



UK Research  
and Innovation

# UKRI Corporate Plan

2023–2024 update





# Contents

Introduction ..... 3

**Delivering our objectives of World-class:**

**Objective 1: people and careers..... 5**

**Objective 2: places..... 10**

**Objective 3: ideas..... 14**

**Objective 4: innovation..... 18**

**Objective 5: impacts..... 22**

**Objective 6: organisation..... 28**

**Our budget..... 31**

# Introduction

UK Research and Innovation (UKRI) has formally existed for five years and is moving into the second year of both our five-year strategy, '[Transforming Tomorrow Together](#)', and a three-year financial settlement from the 2022 Spending Review. This settlement and long-term ambition for UKRI reflects the centrality of research and innovation (R&I) to the UK government's ambitions for high productivity growth, innovative public services and the importance of the strength of the sector to the UK's international standing. This ambition is embodied in the creation of the new [Department for Science, Innovation and Technology \(DSIT\)](#), and the publication of the [Science and Technology Framework](#), and the UK's association with Horizon Europe.

Sponsored by DSIT and reaching across the R&I system, UKRI is uniquely placed to connect and catalyse change across the UK R&I system, bringing people and resources together across sectors and disciplines, to capture the benefits of R&I for national prosperity. We play a vital role in harnessing the strengths of the UK's R&I system, to position the UK at the forefront of global scientific and technological advancement. We support world-leading research, talented people and teams, and networks of collaboration to turn global challenges into opportunities to build high-growth businesses, world-class public services and create high quality jobs across the UK.

We have made significant progress over the last twelve months. We are investing for the long term and the near term, providing for future capability and agility to respond rapidly to emerging challenges, opportunities, and government priorities. We are delivering new, effective and impactful funding streams, and attracting further R&I investment, to fuel sustainable economic growth and high-quality public services. We are strengthening our R&I system and maximising its potential at the local, regional, national, and international level.

Our work this year has spanned strategic investment in regional UK R&I capability, such as the [North West Space Cluster](#) and the [Northern Ireland Cyber-AI Hub](#), training and attracting talent and attracting private investment, to catalyse growth and strengthen the UK's position as a leading science power. We have enabled and nurtured [young innovators](#), ensuring a dynamic community of research and business talent for the future. Building on 10

years of strategic investment, key breakthroughs have been made in quantum technology which are set to revolutionise computing, medical imaging and remote sensing. This will invest in the new [National Quantum Technology Programme](#) to capture the many benefits of this transformative technology and create a quantum enabled economy.

We welcome the [Research, development and innovation organisational landscape review](#), the principles for which closely mirror those in our strategy. We will seize the opportunity to work with DSIT, and across the R&I system, maximise the benefits of association with Horizon Europe, [review our approach to institutional research funding](#), and foster the diverse, connected and resilient system that the UK needs to prosper.

We strive to be the most efficient, effective, and agile organisation we can be, for our staff, our communities, and the taxpayer. As a smart investor we aim to maximise our impact and value at every stage of the R&I cycle, delivering multiple priorities with every pound we spend. Alongside our organisational change programme we are improving our policies and practices, helping our diverse workforce to thrive, improving our systems and increasing our efficiency, successfully responding to recommendations of the [Grant Review](#). We are also responding to recommendations of the [Tickell Review](#), reducing bureaucracy to enable researchers and innovators to maximise the time spent on developing great ideas and building the UK's world-class R&I system. We set the standard globally, using proportionately less operational expenditure (OpEx) than many of our international competitors. We have achieved our operational expenditure targets for the 2022 to 2023 financial year and are pursuing further ambitious OpEx reductions.

This corporate plan update outlines how we will work across UKRI to deliver against our strategy through near term deliverables for the 2023 to 2024 financial year. It builds on the ambitions set out in our [corporate plan 2022 to 2025](#) and the [strategic delivery plans](#) of our nine councils, reflecting the progress we have made, the challenges we face, and where we will focus our efforts in the coming year.



We are progressing delivery of our commitments for the current spending review period (2022-25), including:

**Boosting tomorrow's technologies.** We are increasing our investment in critical, transformative technologies, identified in the UK government's technology strategies, to power an innovation nation. We have invested £160 million, through the Engineering and Physical Sciences Research Council (EPSRC), in research clusters and business partnerships in [artificial intelligence \(AI\)](#) and [quantum technologies](#). We bolstered our [engineering biology](#) portfolio, led by the Biotechnology and Biological Sciences Research Council (BBSRC), by a further £20 million with co-investment by [Defence Science and Technology Laboratory](#). We are driving forward the government's ambitions for compute, [semiconductors](#) and [future telecoms](#), and investing a further £250 million through our [technology missions](#) across AI, quantum and engineering biology, and attracting private investment, to grow these world-leading sectors. **(see objective 5)**

**Building a greener future for all.** We are working to deliver net zero, ensuring UK energy security and biodiversity, and keeping the UK at the forefront of the green industrial revolution. Through strategic investments in partnership with governments and businesses we are building on our existing £800 million annual investment to fast-track initiatives to create the solutions necessary to meet UK net zero targets. We will invest in large scale interdisciplinary centres to address challenges around [clean energy](#), [resilient transport infrastructure](#), [land use](#) and [low-carbon living](#). **(see objective 5)**

**Becoming a more agile, responsive organisation.** We have made significant progress towards increasing our efficiency and effectiveness, maximising our value for money in supporting UK R&I. We are streamlining policies and processes across UKRI and have combined our new operating model and data systems programmes into integrated, coherent workstreams. We are firmly on track to achieve challenging operational expenditure reduction targets and met our targets for 2022-23. **(see objective 6)**

**Catalysing growth by supercharging innovation.** We are increasing our investments in innovation, driving forward the UK government's [Innovation Strategy](#), including through Innovate UK's [Plan for Action for UK Business Innovation](#) which is helping companies to grow and scale. UKRI grants issued in 2022-2023 attracted £792 million in private co-investment, and Innovation Loans companies leveraged a further £88.8 million in private capital. We are actively engaging with partners to ensure that our R&I system offers excellent support for commercialisation, business innovation and inward investment, working with DSIT across the pillars of the [Science and Technology Framework](#), including helping to develop appropriate UK government levers, such as regulation, standards and public procurement. **(see objective 4)**

**Developing, attracting, and retaining talented people and teams.** We are nurturing and growing the UK's talent base, ensuring the UK is a magnet for global talent and improving porosity between sectors. We created [a pooled £2 billion talent budget](#). We published our [Collective Talent Funding roadmap](#) setting out how we will simplify and enhance our talent investments and support the diverse career path needed for success. We are working across the sector to develop a '[New deal for postgraduate research](#)' and to develop talent through studentships and our flagship [Future Leader Fellowships](#) and we are addressing future innovation skills gaps in businesses through the Innovate UK led Workforce Foresighting Hub. The Global Talent visa programme has expanded. We have endorsed 3,000 visas since 2020. **(see objective 1)**

**Supporting new insights through interdisciplinary science.** We are empowering the UK R&I community to bring together different disciplinary perspectives and approaches and launching [a new £65 million fully open interdisciplinary responsive mode pilot](#). This funding is designed to support new ideas that transcend disciplinary boundaries, freeing researchers and innovators across the UK to pursue disruptive ideas that don't fit into current frameworks. **(see objective 3)**

**Thriving research and innovation clusters across the UK.** We will bring researchers, innovators, businesses, and investors together in clusters of excellence across the UK to drive innovation-led economic growth and high-quality job creation. We are investing in [Local Policy Innovation Partnerships](#) across 10 areas of the UK to trial innovative approaches to driving inclusive and sustainable growth. We are working with local leadership, through Innovate UK, to co-develop [Innovation Accelerators](#), place-based action plans, and new [Launchpad](#) investments, building and growing local innovation capability to create an innovation economy across the UK. We are supporting innovative businesses to thrive on our R&I campuses across the UK. **(see objective 2)**

**Tackling global and national challenges.** We are deploying the strength of UK R&I to address complex global and national challenges, focused around our five [strategic themes](#). We are bringing together expertise across our communities, enhancing and maximising synergies across our councils' existing investments, to develop an ambitious portfolio of interdisciplinary programmes, aiming to invest an additional £75 million per theme over five years. We support businesses through the [UKRI Challenge Fund](#) to address big societal challenges, realising £3.3 billion private sector co-investment, and further £2.7 billion committed, to date. **(see objective 5)**

**Outstanding infrastructure across the UK.** We invested £818 million in cutting-edge R&I infrastructure in 2022-23. This included £59 million through our [Infrastructure Fund](#) to support step changes in infrastructure capability and capacity. We launched round seven of the [UK Research Partnership Investment Fund](#) to support up to £100 million in non-public co-investments in higher education facilities. Our investments will continue to strengthen the UK's R&I capabilities and innovation clusters across the UK, attracting R&I investment, globally mobile businesses and talent, and supporting innovation, skills, and high productivity growth. **(see objective 2)**



# Objective 1: World-class people and careers

## Making the UK the top destination for talented people and teams

We are committed to making the UK a destination of choice for researchers and innovators from around the world and to nurturing the full diversity of skills and talent the UK needs for a high-productivity, high-growth, innovation-led economy and public services. We will cement our position as a world leader in research and innovation (R&I) and promote opportunities for international collaboration, delivering on the government's [Research and Development People and Culture Strategy](#).

We are transforming the way we invest in talent. We have brought together our research council spending for talent, including fellowships and studentships, into [a collective single fund of £2 billion](#) (over 2022 to 2025) to align our investments in people and teams. We are increasing investment in our people, culture and talent portfolio by 26% by 2024-25. This will ensure the UK has the people, skills, and environment to respond rapidly to emerging opportunities and secure global competitive advantage in strategic technologies. We increased UKRI student stipends by 13% in 2022-23, without reducing the numbers we support, and are conducting a longer-term review of the stipend as part of our work on the sector-wide [new deal for postgraduate research](#). This is an ambitious programme that aims to ensure that postgraduate research in the UK remains sustainable, open and attractive to a wide range of candidates from the UK and internationally.

We will build on our prestigious fellowship programmes and support for talent mobility to boost career path diversity and connectivity across R&I in the private, public and third sectors, nationally and internationally. We will incentivise a wide range of exciting careers and a vibrant UK R&I culture, building the networks needed for creation, adoption and diffusion of new ideas and technologies. A critical element of this work is public engagement, ensuring that the UK's R&I endeavour has the talent needed into the future, which we are delivering through our new [public engagement strategy](#).

**Building on our work to deliver on our commitments in 2022-2023:**

**To make the UK the most attractive destination for talented people and teams from the UK and around the world**

**In 2023-24 we will:**

Develop and deliver our UKRI-wide talent programme in line with our [Collective Talent Funding roadmap](#). This sets the standard for talent investment globally, supporting development of interdisciplinary as well as specific disciplinary needs. We will harmonise our activities to reduce bureaucracy, and make it easier for researchers and innovators to work across boundaries, including:

- delivering rounds seven and eight of the [Future Leaders Fellowships \(FLF\) programme](#), including a focus on new technologies. We will expand the [FLF development network](#) to include other UKRI fellows and research leaders in UKRI's centres, institutes and units. This will help develop the next wave of world-class R&I leaders in academia and business
- responding to the issues highlighted in the [new deal for postgraduate research call for input](#) in collaboration with DSIT, other funders and providers (while continuing to invest in ongoing doctoral training programmes). We will complete a feasibility study to scope an appropriate approach for evaluating our studentship investments to inform future investment
- developing targeted investment in priority skills for the future, working towards a new UKRI Centres for Doctoral Training (CDT) funding opportunity under the collective talent budget. This is in addition to council-led CDTs in [behavioural science](#) and critical technologies, and [delivering a £117 million cross-UKRI programme for CDTs in AI](#)

Evolve and expand our UKRI Global Talent visa and temporary worker short-term routes to ensure we attract a diverse range of R&I talent with different skills and backgrounds. We will improve visa communications and promotion through the [GREAT Talent campaign](#) and reduce complexity to help international R&I talent navigate the system.

**To develop the breadth of skilled people and teams essential for the future R&D workforce**

**In 2023-24 we will:**

Champion and foster a diverse, inclusive, and connected R&I system, contributing to an innovation-led economy. We will deliver key elements of the [research and development people and culture strategy](#) through our portfolio of people, culture and talent activities, including our [equality, diversity and inclusion \(EDI\) strategy and action plans](#). We will also develop our understanding of future R&I workforce skills and knowledge needs, including:

- using interdisciplinary evidence to inform EDI policy and practice in the R&I system, supported by the £3.4 million [Equality, Diversity and Inclusion Caucus \(EDICa\)](#). This will be delivered in collaboration between Economic and Social Research Council (ESRC), the Arts and Humanities Research Council (AHRC), BBSRC, EPSRC, Innovate UK and the [British Academy](#)
- working closely with DSIT, the [Department for Education, Universities UK](#) and the [Catapults](#), through the Innovate UK-led Workforce Foresighting Hub to identify and address emerging critical innovation skills gaps in business
- launching the 'No Limits' mission, led by Innovate UK, to unlock the power of untapped talent for innovation in the UK and build a fairer and more resilient future
- working with DSIT on the [R&I workforce survey](#) results evaluation and shaping the next survey to establish clearer evidence on workforce needs and gaps



Implement our year one commitments in our new UKRI [people and teams action plan](#) which sets out how we will support the development of skilled people and teams in R&I. This will deliver the [Concordat to Support the Career Development of Researchers](#) and [Technician Commitment](#), including:

- introducing [a new set of grant roles](#) into the new Funding Service. This will better reflect the diversity of people, performing a variety of roles, who apply for UKRI funding, and will enable us to support the implementation of the [Technician Commitment](#) and our [UKRI people and teams action plan](#).
- supporting leadership development for the UK's technical community through [Research England Development Fund](#) support for [Midlands Innovation](#) and the new [Institute for Technical Skills and Strategy](#)

Incentivising diverse career paths and greater mobility between sectors through opportunities to foster partnerships and collaborations across academic, business, investor and policy communities, nationally and internationally including:

- widening the [UKRI Policy Fellowships scheme](#) to include a broader range of disciplines and developing new UKRI Parliamentary Fellowships, building on the [ESRC-led Network of Thematic Research Leads for Parliament](#). This will enable increased researcher engagement with policymakers
- widening our UKRI Innovation Scholars secondments to a broader range of disciplines, in addition to discipline-focused activities such as the [Flexible Talent Mobility Accounts](#), led by BBSRC. This will foster increased mobility between private sectors and institutions as well as training and skills development of academic and industrial researchers and technicians

### To shift research culture to support talented people and teams to pursue their ideas

#### In 2023-24 we will:

Work with a wide range of partners to develop and influence responsible national and international R&I policy, culture, and good practice, including by:

- funding and providing the secretariat for the independent [UK Committee on Research Integrity](#) until 2025 to promote high integrity research practice across all research environments
- redoubling leadership within international fora to influence the global R&I landscape, including the [Global Research Council](#), [Science Europe](#), [Coalition for Advancing Research Assessment](#), [European network of innovation agencies \(Taftie\)](#), and the [Organisation for Economic Cooperation and Development's Global Science Forum](#)
- delivering our [open access policy](#), in collaboration with the [Open Access Policy Stakeholder Forum](#) and a range of multi-lateral international partnerships. We are developing an updated open research data policy that will incentivise open research data practice in line with principles of research data being as open as possible, and as secure as necessary
- working with sector partners to develop a long-term strategic approach to supporting researchers at risk, building on the National Academies/Council for At-Risk Academics, [Researchers at Risk Fellowship Scheme](#) and our support for the [Universities UK international](#) UK/Ukraine Twinning Initiative

Pilot models and adopt good practice for improving R&I culture, working with partners to take a data and evidence-based approach to drive efficient and sustainable change, including by:

- working with the sector, using our convening role, to mature the [Forum for Tackling Bullying and Harassment](#) to realise the potential of this shared endeavour and positively impact the culture of R&I
- publishing an evidence synthesis on expert peer review. This addresses our commitment to review and refine our approach to funding decisions, ensuring the best R&I outcomes through excellent R&I culture

- supporting the further adoption of narrative CVs (for example, [Résumé for Research and Innovation](#)) by sharing the evidence and data gathered in support of a shared evaluation framework of their use across a range of sectors
- improving and embedding our approach to [trusted research and innovation](#), ensuring that we have the most appropriate principles, tools, and guidance in place to protect our thriving and collaborative R&I sector

Implement our new [public engagement strategy](#) to make R&I relevant and useful for everyone, including:

- launching a new £3.6 million [Community Research Networks](#) programme, to be delivered over two phases. The programme will build a sense of shared endeavour and enable equitable and sustainable forms of community participation in research, building connectivity, capability and learning to strengthen relationships between communities and the R&I system
- piloting a new [Community Knowledge Fund](#) programme and [Community Led Research Pilot](#) (co-created with the [British Science Association](#)) that aim to support more people around the UK to develop ideas to address challenges that matter to them locally, valuing diverse forms of knowledge
- building on council-led activities such as the [Festival of Social Science](#) and our ongoing support for the [National Coordinating Centre for Public Engagement](#), through Research England in partnership with other funders, to support universities to engage with the public
- continuing to support the £1.3 million, three-year [Creative Communities](#) programme, with the first ever cross-sector survey of AHRC-funded community research participants. This will broaden future research collaborations and inform a series of UK-wide Policy Labs
- supporting the [Sciencewise public dialogue programme](#) and [STEM ambassadors youth engagement programme](#), inspiring and engaging the next generation
- delivering flagship UKRI programmes, such as the ESRC-led [Administrative Data Research UK \(ADR UK\)](#) and MRC-led [Health Data Research UK \(HDR UK\)](#). These will embed public engagement into everything they do, to ensure research using administrative and health data is informed by the public's views of how this data should be used for the public good



Image credit: Matt Beech Photography



# Highlights:

## UKRI Policy Fellowships Scheme

We are expanding the [UKRI Policy Fellowships](#) scheme to fund 49 opportunities for researchers to enhance their understanding of applying research in government contexts, diversifying career paths and promoting porosity between sectors in the R&I system. This exciting opportunity allows researchers to embed themselves in one of 27 central government or devolved administration hosts or What Works Centres to undertake cutting-edge research to inform policy areas as diverse as fiscal sustainability, achieving net zero, crime and justice and reducing regional inequalities. The scheme is delivered by ESRC, [Administrative Data Research-UK](#), AHRC and BBSRC, and builds on the experience of the ESRC-led [policy fellowship programme](#).

## OneZoo Centre for Doctoral Training (CDT)

In October 2023 the [OneZoo CDT](#) will start to develop the first cohort of researchers trained to tackle current and future zoonotic threats. They will take a transdisciplinary approach to the zoonotic drivers for pathogens and design successful, innovative environmental prevention and control strategies. The wide range of research disciplines (including environmental, veterinary, biomedical, humanities and human clinical research) alongside partners, including non-governmental organisations and government agencies participating in the CDT, will help students develop system-level approaches with real-world applications. We will invest £4.8 million, through the Natural Environment Research Council (NERC), BBSRC and MRC, in partnership with four host institutions (Cardiff University, Aberystwyth University, Queen's University Belfast, and the London School of Hygiene and Tropical Medicine) to fund 20 studentships. This investment will contribute to the 'Tackling infections' strategic theme (see [world-class impacts](#)).



Image credit: Rothamsted Research



# Objective 2: World-class places

## Securing the UK’s position as a globally leading research and innovation nation with outstanding institutions, infrastructures, sectors, and clusters across the breadth of the country

We are investing across the UK to secure our position as a globally leading research and innovation (R&I) nation with outstanding institutions, infrastructures, and R&I clusters, driving growth and crowding-in private sector investments. We will enhance the UK’s competitive advantage by taking a strategic and coordinated approach to investment across the UK. We will strengthen our partnerships to enable locally led, world-leading, collaboration locally, regionally, nationally, and internationally. We are deepening our engagement with local and regional authorities and devolved administrations, embedding place-based considerations in everything we do to enhance our regional presence and strengthen R&I funding outside the Greater South-East of England.

We are delivering substantial strategic investment in R&I infrastructure to provide the long-term capability and access to world-class infrastructure crucial for developing and attracting talent and R&I investment to the UK, and to fostering international collaboration. This includes delivering on the recommendations from our [UKRI Infrastructure Roadmap](#) through our [Infrastructure Fund](#), supporting step changes in infrastructure capability and capacity. We will deliver our [Digital Research Infrastructure programme](#), supporting our vision of a coherent state-of-the-art national digital research infrastructure. We will continue to ensure the UK remains an active partner in priority international research infrastructures, to benefit from sharing knowledge, expertise, data and capability across borders.

Last year we delivered [£150 million support for R&I](#) infrastructure to help address the impacts of the delay in UK association to the EU’s [Horizon Europe](#) programme. We will continue to ensure the UK remains an active partner in priority international research infrastructures, through Horizon Europe and Copernicus, and wider international partnerships, to enable scientists to benefit from sharing knowledge, expertise, data and capability across borders.

Through our [research financial sustainability programme](#) we are working to understand the financial challenges the R&I system faces and how best to ensure a resilient and financially sustainable system. Our work will contribute to the development of responses to the [research, development and innovation organisational Landscape Review](#), working with DSIT and our wider sector partners.



**Building on our work to deliver on our commitments in 2022-2023:****To strengthen clusters and partnerships locally, nationally and globally****In 2023-24 we will:**

Seek new opportunities and partnerships to support collaboration and knowledge exchange to deliver impactful growth outcomes, including by:

- delivering the new £100 million [Innovation Accelerators programme](#), investing in 26 projects to accelerate the growth of three high-potential innovation clusters in Glasgow, Greater Manchester and the West Midlands. We will pilot a locally led approach to supporting city regions to become major, globally competitive centres for R&I. These projects will attract private investment, create new jobs, boost regional supply chains and economic growth, and develop the technologies of tomorrow, including sustainable advanced materials and manufacturing, digital and greener tech, space, and health innovation and precision medicine
- scaling up local innovation capability and cluster development through the [Innovate UK Launchpad](#), after successful pilots within [Liverpool City Region](#) and [Teesside](#). We will launch up to eight new launchpad investments to build on local innovation strengths, supporting small and medium enterprises to deliver jobs, growth, and higher productivity. Innovate UK will strengthen further regional partnerships with co-developed place-based action plans with local stakeholders
- strengthening UK life-sciences capability through a new [Moderna Innovation and Technology Centre](#), at [Harwell Campus \(Harwell Health Tech Cluster\)](#). This will provide the UK public with access to cutting-edge mRNA vaccines for a wider range of respiratory diseases and support high-value jobs across Oxfordshire and the UK

**To improve the financial sustainability of R&I in organisations across the UK****In 2023-24 we will:**

Strengthen our evidence base on the financial resilience of the R&I system in order to embed understanding and insight in our decision-making, contributing to the development of responses to the [Research, development and innovation organisational landscape review](#), including:

- exploring the implications of both short and long-term issues (such as inflation, trends in international students and their impacts on the cross-subsidy of research) for research in higher education, the funding landscape for UKRI institutes and developing options to improve the agility, effectiveness and resilience of the R&I system
- conducting further analysis, building on research commissioned in 2022-23, on the long-term costs of research, to underpin options to move to more sustainable cost recovery on research grants
- reviewing UKRI grant indexation policy for 2024/25 following the decision to increase the indexation rate to 2.48% for grants offered in 2023/24
- providing advice to DSIT on the appropriate balance of funding across our portfolio and the principles underpinning the [dual support system](#) to inform funding allocation decisions. We will further engage and collaborate with key sector stakeholders and government, including through the [Financial Sustainability of Research Group](#), to build a shared understanding of how to improve the financial sustainability of R&I across the UK

## To secure cutting-edge infrastructures for world-class R&I

### In 2023-24 we will:

Ensure UK researchers have access to world-leading laboratory facilities, equipment, and digital resources supporting long-term strategic investments, including:

- working with the UK government to deliver the recommendations of the [Independent Future of Compute Review](#). This will include progressing the business case for an Exascale supercomputing facility and making additional computing resources available for diverse AI R&I applications as part of the government's £900 million compute investment plan
- investing £142 million in 2023-24 financial year in world-leading facilities and equipment through the continued delivery of the [Infrastructure Fund](#). This will strengthen UK research infrastructure in a wide variety of fields including telescopes to help us understand the universe; high resonance brain imaging and spectroscopy; Vulcan 2020, the highest power civilian laser in the world; and the [Digital Footprints](#), a data infrastructure opening new opportunities to develop evidence-based policy and understand rapid societal changes of the 21st century
- investing £100 million over two years, through the [UK Research Partnership Investment Fund](#), in partnership with devolved administration funding bodies, in facilities across the UK contributing to local clusters. This will leverage at least £2 of funding from non-public sources for every pound invested
- maintaining our cutting-edge infrastructure and capabilities at various scales and across our estates by investing a further £641 million in 2023-24 through our research councils and Research England. This will be delivered as part of our [World Class Laboratories programme](#) and [Research Capital Investment Fund](#). This includes capital funding to our institutes, multinational large infrastructure, archives and collections, and to support our Antarctic infrastructure



Image credit: STFC Hartree Centre

- investing a further £42 million in 2023-24 through the [Digital Research Infrastructure programme](#), to enable UK researchers to harness the full power of modern digital platforms, tools, and techniques



# Highlights:

## Business boost for north-west England biotechnology start-up

An exciting new business programme designed to support biotechnology start-ups in the north-west of England was formally launched in February 2023. The new [Biotech Business Incubation Centre \(Bio BIC\)](#) will build on regional strengths to accelerate the emergence and success of new companies, driving enterprise and enhancing links between the science and innovation communities. A growing number of rapidly expanding biotechnology firms, such as [Croda](#) and [Holiferm](#), are adding momentum to the emergence of a new biotech innovation cluster within [Sci-Tech Daresbury](#). Bio BIC is a collaboration between BBSRC and the Science and Technology Facilities Council (STFC). It is located on STFC's Daresbury campus, leveraging the unique and broad mix of facilities and talent across both STFC's Daresbury Laboratory and its partners and networks.

## Infrastructure Fund: investing in UK strengths in brain imaging and spectroscopy

This year we will invest infrastructure funding, through EPSRC and the Medical Research Council (MRC), in a national ultra-high field magnetic resonance imaging (MRI) scanner facility in the [Sir Peter Mansfield Imaging Centre at the University of Nottingham](#) to enhance the UK's strengths in brain imaging and spectroscopy. The new ultra-high field scanner will be 1,000 times more powerful than the first MRI scanners Sir Peter developed. The scanner will underpin a broad range of clinical and neuroscience-focused research programmes in the UK, and will help transform understanding of neurodegenerative diseases, such as Alzheimer's, Parkinson's and Huntington's and neurodevelopmental disorders including autism and schizophrenia. We are investing £29.1 million, through the [UKRI Infrastructure Fund](#).



Image credit: STFC

# Objective 3: World-class ideas

## Advancing the frontiers of human knowledge and innovation by enabling the UK to seize opportunities from emerging research trends, multidisciplinary approaches and new concepts and markets

We support the UK's world-class strength in research and innovation (R&I), from blue skies discovery to adoption and diffusion. We are committed to advancing the frontiers of human knowledge and innovation by seizing opportunities from new and emerging concepts, discoveries, and markets, transcending disciplinary and sector boundaries, and unleashing the creativity and ingenuity of our researchers and innovators.

We are committed to investing £3.8 billion in investigator-led research by 2025, through our substantial investment in open and targeted responsive funding opportunities as routes to support creative, pioneering, discovery-led research. This investment nurtures and underpins the entire R&I system.

We are working with partners to remove barriers to international and interdisciplinary working and are enhancing and improving our toolbox of funding mechanisms. We are piloting the [UKRI fully open interdisciplinary responsive mode programme](#) in 2023 to 2025. This will address an identified gap in funding mechanisms for bottom-up ideas that transcend, combine or significantly span disciplines, ensuring we can fund the best ideas without disciplinary or domain constraints.

In line with the [Integrated Review Refresh 2023](#) and our [international strategic framework](#), we work closely with DSIT, the [Foreign, Commonwealth and Development Office](#) and international funding partners to enable greater strategic co-ordination in the development of long-term international collaboration. This will ensure our researchers can work with leading scientists in Europe and around the world. We are committed to enabling research collaboration internationally to support the collective endeavour of discovery, innovation, and competitiveness of companies globally. We will build on our 2022-23 investment in longstanding, open, responsive R&I programmes through our strategic funder-to-funder relationships. We are working closely with DSIT to support applicants to Horizon Europe across the breadth of the programme. This includes through the UK's [National Contact Point](#) network and the [UK Research Office](#) in Brussels. We will continue to deliver the [Horizon Europe Guarantee](#) to ensure funding for successful [UK applicants to programmes under the Horizon Europe Work Package 2023](#). We are continuing to deliver international collaboration through DSIT's International Science Partnership Fund as well as through UKRI's core funding.



**Building on our work to deliver on our commitments in 2022–2023:****To invest in a diverse and dynamic portfolio of high-quality, creative R&I****In 2023–24 we will:**

Invest in a dynamic portfolio of creative, curiosity-driven R&I through council-led responsive mode programmes. We will champion the diversity of our responsive mode programmes to deliver new technologies that are not yet known, and new insights and knowledge that provide competitive advantage and solve tomorrow's challenges.

Invest £1,974 million annually through Research England [quality-related research funding](#), supporting the resilience, agility and strategic investment in the higher education research system. This will enable universities to support the development of ideas and novel areas of research, including where there are potential opportunities not yet ready for competitive funding processes, as part of the [dual support system](#).

Continue to take a strategic approach to international partnering to reduce barriers to investigator-led, cross-border collaboration, by:

- putting in place new international lead agency agreements with international funding body partners. This will enable UK researchers and innovators to work with international counterparts, building on the UKRI agreement we announced in 2022 with the [Research Council of Norway](#), and existing agreements across our councils with international funders
- supporting new council-led investment through strategic bilateral partnerships with international funders. This includes the [£5.5 million UK commitment, AHRC-led partnership with German Research Foundation](#) via 20 new single and cross-disciplinary arts and humanities discovery projects advancing the frontiers of human knowledge
- actively engaging in multi-lateral funding partnerships to enable international R&I, such as through EPSRC-led engagement in the next round of [CHIST-ERA](#) funding opportunities in information and communication technologies

**To incentivise and remove barriers to multi and interdisciplinary working****In 2023–24 we will:**

Develop and deliver funding mechanisms that help to capture the best ideas unconstrained by disciplinary boundaries, including:

- piloting our new £65 million [UKRI interdisciplinary responsive mode scheme](#), allowing us to assess demand and refine our processes. In each round we expect to support around 36 breakthrough or disruptive interdisciplinary ideas that would not routinely be funded through existing UKRI responsive mode schemes
- continuing to support high-quality, multi and interdisciplinary R&I that links effectively with UK government priorities through existing [Strategic Priorities Fund](#) programme investments and will deliver a final evaluation of the fund in 2025–26
- foster interdisciplinary collaboration through multi-council, multi-funder activities. New investments include:
  - investments to harness the potential of [quantum sensing technologies](#) to monitor the environment, funded through EPSRC, NERC, Innovate UK and the [Department for Environment, Food & Rural Affairs](#)
  - investing at least £50 million, to support [the first MRC Centres of Research Excellence \(MRC CoRE\)](#) for seven years. These are changing the way we fund long-term health research in all parts of the UK, using a new challenge-led approach to tackle complex and interdisciplinary health challenges

Continue to take a strategic approach to international partnering, collaboration, and engagement through transdisciplinary mechanisms to support collaborations between UK researchers and innovators and their peers to address global challenges, by:

- implementing the new [International Science Partnership Fund](#), working closely with international partners in Canada, China, Japan, US, Taiwan, Singapore and South Korea, to enable international teams to address global challenges, build knowledge and develop the technologies of tomorrow
- continuing to deliver benefits in tackling global challenges through our remaining [Fund for International Collaboration](#), [Global Challenges Research Fund](#) and [Newton Fund](#) commitments

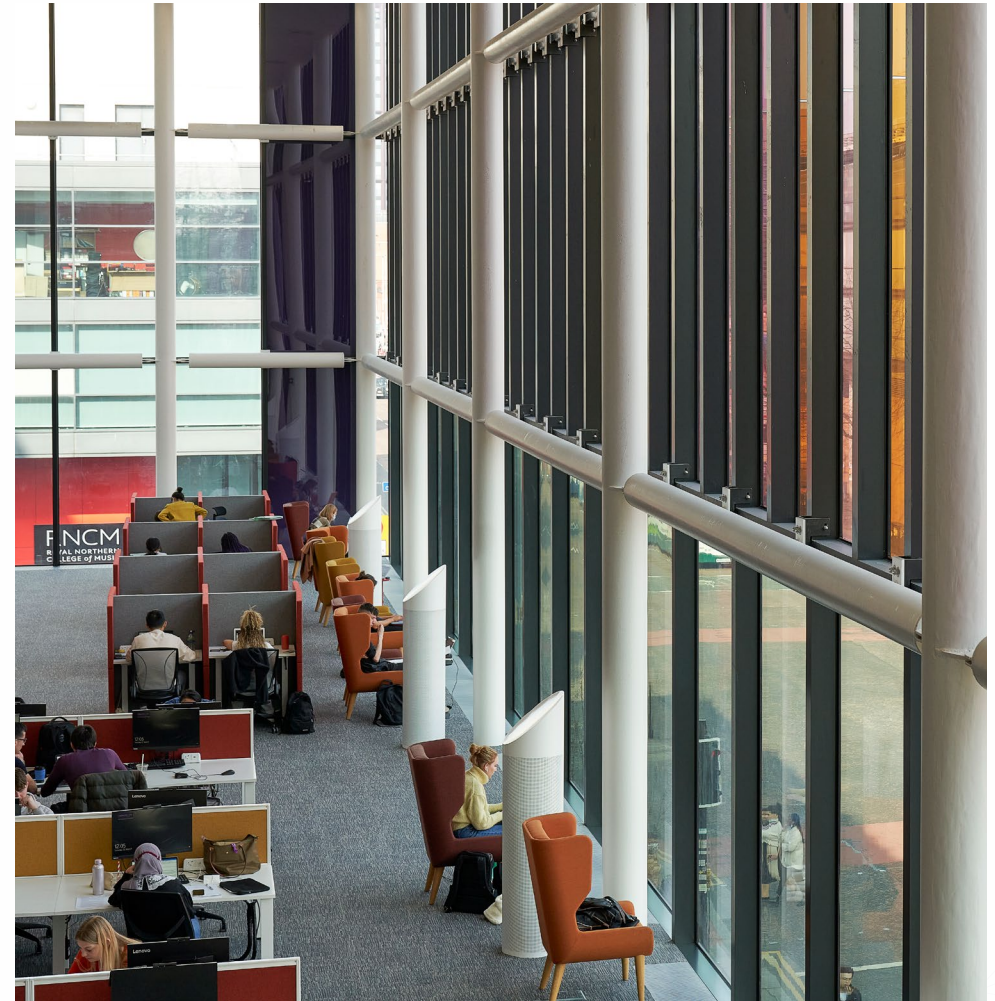


Image credit: Matt Beech Photography



# Highlights:

## Interdisciplinary responsive mode pilot scheme

This year we launched the [cross research council responsive mode funding opportunity](#) to support breakthrough or disruptive interdisciplinary ideas not routinely funded through existing UKRI responsive mode schemes, opening a new route for research ideas that transcend, combine or significantly span disciplines. This will supplement and complement the outstanding interdisciplinary research UKRI already supports, through council-led responsive mode schemes and strategic programmes which will continue to run in parallel. £65 million will be delivered across two rounds of funding.

## Building strategic collaborations to address global challenges

The recently announced [International Science Partnerships Fund](#) is building strategic collaborations with key international partners to enable UK researchers and innovators to collaborate with their peers to tackle global challenges. For example, the fund will be launching a new £54 million programme of interdisciplinary, internationally collaborative centres around [clean energy and climate change](#) (delivered through the 'building a green future' strategic theme, involving AHRC, BBSRC, EPSRC, ESRC, MRC and NERC), co-funded by the [Natural Sciences and Engineering Research Council](#) and [Social Science and Humanities Research Council](#) (Canada), [National Science Foundation](#) (US) and [Commonwealth Scientific and Industrial Research Organization](#) (Australia). It will also launch another £6.5 million centre on [International Research on Climate Adaptation and Mitigation](#) (delivered through AHRC and ESRC) developed in partnership with the Canadian [New Frontiers in Research Fund \(NFRF\)](#) programme.



# Objective 4: World-class innovation

## Delivering the government's vision for the UK as an innovation nation, through concerted action of Innovate UK and wider UKRI

We are committed to making the UK the best place in the world to innovate and helping deliver the ambitions of the government's [UK Innovation Strategy](#). We are increasing our focus on innovation across all parts of UKRI to realise the benefits of the strength of the UK research and innovation (R&I) system for increased productivity, economic growth, world leading public services, and a highly skilled workforce in high-quality jobs.

We are aligning wider UKRI activity and delivering Innovate UK's [action plan](#), to help companies grow through their development and commercialisation of new products, processes, and services, supporting this with an outstanding R&I system that is agile, inclusive, and easy to navigate.

We are using our leadership role and function to incentivise and enhance connectivity across the R&I system. We are developing our approaches, alongside partners, to targeting public investment and attracting private sector investment in R&I to nurture the next generation of globally competitive science and technology companies across the country.

We will work across UKRI to enhance the speed and effectiveness of the UK's commercialisation activity, smoothing routes to market and shortening the distances between discovery and economic, social and cultural benefit. We will maximise the opportunities for knowledge exchange and collaboration between researchers, innovators, businesses, public services and policy makers, across a range of priority business sectors.



Image credit: Matt Beech Photography



**Building on our work to deliver on our commitments in 2022-2023:****To deliver the skills, finance and collaboration opportunities needed to boost private sector investment****In 2023-24 we will:**

Work across the system to support UKRI-wide innovation to align funding opportunities and investments, including:

- supporting innovation and business-research collaboration through our councils and through council collaborations with Innovate UK, as outlined in [council strategic delivery plans \(SDPI\)](#), such as the [BBSRC-Innovate UK £50 million strategic partnership](#)
- strengthening our specialist advisory services to help businesses accelerate their growth, through our 350 [Innovate UK EDGE specialists](#), providing small and medium-sized enterprises (SMEs) with tailored support across every region and nation. EDGE will work with the [Intellectual Property Office](#) and [British Standards Institution](#) to enable SMEs to leverage investment through knowledge of intellectual property and standards
- maximising the impact of the Innovate UK investment in [Catapults](#) throughout the innovation system to deliver government priorities and accelerate the commercialisation of technologies, alongside development of our technology 'missions' (see Objective 5: Impacts)
- using the [Innovate UK Knowledge Transfer Network](#) to inspire and connect diverse innovator, researcher and investor communities across the UK, accelerating ambitious ideas into real-world solutions
- expanding on the success of the initial launch of the [Innovation Hub](#) to help businesses find all funding, collaboration and support offers in one place
- expanding our offer to support innovative businesses to commercialise their innovation and achieve growth at scale through [Innovate UK Innovation Loans](#) and [Investor Partnerships](#). Innovation Loans aim to provide flexible, repayable capital to support SMEs who want to scale up by developing new or improved products, processes or services through late-stage research

and development projects. Investor Partnerships aim to stimulate research and development in micro and SMEs, while accelerating equity investment so that they can grow more rapidly through innovation

Work with partners across the globe to support businesses to make global success a key part of their innovation-driven growth and expansion, by:

- growing key bilateral and multilateral relationships, including through the [Eureka Network](#), and expanding our business-focused global activities. We will spend over £30 million, through Innovate UK, to deliver over 60 global programmes, including [Global Business Innovation Programme](#) missions, [Global Incubator collaborations](#), [Global Expert missions](#), and bilateral and multilateral funding opportunities to help ambitious businesses to collaborate and expand in new markets, accelerating business growth
- supporting UK business engagement, participation and collaboration within all aspects of the Horizon Europe programme

**To accelerate translation, commercialisation, and knowledge exchange****In 2023-24 we will:**

Develop our approaches to incentivise and support new and existing research commercialisation opportunities, including:

- launching the new £7 million UKRI [Innovation and Research Caucus](#), through Innovate UK and ESRC. This will harness the knowledge of social sciences, innovation and research funding policy experts to provide an evidence base in developing R&I policies, strategies and decision-making to maximise the impact of the R&I system
- refining and implementing our [Research Commercialisation Funding Framework](#) to improve accessibility, efficiency and support for researchers' early research commercialisation, as recommended by the government's UK [Innovation Strategy](#). We will also deliver our research commercialisation monitoring framework as recommended by the [Tickell Review](#).



- working with the [British Business Bank \(BBB\)](#), to explore further how businesses interact with public investment support from BBB and UKRI, and how we could improve outcomes. This will build on the publication of our joint report on [Backing Innovation-Led Businesses](#)
- developing our knowledge assets strategy to aid exploitation of high potential UKRI intangible assets that have a broader application or client base
- developing plans for phase three investment in the [UK Catalysis Hub](#), through EPSRC, which links creative, discovery-led science with industrial partners and collaborations
- expanding our [ICURe programme](#) and [Knowledge Transfer Partnerships](#), through Innovate UK and research councils. This will help researchers explore the commercial application and potential of their R&I, and facilitate collaboration between academia and business to deliver industry-leading innovation
- launching a new £4 million [Social Science, Humanities and Arts for People and the Economy \(SHAPE\) Catalyst programme](#), through ESRC and AHRC, in partnership with the [Aspect Research Commercialisation](#) Accelerator. This will catalyse greater commercialisation from social science, arts and humanities research by equipping researchers with the skills to develop and bring new products, processes, services and experiences to market



Image credit: STFC

# Highlights:

## UKRI Impact Acceleration Accounts

In 2022 we launched the [UKRI Impact Acceleration Accounts \(IAAs\)](#), investing £117 million over three years, through five of our councils (AHRC, BBSRC, EPSRC, MRC, STFC), in 64 institutions across the UK. IAAs are strategic awards, adding value to existing funding for research, by providing funding to research organisations to use creatively for a wide range of impact activities. They can be used to work with users of R&I to realise the benefits of research for businesses, public policy/ services, third sector organisations and communities. These IAAs enable efficient delegation of the management of knowledge exchange funding to institutions, enabling them to respond in flexible, responsive and creative ways to take advantage of new or unforeseen opportunities for impact. In 2023-24 we are [investing a further £40 million over five years in IAAs](#) across 32 UK institutions, through ESRC, to support application of social science knowledge to challenges in society.

## National capability for knowledge exchange and metrics

We are developing a national capability as a centre of knowledge exchange (KE) evidence, metrics and data, through Research England ([announced in its strategic delivery plan](#)). This aims to improve metrics that capture the breadth of higher education KE performance, beyond those currently available in the [Higher Education Business and Community Interaction survey](#). This is critical to fulfilling the potential of the [Knowledge Exchange Framework](#) to become a tool for making funding allocations and to ensure better evidencing of the effectiveness of institutional practices to support knowledge exchange activities. This is important for making the R&I system work more effectively and to solve national challenges. Research England will work with colleagues across UKRI and critical partners including the [University Commercialisation and Innovation policy evidence unit](#) at the University of Cambridge and the [Higher Education Statistics Agency \(HESA\)](#) to develop the vision for this national capability.



Image credit: Matt Beech Photography



# Objective 5: World-class impacts

**Focusing the UK's world-class science and innovation to target global and national challenges, create and exploit tomorrow's technologies, and build the high-growth business sectors of the future**

We are committed to harnessing the UK's world-class research and innovation (R&I) to target global and national challenges, delivering benefits to society and the economy by creating and exploiting tomorrow's technologies, supporting public policy decision-making, and building the high-growth business sectors of the future.

Building on our portfolio of activity in support of [UKRI's strategic themes](#), we are coordinating council investments with partners to focus and direct our world class R&I to tackle large-scale, complex global and national challenges around: building a green future; building a secure and resilient world; creating opportunities and improving outcomes; securing better health, aging and wellbeing; tackling infections.

We continue to deliver on the ambitions of the government's [Innovation Strategy](#) through coordinated investment to strengthen the UK's global leadership and strategic advantage in the development of known and emerging new technologies in a competitive world across, and beyond, the [seven technology families](#) (advanced materials and manufacturing; AI, digital and advanced computing; bioinformatics and genomics; engineering biology; electronics, photonics and quantum; energy and environment technologies; robotics and smart machines). We will build on our existing investments to scale and expand R&I across the five technologies prioritised by the National Science and Technology Council (NSTC), as outlined in the [UK Science and Technology Framework](#), which are AI, engineering biology, future telecommunications, semiconductors and quantum technologies. This will keep the UK at the leading edge of development and application of known and new technologies.

**Building on our work to deliver on our commitments in 2022-2023:****To address major national and global challenges****In 2023-24 we will:**

Create opportunities across our [five strategic themes](#), capturing synergies from wider investment across councils and partners. This includes developing plans for longer-term investments (enabled by up to £185 million of investment from 2023-24 to 2024-25), and co-investment of at least £244.4 million from core council budgets and £155.4 million with a wide range of national and international partners. This ambitious programme reflects our unique ability to convene, coordinate and lead activity needed to address the scale and complexity of the challenges we are facing, which demand systems-level, interdisciplinary R&I responses.

■ **Building a green future:** addressing environmental and net zero challenges in all sectors of the economy, including:

- investing up to £10 million in a programme to [Transform land use for net zero, nature and people](#) co-funded by the [Department for the Environment, Food and Rural Affairs \(Defra\)](#) on behalf of England and Wales and the [Department for Energy Security and Net Zero](#). The programme was co-designed with the [Department of Agriculture, Environment and Rural Affairs \(Northern Ireland\)](#), [Welsh Government](#) and [Scottish Government](#). It will invest in research in partnership with government and industry to tackle net zero, through action in UK land sectors (soil health, agricultural systems and land use change)
- investing up to £18 million in our new [Global Centres of Excellence in Clean Energy and Climate Change](#), co-funded by partners in the US, Canada and Australia, to create an ecosystem of global cutting-edge, interdisciplinary, use-inspired centres which thrive on international partnership

- investing in a new £12.5 million [Net Zero Transport for a Resilient Future Hub](#) in collaboration with the [Department for Transport](#), to build interdisciplinary research capability and a focus for the UK transport systems research community. This programme will work in close partnership with businesses, communities, government departments, and administrations throughout the UK to tackle research challenges linked to decarbonisation and adaptation of the sector
- amplifying existing council investments by investing a further £18 million in [Green Transition Ecosystems](#) projects, through AHRC. This will translate the best design-led research into real-world benefits to address climate challenges, through the flagship [Future Observatory partnership with the Design Museum](#) and maximise our research impact on addressing contemporary challenges via our new partnership with [The Design Council](#)

■ **Building a secure and resilient world:** increasing our level of preparedness and improve response and recovery from shocks, including:

- investing £5.5 million in a [Building a Secure and Resilient World Research and Coordination Hub](#) to coordinate and lead development of an integrated, multidisciplinary programme of research, and devolved funding opportunities. This will address gaps in evidence and knowledge to support decision-making for better preparedness and response to crisis
- investing up to £30 million to amplify existing investment in digital twinning research through an interdisciplinary programme delivering applied research to inform the operation and resilience of the UK energy supply grid, contributing to the protection of wider critical national infrastructure and economic assets
- investing £26 million in the interdisciplinary research programme [Mobilising community assets to tackle health inequalities](#), in partnership with the [National Centre for Creative Health](#). This programme will support cross-sector collaborative projects to understand how to increase resilience by scaling up local approaches to integrating community assets into healthcare and social care systems to national level



- investing up to [£30 million to improve the resilience of supply chains as complex systems](#) and developing interventions with broad applicability to all supply chains, including across food and energy
- amplifying existing investments in critical infrastructure through a programme to support better modelling of connectivity and interdependencies between systems. It will foster cross-sector approaches to resilience to reduce vulnerabilities and inform better response and recovery from shocks
- **Creating opportunities and improving outcomes:** improving outcomes for people and places across the UK by identifying solutions that promote economic and social prosperity, including:
  - investing £20 million over four years, across 10 areas of the UK, to establish a network of [Local Policy Innovation Partnerships](#). This will trial innovative approaches to driving inclusive and sustainable growth and quality of life improvements in local communities
  - investing £12 million in a [Creating Opportunities Trial Accelerator Fund](#) that develops the capacity of the R&I system to test and evaluate interventions which aim to spread opportunities and reduce disparities in outcomes for people and places
  - investing up to £20 million in initiatives that engage local communities in research and activities that support social, economic, and environmental resilience. This includes up to £11 million to enhance the resilience, health and wellbeing of [UK Coastal Communities and Seas' works](#) and a £5 million interdisciplinary '[Centre in Community Participation and Connectedness](#)', delivered through ESRC, EPSRC and AHRC, that increases connections between researchers and marginalised place-based communities
- **Securing better health, ageing and wellbeing (SBHAW):** advancing people's health and promoting wellbeing, including:
  - investing in improving health outcomes and reducing health inequalities across the UK through a new £35 million network of interdisciplinary research clusters in [Population Health Improvement](#) and an £8 million [Centre in Climate Change and Health](#)
  - amplifying existing investments in interdisciplinary ageing research. This includes at least £3.5 million investment through [Ageing Research Development Awards](#) to explore the biological, environmental, social and cultural influences on ageing, with the aim of developing interventions that will keep us healthier for longer
  - developing a new £25 million transdisciplinary [Mental Health Platform](#), amplifying MRC investment, to harness and share a wide range of data and key capabilities to advance the detection, prevention and tailored treatment of severe mental illness
  - delivering up to £16 million investment in [Human Functional Genomics Initiative](#) clusters through MRC and BBSRC, addressing capability needs, identified in the [Life Sciences Vision](#), to enable the discovery and development of the next generation of genomically-informed biomarkers, diagnostics, therapeutics, and preventative medicine strategies
  - launching our five new [Digital Health Hubs](#), investing a total of £16.5 million, amplifying the EPSRC portfolio and strengthening synergies across this theme and the 'Tackling infections' theme. The hubs will increase skills and capacity in developing digital health and care solutions across academic disciplines, healthcare and industry and enable rapid commercialisation of emerging digital technologies
- **Tackling infections:** developing new solutions, tools, and technologies to better protect and enhance our health, food supply and natural capital, and detecting and disrupting the emergence and spread of diseases and antimicrobial resistance, including,
  - investing up to £20 million in interdisciplinary research to better understand, predict and prevent emergence or re-emergence of diseases of epidemic potential. This will build new interdisciplinary communities to develop an agile UK capability to respond to future challenges
  - investing up to £10 million in a transdisciplinary programme to tackle the growing [problem of antimicrobial resistance](#), building community capacity and integration of a wider range of disciplines to deliver the transformative approaches needed

- amplifying core disciplinary investments in [vaccinology and pathogen transmission \(including vector-borne pathogens\)](#) to increase their scope and impact. This initiative, developed in collaboration between MRC, BBSRC, NERC and Defra, will develop One Health capability, integrating animal, plant and human sciences tools and knowledge. It will bring communities together to be able to respond to emerging threats
- investing flexibly and responsively across disciplines, through BBSRC and MRC to understand and meet the threats associated with emerging infectious diseases of concern, such as avian influenza. This will foster a rapid response capability to inform policy decision-making at pace

Maintain our support for businesses through the [UKRI Challenge Fund](#) to address big societal challenges. This covers the four areas (clean growth, ageing society, future of mobility and AI and data economy) and monitoring the business co-investment alongside the £3.3 billion co-investment realised, and further £2.7 billion committed, to date.

### To harness the opportunities from tomorrow's technologies

#### In 2023-24 we will:

Strengthen our investment to accelerate known and new technology development, adoption and diffusion for the whole of science, policy and innovation. This includes those aligned to the government's [Innovation Strategy](#) and the NSTC priority technologies. We will contribute to delivery of the government's technology strategies, beyond the considerable activity outlined in council strategic delivery plans. We will signpost opportunities to drive development, adoption, and diffusion across the five key NSTC technologies (AI, quantum technologies, engineering biology, semiconductors and future telecommunications). This includes:

- working with DSIT and wider stakeholders to develop 'technology missions' in the fields of AI, engineering biology and quantum technologies, [investing £250 million](#) to strengthen critical transformative technology R&I in the UK. We will deliver UK leadership through these 'technology missions' to

tackle major global challenges such as, meeting the UK's net zero emissions targets, healthy ageing, and energy security. Key investments include:

- **AI:** investing £100 million in innovation, adoption and diffusion to address known market failures by facilitating applications of existing AI innovations in strategically significant sectors (transport, construction, agriculture, creative industries and health) and strengthen capability in responsible trustworthy AI across the UK AI ecosystem
- **quantum technologies (QT):** investing £70 million, maximizing the UK's potential strategic advantage in QT, in close alignment with national security and defence priorities. This will include accelerating commercialisation and application of quantum position navigation and timing and quantum computing. We will invest in the new [National Quantum Computing Centre](#) (see Objective 5 highlight), alongside a £20 million investment, through Innovate UK and £5 million HM Treasury (HMT) investment, towards a Quantum Networking accelerator, and a £15 million investment, also through Innovate UK and with £8 million HMT investment, towards a Quantum Catalyst accelerator
- **engineering biology:** investing £73 million through [Engineering Biology Mission Hubs and Mission Awards](#) to strengthen UK engineering biology research capability and cross-sector partnership. This will drive technology development, innovation and adoption around four mission areas: food systems, biomedicine, clean growth and environmental solutions
- continuing to support R&I activity in two additional critical technologies prioritised by the NSTC: semiconductors and future telecommunications. This will build on our 2022 investment in [future communications systems](#) and small and medium-sized enterprise use of [transformative technologies](#). For example, we will invest, through EPSRC and Innovate UK, in at least one new significant [Innovation Knowledge Centre \(IKC\)](#), to develop and commercialise emergent semiconductor technologies. We will continue to work with government to respond to the recommendations of the [National Semiconductor Strategy](#) and the [UK Wireless Infrastructure Strategy](#)



## To transform sectors that are key to the future economy

### In 2023-24 we will:

Develop opportunities, building on existing activity across UKRI, to drive new and existing sectors prioritised through government strategies, such as the five NSTC priority technologies, and the government’s priority growth sectors: life sciences, creative industries, advanced manufacturing, green energy and digital technologies. More detail on the wealth of activity across the organisation with sectors key to the future economy are included in [strategic delivery plans](#) and through our strategic theme programmes and technology missions. Examples include:

- **Life sciences:** We will respond to the needs of the sector identified in the [Life Sciences Vision](#) through our strategic programmes on ‘Securing better health, ageing and wellbeing’ and ‘Tackling infections’ and existing programmes (see highlight).
- **Space:** We will contribute towards delivering the ambitions of the government’s [National Space Strategy](#), and the creation of a National Space Operations Centre, including investing £3.4 million in the National Centre for Space Situational Awareness at [Chilbolton](#). This will meet a strategic need to upgrade the UK’s civil capabilities for space surveillance and tracking to determine the characteristics of objects in orbit, and wider uses such as monitoring space weather and predicting its effects on satellites. The investment will strengthen national security and resilience across virtual and physical spaces and will be used by national and international stakeholders such as [UK Space Agency](#), [Defence Science and Technology Laboratory](#), [European Space Agency](#) and participants in the [EU-SST programme, to validate their observations](#).
- **Design and creative industries:** Led by AHRC, we will deliver on the ambitions of the government’s [Creative Industries Sector Vision](#) by launching a new £76 million [Convergent Screen Technologies and Performance in Realtime \(CoSTAR\) programme](#). CoSTAR will design, develop and build state-of-the-art facilities, resources and expertise in advanced computing

technologies to underpin the long-term competitiveness of the UK screen and performance sector. We will invest in additional cluster demonstrator projects, in partnership with the [Department for Culture, Media and Sport](#), to consolidate learning from the [Creative Industries Clusters Programme](#) and inform future investment in creative industries R&I. The demonstrators are designed to build on the work of the nine existing clusters funded through the £55 million [Creative Industries Clusters programme](#) (funded by the [UKRI Challenge Fund](#)). This will expand their geographic impact across the UK and in key sectors, including fashion, games, film and television production. We will also invest in a new [£6 million creative and cultural programme, XRtists](#), through AHRC, delivered in partnership with the Arts Councils of [England](#), [Northern Ireland](#) and [Wales](#), and [Creative Scotland](#). It is the first ever UK-wide collaboration to widen participation in creative technologies.

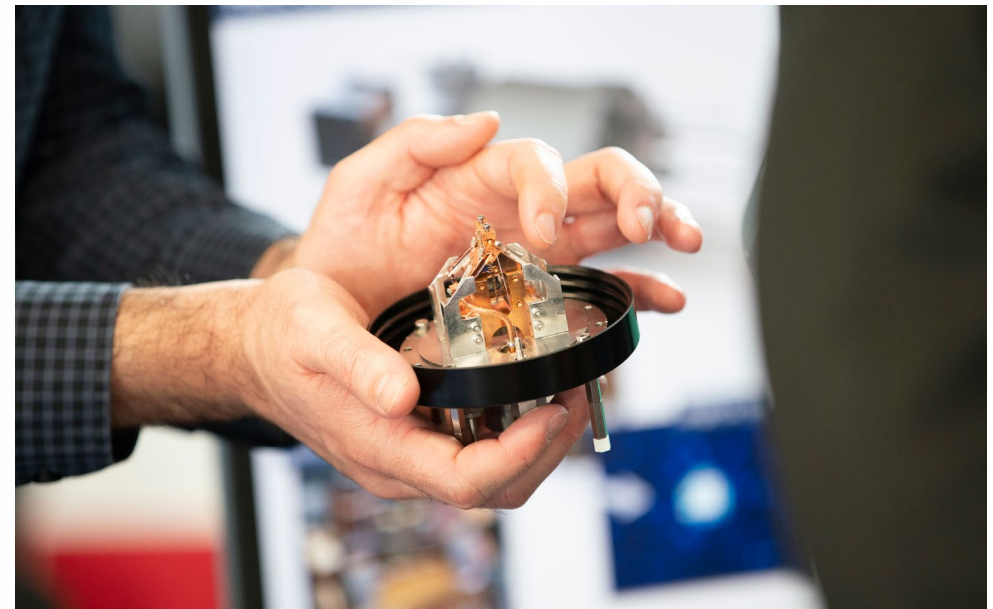


Image credit: Adam Gasson

# Highlights:

## Accelerating the development of quantum computing by addressing the challenges of scalability

The [National Quantum Computing Centre \(NQCC\)](#) will finish being constructed in 2023 and commissioned by early 2024. The NQCC will work with businesses, government and the research community to deliver quantum computing capabilities for the UK. It will support the growth of this emerging industry, create the necessary R&I capabilities through coordination and delivery of a technical programme, and commission and operate new facilities. We will fund the centre, through EPSRC and STFC, to deliver assured quantum computing capability, enabling the UK to remain internationally competitive. It will build on the central role we have played in the [National Quantum Technologies Programme](#) which has been a dynamic collaboration between industry, research organisations and government to create quantum-enabled economic growth.



Image credit: Matt Beech Photography

## Circular Fashion and Textile programme

The Circular Fashion and Textile Programme is a £15 million programme delivered through AHRC, Innovate UK and NERC. The programme has a 10-year vision to drive transformation in the fashion and textiles sector around the development and adoption of economically viable and scalable circular models by 2032. This will help the industry to achieve net zero targets before 2050 while delivering growth and productivity benefits. To start putting our vision into effect we have recently launched a new £6 million investment [Circular Fashion and textile programme: Network Plus](#), with further activities coming online throughout 2023.

## Human Functional Genomics Initiative

The [Human Functional Genomics Initiative](#) aims to advance our understanding of the complexity of human physiology and how it changes over time and in disease. It will bring together recent advances in critical technologies such as AI and gene-editing with multimodal functional assessment at scale, and effective cell-based model systems, to answer critical questions, previously impossible to address. This will enable discovery and development of the next generation of biomarkers, diagnostics, therapeutics, and preventative medicine strategies. This £16 million investment, through MRC and BBSRC, will contribute to delivery of the [Life Sciences Vision](#) through support of up to five coordinated interdisciplinary clusters, boosting UK functional genomics research capability and providing access to new biological models, tools, technologies and data. We will explore mutually beneficial collaborations with industry to advance the societal and economic benefit of the initiative.



# Objective 6: A world-class organisation

## Making UKRI the most efficient, effective, and agile organisation it can be

We are transforming UKRI to become a more agile, responsive organisation, maximising the impact we deliver collectively and our support for the communities we serve, whilst meeting challenging operation expenditure reduction targets. We are determined to make our organisation as efficient and effective as possible, and to create an empowering environment to optimise decision-making, support talent and remove barriers to getting things done. We are driving forward our ambitious plans for organisational change, supported by the recommendations of the [Grant Review of UKRI](#) and the [Tickell Review of research bureaucracy](#), to make our work simpler and better for our stakeholders and our staff.

We are building ways of working across UKRI to benefit from the expertise and skills of our people and enable agile, responsible, responsive, and collaborative working across the organisation, so that we collectively deliver more than the sum of our parts. We are re-engineering our operating model to improve the clarity of governance and speed of decision-making, giving people the power to make decisions to deliver at the appropriate level. We are also innovating to foster sustainable practice in the ways that we work.

To understand and address effectively operational and R&I system challenges, we need the data to inform our decision-making and improve our effectiveness and efficiency. We are driving forward our substantial programmes to harmonise our IT infrastructure and develop replacement systems to improve our operational data and funding service.

We will maintain a strong focus on empowering and supporting talent and engaging our people, whether leading, implementing or experiencing these organisational changes, to ensure they can thrive during this period of significant and rapid change for the organisation. We will also actively work and communicate with partners and stakeholders to understand and help shape the changes we are making.

**Building on our work to deliver on our commitments in 2022-2023:****To empower our talented people to collaborate and thrive****In 2023-24 we will:**

Work collaboratively and strategically across the organisation to deliver a comprehensive people plan to meet the needs of our new operating model and organisational change programme, including:

- strengthening our ability to make data-led decisions around workforce needs. We will ensure that we can respond effectively to evidence of existing and emerging issues for attracting, retaining and developing diversity of talent across the organisation. We will track key metrics, such as employee turnover, recruitment, training and development, and employee engagement. We will draw on analytical tools and HR expertise to understand the efficacy of HR interventions and inform strategic decisions
- developing a framework to improve agile deployment of human resources across the organisation, to be able to identify and resource projects flexibly and at pace to deliver on priorities
- delivering a comprehensive and targeted reward strategy, which works within the public sector framework, and mitigates the risks to the organisation caused by challenges for recruiting and retaining specialist talent
- strengthening career development and progression routes to retain and develop talent by building and running an accessible, attractive and inclusive professional development offer that supports our people to lead, perform, progress and professionalise. We will expand and enhance our mentoring, coaching, peer learning and action learning offer
- enhancing effective change leadership through our leadership and learning plan, including three cohort-based programmes to embed more effective approaches across UKRI

- delivering our workforce equality, diversity and inclusion (EDI) plan to create a culture in which our people can thrive, including our work to champion anti-bullying, harassment and discrimination. We will also revise diversity data collection categories, objectives and guidance to better monitor and diversify our workforce, as well as implementing a robust equality impact assessment process to ensure that our decisions do not disadvantage colleagues

Implement our refreshed communications and engagement strategic framework, including:

- engaging our people, across the organisation, in delivering our new communications and engagement framework so that wider audiences understand the impact and relevance that R&I can make to peoples' lives
- actively engaging and communicating with staff as we develop the new UKRI operating model to support staff wellbeing, ensure that our people thrive in a supported environment, and feel informed and involved in organisational change
- developing our programme of stakeholder engagement further to foster dialogue and partnership to achieve our objectives. We will expand roll out of the enterprise relationship management system to strengthen our understanding of interactions across the organisation, and provide better insight, coordination and management of partner information



## To make UKRI an efficient, effective, and agile organisation

### In 2023-24 we will:

Further improve how we work to drive greater efficiency, collaboration, and agility across the organisation, harnessing and optimising our internal capabilities so we can deliver more together, including:

- delivering a more efficient and effective operating model, clarifying roles and responsibilities, to reduce duplication, streamline our governance and decision-making, and achieve stretching targets to reduce our operating expenditure
- continuing to implement our organisational change programme, to optimise our processes and systems, including IT infrastructures, ensuring on-going alignment with the recommendations of the [Grant Review](#) and [Tickell Review](#), by:
  - increasing the capability of our [new Funding Service](#) to enable successful transition of all open and new funding opportunities and improving data consistency. We will make it easier for researchers and innovators to collaborate, obtain standardised guidance and submit applications and reviews, embedding EDI principles in the new service and reducing the time researchers spend applying for funding. We are engaging directly with institutions' research offices as the Funding Service is being rolled out to identify further ways to reduce bureaucracy
  - further maturing the delivery of functional services to the organisation, the foundation of which will be our new cloud-based platform for human resources, accounting, reporting and procurement (SHARP)
- strengthening our governance and management systems to reflect best practice, guided by [Grant Review](#) recommendations, including refreshing the terms of reference of our councils' Councils
- continue to learn how to effectively and efficiently deliver funding through evaluations of our major programmes
- working with the [National Protective Security Authority](#) to provide guidance, training and risk assessments to ensure that we are aligned with the relevant [trusted research and innovation](#) policies and practices

## To catalyse change and impact through partnership and leadership

### In 2023-24 we will:

Further embed environmental sustainability across our operations and funding approach, delivering on our [Environmental Sustainability Strategy](#) through council-led activity and the UKRI Environmental Sustainability Delivery Programme. This includes:

- implementing new policy positions for business travel and carbon offsetting by June 2023, developing new policies in responsible procurement and future infrastructure investments for implementation in 2024
- establishing first-phase estate decarbonisation plans for existing UKRI estate out to 2030 (for MRC, STFC, and NERC). Building on our current Carbon Zero infrastructure fund investment, we will use these plans to develop proposals for the next phase
- collaborating with the R&I sector to develop a concordat on environmental sustainability in research practice by March 2024
- establishing a 'carbon tracker' system to measure the carbon emission impacts from our operations and future infrastructure investments. We will introduce a software package by March 2024 to be able to forecast potential future carbon emissions from our planned operations and investments to 2040
- delivering environmental training for staff in 2023 to embed environmental sustainability in all we do
- learning from a new pilot programme, led by EPSRC, to foster collaborations and cross-sector initiatives to develop new approaches to improving the environmental sustainability of research infrastructures from which the wider organisation will be able to learn
- developing options and agree on mechanisms, over 18 months, to use carbon budgeting as a carbon control measure across the organisation, as an effective approach to arrive at Net Zero by 2040

# Our budget

The table below provides an update on the budget table included in the corporate plan 2022-2025 for 2023-24 and 24-25. Changes to budgets reflect budget reprofiles and reallocation between budget headings that take place as part of the ordinary course of business throughout the year and in response to new opportunities and priorities.

This budget includes UKRI delivery for and with DSIT and a number of Other Government Departments (OGDs) that are not detailed specifically in this allocation. The figures<sup>1</sup> provided in this document are, as far as possible, in line with the 2022 to 2023 and 2024 to 2025 [budget allocations for UKRI](#).

	2023-24 (£m)	2024-25 (£m)
<b>Core R&amp;I Budgets<sup>2</sup>, of which</b>	<b>5,396</b>	<b>5,862</b>
AHRC	74	76
BBSRC	318	326
EPSRC	639	653
ESRC	121	124
MRC	587	615
NERC <sup>3</sup>	311	325
STFC <sup>4</sup>	544	575
Innovate UK <sup>5</sup>	800	970
Research England <sup>6</sup>	2,003	2,198
<b>R&amp;I Budgets – existing time-limited commitments<sup>7</sup></b>	<b>140</b>	<b>154</b>
<b>Collective Talent Funding<sup>8</sup></b>	<b>678</b>	<b>731</b>
<b>Infrastructure, of which</b>	<b>1,000</b>	<b>1,217</b>
Carbon Zero Fund	16	24
Digital Research Infrastructures	42	70
Infrastructure Fund	142	281
Existing infrastructure investments	127	94
UK Research Partnership Investment Fund (UKRPIF)	29	75
World Class Labs, of which:	371	386
AHRC	5	10
BBSRC	70	74

	2023-24 (£m)	2024-25 (£m)
EPSRC	66	69
ESRC	42	41
MRC	37	39
NERC <sup>9</sup>	35	37
STFC	115	117
Capital for international subscriptions	48	48
Research capital investment fund (RCIF): Higher Education Research Capital (HERC) <sup>10</sup>	225	238
<b>New cross-UKRI Strategic Programmes, of which</b>	<b>261</b>	<b>466</b>
Innovation Accelerators	31	66
Other new cross-UKRI Strategic Programmes	230	400
<b>Existing cross-UKRI Strategic Programmes, of which</b>	<b>807</b>	<b>507</b>
Fund for International Collaboration	19	9
Industrial Strategy Challenge Fund	253	110
Strategic Priorities Fund	153	98
Strength in Places Fund	84	62
Other cross-UKRI Strategic Programmes	70	78
Dual support for existing Strategic Programmes (previously NPIF) <sup>11</sup>	228	150
<b>Centrally Managed Funding</b>	<b>383</b>	<b>264</b>
<b>UKRI allocation<sup>12,13</sup></b>	<b>8,375</b>	<b>8,874</b>



**Footnotes for budget table:**

- 1 The figures provided in this document are, as far as possible, in line with the [2022-23 – 2024-25 budget allocations for UK Research and Innovation](#) and are broken down by our budgeting and reporting categories. Figures are indicative and may vary over the course of the three-year period due to budget adjustments made as a part of ongoing financial management and planning processes to maximise the use of our total funding.
- 2 Council core research and innovation (R&I) budgets as shown do not include funding for existing time-limited commitments, infrastructure, strategic programmes and collective talent. Funding for these budgets will be delivered by councils but has been excluded in core council R&I figures within this publication.
- 3 NERC core R&I budgets figure include resource funding for the Antarctic logistics and infrastructure partition, to support the UK's scientific operations in the Antarctic, rising from £44.6 million in 2022-23 to £52.3 million in 2024-25.
- 4 STFC's budget reflects increases in international subscriptions, including the transfer from MRC of responsibility for funding the European Molecular Biology Laboratory (EMBL), and provision for the impact of rising energy costs on operating domestic facilities.
- 5 Innovate UK was allocated £2.6 billion across 2022-23 and 2024-25 in Spending Review 2021. This includes funding for activities accounted for in 'existing time limited commitments', including a £118 million Zero Emissions Freight Vehicles programme, of which £80 million will be delivered in 2024-25, that Innovate UK will deliver on behalf of the Department for Transport.
- 6 Research England figures are for financial years 2023-24 and 2024-25. Allocated budgets for academic years 2023-24 and 2024-25 will vary and be announced separately. This allocation will hold the balance of dual support at 64p (this currently excludes official development assistance (ODA) funding which is to be confirmed, along with dual support for new strategic programmes).
- 7 Existing time-limited commitments include funding for Covid-19 interventions and one-off committed project spend.
- 8 Collective talent funding includes an additional £8.6 million in 2024-25 as part of a £117 million total government investment to create 1,000 new AI PhDs through Centres for Doctoral Training, as announced in the Spring Statement 2022.
- 9 NERC World Class Labs figure include capital funding for the Antarctic logistics and infrastructure partition, to support the UK's scientific operations in the Antarctic, rising from £7.3 million in 2022-23 to £7.6 million in 2024-25.
- 10 Equivalent funding for the devolved administrations is directly allocated by the Department for Science, Innovation and Technology (DSIT).
- 11 Dual support for existing strategic programmes was previously funded through the National Productivity Investment Fund.
- 12 The totals of the individual UKRI budget lines sum to more than UKRI's total funding to mitigate the risk of underspends and ensure best use of available funding.
- 13 All figures exclude funding for ODA, financial transactions, DSIT programmes managed on behalf of other government departments (excluding the Department for Transport Zero Emission Programme that will be delivered by Innovate UK) and the Department for Education Strategic Priorities Grant.



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