

## **Code of Practice for Research**

Promoting good practice and preventing misconduct



CODE OF PRACTICE FOR RESEARCH



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## 1 Introduction

The University of Bradford Code of Good Practice in Research (the Code) is based upon the <u>UK Research Integrity Office's Code of</u> <u>Practice for Research</u>. Everyone at the University has a responsibility to ensure that research is undertaken in conformity with the law, in line with funders' contractual terms and conditions, in accordance with best current practice and with equality, diversity and inclusion embedded. To these ends, the University provides an environment where good research practice is encouraged and supported throughout its research activities. This Code sets out the standards of performance and conduct expected of all those engaged in research at the University of Bradford and is applicable both to individual researchers and to the University as a whole.

## 2 Scope

- 2.1 The Code applies to researchers: any person who conducts research, including but not limited to: an employee; a research supervisor; a visiting researcher; an independent contractor or consultant; a postgraduate research students; postgraduate taught students; a visiting or emeritus member of staff; an undergraduate student; a member of staff on a joint clinical or honorary contract, and/or a public contributor to research\*. The Code is applicable to all subject areas of the University.
- 2.2 Since the Code applies to undergraduate students, those who have responsibility for undergraduate courses should ensure that the Code is used as a teaching and learning resource such that undergraduates develop an understanding of its application and undertake their own research in compliance with its provisions.

\*Any person who is a patient or member of the public who has a lived experience and can be involved in identifying, designing, conducting and reporting research. Other terms include service user and carers, lay researchers and experts by experience.



## 3 Glossary

3.1 For the purposes of this Code, "research" refers to the definition used by the <u>Research Excellence Framework 2021</u>:

"Research is defined as a process of investigation leading to new insights, effectively shared.

"It includes work of direct relevance to the needs of commerce, industry, culture, society, and to the public and voluntary sectors; scholarship; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and routine analysis of materials, components, and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

"It includes research that is published, disseminated or made publicly available in the form of assessable research outputs, and confidential reports."

## 4 **Responsibilities**

#### 4.1 Senate

The Senate, as the supreme academic authority of the University responsible for overseeing academic quality and standards, is responsible for regulating the University's research activity, including this Code.

#### 4.2 Senior managers

Senior managers in the University are ultimately responsible for the overall quality of research conducted in the University, including compliance with the organisation's research and management policies.

#### 4.3 Committee for Ethics in Research

The University Committee for Ethics in Research, chaired by the Deputy Vice-Chancellor (Research, Innovation & Engagement), is



the primary body where issues related to research governance including this Code are considered.

#### 4.4 Faculties

Faculties have a responsibility to ensure a climate of good research practice in research centres, groups, and teams, including the development of appropriate research skills. Deans of Faculty are responsible for the research conducted within their Faculties. Leads for public and patient involvement have a responsibility to ensure researchers can access advice and good practice on involving public contributors. Researchers are charged with implementing the Code as it applies to their research projects. All staff and students should have defined responsibilities in relation to the project they are engaged on and be aware of those responsibilities.

The creation of a sound research culture is essential to good research practice. The University's <u>Research and Innovation sub-</u><u>strategy</u> sets out our ambition within the overall strategic framework. The sub-strategy sets out the University's ambition for research and innovation to shape future societies and defines an implementation framework for achieving this ambition.

Within Faculties the responsibility for research culture lies with Deans, Associate Deans (RKT), Heads of School and Directors of Research Centres/Groups. Those responsible should create a research environment of mutual co-operation in which researchers are encouraged to develop their skills and in which the open exchange of ideas is fostered.

## 5 General principles

5.1 All members of the University must 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, All members of the University will be guided by these Principles when implementing and complying with the core Standards described in section 6 and the Recommended Checklist for Researchers in section 7.



The University recognises and adopts the eight principles of Responsible Research and Innovation (ethics, gender, open access and data, science education, public engagement, sustainability, social justice and governance).

5.2 Equality, diversity and inclusion: the University of Bradford is committed to supporting research in an environment that values and celebrates the diverse nature of its staff and their contributions. This Code of Practice confirms the University's commitment to equality of opportunity and is consistent with the Equality Diversity and Inclusion (EDI) sub-strategy, University Policy, and relevant legislation.

> The University's commitment to equality of opportunity, to principles of fairness, inclusivity, consistency, accountability, and transparency as detailed in the University Strategy and supporting sub-strategies will be applied to all processes regarding the availability of, and access to, research time and facilities.

- 5.3 **Rigour**: all members of the University will strive for rigour when conducting research and aim to produce and disseminate work of the highest quality.
- 5.4 **Honesty and integrity**: all members of the University will work to create and maintain a culture of research that fosters and supports honesty in research. This applies to the whole range of work encompassed within the research process from the initial formulation of concepts and hypotheses, through methodological and/or experimental design, through analysis of data or ideas, to the publication of results and the acknowledgement of the contributions of others. Researchers must refrain from plagiarism, infringement of intellectual property rights and the fabrication of results.

They must neither engage in misconduct nor conceal it. Researchers must comply with all internal and external legal and ethical requirements relevant to their activities. They should declare any potential or actual conflicts of interest relating to research and where necessary take steps to resolve them.

5.5 **Co-operation and openness**: all members of the University should promote the open exchange of ideas, research methods, data and results and their discussion, scrutiny, and debate, subject to any considerations of confidentiality. Researchers should contact Research and Innovation Services for advice about protecting

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intellectual property rights and their potential exploitation before the release of results by public disclosure, if it is reasonable to believe that the results may hold commercial value.

- 5.6 **Public and community contribution**: where research involves patients or members of the public, the University recommends and supports engagement with service users, carers and community groups in its design, conduct, analysis, and dissemination.
- 5.7 **Training and skills**: the University ensures its research practice is informed by the latest thinking, methodologies and practices for training and development opportunities and this informs the University's approach to training and continued professional development.
- 5.8 **Safety**: the University places the safety, dignity, rights, and wellbeing of all involved in research high on its priorities and expects its research to mitigate against risk or harm to research subjects, patients, participants, researchers, public contributors and others.

## **6 Standards for the University and its researchers**

#### 6.1 General guidance on good practice in research

- 6.1.1 Acting through its officers, the University:
  - a) ensures that good practice in research forms an integral part of its research strategy and policies;
  - b) establishes clear policies and procedures that cover the principles of good practice in research (see section 2) and offers detailed guidance on the Standards set out in this Code;
  - c) ensures that these policies and procedures complement, and are in accordance with, existing organisational policies, such as those for <u>health and safety</u>, <u>raising concerns at work</u>, <u>management of</u> <u>finances</u> or of <u>intellectual property</u>, and <u>equality and diversity</u>;
  - d) makes sure that researchers are aware of these policies and procedures and that all research carried out under the auspices of the University complies with them;
  - e) provides training, resources and support to researchers to ensure that they are aware of these policies and procedures and are able to comply with them;
  - f) encourages researchers to consider good practice in research as a routine part of their work; and



- g) monitors these measures for suitability and effectiveness and reviews them where necessary.
- 6.1.2 Researchers should:
  - a) recognise their responsibility to conduct research of high ethical standards as outlined in the University's <u>Research Ethics Policy</u>;
  - b) be aware of the University's <u>policies and procedures</u> on good practice in research;
  - c) make sure their research complies with these policies and procedures by seeking guidance from the owners of these documents where necessary;
  - d) adhere with learned societies, professional bodies and funders policies and procedures on good practice in research;
  - e) work with the University to ensure that they have the necessary training, resources, and support to carry out their research; and
  - f) suggest to their managers and to the University how guidance on good practice in research might be developed or revised.
- 6.1.3 The University and its researchers must comply with all legal and ethical requirements and other guidelines that apply to their research. This includes submitting research proposals for ethics review where appropriate and abiding by the outcome of that review. They should also ensure that research projects are approved by all applicable bodies: ethical, regulatory, or otherwise. Researchers must adhere to University procedures for ethical review and approval. For guidance on all legal matters relating to research, researchers should contact RaIS Contract Managers.
- 6.1.4 When conducting, or collaborating in, research in other countries, University researchers must comply with the legal and ethical requirements existing in the UK and in the countries where the research is conducted. Similarly, researchers based abroad who participate in UK-hosted research projects should comply with the legal and ethical requirements existing in the UK as well as those of their own country. Advice on international research may be obtained from UKRI. See also sections 6.5.1 and 6.8.2
- 6.1.5 The University and its researchers will ensure that all research projects have sufficient arrangements for insurance, liabilities and indemnity prior to the research being conducted. The University's insurance covers public and professional liabilities to levels sufficient



for most research activities conducted in good faith. The University also seeks limitation of liability and an appropriate distribution of indemnity in contractual agreements with external stakeholders in research projects. Guidance on University procedure for insurance can be found <u>here</u>.

6.1.6 The University reserves the right to withhold permission for its staff to engage in research contracts with certain funding bodies/companies. In certain cases, permission may need to be obtained from the Vice-Chancellor. Guidance is available from RaIS.

#### 6.2 Leadership and supervision

- 6.2.1 The University promotes and maintains an environment which fosters and supports research of high ethical standards, mutual co-operation, professionalism, and the open and honest exchange of ideas. The <u>Academic Workload Model</u>, for example, is equality impact assessed to identify and address any potential issues of discrimination. Researchers should ensure that good conduct in research is promoted and inappropriate conduct is identified and addressed.
- 6.2.2 Principal Investigators (PIs) should be sensitive to the needs of staff, students, and visitors to research laboratories and facilities, particularly those who may associate with one or more equality groups. PIs should seek to eliminate unlawful discrimination, harassment, and victimisation, intended or otherwise, and other conduct prohibited by the Public Sector Equality Duty (2010) in relation to the nine protected characteristics of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex, and sexual orientation.
- 6.2.3 The University is committed to providing direction and supervision of research and researchers, setting out clear lines of accountability for the University and management of research. The University provides support to supervisors and researchers in meeting the legal and ethical requirements of conducting research. It encourages the career development of its researchers and provides training and mentoring of new researchers. The University will also offer training and support to those charged with the supervision and development of other researchers. The University supports the principles of the Concordat to Support the <u>Career Development of Researchers</u>.
- 6.2.4 Researchers involved in the supervision and development of other researchers should be aware of their responsibilities and ensure that they have the necessary training, time, and resources to carry out



that role, and request support if required. <u>Guidance for research</u> <u>student supervisors is available</u>.

#### 6.3 Training and mentoring

- 6.3.1 The University provides training for researchers to enable them to carry out their duties and develop their knowledge and skills throughout their career. This includes training in the responsible design, conduct and dissemination of research. It provides support to researchers in identifying unmet needs for training and development. The University provides training for mentors and connects them with new researchers to assist in their training and career development. It also provides career development and educational opportunities for researchers who are more established in their careers. As stated in 3.2.3, the University supports the principles of the Concordat to Support the Career Development of Researchers and the associated *Vitae* programme.
- 6.3.2 The University provides specific support for student researchers at undergraduate, postgraduate taught, and postgraduate research levels. All the University's student researchers are provided with information on the standards and organisation policies and procedures they are expected to comply with at induction. All students sign up to the <u>student contract</u>.
- 6.3.3 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. An example is Good Clinical Practice (GCP) training, which is the standard to which clinical research is conducted and which should be renewed on a periodical basis. Researchers should identify needs for training when they arise and report them to their manager or other appropriate person as identified by the University.

#### 6.4 Research design

- 6.4.1 When designing research projects, researchers should ensure that:
  - a) The proposed research addresses pertinent question(s) and is designed either to add to existing knowledge about the subject in question or to develop methods for research into it;
  - b) the design of the study is appropriate for the question(s) being asked, addresses the most important potential sources of bias, reflects input from public contributors where relevant, and ensures the potential benefit is commensurate with the effort and expenditure;



- c) the design and conduct of the study, including how data will be gathered, analysed and managed, are set out in detail in a prespecified research plan or protocol;
- d) all necessary skills and experience will be available to carry out the proposed research, in the proposed research team, with public contributors, or through collaboration with specialists in relevant fields;
- e) sufficient resources will be available to carry out the proposed research and that these resources meet all relevant standards
- f) sufficient regard is paid to the specific needs of researchers and participants, including appropriate payment for public contributors under <u>INVOLVE payment guidance</u>; and
- g) any issues relating to the above are resolved as far as possible prior to the start of the research.
- 6.4.2 Researchers must take appropriate action once they have planned a study to determine:
  - a) whether there are any ethical issues and whether ethics review is required. The University <u>Research Ethics Policy and procedures</u> <u>can be found here</u>.
  - b) the potential for risks to the University, the research, or the health, safety and well-being of researchers and research participants. <u>Health and Safety Guidance can be found here</u>.
  - c) what legal requirements govern the research? In the first instance, guidance on legal matters may be obtained from <u>RalS Contracts</u> <u>Managers.</u>
- 6.4.3 Where the design of a study has been approved by ethics, regulatory or peer review, the University and researchers must ensure that any subsequent alterations to the design are subject to appropriate review to determine that they will not compromise the integrity of the research or any terms of consent previously given.
- 6.4.4 Researchers should use best endeavours to anticipate any risks that the proposed research might produce or results that could be misused for purposes that are illegal or harmful. Researchers will report any risks to, and seek guidance from, the appropriate person(s) within the University and take action to minimise those risks. In the first instance, researchers at the University should report anticipated risks to their Associate Dean (RKT). <u>The risk management</u> <u>policy can be found here</u>.



6.4.5 Researchers should be prepared to make research designs and raw datasets available to peer reviewers and journal editors when submitting research outputs for publication, subject to any embargo stipulated by funders.

#### 6.5 Collaborative working

- 6.5.1 Researchers should pay particular attention to projects which 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. See also sections 6.1.1 and 6.8.2.
- 6.5.2 The University works with partner organisations to ensure the agreement of, and compliance with, common standards and procedures for the conduct of collaborative research, including the resolution of any issues or problems that might arise and the investigation of any allegations of misconduct in research if they occur.
- 6.5.3 Researchers should be aware of the standards and procedures for the conduct of research followed by any organisations involved in collaborative research that they are undertaking. They should also be aware of any contractual requirements involving partner organisations, seeking guidance and assistance where necessary and reporting any concerns or irregularities to the appropriate person(s) as soon as they become aware of them.
- 6.5.4 Researchers should use best endeavours to anticipate any issues 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, publication, and the attribution of authorship, recognising that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research.

#### 6.6 Conflicts of interest

6.6.1 Researchers should recognise that conflicts of interest (i.e. personal or institutional considerations, including but not limited to financial matters) can inappropriately affect research. Conflicts of interest should be identified, declared and addressed in order to avoid poor practice or potential misconduct in research.



- 6.6.2 When addressing a conflict of interest, researchers should decide whether it is of a type and severity that poses a risk of fatally compromising the validity or integrity of the research, in which case they must not proceed with the research, or whether it can be adequately addressed through declarations and/or special safeguards relating to the conduct and reporting of the research.
- 6.6.3 The University will have a clearly written and accessible policy for addressing conflicts of interest, including guidance for researchers on how to identify, declare and address conflicts of interest, and should disseminate and explain the policy to researchers. The University will ensure that researchers understand the importance of recognising, disclosing, and addressing conflicts of interest in the conduct and reporting of research.
- 6.6.4 The University will comply with the requirements of its policy for addressing conflicts of interest, as well as any external requirements relating to conflicts of interest, such as those of funding bodies. The Deputy Vice-Chancellor (Research, Innovation & Engagement), Deans of Faculty and other senior staff should be aware of potential or actual conflicts of interest at the institutional level and disclose them when they arise so that they can be addressed.
- 6.6.5 Researchers must comply with University policies for addressing conflicts of interest, as well as any external requirements relating to conflicts of interest, such as those of funding bodies. This should include declaring any potential or actual conflicts of interest relating to their research to the Principal Investigator or supervisor; relevant ethics manager; and when reporting their findings at meetings or in publications. Conflicts of interest should be disclosed as soon as researchers become aware of them.
- 6.6.6 Researchers must agree to abide by any direction given by the University or any relevant ethics committee in relation to a conflict of interest.

#### 6.7 Collection and retention of data

6.7.1 Researchers must comply with all legal, ethical, funding body and organisational requirements for the collection, use, re-use and storage of data, especially personal data, where particular attention should be paid to the requirements of <u>data protection legislation</u>. They should maintain confidentiality where undertakings have been made to third parties or to protect intellectual property rights. Researchers should ensure that research data relating to publications



is available for discussion with other researchers, subject to any existing agreements on confidentiality.

- 6.7.2 Researchers should consider how data will be gathered, analysed, and managed, and how and in what form relevant data will eventually be made available to others, at an early stage of the design of the project.
- 6.7.3 Researchers should collect data accurately, efficiently, and according to the agreed design of the research project and ensure that it is stored in a secure and accessible form.
- 6.7.4 Where research is funded by an external organisation, the University requires researchers to adhere to the requirements set out by that organisation both for preparing data management plans prior to bid submission and for subsequent data management during the lifetime of the research project.
- 6.7.5 Guidance on the data management and retention policies of many of the University's important funders have been collated by the Data Curation Centre. The University's <u>Research Data Management</u> <u>Guidance can be found here.</u>
- 6.7.6 Where the research is not funded by an external organisation or where the funding body does not have its own retention policies, researchers should adhere to the University's default position for the retention of research data. The University's records retention documentation is published on the <u>University intranet</u>.
- 6.7.7 Research data and records relating to the process of conducting research should be kept in a form that permits reuse as far as is possible. At the onset permission for data re-use should be sought from the data owner or study participant.
- 6.7.8 If research data 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 and organisational requirements and with particular concern for confidentiality and security.

#### 6.8 Research involving people, their tissues and/or their data

6.8.1 Members of the public may contribute to research in several ways: as active co-investigators, with design and execution responsibilities; as human participant subjects of observation; as the sources of tissue samples and/or personal data; and/or as expert-by-experience contributors to research governance and oversight.



- 6.8.2 Principal Investigators should consider engaging members of the public in research wherever relevant at the earliest appropriate stage of research planning. They should ensure that necessary resources are available for engaging public contributors, including budget to compensate for time and expenses as appropriate. Advice on these topics is available from Faculty-based leads for public and patient involvement in research and from the RaIS <u>Research Support Team</u>.
- Researchers must make sure that any research involving human 6.8.3 participants, human material or personal data complies with all legal and ethical requirements and other applicable guidelines. Due regard should be paid at all times to the University's Equality, Diversity and Inclusion (EDI) sub-strategy; from research design, to implementation phase, and to dissemination of outputs. Appropriate care should be taken when research projects involve: vulnerable groups, and covert studies or other forms of research which do not involve full disclosure to participants. The dignity, rights, safety and well-being of participants should be the primary consideration in any research study. Research should be initiated and continued only if the anticipated benefits justify the risks involved. University guidance on research ethics can be found here. External sources should also be referred to as appropriate: work involving NHS National Research Ethics Service, and the Human Tissue Authority where work involves the storage of specific human tissues.
- 6.8.4 When conducting, or collaborating in, research in other countries, University researchers should comply with the legal and ethical requirements existing in the UK <u>and</u> in the countries where the research is conducted.
- 6.8.5 The University and its researchers must ensure the confidentiality and security of: personal data relating to human participants in research; and human material involved in research projects. University guidance on compliance with the <u>General Data Protection Regulation</u> and the <u>Freedom of Information Act</u>.
- 6.8.6 The University and its researchers working with, for, or under the auspices of, any of the UK Departments of Health and/or the National Health Service must adhere to all relevant guidelines, for example the Health Research Authority's UK Policy Framework for Health and Social Care Research, the National Research Ethics Service's Guidance for Applicants, the NHS ethics decision tool, the NHS REC and HRA approval, local research and development departments, and applying for research passport (if NHS). The University and its researchers



involved in clinical trials on medicinal products for human use should comply with the principles of <u>Good Clinical (Research) Practice: HRA</u>.

- 6.8.7 Researchers must submit research projects involving human participants, human material or personal data for review by relevant ethics panels/committees and abide by the outcome of those reviews. They must also ensure that such research projects have been approved by all applicable bodies, ethical, regulatory or otherwise. <u>University guidance on research ethics can be found here</u>. External sources should also be referred to as appropriate: work involving NHS (<u>National Research Ethics Service</u>) and the <u>Human Tissue Authority</u> where work involves the storage of specific human tissues.
- 6.8.8 Researchers on projects involving human subjects must satisfy themselves that participants are able, 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 the elderly, children, people for whom English is a second language, or those with mental illness and dementia. Public contributors may, for example, check draft information for appropriateness and Easy English. Where relevant, the provisions of the Mental Capacity Act 2005 must be considered carefully.
- 6.8.9 Researchers should inform research participants that data gathered during research may be disseminated not only in a report but also in different forms for academic or other subsequent publications and meetings, albeit not in an identifiable form, unless previously agreed to, and subject to limitations imposed by legislation or any applicable bodies, ethical, regulatory or otherwise. University guidance on compliance with the <u>General Data Protection Regulation</u> and the <u>Freedom of Information Act can be found here</u>.
- 6.8.10 Researchers who are members of a regulated profession must ensure that research involving human participants, human material or personal data complies with any standards set by the body regulating their profession.
- 6.8.11 Researchers have a duty to publish the findings of all clinical research involving human participants. 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 registers. In this context



"trials" means all comparative studies of health interventions, not just ones conducted in a clinical setting.

6.8.12 If researchers consider that human participants in research are subject to unreasonable risk or harm, they must report their concerns to their manager, or other appropriate person as identified by the University, and, where required, to the appropriate regulatory authority (Public Interest Disclosures Code of Practice). Similarly, concerns relating to the improper and/or unlicensed use or storage of human material, or the improper use or storage of personal data, should be reported.

#### 6.9 **Research involving animals**

- 6.9.1 All aspects of research involving animals at the University of Bradford are overseen by the Animal Welfare and Ethical Review Body (AWERB) and projects must be submitted for review by AWERB as part of the licence application and ongoing review process. Decisions of the AWERB are absolute and researchers must abide by the outcome of that review process. Contact with AWERB is via the University's Home Office Liaison Contact (<u>AWERB@bradford.ac.uk</u>).
- 6.9.2 Researchers must ensure that research involving animals (including the use of animal tissues), adheres to all legal and ethical requirements and other applicable guidelines. Initial advice can be sought internally from the University's Home Office Liaison Contact (AWERB@bradford.ac.uk).
- 6.9.3 Researchers should consider the opportunities for replacement, reduction, and refinement in accordance with the Animals (Scientific Procedures) Act and should refer to <u>relevant guidance from the Home</u> <u>Office</u> when planning their work.
- 6.9.4 Work involving Genetically Altered Animals is covered by the Genetically Modified Organisms (Contained Use) Regulations 2014 and should also be referred to the Biological Safety Officer at planning stage.
- 6.9.5 The University adheres to the <u>Concordat on Openness on Animal</u> <u>Research</u>. If researchers consider that animals involved in research are subject to unreasonable risk or harm, they must report their concerns to their manager or other appropriate person as identified by their University, and, where required, to the appropriate regulatory authority. The <u>Public Interest Disclosures Code of Practice can be</u> <u>found here</u>.



#### 6.10 Health and safety

- 6.10.1 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. They should bear in mind that certain types of research, for example social research in a conflict zone, can present issues of health and safety.
- 6.10.2 Researchers should 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. University <u>Health and Safety Policies can be found here</u>. The University's H&S guidance on overseas travel can be found here. Researchers should also refer to the Foreign and <u>Commonwealth Office website</u> to check for travel alerts.
- 6.10.3 Faculties must ensure that the working environment is appropriate for safe operation of equipment, maintenance of sample quality and integrity, and good working practices. Special facilities which are used (e.g. fume cupboards, microbiological safety cabinets) must be checked and maintained regularly. All equipment should be appropriate for the measurements to be made, calibrated if necessary and be in good working condition and fit for purpose. Suitable records of calibration and maintenance should be kept.

#### 6.11 Intellectual property

- 6.11.1 Intellectual property (IP) is a legal concept that supports the translation of ideas into many forms of societal impact. It includes but is not limited to: research data and other findings of research; ideas, processes, software, hardware, apparatus and equipment; substances and materials; and artistic and literary works, including academic and scientific publications. IP rights are tradeable assets, typically allowing owners a time-limited monopoly within applicable jurisdictions on the commercial application of the underlying IP. These assets have commercial value, and maximising this value underpins much business investment in research.
- 6.11.2 Where commercially relevant research results are properly protected, e.g. through patenting, researchers maximise the likelihood of their results attracting interest and further investment from industry, leading to additional funding for their research and to real-world benefits for people and companies. (By the same token, protection confers control over access to new technology, to mitigate risks of misapplication by the private sector.) The University's IP and



commercialisation strategy and associated policies set out its approach to supporting beneficial societal and economic impact through IP. This includes the sharing of any financial rewards of IP commercialisation between inventors and the University. Further guidance on IP can be obtained from <u>RaIS</u>.

- 6.11.3 Researchers should ensure that any contracts or agreements relating to research include provision for ownership and use of both arising and pre-existing, background IP. While background IP is brought to all projects by researchers and collaborators, researchers should also consider whether IP belonging to a third party is to be utilised in the project and whether permission is required from the owner.
- 6.11.4 Researchers should not disclose the findings of research when this might invalidate any commercial advantage in arising IP or infringe third party rights. The University presumes, however, that any IP discovered or developed using public or charitable funds should be disseminated publicly to have a beneficial effect on society at large. This presumption is compatible with the patenting process if public disclosure is delayed until a patent filing has been made. The presumption may be rebutted where there is an express restriction placed on any such dissemination in the terms and conditions under which the research takes place. Any delay in publication and dissemination pending protection of intellectual property should be kept to a minimum.
- 6.11.5 The University and its researchers will comply with any additional conditions relating to intellectual property required by funding bodies and researchers should ensure that they are conversant with the conditions of their funding body.
- 6.11.6 The University's IP policy sets out its approach to diverse types of IP in more detail. For example, the University normally waives its ownership of copyright of articles prepared for publication in journals or books.
- 6.11.7 Researchers should use best endeavours to anticipate any issues that might arise relating to IP at the earliest opportunity and agree jointly in advance how they might be addressed, communicating any decisions to all members of the research team. Further guidance on IP can be obtained from <u>RaIS.</u>

#### 6.12 Finance

6.12.1 Researchers must ensure that the terms and conditions of any grant or contract related to the research are adhered to.



- 6.12.2 The University issues <u>guidelines regarding the purchasing or</u> <u>procurement of materials, equipment or other resources</u> for research and the <u>hiring of staff for research projects</u>. These guidelines should include statements on the ownership of resources and the rights of researchers to use them. Advice on interpreting this guidance during research planning is available from the RaIS <u>Research Support Team</u>. The University sets up accounts, processes claims, monitors transactional spend, and arranges audits as appropriate through the Research Grants and Contracts office in Finance (<u>financegrants@bradford.ac.uk</u>).
- 6.12.3 Researchers must comply with University guidelines regarding the use and management of finances relating to research projects. They must co-operate 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.

#### 6.13 Monitoring and audit

- 6.13.1 The University monitors and audits research projects to ensure that they are being carried out in accordance with the guidance in this Code, legal and ethical requirements and any other guidelines, adopting a risk-based and proportional approach.
- 6.13.2 Researchers should consider any requirements for monitoring and audit at an early stage in the design of a project and should maintain an understanding of the funder terms and conditions pertinent to all their projects. Advice on this subject is available from <u>RaIS</u>.
- 6.13.3 Researchers must cooperate with the monitoring and audit of their research projects by the University and other applicable bodies and undertake such when required. They should cooperate with any outcomes of the monitoring and audit of their research projects. If they become aware of a need for monitoring and audit where it is not already scheduled, they should report the need to their Principal Investigator or Supervisor.

#### 6.14 **Peer review**

6.14.1 The University and its researchers must be aware that 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.



- 6.14.2 The University encourages researchers to act as peer reviewers for meetings, journals and other publications, grant applications and ethics review of research proposals, and supports those who do so. The University recognises that peer review should be thorough, objective, and confidential and supports its researchers to maintain these standards in all peer review work.
- 6.14.3 Researchers who carry out peer review should do so to the highest standards of thoroughness and objectivity. They should follow the guidelines for peer review of any organisation for which they carry out such work.
- 6.14.4 Researchers should maintain confidentiality and not retain or copy any material under review without the express written permission of the commissioning organisation. They should not make use of research designs or research findings from a paper under review without the express permission of the author(s) and should not allow others to do so. Researchers acting as peer reviewers should declare any relevant conflicts of interest.
- 6.14.5 While carrying out peer review, researchers may become aware of possible misconduct, such as plagiarism, fabrication or falsification, or have ethical concerns about the design or conduct of the research. In such cases they should report it in accordance with the University's Research Misconduct procedure (see 6.16).

#### 6.15 Publication and authorship

- 6.15.1 The University recognises the duty to publish and disseminate research in a manner that reports the research and all the findings of the research accurately and without selection that could be misleading. The <u>University research publications guidance can be found here</u>.
- 6.15.2 The University, through its legal contracting procedures, ensures that sponsors and funders of research: respect the duty of researchers to publish their research and the findings of their research; do not discourage or suppress appropriate publication or dissemination; and do not attempt to influence the presentation or interpretation of findings inappropriately.
- 6.15.3 The University provides training and support to guide researchers in the publication and dissemination of research and the findings of research that involves: confidential or proprietary information; issues relating to patents or intellectual property; findings with serious



implications for public health; contractual or other legal obligations; and/or interest from the media or the general public.

- 6.15.4 Researchers must address issues relating to publication and authorship, especially the roles of all collaborators and contributors, at an early stage of the design of a project, recognising that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research. Decisions on publication and authorship should be agreed jointly and communicated to all members of the research team.
- 6.15.5 Authorship should be restricted to those contributors and collaborators who have made a significant intellectual or practical contribution to the work. No person who fulfils the criteria for authorship should be excluded from the submitted work. Authorship should not be allocated to honorary or "guest" authors (i.e. those that do not fulfil criteria of authorship). Researchers should be aware that 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. Due regard, where relevant, should be paid to the order in which the authors are listed.
- 6.15.6 Researchers should list the work of all contributors who do not meet the criteria for authorship in an acknowledgements section. All funders and sponsors of research should be clearly acknowledged, and any competing interests listed.
- 6.15.7 Researchers must clearly acknowledge all sources used in their research and seek permission from any individuals if a significant amount of their work has been used in the publication.
- 6.15.8 Researchers must adhere to any conditions set by funding or other bodies regarding the publication of their research and its findings in <u>open access</u> repositories (e.g. publications or data). <u>UKRI's Open</u> <u>Access Policy</u>.
- 6.15.9 Researchers should declare any potential or actual conflicts of interest in relation to their research when reporting their findings at meetings or in publications.
- 6.15.10Researchers should be aware that submitting research reports 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.



6.15.11 Researchers who are discouraged from publishing and disseminating their research or its findings, or subjected to attempts to influence the presentation or interpretation of findings inappropriately, should discuss this with their AD (RKT), PI or supervisor so that the matter can be resolved.

#### 6.16 Misconduct in research

- 6.16.1 The University promotes an organisational culture in which high standards of personal conduct and integrity are expected, academic misconduct and fraud are forbidden and appropriate steps are taken to deal fairly and firmly when misconduct is alleged or suspected.
- 6.16.2 Research misconduct, which is misconduct arising during research or its reporting, includes, but need not be limited to:
  - a) Fabrication;
  - b) Falsification;
  - c) Misrepresentation of data and/or interests and/or involvement;
  - d) Plagiarism; and
  - e) Failures to follow accepted procedures or to exercise due care in carrying out responsibilities for:
    - I. avoiding unreasonable risk or harm to:
      - humans;
      - animals used in research; and
      - the environment; and
    - II. the proper handling of privileged or private information on individuals collected during the research.
- 6.16.3 Research misconduct also includes any activity in research and in its dissemination which brings the name of the University into disrepute. The <u>Research Misconduct procedure can be found here</u>.
- 6.16.4 Research misconduct is unacceptable and any researcher who suspects that such misconduct has taken place must report it in accordance with the procedure.

## 7 Checklist for researchers

The Checklist lists the key points of good practice in research for a research project and is applicable to all subject areas.

The Checklist lists the key points of good practice in research for a research project and is applicable to all subject areas.



The checklist should be completed before conducting your research, and bearing in mind that, subject to legal and ethical requirements, roles and contributions may change during the time span of the research.

chang	e during the time span of the research.
1.	What is / are the pertinent question(s) that the proposed research
	addresses?
	Will the proposed research be designed either to add to existing knowledge
	about the subject in question or to develop methods for research into it?
	Who are the key stakeholders in the proposed research?
	How can potential partners and public contributors shape the design?
2.	How have you determined that your research design is appropriate for the
	question(s) being asked?
3.	What are the necessary skills and resources required to conduct the research
	and how will you ensure that you have access to all?
4.	Have you conducted a risk assessment followed by appropriate action to
	determine:
	a) whether there are any ethical issues and whether ethics review is
	required
	b) the potential for risks to the University, the research, or the health,
	safety and well-being of researchers and research participants; and
	c) what legal requirements govern the research?
5.	Which are the legal and ethical requirements and other applicable guidelines,
5.	including those from other organisations and/or countries if relevant, with
	which your research will comply?
6	How have you determined that your research design ensures there is no
0	discrimination in relation to the nine protected characteristics.
7.	How will your research comply with all requirements of legislation and good
7.	practice relating to health and safety?
8.	Has your research undergone any necessary ethics review (see 4(a) above),
0.	especially if it involves animals, human participants, human material, or
	personal data?
9.	How will your research comply with any monitoring and audit requirements?
10.	Which contracts and financial guidelines are appropriate to your proposed research project and how will you ensure compliance?
11.	
11.	State the agreement relating to intellectual property, publication and
10	authorship agreed with collaborators?
12.	State the agreement relating to collaborative working agreed with
12	collaborators, if applicable
13.	Have you agreed the roles of researchers and responsibilities for management
	and supervision?
14.	State the conflicts of interest relating to your research that have been
	identified and declared, and state how these have been addressed?
15.	Are you aware of the guidance from all applicable organisations on misconduct
	in research?
	When conducting your research:
1.	Are you following the agreed research design for the project?
2.	Have any changes to the agreed research design been reviewed and approved if applicable?
3.	Are you following best practice for the collection, storage and management of data?



4.	Are agreed roles and responsibilities for management and supervision being fulfilled?
5.	Is your research complying with any monitoring and audit requirements?
	When finishing your research:
1.	Will your research and its findings be reported accurately, honestly and within
	a reasonable time frame?
2.	Will all contributions to the research be acknowledged?
3.	Are agreements relating to intellectual property, publication and authorship
	being complied with?
4.	Will research data be retained in a secure and accessible form and for the
	required duration?
5.	Will your research comply with all legal, ethical and contractual requirements?
	Source: <u>www.ukrio.org</u>

## 8 Monitoring and review

- 8.1 This document will be reviewed no more than two years after its approval date.
- 8.2 Governance of good practice in research is within the remit of the Committee for Ethics in Research. Breaches of good practice may occur from time to time by exception and a range of procedures, informal and formal, are available to address such breaches. The Committee for Ethics in Research periodically receives summary reports of the activity of these formal procedures, prompting reflection and the opportunity to make recommendations for updating the Code of Practice for Research at the next due review.

## 9 Related external policies

- 9.1 The Code complements existing and forthcoming guidance on research conduct from our larger funders and professional bodies, which researchers are expected to adhere to, including:
  - <u>RCUK: Policy and Guidelines on Governance of Good Research</u>
    <u>Conduct</u>
  - <u>Universities UK: The Concordat to support Research Integrity</u>
  - Wellcome Trust: Guidelines on Good Research Practice
  - <u>UK Policy Framework for Health and Social Care Research</u>

## 10 Appendices

Appendix A: Bibliography



### **Appendix A: Bibliography**

- UKRIO UK Research integrity Office
- UKRI UK Research Councils
- Universities UK
- Wellcome Trust
- <u>UK Policy Framework for Health and Social Care Research</u>
- ESRC Economic and Social Research Council
- <u>National Research Ethics Service</u>
- Human Tissue Authority
- Health Research Authority
- <u>West Yorkshire Research and Development</u>
- National Institute for Health Research
- Government Legislation
- Government guidelines
- <u>Concordat on Openness on Animal Research</u>
- <u>Government data protection legislation</u>
- Digital Curation Centre
- Government foreign travel advice