

UNIVERSITY OF READING RESEARCH AND INNOVATION STRATEGY

Knowledge is key to changing the way we understand and interpret the world around us. Driving the generation and synthesis of new knowledge, and facilitating collaborative sharing of knowledge, is more important than ever in a rapidly changing world. This not only helps us to understand the nature, direction and magnitude of change, but also to inform and shape the way we mitigate and adapt to it, develop resilience and address the significant global challenges arising from it. Its importance is recognised in the UK Government's Industrial Strategy and its commitment to invest 2.4% of GDP into research and innovation. The growth in research and innovation activity associated with this target will require a concomitant increase in highly talented researchers conducting this work.

This context shapes our research priorities, our research and engagement culture, and the way we lead, manage and deliver our research. Our four research themes – Agriculture, Food & Health, Environment, Heritage & Creativity, and Prosperity & Resilience – are rooted in our strengths. They are oriented to develop collaborations across disciplines and with partners, for example in industry and policy, and to drive research excellence, innovation and impact. Together these four themes constitute a distinctive research identity for the University of Reading. They function both as intellectual catalysts – allowing interaction within and across disciplinary boundaries – and as an organising principle for research support and management structures.

Supporting the excellence of our research requires our continued investment in the development and success of our staff and in our research infrastructure; growing our research income to enable this investment; and supporting the development of strategic partnerships, collaboration and engagement – both within and beyond academia – to increase the impact and reach of our work.

Primary objective

As a research-intensive university, our primary objective is to conduct excellent research that changes our understanding of the world past, present and future; promotes innovation; and tackles current and future challenges facing societies. To that end, we will support an environment and culture that enables excellent research; and will make best use of our resources, our strengths, our location and our partnerships – at local, national and global levels.

Our objectives

1) Strengthen the quality of our research by building individual and collective research leadership

The quality and impact of our research is highly dependent on collective and individual leadership in areas of excellence. Empowering our researchers, at all stages of their careers, to develop as potential research leaders within their areas of expertise is the foundation of the vitality, sustainability and quality of our research; and important to enable the conceptual and methodological innovation that underpins research excellence. At a time when technological changes have transformed research capability and opened up new methods for inquiry, we will enable researchers, through training and support, to use innovative research methods to address ambitious and important research questions.

What we will do to build individual and collective research leadership:

- i. Recruit, support and retain the best researchers at all career stages, and recognise and reward research excellence through promotion, awards, and recognition. We will actively promote equality and diversity, ensuring they are fully embedded in recruitment, promotion and retention policies and processes.
- ii. Invest in the development of our researchers through training, mentoring, support and communities of practice; and invest in Research Division Leaders and Research Deans to provide disciplinary and cross-disciplinary research leadership.
- iii. Invest in the recruitment and development of talented doctoral students, so that they fulfil their potential as researchers and are successful in a broad range of future careers.
- iv. Actively encourage entrepreneurship, especially among Early Career Researchers and doctoral students, and provide dedicated support for turning their research ideas into practical value.

2) Strengthen the impact of our research locally, nationally, and internationally

As a global community, we face many challenges. Public and societal engagement with research and new knowledge will help us to tackle and meet some of these challenges. We will sustain the strong culture of research impact we have built, and will support researchers in their engagement with stakeholders, enabling them to deliver practical value from their research to tackle social, economic, environmental and political challenges. We will focus on building further partnerships with industry in Reading and the Thames Valley, nationally and internationally, to translate our research into products and services.

What we will do to strengthen the societal impact of our research:

- i. Engage the public in our research from the outset and further develop our capacity to influence public policy and practice through our research at all stages.
- ii. Sustain and develop the established culture of impact and innovation across the University, providing targeted support to enable research projects to maximise their impact.
- iii. Identify and support opportunities to pragmatically commercialise research outcomes and streamline the associated processes.
- iv. Maximise opportunities to enhance the intrinsic links between research and teaching, and proactively engage our postgraduate and undergraduate communities in the research process.
- v. Develop forward-thinking strategic partnerships around our areas of research excellence to support innovation and knowledge exchange from our research.

3) Enhance collaborations across disciplinary, geographic and professional borders

The challenges that societies face today increasingly require collaborative efforts that bring together different perspectives and skills. Transformational, relevant and impactful research often crosses disciplinary and geographic boundaries, and requires partnerships and engagement outside academia to translate research findings into meaningful solutions to pressing global challenges. Our research themes, and our Interdisciplinary Research Institutes and Centres aim to facilitate and grow such innovative collaborations. Through them, we will support, encourage and inspire researchers to look beyond the boundaries of their own disciplines.

What we will do to enhance collaborations across disciplinary, geographic and professional borders:

- i. Strengthen cross-disciplinarity through our four research themes and our Interdisciplinary Research Institutes and Centres.

- ii. Create opportunities to achieve critical mass for specific challenges of a size and scale that require cross-disciplinary working through clusters of researchers and across research themes.
- iii. Cross traditional professional and disciplinary boundaries, to co-design and co-produce research with academic and non-academic partners, and to create practical value, both within and outside the UK.
- iv. Use our facilities, such as the Thames Valley Science Park and the University Museums and Special Collections, to build new partnerships.

4) Conduct research ethically, and with integrity and transparency

A commitment to open research, and robust processes to govern and review research integrity and ethics are core to our values, particularly in light of social and technological change. Our open research policy sets out how we will support early discovery of the design, planning, methods and results of our research and how we foster a culture of responsibility, integrity and openness in all aspects of our research.

What we will do to support open research and research integrity:

- i. Build a culture of open research, encouraging researchers and research students to be as open as they can, as early as they can, in their work.
- ii. Improve accessibility and transparency of our research through technology and open research practices.
- iii. Support the reproducibility of research through staff training, and by making data and outputs open and accessible through the University's Research Data Archive and the University's Central Archive (CentAUR).
- iv. Sustain a culture of research integrity in line with the commitments in the Concordat to Support Research Integrity.

5) Sustainably resource research activities and the development of our research infrastructure

Continued investment in our modern research infrastructure is critical to sustaining and growing our research excellence. Our existing research infrastructure reflects our disciplinary breadth: from dairy and crop research facilities on the University farm to theatre and art performance spaces; from high-performance research computing facilities to our museums and special collections; from cardiovascular and Magnetic Resonance Imaging Facilities to the Chemical Analysis Facility. Maintaining and developing these facilities requires us to manage our resources effectively. To ensure that our research is financially sustainable, we will diversify and grow our income from UKRI, charities, business and other sources; and strengthen the recovery of the indirect costs of our research. We will support research excellence by allocating resource in a targeted, transparent and open manner.

What we will do to support research infrastructure:

- i. Focus our support on research that demonstrates the potential for both excellence and sustainability.
- ii. Invest in research facilities and infrastructure through a structured planning process and a dedicated research infrastructure fund.
- iii. Provide support structures (including Research and Enterprise Services and the Library) that meet the needs of different disciplines and staff at different career stages, to strengthen funding applications, impact and innovation.
- iv. Grow and diversify the portfolio of research income, including through stronger engagement with industrial and other partners.
- v. Engage with funders to better understand and influence agendas and priorities.

How will we monitor progress?

We will monitor overall progress with the strategy against a number of high-level indicators; and against a set of indicators for each objective. We will measure progress at the institutional and research division level.

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