WE ARE DEFINED AND DRIVEN FORWARD BY OUR RESEARCH

“We embark on research for many reasons, be it out of sheer curiosity about the world or to deliver new practical benefits to industry and the workplace. We use research to build a stronger and more resilient economy, to enhance individual and social wellbeing, and to improve policy and practice. Our world is changing at an unprecedented rate, and so we must adapt how we lead, manage and deliver our research.”

Professor Steven Mithen
Deputy Vice-Chancellor
As individuals and as members of a global community we face many challenges. Some of these are at the forefront of our minds because we encounter them on a daily basis, while others might appear of less immediate concern or seem just too overwhelming to address. Many of the most demanding coalesce around the provision of food, water, health and financial security to people throughout the world. Understanding these challenges, and providing solutions will frame the University’s research agenda as we approach our centenary in 2026. So too will research that seeks to secure the common good, the diversity of human culture, and the value and appreciation of the arts within society.

Research at Reading is structured around five themes: Environment, Food, Health, Heritage & Creativity, and Prosperity & Resilience. These themes encompass our areas of existing strength and those we intend to grow; they drive research excellence within the core disciplines of our Research Divisions, while interdisciplinarity, innovation and impact are enhanced by our Research Institutes and Centres.

Our research culture enriches everything we do, from our thriving undergraduate programmes in which students are producers rather than passive consumers of knowledge, through our vibrant postgraduate community, our support services and our academics, to the most distinguished of our research professors. Everybody has a role to play. We know we can only build the research excellence, power and dynamism of the University by fostering the particular passions of each individual academic and student. We will continue to invest to provide world-class research facilities, exceptional professional support, and outstanding research leadership. We are committed to enhancing our research culture, by promoting diversity and inclusion, supporting researchers at all stages in their careers, and building a shared identity and ambition throughout our research community.
OUR THEMES

Our five research themes are open-ended and overlapping: who can say where research concerning food comes to an end and that concerning the environment or health might begin?

Prosperity requires a secure food supply, while heritage is an integral part of the environment, and culture informs social attitudes to food and health. We need our health systems and our environments to be resilient; to achieve such resilience requires creativity in human thought and action. Despite such profound and deeply woven interconnections, our themes also speak to core areas of research excellence at Reading, some longstanding and others more recently defined. Together they constitute a distinctive identity for the University.

Each theme is led by a Research Dean, whose task is to foster and support world-leading research via our Research Divisions and Interdisciplinary Research Institutes and Centres. The Research Deans work closely together to build the research that binds the whole of our University community together to deliver solutions to global concerns.

OUR RESEARCH DIVISIONS

Excellence within core disciplines underpins the interdisciplinary and multidisciplinary research which is crucial for addressing complex real-world problems. We pursue such disciplinary excellence within our Research Divisions. Each Division is primarily aligned to one of our five Research themes and supports both curiosity- and impact-driven research.
ENVIRONMENT

Since the origins of the Earth itself, the continually changing environment has been a constant stimulus to human creativity. But over the past century none of the Earth’s surface has been immune to human influence. Population growth, climate change, globalisation and technological advances are now placing unprecedented pressures on the environment and the ecosystem services it provides, such as safe food, clean water and air, and flood prevention, disease control and social wellbeing. Much of our research is aimed at understanding how the environment works, in all its complexity, to help protect these ecosystem services into the future.

‘Our research addresses the past, present and future of the environment, natural and built, ranging from outer space to the deepest oceans, from the evolution of microbes to the growth of cities and the dynamics of weather and climate. We bring together the disciplinary focus needed, whether from the natural sciences, the social sciences, or the arts and humanities, to understand the interconnected environment. As an acknowledged leader in environmental science we engage with the very best, nationally and internationally, with other researchers and with those who can influence the use of environment-related research, whether governments, industry, third-sector or individuals. So that working with us helps provide practical solutions to environmental problems, which are being widely adopted.’

Dr Phil Newton,
Research Dean (Environment)
Our research extends along the food value chain and beyond. We use our expertise to help address global society’s problems and needs in relation to agriculture and food. To ensure we have impact on both policy and practice, as well as on our fundamental knowledge base, we foster collaborative working across the University and engage extensively with other research institutes, industry and stakeholders globally. This way of working enables our food systems research to tackle some of the major challenges which are facing us now and into the future.’
Professor Richard Bennett, Research Dean (Food)

Food is one of our most basic needs, and is vital to our health and wellbeing and to our cultural identities. The food we eat and how we produce it has profound implications for both people and the planet. Worldwide, over 800 million people suffer from chronic hunger and two billion from poor diet and micronutrient deficiency; conversely, over 500 million suffer from obesity and its associated health problems. With the current world population set to rise to nine billion by 2050 there is a pressing need for our food production systems to be as efficient, sustainable and resilient as possible to provide enough healthy and nutritious food for everyone.
The major health challenges of the twenty-first century range from the chronic health conditions associated with ageing populations in developed countries to the millions of children elsewhere whose biggest health challenge is simply reaching their fifth birthday. And, outbreaks of viral pandemics, growing resistance to antibiotics, and increasing mental health problems among the young, are affecting millions of people worldwide on a daily basis. Tackling these concerns demands both fundamental science and new forms of behaviour, requiring research that spans the sciences, social sciences, arts and humanities.

‘Health-related research at Reading is directed at preventing disease, improving diagnoses, developing new treatments, and informing and improving both clinical practice and health governance, as well as enhancing wellbeing. We have an ambitious agenda to build on our strengths across the whole of this healthcare continuum. We are the leading UK institution for research on the relationship between diet and health and are expanding our patient-facing clinics and research in mental health and dementia. The opportunities offered by our new initiatives such as the Thames Valley Clinical Trials Unit and our international partnerships are enabling us to tackle not only UK but also global health challenges.’

Professor Adrian Williams, Research Dean (Health)
HERITAGE & CREATIVITY

We are all shaped by our heritage, as individuals and as societies, through the cultural expression of communities, whether hundreds of years ago or today – our buildings and artefacts, literature, language and art, our theatre, film and social traditions, YouTube videos and tweets. Focusing on the intersection between heritage and creativity, we promote public debate about how we draw on the past to shape the future, how our sense of place creates identity, how cultural heritage influences the manner in which we think and behave today, and how our heritage helps to build a feeling of community and belonging – or conversely, create alienation and social fragmentation.

‘Our research is making a difference to people's lives through exploring their sense of place and identity. We are seeking to understand the ethics and value of heritage and cultural works to different audiences, as well as the business and economics of creativity. Using our nationally designated museums, collections and archives alongside our research excellence in historical, creative and analytical disciplines, we are developing heritage projects which explore the experience and impact that global issues have on real people. We are working with international partners to safeguard cultural heritage in post-conflict zones. New partnerships with a range of different organisations and institutions are enhancing the impact of our research and enabling us to engage in national and international policy for the Arts and Heritage.’

Professor Roberta Gilchrist,
Research Dean (Heritage & Creativity)
Many of the most important problems that our societies face – such as inequality, urbanisation, unemployment and migration, climate change or armed conflict – cannot be understood through the lens of a single discipline, and so we need to work together in new ways. What are the institutions and practices that enable us to prosper as individuals and societies? How do they help us to build resilience against sudden economic, social, political or environmental shocks? Building on our strong research base, and combining it with our experience of working with governments, international organisations and charities, enables us to contribute to understanding and responding to the complex task of building prosperous and resilient communities and societies.

Professor Dominik Zaum, Research Dean (Prosperity & Resilience)
Each of our Research Divisions has its own group of doctoral students who form a key part of the research community. Our PhD and Professional Doctorate students come from all over the world and are an integral part of the thriving Reading research community. Our highly ranked Graduate School provides a central hub of support activity and skills training for research students and their supervisors, promoting multidisciplinary approaches and building excellence within our Doctoral Training Centres.”

Professor Dianne Berry,
Dean of Postgraduate Research Studies
We currently have fifteen Research Centres that act as catalysts for innovative research by combining the disciplinary expertise located within two or more Research Divisions, and often across at least two research themes.
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OUR INTERDISCIPLINARY RESEARCH INSTITUTES

Five large institutes act as the pillars for interdisciplinary research at Reading. While each has its foundations in one of our themes, their purpose is to draw on research from across all five themes to make profound contributions to our understanding of the world and to enhance wellbeing, society and the economy.
Centre for Literacy and Multilingualism
The Centre for Literacy and Multilingualism (CeLM) brings together leading experts in the fields of literacy and multilingualism to generate new insights into language acquisition, the importance of language for wellbeing and health, and the impact of multilingualism on cognitive development throughout the life-course. Strong links to practitioners (especially speech therapists and health workers) and multilingual families ensure that CeLM’s research remains grounded in policy and practice.
www.reading.ac.uk/celm

Centre for Integrative Neuroscience and Neurodynamics
The Centre for Integrative Neuroscience and Neurodynamics (CINN) is a partner of choice in understanding the nature of human behaviour and the complex interdependence of physiology, brain functioning and cognition. Using state-of-the-art technology, including multi-modal imaging and high-level computational modelling, our researchers are in a unique position to better understand conditions such as autism, obesity and ageing.
www.reading.ac.uk/cinn

Institute for Food, Nutrition and Health
The new Institute for Food, Nutrition and Health brings together Reading’s world-leading expertise in food, agriculture and the environment to understand how food production and processing can be improved to deliver better nutrition and diets. Drawing also on our economics and social science expertise, the Institute will inform policy debates and technology and to improve industrial processes and the development of new products for improved human health.
www.reading.ac.uk/ifnh

Heritage and Creativity Institute
The Heritage and Creativity Institute acts as a catalyst for building interdisciplinary research and public engagement, drawing on the University’s world-class collections. These focus on agricultural, rural and environmental histories, the work of Samuel Beckett, the history of books and publishing, typographic and architectural design, and business archives. We have three University museums with nationally significant collections: the Museum of English Rural Life, the Cole Museum of Zoology, and the Ure Museum of Greek Archaeology.
www.reading.ac.uk/hci

Walker Institute
Understanding the complex connections between climate variability and change, the environment, the economy, health and communities, requires the generation of new knowledge that occupies the spaces found between traditional academic disciplines. Walker Institute research is helping to address some of the fundamental questions facing the international community, encompassing social, economic, technological and political change, to enable the involvement of grassroots communities in the development of climate-resilient societies which are able to adapt in an uncertain, changing world.
www.walker.ac.uk
INNOVATION AND IMPACT CENTRES

Working with business, industry, government bodies and the NHS is fundamental to Reading’s research agenda. To promote this we have established the Thames Valley Science Park and are a leading member in several national and international initiatives to drive innovation.
Agrimetrics
Agrimetrics is one of four new Centres for Agricultural Innovation established by Innovate UK to advance the development, adoption and exploitation of new technologies in the agri-food sector. A partnership between the National Institute of Agricultural Botany, Rothamsted Research, the Scottish Universities Environmental Research Centre and the University of Reading, Agrimetrics is the world’s first Big Data Centre of Excellence for the sector, providing expertise in data science, smart analytics, bioinformatics, translational research and knowledge exchange in crops, livestock, food, and sustainability. www.agrimetrics.co.uk

EIT Food
Reading is a leading partner of a 50-member consortium as part of the EU-funded Knowledge Innovation Community that seeks to transform the way in which we produce, distribute and consume food throughout Europe to improve consumer confidence and global health. Reading leads the north-west Europe group that includes the Queens University Belfast and the University of Cambridge, alongside business partners ABP Food Group, The Nielsen Company, Pepsico and others who will join early in 2017. www.eit-food.eu

Institute for Environmental Analytics
The Institute for Environmental Analytics was launched in 2015 with catalyst funding from HEFCE to bridge the innovation gap between scientific research and commercial exploitation with regard to climate and environmental change. It is working to develop the technologies, knowledge and skills required to translate cutting-edge environmental research into commercially relevant solutions in a range of key sectors. www.the-iea.org

Knowledge Transfer Centre
The Knowledge Transfer Centre seeks opportunities to use and share research and resources in order to enhance innovation in industry. Reading is already a key partner for businesses of all sizes, from multinational corporations to growing, innovative small and medium-sized enterprises. The KTC provides businesses with access to cutting-edge technical equipment and facilities, the application of our research via consultancy and collaborative R&D programmes and a variety of executive education programmes, plus student placements and knowledge transfer partnerships. www.reading.ac.uk/ktc

Thames Valley Clinical Trials Unit
The Thames Valley Clinical Trials Unit is a new partnership with the Royal Berkshire NHS Foundation Trust and the Berkshire Healthcare NHS Foundation Trust, which builds on a long history of high-quality research collaboration. The Unit exists to support a step change in clinical research capability within the Thames Valley, providing real benefits to patient health and wellbeing in both community and hospital settings. www.tvctu.org

Thames Valley Science Park
We are creating a science park with international appeal that builds on the established cluster of high-growth-potential companies already based in the University and local region. Over 80,000 square feet of office and laboratory facilities on the University campus, plus a new 47-acre site close by, means we are able to offer a supportive, flexible approach and specialist facilities to a dynamic mix of start-up and larger companies in the heart of the Thames Valley among Europe’s largest cluster of high-tech businesses. www.tvsp.co.uk
OUR RESEARCH BINDS THE WHOLE OF OUR UNIVERSITY COMMUNITY TOGETHER TO DELIVER SOLUTIONS TO GLOBAL CONCERNS
OUR WORK WITH FORECASTERS PROVIDES ADVANCE FLOOD WARNINGS, BEFORE IT EVEN STARTS RAINING | WE ARE WORKING WITH LOCAL COMMUNITIES TO PROTECT WORLD HERITAGE SITES AT HOME AND ABROAD | WE ARE WORKING TO UNDERSTAND WHAT CAUSES ALZHEIMER’S DISEASE AND HOW TO BETTER SUPPORT BOTH SUFFERERS AND THEIR CARERS | OUR INSTITUTE OF FOOD, NUTRITION AND HEALTH IS LEADING RESEARCH TO BETTER UNDERSTAND THE COMPLEX RELATIONSHIPS BETWEEN FOOD AND WELLBEING | WE ARE HELPING SMALLHOLDER FARMERS IN AFRICA TO BUILD THEIR RESILIENCE TO CLIMATE CHANGE AND ADVERSE WEATHER | THE THAMES VALLEY CLINICAL TRIALS UNIT IS BRINGING NEW TREATMENTS TO PATIENTS WHILE TRIALLING THE LATEST DRUGS | OUR WORK WITH THE UN IS HELPING TO IMPROVE THE GOVERNANCE OF UN PEACEKEEPERS
A VIBRANT, THRIVING, SUSTAINABLE, GLOBAL AND BROAD-BASED INSTITUTION, RESPONSIVE TO, STIMULATED BY AND INFORMING CHANGES IN THE WORLD AROUND US

University of Reading
A VISION, AMBITION AND STRATEGY FOR 2026

CONNECTING RESEARCH
Our ways of working

For more information, please contact:
Deputy Vice-Chancellor’s Office
University of Reading
Whiteknights
PO Box 217
Reading, RG6 6AH
Tel (0118) 378 6442
research@reading.ac.uk
www.reading.ac.uk/research

The Athena SWAN Charter promotes and rewards good employment practice in the recruitment, retention and progression of female academics in STEMM. The University of Reading joined the Charter in 2012 and holds a Bronze Athena award.

The following Departments and Schools have achieved Athena awards:
- Archaeology, Geography and Environmental Science (Silver)
- Biological Sciences (Bronze)
- Built Environment (Silver)
- Chemistry, Food and Pharmacy (Bronze)
- Mathematical and Physical Sciences (Silver)
- Psychology and Clinical Language Sciences (Bronze)