDF has been used in PGR supervisor training to increase awareness of it - one third of those eligible to supervise in 2017-2019 received training.

Equality and Diversity (EDI)

The University Equality, Diversity and Inclusivity Enhancement Committee reports to Senate and oversees the implementation of University EDI related policies, Code of Practice and frameworks for staff and students. In 2020, the University signed up to the Race Equality Charter (REC) and completed the Investing in Ethnicity Maturity Matrix to inform the REC action plan. In 2018, UoH was accredited as a Disability Confident Employer and was a signatory to the Mindful Employer Charter, it is also a Stonewall Champion and participated in the Stonewall Equality Index in 2019. The University has four staff networks (LGBTQI+, BAME, Women and Disability) run by members with support from the University EDI Officer.

In 2015, UoH was awarded Athena SWAN Bronze and this has been renewed. Schools with Athena SWAN awards are Applied Sciences (Silver), Music Humanities and Media (Bronze) and Huddersfield Business School (Bronze). In 2017, at the AS conference 'Equality: Everyone's job, no-one's responsibility', Prof. Dame Julia King DBE FREng was keynote speaker. Female staff are encouraged to participate in the Advance HE Aurora programme and some staff act as Aurora role models.

The University participates in Vitae's 'Every Researcher Counts' to improve equality and diversity for researchers and our Head of Researcher Environment participates in national equality and diversity networks. EDI is integral to our commitment to the Concordat to Support the Career Development of Researchers and our HR Excellence in Research Action Plan e.g. an EDI review of central research committees (see gender table below), and anonymous sift exercises of grant applications to ensure quality-based selection without bias.

Committee	Total members	Percentage Male	Percentage Female
University Research Committee	22	59%	41%
Graduate Board	26	35%	65%
University Research Group	11	64%	36%
University Research Careers Oversight Group	14	50%	50%
University Knowledge Exchange Group	20	55%	45%

EDI is a priority within our REF2021 Code of Practice (CoP). In January 2019, an equality analysis was carried out for SRR and IR identification and output selection processes. Appendix 16A of the CoP contains the outcomes which led to the inclusion the University's on-line 'unconscious bias' and 'diversity in the workplace' modules as mandatory training for all staff involved in decision making, in addition to bespoke mandatory EDI REF training. An Equality Impact Assessment (EIA) was carried out in May 2019, testing SRR/IR identification processes and provided confidence that the processes were fair. This EIA report is in Appendix 16B of the CoP. No subsequent changes were made to the criteria for SRR/IR. This exercise was repeated prior to submission to evaluate the efficacy of the process for final identification of SRR/IR staff and the output pool.

4. Income, infrastructure and facilities

Income generation strategy and support

Total research income for 2019-20 was £16.9M, representing a >3-fold increase since 2014, can be broken down as follows:

Funder	Percentage
UK Government and NHS	35.8%
UKRI and NIHR	24.6%
IUK and Industry	21.7%
EU	10.4%
Charity	5.6%
Overseas and Other	1.0%
Local Government	0.8%

The distribution of income sources reflects the University strategy to conduct collaborative research with end-users. For example, ~60% of income falls within this category (IUK, Industry, UK Government and NHS).

We plan to continue to focus on collaborative end-user R&D and secure funding for impact delivery (e.g. Impact Acceleration Accounts). Enterprise income, from sources such as ERDF, remains a priority to facilitate impact. We will target initiatives to support our growing population of ECRs and seek alternatives to EU funding (~10% income).

Internal funding will support new partnerships and facilitate impact with end users. Over the period we allocated >£1M/annum URF to support our ASRI portfolio, capability growth, internationalisation programme and as match funding for external grants. We expect this level of commitment to continue. A Strategic Partnership Fund to facilitate relationships with external organisations has been created where UoH and external partners fund research programmes equally. Key partners include: RSSB, Paxman Coolers, Renishaw and YES Tequila.

A portfolio of schemes, infrastructure and resources exist to support development of grant applications, impact delivery and establishment of collaborative partnerships.

Infrastructure, resources and facilities

To support staff developing grant applications, we have a central pre-award team with Research Development Managers (RDMs) assigned to schools. A central post-award finance and contracts team assist in the management of successful awards. RDMs delivered challenge-type sand pit events to facilitate pan-institutional interdisciplinary collaborations and funding used to pump-prime research proposals. Some have secured external grant funding e.g. AHRC *Life-Saving Lullabies* project working with women in Zambia. Since 2016 the University has received EPSRC DTP and NPIF funding (EP/N50967X/1, EP/R513234/1, EP/R51228X/1, EP/S515425/1) and the central Research & Enterprise directorate oversees the management of these including strategy development and grant reporting.

Investment in University estate and facilities has significantly enhanced the research environment. For example, in 2017, the Oastler Building (£27M) was constructed for the School

of Music, Humanities and Media and in 2019 the Barbara Hepworth Building (£30M) for Art, Design and Architecture. As well as research facilities, buildings house dedicated PGR study areas and PGR admin staff offices. Dedicated research facilities, such as a full-scale test rig for the Rail Research Institute and the EPSRC MIAMI Ion Beam Facility have been constructed. Other major facilities include the Spatial and Interactive Research Laboratory (SPIRAL) including recording studios and the Phipps Concert Hall and the Centre for Precision Technology (CPT) which is home to the EPSRC Future Advanced Metrology Hub (EP/P006930/1). Additional equipment, purchased via an EPSRC Multidisciplinary Research Equipment Investment grant (EP/T02433X/1), supports staff across two schools. To showcase facilities and to access a wider portfolio of equipment elsewhere, we use the National Centre for Universities and Business Confer system.

Other buildings, including the Holocaust Exhibition and Learning Centre, Sovereign Design House Art Gallery and the 3M Buckley Innovation Centre (3M BIC), have been opened to facilitate impact from research. The 3M BIC has been recognised in national reviews including Lord Young's 2014 report '*Enterprise for All'* and the 2017 BEIS Industrial Strategy Made Smarter report. The HLF funded Heritage Quay archive facility (opened 2014) houses collections encompassing: British music 19th-21st century, sport, education, politics, art and design, theatre and literature.

We have invested in computer systems to support research including; the Elsevier PURE Research Management Information System, Skills Forge for PGR training and supervision monitoring and Microsoft Dynamics for tracking collaborative R&D and enterprise activities. In addition, researchers are allocated Box Data Storage system licences.

Reproducibility of research is generally addressed through internal peer review of all research outputs ahead of publication. In one specific area, the CPT and EPSRC Future Advanced Metrology Hub, reproducibility of research is critical for the development of national ISO standards. The National Physical Laboratory (NPL) is a strategic partner and PGR students developing new physical metrology and machine tool ISO standards are co-supervised by NPL staff.

Benefits In-kind

The School of Computing and Engineering has benefited from equipment donations that significantly contribute to the research environment, e.g. the STFC Medium Energy Ion Source (MEIS) which was rebuilt and became operational in 2015. MEIS forms part of the UK National Ion Beam Centre, funded by EPSRC, along with the MIAMI facility. Siemens also donated an ONIAC tandem particle accelerator to the ion beam centre at Huddersfield.

In the areas of engineering and innovation, strategic partner Renishaw, provided significant discount on a metal 3D printing AM facility dedicated for research and has installed, free of charge, metrology software for in-process measurement.

Academic researchers in Applied Sciences have accessed national HPC facilities such as HECToR and ARCHER for computational chemistry simulations and NERC research ships for the study of Arctic climate systems. Social scientists share their research using the UK Data Service.

Impact Support

UoH is committed to the principles of the Concordat for Public Engagement with Research and delivering impact from its research. In 2019, we signed the Civic University Agreement recognising our role as an anchor institution and conducted a Joseph Rowntree Foundation impact assessment to better understand the overall impact of the institution. The University Knowledge Exchange Group, reporting to URC, was established to oversee areas such as business and public engagement and IP commercialisation. Given the breadth of research across our UoAs, impact extends across economic, social and academic boundaries and substantial infrastructure has been established to support our staff and PGR.

Impact infrastructure:

Central staff supporting aspects of the impact agenda include:

- an Impact Manager advising academic researchers and school-based officers on delivery and monitoring of impact from research as well as impact training for staff.
- the Head of Business Development (HoBD) advising on IP protection and commercialisation. The HoBD also supports researchers securing funding from regional Medtech HEIF CCF schemes.
- the Head of Regional Business Engagement facilitates interaction with local businesses through ESIF programmes e.g. Manufacturing Supply Chain Programme (£5.4M) supporting 550 businesses.
- A dedicated KTP manager supports academic engagement with the IUK programme. In May 2020, UoH had 13 active KTPs across 4 academic schools.
- A part-time Public Engagement Officer leads the Public Impact and Engagement network. Events enable academics to share best practice in impact through public engagement.

Central funding (URF, QR GCRF, QR SPF and HEIF) supports our research impact related activities. For example, in collaboration with the University of Leeds, an independent Science & Innovation Audit in rail was commissioned to evaluate the opportunities for connecting our collaborative rail research capabilities with northern rail innovation systems. In addition, over the last three years, ~£400k Follow-On and Impact funding has been secured, primarily from AHRC, for projects such as Gerhard Revealed (£80k) and the EU for Researchers Night (£146k).

The University's 3M Buckley Innovation Centre is a major route to impact for several academic schools. A spin-in model for co-location of businesses alongside UoH is adopted to facilitate collaborative R&D e.g. NPL is an anchor tenant. The University showcases research strengths to local companies and provides access to state-of-the art equipment such as metal 3D printing, HPC, X-ray CT and imaging facilities. Equipment in the centre has been funded via a UoH Local Growth Fund capital grant (£2.9M).

Staff and PGR impact training

Impact training sessions have been delivered by external providers including Fast Track Impact, Vertigo Ventures, Bulletin Academic, Walcott Communications, NCCPE and Parliament Outreach & Engagement Services. Training has encompassed topics such as individual impact mapping, writing for impact, articulating impact, REF ICS development and delivering research impact into policy. Training has been tailored to all stages of research career development, e.g.

ECRs were centrally supported to participate in the NCCPE Researchers Academy. More than 200 staff have undertaken impact related training. Our PGR students receive training from the Director of Research & Enterprise and online resources are available on Brightspace. During the REF period, 10 PGR sessions have been delivered and 122 students have attended.

External promotion and events

The University website and social media platforms (@HudReseach Twitter has 2794 followers) regularly report research news stories and our dedicated PURE web portal enables promotion of research activities. The UoH Discover Magazine showcases the diverse range of research carried out and highlights economic and societal impact - 17 issues of Discover have been published during the REF period, showcasing 119 projects. In addition, to promote our research more widely, we subscribe to The Conversation magazine and 253 articles, written by 147 academics, have been published.

Events, workshops and networks are key vehicles for engaging with end users to facilitate impact of research. For example, the EU H2020 Researchers Night event 'Full STEAM Ahead' ran in 2016 and 2017. Events showcased UoH interdisciplinary research and >3000 members of the pubic visited on each occasion. To drive policy related impact of research, UoH has recently become a member of the Universities Policy Engagement Network and is seeking to drive such activity in partnership with Yorkshire Universities and West Yorkshire Combined Authority.