

GUIDELINES ON GOOD RESEARCH PRACTICE

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1. INTRODUCTION

Manchester Metropolitan University is responsible for ensuring good research practice throughout the institution. The purpose of these guidelines is to provide members of the University with clear guidance on the expected standards that should be adhered to when conducting research, and ensuring that members are aware of the mechanisms that are in place should these standards not be upheld.

All research active staff and students are responsible for ensuring that they adhere to all relevant guidance published both by the University, and by external stakeholders related to their research. This may include but is not limited to funding bodies and collaborative partners.

The University promotes a culture based on principles of academic excellence, inclusivity, honesty, integrity, openness, accountability, responsibility and rigour in research. The University has drawn up these 'Guidelines on Good Research Practice' to support the expectation that all members will conduct their research in accordance with these principles, and to ensure that we are compliant with external codes and concordats. These guidelines should be read in conjunction with the University's 'Code of Practice for Dealing with Allegations of Scientific or Ethical Misconduct in Research'.

The University cannot be prescriptive about individual approaches taken by researchers to solving particular research problems. However, the University expects individuals to promote and encourage an ethos of good research practice, emphasizing integrity and rigour in their research. The University will endeavour to create a culture in which the following standards can be understood and observed.

2. STANDARDS

2.1. Training

The University has systems in place that allow students and new researchers to understand and adopt best practice as quickly as possible.All full-time and part-time research students must attend the appropriate Faculty induction programme and complete the online induction at the start of their registration period. The Centre for Excellence in Learning and Teaching (CELT) and Research and Knowledge Exchange (RKE) run two further Induction sessions that are mandatory for new academic and research staff.

2.1.1. Postgraduate Researchers

All new postgraduate researchers are required to engage with the <u>Vitae Concordat to Support the Career Development of</u> <u>Researchers</u>to identify skills that they need to develop or enhance. They will be guided in this process by their Principal Supervisor.

2.1.2. Supervisory Teams

The Graduate School run a comprehensive programme of training sessions and workshops to support members that are new to the research student journey. These training sessions are targeted at the responsibilities of the student and the supervisory team.

2.1.3. Mentoring

The University has a mentoring scheme and guidelines are available to support members who wish to utilise the process. These opportunities are available to all members, not just those who are new to academia/the institution.

2.1.4. General Training & Refresher Sessions

The University has a comprehensive Training and Development Programme that is available to members. All staff should ensure that they undertake the relevant refresher courses for training that they have previously completed. It is compulsory for staff to complete the 'Examine the Examining' and 'Successful Supervising' training every three years.

Faculties, Departments or University Centres for Research and Knowledge Exchange (UCRKE) also provide more specialist training, which includes analytical and research skills appropriate to the subject area, for example in research design, regulatory and ethics approvals and consents, and equipment use.

2.2. Integrity

Researchers should be honest in respect of their own actions in research and in their responses to the actions of other researchers. This applies to the whole range of research work, including experimental design, generating and analysing data, applying for funding, publishing results, and acknowledging the direct and indirect contribution of colleagues, collaborators and others.

Plagiarism, deception or the fabrication or falsification of results is regarded as serious professional misconduct and may result in the University invoking disciplinary procedures.

Researchers are expected to report cases of suspected misconduct and to do so in a responsible and appropriate manner. The University will treat information received confidentially and investigate on a case-by-case basis.

22.1. Conflicts of Interest

Researchers should declare any potential or real conflicts of interest. Conflicts may be legal, ethical, moral, financial,

personal, academic or of another nature. Any perceived conflict should be discussed with the member's line manager or supervisor. Researchers should be aware of the University's Conflict of Interest Policy:<u>https://mmuintranet.mmu.ac.uk/Interact/Pages/Content/D</u> ocument.aspx?id=2335.

2.3. Openness

The University encourages researchers to be as open as possible in discussing their work with other staff and with the public to promote the open exchange of ideas. Nevertheless, researchers should recognise the need to:

- protect their own research interests and any intellectual property rights that have been produced
- adhere to the terms and conditions of any relevant research contracts

Research funded by third parties may be subject to confidentiality clauses which may restrict the information that can be disclosed. Any such restrictions should be clearly stated in the contract. Colleagues in the RKE Office can offer support and guidance on these matters.

Researchers have a duty to disseminate their research as widely as possible, especially those who will benefit directly from it, and to publish in places where their research will have the greatest impact.

Once results have been published, the University expects researchers to make available relevant data and materials to other researchers, on request, provided that this is consistent with any ethics approvals and consents which cover the data and materials, and any intellectual property rights in them.

The University recognises that publication of the results of research may need to be delayed for a reasonable period pending protection of intellectual property arising from the research. However, any such periods of delay in publication should be kept to a minimum.

2.4. Guidance from the University, professional bodies and legislation

The University expects researchers to be aware of, and adhere to all relevant policies and guidance, any legal and policy requirements which regulate their work, and any standards of research practice set out by scientific and learned societies and other relevant professional bodies.

All researchers should be aware of any legal requirements that regulate their work. This includes, but is not limited to: health and safety, data protection and freedom of information.

2.5. Leadership

Senior members of the University (including the Vice Chancellor, the Pro Vice Chancellor for Research & Knowledge Exchange, the Director of Research & Knowledge Exchange, UCRKE Directors, Deans, Heads of Schools/Departments, and their senior colleagues) should ensure that a research climate of mutual cooperation is created in which an open exchange of ideas is fostered, and all members of the research community are encouraged to develop their skills and support the skill development of others. UCRKE Directors and Heads of School/Departments are responsible for ensuring that the research culture that is disseminated at institutional level is communicated to all involved in research at the School or UCRKE level and that they are all aware of the Guidelines on Good Research Practice. Principal Investigators and Research Group leads are required to ensure that the research culture promoted at institutional and School/Department level is translated into good research practice in action.

2.6. Research data management

Research data is defined as all recordable forms of qualitative and quantitative information generated through research. Research data may be paper based, digital or in other forms such as tissue samples. Requirements for the recording and storage of research data will vary by discipline. Researchers should ensure that they adhere to guidance set out by funding bodies and professional bodies as well as institutional guidance whether this is set at institutional or local level.

2.6.1. Compliance

All research data must be collected, managed and maintained in accordance with relevant English, UK and European law and with any terms and conditions imposed by funding bodies, professional bodies and University policies.

2.6.2. Security

All data must be managed securely throughout the research data lifecycle. It must be protected as far as possible from loss by using electronic back-up systems for digital data and secure storage facilities for physical records.

2.6.3. Responsible management

The Principal Investigator (PI) is responsible for the research data management and archiving for each project. Research data management plans should be drawn up at the outset of new projects.

2.6.4. Storage and Archiving

Data should be stored in a way that will allow a complete retrospective audit. Suitable retention periods must be established and implemented for all archived data. The University considers a minimum of ten years to be an appropriate period. However, research based on clinical samples or relating to public health might require longer storage to allow for long-term follow-up to occur.

Researchers should be aware of the University's Records Management Policy:<u>https://mmuintranet.mmu.ac.uk/Interact/Pages/Content/Document.a</u>

<u>spx?id=3363</u>.

2.7. Supervision

The University ensures that appropriate direction of research and supervision of researchers is provided. Training in supervisory skills is compulsory for: existing members of academic staff who are new to research degree supervision at the University, and newly appointed academic staff who will be expected to undertake supervisory responsibilities in their role at MMU, irrespective of previous supervisory experience. Additionally, staff are required to attend a refresher session every three years.

The University's Research Student Handbook, PGR Regulations and the Institutional Code of Practice are available to all supervisors of research students and provide guidance on the responsibilities of the student and supervisors.

It is expected by the University that supervisors should supervise all stages of the research process, including outlining or drawing up a hypothesis, methodologies, preparing applications for funding, literature searching, protocol design, data recording and data analysis and evaluation of any ethical issues raised by the research activity.

All research students are provided with a link to the Research Student Handbook, PGR Regulations and the Institutional Code of Practice at induction. These documents detail the key stages of the research degree process, key contacts, responsibilities and the complaints procedure along with other pertinent information.

2.8. Ethical practice

All research undertaken at the University must be assessed according to the Academic Ethics Procedures. It is the responsibility of all researchers to ensure that they are aware of and adhere to these procedures.

Ethical Approval must be obtained prior to the research project commencing. Approval cannot be granted retrospectively. Once e thical

approval has been granted, all changes to the protocol must be approved by the relevant Faculty Head of Ethics

2.8.1. Research involving human subjects, their tissue or data

Approval must be gained from the appropriate authority for all research involving human participants or biological samples prior to commencing work. The University has an Ethics Policy and Procedural Framework which sets out the requirements.

Researchers should ensure the confidentiality of personal information relating to the subjects of research, and that the research fulfils any legal requirements such as those of the Data Protection Act 1998 and the Human Rights Act 1998.

Researchers should also be aware that any research that involves patients or staff of the NHS will require approval from the NHS Research Ethics Committee. Approval from the NHS does not replace the need for approval from the University.

2.8.2. Research involving animals

The University fully subscribes to the view that every effort should be made to find alternatives to the use of animals in research. Researchers are expected to demonstrate that the design of their research has incorporated all opportunities for reduction, replacement and refinement of animal involvement (the three Rs).

All research using sentient animals is covered by the Animals (Scientific Procedures) Act 1986 and the Home Office has clear reporting and licence procedures which are strictly and regularly monitored by a team of inspectors. Researchers must ensure that they are compliant with any guidance, regulations or procedures laid out by the Home Office.

2.8.3. Other ethical issues

There are many other areas of activity where ethical issues may arise and it is the responsibility of the researcher to demonstrate that they have fully considered the ethical implications of their research.

Researchers should always seek guidance from supervisors or line managers in the first instance, on any research-related work that might involve material or activities, which could, for example, be considered pornographic, racist, or otherwise offensive. Regard must also be had for important legislation on matters of equal opportunities and racial/disability discrimination. Researchers must familiarise themselves with the University's policies and regulations in these areas.

2.9. Publication and dissemination

The University encourages researchers to publish and disseminate the results of highquality research. Results should be published in an appropriate form, usually as papers in refereed journals. Researchers should be aware of the consequences of dissemination in the wider media.

Anyone listed as an author on a paper should accept responsibility for ensuring that he/she is familiar with the contents of the paper and can identify his/her contribution to it. The practice of honorary authorship is unacceptable.

The contributions of formal collaborators and all others who directly assist or indirectly support the research should be properly acknowledged.

An example of good publication practice can be found in the document produced by the Committee on Publication Ethics entitled 'Good Publication Practice'.

REFERENCES

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