UNIVERSITY OF WOLVERHAMPTON

Code of Good Research Practice

Index

Code of Good Research Practice

1. Introduction

The University of Wolverhampton's Code of Good Research Practice has been developed to articulate the importance of integrity and rigour in all research carried out at and in partnership with the University. The Code assists researchers to determine how to apply the baseline standards set by policies and regulations of the University, as well as by wider legal and contractual requirements and ethical norms, to the situations which face them in everyday practice of research.

2. Our Values

The University of Wolverhampton has core values; values which guide the decisions we make and how we engage with communities, our partners, staff, and students both locally and globally:

- Ethical
- Respectful
- Transparent
- Inclusive and fair
- Challenging
- Confident
- Collaborative
- Professional

The University is committed to its values and maintaining the highest standards of ethics and integrity in its research and is committed to ensuring that all researchers should be able to pursue their work in an atmosphere free of prejudice and harassment.

3. Scope

The Code applies to all members of the University's academic and non-academic staff; research fellows, assistants, and associates; research administrators; students undertaking research as part of a programme of study (taught or research); visiting researchers as well as all those with honorary positions conducting research within, or on behalf of the University of Wolverhampton.

This includes collaborative work conducted on and off campus, where the lead is not a University of Wolverhampton employee, or is clinical contract holder, consultant, or contractor. The Code also covers any person(s) not affiliated with or acting on behalf of the University, but who use University premises for research. The Code applies to all research projects conducted, whether externally funded or not. It is applicable to all disciplines of research and applies to all stages of a research project, from beginning to end.

Throughout the document, the term 'researcher' is used to mean any individual carrying out research or other activity in the scope of this Code.

4. General Principles

All researchers at the University are expected to conduct research in accordance with the core elements of research integrity, namely honesty in all aspects of research, rigour in line with prevailing disciplinary standards and norms, transparency and open communication, and care and respect for all participants in and subjects of research. The principles and standards set out in the Code are applicable to all disciplines, and apply to all stages of a research project, from beginning to end.

Researchers at all levels must conduct a risk assessment of any planned research to determine:

a) the ethical considerations that are relevant to the proposed research
b) the potential for risks to the organisation, the research, or the health, safety, wellbeing and mental health of researchers and research participants, the public, the environment, and national security
c) what legal requirements govern the research.

Risk assessments should be a continuous process throughout the lifecycle of the research project to mitigate risks. Researchers should try to anticipate any risks that the proposed research might produce results that could be misused for purposes that are illegal or harmful. Researchers must comply with Trusted Research guidelines, report any risks to, and seek guidance from, the appropriate person(s) in the University and take action to minimise those risks. In the first instance, researchers at the University must report anticipated risks to their Associate Dean (Research & Knowledge Exchange).

All research requires ethical review to facilitate the conduct of university activities in a manner that manages ethical risk appropriately, and which safeguards researchers.

In addition all staff and research student projects must undergo full ethical review (and secure approval) before any data collection starts.

Those undertaking approved research should remain alert to emerging ethical issues throughout the life of the project; where issues are identified after project start, or where there are significant amendments to the design or execution of the project, re-approval may be required.

Researchers must familiarise themselves and act in accordance with both University policy and processes and with external requirements pertaining to the conduct of their work. They should observe the highest standards of research integrity and embed good practice in all aspects of their work. To facilitate such efforts, this document provides guidelines on good practice in research.

5. Research Design

When designing research projects, researchers must ensure that:

a) the proposed research addresses pertinent questions relevant to the community or beneficiaries and is designed either to add to existing knowledge about the subject in question or to develop methods for research into it; context dependent concepts like repeatability, reproducibility, replicability, reliability, trustworthiness, credibility, authenticity and meta-research are of equal importance to establish quality.
b) the design is justified and appropriate for the question(s) being asked and addresses the most important potential sources of bias and criticism.
c) the design and conduct of the study, including how the research outputs will be made, gathered, analysed, stored, and managed, are set out in detail in a prespecified research plan or where possible a protocol submitted to a registry. Open research practices are encouraged – see the UK Reproducibility Network (UKRN) resources on practicing open research in different disciplines.
d) all necessary skills and experience will be available, in the proposed research team or through collaboration with specialists in relevant fields.
e) sufficient resources will be available, and these resources meet all relevant standards.
f) agreements are in place to give appropriate acknowledgement for the intellectual and/or technical contributions to the research output.
g) any of the above issues are resolved as far as possible before the start of the research.

Researchers must be prepared to make research designs available to peer reviewers and journal editors when submitting research reports for publication.

6. Research Guidance & Legislation

Where available, the University expects researchers to observe the standards of research practice set out in guidelines published by funding bodies, scientific and learned societies, and relevant professional bodies.

All researchers should be aware of the legal requirements which regulate their work including health and safety legislation, data protection legislation and the Freedom of Information Act.

Detailed information is available from the Research Services 'Research Policies, procedures, and Guidelines' webpage www.wlv.ac.uk/researchpolicies

6.1) Funder requirements

Research funders can reasonably expect the University to ensure that an adequate policy framework exists that promotes and promulgates good research practice, that emphasises integrity and rigour in research and that facilitates the development of a culture in which the following general principles can be understood and observed. Such expectations are set out in Universities UK's Concordat to Support Research Integrity which has been signed by the University's leading funders, including UKRI, HEFCE and the Wellcome Trust. Compliance with the Concordat is a condition of receipt of funding.

Many funders have published their own policies, including UKRI's Policy and Guidelines on the Governance of Good Research Conduct and the Wellcome Trust's Guidelines on Good Research Practice. A list of relevant policies and guidance from various funders is provided at the end of this document. Researchers should ensure that they are aware of and abide by all policies and guidelines that apply to their research.

Research Councils and charities fund for public benefit and impose certain obligations and restrictions on the use of their funds, for example a requirement to disseminate research findings, and a proscription on funding research for the purpose of direct commercial or private gain. Researchers should be aware of these obligations and seek advice where required.

Researchers should report any significant changes in the direction of funded research to the funder or other relevant body. Best practice would be to discuss any change in the direction of the research with the funder prior to its implementation. Most funding agreements will provide a mechanism for handling this process.

The Bidding Support Team can provide guidance on funder requirements and funding agreements.

6.2) Adherence to legal and ethical guidelines

All research carried out at the University must also comply with relevant legal, regulatory, professional, and ethical requirements and standards. This includes submitting research proposals for ethical review and abiding by the outcome of that review. Researchers must also ensure that research projects are approved by all applicable bodies, ethical, regulatory, or otherwise.

Researchers should be familiar with guidance on university procedures for ethical assessment, review and approval found on the webpage www.wlv.ac.uk/ethics

For guidance on all legal matters, visit https://www.wlv.ac.uk/about-us/governance/legal-information/

6.3) Overseas research

When conducting or collaborating in research in other countries University researchers must comply with the legal and ethical requirements both in the UK and in the countries where the research is conducted. Similarly researchers based abroad who participate in UK hosted research projects must comply with the legal and ethical requirements in the UK as well as those of their own country.

6.4) Insurance and indemnity

University researchers must ensure that all research projects have sufficient arrangements for insurance and indemnity prior to the research being conducted. Guidance on University procedures for insurance may be found at https://www.wlv.ac.uk/staff/services/university-secretary-directorate/insurance--inventory/major-features/

6.5) Health and safety

University researchers must ensure that all research carried out under their auspices, or for which they are responsible, fulfils all requirements of health and safety legislation and good practice. Researchers must bear in mind that certain types of research can present particular issues of health and safety. They must ensure that all research which involves potentially hazardous or harmful material, or which might cause harm to the environment, complies with all legal requirements and other applicable guidelines. Researchers should also consider any implications with respect to their own health & safety and that of any participants. The University's guidance on Health and Safety may be found at https://www.wlv.ac.uk/staff/services/hsd/

6.6) Finance

University researchers must ensure that the terms and conditions of any grant or contract related to the research are adhered to. The University issues guidelines regarding the purchasing or procurement of materials, equipment or other resources for research and the hiring of staff for research projects. Researchers should confirm details regarding ownership of resources, storage, and maintenance (if applicable), and the rights of researchers to use them prior to purchase.

Researchers must comply with the University's Financial Regulations regarding the use and management of finances relating to research projects. They must cooperate with any monitoring and audit of finances relating to research projects and report any concerns or irregularities to the appropriate person(s) as soon as they become aware of them.

7. Ethical Practice

7.1) Ethical Principles

The University and researchers should adhere to the following principles, which set out the responsibilities and values relevant to research. While some elements may seem self-evident, and there is some overlap, these principles aim to encourage all involved in research to consider the wider consequences of their work and to engage critically with the practical, ethical, and intellectual challenges that are inherent in the conduct of high-quality research, rather than treating codes of practice such as this as just another procedure to be followed.

The principles below are based on those of the UK Research Integrity Office and the European Code of Conduct for Research Integrity

- Principle 1: Excellence
- Principle 2: Honesty
- Principle 3: Integrity
- Principle 4: Cooperation
- Principle 5: Accountability
- Principle 6: Training and Skills
- Principle 7: Care, Safety and Respect

Researchers should work to ensure that, throughout the lifecycle of their research, ethical issues relating to their research projects are identified and managed. Ethical issues should be interpreted broadly and may encompass areas where regulation and approval processes exist as well as areas where they do not. All appropriate licences, permissions and approvals must be in place before research starts and be updated as necessary if plans change.

7.2) Ethical Review and Approval

The University has developed a Handbook for Ethical Review & Approval. The procedures for ethical review, approval and practice in this handbook have been designed to assist in the application and assessment of ethical approval requests, implementation of good conduct in research, and in the prevention of misconduct. This is to ensure that researchers conduct research of the highest quality.

The handbook is written for all researchers who are planning to carry out a research project, and staff involved in assessing applications for ethical approval. It may be used as a reference in the preparation of bids for grant funding.

The University Ethics Policy, handbook and ethics guidance can be found at www.wlv.ac.uk/ethics

7.4) Research involving human participants

All research involving human participants, human material and human data must comply with all the relevant legal and ethical requirements. All research involving human participants or personal data carried out by university employees or on university premises must abide by ethical guidance on Recruiting Research Participants.

Researchers on projects involving human participants must satisfy themselves that participants are enabled, by the provision of adequate accurate information in an appropriate form through suitable procedures, to give informed consent, having regard to the needs and capacities of vulnerable groups, such as older participants, children, those with mental illness or those in prison all of whom may require gatekeeper permissions. If a participant or gatekeeper cannot give informed consent, the participant should not be involved in the research.

Researchers are required to consider the ethical risk of any procedure within a research project which involves human participation or personal data. Advice must be sought from the relevant Faculty ethics panel in case of doubt.

The ethical issues that researchers encounter in their work may vary according to the type of research they undertake. As such, researchers should familiarise themselves with the ethical guidance relevant to their subject area or issued by their funder. Those undertaking social research involving human participants may find it particularly useful to consult the ESRC's Framework for Research Ethics.

7.5) Safeguarding & Prevent

Researchers should familiarise themselves with the University Safeguarding and Prevent webpage

a) Safeguarding

The University has a duty, both in law and as a responsible organisation, to take reasonable care of children and adults at risk coming onto its premises or otherwise engaging with the university. The University encounters children and adults at risk in a variety of settings, including through its research activities. The term safeguarding is used to define actions taken to protect vulnerable groups from harm.

Everyone who comes into contact with children/adults at risk (and their families) has a role to play. To fulfil this responsibility effectively, all researchers should make sure their approach is centred on the vulnerable individual. This means that they should consider, at all times, what is in the best interests of the child/adult at risk.

Researchers should seek to manage effectively the risks associated with activities involving children and adults at risk through:

- Completing a risk assessment to identify risks and means of reducing or eliminating these.
- Implementing the required actions identified by the risk assessment and reviewing the effectiveness of these on a regular basis.
- Ensuring that the appropriate DBS checks, or other appropriate screening checks are conducted, depending on eligibility, for any individuals conducting research which involves working with children or adults at risk.

Concerns for the safety and wellbeing of children and adults at risk could arise in a variety of ways and in a range of situations. For example, a child/ adult at risk may report or show signs of abuse, someone may hint that a child/adult at risk is or has been subject to harm, or that a colleague is an abuser, or someone may witness abuse.

Where a researcher suspects or is informed that a child or adult at risk has been, is being, or could be harmed it is not the responsibility of that person to decide whether abuse has taken place. Concerns should be shared in the first instance with the researcher's line manager/supervisor as outlined in the Safeguarding and Prevent statement.

b) The Prevent Duty

Prevent is part of the Government counter-terrorism strategy CONTEST and aims to reduce the threat to the UK from terrorism by stopping people becoming terrorists or supporting terrorism. Prevent focuses on all forms of terrorism and operates in a 'pre-criminal' space'. The Prevent strategy is focused on providing support and re-direction to individuals at risk of, or in the process of being groomed /radicalised into terrorist activity before any crime is committed.

Radicalisation is comparable to other forms of exploitation; it is a safeguarding issue that researchers working in the education sector must be aware of. Radicalisation is a process by which an individual or group adopts increasingly extreme political, social, or religious ideals and

aspirations that reject or undermine the status quo or undermine contemporary ideas and expressions of freedom of choice.

The Prevent Duty 2015 requires us to ensure that all researchers understand the risk of radicalisation and how to seek appropriate advice and support. Researchers may interact with people who may be vulnerable to being drawn into terrorism and must be able to identify early signs of an individual being drawn into radicalisation. Researchers should be able to recognise key signs of radicalisation and be confident in referring individuals to the organisational safeguarding lead or the police, thus enabling them to receive the support and intervention they require.

7.6) Health and Social Care Research

The Health Research Authority's (HRA) UK Policy Framework for Health and Social Care Research sets out the broad principles of good research governance in the research areas of health and social care.

It includes clinical and non-clinical research; research undertaken by NHS or social care staff using the resources of health and social care organisations; and any research undertaken by industry, charities, research councils and universities within the health and social care systems that might have an impact on the quality of those services.

a) NHS Research

Most research involving NHS patients, staff or facilities will come under the UK Policy Framework for Health and Social Care and will require review by a National Research Ethics Service (NRES) Committee. Some other research will also require NRES review for legal and policy reasons.

The NHS Health Research Authority (HRA) protects and promotes the interests of patients and the public in health and social care research. http://www.hra.nhs.uk/ . Details of when NRES review is needed are provided on the HRA website. In some cases it may also be appropriate to seek the views of relevant patient groups.

b) Institutional Sponsorship

Research which falls within the scope of the UK Policy Framework requires a research sponsor; the Sponsor is a company, institution or organisation which takes responsibility for the quality and governance of the project. The UK Policy Framework states that a Sponsor is 'The organisation or partnership that takes on overall responsibility for proportionate, effective arrangements being in place to set up, run and report a research project'.

Formal confirmation from the Sponsor must be obtained prior to an application for the permissions and approvals for health and social care / community care research in the UK using the Integrated Research Application System (IRAS).

Researchers must receive ethical approval, and follow the Institutional Sponsorship Policy - Health and Social Care Research, and the Institutional Sponsorship application process to obtain sponsor approval, before making an IRAS application.

c) Good Clinical Practice (GCP)

The University expects that all clinical research involving human participants will be undertaken in line with the principles of GCP. GCP is the agreed international standard for conducting clinical research. GCP is a set of core principles, which applies to all clinical investigations that could affect the safety and wellbeing of human participants. GCP is internationally recognised as best practice and compliance (including up to date training) and is a legal obligation in the UK/Europe for all trials of investigational medicinal products. GCP provides assurance that:

(i) Data and reported results of clinical investigations are credible and accurate, and

(ii) The rights, safety, and confidentiality of participants in clinical research are respected and protected.

Researchers have a duty to publish the findings of all clinical research involving human participants and be mindful of any restrictions on the reporting period (new legislation stipulates 12 months from the completion of the study). See the current regulations introduced by the HRA for clinical trials and the MHRA for Clinical Trial of an Investigational Medicinal Product (CTIMP). In addition, it is government policy to promote public access to information about any research and research findings affecting health and social care, including the principle that trials should appear on public registries. In this context "trials" means all comparative studies of health interventions, not just ones conducted in a clinical setting.

7.7) Research involving human tissue

All activity involving the acquisition, storage, and use of human tissue (including cells, serum, saliva etc.) as defined by the Human Tissue Authority (HTA) under relevant material for the purposes of research is covered by a number of different pieces of legislation all of which researchers must fully comply with. This includes but is not limited to the Human Tissue Act 2004, NHS Act 2006, and Mental Capacity Act 2005

Researchers must not use their own biological or personal material in their research.

The University Policy for Use of Human Tissue in Research aligns with the requirements of the Human Tissue Authority (HTA). The aim of this Policy is to ensure University compliance with the Human Tissue Act 2004 and ethical considerations in relation to research using human tissue.

7.8) Research involving animals

The University is committed to following the UK Animals (Scientific Procedures) Act 1986, amended 2012 (ASPA), the Animal Welfare Act 2006 and the Wildlife and Countryside Act, 1981.

The University of Wolverhampton does not conduct any research requiring a Home Office license under the ASPA on its premises. However, the University does conduct other forms of animal-based research, which only takes place when it is necessary and there is no practical alternative:

- Behavioural/Ecological Research
- Captive Animal Welfare Research
- Biomedical Research
- Forensic Research

All researchers involved in animal-based research must treat animals with respect and consideration. Before any animal-based research can commence, ethical approval must be granted, and any relevant licences obtained.

All animal research is overseen by the University Life Sciences Ethics Committee and in compliance with the University's Policy on Animal-Based Research.

In accordance with the Concordat on the Declaration of Openness in Animal Research, the University supports the goal of openness and transparency with respect to our use of animals.

7.9) The Nagoya Protocol

The Nagoya Protocol on Access & Benefit Sharing (ABS) is an international agreement establishing a legal framework to govern access to genetic material including the associated traditional knowledge and ensure that benefits arising from the use of these resources are shared fairly.

Researchers are required by law to undertake due diligence when using genetic resources and should refer to University guidance on complying with the Nagoya Protocol.

7.10) Research misuse, non-proliferation, and dual-use research

Researchers must consider any risks that their research will generate outcomes that could be misused for harmful purposes both when setting up research collaborations, communicating results and teaching (particularly teaching postgraduates in ATAS (Academic Technology Approval Scheme) regulated subject areas). Where risks exist, they must seek advice and take active steps to minimise them.

Researchers must also comply with all legal requirements relating to non-proliferation and dual-use, particularly export controls. Export controls apply to the transfer (by any means) of goods, technology, software and/or knowledge from the UK to a destination outside the UK that may be used for military purposes or for Weapons of Mass Destruction purposes. Researchers should familiarise themselves with the University's Trusted Research guidance and Dual Use guidance.

8. Research Integrity

All individuals involved in research at Wolverhampton are expected to observe the highest standards of integrity, honesty, and professionalism in respect of their own actions in research and in their responses to the actions of others. This applies to the whole range of research work including, but not limited to, designing studies and experiments; generating, recording, archiving, analysing and interpreting data; sharing data and materials; applying for funding; presenting and publishing results; training new researchers, staff, and students; and peer reviewing the work of other researchers. The direct and indirect contributions of colleagues, collaborators and others should be acknowledged.

The University expects research results to be checked for accuracy and consistency by the researchers responsible for them before being made public. Researchers must be able to explain

and justify how results were reached.

The University is committed to upholding the commitments outlined in Universities UK's Concordat to Support Research Integrity. This requires those involved in research to abide by national, European, and international standards of research integrity and to embed good practice in every aspect of their work. All researchers should be aware of their responsibilities under the Concordat. A summary of the standards to which researchers are expected to adhere is provided in the University's Statement on Research Integrity.

Further guidance on the University's expectations for integrity in research is provided by the University Research Integrity webpage.

8.1) Research Misconduct

Allegations of misconduct in research are rare but the University takes them very seriously. The University is committed to ensuring that allegations of misconduct in research are investigated with all possible thoroughness and vigour.

All members of the University, and individuals permitted to work in university institutions, have a responsibility to report any incident of misconduct, whether witnessed, or suspected.

8.2) Definitions of Research Misconduct

In the context of these procedures, misconduct is taken to mean:

a) **Fabrication**: This includes the creation of false data or other aspects of research, including documentation and participant consent.

b) **Falsification**: This includes the inappropriate manipulation and/or selection of data, imagery and/or consents.

c) **Plagiarism**: This includes the general misappropriation or use of others' ideas, intellectual property or work (written or otherwise), without acknowledgement or permission.

d) **Misrepresentation**: Including:
- Misrepresentation of data, for example suppression of relevant findings and/or data, or knowingly, recklessly or by gross negligence, presenting a flawed interpretation of data.
- Undisclosed duplication of publication, including undisclosed duplicate submission of manuscripts for publication.
- Misrepresentation of interests, including failure to declare material interests either of the researcher or of the funders of the research.
- Misrepresentation of qualifications and/or experience, including claiming or implying qualifications or experience which are not held.
- Misrepresentation of involvement, such as inappropriate claims to authorship and/or attribution of work where there has been no significant contribution, or the denial of authorship where an author has made a significant contribution.

e) **Mismanagement** or inadequate preservation of data &/or primary materials.
Including failure to:
- keep clear and accurate records of the research procedures followed and the results obtained, including interim results.
- hold records securely in paper or electronic form.
- make relevant primary data and research evidence accessible to others for reasonable periods after completion of the research.
- manage data according to the research funder's data policy and all relevant legislation.
- wherever possible, deposit data permanently within a national collection.

f) **Breach of duty of care**, which involves deliberately, recklessly or by gross negligence:
- disclosing improperly the identity of individuals or groups involved in research without their consent, or other breach of confidentiality.
- placing any of those involved in research in danger, whether as Respondents, participants or associated individuals, without their prior consent, and without appropriate safeguards even with consent; this includes reputational danger where that can be anticipated.
- not taking all reasonable care to ensure that the risks and dangers, the broad objectives and the sponsors of the research are known to participants or their legal representatives, to ensure appropriate informed consent is obtained properly, explicitly and transparently.
- not observing legal and reasonable ethical requirements or obligations of care for animal subjects, human organs or tissue used in research, or protection of the environment.
- improper conduct in peer review of research proposals or results (including manuscripts submitted for publication); this includes failure to disclose conflicts of interest; inadequate disclosure of clearly limited competence; misappropriation of the content of material; and breach of confidentiality or abuse of material provided in confidence for peer review purposes.

g) **Improper dealing with allegations** of misconduct: failing to address possible infringements, such as attempts to cover up misconduct and reprisals against whistle-blowers, or failing to adhere appropriately to agreed procedures in the investigation of alleged research misconduct accepted as a condition of funding. Improper dealing with allegations of misconduct includes the inappropriate censoring of parties through the use of legal instruments, such as non-disclosure agreements.

Honest errors and differences in, for example, research methodology or interpretations do not constitute research misconduct.

The University's approach to managing these issues is described in detail in the University's Procedures for dealing with allegations of misconduct in research, found on the Research Misconduct webpage.

8.3) Conflict of interest

Researchers should declare and manage any real or potential conflicts of interest, both financial and professional. Section 4: Staff Interests of the University's Transparency Policy contains further details on the declaration of personal interests, see Transparency webpage for information.

Researchers should comply with the policy for addressing conflict of interest, as well as any external requirements, such as those of funding bodies. This should include declaring any potential or actual competing interests relating to their research to their manager, any ethics committee which reviews their research, and when reporting their findings at meetings or in publications. Conflicts should be disclosed as soon as researchers become aware of them.

9. Open Research

Open Research refers to the principle that all knowledge should be open and accessible as early as possible in the discovery process. This includes results, data, protocols, published outputs and other aspects of the research lifecycle. Open Research is collaborative, transparent, reproducible, and publicly available and at its core is the principle that research brings the most benefits the more widely it is shared.

Open Research is being increasingly recognised in the policies of research funders, organisations, and publishers to accelerate the progress and impact of research by making the process more transparent, collaborative, and efficient.

Researchers should familiarise themselves with the University's Open Research Statement and Open Access Publications Policy.

Whilst recognising the need for researchers to protect their own intellectual property rights (IPR), the University encourages researchers to be as open as possible in discussing their work with other researchers and with the public. The aim in disseminating charity-funded or University research is to increase knowledge and understanding: its purpose should not be primarily to seek publicity for the researcher, for the University or for the funder.

The University is committed to disseminating research and scholarship as widely as possible, whilst affirming academic freedom to choose the location and nature of publication. In keeping with this commitment, the University supports its staff in making their research available through Open Access. Where research funders include Open Access requirements as a condition of grant funding, researchers are expected to ensure that they comply with such requirements.

All researchers must ensure all scholarly outputs are recorded in Elements, the University Current Research Information System (CRIS), which in turn ensures that research publications are made available online via WIRE, the University's institutional repository.

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

ethical approvals and consents which cover the data and materials, confidentiality considerations, and any intellectual property rights in them. Many funders will have data sharing policies that must be abided by where appropriate. Funders recognise that publication of the results of research may need to be delayed for a reasonable period pending protection of any intellectual property arising from the research. Any such periods of delay in publication should be kept to a minimum and this should normally be no more than three months.

Researchers should be especially careful when discussing work that is not complete or has not been published, particularly if it has not undergone peer review.

Researchers should also abide by the Concordat on Open Research Data and follow guidance on good practice in open research and regulatory frameworks according to disciplinary norms.

10. Leadership & Cooperation

Heads of Research Centres and senior colleagues should ensure that a research climate of mutual co-operation is created in which all members of a research team are encouraged to develop their skills and in which the open exchange of ideas is fostered.

Efforts should also be made to foster an environment where research is conducted in accordance with good research practice and to ensure that all those involved in research are made aware of these guidelines and related policies and guidelines. Senior researchers should make efforts to help new members of the research community understand and adopt best practice. Within a research group, responsibility to ensure that good research practice is maintained throughout the research process ultimately lies with the group leader.

11. Supervision

All members of staff engaged in supervision are required to ensure that they achieve and maintain expertise in supervision practice. All supervisors are expected to be aware of current University Research Degree Regulations, to be aware of the requirements of all relevant research policies, procedures, and guidelines.

The University also provides guidance for supervisors and Appendix 2: Guidelines on Supervision & Supervisory Teams of the Regulations clearly sets out supervisor responsibilities.

The University wishes to ensure that appropriate training and direction of research and supervision of researchers is available. The Research Supervisor Development Programme is provided by the Doctoral College as part of the University's staff development.

All supervisors should ensure that their supervisees receive appropriate and timely training in research design, regulatory and ethical approval and consent, equipment use, confidentiality, data management, record keeping, data protection, and in the protection of IP.

Supervisors should supervise all stages of the research process, including outlining or drawing up a hypothesis, preparing applications for funding, the design of experimental or research protocols, data recording and data analysis, and writing the thesis.

12. Training

Researchers should undergo training to carry out their duties and to develop their knowledge and skills throughout their career, repeating training where necessary to ensure that skills are kept up to date. They should identify needs for training when they arise and report them to their manager.

The University offers many courses to enable students and researchers to understand and adopt best practice in research as quickly as possible. Supervisors should encourage students and colleagues to attend relevant courses as part of their overall career development. Lists of courses are available on the Doctoral College website. Researchers should also be aware of training offered locally by their School or Faculty.

13. Generation, Collection and Retention of Data, Information or Material

13.1) Ownership and responsibilities

There should be clarity at the outset of the research as to the ownership and use of, where relevant:

- Data and samples used or created in the course of the research
- The results of the research
- Patient questionnaires
- Equipment paid for by funders.

The responsibilities and procedures for the storage and disposal of data and samples (including compliance with the requirements of any ethics committee) should be made clear at the commencement of any project. Any research collaboration agreement relating to the research should contain clauses describing any necessary arrangements.

13.2) Research data

Researchers should comply with all legal, ethical, funding body and organisational requirements for the generation, collection, use, storage, and security of data, especially personal data, where particular attention should be paid to the requirements of data protection legislation provided in the GDPR by the Information Commissioner's Office (ICO). They should also maintain confidentiality where undertakings have been made to third parties or to protect intellectual property rights. Organisations and researchers should ensure that research data relating to publications is available to other researchers, subject to any existing agreements on confidentiality.

Consideration should be given to how data will be gathered, analysed, and managed, and how and in what form relevant data will be made available to others under open research practices, at an early stage of the design of the project. Researchers should collect data accurately, efficiently, and according to the agreed design of the research project.

Data should be kept intact, and stored in a secure and accessible form, for any legally specified period and otherwise for three years at least, subject to any legal, ethical, or other requirements, from the end of the project. It should be kept in a form that would enable retrieval by a third party, subject to limitations imposed by legislation and general principles of confidentiality (see the Medical Research Council's GDPR guidelines on how the law about confidentiality relates to data protection). Use of open access data repositories is encouraged and highly recommended to ensure reproducibility and efficient research on research.

Data stored locally on a computer should be backed-up. Electronic files containing personal data should be encrypted or password protected, and access should be limited to as few people as possible. It is of paramount importance that confidentiality, where required, is maintained. Researchers should familiarise themselves with the University's Research Data Management Guidance and Research Data Management Policy.

Retention periods for research data will vary according to specific contractual requirements and the nature and sensitivity of the research. Most funders consider a minimum of ten years after the completion of a project to be an appropriate period. However, research based on clinical samples or relating to public health may require longer storage to allow for long-term follow-up to occur.

If research data (and/or materials) is to be deleted or destroyed, either because its agreed period of retention has expired or for legal or ethical reasons, it should be done so in accordance with all legal, ethical, research funder, professional guidance, as well as the University document retention schedule.

13.3) Record keeping

Researchers should keep clear and accurate records of the procedures followed and the approvals granted during the research process, including records of the interim results obtained as well as of the final research outcomes. This is necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about the conduct of the research, the results obtained, or inventorship on patentable inventions.

Researchers should consider any requirements for monitoring and audit at an early stage in the design of a project. They should cooperate with the monitoring and audit of their research projects by applicable bodies and undertake such when required. They should cooperate with any outcomes of the monitoring and audit of their research projects.

14. Dissemination, Publication of Outputs & Authorship

The University encourages the publication and dissemination of high-quality research outputs but believes that researchers must do this responsibly and with an awareness of the consequences of any such dissemination in the wider media. Dissemination will normally be a requirement of research council and charity funding.

14.1) Publication of research outputs

Arrangements and responsibilities for publication should be considered when planning a study and should ideally be agreed by all investigators at the outset. These should be revisited where role and contributions change over the life cycle of the study. Such discussions might include authorship, authorisation for the content of papers, and the intended place of publication.

Researchers should consider the following guidance when publishing or disseminating their research or research findings including any plans they may have to publish or publicise research at conferences or on web sites:

a) Funding sources should normally be acknowledged in any publication or publicity.
b) Results of research should be published in an appropriate form.
c) Anyone listed as an author of any work should be prepared to take public responsibility for that work and ensure its accuracy and be able to identify their contribution to it. For this reason, the use of generative AI as co-author is unacceptable. COPE provides further guidance on Authorship and AI tools. Honorary authorship is not good practice.
d) The contributions of formal collaborators and all others who directly assist or indirectly support the research should be both specified and properly acknowledged.
e) Research outputs should be disseminated in a manner that reports the research and all the findings of the research accurately and without selection that could be misleading. Compliance with open research practices will add another layer of protection against this; the Transparency and Openness Promotion (TOP) guidelines are useful in implementing transparent research.
f) Consider and mitigate risks associated with research following interpretation of early results (e.g., from rapid publications in open peer review journals where review process is incomplete or preprints) by the media, public, or other beneficiaries.
g) Similarly, in accordance with the Concordat on Openness on Animal Research, where research has been conducted using animal models, this should be clearly stated in press materials and news stories.

Examples of good publication practice can be found in the Committee on Publication Ethics guidelines, the International Committee of Medical Journal Editors Recommendations and on the Nature website.

14.2) Publicity

Publicity may also be important to industrial funders and to fund-raising charities and is increasingly important to the University itself. Advice on press releases and publicity can be

obtained from External Engagement.

14.3) Academic Authorship

The University has set out principles for determining authorship of publications in the Academic Authorship Policy. The purpose of this policy is to ensure:

a) Researchers who participate in investigation and other academic activities are equitably acknowledged and their contributions are fairly represented.
b) The work of others is citied and referenced appropriately and acknowledgement of authorship is given to those making a substantial scholarly contribution to the output.
c) The criteria for attribution of authorship of all research outputs is clarified and appropriate steps to confirm authorship are taken prior to any submission of research outputs for publication; and
d) The University complies with all relevant external guidelines relating to the attribution of authorship.

Researchers should declare any potential or actual competing interest in relation to their research when reporting their findings at meetings, on social media, or in publications.

Researchers should be aware that submitting research outputs as publications to more than one potential publisher at any given time (i.e., duplicate submission) or publishing findings in more than one publication without disclosure and appropriate acknowledgement of any previous publications (i.e., duplicate publication) is unacceptable.

14.4) Peer Review

Peer review is an important part of good practice in the publication and dissemination of research and research findings, the assessment of applications for research grants, and in the ethics review of research projects. Wherever possible, research undertaken by staff should undergo peer review prior to it being published, publicised, or disseminated. If research is placed in the public domain before peer review has been undertaken, it is good practice to make this clear in any publicity.

The University has established a Funding Peer Review College (FPRC) to support colleagues with their research proposals to key strategic funders. Peer review is an essential element of developing an application for research funding to research councils and the process to adhere to is found on the FPRC webpage.

Researchers who carry out peer review should do so to the highest standards of thoroughness and objectivity. They should maintain confidentiality and not retain or copy and material submitted to them for peer review. They should not make use of research or research findings from a paper under review without the express permission of the author(s) and should not allow others to do so. They should follow the guidelines for peer review of any organisation for which they carry out such work as well as the Committee on Publication Ethics (COPE) guidance for publication ethics.

Researchers acting as peer reviewers must declare any relevant competing interests and decline to peer review if they have significant conflicts.

15. Intellectual Property & Copyright

The University, which has charitable status, carries out research and the research councils and charities fund research for public benefit and not for direct commercial or private gain. Public benefit may arise from education, i.e. the gain of knowledge that is placed in the public domain, or in the case of biomedical research improvement in the treatment or care of patients or in the prevention or cure of diseases. Although the University cannot carry out research solely for the purpose of commercial gain, commercial benefit from the exploitation of the results of research may, subject to expectations of funders, accrue to their inventor(s), the University and, by agreement, to the funder of the research. Commercialisation may also be the most effective means of disseminating research results and accruing public benefit.

Researchers must be mindful that the public disclosure of inventions or potentially patentable ideas before registration may prejudice the opportunity to exploit fully the fruits of such research.

Additionally, where the research is funded or part-funded by a third party, in particular for industrially sponsored research, the contractual agreement associated with the funding must be adhered to.

Once any IP arising from their research programme has been protected, and the results have been published, the University expects researchers to be able to make available relevant data and materials to other researchers, on request. However, such release of data and materials should be consistent with ethical principles governing consent, confidentiality, and anonymity, and should respect any intellectual property rights that arise either as a matter of general legal principles or specifically as a result of a research contract.

Researchers should familiarise themselves with the University's Intellectual Property Policy.

Researchers should try to anticipate any issues relating to intellectual property at the project planning stage or at the earliest opportunity before dissemination and agree jointly in advance how they might be addressed, communicating any decisions to all members of the research team.

Researchers intending to copyright research material or output must comply with relevant legislation and guidelines (see government guidelines on copyright), and ensure that these do not conflict with open access terms or other conditions of funding agreements.

16. Collaboration

Research is increasingly collaborative, involving individuals from different disciplines and from institutions within and beyond the UK. In establishing research collaborations researchers should be mindful of the University's policies and guidelines, as well as funder, legal and regulatory requirements, and ensure that research partners and their employing institutions are able to meet the required standards of research conduct. There needs to be clear agreement on, and compliance with common standards and procedures for the conduct of collaborative research, including the resolution of any issues or problems and the investigation of any allegations of misconduct in research.

Researchers should try to anticipate any issues or barriers that might arise because of working collaboratively and agree jointly, in advance, how they might be addressed, communicating any decisions to all members of the research team. Agreement should be sought on the specific roles of the researchers involved in the project and on issues relating to intellectual property, Trusted Research, open access, publication, and the attribution of authorship and contributorship, recognising that, subject to legal and ethical requirements, roles and contributions may change during the research.

Researchers should follow the Framework to Enhance Research Integrity in Research Collaborations, paying particular attention to projects that include participants from different countries or where work will be carried out in another country, due to the additional legal and ethical requirements and other guidelines that may apply. Refer to the Cape Town Statement on how to foster equitable research partnerships.

Guidance on research integrity in collaborative research is provided by the Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations.

17. Funding and Collaboration in Research and Enterprise

Researchers collaborating with commercial or other non-research organisations must have a collaboration agreement signed before any work commences that stipulates key roles, responsibilities, obligations, and rights of all parties, and how the research will be jointly managed. The agreement should clarify ownership of intellectual property, authorship, and specify exemptions to open licensing terms for the use of research material and legally protected databases. The agreement must reflect any funding terms and conditions including conditions for funding transfer between sponsors and collaborators or commercial partners.

Before agreeing to any collaboration with multinational organisations or researchers outside the UK, organisations and researchers must undertake a risk assessment and due diligence to ensure national security and compliance with legal requirements and financial agreements in the UK and all relevant countries. Ethical approvals (if applicable) must be in place from all relevant countries and research protocol(s) agreed upon by all parties.

A risk assessment must be conducted for research that is subject to export control restrictions, acquiring an export licence if needed, and manage the research under Trusted Research guidelines.

Researchers must ensure that any relevant ethical approvals or permissions are in place before starting contract research or research with high economic impact. Such research should be conducted in accordance with relevant Trusted Research guidance and appropriate sector-specific guidelines.

18. Acknowledgements

- UKRIO Code of Practice for Research https://ukrio.org/about-us/code-of-practice-for-research/
- Universities UK, The Concordat to Support Research Integrity https://www.universitiesuk.ac.uk/topics/research-and-innovation/concordat-support-research-integrity
- UKRI, Policy and Guidelines on Governance of Good Research Conduct https://www.ukri.org/councils/esrc/guidance-for-applicants/research-ethics-guidance/our-policy-and-guidelines-for-good-research-conduct/
- UKRI Good Research Resource Hub https://www.ukri.org/what-we-do/good-research-resource-hub/
- Association of Medical Research Charities (AMRC), guidance on Research Management https://www.amrc.org.uk/Pages/Category/research-management
- AHRC, Research Funding Guide https://www.ukri.org/publications/ahrc-research-funding-guide/
- BBSRC, Statement on Safeguarding Good Scientific Practice https://www.ukri.org/about-us/bbsrc/our-policies-and-standards/safeguarding-good-scientific-practice/
- ESRC, Framework for Research Ethics https://www.ukri.org/councils/esrc/guidance-for-applicants/research-ethics-guidance/
- ESRC, Research Funding Guide https://www.ukri.org/publications/esrc-research-funding-guide/
- MRC principles and guidelines for good research practice https://www.ukri.org/publications/principles-and-guidelines-for-good-research-practice/
- NERC, Research Grants and Fellowships Handbook https://www.ukri.org/publications/nerc-research-grants-and-fellowships-handbook-guidance-for-applicants/
- Wellcome Trust, Responsible conduct of research https://wellcome.org/grant-funding/guidance/responsible-conduct-research

19. Contact

For general queries regarding Research Policies, Procedures and guidelines contact Jill Morgan, Research Integrity Manager, by email: J.Morgan4@wlv.ac.uk

VERSION	2.0	**AUTHOR/ OWNER**	Jill Morgan, Research Integrity Manager, Research Services
Approved Date	October 2023	**Approved By**	University Research Committee
Review Date	October 2026		