University of Southampton

CODE OF CONDUCT FOR RESEARCH

October 2025

Research Integrity and Compliance Office (RICO)

STATEMENT OF PURPOSE

The University of Southampton ('the University') recognises that excellence in research is based upon trust and the adherence to the highest standards of behaviour. This Code of Conduct ('Code') sets out the key responsibilities and behaviours which are expected by the University for any research work (formal and informal) which is undertaken in its name, by its staff, visitors (undertaking research at the University), the student body, and for any research sponsored by the University.

FOREWORD FROM THE VICE-PRESIDENT FOR RESEARCH AND ENTERPRISE

It is a pleasure to provide a foreword to the University's Code of Conduct for Research. The University of Southampton aims to 'inspire excellence, to achieve the remarkable, and build an inclusive world, and one of the key mechanisms by which we do this is through generating new knowledge via our research and ensuring that it has a positive impact through its dissemination and via our knowledge exchange and enterprise activities. We will only achieve this ambition if we conduct research of the highest quality, according to rigorous ethical considerations, while embedding integrity throughout. If the outputs of our research cannot be relied upon or have caused harm in the process of obtaining them, this will invalidate the research, call into question any associated work, and may cause irreparable reputational damage to the individuals and institutions involved.

This Code of Conduct for Research ('the Code') provides clear guidance across a wide range of topics regarding research integrity and associated issues. It is written in a straightforward way and provides links to other resources for cases when additional background is required. The principles apply broadly across the entire range of research conducted at the University. For many of us, the content of the Code and the principles upon which it is based are likely to appear to be obvious and amount to a statement of 'common sense.' However, it is important never to take this shared understanding for granted, and to make positive, conscious decisions regarding how to conduct research to ensure its quality, rather than to take an easier path, or to respond unconsciously to external pressures of time, budget or simply a desire to produce certain results.

I hope all those conducting research at the University of Southampton will find this Code useful. I thoroughly commend it and thank those responsible for its creation for their hard work. I would welcome feedback and a wider discussion of the topics covered.

Professor Mark Spearing
Vice-President (Research and Enterprise)
October 2025

TABLE OF CONTENTS

OVERVIEW

As a world-leading and research-intensive institution the University recognises the importance of undertaking its activities responsibly and in accordance with the highest standards of research integrity, quality, and rigour. It is important to recognise the Code includes research that leads to the development of innovation and enterprise activities both at the University and external research and innovation networks in the UK and internationally.

The Code covers a diverse range of topics essential for the governance, compliance, integrity and ethical considerations of research, required for the vast array of research areas within our five faculties. Irrespective of the research based in science, technology, engineering, and mathematics (STEM) subjects or the social sciences and arts and humanities sector, this Code applies to everyone.

INTRODUCTION

The University acknowledges its responsibilities to researchers and the wider community, and is strongly committed to effective research governance, integrity, and probity across the full spectrum of its research activities, including compliance with UK law and regulatory requirements.
The University launched 'Our Strategy' in 2022, setting the future direction and goals. It is based on our core purpose, "to inspire excellence to achieve the remarkable and build an inclusive world."

This is underpinned by our 'Triple Helix' approach which puts people at the core of our highly ranked education, research, and knowledge exchange and enterprise (KEE).

'Our Southampton Behaviours' outlines the responsibility we each have in working collaboratively to achieve our strategy. In developing trust, respect and compassion, supporting and encouraging each other, the University will achieve the best outcome for all concerned. In addition, the 'Inclusion and Respectful Behaviour Policy' highlights the University's pledge to create an inclusive University community where everyone feels that they belong.

The University is committed and continues to support the Universities UK (UUK) Concordat to Support Research Integrity ('the RI Concordat'). This provides a national framework for good research conduct and its governance, and asks universities, research institutes and individual researchers to commit to the highest standards of rigour and integrity via its' five commitments:

1. Maintaining the highest standards of research integrity – the principles
2. Maintaining the highest standards of research integrity – expectations and compliance
3. Embedding a culture of research integrity
4. Questionable research practices and potential research misconduct
5. Accountability and continuous improvement in research integrity

To promote a culture of research integrity and comply with the RI Concordat, we publish an 'Annual Research Integrity Statement' to emphasise our activities to support the RI Concordat, supported by numerous University research and enterprise policies.
This Code forms part of the University's research governance framework and draws on several global sources of guidance and good practice including:

- UKRIO Code of Practice for Research: Promoting good practice and preventing misconduct (2023)
- UKRI Policy on the Governance of Good Research Practice (2024)
- ALLEA The European Code of Conduct for Research Integrity (2023)
- Wellcome Responsible Conduct of Research (March 2022)
- Global Research Council Statement of Principles and Practices for Research Ethics, Integrity and Culture in the context of Rapid-Results Research (2022)
- The Seven Principles of Public Life established by the Nolan Committee (31 May 1995) and 23rd Report 'Upholding Standards in Public Life (1 November 2021)
- Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations (2013)
- MRC Ethics Series - Good Research Practice: Principles and guidelines (July 2012)
- Singapore Statement on Research Integrity (2010)

This Code recognises, and is not intended to detract from, the guiding principles of academic freedom, which are at the centre of all activities of the University, as set out in the University Charter (revised 2023). As section/point 25 states:

"The Council shall have regard to the need to ensure that employees engaged in teaching or research, or in undertaking other academic activity, shall have freedom within the law to question and test received wisdom and to put forward new ideas and controversial or unpopular opinions, without placing themselves in jeopardy of losing their jobs or any privileges which they may have at the University."

The Council of the University approved a revised Code of Practice to Secure Freedom of Speech to discharge its obligations under the Higher Education (Freedom of Speech Act) 2023[1].

The University will draw attention to this Code as part of the training and induction process for newly appointed academic and research staff and post-graduate researchers.

[1] Note: Announcement by the Secretary of State for Education on 26 July 2024 indicating a decision to "*...stop further commencement of the Higher Education (Freedom of Speech) Act 2023, in order to consider options, including its repeal*", the University's existing Code of Practice, will remain in effect for the time being.

SCOPE

This Code provides guiding principles and a framework for the responsible conduct of research throughout the University. It also encompasses ethical conduct imposed by law, professional, regulatory or funding bodies, or University policy and statements. This Code applies to all those conducting research at or in the name of the University, and this extends to technical, teaching and enterprise activity. It is therefore expected that all staff (including honorary staff), students, visitors and collaborators are aware of and adhere to the Code's principles and responsibilities.

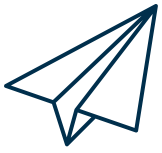
BREACH OF THE CODE

This Code operates in alignment with all other related University regulations, policies and procedures. Failure to comply with the provisions of this Code will be considered under the University's Procedure for Investigating Cases of Alleged Misconduct in Research (staff) and Academic Responsibility and Conduct (ARC) regulations (applicable to all students). Any such breaches (or suspected breaches) of the Code should be reported to allow an investigation. All parties involved will be supported throughout the process.

CONTACTS FOR INFORMATION

For further advice on topics raised within this Code, staff, students and visitors can contact the following teams:

- For research integrity inquiries, or concerns about the breach of this Code contact **Research Integrity and Compliance team (RICO)** at researchintegrity@soton.ac.uk
- For Export Control advice contact **Research Integrity and Compliance Office (RICO)** at exportandsecurity@soton.ac.uk
- For data protection matters and breaches contact **Information Governance** team at data.protection@soton.ac.uk
- For further information and advice about data protections and/or research data management contact the **Information Governance Team** at data.protection@soton.ac.uk or the Library at researchdata@soton.ac.uk
- For research ethics advice contact the **Research Ethics and Governance Office (REGO)** via risethics@soton.ac.uk
- For advice or queries regarding clinical governance, sponsorship for clinical studies, medical devices or working with human tissue, please contact the **Research Ethics and Governance Office (REGO) team** via rgoinfo@soton.ac.uk
- Researchers seeking guidance on any **research funding** agreement can find information on the Finance Research Hub (Pre-Award) or contact at finrhub@soton.ac.uk.
    - For enquiries regarding European (EU) research funding contact sotoneufinance@soton.ac.uk
    - For enquiries regarding successful research awards contact finaward@soton.ac.uk
- Researchers seeking guidance on contractual agreements should contact **Research and Innovation Services (RIS)** via riscontracts@soton.ac.uk
- For advice and guidance on **Technology Transfer and Intellectual Property** (IP), researchers should contact intellectualproperty@soton.ac.uk
- For advice on health and safety risk assessments, researchers should contact the **University Health and Safety team** on healthandsafety@soton.ac.uk. For risk assessments related to the conduct of research studies, contact the **Research Ethics and Governance Office (REGO) team** at rgoinfo@soton.ac.uk
- Researchers seeking advice on all matters relating to the University's insurance policies and claims, and for arranging necessary insurance cover for research projects (including overseas travel) should contact the **Insurance Office** at insure@soton.ac.uk More information is available on the Insurance SharePoint site



INSTITUTIONAL RESPONSIBILITIES

The University is responsible for:

- Developing a comprehensive research governance and compliance framework via University policies and procedures, and a thorough ethical review system.
- Establishing clear policies and procedures on 'Trusted Research' that encompass National Protective Security Authority (NPSA) guidelines while maintaining open research, where applicable.
- Ensuring that our international research portfolio is compliant with UK law and regulatory requirements and does not pose a risk to national security concerns.
- Providing appropriate training, development opportunities and mentoring to enable researchers to attain necessary skills for their role, and to support their future career development.
- Ensuring that appropriate direction of research and supervision of researchers is provided.
- Making research outputs openly accessible and freely available to other researchers, and to the public, to maximise the visibility and impact of research, with the exception of where ethical, legal, contractual or confidentiality restrictions prevail.
- Ensuring that robust management methods are in place to ensure awareness and application of the highest standards, as well as early identification of issues and preventative measures.
- Providing appropriate infrastructure and support for good research data management.
- Enabling transparency in research and its outputs wherever possible to promote trust and impact of research.
- Providing a full range of insurance policies which protect the University's assets and liabilities, and which extend to liabilities of researchers undertaking research on behalf of the University.
- Providing a clear and fair process for investigating decision-making and reporting on allegations of research misconduct.
- Providing oversight through its committees and senior leadership on activities and progress anticipated by this Code.
- Being open and transparent to its funders and the public about activities undertaken to support a culture of research integrity by the provision of a publicly accessible annual statement and applicable policies.

INDIVIDUAL RESPONSIBILITIES

This section clarifies the personal responsibilities of researchers (the term 'researchers' refers to staff, students and visitors to campus involved in research activities) at all levels of their career. As the level of responsibility increases, the requirements under the other categories continue to apply, e.g. responsibilities set out for 'researchers' apply also to 'Leadership and Supervision' or 'Head of Research Group.' Each individual involved in research will have their own specified responsibilities in terms of their accountability and tasks. The principal rule is that everyone is responsible for their own actions.

RESEARCHERS (STAFF, STUDENTS AND VISITORS)

The following individual responsibilities apply to all those engaged in research carried out under the auspices of the University of Southampton.

As a Researcher you:

- Are required to maintain the highest standards of research integrity and ethical conduct both at Southampton and when working overseas.
- Are responsible for familiarising yourself with this Code of Conduct and adhering to its provisions. This includes related University regulations, policies and procedures that are underpinned by applicable UK legislation and any terms and conditions, codes of practice or guidelines issued by external funding or relevant professional bodies.
- Are responsible for familiarising yourself with the Authorship, Contribution and Publishing Policy and the Research Data Management Policy.
- Must ensure that you have the necessary skills and experience to carry out your duties and undertake training where necessary to ensure.
- Should undertake appropriate training and development opportunities; to have the necessary skills to carry out your duties and your skills and knowledge are kept up to-date. This includes training for adequate supervision and assistance to ensure research is conducted to the highest standards.
- Are expected to work collegially as set out in 'Our Southampton Behaviours', https://sotonac.sharepoint.com/teams/EmbeddingCollegiality.
- By supporting and encouraging each other to strive towards and achieve the University strategy as outlined in 'Our Strategy' and accept and share equitable responsibilities.
- Must keep disagreements over interpretation or judgment in research within the bounds of civilised academic discourse. Personal abuse or malicious attempts to undermine the academic reputation of individuals or groups, at the University or elsewhere, is not acceptable and can constitute misconduct in its own right.
- Must uphold the University's Inclusion and Respectful Behaviour Policy, in every aspect of their work. This includes the University's statutory obligations under the Equality Act (including the Public Sector Equality Duty) and related legislation, and supports the University's commitment

to create an inclusive University community where everyone feels welcome for who they are, free to express their identity, ideas and opinions, and feels included and supported.

- Must be aware of and adhere to the University's Conflicts of Interest Policy and associated guidance, including external requirements published by funding or governing bodies relating to Conflicts of Interest disclosures.
- Must complete the Register of Interests in MyView (MyHR) ensuring it is updated, as necessary. It is important you recognise and declare research affiliations and other activities external to your University role that may be a conflict of interest.
  There is a short video to explain how to complete your Register of Interests and 'What is a Conflict of Interest'.
- Must complete a Conflict Management Plan (CMP) with your line manager for those registered interests that are a conflict with your University role. The CMP needs to state the appropriate mitigating actions, or the activity must cease.
  There is a short video to explain how to complete your Conflict Management Plan.
- Must submit an Annual Conflicts of Interest Declaration by August of each year if you are staff level 5 or above.
- Should be aware that some Funders may have additional requirements for disclosing financial interests which are broader than the University's Conflicts of Interest Policy and all individuals involved in a project will be required to complete an additional declaration form before the project can commence.
- Should minimise risks by adhering to Trusted Research (NPSA) guidelines. This includes informal discussion in public spaces, conferences, and collaborations.

HEADS OF RESEARCH GROUPS

- Are responsible for the overall research performance of the group, including the career development of its members, and fostering a culture of support, openness and research integrity.
- Should be aware of their responsibilities and ensure that they have the necessary training, capacity and resources to carry out their role, and request support if required.
- Are responsible for ensuring compliance with this Code and all legal and ethical standards and requirements, and for obtaining appropriate approvals from all relevant bodies before commencing a research study.
- Are accountable for the safety of others under their supervision and ensuring that risk assessments are completed prior to commencing research.
- Are responsible for ensuring the safety, dignity, rights and welfare of all research participants, and for mitigating against or minimising risks in their research.
- Should ensure that each research team member is qualified and competent to fulfil their role, and that researchers have undertaken relevant security checks (if applicable), and have adequate support, supervision and training.

- Are accountable for ensuring that appropriate arrangements are in place to manage the research, financial and other resources, and any arising Intellectual Property ('IP').
- Are responsible for supervising and checking the work of others in their group and should undertake a regular review of progress.
- Should ensure that where there are collaborations with external organisations, appropriate agreements are entered into.
- When allegations of research misconduct or integrity are raised against staff, they must be passed to the Research Integrity and Compliance Office (RICO) via researchintegrity@soton.ac.uk.

LEADERSHIP AND SUPERVISION

The following individual responsibilities apply to all staff responsible for the academic leadership of the University, including members of the Executive Board and Deans.

Individuals in leadership and supervision:

- Are responsible for creating, promoting and maintaining a sound research environment which encourages all research to be conducted to the highest standards of research integrity, governance and ethical practice.
- Should seek to foster a culture of honesty, mutual co-operation and professionalism, where all researchers are encouraged to develop their skills and openly exchange their ideas, and where inappropriate conduct is identified and properly addressed.
- Should actively ensure that their research staff have access to appropriate training specific to their discipline and research practice.
- Ensure their research staff receive high-quality supervision and guidance in accordance with this Code of Conduct, and all other relevant standards, policies and procedures.
- Support activities to implement the 'Concordat to support the Career Development of Researchers'.
- Provide dedicated mentoring in any areas where research staff require additional assistance.

The Vice-President for Research and Enterprise has the prime responsibility for setting the strategy in relation to research and for fostering a culture of research integrity across the University.

Deans, Associate Deans, Heads of Academic Units and Institute Directors take responsibility for ensuring that appropriate strategic direction of research and supervision is provided, including providing advice on matters of research integrity and conduct. This responsibility can be delegated to appropriate Heads of Research Groups or other senior staff, provided that it is made clear within the research group what is expected of each of its members.

RESPONSIBLE RESEARCH PRACTICE

In addition to individual responsibilities above, the Code sets out specific expectations and requirements for responsible research practice and the different stages of the life cycle of a research project. This part should be interpreted as complementary in the context of the individual responsibilities.

RESPONSIBLE COLLABORATION STATEMENT 2025

International partnerships are an important part of our research portfolio, but we are required to be vigilant with whom we collaborate. We must review the risks against the benefits of these partnerships, both at the institutional and individual levels, and be compliant with associated UK legislation and government regulatory requirements (i.e. Export Control Order 2008, National Security and Investment Act 2021, The Animals (Scientific Procedures) Act 1986, The Health and Safety at Work Act 1974, UK General Data Protection Regulation (UK GDPR) and the Data Protection Act 2018, etc).

In response to these geopolitical challenges, the University has now published a new 'Responsible Collaboration Statement' with an Addendum (identifying specific sectors) to support and guide our researchers as they continue to establish new international research partners; its underlying principles are embodied in this Code.

RESEARCH PRINCIPLES

All researchers are expected to consider the wider consequences of their work and to critically engage with the practical, ethical and intellectual challenges that are intrinsic to the conduct of high-quality research. It is the responsibility of all engaged in research to observe and promote the following principles which set out the standards and values relevant to research.

As a researcher you must:

EXCELLENCE

- Strive for excellence when conducting research.
- Aim to produce and disseminate work of the highest quality and ethical standards.
- Promote and support responsible research practice throughout the whole research life cycle.

OPENNESS

- Be honest and open at all stages of the research process.
- Be open about your work and willing to discuss results and share data with academic colleagues.
- Ensure research designs, methodologies and findings are open to scrutiny, debate, further analysis and re-use (subject to appropriate confidentiality, data protection, and IP considerations).

INTEGRITY

- Demonstrate integrity and professionalism by maintaining knowledge and awareness, and complying with the University policies, relevant requirements, and guidelines.

- Follow the rules and regulations of your membership body if you are a member of a regulated profession.

ACCOUNTABILITY

- Accept full responsibility for your own research conduct and any activities of those who work under your direction or supervision.
- Ensure that any research undertaken complies with any agreements, terms and conditions relating to the project, and allows for proper governance and transparency.
- Ensure that a research project is undertaken in accordance with a favourable outcome of an ethics review.
- Ensure any associated finance for a research project is used solely for the purpose of that research project.
- Ensure that conditions regarding publication, research data management and Intellectual Property rights are fully complied with.
- Report any instances of research misconduct to the Research Integrity and Compliance Office (RICO) for investigation in line with the University's procedures.

RIGOUR

- Conduct research according to the highest standards of rigour in line with prevailing disciplinary norms and standards.

CARE and RESPECT

- Understand you have a duty of care for all participants in, and subjects of research, including humans, animals, the environment and cultural objects.
- Address any concerns regarding the dignity, rights, safety and well-being of those involved in research.
- Always act with respect, dignity and provide duty of care to all colleagues and students.
- Understand you are responsible for the stewardship of research and scholarship for future generations, and that you are contributing to their professional community.

RESEARCH DESIGN

Sound research design and management is crucial to successful research outcomes. Suitable research design should be used to structure the research, and to outline how the key parts of the research project will work together. The process of research design should examine all the potential risks and ethical issues, how data will be collected, what techniques and instruments will be used and how records will be analysed.

As a researcher you should:

- Ensure the proposal is designed to add to existing knowledge in accordance with state-of-the-art knowledge of the subject in question, or to develop methods for research into it.
- Seek appropriate advice on sound research design from more senior and experienced colleagues when appropriate.
- Ensure the research design is appropriate for the question(s) being asked and addresses the most important sources of bias.

- Produce a clear and detailed research plan or protocol setting out the design and conduct of the study, including how records will be gathered, analysed, and managed.
- Plan for documenting the research in line with FAIR Principles (Findable, Accessible, Interoperable and Re-usable) to enable appropriate reporting in line with these principles.
- Consider how data may be reused in the future including sharing it with collaborators, making it available to other researchers, or through open access.
- Ensure all necessary skills and experience, and sufficient resources meeting the relevant standards, will be available to conduct the research within the research team, or through collaboration with specialists in relevant fields.
- Monitor progress regularly. If necessary, there should be an opportunity to refine the research design and/or methodology where justifiable.
- Keep documentation for the rationale for the study and any subsequent modifications or if appropriate, express this clearly in study protocols.
- Ensure that any subsequent alterations to the design are subject to appropriate review and scrutiny where the research design has been approved by the Faculty Research Ethics Committee (FREC) and/or a favourable opinion from a regulatory body.

RESEARCH FUNDING

As a researcher you:

- Must familiarise yourself with the terms and conditions of any funding agreement (grant or contract and whether from public, government funding bodies, industry or other), to ensure that you fully understand the implications of those terms, and that you accept these terms as the basis for your research.
- Must ensure you observe and fully comply with the terms and conditions of any grant or contract once the funding has been accepted.
- Must adhere to all Financial Regulations and Procedures including those related to purchasing or procurement of resources for research, the hiring of research project staff and expenses.
- Must use and manage financial resources responsibly, in accordance with the terms and conditions of the funding body and the University and co-operate with any financial monitoring and audit.
- Should report any concerns, irregularities or events which can result in unforeseen finance consequences to the Faculty Finance team when these become apparent.

Additionally, where there is more than one Funder for any project you:

- Must read the terms and conditions of the different funders to ensure there is no conflict.
- Must ensure the rules against double recovery of funding for research are complied with.
- Should ensure that relevant funders are made aware of and consent to any other funding received for the same piece of research.

INTERNATIONAL RESEARCH

As a researcher you:

- Should pay particular attention to any additional legal and ethical requirements when conducting or collaborating in research internationally, including regulatory considerations for working overseas.
- Must ensure that research projects based outside of the UK comply with the UK's legal and University ethical requirements, as well as the laws and regulations of the country where the study is taking place or data is collected.
- Should consider early in the research design process if the research project has the appropriate insurance cover. This applies to research conducted in the UK, at overseas institutions (where UK insurance is not always recognised in some countries) and that aboard vessels in international waters. Please contact insure@soton.ac.uk for advice.
- Should seek advice when University insurance is not covered when the research undertaken in countries where UK insurance is not recognised. Please contact insure@soton.ac.uk for advice.
- Should seek advice when the research is not conducted in a country at all e.g. on research cruises in international waters, albeit the jurisdiction then is that of the ship. Please contact insure@soton.ac.uk for advice.
- Must be aware of cultural sensitivities and differences when undertaking research in other countries or regions with different cultural expectations and economic circumstances compared to the UK and apply the principle of benefit-sharing to the research study.
- Similarly, researchers and organisations from abroad involved in research undertaken under the auspices of the University of Southampton, must comply with both the UK's ethical and legal standards, and those of their own country. Further guidance on research integrity in cross-boundary research and research involving people in low and middle income countries.

COLLABORATIVE WORKING WITH INTERNATIONAL RESEARCH PARTNERS

The University recognises that research is increasingly globalised and collaborative by involving individuals and institutions within and beyond the UK.

As a researcher you should:

- Be mindful of the procedures for the conduct of research adopted by organisations involved in collaborative working and work to ensure compliance with common research standards and procedures.
- Ensure that research projects in Low- and Middle-Income Countries (LMICs) which may be funded by Official Development Assistance (ODA) governments or other official agencies have the following appropriate considerations:

  (a) general need/recognition that the research is co-designed and co-delivered on equal basis with local partners.

(b) importance of recognising Indigenous, cultural and traditional rights.

(c) compliance with the Nagoya protocol, CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) and The International Union for Conservation of Nature (IUCN) Red List of Threatened Species; and

(d) compliance with all import and exports requirements of all countries involved when shipping i.e. biological samples (human, animal) artefacts.

- Ensure all parties are clear about their respective roles and responsibilities, and agree uniform collaboration principles; consensus should be reached on:
    - Confidentiality
    - Provenance of intellectual ideas
    - Ownership and publication of research
    - Authorship contribution (significant research input) and correct affiliation where research was conducted as per Authorship, Contribution and Publishing Policy
- Recognise that subject to legal and ethical requirements, roles and contributions may change during the lifespan of the research.
- Contact Research Contract Team via riscontracts@soton.ac.uk as early as possible to ensure that appropriate agreement(s) can be put in place.

EXPORT CONTROLS

Export controls can apply to the digital or physical export of any strategic goods, data, technology, documents, materials, software, or know-how from a destination within the UK to a destination outside the UK. Export controls are needed for a variety of reasons, including national security and international treaty obligations. In the UK, the Export Joint Control Unit (ECJU) undertakes the control of strategic goods and technology.

Export control rules apply to commercial export and all kinds of academic activity, including teaching and research. This can extend to academic fieldwork, virtual teaching to students abroad, taking a laptop on a trip, discussing research via electronic means, and presenting at international conferences. Exports to a destination outside the UK may require an appropriate export control licence. Failure to comply with Export Controls is a criminal offence which can lead to unlimited fines or a prison sentence for the individual involved.

As a researcher you should:

- Be aware of and comply with the UK Export Control Order 2008 and apply for export control licence as required under the UK's regulatory framework of Strategic Export Controls relevant to your field of study.
- Be aware that an export of your research (software, technology, radioactive substances) may come under the category of a dual-use items (non-military items which may also be used for military purposes).

- Check that any export of your research is not listed on the UK Consolidated list of strategic military and dual-use items that require export authorisation. There is helpful Goods Checker tool to determine if an export licence is required.
- Check that any export of your research, knowing the Control List entry reference (or 'rating') that apply to your specific goods, software or technology can use be exported using an existing Open General Export Licence (OGEL), using the OGEL checker tool.
- Be aware that you have a personal responsibility to adhere to Export Control regulatory requirements.

Researchers can find further information on Export Control Joint Unit (ECJU) website and the Research Integrity and Compliance Office (RICO) SharePoint site and can seek support assessing or applying for a license from the Research Integrity & Compliance Office (RICO) via exportandsecurity@soton.ac.uk.

NATIONAL RESEARCH SECURITY

The current geopolitical landscape has seen unprecedented change globally over recent years. This has impacted research in the UK with international research collaborations under UK Government scrutiny. The National Security and Investment (NSI) Act 2021 was introduced to protect the UK's intellectual property, sensitive research, people and infrastructure from potential theft, manipulation and exploitation and interference by hostile entities.

The National Protective Security Authority (NPSA) and the National Cyber Security Centre (NCSC) and designed in partnership with the academic sector, created a Trusted Research Evaluation Framework (TREF) to support the integrity of the system of international research collaboration. It provides guidance to researchers, University staff and funding organisations to help keep sensitive research and intellectual property secure from theft, misuse or exploitation.

As a researcher you should:

- Be aware that if your research falls within one of the NSI Act 17 sensitive areas of the economy. This includes licensing any intellectual property (IP) to an external entity to the University, including spin-out companies where the University has a stakeholder share.
- Be aware that you have a personal responsibility to adhere to the NSI Act requirements and making a notification to the UK Government Investment Screening Unit (ISU)

For further advice and guidance, contact the Research Integrity and Compliance Office (RICO) at exportandsecurity@soton.ac.uk or Research Integrity and Compliance Office (RICO) SharePoint site.

INTELLECTUAL PROPERTY AND COPYRIGHT

It is the University's policy to encourage and facilitate the successful utilisation of Intellectual Property (IP) to the benefit of the University, its researchers and as part of its contribution to society.

As a researcher you should:

- Understand and comply with the terms relating to IP and confidentially in any sponsored research, grant, contract or collaboration agreement.
- Respect IP created by others, use it only with appropriate permissions and fully comply with all relevant IP licences.
- Keep lab notebooks and other records for evidencing the creation of new IP during your research.
- Comply with the University's Intellectual Property Regulations.
- Be aware of relevant legislation such as 'Copyright, Designs and Patents Act 1988' (https://www.legislation.gov.uk/ukpga/1988/48/content).

Further information on any aspects of IP and copyright can be obtained from enterprisecontracts@soton.ac.uk.

INSURANCE AND INDEMNITY

The University provides a full range of insurance policies which protect the University's assets and liabilities and extend to liabilities of researchers undertaking authorised research on behalf of the University. The University also provides professional indemnity cover which provides indemnity in respect of legal liability to third parties for breach of professional duty due to negligent acts, error, or omission in connection with the University business.

The University's Insurance Office is responsible for providing advice on all matters relating to the University's insurance policies and claims, and for arranging necessary insurance cover for research projects. More information is available on the Insurance webpage or by contacting: insure@soton.ac.uk

HEALTH AND SAFETY

As a researcher you:

- Must ensure the dignity, rights, safety, and well-being of all involved in research, including researchers themselves.
- Must avoid unreasonable risk or harm to research participants, the environment or animals.
- Should observe the University's Health and Safety Policies and undertake prior risk assessments.
- Should only commence and continue a research project if the anticipated benefits justify the risks involved.

- Should ensure that your research study conforms to all appropriate health and safety legislation and good practice, especially if it involves potentially hazardous or environmentally harmful material.
- Should ensure that sufficient insurance and indemnity has been arranged with the Insurance Team.

Further information and advice is available on the University Healthy and Safety website which has links to Health and Safety SharePoint site.

RISK ASSESSMENT

A risk assessment of the planned study should be undertaken before the research commences.

As a researcher you should:

- Identify any potential risks to the University or the health, safety or well-being of researchers or research participants.
- Identify any potential risks to animals, the environment, cultural heritage and/or society.
- Determine whether the proposed research might produce results that could be misused for illegal or harmful purposes.
- Seek help and advice when needed on risk assessments from the University's Health and Safety Office at healthandsafety@soton.ac.uk or the Research Integrity and Governance Team at rgoinfo@soton.ac.uk.
- Take sufficient steps to eliminate or minimise any identified risks.

RESEARCH DATA MANAGEMENT

Effective and accurate management of research data and records constitutes a foundation of good research practice.

As a researcher you must:

- Keep full, clear, and secure records of your procedures and results, including interim findings where applicable.
- Ensure you understand and adhere to the University's Research Data Management Policy (link).
- Be mindful of relevant legislation and funding body policies, and plan for documenting the research in line with FAIR Principles (Findable, Accessible, Interoperable and Re-usable) to enable appropriate reporting in line with these principles.
- Comply with the University's Open Access Policy.
- Destroy research data in accordance with the 'University's Recommended Practices for Destruction of Data' http://library.soton.ac.uk/researchdata/destruction as well as any relevant legal, ethical and funder requirements.

- Give special consideration to confidentiality and security when storing, managing or destroying research data.
- Observe the following research data principles and standards:
    - Collect all research data accurately, efficiently and according to the agreed design of the research project.
    - Generated research data is compliant with the University's Research Data Management Policy and a Research Data Management Plan is in place. This is recommended practice, and may be mandatory from the funder – information and funders templates can be found at DMPonline.
    - Accurately manage all research data throughout the research life cycle.
    - Store all primary and secondary data in a secure, durable, and auditable format appropriate for the type of research data.
    - Securely store all significant research data for a minimum of 10 years in line with the University's Research Data Management Policy.
    - Comply with any requirements from the funder or Sponsor for an increased retention period, or where the research is of major social, environmental or heritage importance.
- Ensure that, in cases of research collaboration, an agreement is drawn up between the participating institutions regulating data ownership and publication of research outcomes. Please contact Research Contracts at riscontracts@soton.ac.uk for advice and information.

PERSONAL DATA

All processing of non-anonymised Personal Data, including its collection, storage and destruction, must comply with the terms of the Data Protection (Fundamental Rights and Freedoms) (Amendment) Regulations 2023.

The UK data protection legislation accounts for research activities and in cases where compliance with certain obligations will cause a significant detriment to the stated research aim, and a lack of adherence to those obligations do not cause distress or damage to participants, researchers may be able to rely on the exemptions in law. Advice on this must be sought from the Information Governance team before commencing.

Unless there are ethically and legally justified reasons for doing otherwise, **as a researcher you must:**

- Understand your obligations under the University's Data Protection Policy.
- Ensure an adequate data risk assessment is undertaken, with a data management plan and an IDPR (Initial Data Protection Review) and Data Protection Impact Assessment (DPIA) if applicable.
- Not use personal data for purposes other than stated on the information sheet provided to participants, unless there is explicit approval from the Faculty Research Ethics Committee (FREC).

- Not store personal data for longer than is necessary.
- Ensure personal data is stored fairly, lawfully, and transparently in respect of data subject (participant) rights.
- Personal data must be kept confidential and not disclosed to third parties except in circumstances where there is a legal or statutory obligation, or where the disclosure is necessary for the research (i.e. collaborations with third parties where there is a written agreement in place) and where the conditions above are fully met.

Further advice can be sought from the Research Information Governance Team via data.protection@soton.ac.uk or researchdata@soton.ac.uk.

CONFIDENTIAL INFORMATION

As a researcher you must:

- Be aware of any confidential information you may be in receipt of from other researchers, collaborators, and funders.
- Manage confidential and/or restricted information with care.
- Not use or disclose confidential information to others without the consent of the party who owns it.
- Ensure you are aware of any confidentially provisions which apply to specific projects involving commercially sensitive data or IP, and of any obligations in respect of these provisions.

PUBLICATION AND AUTHORSHIP

All researchers are expected to publish and disseminate the results of their research in an open, honest, transparent, and accurate manner, and via all appropriate media such as journal papers, books, reviews, software, data repository or conference proceedings. Only in the most exceptional circumstances of security or confidentiality should research findings be withheld from academic scrutiny, sharing or further use.

As a researcher you must:

- Ensure your publications conform to appropriate discipline specific professional standards.
- Comply with the University's Authorship, Contribution and Publishing Policy.
- Clearly acknowledge and attribute all sources used in the research in line with your specific discipline citation and referencing convention.
- Ensure that any inconsistencies or errors in your published material are rectified in a timely manner.
- Be aware of the guidelines provided by Committee on Publication Ethics (COPE) and International Committee of Medical Journal Editors (ICMJE), as well as other discipline specific recommendations or standards.

- Make all publications and research outputs available to other researchers and to the public in accordance with the University's Open Access Policy.
- Follow the examples of good practice as set out below:
    - In any publication, the authors must be able to identify their contribution to it, be familiar with its content, and accept personal responsibility for it.
    - In all aspects of research, the contributions of formal collaborators and all others who directly assist or indirectly support the research (including research students, research staff and professional services staff) should be properly acknowledged with their permission.
    - Funders of research should be clearly acknowledged and any competing interests listed.
    - The sequence in which authors are listed should be agreed by all authors, following disciplinary conventions or publisher's requirements.
    - Intentional failure to acknowledge the contributions of others is regarded as unprofessional conduct, and instances other than minor omissions will be treated as research misconduct.
    - Any person who has not made an intellectual, scholarly or practical contribution, and has not participated in a substantial way in conceiving, executing or interpreting at least part of the relevant research, should not be included as an author of the publication derived from that research (so called 'honorary authorship').
    - A researcher who submits substantially similar work to more than one publisher should disclose that fact to the publishers at the time of submission.
    - Publications should include sufficient methodological information to allow other researchers to reproduce original procedures used.
    - Researchers should observe any conditions set by funding or other bodies regarding the publication of their research and its findings.
    - Authors should declare any potential or actual conflicts of Interest, which may be financial, commercial, personal, academic, or political.
    - Authors should be clear about how they have manipulated published images and data.
    - Publications should acknowledge the limitations of data and sources and should only share conclusions which are supported by the results.
    - Be aware if the use of Generative Artificial Intelligence (Gen AI) tools are appropriate for your research. It is important to understand that these tools recognise patterns but do not understand the content. Whilst it can lead to biases and inaccuracies in the content they generate, it may breach security of confidential and sensitive data. You will need to check with each journal their rules for using GenAI.

PEER REVIEW

The University encourages peer review as an important part of good practice in the assessment of applications for research grants, review of research proposals, and the publication and dissemination of research findings.

Researchers must not use AI to support peer review without explicit permission. Uploading confidential manuscripts into generative tools may breach trust or policy.

RESEARCH ETHICS

The University aims to provide a competent, rigorous, and independent process of ethical review, which is proportionate to the anticipated risks involved in a research project.

As a researcher you:

- Should consider all ethical and regulatory issues before any research work commences.
- Should ensure that you are fully aware of and comply with all ethical and legal obligations and guidelines as required by relevant stakeholders, including seeking ethical review, and approval and authorisation for research where appropriate.
- Must observe the University's Ethics Policy at all times.
- Must ensure you act and conduct your research to the highest ethical standards.
- Should be aware that the Guidance on the use of secondary data for research purposes may require ethical review where there are ethical considerations.
- Must register **all** research requiring ethical review on the University's electronic ethics and governance platform ERGO II irrespective of whether the research will be ethically reviewed internally or by an external body.
- Must not commence research and data collection, including recruitment of participants or fieldwork, until ethical approval has been granted by the Faculty Research Ethics Committee (FREC) and/or other relevant external body (i.e. Health Research Authority (HRA) NHS Research Ethics Committee). Further governance reviews by the University's Research Ethics and Governance Office (REGO) and Insurance Office may be required as appropriate.
- Must contact risethics@soton.ac.uk if you are in doubt about the need for ethical review.
- If a staff member intends to carry out staff non-scientific research (i.e. a survey for University purposes which is not intended for publishing) this would require ethical review through Administrative Research Ethics and Quality Assurance (AREQA).

RESEARCH INVOLVING HUMAN PARTICIPANTS, HUMAN MATERIAL OR PERSONAL DATA

The University is committed to protecting the rights, welfare, safety, and dignity of all those involved in research, and to promoting and achieving the highest ethical standards.

Where research involves the participation of individuals as the subjects of investigation, as a researcher you must:

- Ensure the research complies with the University's Ethics Policy.
- Complete the accredited Good Clinical Practice Training or enquire via risethics@soton.ac.uk and ensure that all clinical research involving human participants is undertaken in line with the principles of Good Clinical Practice for Clinical Trials.
- Ensure that clinical medical device trials are undertaken in line with the appropriate ISO standards.

Where research studies involve human biological material, as a researcher you must:

- Comply with the relevant Human Tissue Authority (HTA) Code of Practice and Standards E: Research as required for the University of Southampton's HTA Research Licence.
- Abide by the University Use of Human Tissue in Research policy.
- Ensure all human 'relevant' samples collected comply with the HTA Code A: Guiding Principles and the Fundamental Principle of Consent as required under the Human Tissue (HT) Act 2004.
- Check if the human samples being donated or collected are considered' relevant material under Human Tissue Act 2004' (the list is not definitive); for any query concerning (whether or not) human material being collected for research purposes is 'relevant' please contact RICO via researchintegrity@soton.ac.uk.
- Adhere to the University's Biological Material Safety Policies and have the appropriate approval to ensure any biological material used in research does not pose a risk to human health.
- Ensure you have appropriate research ethical approval to collect or purchase all human relevant and non-relevant material.

SPONSORSHIP FOR CLINICAL RESEARCH

The Sponsor takes primary responsibility for ensuring that the design of the study meets applicable standards and that arrangements are in place for appropriate research conduct and reporting.

Any research requiring sponsorship must have an organisation willing and able to take on the responsibilities of the research Sponsor. The responsibilities of Sponsors are set out in more detail in the UK Policy Framework for Health and Social Care Research 2025 written by the Health Research Authority (HRA) and the health departments in Northern Ireland, Scotland and Wales have developed the policy framework, following public consultation.

The University can act as a research Sponsor; however, this does not constitute blanket acceptance for all University-led research projects. The risks attached to assuming the role of the Sponsor vary and are assessed and considered on an individual project basis. Any requests for Sponsorship should be made via ERGO II.

Sponsorship in principle is required for all high-risk studies including human challenge, drug or medical device trials and should be requested via ERGO II before submission of grant applications. For sponsorship queries contact rgoinfo@soton.ac.uk.

In the case of **medical device trials**, the University may also be acting as the legal manufacturer. It is essential that you contact REGO via rgoinfo@soton.ac.uk as early as possible to determine who is the legal manufacturer and how the responsibilities will be delegated. Further guidance and information can be found at REGO Medical Devices SharePoint site. The legal manufacturer must demonstrate that the product meets requirements of the United Kingdom Medical Device Regulations (UKMDR) and the European Union Medical Device Regulations (EUMDR), as well as registering with the Medical and Healthcare products Regulatory Agency (MHRA).

MONITORING AND AUDIT

Any Research undertaken by the University can be subject to monitoring and audit by the University and/or external regulatory bodies and competent authorities, to ensure that it is carried out in accordance with good practice, and all legal and ethical requirements.

As a researcher you should:

- co-operate with monitoring and audit of your research studies and any outcomes.

ADVERSE EVENTS

Adverse Events (AEs) are negative events that occur as a result of carrying out the research project and may include incidences that cause harm (i.e. to the environment, participants, University reputation and the integrity of the research). In clinical research, researchers should follow the reporting guidelines in accordance to Good Clinical Practice for Clinical Trials.

As a researcher you must:

- Report any adverse events and incidents that occur during, or result from, a research project to the Research Ethics and Governance Office (REGO) via rgoinfo@soton.ac.uk.
- Be familiar with any relevant legal or regulatory requirements and time frames to report adverse events directly to external regulatory bodies, competent authorities, or funders.
- Promptly report any accidents, incidents, dangerous occurrences and 'near misses' during the course of research in line with the University's Health and Safety Policy.

Queries on reporting requirements can be sent to the REGO Team via rgoinfo@soton.ac.uk.

RESEARCH INVOLVING ANIMALS

The use of animals in research is governed by the Animal (Scientific Procedures) Act 1986 and this Act is enforced by the Animals in Science Regulation Unit (ASRU).

The University is a signatory to the Concordat on Openness on Animal Research and is committed to the highest standards of animal welfare, including the principle of **3Rs**:

1. **R**eplacing animals with alternative methods wherever possible
2. **R**educing the number of animals used
3. **R**efining procedures whenever possible

Researchers considering bringing the 3Rs into their research can seek guidance from the National Centre for Replacement, Reduction Refinement of Animals in Research (NC3Rs) and Replacing Animals Research who have created a Replacement Checklist which can be found in Appendix II.

As a researcher you must:

- Ensure that research involving animals has prior approval from the University's Animal Welfare and Ethical Review Body (AWERB), and appropriate Home Office licences for the University, the study project, and the investigator.
- Be familiar with The University of Southampton policy for using animals in research and education and comply with all legal and ethical requirements and applicable guidance.
- Maintain the highest standards of care for all animals involved in research.
- Ensure other types of research involving animals not covered by ASPA receive an appropriate ethics review and approval by AWERB or the Animal Committee. Advice and information can be sort at awerb@soton.ac.uk and AWERB website and ethics applications are submitted in ERGO II.

CODE OF CONDUCT REVIEW AND VERSION CONTROL

This 'Code of Conduct' and its implementation will be regularly reviewed every three years by the University's Research Integrity and Governance Committee (RIGC). The review will take into account any new regulatory and legislative requirements, changes and recommendations from external research funding organisations, as well as relevant stakeholders.

Version	October 2025
Author	Dr Julie Merriman-Jones, Head of Research and Integrity and Compliance Office (RICO), Research Innovation Services (RIS)
Approval	Research Integrity and Governance Committee (RIGC) – provisional approval (July 2025); RIGC Chair approval for publication October 2025
Revision Date	2028

ACKNOWLEDGEMENTS

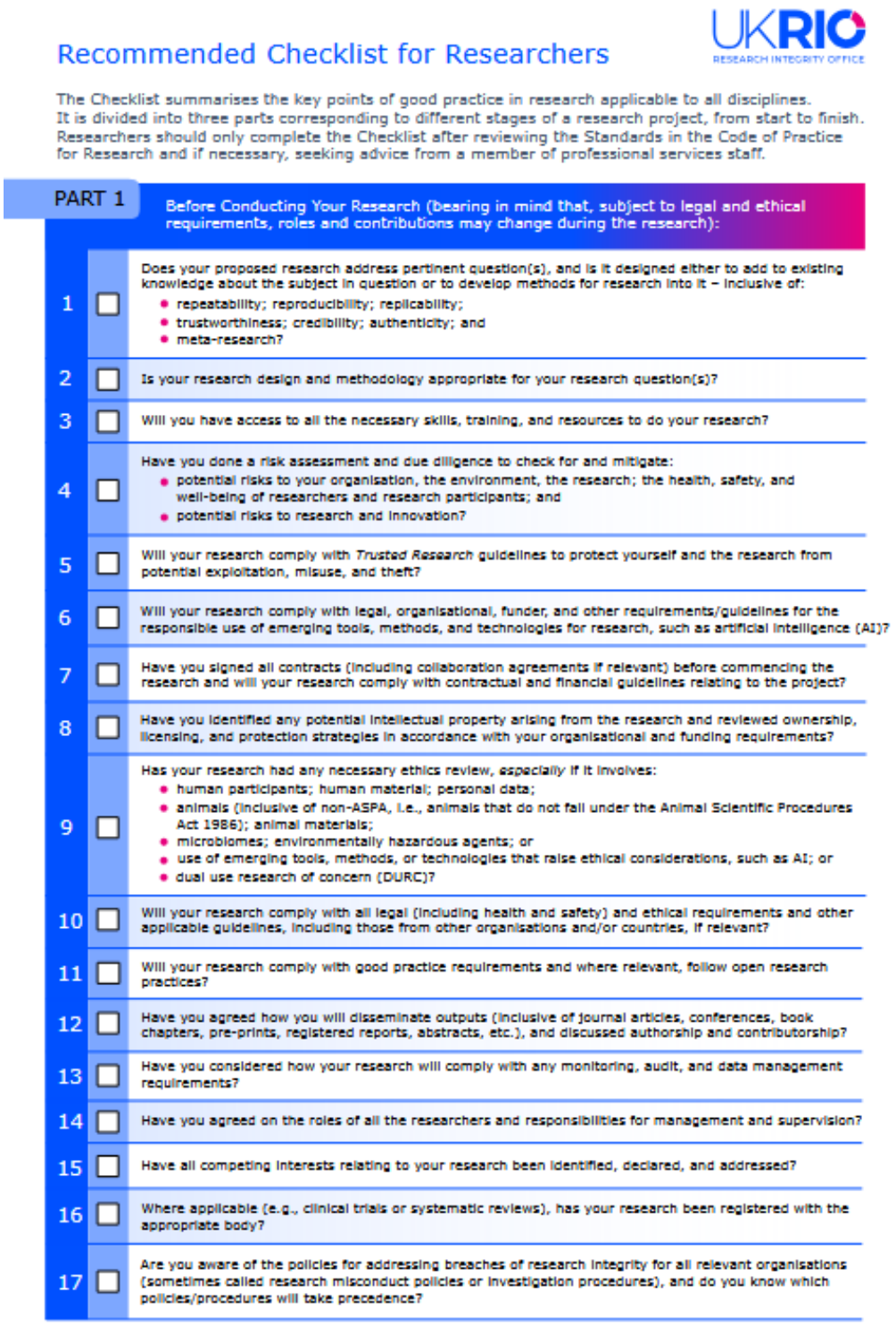
The University of Southampton gratefully acknowledges that the following external documents were referred to when preparing this Code of Conduct:

Cardiff University, 2019. Research Integrity & Governance Code of Practice.
DGF – German Research Foundation, 2019. Safeguarding Good Scientific Practice.
European Science Foundation, ALLEA (ALL European Academies), 2023 Revised Edition. The European Code of Conduct for Research Integrity.
OECD Global Science Forum, 2009. Investigating Research Misconduct Allegations in International Collaborative Research Projects. A practical guide.
OECD Global Science Forum, n.d. Best Practice for Ensuring Scientific Integrity and Preventing Misconduct.
Research Councils UK, 2013. UKRI Policy and Guidelines on Governance of Good Research Conduct.
UK Research Integrity Office (UKRIO) Code of Practice for Research: Promoting good practice and preventing misconduct, Version No. 3.5, Publication Date: 8/07/2025.
University College London, 2023. UCL Code of Conduct for Research.
University of Birmingham, 2021. Code of Practice for Research.
University of Glasgow, 2023. Code of Good Practice in Research.
University of Manchester, 2022. Code of Good Research Conduct
University of Nottingham, 2021. Code of Research conduct and Research Ethics.
University of Oxford, 2022. Academic integrity in research: Code of practice and procedure.
University of Warwick, 2024. Research Code of Practice.
University of York, 2022. Code of practice and principles for good ethical governance.
Universities UK (UUK) Concordat to Support Research Integrity, published 4 April 2025.

APPENDICES

I: UKRIO RECOMMENDED CHECKLIST FOR RESEARCHERS

UKRIO Recommended Checklist for Researchers 2025 (Parts 1, 2 and 3) is available to download from the UKRIO website.



Recommended Checklist for Researchers

UKRIO RESEARCH INTEGRITY OFFICE

The Checklist summarises the key points of good practice in research applicable to all disciplines. It is divided into three parts corresponding to different stages of a research project, from start to finish. Researchers should only complete the Checklist after reviewing the Standards in the Code of Practice for Research and if necessary, seeking advice from a member of professional services staff.

PART 1 Before Conducting Your Research (bearing in mind that, subject to legal and ethical requirements, roles and contributions may change during the research):

1	☐	Does your proposed research address pertinent question(s), and is it designed either to add to existing knowledge about the subject in question or to develop methods for research into it – inclusive of: • repeatability; reproducibility; replicability; • trustworthiness; credibility; authenticity; and • meta-research?
2	☐	Is your research design and methodology appropriate for your research question(s)?
3	☐	Will you have access to all the necessary skills, training, and resources to do your research?
4	☐	Have you done a risk assessment and due diligence to check for and mitigate: • potential risks to your organisation, the environment, the research; the health, safety, and well-being of researchers and research participants; and • potential risks to research and innovation?
5	☐	Will your research comply with *Trusted Research* guidelines to protect yourself and the research from potential exploitation, misuse, and theft?
6	☐	Will your research comply with legal, organisational, funder, and other requirements/guidelines for the responsible use of emerging tools, methods, and technologies for research, such as artificial intelligence (AI)?
7	☐	Have you signed all contracts (including collaboration agreements if relevant) before commencing the research and will your research comply with contractual and financial guidelines relating to the project?
8	☐	Have you identified any potential intellectual property arising from the research and reviewed ownership, licensing, and protection strategies in accordance with your organisational and funding requirements?
9	☐	Has your research had any necessary ethics review, *especially* if it involves: • human participants; human material; personal data; • animals (inclusive of non-ASPA, i.e., animals that do not fall under the Animal Scientific Procedures Act 1986); animal materials; • microbiomes; environmentally hazardous agents; or • use of emerging tools, methods, or technologies that raise ethical considerations, such as AI; or • dual use research of concern (DURC)?
10	☐	Will your research comply with all legal (including health and safety) and ethical requirements and other applicable guidelines, including those from other organisations and/or countries, if relevant?
11	☐	Will your research comply with good practice requirements and where relevant, follow open research practices?
12	☐	Have you agreed how you will disseminate outputs (inclusive of journal articles, conferences, book chapters, pre-prints, registered reports, abstracts, etc.), and discussed authorship and contributorship?
13	☐	Have you considered how your research will comply with any monitoring, audit, and data management requirements?
14	☐	Have you agreed on the roles of all the researchers and responsibilities for management and supervision?
15	☐	Have all competing interests relating to your research been identified, declared, and addressed?
16	☐	Where applicable (e.g., clinical trials or systematic reviews), has your research been registered with the appropriate body?
17	☐	Are you aware of the policies for addressing breaches of research integrity for all relevant organisations (sometimes called research misconduct policies or investigation procedures), and do you know which policies/procedures will take precedence?

Part two and three of the Checklist summarises the key points of good practice during the conduct and upon completion of the research. Researchers should review the Standards in the Code of Practice for Research and if necessary, seek advice from a member of professional services staff before completing this Checklist.

PART 2

When Conducting Your Research:

1	☐	Are you following the agreed design and methods for the project?
2	☐	Have any changes to the agreed design, methods, and hypotheses been reviewed and approved, if applicable?
3	☐	Are you following best practices to collect, create, produce, compile, store, and manage your research outputs?
4	☐	Are agreed roles and responsibilities for management and supervision being fulfilled?
5	☐	Is your research complying with any monitoring, audit, and appropriate data management requirements?
6	☐	Is your research in compliance with all requirements and guidelines for the responsible use of emerging tools, methods, and technologies for research (such as AI), including human oversight and transparency?
7	☐	Have you reviewed authorship and contributorship agreements at this stage of the project?

PART 3

When Finishing Your Research:

1	☐	Does your research comply with all legal, ethical, and contractual requirements?
2	☐	Are agreements relating to intellectual property, publication, authorship, contributorship, international collaboration, and innovation being complied with?
3	☐	Will all contributions to the research be acknowledged?
4	☐	Will your research and all its findings (inclusive of null results) be reported accurately, honestly, completely, and within a reasonable time frame?
5	☐	Will the research outputs be retained in a secure and accessible form and for the required duration?
6	☐	Will research outputs be made open and accessible?
7	☐	Will research outputs comply with all dissemination requirements and guidelines relating to the use of emerging tools, methods, and technologies for research (such as AI) including full and transparent disclosure of their use?

DOI: https://doi.org/10.37672/UKRIO.2023.08.recommendedchecklistresearcher

II: REPLACING ANIMAL RESEARCH: REPLACEMENT CHECKLIST

Replacing Animal Research, formerly known as FRAME, is a charitable organisation fighting for a future where no animal suffers for science. They publish a Replacement Checklist available to download.

Replacement Checklist

Replacing Animal Research

When looking for non-animal technologies, or alternative approaches to the use of animals in research, there are steps to take to thoroughly explore existing opportunities and new approaches to answering a research question.

Similarly, for those reviewing proposals, whether an application for funding or for a licence to use animals in research, there are questions that do not require subject-specialist knowledge that could be asked to provide reassurance that the potential to replace animals has been fully explored.

In the simplest terms, asking the What, Where, When, Who, How and Why questions should provide information to guide both researchers and reviewers of proposals and applications to ensure a thorough exploration of opportunities to avoid animal use has been performed.

What subject area(s) did the search(es) cover?

Are the search terms and variants used provided? Searching for potential animal replacements within any given field requires a combination of search terms: subject-specific terms, and keywords focusing on techniques avoiding animal use. Many non-animal approaches with the potential to provide useful data and replace animal use will not necessarily be tagged in literature with '3Rs', 'replacement', or 'alternative' and so it is helpful to use terms implying non-animal methods e.g. in vitro, microphysiological, model, assay etc.	☐
Are the search terms relevant to the field of study? What subject-specific terms were used to try and identify alternative approaches appropriate to the field? Were any variants of keywords included? (Please note that some databases automatically generate variants of search terms)	☐
Is there anything missing from search methodology?	☐

Where was information obtained?

Which databases were searched? Has a list of the databases or other sources of information been provided? Were multiple sources of information explored?	☐
Which websites were searched? Have specific (and relevant) websites been included in the report of the search for alternatives?	☐
Was any other 'grey literature' included? Has any 'grey literature' been mentioned? Did the search include pre-registered protocols, pre-prints of papers or information produced outside of traditional publishing and distribution channels, including reports, policy literature, newsletters, government documents, white papers or similar?	☐

The "Replacement Checklist" has been submitted as part of *"Reviewing Current Guidance for the 'R' of Replacement and Rethinking it with the 'Replacement Checklist'"* 2024, by Dukes, J., Beale, A. and Camp, C. submitted to ATLA as manuscript ID ATL-24-0031.R1.

Replacement Checklist

Replacing Animal Research

How was the search conducted?

What combination of operators and search terms was used? Were search terms combined appropriately?	☐
Were search string(s) constructed? Were the combined search terms and operators recorded?	☐
Were different types of searches used for different sources of information?	☐

When was info published, and search(es) completed?

What publication years were included? Science and technology can progress rapidly, did the search involve the most up to date publications? What years of publication or release were included in the search?	☐
When was the search conducted? How long prior to the application being completed and submitted was the search conducted?	☐
Was it repeated? Was the search repeated at multiple time points, or was it carried out only once?	☐

Who was approached for advice?

Which networks, communities or individuals? Were any peers, or subject specific experts consulted? Or any of the expected beneficiaries of the research?	☐
Were any 3Rs or 1R organisations approached for expert advice? Several organisations exist to progress and promote the 3Rs, and some focus solely on replacement. Were any of them approached for advice?	☐

Why were results of the search(es) rejected?

Were the results of the search provided? Have any references (papers, technical information) about potential techniques, or combinations of techniques, been reported?	☐
Were the results relevant to the field?	☐
Could any identified protocols be adapted to suit? What changes would need to be made to existing techniques in order to achieve research goals? Are any in development?	☐
If results were rejected, was it justifiable to do so? Was the output thoroughly evaluated? Has evidence of assessment been provided? Were any approaches found to be relevant to the research? What were the limitations of the approaches found? What would it take to optimise them to be suitable? Would there be an opportunity to replace part of the overall programme of work?	☐

The "Replacement Checklist" has been submitted as part of *"Reviewing Current Guidance for the 'R' of Replacement and Rethinking it with the 'Replacement Checklist'"* 2024, by Dukes, J., Beale, A. and Camp, C. submitted to ATLA as manuscript ID ATL-24-0031.R1.