

Code for the Responsible Conduct of Research

1 Introduction

This code has been adopted with permission from the *Australian Code for the Responsible Conduct of Research*, which was jointly developed by the National Health and Medical Research Council, the Australian Research Council and Universities Australia.

The purpose of this code is to guide Ara Institute of Canterbury (Ara) and researchers in responsible research practices in the context of the Ara environment. This Code does not incorporate all the laws, regulations, guidelines and other codes of practice that apply to the conduct of research within New Zealand. Compliance with these requirements should be checked as needed.

The *APP803 Research & Knowledge Transfer Policy* and procedures provide the main framework for research, with support through other Ara policies and procedures.

Responsible research is encouraged and guided by the research culture at Ara that demonstrates:

- a Honesty and integrity.
- b Respect for human research participants, animals and the environment.
- c Good stewardship of public resources used to conduct research.
- d Strategic alignment.
- e Appropriate acknowledgment of the role of others in research.
- f Responsible communication of research results.

1.1 Responsibilities of Ara

- a Promote awareness of, and compliance with, all its policies, processes, guidelines and documents relating to the conduct of research.
- b Maintain a climate in which responsible and ethical behaviour in research is expected.
- c Promote quality in research, enhance the reputation of Ara and its researchers, and minimise the risk of harm for all involved.

1.2 Responsibilities of Researchers

- a Foster and maintain a research environment of intellectual honesty and integrity, and scholarly and scientific rigour.
- b Manage conflicts of interest so that ethical or scholarly considerations are not compromised.
- c Adopt methods appropriate for achieving the aims of each research proposal
- d Follow proper practices for safety and security.
- e Promote adoption of this code and avoid departures from it.

- f Conform to the policies, requirements and codes of practice of Ara and funding bodies.
- g Comply with ethical requirements.
- h Act in a timely manner if a research misconduct may have occurred (*CPP116 Protected Disclosures, CPP117 Raising Problems or Complaints, CPP117a Notification of Problem or Complaint*).
- i Take Treaty of Waitangi into account in planning, undertaking and dissemination of research.
- j Ensure that research findings are disseminated responsibly.
- k Conduct research so as to minimise adverse effects on the wider community and environment.

2 Management of Research Data and Primary Materials

2.1 Responsibilities of Ara

- a All research data and outputs are owned by Ara (*CPP106 Intellectual Property Policy*) unless there is a specific written agreement otherwise e.g. with a funder of the research.
- b Each Department must have an appropriate process for managing the retention storage, access and destruction of materials and research data.
- c Provide regular back up of electronic research data on the Ara system.
- d When staff leave, research data will be archived by the Department for remaining period of data retention, unless specified otherwise. In the absence of contractual, confidentiality or IP arrangements, staff may take data with them.

2.2 Responsibilities of Researchers

- a For research with external partners ownership and management of all associated data must be made in the MOU and contract, prior to the commencement of the project.
- b The researcher must decide which data and materials should be retained, in accordance with the law, funding agency, publisher or by convention in the discipline.
- c Ara author/s will retain their own data for 5 years after publication, unless otherwise required.
- d Data for student research projects should be held by Ara for 12 months after completion of the project, unless otherwise agreed in writing.
- e Ensure that information is only used in ways that were agreed to by the providers.
- f If the results from research are challenged, or if there is a misconduct inquiry all relevant data and materials must be retained until the matter is resolved.
- g Keep clear and accurate records of the research methods and data sources.
- h Leaders of research projects/programmes will ensure that research data and primary materials are kept in safe and secure storage, in a durable, and retrievable form, are managed and disposed of according to ethical protocols and relevant legislation.

3 Supervision of Emerging Researchers and Students

Staff may be required to undertake research and may need support if they are recent graduates or not undertaken research previously. Students may undertake a research project as part of their course work. The requirements of the research project will vary depending on the degree.

3.1 Responsibilities of Departments

Each Department will:

- a Ensure that training is provided on research ethics, research methods, occupational health and safety, environmental protection and technical matters relevant to the discipline and as specified in student course.
- b Provide support through an external supervisor or an appropriately qualified and/or experienced Ara supervisor/mentor.
- c For staff, provide training on this Code and Ara research policies.

3.2 For Student Projects:

- a Appoint appropriately qualified and experienced supervisors for student research projects who:
 - i Only supervise student projects within their area of expertise.
 - ii Are experienced researchers with a research degree (Masters by thesis or PhD), a minimum of four quality assured outputs, or are supervised by someone who has these qualifications or experience.
 - iii Are familiar with relevant Ara policies and procedures.
- b Ensure that the workplace co-operative agreements specify the party that has responsibility for ensuring there is appropriate supervision of any external student research projects.
- c Maintain a record of the students, their projects, supervisor(s) and approvals (project and ethics if required) and present records to the Department Board of Studies.
- d Ensure that the ratio of students to supervisors is low enough for effective intellectual interaction.
- e Ensure that projects are approved under delegation to the Board of Studies *APP803 Research and Knowledge Transfer Policy*.
- f Before work commences, ensure that ethics approval is granted by the RKT committee. For generic student research assignments, approval is delegated under conditions *APP803 Research and Knowledge Transfer Policy*.

3.3 Responsibilities of Ara Supervisor/Mentor

The supervisor/mentor will ensure that:

- a The scope of project is clearly defined stating the research topic, objective, procedures, specialist (e.g. laboratory) requirements, costs and schedules.
- b Project and ethics approvals are obtained as required, health and safety and/or confidentiality requirements are met.
- c Emerging researchers and students receive appropriate credit for their work.

3.4 Responsibilities of Supervisors of Student Research

- a Ensure that the scope of the student's project is within their capability and can be completed to a satisfactory standard within the time frame allowed.
- b Ensure that students have appropriate level of supervision, working on or off Ara site.
- c Direct the student to relevant areas of information, literature sources and specialised internal/external help; advise on appropriate methodologies/ techniques; advise on referencing style and the problem of plagiarism; provide peer review.
- d Maintain regular supervisory contact, regularly monitor the student's work and schedule meetings on a weekly basis (or other specified period).
- e Clearly state the expected output(s) such as written report, plans, drawings, models, video-tapes, audio tapes, software, art work, performance and provide grading criteria in advance.
- f Ensure students receive appropriate credit for their work.

3.5 Responsibilities of Emerging Researchers and Students

- a Ensure that the scope of the project is understood.
- b Attend scheduled meetings with supervisor.
- c Seek guidance and not wait until meetings with supervisor, as appropriate.
- d Meet any conditions attached to project approval including ethics and confidentiality.
- e Assign appropriate credit for the work to supervisors and collaborators.
- f Undertake training as directed.
- g Comply with health and safety requirements of Ara or any other organisation.

4 Publication and Dissemination of Research Findings

One of the main reasons for research is to allow for the advancement of an area of knowledge and so all research needs to be disseminated by publication, broadcasting or presenting at conferences and meetings. The publication of research papers can be via a recognised publisher, which means that their rules apply with regard to copyright and use of the work, or non-peer reviewed forms such as an open access webpage. Refer also to *Section 5 (Authorship)*.

4.1 Responsibilities of Ara

- a Encourage and support an environment of honesty, integrity, accuracy and responsibility in the dissemination of research findings and reporting.
- b Make researchers aware of their responsibilities under IP policy, contracts, confidentiality agreements and MOUs.
- c Agreements with sponsors shall identify the importance of publication and not unreasonably withhold permission to publish beyond time needed to protect IP.
- d Marketing provides advice on communication with the media and acknowledges the support and involvement of all sponsors and institutions.
- e Inform staff about copyright management.

4.2 Responsibilities of Researchers

- a Any publication or presentation should be accurate, complete and, if applicable, include details of any negative findings and/or results. If any inaccuracies are found later then the researcher must make every effort to ensure that these are corrected promptly.
- b The researcher must ensure that all use of other researchers work is fully and correctly cited.
- c Conditions attached to funding and confidentiality must be honoured in verbal and written dissemination of results.
- d Where confidentiality prevents peer review, the author shall explain the implications to the sponsor.
- e Reasonable effort should be made to obtain permission for republishing research findings.
- f The outcomes of research with a strong commercial element may have to be presented to a stock exchange or financial body before any public release.
- g Multiple submissions of research in several publications must be consistent with the copyright requirements of the publishers or conference organisers.
- h Publications shall include information on sponsors, whether in-kind or financial, and acknowledge the funder of the research and the host institution.
- i Record research outputs with required PBRF documentation in the Ara Research repository by January 31 of the following year.
- j Where research has not been peer reviewed but is being presented outside of the research group, then the status of the research output must be conveyed.
- k A disclaimer shall be included where research may be used by decision makers.

5 Authorship

The outcomes of research may be disseminated in a variety of ways but enduring forms, such as journal articles, are particularly important. The right to authorship is not tied to position or profession, nor is it enough to have provided materials or routine technical support, or to have made the measurements on which the publication is based.

5.1 Responsibilities of Ara

Ara criteria for authorship are:

- a Conception and design of the project.
- b Analysis and interpretation of research data.
- c Drafting significant parts of the work or critically revising it so as to contribute to the interpretation.

5.2 Responsibilities of Researchers

- a A researcher must have made a substantial scholarly contribution to the work and be able to take responsibility for at least that part of the work they contributed.
- b Where there are several authors, one shall be appointed to have overall management.

- c All the authors of a piece of work must be included, unless they decline in writing.
- d All those who have contributed to the research, facilities or materials must be properly acknowledged, such as research assistants and technical writers.
- e Senior author must have written acknowledgement of authorship from all authors.
- f If an author is deceased or cannot be contacted, the publication can proceed provided that there are no grounds to believe that this person would have objected to being included as an author.
- g The order of the listing and its format should be decided on in the early stages of the research.
- h Where relevant a contact author must also be decided upon and listed in research outputs.
- i Where a publisher does not set a format for the display of names the final listing should be decided on by all authors.
- j Sometimes the editor of a significant collective work or anthology has responsibilities analogous to those listed above for authorship; in such cases, similar criteria apply to 'editor' as to 'author', where that person has played a significant role in the intellectual shaping of a publication.
- k Authors of web-based publications must be able to take responsibility for the publication's content and must be clearly identified in the publication.

6 Technical Review

The term 'technical review' is used here to describe impartial and independent assessment of research by others working in the same or a related field. The reviewer must be someone with an established reputation in the field. Technical review has important roles in research and research management. It provides expert scrutiny of a project, and helps to maintain high standards and encourage accurate, thorough and credible research reporting.

6.1 Responsibilities of Departments

- a To provide peer review of research project/ programme applications as they are developed.
- b Appoint technical reviewer(s) for internal research project and programme applications.
- c Ensure that reviewers have the appropriate knowledge, skills and experience for the proposed projects and programmes. They may be external.
- d Departments should support participation in technical review more widely by:
 - i Pairing experienced reviewers with others who are less experienced in the technical review process in order to build capability within and across research teams.
 - ii Encouraging participation in conference organising work where peer review of abstracts, submissions, papers or other contributions and ensuing publications is required.
 - iii Encouraging participation in editorial work for books, journals or other publications.

6.2 Responsibilities of Technical Reviewers

It is important that participants in the technical review:

- a Are fair and timely in their review.
- b Act in confidence and do not disclose the content or outcome of any review process.
- c Take responsibility for mentoring less experienced co-reviewers.
- d Declare all conflicts of interest, do not permit personal prejudice to influence the peer review process, and do not introduce considerations that are not relevant to the review criteria.
- e Do not take undue or calculated advantage of knowledge obtained during the review process.
- f Ensure that they are informed about, and comply with, the criteria to be applied.
- g Do not agree to participate in technical review outside their area of expertise.
- h Give proper consideration to research that challenges or changes accepted ways of thinking.

6.3 Responsibilities of Researchers

It is important that during the technical review process, researchers:

- a Do not seek to influence the process or outcomes.
- b Participate in internal technical review processes if requested, as well as external processes.
- c Assist trainee researchers in developing the necessary skills for technical review and understanding their obligation to participate.
- d Declare conflicts of interest.

7 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. Actual and potential conflicts of interest in research may include financial, personal, professional and institutional advantages.

7.1 Responsibilities of Ara

- a Any person who has, or is perceived to have, a conflict of interest in a research project must declare it to the Central Research & Knowledge Transfer Committee through the Research & Knowledge Transfer Manager.
- b Processes for managing conflicts of interest are identified in the *CPP102 Disclosure and Management of Conflicts of Interest Policy* and require a full written disclosure by those involved of the circumstances giving rise to concerns about the conflict of interest. The information may be kept confidential and will need to comply with any other agreements in place.
- c A record must be kept of how each conflict is managed. Confidential information may be omitted.

7.2 Responsibilities of Researchers

Researchers frequently have a conflict of interest that cannot be avoided. The pool of experts in a field can be so small that all the experts have some link with the matter under decision. An individual researcher should therefore expect to be conflicted from time to time, and be ready to acknowledge the conflict and make disclosures as appropriate. While there is no requirement to disclose the details of a conflict of interest, for example, because of a confidentiality agreement or for personal reasons, the existence of the conflict must be declared.

Researchers should use the following approach to manage conflicts of interest:

- a Read and understand *CPP102 Disclosure and Management of Conflicts of Interest*.
- b 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.
- c 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.
- d Disclose any actual or apparent conflict of interest as soon as it becomes apparent.

8 Collaborative Research across Institutions

Collaborative research raises specific issues, such as sharing intellectual property, managing research findings, managing conflicts of interest, and commercialising research outcomes. Research practices differ between countries, but researchers supported by New Zealand public funding should make every effort to comply with this Code even when conducting research outside New Zealand.

8.1 Responsibilities of Ara

- a Conflicts of interest must be disclosed by researchers as soon as they arise in *CPP102 Disclosure and Management of Conflicts of Interest Policy*.
- b A joint research project should produce a written agreement outlining how the research will be managed and the results disseminated. It shall cover:
 - i Issues of intellectual property, confidentiality and copyright; shared of commercial returns, responsibility for ethics and safety;
 - ii Reporting to appropriate agencies,
 - iii Protocols to be followed by the partner organisations/researchers when carrying out and disseminating the research outcomes,
 - iv Management of primary research materials and research data.
- c A lead person should be identified for management of data, including storage and destruction.
- d Requirements for contracts are set out in the *CPP309 Principles and Practices Governing All Contractual Arrangements Policy*. Only the Chief Financial Officer has signing authority on any contractual agreement, including Memorandum of Understanding, Non-disclosure agreements etc.
- e An MoU may be prepared for a funding proposal which could include how changes which would be made to secure funding.

- f The lead Ara researcher must ensure that all involved researchers are aware of, and adhere to, the conditions of any agreement.

8.2 Responsibilities of Researchers

- a Researchers must be aware of, and comply with, all policies and written agreements affecting the project, particularly those relating to the dissemination of research findings and the management of research data and primary materials.
- b Disclose as soon as possible any actual or apparent conflicts of interest relating to the project.

9 Breaches of the Code and Misconduct in Research

A prompt and effective response is required to respond to any allegation that research has not been conducted responsibly. All affected parties must be treated fairly and the situation remedied, and appropriate steps taken to maintain public confidence in the research endeavour.

Definition - Research Misconduct: A complaint or allegation relates to research misconduct if it involves any of the following:

- a An alleged breach of Research Ethics.
- b Intent and deliberation, reckless or gross and persistent negligence.
- c Serious consequences, such as false information on the public record, or adverse effects on research participants, animals or the environment.
- d Fabrication, falsification, plagiarism or deception in proposing, carrying out or reporting the results of research.
- e Failure to declare or manage a serious conflict of interest.
- f Avoidable failure to follow research proposals as approved by a research ethics committee, and the wilful concealment or facilitation of research misconduct by others.

Research misconduct does not include honest differences in judgment in management of the research project and may not include honest errors that are minor or unintentional.

9.1 Breaches of the Code for the Responsible Conduct of Research

Specific actions or omissions that constitute breaches of this Code, but lack the seriousness of consequence or wilfulness to constitute research misconduct, may constitute research misconduct if repeated or continued. Breaches of this Code are classified as unacceptable behaviour under the *CPP221 Code of Professional Practice Policy* and *APP310 Student Rights and Responsibilities Policy*.

9.2 Resolving Allegations or Complaints

When an Ara staff member or manager is apparently failing to perform, or, failing to meet the requirements of the Code of Professional Practice and/or ethical standards for research and scholarly activity – the *CPP208 Resolving Staff Performance of Conduct Issues Policy* provides senior managers with the authority and a framework to take action. This policy offers a framework for dealing with minor through to serious issues, where penalties may be applied if the allegations are true. The framework addresses issues of fairness, delegation, the nature of the concern and the constitution of a Complaints Committee.

Breaches of Research Ethics require specific action by supervisors and responsible officers of the institution (see *APP804 Research Ethics Policy*). The *CPP116 Protected Disclosures Policy* protects staff who disclose breaches of the code. Related policies on receiving complaints or

allegations from students or external parties are *CPP117 Raising Problems or Complaints* and *CPP117a Notification of Problem or Complaint*.

9.3 Responsibilities at the Departmental Level

The Head of Department, Human Resources and Department Research Committee should agree on how they will implement this Code and cooperate in maintaining high standards of research practice.