

Research Integrity Code of Practice

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Introduction

The general principle of integrity should inform all research activities. Honesty should be central to the relationship between the researcher, the participant and other interested parties. All those concerned with research need to adhere to the highest standards of honesty, rigour and integrity. The University subscribes to the principles of public life as published in the Nolan Report (1996), which are: selflessness, integrity, objectivity, accountability, openness, honesty, and leadership.

By Vice-Chancellor's Memorandum to Universities UK in October 2012, the University adopted the Universities UK Concordat to support research integrity, and is committed to upholding the essential elements of the Concordat in an effective and transparent manner. The University expressly subscribes to the basic tenet of the Concordat that:

...Public trust in research is essential: to secure public participation in research; to maintain public support for the funding of research; and to ensure that research findings are mobilised as effectively as possible (Concordat 2019).

We acknowledge the commitments set down in the Research Integrity Concordat:

- Commitment 1: We are committed to upholding the highest standards of rigour and integrity in all aspects of research.
- Commitment 2: We are committed to ensuring that research is conducted according to appropriate ethical, legal and professional frameworks, obligations and standards.
- Commitment 3: We are committed to supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers.
- Commitment 4: We are committed to using transparent, timely, robust and fair processes to deal with allegations of research misconduct when they arise.
- Commitment 5: We are committed to working together to strengthen the integrity of research and to reviewing progress regularly and openly.

In order to meet these commitments, the University seeks to ensure that good practice in research is an integral part of its research strategy and associated policies. The research integrity code of practice applies to all research undertaken at Brunel University London. Some supporting policies apply to peer review research only whilst others have wider coverage in relation to research undertaken by students as part of their studies. A list of these policies and links to the most recent versions are in the Appendix to this document,

Ways of Working

Statements of Principle

In order to adhere to consistently high standards of integrity across the University research community, we seek to demonstrate that all research endeavours are underpinned with common values of rigour and integrity by:

- Conforming to all ethical, legal and professional obligations incumbent on the work of the researcher;
- Nurturing a research environment that supports research of the highest standards of rigour and integrity;
- Using transparent, robust and fair processes to handle allegations of misconduct;
- Continuing to monitor, and where necessary improve, the suitability and appropriateness of the mechanisms in place to provide assurances over the integrity of research;
- Considering how the work the researcher undertakes affects society and the wider research community to demonstrate to the public, government and business that they can continue to have confidence in the research that is produced (Concordat 2019)

In this regard, the University shall:

- Ensure that policies and procedures are established and maintained to uphold the principles of good practice, and offer detailed guidance where relevant;
- Ensure that policies and procedures are compliant with existing organisational policies, such as those for health and safety, raising concerns at work, management of finances or intellectual property, and equality and diversity;
- Raise awareness of relevant policies and procedures;
- Provide relevant training, resources and support for researchers, and encourage researchers to consider good practice in research as a routine part of their work:
- Monitor these measures for suitability and effectiveness, and review them when necessary.

The Researcher shall:

- Demonstrate integrity, professionalism and self-regulation;
- Inform themselves of developments in relevant subjects and disciplines, including their methodologies;
- Observe fairness and equity;
- Avoid conflicts of interest and declare sources of funding;
- Ensure the health and safety of those associated with research;
- Be aware of the University's policies and procedures on good practice in research and observe all legal and ethical requirements laid down by the University and other relevant bodies, seeking guidance from the University where necessary;

- Ensure that all research projects have sufficient arrangements for insurance and indemnity prior to the research being conducted;
- Be accountable to the University, the research sponsor(s), and the general public with regard to the conduct and finances of their research, and the publication of results;
- Identify needs for training where appropriate.

Non-compliance with these principles normally constitutes misconduct. Moreover, all individuals permitted to work in Brunel University London have a responsibility to report any incidents of misconduct, whether witnessed or suspected. All staff and students, and those who are not staff or students but who are conducting research on University premises or using University facilities, shall have a responsibility to observe the highest standards of conduct.

The University cannot be prescriptive about approaches taken by individuals to solving particular research problems. However, in the conduct of research, the University requires some general precepts to be understood and observed, and these are outlined further in the following sections and in the policies, which underpin them

Professional Standard: Research Practice

It is important that a culture of professionalism towards research is fostered and maintained throughout the University. Regardless of discipline, researchers must adopt, and promote in others, high standards of professional conduct, and be honest and ethical with regard to their own actions, and in their responses to the actions of other researchers. The adoption of a professional approach applies to the whole range of research endeavours, and in particular with regard to:

- Maintaining professional standards, with particular regard to ethics;
- Documenting results;
- Questioning one's own findings;
- Attributing honestly the contribution of others;
- Leadership and co-operation in research groups;
- Taking special account of the needs of inexperienced researchers;
- Securing and storing primary data;
- Taking appropriate measures to protect intellectual assets.

Trusted Research

It is important that you are aware of guidance regarding theft of intellectual property, exploitation and misuse of research. The Centre for the Protection of National Infrastructure (CPNI) has published guidance on their webpage which outlines the principles of Trusted Research:

Outline the potential risks to UK research and innovation;

- Help researchers, UK universities and industry partners to have confidence in international collaboration and make informed decisions around those potential risks;
- Explain how to protect research and staff from potential theft, misuse or exploitation

Please see the webpage for guidance on how to follow Trusted Research: <u>Trusted</u> Research Guidance for Academia | CPNI

Misconduct in Research

Any person engaging in research in the name of Brunel University London is expected to observe the highest standards of conduct. The general principles in relation to research are addressed both in this Code and in the University Code of Research Ethics.

Research misconduct includes but is not limited to:

- 1. Fabrication: making up results, other outputs (for example, artefacts) or aspects of research, including documentation and participant consent, and presenting and/or recording them as if they were real
- 2. Falsification: inappropriately manipulating and/or selecting research processes, materials, equipment, data, imagery and/or consents
- 3. Financial misconduct
- 4. Plagiarism¹ or deception in proposing, carrying out or reporting results of primary research
- 5. Deliberate, reckless or negligent deviations from accepted practice in conducting research
- 6. Conducting research with human participants without first obtaining research ethics approval
- 7. Failure to follow an agreed protocol, particularly if this failure results in unreasonable risk or harm to humans, other vertebrates or the environment
- 8. Failure to meet legal, ethical or professional obligations, including

¹ Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating it into your own work without full acknowledgement.

- not observing legal, ethical and other requirements for human research participants, animal subjects, or human organs or tissue used in research, or for the protection of the environment
- breach of duty of care for humans involved in research whether deliberately, recklessly or by gross negligence, including failure to obtain appropriate informed consent
- misuse of personal data, including inappropriate disclosures of the identity of research participants and other breaches of confidentiality
- improper conduct in peer review of research proposals, results or manuscripts submitted for publication (including 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 the purposes of peer review)

9. Misrepresentation of

- data, including suppression of relevant results/data or knowingly, recklessly or by gross negligence presenting a flawed interpretation of data
- involvement, including inappropriate claims to authorship or attribution of work and denial of authorship/attribution to persons who have made an appropriate contribution
- interests, including failure to declare competing interests of researchers or funders of a study
- o qualifications, experience and/or credentials
- publication history, through undisclosed duplication of publication, including undisclosed duplicate submission of manuscripts for publication
- 10. Facilitating misconduct in research by collusion in, or concealment of, such actions by others
- 11. Failure to maintain a duty of confidence where such confidentiality is expressly required or implied
- 12. Failure to ensure that any appropriate safeguards to protect human participants are embedded and followed.

Any plan or conspiracy or attempt to do any of these things is also considered to be research misconduct. This also includes failure to follow rules and regulations including those of a third party with a legitimate interest in the research of the University.

Everyone has a responsibility to report any incidents of research misconduct, whether witnessed or suspected, using the procedures outlined in the University's

Procedures for Investigation of Research Misconduct. The University hopes that individuals will feel comfortable voicing any concerns regarding research misconduct openly under the Whistleblowing Policy. The policy aims to

- 1. provide individuals with guidance on how to raise concerns;
- 2. encourage individuals to report suspected wrongdoings as soon as possible, in the knowledge that their concerns will be investigated appropriately;
- 3. reassure individuals that they should be able to raise genuine concerns without fear of reprisals, even if they turn out to be mistaken.

However, the University also has a responsibility to protect people from malicious, vexatious, or frivolous accusations. Appropriate action will be taken if an allegation is found to be malicious, vexatious or frivolous. Any allegation of research misconduct should be reported confidentially to the Secretary to Council, or, in the event of a potential conflict of interest or absence, their nominated representative appointed by the Chair of Council. Any allegations of fiscal malfeasance or irregularity in relation to research activity should be reported confidentially to the Director of Finance. Failure to maintain confidentiality may in itself be considered misconduct and could result in disciplinary action being taken.

The University has established and maintains standard procedures for the investigation of misconduct in research, ensuring that such allegations are thorough, fair and conducted in a timely manner.

Any allegation of research misconduct should be reported confidentially to the Chief Governance Officer, Eliot Glover, at res-ethics@brunel.ac.uk or, in the event of a potential conflict of interest or absence, his nominated representative appointed by the Chair of Council. All concerns will be treated sensitively and in the strictest confidence.

See the appendix for *The Procedures for Investigation of Research Misconduct* and the *Public Interest Disclosure (Whistleblowing) Policy and Procedure.*

Research Design and Methodology

Researchers need to ensure that the proposed research addresses pertinent questions and either adds to existing knowledge about the subject in question, or develops new methodologies for research into it. They also need to be prepared to make research designs and data available to peer reviewers and publication editors when submitting research reports for publication.

A risk assessment of the planned study is undertaken to determine:

- Whether there are any ethical issues, and whether research ethics review is required;
- The potential risks to the University, the research or the health, safety and wellbeing of researchers and research participants;
- All legal requirements governing the research are met;
- Any risks associated with the collection and management of research data.

Collaborative Working

Research outputs should contain acknowledgements of the work of others as appropriate. (see Publication and Authorship). Particular care should be exercised to acknowledge the work of research students.

Where research is being conducted collaboratively, particularly within international and interdisciplinary partnerships which may be subject to different legal and ethical standards and frameworks, there needs to be clear agreement on and articulation of the requirements which will apply.

Researchers working with partner organisations should ensure the compliance with common standards and procedures for the conduct of collaborative research, including contractual requirements and the resolution of any issues that might arise, and the investigation of any allegations of misconduct in research if they occur. In particular, agreement should be sought on:

- The specific roles of the researchers involved in the project;
- Issues relating to intellectual property, publication and the attribution of authorship.

Research Data Management

Data management is one of the essential areas of responsible conduct of research. Before starting a new research project, the Principal Investigators (PIs) and the research teams must address issues related to data management. By managing data; the following obligations will be met:

- Funding body grant requirements.
- Research integrity and replication.
- Ensure research data and records are accurate, complete, authentic and reliable.
- Increase research efficiency.
- Enhance data security and minimise the risk of data loss.
- Prevent duplication of effort by enabling data sharing, where possible.
- Comply with practices conducted outside the HE sector, such as in industry and commerce.

Published research papers should include a short statement describing how and on what terms any supporting research data may be accessed. Such data must be

accompanied by the necessary metadata enabling those interested in accessing it to understand the research and re-use potential of the data.

Researchers must comply with the University's Research Data Management Policy regarding the collection and storage of any data and co-operate with any monitoring or audit of data held within the University.

Specifically, the University and its researchers must comply with all legal, ethical, funding body and organisational requirements for the collection, review, publication, storage, preservation and re-use of data, especially personal data, where particular attention must be paid to the requirements of data protection legislation, and the relevant University policies. The University recognises that there are legal, ethical and commercial constraints on the release of research data. To ensure that the research process is not damaged by inappropriate release of data, these constraints should be considered at all stages in the research process.

Confidentiality must be maintained where undertakings have been made to third parties or to protect intellectual property rights.

Data collected in the course of research must be retained intact for any legally specified period and otherwise for a period of at least ten years from completion of the project, subject to any legal, ethical or other requirements. The data must be kept in a form that enables retrieval by a third party, subject to limitations imposed by legislation and general principles of confidentiality.

If the research data is to be deleted or destroyed, either because its agreed period of retention has expired, or for legal or ethical reasons, it must be done in accordance with all legal, ethical, research funder and University requirements, and with particular concern for confidentiality and security.

Researchers must report any concerns regarding research data to the University as soon as they become aware of them. (Help and advice on Research Data Management issues is available from the Library via researchdata@brunel.ac.uk)

Monitoring and Audit

At an early stage in the design of a project, researchers should consider any requirements for monitoring and auditing. The University and its researchers will ensure that research projects comply with any monitoring and auditing requirements. The University will ensure that researchers charged with carrying out monitoring and audits receive sufficient training, resources and support to fulfil the requirements of the role.

The University undertakes to monitor and audit research projects to ensure that they are being carried out in accordance with good practice, legal and ethical requirements, and any other guidelines. Such monitoring and audit will reflect a risk based and proportional approach.

Researchers must co-operate with the monitoring and auditing of their research projects by applicable bodies and undertake such when required. If they become aware of a need for monitoring and audit where it is not already scheduled, they should report that need to the University.

Research Outcomes

Peer Review

The University recognises 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.
- Ethics review of research projects.

To this end, researchers are encouraged to act as peer reviewers, both externally and within the University, and the University supports those who do so. 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 any material under review without the express permission from the relevant party(ies).

Peer reviewers must declare any relevant conflicts of interest. Where peer reviewers become aware of possible misconduct (see below), they should inform the appropriate representative of the University.

Publication and Authorship

Dissemination of knowledge is one of the objectives of the University. A publication must report research and research findings accurately, and any publication must contain appropriate acknowledgement of the direct and indirect contributions of colleagues, collaborators and others.

Any person who has participated in a 'substantial' way in conceiving, executing or interpreting a significant part of the relevant research should be given the opportunity to be included as an author of a publication derived from that research. Queries regarding the definition of a 'substantial' contribution for an individual piece of work should be resolved, using discipline practice as guidance, prior to publication by the PI's Head of Institute/ Dean of College or their representative.

It is an ethical requirement that the design and results of the research must be published. Those who pursue research must open their work to critical review through the accepted scientific and professional channels. Once established, findings must be made available to those participating in the research and to all those who could benefit from them, through publication and/or other appropriate means.

Both authors and publishers have ethical obligations. In publication of the results, researchers are obliged to preserve the accuracy of the results. Negative as well as positive results should be published or otherwise be made publicly available. Researchers must not engage or collude in selecting methods designed to produce misleading results, or in misrepresenting findings by commission or omission.

Sources of funding, institutional affiliations and any possible conflicts of interest should be declared in the publication.

The University shall seek to ensure that sponsors and funders of research shall:

- Respect the duty of researchers to publish their research and the findings of their research:
- Not discourage or suppress appropriate publication or dissemination;
- Not attempt to influence the presentation or interpretation of findings inappropriately.

Reports of research not in accordance with the principles laid down in this Code should not be submitted for publication.

University Open Access Policy

The University recognises that the accessibility of research is of benefit to the wider research community and society in general. Free open access to our research outputs is fundamental to this, so that it can be built upon and generate further discovery and innovation. We believe that researchers should be free to publish in the best journal for them, provided funders' requirements are met. Researchers are responsible for:

- ensuring that research outputs are made freely available in accordance with the University's Open Access Mandate;
- complying fully with the publishing requirements of their research funders.

Following the strengthening of open access policies of key funders such as UKRI and Wellcome Trust, the University has adapted its own policy. Those requirements apply to all Brunel research and dictate that all journal articles must be made open access immediately upon publication from April 2022 (or earlier as required by the funder).

The University asks all researchers to use the <u>Plan S Journal Checker Tool</u> **before submitting their manuscript for publication.**

The tool will tell researchers if the intended journal offers an Open Access compliant route and advise the corresponding author on how to proceed. This advice might include:

- Checking that the corresponding author has selected a CC BY license prior to publishing;
- Using Rights Retention wording during the manuscript submission to their preferred journal to retain author rights to make the accepted manuscript available under a CC BY license in BURA on first publication;
- Considering a different place of publication.

Similar requirements are expected for monographs for some funded research. Wellcome Trust already mandates open access for monographs citing its funding, and UKRI will require open access for all its funded monographs from 1 April 2024.

The University is committed to the changes made to Open Access policy and researchers are responsible for complying fully with the new requirements. Doing so will ensure that Brunel research can be made Open Access immediately for the public benefit and that researchers retain the right to use and share their work freely, enhancing professional recognition and impact. Furthermore, it keeps Brunel's research compliant with the changing requirements of funders including the expected requirements for the next Research Excellence Framework (REF).

Additionally, researchers must refer to the Brunel University Open Access Mandate and:

- Upon publication, or as soon as possible thereafter, deposit a full-text copy of the research output in BRAD. Copies must include accompanying metadata.
- The University requires every research output to be made available in BURA, under rights retention, which requires Gold publishing in a compliant journal.
- As stated above, publish using the Creative Commons CC-BY Attribution License which permits reuse of the research publication to ensure widest possible dissemination, and is the licence preferred by research funders.
- Be fully compliant with any additional OA publishing requirements of the research funder(s). This may include the deposit of full-text copies of research publications and underpinning research data within general or specialist repositories in addition to BURA.
- Include details of the research funder and the grant number within the details of the research output.
- Link their ORCiD identifier to all published outputs and ensure that the ORCiD record is also linked to their BRAD profile
- Take steps to safeguard IP throughout the entire publication process (help and advice on copyright and IP is available from the Library and the RSDO respectively).
- Ensure that research data associated with the published work is openly available, wherever possible, and that research data access is compliant with the funder guidelines.

Ensure that all published research articles contain a Data Access Statement in line with the Research Data Management Policy. The library provides support to researchers on data access statements, which also lists the key information they need to include. A statement must be included in all research articles, even where there is no data associated with the article or the data is inaccessible.

Please contact the Open Research and Rights Team at openaccess@brunel.ac.uk with any queries or for further information.

Intellectual property

The University and its researchers must ensure that any contracts or agreements relating to research include provision for ownership and use of intellectual property. Intellectual Property Law regulates the ownership and use of creative works. Intellectual Property Rights (IPR) extends to a variety of intangible assets, including but not limited to: research data and other findings of research; ideas, processes, software, hardware, apparatus and equipment; substances and materials; music, artistic and literary works, including academic and scientific publications. The main Intellectual Property Rights available to researchers are Copy rights, Moral rights, Patents, Know-how, Design rights and Trademarks.

In the University environment, intellectual property is a likely outcome of conducted research, and the University recognises there may be commercial value attached to this property. There is a presumption that intellectual property discovered or developed using public or charitable funds should be disseminated in order to have a beneficial effect on society at large, unless there is an express restriction placed on any such dissemination and the University recognises the presumption. That said, prior disclosure of research or the findings of research should not be given where it might invalidate any commercial property.

The originator of any copyright material or any patentable invention owns the IP for that material or object. Students at the University retain the IP rights for any work they do during the course of their studies, unless a written agreement has been signed which states otherwise. The opposite is true for members of staff. Unless otherwise specified, the University owns the IP for any copyright or patentable work produced by an employee.

Researchers are encouraged to anticipate any issues that might arise relating to intellectual property at the earliest opportunity, and agree jointly in advance how they might be addressed, communicating any decisions to all members of the research team. (Help and advice on copyright and IP is available from the Library and the RSDO).

Researchers should be aware of and comply with any additional conditions relating to intellectual property required by funding bodies.

Ethics Review and Approval

Research involving human participants, human material or personal data

The University subscribes to the principles of the Vitae <u>Concordat to Support the Career Development of Researchers</u> and the Universities UK <u>Concordat to Support Research Integrity.</u>

In this regard, the remit of the Brunel University Research Ethics Committee (UREC) is to oversee all research ethics matters concerning research conducted by Brunel University London staff and students which involves human participants, their tissues and their data. Furthermore, the remit of UREC is to:

- Provide a research ethics framework to establish and maintain policies, processes and procedures (including codes of practice where appropriate) to ensure that all research conducted within the University meets the University's ethical standards.
- Be accountable to the Council and Senate of the University and have independent, delegated authority from Council and Senate to approve (with or without modification) proposals for research, or reject or refer proposals for research on ethical grounds.
- To ensure researchers are aware of the systems in place, and have access to all relevant guidance and legal and ethical frameworks. The Committee shall produce guidance documentation and make it available on its dedicated intranet site, and take all reasonable steps to embed a culture and awareness of ethics in research within the University, with particular reference to training in research ethics.
- To require reports from UREC Sub-committees, College and Institutes.
- To ensure awareness of research ethics issues throughout the University as determined by current and relevant national and international codes of best practice.
- To provide an annual report to Council and Senate (with copies to note to the Academic Strategy Committee and the Research Knowledge and Transfer Committee of Senate).

Powers of research ethics review and approval are devolved to three Colleges, the management of which is devolved from the College Dean, through a Vice Dean, with designated responsibility to the College Research Manager. Each College is required to establish and maintain a College Research Ethics Committee (CREC). The CRECs are accountable to the UREC.

The UREC acts as the Research Ethics Committee for staff and students in Specialist Research Institutes.

The UREC has a number of Sub-Committees with cross-representation between the memberships:

- Matters relating to human tissue and compliance with the Human Tissue Act 2004 are the remit of the Human Tissue Act Compliance Sub-Committee.
- Research involving animals comes with the remit of the Animal Welfare Ethical Review Board (see: below).

The University has a Federal-Wide Assurance, and the Committee sits as an Institutional Review Board (IRB) to approve research using human participants which is to be funded by a United States Department of State or Federal agency.

Paragraph 1 of the University Code of Research Ethics states:

Any research that involves human participants, the collection or study of their data, and/or the use of their organs and/or tissue, that is carried out by Brunel University staff, or students under the supervision of Brunel University staff,

requires research ethics approval [before the research can commence]. As stated in the New SR6: Student Misconduct and Professional Suitability.

This applies to all relevant research endeavours, whether conducted by students or staff. Such research must comply with all legal and ethical requirements and other applicable guidelines, including those relating to membership of a regulated profession. Appropriate care needs to be taken when research projects involve vulnerable groups, covert studies and other forms of research which do not involve full disclosure to participants. The dignity, rights, safety and well-being of participants must be the primary consideration in any research study.

Research should be initiated and continued only if the anticipated benefits justify the risks involved.

Through Data Protection policies and the Information Access Officer, the University and its researchers must seek to ensure the confidentiality and security of personal data relating to human participants in research, and human material involved in research projects.

When conducting, or collaborating in, research in other countries, the University and its researchers must comply with the legal and ethical requirements existing in the UK, and in the countries where the research is conducted.

Similarly, research conforming to definitions laid down by the NHS National Research Ethics Service on behalf of the Health Research Authority must be submitted for NHS Local Research Ethics Committee review and approval.

In compliance with Universities UK Guidance: Oversight of Security-Sensitive Research Material in UK Universities 2019, an expansion of the standard research ethics approval process is required where research is:

- Commissioned by the military;
- Commissioned under an EU security call;
- Involves the acquisition of security clearances:
- Concerns terrorist or extreme groups.

Special care must be taken when storing research data of this nature, and researchers are advised to seek the advice of the UREC, which oversees the ethics process for projects involving these topics. All such research should be registered with the UREC prior to commencement via an application made within the online system Brunel Research Ethics Online (BREO).

If researchers consider that human participants in research are subject to unreasonable risk or harm, they must report their concerns to the University, and, where relevant, to the appropriate regulatory authority. Similarly, concerns relating to the improper and/or unlicensed use or storage of human material, or the improper use or storage of personal data, must be reported.

Research involving animals

The Animal Welfare Ethical Review Board acts on behalf of the University in all issues relating to the ethical use of animals for scientific purposes, and seeks to ensure on-going research ethics review of work carried out on animals under the Animals (Scientific Procedures) Act 1986 (ASPA). The Committee must consider opportunities for reduction, replacement and refinement (the 3Rs) of involving animals in research projects with reference to the relevant guidance. Assessing the justification for the use of animals will be determined by considering the balance between the likely welfare cost to the animals and the expected scientific benefit. This will include the promotion of the 3Rs at all times.

The Committee fosters best practice, ensuring continuous improvement in standards of welfare and animal husbandry and encouraging continued professional development for all staff working with animals.

The Committee is responsible for establishing and maintaining systems and mechanisms to ensure the ethical, regulatory and peer review of research projects involving animals, and ensures that such research projects have been approved by all applicable bodies, ethical, regulatory or otherwise. In this regard, the Committee considers applications for new project licences, amendments to existing project licences, project licence renewals and additional availabilities.

The Committee shall provide opportunities for discussion, and be a source of support, advice and awareness on any of the above issues. This includes ensuring that staff be kept informed of new techniques to encourage best practice at all times.

When conducting, or collaborating in, research involving animals in other countries, researchers should comply with the legal and ethical requirements existing in the UK, and in the countries where the research is conducted. Similarly, University researchers based abroad should comply with the legal and ethical requirements existing in the UK as well as those of their own country. For the use of animals in research in the UK, see also the Concordat for Openness on Animal Research in the UK.

If researchers consider that animals involved in research are subject to unreasonable risk or harm, they must report their concerns to the University and, where required, to the appropriate regulatory agency.

The Committee undertakes a retrospective review of on-going projects in order to promote the development of the 3Rs and to monitor work conducted under each project licence.

Finance

In cases where the proposal involves financial inducements to the participant, details relating to the amount and purpose of the financial inducement shall be notified at the time of the submission of the proposal.

Researchers must comply with the University's Financial Regulations [Council Ordinance 10] and, in particular, section 20 of the Financial Regulations regarding the use and management of finances relating to research projects, and co-operate

with any monitoring or audit of finances relating to research projects. Section 20 includes the key provisions that:

- It is the responsibility of the Dean of College or Director of Institute as appropriate to ensure that the financial implications have been appraised by the Director of Finance. This will include obtaining a set of grant terms and conditions from each organisation providing funding to enable appropriate monitoring of compliance.
- The research agreement must be in line with the University's policy with regard to indirect costs and other expenses and taking account of different procedures for the pricing of research projects depending on the nature of the funding body.
- Research grants and contracts shall be accepted on behalf of the University by the Head of the Research Support and Development Office.
- Control of pay and non-pay expenditure for a project will be the clear responsibility of the budget holder. Any overspend or under-recovery of overheads is the responsibility of the budget holder, and will be charged against School or specialist research institute funds.
- It is the responsibility of the named principal investigator or grant holder to ensure that conditions of funding are met.

Researchers should also ensure that all procurement of materials, equipment and other resources for research are undertaken in accordance with the University's <u>purchasing procedures</u> which also form part of Council Ordinance 10. Researchers must report any concerns or irregularities to the University as soon as they become aware of them.

Conflicts of Interest

Conflicts of interest arise where a researcher's private interests diverge from and compete with their ethical responsibilities in the research endeavour, such that it might be reasonable to infer that the researcher's behaviour or judgment is likely to be motivated by such private, competing interests. Although a competing interest does not necessarily imply wrongdoing, declaration and appropriate management of the issue is required where such an interest might reasonably be foreseen to unduly influence the researcher's overall ethical responsibilities.

The researcher may combine research with professional care only to the extent that the research is justified by its potential value. When research is combined with care, additional standards apply to protect human participants.

The researcher should fully inform the participant which aspects of the professional care are related to the research. The refusal of an individual to participate in a study must never interfere with the professional relationship with the patient or client.

Working Safely

Health and Safety

The University must seek to be compliant with the requirement that all research carried out under the auspices of the University, or for which they are responsible, fulfils all requirements of health and safety legislation and good practice. Certain types of research, for example social research in a conflict zone, can present particular issues of health and safety. All research which involves potentially harmful or hazardous material, or which might cause harm to the environment, must comply with all legal requirements and other applicable guidelines.

To this end, the University Health and Safety Committee are responsible for:

- Adopting policy and procedures to facilitate the development and maintenance of safe systems of work and compliance with existing and impending legislation;
- Agreeing appropriate objectives and timescales;
- Fostering the organisation and the planning necessary for effective risk management, particularly in relation to new practices, substances and plans, and in relation to contractors' activities:
- General oversight of implementation, with particular reference to risk management, health and safety training, and communications;
- The examination of accident reports and recommendations; other internal health and safety reports; reports relating to comparable institutions and any reports from enforcement authorities;
- The monitoring, audit and review of the overall efficacy of the health, safety and welfare management system as outlined in the bullet points above;
- The submission of an annual report to Council.

Where appropriate, researchers must submit research to all forms of appropriate review by the relevant Research Ethics Committee and the Health and Safety Committee, and abide by the outcome of that review. The University Executive Board has overarching responsibility for establishing, maintaining and overseeing the Brunel University Responsible Research Policy.

Institute Directors and Deans of Colleges are responsible to the Executive Board and should ensure that:

- Health and safety policies, guidance and arrangements relevant to the expected risks in their research or work area are in place;
- Comprehensive risk management, identification and control programmes are in place, indicating how higher risk activities such as research involving hazardous equipment or substances, lone working or fieldwork will be managed;
- Appropriate permits and licences are obtained before the research begins, and records of authorisation, training, incidents and maintenance are kept securely;
- Reports on health and safety performance are fed back to the Health and Safety Committee at least annually;

- Corporate systems are in place for identifying training needs and providing appropriate training and supervision for research staff and others in the workplace;
- The general and specific health and safety arrangements for contractors, visiting workers and visitors are explicit and communicated effectively; and
- The sanctions for not following organisational, College and/or Institute policies or codes of practice are made clear to all.

Guidance on Risk and Insurance for Research

It is essential that researchers understand the risks associated with their research work, the limitations of the University's insurances including relevant terms and conditions, and prepare contingency plans to be implemented in the event of an incident affecting their research.

The University has comprehensive insurances that provide cover against many of the risks that may arise from research work. This includes both risks prior to the successful completion of research and risks which may arise subsequently. However, insurance never covers all the costs incurred in an incident either because of policy excesses (typically in the range of £2.5K to £10K) and/or uninsured costs including for example the effort required to successfully make a claim, the inevitable delay in completing planned work.

If a claim is made researchers are responsible for providing detailed information of losses to the insurers, including any invoices and work plans as appropriate. Researchers also need to prepare a recovery of work plan.

Leadership and Training

Leadership and Supervision

Research integrity is relevant to all research and all researchers, and the creation of a sound research climate that incorporates research integrity is essential to good research practice. Within a research group, responsibility for creating such a climate lies with the Principal Researcher. Principal researchers and other senior researchers should create an environment of mutual co-operation, in which all researchers are encouraged to develop their skills and in which the open exchange of ideas is fostered. Appropriate training should be undertaken by the researcher. and researchers with supervisory/leadership responsibilities are encouraged to engage in regular Continuing Professional Development to enhance and maintain good research practice. They must also ensure that appropriate direction of research and supervision of researchers is provided, and support supervisors and researchers in meeting the legal and ethical requirements of conducting research.

This includes communicating how the research integrity policy is sensitive to different disciplinary norms and how issues which could affect research integrity (e.g., bullying

and harassment, equality and diversity, collaborative and international research and others) can be prevented or mitigated.

Training and Mentoring

Researchers who are new to the academic community may face particular difficulties. Responsibility for ensuring that students and other inexperienced researchers understand good research practice lies with all members of the community, but particularly with Principal Researchers and the Directors of Research. Good practice includes mentoring less experienced researchers and postgraduate students in their new environment, and providing relevant training in the responsible design, conduct and dissemination of research. This training aims to help researchers achieve the following goals:

- Recognise that research integrity is relevant to all research and all researchers;
- Understand the required standards and what is considered 'best practice' for their research;
- Reflect on the challenges involved in conducting ethical research and how they might be addressed;
- Learn about positive and negative impacts of incentives in research and how the institution mitigates negative impacts;
- Understand the sources available to them if researchers require support, have concerns about research misconduct and how to report any concerns, including whistleblowing policies.

In addition, the University aims to carry out special training for research involving human participants; human tissue, material or remains; personal data; animal research subjects and animal materials, and the acceptable conduct required when undertaking that research.

Staff responsible for training and mentoring are encouraged to make training materials available to researchers that they can consult independently. This may also include links to online self-assessment tools where applicable.

Research students should consult and abide by the University Student Research Code of Practice: http://www.brunel.ac.uk/about/administration/quality-assurance/research

Research Integrity Review

The University seeks to ensure that good practice in research is an integral part of its research strategy and associated policies, and, to this end, the following processes seek to achieve the above aims by securing an effective and transparent system by which the University can assure itself that research integrity is being maintained.

The following principles underpin the University system of Research Integrity Review:

- There must be clear ownership of the process at the highest level of the University;
- Transparency and accountability should be ensured;
- The process must draw together academic, strategic and financial considerations to allow a holistic view of activities;
- Reviews should ask questions and generate responses that are institutionally relevant;
- The process should be concerned with enhancement as well as assurance, but must also be grounded in evidence;
- The process should be built on the premise of peer assessment of a critical appraisal;
- The process should be sufficiently flexible to operate on all areas of activity: e.g. academic, academic support, administrative and financial.

Process and Responsibility

The principal responsibility for Research Integrity compliance rests with Senate and is monitored on behalf of Senate by the Research and Knowledge Transfer Committee.

The Governance, Information and Legal Office also reports on compliance annually to Executive Board and Council in a short statement relating to progress in research integrity.

The Research and Knowledge Transfer Committee of Senate will monitor research integrity through completion of an annual report. Returns from the Colleges and Institutes will be part of the review process. The report prepared by the Committee will be submitted to Senate for final consideration. The report, where relevant, may be accompanied by any recommendations arising from any content in the report. The Governance, Information and Legal Office shall have sight of the annual reviews and on behalf of the Council of the University assure itself of compliance, providing feedback to Senate, and through the Research and Knowledge Transfer Committee, and College and Institute research committees.

Responsibility for ensuring that the code is securely embedded within the 'local' structure rests with the Dean, appropriate Vice-Dean and Director of Research. Responsibility for supervision and monitoring of local compliance in research integrity lies with the College Research Committees. Issues of Research Ethics are determined through College and Research Ethics Committees who have a direct relationship with UREC (University Research Ethics Committee).

Annual Research Integrity Report

The annual reporting framework is based on the commitments and employer responsibilities (as outlined in the Research Integrity Concordat here: <a href="https://doi.org/10.1007/jhe-2012/jhe-20

Annual Review Questions	Information source and short summary of information
1. What policies and procedures are in place to ensure that research is conducted in accordance with standards of best practice; including processes for dealing with allegations of misconduct? How often are these reviewed and when were they last reviewed?	Central Annual process of policy review will take place at the end of the academic year – RKT will request a report from policy holders for each supporting policy.
2. Are the policies on ethical review and approval clear and available to all researchers? Please explain the arrangements you have in place for reviewing that research is planned and conducted in accordance with such ethical standards (include additional arrangements for research funded by the Research Councils if required).	Colleges Description of arrangements for reviewing that all research is planned and conducted in accordance with ethical standards to be included in annual review. Include IA. Central Report outlining any additional funder specific activity.
3. How are researchers able to access advice and guidance on ethical, legal and professional obligations and standards?	Colleges/ Central Description of resources and links.
4. What is the publicly accessible web-link to these policies, and the name of the senior officer responsible for dealing with cases of misconduct?	Central Senior Officer details supplied by UREC.
5. How are these policies disseminated to staff? Include any special provision made for new employees (including postgraduate students), and how staff awareness is maintained.	Colleges Annual review will require confirmation that academic staff have been advised where information on research integrity (including the code) can be found, and with an option to send any questions regarding research integrity and/ or requests for specific training to the Vice-Dean Research.
6. What actions and activities have been undertaken to support and strengthen understanding and the application of research integrity issues (for example postgraduate and researcher training, or process reviews)?	Colleges Numbers of staff attending research integrity training sessions, plus details of any additional training to be requested in annual review. Central

	Produce report outlining dissemination and awareness raising activities and external engagement activities.
7. What systems are in place within the research environment that identify potential concerns at an early stage?	Colleges Information from CREC.
8. What policies in are place to support researchers who find that they need assistance as a result of following the guidelines in the concordat?	College/Central Details of policies.
How does the University ensure that there is no stigma attached to seeking support or raising concerns?	Confirmation of safeguarding processes in relation to disclosure and whistleblowing.
9. How does the University support researchers in providing appropriate information when they are required to make reports to professional and/or statutory bodies regarding integrity?	Colleges. Description of arrangements for providing information and support to researchers.
10. How many formal investigations of research misconduct have been completed in the past three completed academic years which relate to researchers funded by or responsible for funding from Research Councils (including supervisors of postgraduate awards)?	UREC Brief anonymised summary figures to be provided by UREC. This will be requested by RKT at the end of the academic year.
What has the institution learned from any formal investigations of research misconduct that have been undertaken, including what lessons have been learned to prevent the same type of incident re-occurring?	Statement from UREC.

Acknowledgements

The code requires compliance with a number of established University policies and procedures. The governance relating to these policies and procedures and their 'owners' is not superceded by the code, but compliance with, and changes to, such policies will form part of the annual monitoring process for the code.

The code is a living document which changes as its constituent policies are revised in response to the business of the University or the external research environment. The constituent policies at the time of writing are reproduced here, but colleagues are advised to consult the relevant webpages for the most recent versions.

Update to the Research Integrity Code

A revision of the Research Integrity Code was completed in August 2022. The Code now has an altered order of content to reflect the research process more clearly; a statement of principles to stress the importance of public trust in research; a revised section on Open Access to reflect the changes made to funders' policy; an expanded training section to highlight training needs more clearly; removal of the appendix of hard copies of policies to reduce page length and increase accessibility; amendment of the audit questions reflecting the requirements outlined in the latest version of the UUK Concordat.

Appendix

Policies applicable to Research Integrity

Policy	Owner	Who it applies to	Where to find it
The University Conflict and Declaration of Interest and Policy		UG/PGT Students PGR Students	Conflict and Declaration of Interest Policy November 2020 (brunel.ac.uk)
		Research Staff Staff	
Code of Research Ethics	University Research Ethics Committee (UREC)	UG/PGT Students PGR Students Research Staff Staff	Brunel - Code of Research Ethicsbrunel
The Use of Animals in Scientific Research	University Health and Safety Committee	UG/PGT Students PGR Students Research Staff	The Use of Animals in Scientific Research (brunel.ac.uk)
Responsible Research Policy	University Health and Safety Committee	UG/PGT Students PGR Students Research Staff Staff	SC1708 Responsible Research at Brunel - 2020.pdf
Intellectual Property Rights Policy		UG/PGT Students PGR Students Research Staff Staff	intellectual property rights policy 2007 (brunel.ac.uk)
Anti-Bribery and Corruption Policy, including Gifts and Hospitality Policy	Chief Governance Officer	UG/PGT Students PGR Students Research Staff Staff	Anti Bribery Gifts Hospitality Conflict of Declaration Policy November 2020 (brunel.ac.uk)
Data Protection Policy	Chief Information Officer	UG/PGT Students	Data Protection Policy 2018 (brunel.ac.uk)

		PGR Students	
		Research Staff	
		Staff	
Brunel University Research Data	Open Research and	PGR Students	Brunel University Research Data
Management Policy	Rights, Library	Research Staff	Management Policy
	Services	Staff	
Open Access Mandate	Open	PGR Students	Open Access Mandate 2009
	Research and Rights, Library Services	Research Staff	(brunel.ac.uk)
Procedures for	Chief	UG/PGT	Microsoft Word - CO 18
Investigation of	Governance	Students	Amendv3.docx (brunel.ac.uk)
Research Misconduct	Officer	PGR Students	
		Research Staff	
		Staff	
Public Interest Disclosure	University	UG/PGT Students	Whistleblowing Policy (brunel.ac.uk)
(Whistleblowing) Policy	Secretary and Human		(bruner.ac.uk)
and Procedure	Resources	PGR Students	
		Research Staff	
		Staff	