
UNSW CODE OF CONDUCT FOR THE RESPONSIBLE PRACTICE OF RESEARCH

Approved by Academic Board on 2 March 2004

INTRODUCTION

Research is the scholarly or systematic investigation of a topic that leads to the establishment of new knowledge and/or concepts that advance understanding of a discipline. It includes fundamental discoveries as well as the critical evaluation of existing facts, opinions or processes. Those who undertake research must adhere to the highest principles of honesty and accuracy so that the total body of knowledge increases without distortion of the truth. It is therefore essential that researchers conduct their activities in an ethical and professional manner, ensuring validity and accuracy in the collection and reporting of data.

The University of New South Wales is one of Australia's leading research institutions and prides itself on its performance in research. Its researchers are expected to be committed to high standards of professional conduct in accord with the accepted practice of their disciplines and the codes of relevant external funding bodies. All researchers have a duty to ensure that their work strengthens and safeguards the reputation of UNSW and of the profession to which they belong. The Academic Board has accepted the Joint NHMRC/AVCC Statement and Guidelines on Research Practice (1999) and its revisions. These guidelines are extended in this Code of Conduct for the Responsible Practice of Research. The University has experienced research staff who will ensure that new staff and research students are fully aware of their obligations and of colleagues from whom they can seek help and advice in cases of uncertainty.

Debate and criticism are essential components of all research programs and facilitate the establishment of sound conclusions. Communication between collaborators, presentation and discussion of work at meetings of experts, publication of results, including the important element of peer review; and the possibility that investigations will be repeated or extended by other researchers, all contribute to the intrinsically self-correcting nature of research.

Researchers should participate only in work which conforms to accepted ethical standards and which they are competent to perform. UNSW researchers have a responsibility to ensure the safety of all those associated with the research. The design and conduct of projects must take account of

- the National Statement on Ethical Conduct in Research involving Humans,
- the Rules Governing Human Research Projects at the University of New South Wales and
- the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes.

All research at UNSW which involves human or animal subjects must have clearance from the Human Research Ethics Committee or the Animal Care and Ethics Committee as appropriate. Protocols for human research giving rise to minimal ethical considerations must be reviewed by a Human Research Ethics Advisory Panel to confirm whether or not the protocol needs to be considered by the Human Research Ethics Committee. The requirement for ethical clearance across the University is based in the contracts whereby funds are received by UNSW from the Australian Research Council and the National Health and Medical Research Council.

Adherence to this Code is expected to ensure that individual researchers meet the highest standards of professional practice. However an individual researcher may not be protected if a specific allegation is made. Questions of authenticity of data and authorship of published work occasionally arise and it is important that researchers maintain written records to substantiate their actions. Adequate records of the source of experimental data and authorship must be maintained in a secure place for at least 5 years after publication and must be recoverable when questions arise. Ideally, a responsible person other than the researcher such as the Head of School or Director of a Centre will hold this information. All authors of all types of publication should sign a declaration prior to its submission (see *Authorship*).

Procedures for responding to allegations of research misconduct are outlined at the end of the Code.

1. GENERAL PRINCIPLES

- 1.1 UNSW has developed this Code of Conduct on the Responsible Practice of Research and **has formulated** the steps to be followed if suspicions or allegations exist regarding research misconduct. These procedures and guidelines meet the standards set out in the *Joint NHMRC/AVCC Statement and Guidelines on Research Practice*.
- 1.2 UNSW has established and maintains practices and policies which promote the highest possible standards and discourage misconduct and fraud. The open presentation and discussion of results via peer review mechanisms is central to these policies.
- 1.3 UNSW has formulated below policies on the maintenance of records, retention of data, publications and authorship, management of intellectual property, research training, confidentiality and conflict of interest.
- 1.4 Researchers have an obligation to achieve and maintain the highest standards of intellectual honesty in the conduct of their research.
- 1.5 Researchers must be aware of and adhere to ethical principles of justice and veracity, and of respect for people and their privacy and avoidance of harm to them, as well as respect for non-human subjects of research. Research must comply with established guidelines such as the *National Statement on Ethical Conduct in Research Involving Humans*, available at (<http://www.health.gov.au/nhmrc/publications/humans/contents.htm>).
- 1.6 Where research procedures involve humans or animals as research subjects, approval must be sought from the Human Research Ethics Committee or the Animal Care and Ethics Committee, as appropriate. The safety of all participants (subjects and researchers) must be protected by the approval of protocols by the Institutional Biosafety Committee or the Radiation Safety Committee or other relevant committee(s), as appropriate. Research must not proceed without such approval.
- 1.7 At UNSW, the Deputy Vice-Chancellor (Research), or nominee, is responsible for monitoring the observance of these guidelines.

2. DATA STORAGE AND RETENTION

- 2.1 Data (including electronic data) must be recorded in a durable and appropriately referenced form. Data management should comply with relevant privacy protocols, such as the Australian Standard on personal privacy protection and the *UNSW Privacy Management Plan* (<http://www.infonet.unsw.edu.au/poldoc/privacy.htm>).
- 2.2 Each School or research unit must establish procedures for the retention of data, and for the keeping of records of data held, as appropriate for the discipline. This is the responsibility of the relevant Head of School or Director of a UNSW Research Centre.
- 2.3 Data must be held for sufficient time to allow reference. For data that are published, this may be for as long as interest and discussion persists following publication. The minimum period for retention is 5 years from the date of publication but for specific types of research, such as clinical research, data should be kept for 15 years, unless justification is given.
- 2.4 Wherever possible, original data and, where relevant, materials should be retained in the School or research unit in which they were generated. If required, individual researchers can hold copies of the data for their own use. Retention solely by the individual researcher provides little protection to the researcher or to UNSW in the event of an allegation of falsification of data.

If the originals are retained by the researcher, the Head of School or Director of Centre must be formally advised of their location and the researcher will be responsible for their security.

- 2.5 Data related to publications must be available for discussion with other researchers. Where confidentiality provisions apply (for example, where the researchers or institution have given undertakings to third parties, such as the subjects of the research), it is desirable for data to be kept in a way that reference to them by third parties can occur without breaching such confidentiality.
- 2.6 When the data are obtained from limited access databases, or via a contractual arrangement, written indication of the location of the original data, or key information regarding the database from which it was collected, must be retained by the researcher or research unit.

3. CONFIDENTIALITY

- 3.1 UNSW has formulated a *Privacy Management Plan* to comply with the NSW Privacy and Personal Protection Act 1998 (<http://www.infonet.unsw.edu.au/poldoc/privacy.htm>). Researchers are responsible for ensuring appropriate security for any confidential material, including that held in computing systems. Where computing systems are accessible through networks, particular attention to security of confidential data is required. Security and confidentiality must be assured in a way that covers cases of multiple researchers or the departure of individual researchers. Heads of School are responsible for establishing mechanisms to ensure security and confidentiality in their disciplines.

- 3.2 Confidentiality agreements to protect intellectual property rights may be agreed between UNSW, the researcher and a sponsor of the research. Where such agreements limit free publication and discussion, limitations and restrictions must be explicitly agreed.
- 3.3 It is the obligation of the researcher to know whether confidentiality agreements apply and of the Head of the School or other research unit to inform researchers of their obligations with respect to these provisions.
- 3.4 All confidentiality agreements should at an early stage involve the Director of the Research Office, or a nominated representative.
- 3.5 Heads of Schools are responsible for maintaining a register of the establishment and ownership of databases containing confidential information within their School. Access to these databases must be restricted to researchers with approved involvement in a research project.

4. AUTHORSHIP

- 4.1 UNSW acknowledges that the criteria for authorship of research output vary to some extent depending on currently accepted practice in the research discipline. Minimum requirement for authorship is substantial participation, where all the following conditions are met:
 - a) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; and
 - b) drafting the article or reviewing it critically for important intellectual content; and
 - c) final approval of the version to be published.

Acquisition of funding, the collection of data, or general supervision of the research group, by themselves, do not justify authorship.

Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. No person who is an author, consistent with this definition, must be excluded as an author without their permission in writing.

- 4.2 All others who contributed to the work who are not authors should be recognized by being named in footnotes or in the Acknowledgments, and what they did should be described. The provision of technical assistance or materials is normally not enough for inclusion as an author. However courtesy demands that individuals and organisations providing facilities should be acknowledged.
- 4.3 The role of research students as authors must be recognized according to the same criteria as all other authors participating in the research.
- 4.4 Authorship of a research output and the order in which names appear is a matter that should be discussed between researchers at an early stage in a research project, and reviewed whenever there are changes in participation. It is preferable that the agreement be recorded in a signed document. Authors should be able to explain the order in which authors are listed.

- 4.5 When there is more than one co-author of a research output, one or more authors should take responsibility for the integrity of the work as a whole, from inception to published article. One UNSW co-author (the “executive author”) should take responsibility for record-keeping regarding the research output.
- 4.6 Where the research is published, including electronically, all co-authors of a publication must acknowledge their authorship in writing in terms of, at least, the minimum acceptable definition at 4.1, above. This signed statement of authorship must specify that the signatories are the only authors according to this definition. It must state that the signatories have seen the final version of the paper that was submitted for publication. A form for this purpose is available on the Research Office website (<http://www.ro.unsw.edu.au>).
- 4.7 All written acknowledgements of authorship must be placed on file in the School or Centre by the executive author at the time of submission of the research output for publication, and must remain in safe keeping in that School/Centre. For the author’s protection, it is advisable that authorship forms be held by the Head of School/Director of Centre.
- 4.8 If, for any reason, one or more co-authors are unavailable or otherwise unable to sign the statement of authorship, the executive author may sign on their behalf, noting the reason for their unavailability. Confirmation should be obtained from absentee authors within six months of the publication being submitted.
- 4.9 At UNSW, conflicts arising through disputes about authorship should initially be mediated by the Associate Dean (Research) and two Professors who will be generally expert in the research area. The Deputy and/or Pro-Vice-Chancellor (Research) should be approached for a decision if resolution cannot be obtained.

It is important that there are no reprisals for complainants, especially junior staff and research students, except for those who knowingly make false complaints. Appropriate disciplinary action will be taken against such individuals.

5. PUBLICATION

- 5.1 Publication of multiple papers based on the same set(s) or subset(s) of data is not acceptable, except where there is full cross-referencing within the papers (for example, in a series of closely related work, or where a complete work grew out of a preliminary publication and this is fully acknowledged). Publication of the same material translated into different languages is acceptable provided that the original source is acknowledged. Republication of control data (rather than regularly performing new control experiments) is not acceptable unless a full justification is provided to and approved by the journal Editor.
- 5.2 An author who submits substantially similar work to more than one publisher must disclose this to the publishers at the time of submission.
- 5.3 As a general principle, research findings should not be reported in the public media before they have been reported to a research audience of experts in the field of research - preferably by publication in a peer-reviewed journal. Discussion of work in progress should avoid claims of unusual or unexpected findings until the results are conclusive. Where there is a contractual arrangement, all the conditions of the contract concerning the release of data must be fulfilled.

- 5.4 It is acknowledged that, where issues of public policy and concern make prior advice desirable, such advice must be tendered first to the public or professional authorities responsible, and the unreported status of the findings must be advised at the same time. Only where responsible authorities fail to act can prior reporting to the media be justified, and again the unpublished status of the findings must be reported at the same time.
- 5.5 Where research that has not yet been subjected to peer review is privately reported, especially to prospective financial supporters including granting agencies, researchers have an obligation to explain fully the status of the work and the peer-review mechanisms to which it will be subjected.
- 5.6 Publications must include information on the sources of financial support for the research. This should include recognition of the support of the University in cases where a byline is not included. Financial sponsorship that carries an embargo on the naming of the sponsor should be avoided.
- 5.7 Deliberate inclusion of inaccurate or misleading information relating to research activity in curriculum vitae, grant applications, job applications or public statements, or the failure to provide relevant information, is a form of research misconduct. Accuracy is essential in describing the state of publication (in preparation, submitted, accepted), research funding (applied for, granted, funding period), and awards conferred, and where any of these relate to more than one researcher.
- 5.8 If papers are prepared without rigour or released without statistical analysis and critical review of the data, there is an increased risk that errors will occur. The line between sloppy practice and misconduct may prove difficult to define. All reasonable steps must be taken to ensure that published reports, statistics and public statements about research activities and performance are complete, accurate and unambiguous.

6. SUPERVISION OF STUDENTS / RESEARCH TRAINEES

- 6.1 Schools and Faculties are expected to comply with UNSW's *Guidelines on the Supervision of Postgraduate Research*. These Guidelines describe the responsibilities of students, of supervisors and of Schools. The *Guidelines* provide that each School has the responsibility to select a specific, responsible and appropriately qualified supervisor for each research student.
- 6.2 The ratio of research students to supervisors is limited by the ability of the supervisor to convince the Head of School that they can assure effective intellectual interaction and effective oversight of the student's research program. A supervisor must provide substantiating evidence of adequate time and experience to the relevant Associate Dean (Research) if more than 5 full-time research students, or equivalent, are to be supervised at any one time.
- 6.3 Each research student must be provided with the current government and institutional guidelines for the conduct of research, including those covering ethical requirements for studies on human or animal studies, requirements for confidentiality, and occupational health and safety matters.

- 6.4 Consideration should be given to providing researchers new to research in the institution with a more senior staff member experienced in research as mentor at the time of their appointment.
- 6.5 Supervisors and mentors are obliged to provide guidance in all matters of good research practice.
- 6.6 The supervisor must ensure, as far as possible, the validity of research data obtained by a student / research trainee under his / her supervision.

7. DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

- 7.1 All UNSW researchers have an obligation to avoid actual and perceived conflicts of interest. The University requires that conflicts of interest which may arise or appear to arise in relation to research be managed in accordance with the highest ethical standards. The principles are covered in the UNSW Code of Conduct (<http://www.hr.unsw.edu.au/poldoc/codecond.htm>)
- 7.2 UNSW's policies and procedures regarding appropriate disclosure of affiliation with, or financial involvement in, any organisation or entity with a direct interest in the subject matter or materials of researchers will soon be available on the Research Office website. Researchers are required to comply with current UNSW policy and procedures on conflict of interest, as developed from time to time.
- 7.3 Disclosure of conflicts of interest must be made to editors of journals, to the readers of published work, and to external bodies from which funds are sought.
- 7.4 Researchers have an obligation to disclose at the time of reporting or proposing research (for example, in a grant application), any conflict of interest which has the potential to influence research and investigations, publication and media reports, grant applications, applications for appointment and promotion.

8. RESEARCH MISCONDUCT

8.1 DEFINITION:

"Research Misconduct" or "Scientific misconduct" is taken here to mean fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research. It includes the misleading ascription of authorship including the listing of authors without their permission or the inappropriate omission of authors, attributing work to others who have not in fact contributed to the research, and the lack of appropriate acknowledgment of work primarily produced by a research student / trainee or associate. It does not include genuine errors or differences in interpretation or judgments of data.

Examples of research misconduct include, but are not limited to, the following :

Misappropriation : A researcher or reviewer shall not intentionally or recklessly

- a. plagiarize, which shall be understood to mean the presentation of the documented words or ideas of another as his or her own, without attribution appropriate for the medium of presentation;
- b. make use of any information in breach of any duty of confidentiality associated with the review of any manuscript or grant application;
- c. omit reference to the relevant published work of others for the purpose of inferring personal discovery of new information.

Interference : A researcher or reviewer shall not intentionally and without authorization take or sequester or materially damage any research-related property of another, including without limitation the apparatus, reagents, biological materials, writings, data, hardware, software, or any other substance or device used or produced in the conduct of research.

Misrepresentation : A researcher or reviewer shall not with intent to deceive, or in reckless disregard for the truth,

- a. state or present a material or significant falsehood; or
- b. omit a fact so that what is stated or presented as a whole states or presents a material or significant falsehood."

8.2 PROCEDURES WHERE RESEARCH MISCONDUCT IS SUSPECTED OR ALLEGED

- (a) Research misconduct includes deliberate, dangerous or negligent deviations from accepted practices in carrying out research. It also includes failure to follow established protocols if this failure results in harm or unreasonable risk to others or the environment, including collusion in, or concealment of, such actions by others, and actions that lead to damage or removal of research-related materials.
- (b) Research misconduct does not include poor research practice such as inaccurate record keeping unless this has been done with the intention to deceive.
- (c) Members of UNSW who have concerns about possible misconduct can obtain advice in the first instance from the University's advisers on research integrity. UNSW has nominated as advisers on integrity in research:
 - the Deputy Presidents of the Academic Board
 - all other Academic Board members of the Committee on Research who are not line managers (i.e. Heads of School, etc).

These advisers, named at <http://www.secretariat.unsw.edu.au/acboard/regaacboardcom.htm#COR> are familiar with the *Joint NHMRC/AVCC Statement and Guidelines on Research Practice* and with issues surrounding research integrity and misconduct.

- (d) Students or staff may sometimes wish to make an allegation of research misconduct as a result of frustration based on poor communication, misunderstanding or, at worst, harassment, rather than research misconduct. Advice about whether to proceed with an allegation may also be obtained from the Associate Dean (Research) of the relevant Faculty, the Deputy and/or Pro-Vice-Chancellor (Research) or the Deputy Vice-Chancellor (Academic). This should avoid any possible or perceived involvement of those who may be close to the person against whom the allegation is made.

- (e) In the first instance, an allegation of research misconduct by a complainant against an academic should be directed to the Deputy or Pro-Vice-Chancellor (Research), who will conduct a preliminary investigation. It is important to recognise that an allegation(s) of research misconduct can damage irreparably the reputation of the academic within their discipline, even when proved to be baseless. For this reason, it is vital that action be taken expeditiously and confidentially to identify whether or not a case of research misconduct may exist. A period of not longer than two weeks for this investigation should be the aim.
- (f) In examining any allegation, the Deputy or Pro-Vice-Chancellor (Research) may obtain advice from internal and/or external independent experts in the research area concerned.
- (g) Where, following a preliminary examination of an allegation, a view is formed by the Deputy or Pro-Vice-Chancellor (Research) that there is a prima facie case of research misconduct, the Deputy Vice-Chancellor (Research) shall report the findings to the notifier of the allegation and to the relevant Dean or Head of School for action as he or she considers appropriate under the UNSW (Academic Staff) Enterprise Agreement 2003. The Dean or Head of School should, as early as practicable, inform the person against whom the allegation has been made. For allegations against research students, the Head of School will refer the matter to the Vice-Chancellor.
- (h) If a case for consideration of research misconduct is found in the preliminary investigation to exist, advice of this to be given, in confidence, to the secretary of any funding agency currently supporting the person supported, on the understanding that the agency will not terminate its support.
- (i) When research misconduct is found to have occurred, the Deputy Vice-Chancellor (Research) will ensure that the findings of research misconduct are reported to all funding agencies that have funded work in respect of which such misconduct occurred, or which are currently supporting the person found to have engaged in research misconduct, and to journals and other media through which the research in question was reported.
- (j) Even if the person accused of such misconduct has resigned from the University, a preliminary investigation to establish the facts of a matter in which research misconduct is alleged to have occurred will be pursued by the Deputy Vice-Chancellor (Research). Distortions of the research record must be rectified, whether or not the person involved remains in the institution.

The interests of all interested parties must be protected during these investigations by preserving confidentiality and ensuring natural justice. Such fair dealing must consider the protection of persons making allegations in good faith, and of persons accused of misconduct. "Interested parties" include :

- a person bringing an allegation.
- a person against whom an allegation is made.
- staff, student and trainees working with persons making an allegation, or with persons against whom an allegation is made.
- journals and other media reporting research subject to suspected, alleged, or found research misconduct.
- funding bodies supporting persons or research involved.
- the public.