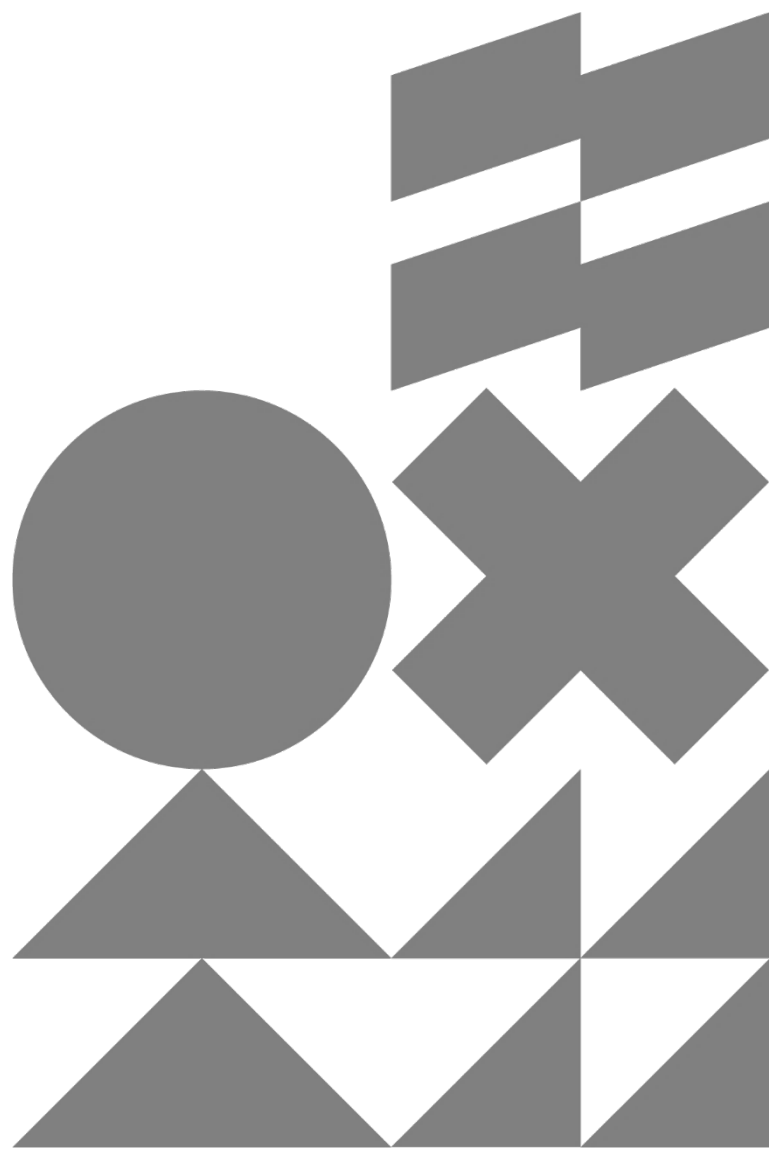


# RESEARCH & KNOWLEDGE EXCHANGE PLAN

2023 - 2030



# RESEARCH & KNOWLEDGE EXCHANGE PLAN

## SECTION A – VISION AND PURPOSE

### VISION

To grow our engagement with research and with knowledge exchange (KE) activities, to create and apply our expertise to inform teaching and professional practice and in turn, to positively impact our stakeholders, the economy and our communities in the region of Cumbria and beyond.

To realise this vision, we need to recognise the contribution of research and KE to the academic purpose of higher education: new knowledge creation, the application of knowledge to professional practice (and vice versa) and knowledge exchange with external users for the benefit of society, culture and the economy. Increasing our contributions through research and knowledge exchange will have the simultaneous effect of changing the complexion of the University from its current position to one which reflects a more balanced portfolio of core academic endeavour (teaching and learning, scholarship, research, knowledge exchange and vocational professional development/practice).

### PURPOSE

Towards 2030 sets out the vision for the University which is to ‘transform lives and livelihoods now and for future generations’. The vision describes multiple ways this will be achieved including inter alia by leveraging the University’s research, research-informed practice and knowledge exchange activities to improve learner outcomes and solve real world challenges.

The Academic Strategy 2022-30 outlines a thematic framework to deliver on the Towards 2030 vision by further articulating an integrated approach to core academic endeavours. Theme 3 of the Academic Strategy focuses on research and knowledge exchange, describing a need to expand research activity, grow research skills, grow expertise and outputs, provide creative solutions to problems and use academic skills to support innovation and growth.

Taken together, Towards 2030 and the Academic Strategy address the ‘what’ and ‘why’ of activities. This Research & Knowledge Exchange Plan to 2030 (‘the Plan’) sets a blueprint for ‘how’ our academic colleagues can play their part in realising the vision through their commitment and delivery to the goals within the Academic Strategy.

The University is still in the process of identifying its strengths in research and its key impactful relationships in terms of knowledge exchange; furthermore, the Graduate School is in a formative phase. Consequently, this Plan, once agreed and by necessity, needs to be a ‘live’ and evolving document.

### PRINCIPLES

Our Research and Scholarly Focus:

The research, knowledge exchange activity and graduate education (postgraduate teaching and postgraduate research) taking place within the five Academic Institutes, form the bedrock of academic endeavour at UoC. The Institutes and Centres which help establish the fundamental research and KE identity of the university are:

- Institute of Engineering, Computing & Advanced Manufacturing
- Institute of Business, Industry & Leadership
- Institute of Health
- Institute of Science & Environment
- Institute of Education, Arts & Society
- Centre for National Parks & Protected Areas
- Centre for Digital Transformation
- Learning, Education & Development Research Centre

Research activities taking place in Institutes and Centres are founded in the discipline-based scholarly interests of academic staff. However, UoC was established in part to address the higher level education and skills requirements of Cumbria which require not only the creation but also the application of new knowledge i.e. research. Our strengths in disciplinary, transdisciplinary and applied research reflect the demand-led requirement for our scholarly output to be front and centre in enhancing public and professional services in Cumbria (e.g. educating teachers and paramedics), helping businesses to innovate (e.g. through digital transformation) and solve problems (e.g. through sustainable practices). Moreover, our knowledge exchange activities by definition are bidirectional which enables us to learn from application of our research in the real world to co-develop higher quality and relevant curricula for our students. In this way, UoC is able to ensure our students are equipped with the relevant skills demanded by employers; this in turn enhances the regional economy.

The Research Excellence Framework 2021 (REF2021) revealed impactful research in all units of assessment to which UoC offered submissions. Notable areas which met or exceeded the international quality benchmark were: clinical healthcare practices (including e.g. radiography and psychology), forestry, leadership & practice in education, outdoor education, photography, and local and regional economies. By submission to REF2028 and future Knowledge Exchange Framework (KEF) exercises, we would hope to demonstrate expansion of our portfolio of high quality, cross disciplinary research and knowledge exchange activities to encompass: health technology (engineering/health), social care (business/health), allied medical practices (health), digital transformation (business/health), advanced manufacturing (business), supply chain & logistics (business), sustainability (environment), and low carbon economy (business/environment).

In order to realise the vision for UoC described in Towards 2030 and achieve an outcome from REF2028 which recognises and rewards our progress in becoming more research engaged, it is imperative that significant changes are made to the academic culture of the organisation over the next 3 years. This Research & Knowledge Exchange Plan sets out in some detail how this

can be achieved. The Plan describes a university research culture very much in development rather than a collection of quantitative targets which would be more in keeping with a mature research environment.

### **LINKS TO OTHER STRATEGIES AND PLANS**

This Plan is constructed such that actions are aligned to the relevant objectives within the Academic Strategy. The actions are also aligned with the three main pillars (Strategic Foci- 'SF') of Towards 2030.

The research, KE and PGR elements of the Institute AOPs should reflect this Plan. Moreover, some of the enabling actions within this Plan should be reflected in the AOP for the Research, Knowledge Exchange and Graduate School (RKE-GS) professional service directorate.

Other relevant plans which link to the RKE Plan are:

- Academic Strategy-learning, teaching & assessment: where outputs from research and knowledge exchange may influence curriculum development and require a forum for consideration and scrutiny through the governance process for programme development/improvement.
- Library Services: where outputs from research (whether publications or creative works) require curation via the organisational repository which is managed and resourced by the Library.
- Student Services: where matters of entrepreneurship e.g. start up businesses or development of business innovations may interface with graduate employability.
- Academic Registry: where the admissions process for students incorporates or interfaces with the PGR journey.
- HR & OD: particularly with respect to recruitment, promotion, retention, development and career pathways in research and KE (link).

## **SECTION B – THEMES/PILLARS AND OBJECTIVES**

Success, Timeline and Other Developments:

We will realise the vision incrementally during the timeframe of this Plan if we remain consistently research and KE inclusive in a quality -focused and supported manner. During the next 6 years, we expect to engage with the next Research Excellence Framework (REF) and Knowledge Exchange Framework (KEF) exercises and consequently, this Plan will be influenced by the strategic decisions we take during our preparations and critically, by the outcomes and learnings from recent exercises. The Research Centres have been subject to review with a report produced for VCE in January 2023. Findings and recommendations from that review will also likely impact on the agreed Plan if recommendations involve significant changes to the purpose, internal structure, remit, operations or leadership of Centres.

The University is growing. There is now an Institute of Engineering, Computer Science & Advanced Manufacturing with a clear research and KE focus from new professorial level

appointees. In partnership with Imperial College School of Medicine, there will also be a medical training offer to build capacity of health professionals in Cumbria. Both will provide an expansion in opportunities which will raise our inclusivity and intensity across research and knowledge exchange but also pose challenges around service capacity to support physically distributed activities.

Consequently, this Plan is very much a living document which needs to be challenging but achievable and yet agile enough to evolve in line with all of these developments and their inevitable impact on research and KE over the next 6 years.

Objectives are taken from the Academic strategy, the Plan documents the underlying actions to deliver, and indicators for each theme are included in Section D – Implementation.

### **THEME ONE - RESEARCH CAPACITY & CAPABILITY**

**An increase in the research capacity and capability of academic staff thus increasing the number of academic staff with significant responsibility for research (i.e. returnable to any future REF exercise)**

The focus of research and KE activities across the University will be in our current or emerging areas of strength and repute. There is a need to build both critical mass and capability to underpin quality and in order to achieve this, there will be a requirement to re-balance the academic portfolio of activity.

### **THEME TWO - RESEARCH QUALITY**

**Continued growth via our engagement with the Research Excellence Framework (or its successor)**

Although we are not using the REF results to dictate strategy and drive growth of the University, they will be used as a reliable indicator of our progress in terms of research quality across disciplines and our comparative national standing. REF results determine our 'QR' -quality related public funding for research and therefore, increases in QR not only reflect our research quality but also enable us to invest in research.

### **THEME THREE - KNOWLEDGE EXCHANGE RELATIONSHIPS**

**Increases in our KE Framework (KEF) outcomes that measure our relevance and engagement with partners, stakeholders and collaborators.**

Knowledge-based relationships with regional, national and international stakeholders such as businesses, the public sector and the third stream sector will focus on addressing economic and societal challenges and equally, inform the applied nature of our academic programmes. Our visibility as experts who are 'open to doing business' is critical to realising and being recognised for the impact of knowledge exchange activities. Income from KE activities informs our HE-BCIS return which in turn drives our public HEIF allocation. HEIF is re-invested in our KE active staff and their activities.

#### THEME FOUR – FINANCIAL SUSTAINABILITY

##### **Increase in research and KE income**

Although much of the research portfolio at UoC does not on the face of it require significant external income to generate outputs, it is very difficult to engage in STEM -based research without funding for infrastructure and recurrent supplies. Moreover, the full economic cost of research which includes inter alia, academic salaries to compensate for time engaged on research projects, means that in most cases, research runs at a financial loss and is maintained through subsidization e.g. from student fees. Although KE income can be obtained from project grants (where it is underpinned by research activities for example), KE income can also be obtained in compensation for a contractual activity and often at commercial rates which covers academic time. The aim is to move towards a more sustainable financial position so that our income covers the costs of those activities and allows us to grow them.

#### THEME FIVE – DOCTORAL STUDENTS

##### **A significant increase in doctoral student numbers and the completion of doctoral studies on time.**

Now that the University has higher degree awarding powers coupled with a regional need for tertiary level vocational skills, there is an opportunity to build a comprehensive offer of doctoral programmes tailored to meet that need. UoC needs to differentiate itself from the regional competition by offering doctoral research opportunities of relevance without compromising on quality or rigour.

#### THEME SIX – POSTGRADUATE RESEARCH EXPERIENCE

##### **Progressive improvement in our Postgraduate Research Experience Survey (PRES)**

The University needs to maintain its excellent reputation (5th nationally) for the postgraduate research experience by ensuring that every stage of the student journey from registration to graduation is exceptional. This is a challenge not least of all because there are many dependencies including the quality of supervision, services from the Graduate School and elsewhere across the University, the infrastructure including library and Blackboard access and the degree to which a complex demographic of students feel part of a University community which cares about them and facilitates their success.

#### THEME SEVEN – RKE PROFILE

##### **Raise profile and impact of UoC's research and KE activity within the University, across the region and beyond**

Growing our research and KE 'intensity' and inclusivity will not happen without all of our colleagues and stakeholders understanding the importance of these activities to our identity as a university and as a credible lynchpin in the region and beyond. There is not only a need to communicate more effectively across the University at every level but to also keep our external

stakeholders, partners, collaborators and regional communities informed and involved in our activities as far as it is possible and appropriate to do so.

# APPENDICES

## APPENDIX A – PLAN VISUALISATION

### RESEARCH AND KNOWLEDGE EXCHANGE

#### VISION

To grow our engagement with research and with knowledge exchange (KE) activities, to create and apply our expertise to inform teaching and professional practice and in turn, to positively impact our stakeholders, the economy and our communities in the region of Cumbria and beyond.

#### OUTCOMES


Improved Quality

Increased Income

Growing Reputation

Informing Curriculum

#### THEMES



**Research Capability & Capacity**

- Improving capability of academic staff, increasing capacity and the number of staff with significant responsibility for research




**Research Quality**

- Using Research Excellence Framework to measure quality and drive growth




**Knowledge Exchange Relationships**

- Increasing our Knowledge Exchange Framework (KEF) outcomes



**Financial Sustainability**

- Increasing income to balance areas of subsidy




**Doctoral Students**

- Building our doctoral programmes portfolio, increasing doctoral student numbers



**Postgraduate Research Experience**

- Postgraduate research experience survey improvements



**RKE Profile**

- Growing RKE intensity, raising profile and impact of RKE activity

#### PRINCIPLES

Ethics and integrity

Inclusivity

Excellence

Collaboration

Impactful Activity