

# Section 1

## Principles

The following principles outline the MRC's expectations relating to the conduct of research. They should underpin all MRC-funded research within the MRC's own research units and institutes and in other research organisations, whether they are supported either in whole, or in part, by the MRC. They apply to everyone involved in MRC-funded research, including researchers, research support staff, students, research managers and administrators and aim to reflect principles that apply more widely across public life such as those outlined by the *Committee on Standards in Public Life* (7). The principles also underpin the expectations the MRC has of its own staff which are outlined in the *MRC Code of Conduct for Employees* (8).

### **Research excellence and integrity:**

The MRC is dedicated to excellence and high-ethical standards in the design, conduct, reporting and exploitation of publicly-funded research. The MRC expects all of those it supports to act with care and skill at all times in order to deliver high-quality science. Everyone involved in MRC-funded research must recognise and accept personal responsibility for the integrity of the research record, whether this is used as the basis for the further development of scientific knowledge, for improvements in healthcare, or the prevention of disease.

### **Respect, ethics and professional standards:**

All research supported by the MRC must respect and maintain the dignity, rights, safety and wellbeing of all involved, or who could be affected by it.

All researchers should be familiar with, and know how to access, the relevant legal and ethical requirements. They must take appropriate steps to work within these frameworks to manage data and records appropriately, maintain confidentiality and to minimise any adverse impact their work may have on people, animals and the natural environment; and to work with those with corporate responsibility within their organisations for meeting the requirements of the frameworks. Risks relating to the potential for research outcomes to be misused for harmful purposes must be recognised and managed.

### **Honesty and transparency:**

All of those involved in MRC-funded research should be honest in respect of their own actions and their responses to the actions of others. The research community must foster and support a culture of transparency and honesty which promotes good practice, recognises relevant interests or conflicts and deals with these openly and explicitly. This applies across the whole range of research activity from study and experimental design, generating, analysing and recording (including archiving) data, sharing data and materials, applying for funding, publishing findings, acknowledging the contributions of others and engaging in the peer review process.

Procedures for reporting and investigating allegations of research misconduct should be clear, thorough, fair, constructive, conclusive and timely. Any remedial action should be promptly implemented.

### **Openness and accountability:**

MRC-funded researchers are expected to foster the exchange of ideas and to be as open as possible in discussing their work with other scientists and the public.

The findings of MRC-funded research must be made available to the research community and the public, in a timely manner. A complete, balanced and accurate account of scientific evidence must be presented to support the appropriate and effective use of this knowledge.

To maximise public benefit, the MRC supports open access to the published outputs of research as well as initiatives that aim to extend access to the valuable, and often unique, data, materials and resources generated in the course of MRC-funded work. Extending access, through initiatives such as data sharing, promotes the efficient use of resources for new research, assures the quality of research outputs and helps to maximise the impact of outputs on health.

All involved in research have a responsibility to ensure the efficient and proper use of resources provided from public and charitable funds. Those planning and delivering research must make efforts to maximise effectiveness and avoid waste, including reviewing project progress and appropriate business continuity planning.

Researchers should proactively engage openly in communication with the public to discuss the issues their work raises for society, and to listen to the aspirations and concerns of patients, carers, study participants and others in relation to the research.

### Supporting training and skills:

All of those engaged in MRC-funded research have a responsibility to develop and maintain the skills they need in their research and to assist others with their personal development. Research organisations, managers and research leaders are expected to provide the direction, resources, training and opportunities for development to support their teams in conducting their work to the highest standards. Research organisations, supervisors and research team leaders should recognise and deliver on their responsibilities for mentoring and staff development and ensure students, new researchers, support, technical and administrative staff are supported in understanding and adopting good practice at an early stage and throughout their career.

### Related links

- (1) RCUK policy and code of conduct on the governance of good research conduct, Integrity, Clarity and Good Management (2013): <http://www.rcuk.ac.uk/RCUK-prod/assets/documents/reviews/grc/RCUKPolicyandGuidelinesonGovernanceofGoodResearchPracticeFebruary2013.pdf>
- (2) MRC policy on health department research governance frameworks: <http://www.mrc.ac.uk/research/research-policy-ethics/clinical-research-governance/>
- (3) Government Office for Science, Rigour, Respect and Responsibility: A universal ethical code for scientists (2007): [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/283157/universal-ethical-code-scientists.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/283157/universal-ethical-code-scientists.pdf)
- (4) Universities UK Concordat to Support Research Integrity: <http://www.universitiesuk.ac.uk/highereducation/Documents/2012/TheConcordatToSupportResearchIntegrity.pdf>
- (5) UK Research Integrity Office, Code of practice for research: Promoting good practice and preventing misconduct (2009) and Recommended Checklist for Researchers: <http://www.ukrio.org/publications/code-of-practice-for-research/>
- (6) MRC ethics and research guidance: <http://www.mrc.ac.uk/research/research-policy-ethics/>
- (7) Committee for Standards in Public Life: <https://www.gov.uk/government/organisations/the-committee-on-standards-in-public-life>
- (8) MRC Code of Conduct for Employees: [www.mrc.ac.uk](http://www.mrc.ac.uk)
- (9) MRC position statement on bioterrorism and biomedical research (2005): <http://www.mrc.ac.uk/research/research-policy-ethics/bioterrorism/>
- (10) The Concordat to support career development for researchers, an agreement between the funders and employers of research in the UK (2008): <https://www.vitae.ac.uk/policy/concordat-to-support-the-career-development-of-researchers>