

NSW Department of Primary Industry Guidelines for Research

General Considerations

This document relates specifically to the conduct of research in the NSW Department of Primary Industry and should be read in conjunction with NSW DPI's Code of Conduct. It has been formulated in accordance with the Australian Code for Responsible Conduct of Research issued in 2007 as a revision of the joint [NHMRC/AVCC Statement and Guidance on Research Practice](#). The NSW DPI guidelines should be read in conjunction with this Australian standard.

The broad principles that guide research have long been established. Central to these are the maintenance of high ethical standards, validity and accuracy in the collection and reporting of data and responsibility of the research community to the public and to itself. These general principles are summarised below:

- a. **Integrity**
The Department and its staff are committed to high standards of professional conduct and intellectual integrity. Officers carrying out research have a duty to ensure that their work enhances the good name of the Department..
- b. **Ethical Standards**
Officers carrying out research 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 managers. Debate on, and criticism of, research work are essential parts of the research process. Design of research projects must take account of relevant ethical guidelines, such as conditions laid down by an Animal Ethics Committee
- c. **Research Using Animals**
All officers carrying out research using animals must comply with the requirements of the *Animal Research Act 1985*. Carrying out these activities without Animal Ethics Committee approval places the organiser at risk of prosecution under the *Act*, and also jeopardises the accreditation of the whole of DPI as an animal research establishment.
- d. **Statutory Obligations**
All officers carrying out research must seek and obtain any necessary statutory approvals before any relevant action is undertaken. They should consult the Department of State and Regional Development, Office for Science and Medical Research (OSMR) '*Roadmap for Research –^a A guide to conducting life science activities in New South Wales*'.
- e. **Health and Safety**
The Department and its officers carrying out research have a responsibility to ensure the safety of all those associated with the research. All officers have a responsibility under the *Occupational Health and Safety Act 2000* and the *Occupational Health and Safety Regulation 2001* to ensure safe working conditions for staff under their control
- f. **Australian Gene Technology Act**
The Department and officers carrying out research must, where relevant, meet the Guidelines for Accreditation of an Organisation Pursuant to the *Gene Technology Act 2000* and corresponding State law as administered by the Office of the Gene Technology Regulator.
- g. **Biosecurity**
Biosecurity is a crucial consideration for any officer carrying out research. Importation of plant products, evaluation and release of imported species and release of organisms for biological control purposes all carry considerable risk to the community and appropriate codes must be followed. Any form of experimentation on farmers' properties also carries with it a degree of biosecurity risk. All care must be taken to ensure weeds, pests and diseases are not transmitted onto or off experimental sites. Appropriate codes covering these biosecurity

^a A website will be launched in October 2006

requirements are being developed.

h. Intellectual Property

The Department must not ignore the possible strategic, and where appropriate, commercial benefits to be gained from intellectual property developed in the course of or arising out of research projects. There are a number of key issues relating to such intellectual property:

i. Departmental policy & effects of contractual obligations

Where research is undertaken under contract, the conditions of the contract must be adhered to. The following Departmental policies must also be adhered to:

- "Commercialisation of Department's Innovations" (General Circular 92/156^b)

- "Changes to Commercialisation Policy" (General Circular 00/048^c)
Intellectual Property (General Circular No 02/086^d)

ii. Confidentiality and protection of intellectual property

Research results and methods should generally be open to scrutiny by colleagues within the Department and, through appropriate publication, by the profession or public at large. However, confidentiality may be required under contract or to protect the value of intellectual property. Staff and managers should assume that all intellectual property has commercial value and, unless otherwise directed, should treat it as confidential.

Terms of the research agreements with funding bodies should be adhered to by individuals involved.

Any data or product (eg germ plasm) made available to other organisations should be accompanied by a material transfer agreement (MTA) identifying the circumstances where that IP can be used. Standard MTA agreements can be obtained from DPI's Legal Branch.

Only Research Leaders, Managers or Directors have the delegation to direct that particular pieces of IP should not be treated as confidential and can be made available to third parties. They will attempt to avoid legal complexity over material that has little if any commercial value, or for which the cost of protecting the IP outweighs the benefit to DPI. Likewise, if data of a confidential nature are obtained from other persons, confidentiality must be observed.

iii. Ownership of intellectual property

All research results, data and intellectual property generated by staff of NSW DPI are the property of NSW DPI, unless contractual arrangements specify otherwise

iv. Inappropriate or unauthorised use of intellectual property

Officers carrying out research must not misappropriate or plagiarise or use research data or intellectual property in breach of any duty of confidentiality or for their own personal or third party advantage.

Staff should inform management of any allegations of inappropriate conduct in order that it may be investigated in accordance with the Department's complaint handling policy.

v. Third Party IP

Where research projects involve the use of third party IP officers carrying out research must ensure that they have 'freedom to operate' with the IP. It is the responsibility of the officers involved to ensure third party IP does not inhibit or prevent the application of outputs from a project. In addition, funding bodies are requesting that research organisations declare that there

^b while still appropriate this policy is being updated to reflect a whole of DPI position

^c this Circular is being updated to cover changes to the costing policy

^d while still appropriate this policy is being updated to reflect a whole of DPI position

will not be any impediments to development and the application of project IP and this will be the responsibility of the principal officer involved.

- i. Moral rights: The Department acknowledges the moral rights of authors and creators of original works, which rights are separate from economic rights, including ownership. These rights include:
 - i. the right of attribution of authorship (the right to be named as author or creator
 - ii. the right of protection against false attribution; and
 - iii. the right of integrity of authorship (the right to object to any distortion, use or modification of a work which harms the author's/creator's honour and reputation.

Moral rights cannot be assigned or waived by the author or creator.

Under DPI policy A-034 (Contract delegations^e) the author has the delegation to transfer copyright (as required for journal publication).

- j. Branch and Unit Management within NSW DPI is responsible for all research and development conducted within the Department. Consequently, Directors, Research Leaders and Managers and Industry Leaders are responsible for ensuring appropriate management structures are in place to address the management needs of each project

SPECIFIC MATTERS

Data Gathering, Storage and Retention

Data must be recorded in a durable and appropriately referenced form.

It is in the interests of all officers carrying out research to ensure that original data are safely held for periods of at least five years or for any longer period necessary to meet contractual commitments. These records must be kept in the Department's formal record keeping system (TRIM or specialised central DPI databases yet to be developed) A copy of the original data should be retained in the research unit in which they were generated. Management should be advised where data are stored for safe keeping. Records may only be destroyed in accordance with record disposal authorities approved by the State Records Authority (and contained in the TRIM Records Management System).

Data management should comply with relevant privacy protocols such as the Australian Standard on Personal Privacy Protection. Where research information can identify co-operators and/or staff, care needs to be taken to ensure that this information is collected, used/accessed and disposed of correctly. Particular care must be taken when the information is to be published and/or given to other parties. A Privacy Plan exists (on the DPI's external website) that explains how the Department will comply with the legislation and all officers carrying out research should be familiar with this Plan.

Authorship

Where there is more than one author of a publication, one author (by agreement among the authors) should formally accept overall responsibility for the entire publication. Such formal acceptance must be in writing, be signed by all authors and be kept on file in the unit of that "responsible author" with a copy being provided to the "responsible author's" Research Leader or appropriate manager.

The criteria for authorship of a publication must be understood by all staff involved from the outset. The industrial classification of staff involved in a research project has no bearing on rights to

^e while still appropriate this policy is being updated to reflect a whole of DPI position

authorship. Minimum requirement for authorship would be participation in conceiving and/or executing and/or interpreting at least that part of the publication in a co-author's field of expertise, sufficient for him/her to take public responsibility for it. The authors of the publication must read the final paper and sign a statement indicating that each of them has met the minimum requirements for authorship. This statement must include an indication that there are no other 'authors' of the publication, according to this definition. If, for any reason, one or more co-authors are unavailable or otherwise unable to sign the statement of authorship, the "responsible author" may sign on their behalf, noting the reason for their unavailability. This statement must be kept on file by the "responsible author".

"Honorary authorship" is unacceptable. "Honorary authorship" occurs when a person is listed as an author of a publication when he/she has not participated in a substantial way in conceiving and/or executing and/or interpreting at least part of the work described in the publication.

Due recognition of all participants is a proper part of a research process. Authors should ensure that the work of non-authors, including research assistants, technical officers, cooperative producers and businesses is properly acknowledged.

Approval for Publication

Approval **must** be sought for the publication of **all** scientific outputs, whether it is a journal publication, a book chapter, a conference paper, a report, a poster, a media article etc. The following Departmental policies must be adhered to:

- Approval to Publish^f
- A-030, Publishing Policy
- A-002, Dealing with the Media

Publication of Multiple Papers

Publication of multiple papers based on the same set(s) or subset(s) of data is improper unless full cross-referencing occurs within the papers (for example, by reference to a preliminary publication at the time of publication of the complete work, which grew from it). Simultaneous submission of papers based on the same set(s) or subset(s) of data to more than one journal or publisher should be disclosed to each journal or publisher at the time of submission.

Quality Assurance

NSW DPI is committed to providing research services which are subject to quality assurance in order to ensure traceability and accountability and which produces results which are reliable and reproducible.

Where NSW DPI has established formal quality assurance procedures which apply to research activities such as laboratory work, officers carrying out research shall ensure that such procedures are followed, and that the conditions of external certifications and accreditations are observed. This includes documentation of methods, equipment calibration, maintaining records, conducting audits, implementing corrective actions and all other activities required to support quality management systems consistent with ISO9001 and/or ISO 17025

Student/Research Trainee Supervision

Post Graduate students located at Department facilities must comply with Director-General Circular 95/009^g. Students working on Department projects should be required to sign an undertaking of confidentiality for the relevant work.

^f this policy is currently being rewritten

^g while still appropriate this policy is being updated to reflect a whole of DPI position

Supervision of each research student/trainee investigator (including honours, masters, doctoral and junior postdoctoral research workers) should be assigned to a specific, responsible and appropriately qualified senior research worker.

The ratio of students/trainees to supervisors should be small enough to assure effective scientific interaction, as well as effective supervision of the research at all stages.

Research supervisors must ensure each trainee operates within applicable government and institutional guidelines and appropriate legislation for the conduct of research, including the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes and other covering ethical requirements for studies on animals, the requirements for studies involving potentially hazardous agents, genetically modified organisms and other occupational health and safety issues, privacy, intellectual property and publication issues.

Supervisors must ensure all appropriate agreements are in place between the Department, student, educational institution and funding body before the student commences work at a Departmental facility. Departmental forms (VSS1-3^h) setting out contractual arrangements for visiting scientists and students must be used for all visiting scientists and students.

Supervisors must ensure that post graduate students and others undertaking research at our facilities have a formally approved and registered Departmental project.

Research supervisors should be primary sources of guidance to research students/trainees in the matters of sound scientific practice.

As far as possible, research supervisors should ensure that the work submitted by research students/trainees is their own and that, where there are data, they are valid.

Disclosure of Potential Conflicts of Interest

Disclosure of any potential conflict of interest is essential for the responsible conduct of research. These may include, but are not limited to, any affiliation with, or financial involvement in, or payment of assistance of any kind from any organisation with a direct interest in the subject matter of a research project.

The Department has a clearly formulated policy regarding potential conflicts of interest (see NSW DPI's Code of Conduct).

Formal written disclosure of any conflict of interest will generally be required to research supervisors; the editors of journals to which papers are submitted; and to bodies from which research funds are sought.

Misconduct and Procedure for Handling Allegations of Misconduct

Scientific misconduct may include fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community. It includes misleading ascription of authorship and the listing of authors without their permission, publication of material without all authors consent, 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 honest errors or honest differences in interpretation or judgement of data.

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

Misappropriation

An officer carrying out research or a reviewer must not intentionally or recklessly:

- plagiarise, which means the presentation of the documented words or ideas of another as his or her own, without attribution appropriate for the medium of presentation;

^h while still appropriate this policy is being updated to reflect a whole of DPI position

- make use of any information in breach of any duty of confidentiality associated with the review of any manuscript or grant application;
- omit reference to the relevant published work of others for the purpose of inferring personal discovery of new information.

Interference

- An officer carrying out research or a reviewer must 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

An officer carrying out research or a reviewer must not with intent to deceive, or in reckless disregard for the truth:

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

The above list is not exhaustive. For example, departure in animal experimentation from approved protocols accepted by a specific discipline may constitute misconduct.

5.1 Protection of Interested Parties

Where an allegation of inappropriate conduct is made, the protection of interested parties from unproven, ill founded or mischievous claims is essential.

Interested parties may include:

- the person bringing the allegation
- the staff member against whom a complaint is made
- research students and staff working with the staff member concerned
- journals in which a relevant paper may have been or is about to be published
- funding bodies including Research & Development Corporations,
- cooperative research centres, other government agencies and private/public companies which have contributed to the research.
- Animal Ethics Committee.

Complaint Handling

Complaints should be dealt with in accordance with existing procedures. Where an employee cannot raise a matter with the supervisor as it may involve them directly, then they should report the matter to the relevant Unit Leader, Branch Director, Executive Director or Deputy Director-General. . Formal investigations will be conducted in accordance with the Disciplinary Guidelines laid down within the NSW Public Service Personnel Handbook.

Special Rules

In some disciplines there will be special areas which require regulation, for example the handling of hazardous materials. The rules, policies and guidelines for such activities form part of the general code of ethics for each discipline.

