

Swinburne Responsible Conduct of Research Guidelines

Approved by	Deputy Vice Chancellor, Research and Development
Contact	Research Integrity Coordinator, Swinburne Research
Related documentation	<ul style="list-style-type: none">• Australian Code for the Responsible Conduct of Research (2018)• National Statement on Ethical Conduct in Human Research (2001) – updated 2018• Swinburne Researcher Guide to the Management of Potential Breaches of the Australian Code
Date effective	1 July 2019
Date of next review	July 2022

Purpose

These guidelines articulate the commitment and approach to the responsible conduct of research expected of all persons engaged in research at or through Swinburne University of Technology. The University has developed these guidelines to meet the principles and responsibilities as established in the [Australian Code for the Responsible Conduct of Research \(2018, referred to as the Code\)](#).

Scope

These guidelines apply to researchers and those personnel who assist with the conduct of research. This includes academic staff, professional staff, students (including Research Higher Degree (RHD) students and industry placement students) and technical staff as well as visiting academics and adjunct appointees University-wide, including Sarawak campus.

All research at Swinburne must be conducted in accordance with these Guidelines and the Code irrespective of the funding source or whether the research requires ethics clearance.

Failure to conduct research in accordance with these Guidelines or the Code may be grounds for disciplinary action (refer to the Swinburne Research Misconduct Guidelines).

Application

All researchers and those personnel who are assisting in the conduct of research under the auspices of the University must familiarise themselves with these Guidelines and ensure that its provisions are observed. This includes when research is conducted outside Australia.

Where researchers and those personnel who are assisting in the conduct of research are in doubt about the applicability of provisions of these guidelines or the appropriate course of action to be adopted, particularly with regard to possible or actual breaches of these Guidelines or instances of research misconduct, advice should be sought in the first instance from any of the [Advisors in Research Integrity](#) appointed by the University.

These Guidelines must be read in conjunction with applicable regulations, policies and closely-related Swinburne guidelines including:

- [Swinburne People, Culture and Integrity Policy](#)
- Swinburne Researcher Guide to the Management of Potential Breaches of the Australian Code
- [HDR Research Training Statement of Practice](#)
- [Research Data Management Guidelines](#)
- [Australian Code for the Responsible Conduct of Research \(2018\)](#)
- [National Statement on Ethical Conduct on Human Research \(2007\) – updated 2018](#)

Definitions

Word/Term	Definition
Code	Australian Code for the Responsible Conduct of Research (2018)
3Rs	The 3Rs are three principles that underpin a systematic framework to achieve the goal of humane experimental techniques. The principles are: Replacement of animals with other methods; Reduction in the number of animals used; and Refinement of techniques used to minimise the adverse impact on animals.
Conflict of interest	A conflict of interest exists in a situation where an independent observer might reasonably conclude that the professional actions of a person are or may be unduly influenced by other interests. This refers to a financial or non-financial interest which may be a perceived, potential or actual conflict of interest.
Research	The concept of research is broad and includes the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies, inventions and understandings. This could include synthesis and analysis of previous research to the extent that it is new and creative.
Researcher	Person (or persons) who conducts, or assists with the conduct of, research. This includes adjuncts, HDR students on placement, HDR students who are located outside of Australia, researchers and HDR students located in Sarawak, casual employees, contract employees.
Breach	A failure to meet the principles and responsibilities of the Code. May refer to a single breach or multiple breaches.
Research misconduct	A serious breach of the Code which is also intentional or reckless or negligent

1. Principles of responsible research conduct

These principles are taken directly from the Code and reproduced here to emphasise the importance of each principle.

- 1.1. Honesty in the development, undertaking and reporting of research. Present information truthfully and accurately in proposing, conducting and reporting research.
- 1.2. Rigour in the development, undertaking and reporting of research. Underpin research by attention to detail and robust methodology, avoiding or acknowledging biases.
- 1.3. Transparency in declaring interests and reporting research methodology, data and findings. Share and communicate research methodology, data and findings openly, responsibly and accurately. Disclose and manage conflicts of interest.
- 1.4. Fairness in the treatment of others. Treat fellow researchers and others involved in the research fairly and with respect. Appropriately reference and cite the work of others. Give credit, including authorship where appropriate, to those who have contributed to the research.
- 1.5. Respect for research participants, the wider community, animals and the environment Treat human participants and communities that are affected by the research with care and respect, giving appropriate consideration to the needs of minority groups or vulnerable people. Ensure that respect underpins all decisions and actions related to the care and use of animals in research. Minimise adverse effects of the research on the environment.
- 1.6. Recognition of the right of Aboriginal and Torres Strait Islander peoples to be engaged in research that affects or is of particular significance to them. Recognise, value and respect the diversity, heritage, knowledge, cultural property and connection to land of Aboriginal and Torres Strait Islander peoples. Engage with Aboriginal and Torres Strait Islander peoples prior to research being undertaken, so that they freely make decisions about their involvement. Report to Aboriginal and Torres Strait Islander peoples the outcomes of research in which they have engaged.
- 1.7. Accountability for the development, undertaking and reporting of research. Comply with relevant legislation, policies and guidelines. Ensure good stewardship of public resources used to conduct research. Consider the consequences and outcomes of research prior to its communication.
- 1.8. Promotion of responsible research practices. Promote and foster a research culture and environment that supports the responsible conduct of research.

2. Researcher Responsibilities

2.1. Research Integrity

Researchers are expected to:

- 2.1.1 Foster and maintain a culture of responsible research conduct.
- 2.1.2 Conduct their research with honesty, integrity, respect, scholarly and scientific rigour.
- 2.1.3 Conduct research that is trustworthy, uses appropriate methods; and report findings accurately. All researchers are accountable for the conduct of their research.
- 2.1.4 Complete and promote training in responsible research conduct. This includes any training specific to a researcher's particular field of practice.
- 2.1.5 Adopt methods appropriate to the aims of the research and ensure that conclusions are justified by the results.

Example: Completing & promoting training

You are a member of a research group that conducts clinical trials. Being involved with clinical trials not only requires you to be well versed in the National Statement for the Ethical Conduct of Human Research and any updates to this document that are released periodically, but also in the principles of Good Clinical Practice (GCP), the requirements of the Therapeutic Goods Administration (TGA) and the Swinburne policy relating to conflicts of interest. It is up to the researcher to ensure they are up to date with any relevant training and to keep completion records of relevant training.

2.2. Supervision of Research Trainees

Research trainees including honours students, Higher Degree by Research (HDR) students and industry placement students are an important part of Swinburne. Supervision of HDR students must be conducted in accordance with the [Research Training Statement of Practice](#) as well as the provisions in Code and these guidelines.

Supervisors should:

- 2.2.1 Guide the professional development of research trainees and students. This involves providing guidance in all matters relating to research conduct, and overseeing all stages of the research process. This includes identifying the objectives and approach, obtaining ethics and other approvals, obtaining funding, conducting the research, and reporting the research outcomes in appropriate forums and media.
- 2.2.2 Ensure that students receive appropriate training to conduct their research in accordance with these guidelines, the Code; and any other relevant policy, regulation or legal requirement.
- 2.2.3 Provide guidance and mentorship on responsible research conduct, as described in these guidelines, to research trainees under their supervision and, where appropriate, monitor their conduct.
- 2.2.4 Have oversight of the research outcomes from those under supervision.
- 2.2.5 Be satisfied that the research methods and outcomes of research trainees and students under their supervision are appropriate and valid.
- 2.2.6 Ensure that research trainees and students receive appropriate credit for their work.
- 2.2.7 Assist their students in developing the necessary skills for peer review and understanding their obligation to participate in the peer review process.

2.3. Ethics, Biosafety and Other Regulatory Requirements

The ethical conduct of research is important as it promotes a culture of accountability and respect for human and animal participants involved in the research and for minimising harm to the wider community and environment.

Swinburne researchers should:

- 2.3.1 Obtain any necessary written approvals from the appropriate ethics committee(s), biosafety committee or any other regulatory body as required by Swinburne policies or guidelines prior to commencing research and ensure that conditions of any approvals are adhered to during the course of the research. Clinical trials must be registered with a recognised register in order to promote access to clinical trials.
- 2.3.2 Ensure that before any modifications to an approved project are implemented the appropriate ethics committee(s), biosafety committee or regulatory body are informed of any proposed relevant changes to the project;
- 2.3.3 Ensure that, if required, an extension to the approval period is applied for from the appropriate ethics committee(s), biosafety committee or regulatory body, prior to the lapse of that approval.
- 2.3.4 Ensure that the 3Rs (Replacement, Reduction and Refinement) will be considered at all stages of research involving animals and that this research is conducted in accordance with the Australian Code for the Care and Use of Animals for Scientific Purposes.
- 2.3.5 Ensure that research is conducted in a way to minimise adverse effects on the wider community and the environment.
- 2.3.6 Ensure that when conducting research with or about Aboriginal and Torres Strait Islander peoples you respect their legal rights and local laws, customs and protocols. The [Values and Ethics – Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research](#) and the [AIATSIS Guidelines for Ethical Research in Australian Indigenous Studies](#) must be consulted.

Example: Professor John Verygood recently moved his research group to Swinburne. John's research had approval from his previous institution's Human Research Ethics Committee. To make sure that the research maintained ethics approval, John submitted his previous institution's HREC approval documents to the Swinburne Research Ethics Office. Given that nothing else had changed except for the lead institution, the documents were processed through the expedited review process and only minor changes to the consent documentation (changing researcher affiliation) was required. When a new Research Assistant was hired by the research team, a modification to the existing ethics application was submitted and approved prior to the new RA commencing any research on that project.

2.4. Conflicts of Interest

A conflict of interest exists where there is a divergence between the individual interests of a person and their professional responsibilities such that an independent observer might reasonably conclude that the professional actions of that person are unduly influenced by their own interests.

Conflicts of interest in research are common and are frequently unavoidable. Expert advice is frequently needed, and the pool of experts in a field can be so small that all the experts have some link with the matter under decision. It is important that any conflict of interest be disclosed and dealt with properly. The perception that a conflict of interest exists is also a serious matter and can

raise concerns about the integrity of individuals or the institution and can be as problematic as an actual conflict of interest.

Actual or perceived conflicts of interest could arise through membership of committees or boards, selection committees, advisory groups, personal relationships, consultancies, financial delegations, institutional responsibilities, peer review, or receipt of funding or equipment from outside bodies.

Researchers must:

- 2.4.1 Maintain records of activities that may lead to conflicts, for example: consultancies; membership of committees, boards of directors, advisory groups, or selection committees; and financial delegation or in receipt of cash, services or equipment from outside bodies to support research activities
- 2.4.2 When invited to join a committee or equivalent, review current activities for actual or apparent conflicts and bring possible conflicts of interest to the attention of those running the process
- 2.4.3 Disclose to their line manager or other appropriate senior manager any actual, potential or perceived conflicts of interest. A conflict of interest may need to be lodged with the [Swinburne Conflict of Interest register](#). A management plan may also be required for each declaration.
- 2.4.4 Respect queries by the University and provide relevant information in relation to potential conflicts of interest.

2.5. Research Data and Records

Research can generate large volumes of data, records and primary materials. Responsible research data and record management practices are important to ensure the integrity of the data is maintained. Your data and materials must be retained to justify the outcomes of research and to defend them if they are challenged. If sufficient data and materials are not retained then the research findings should not be published.

Researchers should:

- 2.5.1 Prior to commencing a project develop a [research data management plan](#) including procedures for storage, access during and after the project, retention requirements and destruction. Details of the data may include file formats, data quality, technical aspects and hardware or processing parameters.
- 2.5.2 Maintain clear, accurate, secure and complete records of all research including research data and primary materials. Primary materials and records should be afforded the same care as analysed data.
- 2.5.3 Ensure that materials, relevant to the discipline and methodology (such as questionnaires, fieldwork note books, notations recorded during interviews, specimens), are retained in order to substantiate results and published conclusions. The recommended length of time for data retention is five years from the date of any published or reportable outcome based on that data however for identifiable health research data the minimum period may need to be seven years, for clinical trials the data may need to be retained for a minimum of fifteen years and for participants that

were minors at the time of participation in the research project the data must be retained until they reach 25 years of age.

- 2.5.4 Where possible and appropriate (for example within the requirements of ethics approvals) allow access and reference to research data and records by interested parties.
- 2.5.5 Ensure that all data and records are stored in secure and safe location/s.
- 2.5.6 Only destroy data and records in accordance with all ethical and legal obligations making sure that consideration is given for confidentiality, collaborators and verification of any publications.
- 2.5.7 Not destroy any research data or records relevant to a research breach or misconduct or where published data or conclusions have been challenged.

Example: Jane publishes some exciting research data in a Q1 journal that relates back to current data and data from her PhD over 10 years ago. The validity of the data is queried by her peers and subsequently the Journal who request to see copies of her lab book and raw data files to verify her results. Jane has kept careful notes outlining the steps and findings of her research in her lab books and has kept all her previous and current data files as [recommended](#) and is able to readily substantiate her findings.

Swinburne has information on [data management](#) available including research data storage options, laboratory notebook guidelines, sharing your research data and movement and disposal of data.

2.6. Dissemination, Authorship and Publications

Communication, or dissemination, of research findings is an important part of the research process. Dissemination benefits other researchers, the wider community and it fulfils obligations to funding bodies. There are many ways to disseminate research findings such as in refereed academic journals or books, conference presentations, creative works and performances. Regardless of how research findings are disseminated the general principles of honesty, integrity and accuracy apply.

Authorship practices and conventions vary depending upon the discipline. Authorship is about ensuring that credit is given to those individuals and institutions contributing to the research. Researchers should discuss authorship early in a research project, including who will be listed, in what order and the responsibilities of each author; and should review authorship decisions periodically.

All researchers should:

- 2.6.1 Disseminate research findings responsibly, accurately and broadly subject to restrictions relating to intellectual property, confidentiality or commercially or culturally sensitive data. Researchers are to comply with any agreements made with funders and partners regarding restrictions on publications.
- 2.6.2 Offer authorship to all those, including research trainees, who meet the normal disciplinary or publication criteria for authorship. Written acceptance (or veto) of the

invitation to be an author must be obtained prior to publication from all those offered authorship.

- 2.6.3 Ensure that authors of research outputs are all those, and only those, who have made a significant intellectual or scholarly contribution to the research and its output; and that they agree to be listed as an author. The right to authorship is not tied to a position and must not be offered as a gift or honorary authorship. Authorship should reflect honest contribution to the published work.
- 2.6.4 Acknowledge those who have contributed to the research including all sources of financial and in-kind support for the research; and acknowledge all potential conflicts of interest.
- 2.6.5 Cite and acknowledge the work of other authors appropriately and accurately. It is not acceptable to use the work of other authors without acknowledgement. This also applies to the researcher's own publications, which must be cited in the same manner as the work of other authors.
- 2.6.6 Where necessary, take action to correct the record in a timely manner as soon as the researcher becomes aware of misleading or inaccurate statements about their research.

Best practice example: Tian develops a project that involves research groups from Sarawak, Malaysia, and Vancouver, Canada. To all those involved he sends a plan for the project including a breakdown on which group will be doing which experiments and the research papers that could be reasonably expected from the results. In the details of the research papers, Tian proposes who should be authors and in what order depending on their role. Tian explains to his collaborators that the proposals for each paper can be revisited and revised if all agree. Six months later there has been a change in one of the research groups. A new postdoc has joined the Vancouver group. Tian emails all the collaborators proposing a new authorship order for one of the papers and asks all involved if they agree with the change.

2.7. Peer Review

Peer review is the impartial and independent assessment of research by others working in the same or a related field. Peer review provides public credibility to the reporting of research. Researchers in receipt of public funding have a responsibility to participate in the peer review process.

Swinburne researchers should:

- 2.7.1 Participate in peer review in a way that is fair, rigorous and timely and maintains the confidentiality of the content.
- 2.7.2 Agree not to review any research for which they have a conflict of interest, or where the research is outside their area of expertise. However where there are limited numbers of potential reviewers with relevant expertise it may be unavoidable that a reviewer has some conflict of interest. A conflict of interest must be disclosed to the person/organisation requesting the review either prior to accepting the request or as soon as the conflict of interest becomes apparent.

- 2.7.3 Not seek to influence the process or the outcomes when their own work is the subject of the peer review.

2.8. Divergence from the Code and Research Misconduct

Researchers must take all reasonable steps to report suspected breaches of the Code to the Research Ethics, Integrity and Biosafety Office or a senior manager in the relevant faculty.

Researchers are encouraged to see the advice of a Research Integrity Advisor if they have any concerns about the research conduct of a fellow Swinburne researcher. If the concern regards a researcher from another institution the researcher should inform that institution's relevant authority for such matters.

Failure of a researcher to abide by these guidelines or the Code may result in disciplinary action in accordance with the Swinburne Researcher Guide to the Management of Potential Breaches of the Australian Code.

Example 1:

A HDR student working on his literature review noted that several papers were very similar and in parts exactly the same. The lead author was from Swinburne. The student approached a Research Integrity Advisor for advice and consequently informed the Research Ethics, Integrity and Biosafety (REIB) Office.

Example 2:

A researcher collaborating with a group from another institution noticed that the data set they were working on had been altered giving a more significant result than had initially been calculated. The new result supported their hypothesis far more significantly. The Swinburne researcher raised this alteration with the collaborators who checked their data and realised an error had been made in translation. The error was corrected.

It is important to raise concerns when it seems as though something is not right with the data or records. In this case there it was not a deliberate act that caused the change and fortunately the data was corrected prior to publication. The impact of incorrect data informing conclusions that are published could be far greater than expected.

Version control and change history

Version Number	Approval Date	Approved by	Amendment
1	July 2018		

Relevant codes

Name	Location
Australian Code of Practice for the Care and Use of Animals for Scientific Purposes (8 th Edition, 2013)	https://www.nhmrc.gov.au/guidelines-publications/ea28
National Statement on Ethical Conduct in Human Research (2007-updated 2018)	http://www.nhmrc.gov.au/files_nhmrc/file/publications/synopses/e72-jul09.pdf
Australian Code for the Responsible Conduct of Research (2018)	https://www.nhmrc.gov.au/guidelines-publications/r41