

MRC Strategic Updates

Community Visits 2024



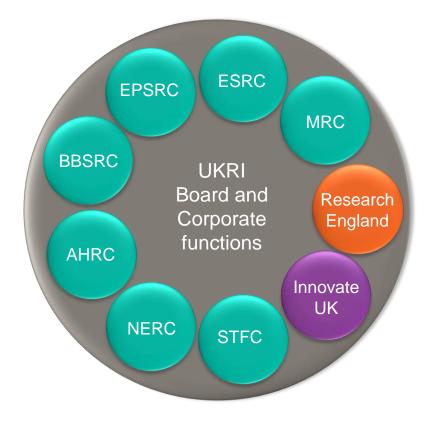
Who we are

The MRC's purpose is to:

 Accelerate improvements in human health and economic prosperity by supporting world-class biomedical research and innovation

To deliver this we:

- Encourage and support research to improve human health
- Produce skilled researchers
- Advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness of the UK
- Promote dialogue with the public about medical research

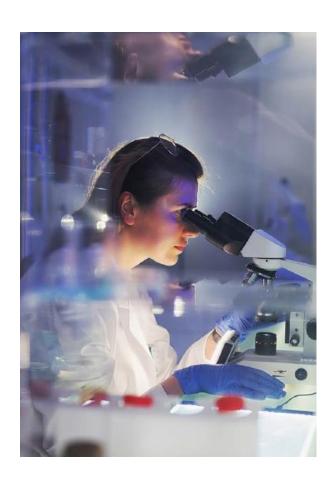


A constituent part of UKRI



MRC Strategic Delivery Plan 22/23 – 24/25





Our purpose

Accelerating improvements in human health and economic prosperity by supporting world-class biomedical research and innovation, and strengthening partnerships within UKRI, across the UK and around the world.

Our principles for change – we will embed the principles of diversity, resilience, connectivity and engagement across all our work, to drive change and create the conditions for an outstanding research and innovation system

Our strategic objectives provide the framework for how we will achieve our vision and realise our principles, through world-class:

People and careers

Supporting the breadth and diversity of skilled people needed for the future R&D workforce; and advancing an open and collaborative research and innovation culture.

Places

Fostering local, national, and international partnerships; access to infrastructure, equipment and digital capabilities; and the sustainability and agility of our major investments portfolio.

Ideas

Funding world-class discovery science and driving an integrated understanding of human disease.

Innovation

Strengthening the translation of discovery science and experimental medicine; driving advanced therapies and innovative technologies; and broadening partnerships with industry.

Impacts

Promoting healthy ageing and reducing the burden of mental and physical illness; strengthening health equity and prevention; tackling infections; protecting human health in the face of environmental change; and progressing transformative technologies.

Supported by a world-class organisation

Strengthening equality, diversity and inclusion and enabling talented people to thrive; being an efficient, effective and agile organisation; and catalysing change and improving environmental sustainability through partnerships and leadership.

Training and Careers

Refreshing MRC's Training and Careers Strategy in 2024

- Ensure our offer is coherent and targeted for optimal impact
- Timely for:
 - Upcoming Spending Review
 - UKRI Collective Talent consideration
 - Clinical academic careers (Task and Finish Group)
- Your views matter: Critical to work with employers for attractive research careers

UKRI Collective working in talent

- Plans for UKRI-wide 'investment framework'
 - easier to understand, access & manage
- Studentships: Focus to date
- Fellowships: starting now
 - Consider alignment & reduce duplication
 - Consider gaps in our offer
 - Not 'one size fits all' joint approaches where beneficial



Research Culture

Refreshed Data Sharing Policy

- Concise policy based on principles, which is applicable to all research data generated with MRC funds
- Publication and guidance <u>published</u> in Nov 2023

Embedding Diversity in Research Design

- Requires that researchers consider the characteristics of the population groups or sub-groups who could benefit from the research being proposed and embed diversity in the design and conduct of their studies
- Policy launched in July 2023

Public Involvement and Engagement

- New Public Partnership strategy to be published Summer 2024
- Covers spectrum of public engagement, which includes involvement
- Genuine partnerships between researchers, MRC staff, public engagement professionals, people & communities



MRC CoRE: Round 2

Jan 2025: Mar 2025: 23-24 April 2024: Outline May 2024: Sept 2024: Apr 2025: Apr - Sept 2025: 25 Sept 2023 7 Feb 2024 8 Nov 2023 Informed Full Outline Outline Full New MRC Full Application Panel Community application of full Opportunity **Application** application deadline opportunity CoREs **New MRC** Webinar application assessment Open Deadline CoREs start awarded opens Meeting decision by Interview 23-24 April 2024 -30 Outline Applications **Outline** 7 applications, across all Received themes, invited to full stage **Application Panel** Meeting

R2 Themes





Immune Regulation

Molecular mechanisms to inform cancer intervention

Existing Units

MRC Place Framework

Vision Statement:

- Draws on and fosters talent, research communities and capacity from across the UK to address major health challenges, boosting the economy and fulfilling our <u>Strategic Delivery Plan</u>
- Recognises the importance of Place for strengthening capacity across the UK for the long-term benefit of UK science, socio-economic growth and, importantly, the health benefits that result from R&I investment
- Place will be a consideration in funding decisions, notably for strategic initiatives.

Principles for Place:

The following principles underpin MRC's vision to encourage and support excellent and impactful research, wherever it is found in the UK.

Recognises the range, diversity and capacity of research institutions throughout the whole of the UK, ensuring we tap into all available talent to tackle major health challenges and address health inequalities in our diverse populations

Will ensure the formation of partnerships and collaborations that build capacity outside areas of current high investment where there are untapped opportunities for excellent and impactful research. This will include an obligation on our research institutes and major investments to fulfil their national function through outreach across the UK.

Will develop a geographically distributed research portfolio to meet the objectives set out in the MRC Strategic Delivery Plan (SDP), boost local and national research environments, and spread the economic benefits of our investment throughout the UK.

Will ensure that no region is disadvantaged based on its historical pattern of investment and where necessary will provide additional support in order to achieve equity of opportunity in our funding initiatives.

International Funding

International Science Partnerships Fund

- A global fund (ISPF) to support scientific collaboration between the UK and international R&D powers.
- ODA and non-ODA funding will support activities under four themes: Resilient Planet; Transformative Technologies; Healthy People; Animals and Plants; Tomorrow's Talent

MRC ISPF Partnerships

MRC has secured over £70m ISPF funding to co-fund international partnerships. Examples of recent opportunities from 2024 include:

- Brazil: Artificial Intelligence for Health
- Southeast Asia: <u>Infectious Diseases with pandemic or AMR</u> potential





UKRI Infrastructure opportunities

BioFAIR

- £34m UKRI funded (BBSRC and MRC led) federated digital research infrastructure
- Will deliver a step change in 'Findable, Accessible, Interoperable and Re-usable' (FAIR) research data management, providing end-to-end FAIR research data management & analysis capabilities along with the necessary support and training for UK researchers working in the life sciences.
- Delivery will be through a hub and spoke model, with spokes funded through open call responsible for delivering key services and tools.
- Due to launch this summer





MRC Core Infrastructure

Enhancing biomedical and health-related data and digital platform resources

- Co-funded by National Institute for Health and Care Research (NIHR)
- Applications for data and digital platform resources that will support, manage, link, share and access data at scale for biomedical, health and care research
 NIHR | National Institute for Health Research

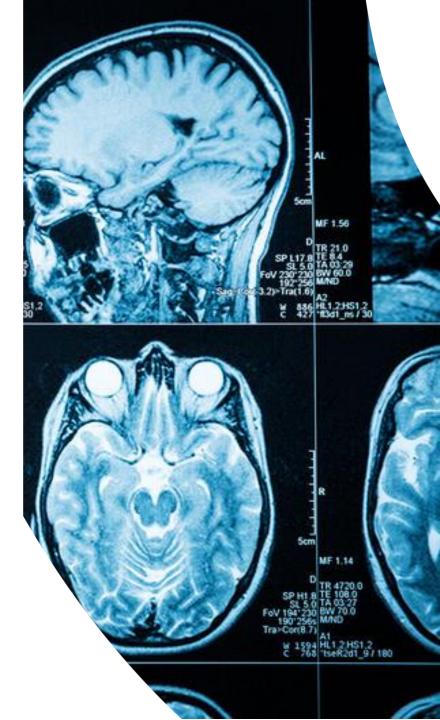
Mid-range research equipment rolling call

Round 4 expected to launch in the Autumn

Longitudinal Population Studies (LPS)

 Piloting a 3 stage – active, passive, archived – model of LPS management





MRC led Infrastructure and Platforms

Adolescent Health Study

• £62m - Director appointment 2024, call for study sites late 24 / early 25

Total body PET

£32m - National PET Imaging Platform has now launched (http://npip.org.uk/)

Population Research UK

 £9m - Coordinating Hub team appointed; Hub will lead process to co-develop PRUK delivery functions in 2024

Traumatic Brain Injury Platform

£10m - national TBI data hub and biomarker resource

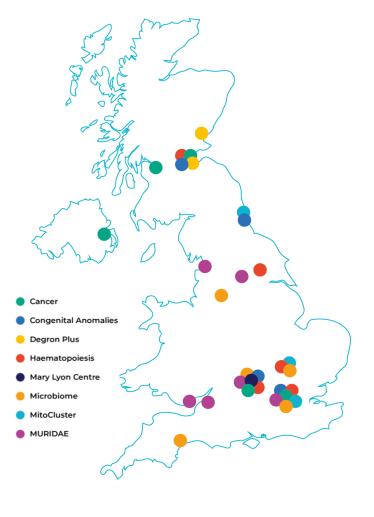
MRC-NIHR Rare Diseases Platform

 £14m - Hub and 11 "nodes", each delivering networking and 2-3 enabling science projects within identified domain

National Mouse Genetics Network

 £20m - Key spokes funded, new ageing cluster awarded, data platform being established





Mary Lyon Centre at MRC Harwell







Enabling UK Biomedical Research

- In vivo aspects of research programmes in both academia and biotech/pharma including supporting researchers new to mouse genetics
- Partnerships with academic and commercial researchers to developed new technologies
- Hub for the National Mouse Genetics Network



Functional Genomics Initiative

Aims to boost UK capability to explore how genetic variation impacts complex phenotypes and how this changes over time and in disease. MRC supported by BBSRC, £28,5m, 4 years, launch in June 2024.

Director

Leads on networking, collaboration and data needs in the UK Functional Genomics community

Research clusters

Four clusters that will provide new insights into the interplay of genetic variance and physiological pathways, organs and systems in both healthy and disease states, such as brain, lung, skin, immune, musculoskeletal and rare disorders AstraZeneca MILNER

Functional Genomics Screening Laboratory (FGSL)

- Access to arrayed functional genomics screening to better understand the biology represented by complex human in vitro models for target identification (e.g organoids, co-culture models)
- Open call for collaborative projects using CRISPR based screening approaches Panel review in May and Nov 2024
- Based at the Milner Therapeutics Institute
- Collaboration with AstraZeneca and the University of Cambridge.
 - https://www.milner.cam.ac.uk/call-announced-for-project-proposals-to-collaborate-with-new-functionalgenomics-screening-laboratory/



UKRI opportunities

Cross research council response mode

- Supporting breakthrough or disruptive interdisciplinary ideas not routinely funded through existing UKRI responsive mode
- £65m available across two pilot rounds; 36 awards anticipated in first round
- Open to ideas with no clear 'lead' UKRI research council for responsive mode funding
- Existing council responsive mode opportunities continue and remain open for interdisciplinary research applications – duplicate submissions not permitted
- Assessment College UKRI appointed c. 200 members, and c20 chairs
- First Round Outline applications by July 23; invited full applications by Nov 23
- Second Round Official launch June 2024, Outlines by Nov 24





Innovation

Advanced therapies

- Strategic priority area and significant UK strength
- A new Advanced Therapies Strategy developed in 2023, to be published later this year
- A new call will launch in summer 2024 for Prosperity Partnerships to tackle challenges in safety and toxicology science of Advanced Therapies

Supporting industry partnerships and commercialisation

- Industry-academic collaborations through Industry Collaboration Framework
- Launched pilot business engagement fund trialling in NMGN and with Crick
- Working with IUK to support academic involvement in healthcare accelerators – call later in 2024
- New £20m cross-UKRI PoC fund to address recommendations of spin-out review





Accelerators and Strategic Themes

Accelerators

Dementia Trials Accelerator £20m (contributing to the Govt's Dementia Mission)

 to demonstrate innovation in the delivery of late phase clinical trials of new therapies for dementia and deliver proof of concept for recruiting stratified participant groups outside of standard NHS settings

MND Accelerator £6m

 The MND Accelerator, cofounded with NIHR, exists to speed up the development of diagnostics, treatment and prevention interventions for Motor Neuron Disease

Health, Ageing and Wellbeing

Population Health Improvement/health inequalities £43m

 Population Health Improvement UK (PHI-UK) will bring together four <u>challenge-led themes</u> to progress interventions that benefit the health of populations and close the gap between the richest and poorest; and a <u>centre in climate change and health</u>

Mental Health £22.5m

 Five new research hubs form the basis of the UKRI mental health research platform, which aims to tackle key challenges in severe mental illness



Equality, diversity and inclusion

- Broadened Board and Panel Observer Scheme launched
 February 2024
- New Board and Panel Associates Scheme launched February 2024
- Bias guidance is being refined and new training for board/panel members is being developed
- Black in Biomedical Research project MRC is providing funding to support the organisation of an 'Annual Biomedical Research Conference for Minoritised Scientists' in the UK (early 2025), modelled after the long-running annual American event





Sustainability

Environmental Sustainability Concordat

UKRI have signed the Environmental Sustainability Concordat

Sustainability across MRC's estate

 Pathway developed to net zero carbon (2040 target) and greater environmental sustainability, improved resilience and research continuity. Preparation for implementation currently ongoing (design development, benefit case production, etc.)

Landscape Review

 Transitioning to environmentally sustainable life science – challenges and opportunities. <u>Published March 2024</u>

Seminar series

- Regular biannual MRC Environmental Sustainability Seminars
- Next seminar on "Advancing Sustainability in Medical Science through Culture Change" contact <u>elena.dimitrova@mrc.ukri.org</u>





The value of sharing stories of MRC-funded people, research and impacts

- MRC-supported researchers, support teams, technical specialists and innovators are instrumental in driving global change.
- For our collective work to continue we need advocates from communities across the UK, support from their elected representatives and crucially continued financial support from Government via public taxes.
- To secure this advocacy and support, we need to collectively demonstrate the value of publicly-funded biomedical research by sharing the stories of endeavour, successes and impacts.

Business case and public support for research

UKRI public funding allocation from Treasury

Research outputs and impacts

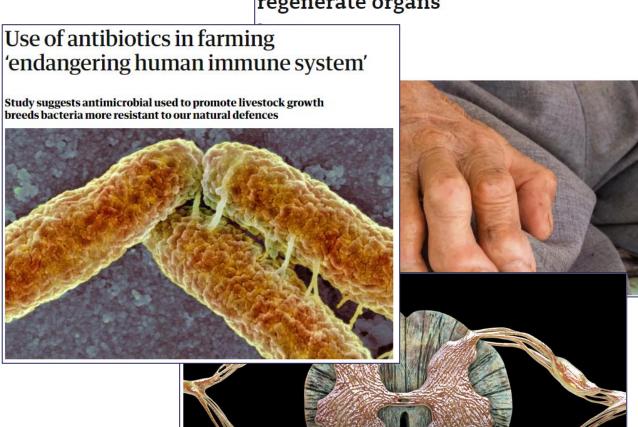
MRC public funding to the research community



What do these news stories have in common?

- Great examples of MRC supported research
- Great examples of research impact
- Great examples showcasing the impact of public funding
- Unfortunately, none of these stories mentioned the MRC in the press releases issued to the media

Leprosy: Ancient disease able to regenerate organs



New ALS Therapeutic Strategy Targets

mRNA and Protein Distribution



We'd love to hear from you

- When communicating about your research it is important to ensure all funders are attributed, whether MRC, charities or industry.
- If you've had an MRC-funded paper accepted for publication in a journal, and you think your findings could be of interest beyond the scientific community, please let UKRI's press office (press@ukri.org), as well as your university press team, know by sending a copy and a lay summary as soon as the paper has been accepted.
- If it's not quite right for a press release, we can share with our colleagues who may be able to support development of other forms of UKRI content or amplify on our social media channels.







Thank you

