

## THE UNIVERSITY OF ADELAIDE

## GUIDELINES AND RULES FOR RESPONSIBLE PRACTICE IN RESEARCH

## INTRODUCTION

The University has adopted the *Joint National Health and Medical Research Council (NHMRC)/ Australian Vice-Chancellors' Committee (AVCC) Statement and Guidelines on Research Practice (1997)*. This Joint Statement, replacing the *NHMRC Statement on Research Practice (1990)* and the *AVCC Guidelines for Responsible Practice in Research and Problems of Research Misconduct (1990)*, has provided for institutions a comprehensive framework of minimum acceptable standards.

The following Guidelines are based largely on the Joint NHMRC/AVCC Statement. All members of the University staff and students must be aware of and adhere to these Guidelines in the practice of their research. The Deputy Vice-Chancellor (Research) is the designated officer responsible for monitoring the observance of these Guidelines. In matters relating to higher degree research students, the Deputy Vice-Chancellor (Research) may delegate this responsibility to the Dean of Graduate Studies.

The Guidelines consist of:

- 1 Preamble
- 2 Code of Conduct for Responsible Research Practice
  - 2.1 General Principles
  - 2.2 Data Storage and Retention
  - 2.3 Authorship
  - 2.4 Publication
  - 2.5 Supervision of Students/Research Trainees
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- 3 Rules for Dealing with Allegations of Research Misconduct
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Appendix A Ethical guidelines and statutory requirements

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## 1 PREAMBLE

- 1.1 Research and the pursuit of the truth are vital University functions. The broad principles that guide research have been long established. Central to these are the maintenance of high ethical standards, and validity and accuracy in the collection and reporting of data. The responsibility of the research community to the public and to itself is acknowledged. This responsibility is particularly important where professional practice or public policy may be defined or modified in the light of research findings.
- 1.2 The processes of research protect the truth. Communication between collaborators; maintenance and reference to research records; 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 and ethical nature of research.

- 1.3 Competition in research can have a strong and positive influence, enhancing the quality and immediacy of the work produced. However, competitive pressures can act to distort sound research practice, if they encourage too-hasty preparation and submission of papers, the division of reports on substantial bodies of work into multiple small reports to enhance the 'publication count' of the author(s), or an undue emphasis on safe but mundane research at the expense of more creative and more innovative lines of study. Accordingly, due emphasis should be given to quality and originality of research, as well as to quantity of research output.
- 1.4 The following code of conduct has been established as a framework for sound research procedures and for the protection of individual researchers from possible misunderstandings. Where appropriate, reference should also be made to the University's *Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees*.

## **2 CODE OF CONDUCT FOR RESPONSIBLE RESEARCH PRACTICE**

### **2.1 General Principles**

- 2.1.1 It is a basic assumption of the University that students and staff members engaged in research are committed to high standards of professional conduct. Researchers have a duty to ensure that their work enhances the good name of the University and the profession to which they belong.
- 2.1.2 Researchers should only participate in work which conforms to accepted ethical standards and which they are competent to perform. When in doubt, they should seek assistance with their research from their colleagues, peers, or supervisors and seek advice from the relevant ethics and safety committees of the University. Debate on, and criticism of, research work are essential parts of the research process.
- 2.1.3 Both the University and researchers have a responsibility to ensure the safety of all those associated with the research. It is also essential that the design of projects takes account of any relevant ethical guidelines. Research must comply with established guidelines and/or statutory requirements including those as stated in **Appendix A**. Where research procedures are of a kind requiring approval by a human or animal ethics committee, or by other safety or validly constituted regulatory committees, research must not proceed without such approval.
- 2.1.4 If data of a confidential nature are obtained, for example from individual patient records or from certain questionnaires, confidentiality must be observed and researchers must not use such information for their own personal advantage or that of a third party. Secrecy may also be necessary for a limited period in the case of contracted research or of non-contractual research which is under consideration for patent protection. In general, however, research results and methods should be open to scrutiny by colleagues within the institution and, through appropriate publication, by the profession at large.

### **2.2 Data Storage and Retention**

- 2.2.1 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<sup>1</sup>.
- 2.2.2 The executive author of a research publication (see 2.3.3) must submit to the Head of Department written indication of the location of the original data on which the publication is based. The *Statement of Authorship/Location of Data* form (**Appendix B**) should be used for this purpose. The Head of Department is responsible for maintaining a file recording the location of research data generated by or used by students and staff members of the Department, and upon which a publication is based.
- 2.2.3 Data must be held for sufficient time to allow reference. For data that is published this may be for as long as interest and discussion persists following publication. It is recommended that the minimum period for retention is at least 5 years from the date of publication. However, a longer period may be required as recommended by other relevant guidelines, and it is the researcher's duty to know these. For example, 15 years is recommended for clinical research<sup>2</sup>.

- 2.2.4 Wherever possible, original data must be retained in the department or research unit in which they were generated. Individual researchers should be able to hold copies of the data for their own use. Retention solely by the individual researcher provides little protection to the researcher or the University in the event of an allegation of falsification of data.
- 2.2.5 Data related to publications must be available for discussion with other researchers. Where confidentiality provisions apply (for example, where the researchers or the University 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.
- 2.2.6 Confidentiality agreements to protect intellectual property rights may be agreed between the University, the researcher and a sponsor of the research. Where such agreements limit free publication and discussion, limitations and restrictions must be explicitly agreed. Consult the relevant intellectual property policies of the University (*Commercial Development of University Intellectual Property, Administrative Handbook, Sub-section 10.13, and Higher Degree Students and Intellectual Property, The Code of Practice for Maintaining and Monitoring Academic Qualities and Standards in Higher Degrees*), and direct any enquiries to the Deputy Vice-Chancellor (Research).
- 2.2.7 It is the obligation of the researcher to enquire whether confidentiality agreements apply and of the Head of the Department or research unit to inform researchers of their obligations with respect to these provisions.
- 2.2.8 All confidentiality agreements should be made known at an early stage to the Deputy Vice-Chancellor (Research), who may inform the Dean of Graduate Studies of such agreements if and when higher degree research students are involved.
- 2.2.9 When the data are obtained from limited access data-bases, or via a contractual arrangement, written indication of the location of the original data, or key information regarding the data-base from which it was collected, must be retained by the researcher or the department/research unit.
- 2.2.10 Researchers must be 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 copes with multiple researchers and the departure of individual researchers.

### 2.3 Authorship

- 2.3.1 Minimum requirement for authorship should accord with the *Vancouver Protocol*<sup>8</sup>. Authorship is substantial participation, where all the following conditions are met:
- a) conception and design, or analysis and interpretation of data;
  - b) drafting the article or revising it critically for important intellectual content; and
  - c) final approval of the version to be published.

Participation solely in the acquisition of funding or the collection of data does not justify authorship. General supervision of the research group is not sufficient for authorship. Any part of an article critical to its main conclusion must be the responsibility of at least one author. An author's role in a research output must be sufficient for that person to take public responsibility for at least that part of the output in that person's area of expertise. No person who is an author, consistent with this definition, must be excluded as an author without their permission in writing.

- 2.3.2 Authorship of a research output 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. If there are conflicts arising through disputes about authorship, the Deputy Vice-Chancellor (Research) should be notified and will decide on what course of action.
- 2.3.3 When there is more than one co-author of a research output, one co-author (by agreement amongst the authors) should be nominated as executive author for the whole research output, and should take responsibility for record-keeping regarding the research output.

- 2.3.4 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 2.3.1 above. This signed *Statement of Authorship/Location of Data* (**Appendix B**) must specify that the signatories are the only authors according to this definition. It must state that the signatories have seen the version of the paper submitted for publication.
- 2.3.5 The signed *Statement* must be placed on file in the department or unit of the executive author, at the time of submission of the research output for publication, and must remain in safe keeping in that department.
- 2.3.6 If, for any reason, one or more co-authors are unavailable or otherwise unable to sign the *Statement*, the Head of Department or research unit may sign on their behalf, noting the reason for their unavailability.
- 2.3.7 The authors must ensure that others who have contributed to the work are recognised in the research output. Courtesy demands that individuals and organisations providing facilities should also be acknowledged.
- 2.4 Publication**
- 2.4.1 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).
- 2.4.2 An author who submits substantially similar work to more than one publisher must disclose this to the publishers at the time of submission.
- 2.4.3 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, except where there is a contractual arrangement.
- 2.4.4 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.
- 2.4.5 Where there is private reporting of research that has not yet been exposed to open peer-review scrutiny, especially when it is reported to prospective financial supporters, researchers have an obligation to explain fully the status of the work and the peer-review mechanisms to which it will be subjected.
- 2.4.6 Publications must include information on the sources of financial support for the research. Financial sponsorship that carries an embargo on such naming of a sponsor should be avoided.
- 2.4.7 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.
- 2.4.8 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.
- 2.4.9 Publications involving a student or a staff member of the University must acknowledge the work was carried out at the University by using the University by-line.
- 2.5 Supervision of Students/Research Trainees**  
[Reference should be made to the University's *Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Degrees.*]

- 2.5.1 The Head of Department or research unit should ensure:
- a) that the supervision of each research student/trainee (including honours, masters and doctoral students and junior postdoctoral staff) is assigned to a specific, responsible and appropriately qualified supervisor; and
  - b) that the ratio of trainees to supervisors is low enough to assure effective intellectual interaction and effective oversight of the research at all times.
- 2.5.2 The Head of Department or nominee should provide each research student/trainee with written material on applicable government and University guidelines for the conduct of research, including those covering ethical requirements for studies on human subjects or animals, requirements for confidentiality, and occupational health and safety matters.
- 2.5.3 The supervisor is obliged to provide each research student/trainee guidance in all matters of good research practice.
- 2.5.4 The supervisor must ensure, as far as possible, the validity of research data obtained by a student under his/her supervision.

## **2.6 Disclosure of Potential Conflicts of Interest**

- 2.6.1 Disclosure of any potential conflict of interest is essential for the responsible conduct of research. Researchers have an obligation to disclose any affiliation with, or financial involvement in, any organisation or entity with a direct interest in the subject matter or materials of researchers.
- 2.6.2 Other examples of conflicts of interest include direct benefits such as sponsorship of the investigation or indirect benefits such as the provision of materials or facilities or the support of individuals such as provision of travel or accommodation expenses to attend conferences. Such disclosure should cover any situation in which the conflict of interest may, or may be perceived to, affect any decision regarding other people.
- 2.6.3 Researchers have an obligation to disclose at the time of reporting or proposing research (for example, in grant application or research proposal for postgraduate studies) any conflict of interest which has the potential to influence research and investigations, publication and media reports, grant applications, applications for appointment and promotion. Details of such potential conflict of interest must be disclosed on the *Disclosure of Potential Conflict of Interest* form (**Appendix C**) and lodged with the Head of Department or research unit who will then decide whether a conflict of interest exists.
- 2.6.4 If a conflict of interest is considered to exist, the Head of Department should refer the matter to the Deputy Vice-Chancellor (Research) who will determine what further action should be taken. That action may include consultation with the researcher and may also involve consultation with the funding agency or other parties to ensure that the conflict of interest does not compromise the research, or the University's interests. In some circumstances, it may be necessary to reject or terminate a research project, or to disclose the conflict of interest to the editors of journals or the readers of published work arising from the research.

## **3 RULES FOR DEALING WITH ALLEGATIONS OF RESEARCH MISCONDUCT**

### **3.1 Definition of Research Misconduct**

- 3.1.1 Misconduct in research includes:
- The fabrication of data: claiming results where none has been obtained.
  - The falsification of data including changing records.
  - Plagiarism, including the direct copying of textual materials, the use of other people's data and/or idea without acknowledgment.
  - Misleading ascription of authorship including the listing of authors without their permission, 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.

- Other practices that seriously deviate from those that are commonly accepted within the research community for proposing, conducting, or reporting research.
- Intentional infringements of the University's *Code of Conduct for Responsible Research Practice*.

Misconduct does not include honest errors or honest differences in interpretation or judgements of data.

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

**Misappropriation** : A researcher or reviewer shall not intentionally or recklessly:

- a) plagiarise, 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) intentionally 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 authorisation 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;
- b) omit a fact so that what is stated or presented as a whole states or presents a material or significant falsehood.

3.1.3 The list above is not meant to be all inclusive. There may be other serious misdemeanours. For example, in research involving animals or human subjects or the handling of hazardous materials, departing from approved protocols accepted by a specific discipline will constitute serious misconduct.

## 3.2 Protection of Interested Parties

3.2.1 Allegations of research misconduct require very careful handling. When an allegation is made, fair dealing must be exercised to protect the interests of all interested parties, including persons making allegations in good faith and persons accused of misconduct. Interested parties may include:

- the person bringing the allegation;
- the person against whom the allegation is made;
- staff and students 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 demonstrated research misconduct;
- funding bodies supporting persons or research involved;
- the public.

3.2.2 Adequate protection of the complainant and the accused demands absolute confidentiality and reasonable speed in the early stages of investigation. On the other hand, the protection of other parties may involve some disclosure. Such judgements should be made by the Vice-Chancellor. Under no circumstances will an anonymous complaint be the basis for a formal proceeding.

## 3.3 Advisers on Integrity of Research

The Associate Dean (Research) of each Division should be available to advise staff and students of the Division on integrity in research. Their task should be to give confidential advice to staff and students about what constitutes research misconduct, the rights and responsibilities of a potential complainant, and the procedures for dealing with allegations of research misconduct within the University.

## 3.4 Receipt of Complaints of Students

Allegations of research misconduct by students must be investigated in accordance with the relevant University Statutes on Student Misconduct and by the designated Board/Committee.

### **3.5 Receipt of Complaints of Staff**

- 3.5.1 Allegations of research misconduct about staff coming from outside the University should be referred to and dealt with directly by the Vice-Chancellor.
- 3.5.2 Inside the University, allegations of research misconduct may come from other members of staff or from research students/trainees. The latter may feel themselves to be in a difficult situation because their degrees and their future careers can depend on interaction with a supervisor. The Deputy Vice-Chancellor (Research) is responsible for convening a panel to receive and consider formal complaints of research misconduct. The panel should comprise a small number of senior researchers, preferably with appropriate discipline mix and gender balance. It will include the Dean of Graduate Studies if a postgraduate student is involved in the complaint. The Vice-Chancellor should be informed immediately a complaint is received and be kept informed as the case progresses.
- 3.5.3 The Vice-Chancellor, on the advice of the panel, shall determine whether the allegation should be dismissed or investigated further by way of a preliminary investigation.

### **3.6 The Preliminary and Formal Investigations**

- 3.6.1 The Vice-Chancellor shall provide a written statement of any allegations to the staff member against whom the allegations are directed and require the staff member to respond in writing within 10 working days of this notification. The Vice-Chancellor may require the respondent to produce experimental data files or other material to be kept secure, but not disclosed during the preliminary investigation.
- 3.6.2 The form of the preliminary investigation will depend on the case and shall be decided by the Vice-Chancellor. The Vice-Chancellor must have the right to conduct the preliminary investigation in person if that is appropriate. In some cases, there will need to be a small committee from inside the University but from areas not affected by the research in question. In other cases, it may be necessary to seek expert opinion from outside the University.
- 3.6.3 The preliminary investigation should be limited to establishing whether a sufficient case exists for formal charges of misconduct to be laid. It should be conducted expeditiously and, as far as possible, confidentiality should be maintained.
- 3.6.4 If no case is found to exist, the staff member concerned shall be informed in writing that no further action will be taken. The findings of the preliminary investigation shall be documented on the individual's staff file and as far as possible, in a form satisfactory to the staff member. If it is considered that the complainant has brought charges improperly, the complainant may be disciplined. If the charges were reasonably brought but incorrect, the case should cease.
- 3.6.5 If a case for consideration of research misconduct is found to exist in the preliminary investigation, the Vice-Chancellor shall proceed with a formal investigation in accordance with the relevant Clauses relating to misconduct/serious misconduct in any certified agreement or award in force at the University at the time. The Vice-Chancellor must provide for advice of this to be given, in confidence, to the secretary of any funding agency currently supporting the alleged staff member, on the understanding that the agency will not terminate its support until the outcome of a formal investigation is known.

[Note The current Enterprise Certified Agreement can be found on the website:  
<[www.adelaide.edu.au/HR/policies/awards/eb97.htm](http://www.adelaide.edu.au/HR/policies/awards/eb97.htm)>]

- 3.6.6 If the findings of a formal investigation are that research misconduct has occurred, disciplinary action will be taken as prescribed in any certified agreement or award in force at the University at the time. The Vice-Chancellor shall report the findings of research misconduct to any funding agency that funded work in respect of which such misconduct occurred, or which is 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.

- 3.6.7 In the event of the resignation of the accused staff member, the Vice-Chancellor should conduct an inquiry to establish the facts of the matter in which research misconduct is alleged to have occurred, and to report on any remedial action needed to protect affected people and the public. The University cannot take any further disciplinary action against the staff member. However, nothing in this clause shall be construed as excluding the jurisdiction of any external court or tribunal which, but for this clause, would be competent to deal with the matter.

**Footnote:**

1. *Personal Privacy Protection in Health Care Information Systems, Australian Standard AS 4400-1995.*
2. *The December 1991 Guidelines for Good Clinical Research Practice in Australia*, published by the Therapeutic Goods Administration of the Commonwealth Department of Health and Family Services, recommends retention of data for at least 15 years.
3. *Vancouver Protocol* as set out in *Uniform Requirement for Manuscripts Submitted to Biomedical Journals as presented in JAMA 1997:277:927-934.*

18 November 1998

**The University of Adelaide Guidelines and Rules for Responsible Practice in Research  
Appendix A**

The following guidelines and/or statutory requirements must be adhered to.

**For research involving the use of animals:**

*South Australian Prevention of Cruelty to Animals Act, 1985; and  
The Australian Code of Practice for the Care and Use of Animals for Scientific Purposes, 6<sup>th</sup> Edition, 1997*

**For research involving human subjects:**

*NHMRC Statement on Human Experimentation and Supplementary Notes*

**For research involving genetic manipulation:**

*The Genetic Manipulation Advisory Committee's*

- *Guidelines for Small Scale Genetic Manipulation Work*
- *Guidelines for Large Scale Genetic Manipulation Work*
- *Guidelines for the Deliberate Release of Genetically Manipulated Organisms*
- *Guidelines for Activities with the Potential for Unintended Release of Genetically Manipulated Organisms*

**For all research:**

*Occupational Health and Safety laws and regulations*

The University of Adelaide Guidelines and Rules for Responsible Practice in Research  
Appendix B

**Statement of Authorship and Location of Data**

*(Please submit this form to the Head of the Department of the Responsible/Executive Author.)*

Department: \_\_\_\_\_

Publication title: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Submitted/re-submitted to: \_\_\_\_\_

\_\_\_\_\_

on: \_\_\_\_\_

**Authors:**

Name	Department	Signature

**Statement by Responsible/Executive Author:** *(\* delete as appropriate)*

I, the *responsible/executive author\** of the above publication, certify:

- that *I am the only author/all authors listed above are the only authors\** of this publication in accordance with the minimum acceptable definition of authorship as stated in clause 2.3.1 of the University of Adelaide Guidelines and Rules for Responsible Practice in Research;
- that *I/all signatories\** have seen the final version submitted for publication; and
- that the primary data on which this publication is based are located:

in the Department of the undersigned

in the following location(s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Responsible/Executive Author

Name: \_\_\_\_\_

The University of Adelaide Guidelines and Rules for Responsible Practice in Research  
Appendix C

**Disclosure of Potential Conflict of Interest**

*(Please submit this form to the Head of Department.)*

Department: \_\_\_\_\_

In accordance with clause 2.6 of the University of Adelaide Guidelines and Rules for Responsible Practice in Research, I make the following disclosure:

Publication/research project entitled:

Details of potential conflict of interest, including names of people and organisations involved:

Where the publication has been submitted for publication or the project has been submitted to a funding body for funding support, have the above details been disclosed to the publisher or funding body?

- Yes
- No

Name of publisher/funding body: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_