

The responsible management of research data and materials

Updated June 2010

Contents

- Defining research data and materials
- What needs to be kept in a primary form?
- Who own the data and materials?
- Management during research
- Management after the research
- Agreements with collaborators
- Agreements with service providers
- Controlling access
- Data-banking and the reuse of data

Continued over leaf

Summary

To varying degrees, all research involves the collection, generation, analysis, reporting, and / or storage of data. In addition to data, there can also be research materials that (at least for some disciplines and research designs) can be necessary basis to understand, and perhaps authenticate, the data (eg the lab notes associated with test results). The conduct of researchers with regards to these data / materials are subject to responsible and ethical conduct standards. In many cases, legal standards can also apply to their management.

National and University guidelines

The national guidelines and integrity principles that apply to the retention of research data can be found in the [Australian Code for the Responsible Conduct of Research](#) (2007). The University has implemented, and clarified our implementation of, the [Australian Code](#) with the release of the [Griffith University Code for the Responsible Conduct of Research](#). As per the [Australian Code](#), Griffith University has established policies with regards to the retention of research data and materials. This includes the [Schedule of Retention Periods for Research Data and Primary Materials](#). These arrangements have been registered as part of the University's disposal schedule and so have legislative force.

Because Griffith University was established by a Queensland Act of Parliament, the management of identified personal data in our research is subject to the [Queensland Information Privacy Act](#) (2009). The University policies on the application of the [Queensland Act](#) are discussed in [Booklet 23 of the Griffith University Research Ethics Manual](#).

Consequently, it is extremely important that a researcher is clear about her or his responsibilities with regards to these matters. The *Research Integrity Information Sheet Series* is a resource for researchers to assist with the implementation of these guidelines. **These guidelines apply to all Griffith University researchers, including students.**

Defining research data and materials

No one single definition for research data and materials will fit all disciplinary areas, research designs or traditions. However, a broad definition of research data might be the collected or generated information that will be analysed / interpreted, with a view to making some sort of contribution to the body of academic, professional or general knowledge. Whereas a broad definition of research materials might be the notes, samples or other records necessary to explain the origins of the data or to substantiate the veracity of the data.

In some cases (eg lab-based physical science work or analysis of language samples), retaining the data alone is not sufficient. Instead research materials (eg lab notes or audio recordings of the language sample) will also need to be retained.



The responsible management of research data and materials - page 2

Contents (cont'd)

- Retention requirements
- Sharing with third parties
- Regulatory privacy considerations
- University archiving facilities
- Disposal of data
- Scope of these guidelines

What needs to be retained in a primary form?

An important consideration for researchers is what research data and materials need to be kept in a primary form (eg do returned surveys, source documents, the samples, and audio recordings of discussions need to be kept in a primary form)? Generally, the answer to this question will be discipline and methodologically specific (eg in the case of a tourism project interested in the reported experience of eco-tourists, it is probably sufficient to retain the transcript of the interviews, rather than the actual audio recordings; but in the case of a linguistic project exploring how the primary language of migrants impacts upon their phraseology when speaking the language of their adopted country, it is probably important to retain the actual recordings). In most cases, for anonymous surveys, it will be sufficient only to retain the data extracted from the surveys. But in the case of identified surveys, normally the returned surveys will need to be retained. When a researcher uses data that can be verified to be already in the public domain, there is no need to retain the data. **A useful way to approach this question can be, if someone challenged the reported results of the research project (see No2 in this series), what data or materials would be required to credibly respond.**

Who owns the data and materials?

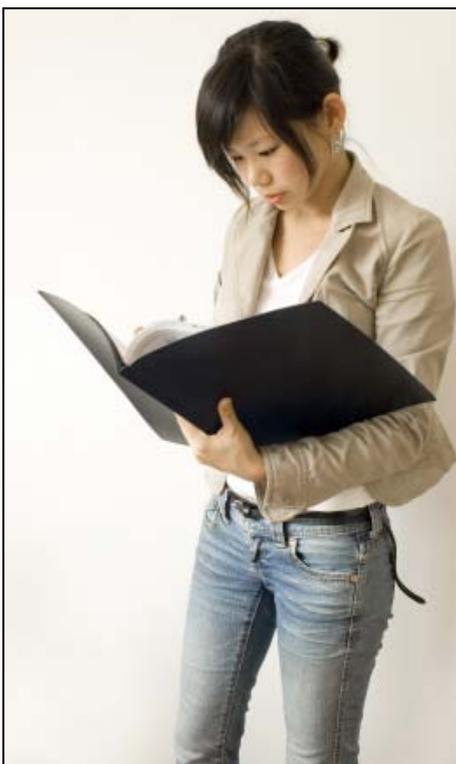
As a general principle, unless they formally agree to a different arrangement (see below), all researchers involved in the collection / generation of the data, and in the analysis of the data (though only when that analysis involves the use of innovative techniques), have an equal claim to ownership of the data / materials. In the case of identified personal information (see below), the research participants themselves have legislated rights with regards to access to, annotation of, prior approval before the data is provided to third parties, and additional uses of, that data.

Management during the research

It is extremely important for researchers to have a plan with regards to the management of the data (and materials) during the conduct of the research, which addresses the matters discussed in this briefing sheet. Examples of important considerations are: i) who is responsible for maintaining and updating the data / materials; ii) where will the data / materials be stored; iii) who will have access; iv) in what form will they be stored (identified, coded or de-identified); v) if there is a code key, where will this be stored and who will have access to the key; vi) if data / materials are to be transported, in what form will they be transported, and what are the security and back-up precautions; and vii) is it possible that third parties (eg law enforcement) might seek access to the data, and what is the planned response to such attempted access?

Management after the research

Many of the same considerations with regards to the management of data / materials during the research also apply after the completion of the research. Additional considerations include: i) will the data just be retained for the minimum retention period (see below); ii) will there potentially be any reuse of the data (see below); and iii) is it necessary to have a mechanism to withdraw an individual data from the stored set if needed (eg because consent has been withdrawn)?



The responsible management of research data and materials - page 3

CARMS Contact

Corporate Archives and Records Management Services

Contact CARMS for further information with regards to the University's disposal schedule, advice with regards to the implications for the data / materials for a specific research project, and making use of the University's central arrangements for the archiving of research data and materials.

Please also refer to [this web site](#).

Corporate Information Officer

Gabrielle Ingram
ext: 57806
g.ingram@griffith.edu.au

Agreements with collaborators

Research is frequently conducted by teams, which sometimes can include persons from other universities, hospitals, research institutions, government agencies, private practice, etc. These collaborators might be involved in every phase of the research, or just in specific elements (eg the analysis of the data). It is extremely important that the collaborators have a shared understanding with regards to the matters above (including whether all of the collaborators can access the data, who owns the data, who can publish based on the data, and any privacy or other ethical issues relating to the data). **It is recommended that the position with regards to these matters is confirmed via email, to ensure there is a record which can be referred to later, if required.**

Agreements with service providers

The conduct of research can often involve third parties / service providers (eg a market research company that will conduct the interviews, or an academic who will analyse the data). It is extremely important that the parties have a shared understanding with regards to the matters above, including who owns the data, who can publish based on the data, and any privacy or other ethical issues relating to the data. **It is recommended that the position with regards to these matters is at least confirmed via email, but these matters may need to be discussed in a formal contract, to ensure there is a record which can be referred to later, if required.**

Controlling access

When research data / materials include sensitive information, it can often be important to control who can access it. In the case of identified personal information, especially when the information is sensitive, there can be significant ethical and legal (see below) imperatives that demand careful control of who can access the data / materials. There are a range of possible and appropriate strategies to control access. Generally the level of security and, in some cases, record keeping about access, should be proportional to the sensitivity of the data / materials.

Data-banking and the reuse of data

In some cases, data sets will be such a rich or unique source of information that researchers will want to retain them for future reuse. Such an approach can often be valid, and indeed responsible - eg if the data has come from participants who live with chronic and relatively rare medical condition, researchers returning to recollect the data for every new project might place an unwarranted burden on the same group of people.

When data are retained for future use, the discussion about responsible management of data / materials after the research continues to apply.

When the data relate to human research, if the data are being held in an identified form, either the original consent needs to anticipate the retention and potential reuse, or fresh consent must be obtained for the new uses.

When publishing / reporting on the basis of banked and reused data, this should be made clear to the editor and probably to the readers / audience.



The responsible management of research data and materials - page 4

Web site

www.griffith.edu.au/research/research-support
select 'Research Integrity'

On the site you will find:

- A link to the Australian Code
- A link to the Griffith Code
- The Information Sheet series
- Links to animal ethics and welfare resources
- Links to human research ethics resources
- Other resources
- Contacts

Further resources are being developed so check this site regularly

Retention requirements

As per the [Australian Code](#), Griffith University has established the [Schedule of Retention Periods for Research Data and Primary Materials](#). This describes different categories of research, and circumstances, and **specifies a minimum period of time during which the data, and any appropriate materials, must be retained.**

These arrangements have been registered as part of the University's disposal schedule and so have legislative force. The destruction of data before the end of the retention period may constitute both a breach of Queensland law and potentially research misconduct - both of which could have serious consequences.

It may be possible to retain data beyond the specified retention date, but in the case of identified personal information from human research, this will only be possible with the consent of the identified individuals.

Sharing with third parties

In nearly all cases, research cannot be considered complete until the results of research are disseminated in the form of some sort of publication or report (see Information Sheet No.2 for more about the research integrity issues relating to the dissemination of results). In some cases, researchers may wish to share data / materials with academic and other colleagues. When this is the case, and the data / materials contain identified personal information, there must be careful consideration of the regulatory privacy requirements (see below) and whether there is research participant consent for this sharing with colleagues. Perhaps the most difficult issues arise when researchers are faced with legal, moral and/or contractual obligations to communicate identified data to the authorities or other third parties.

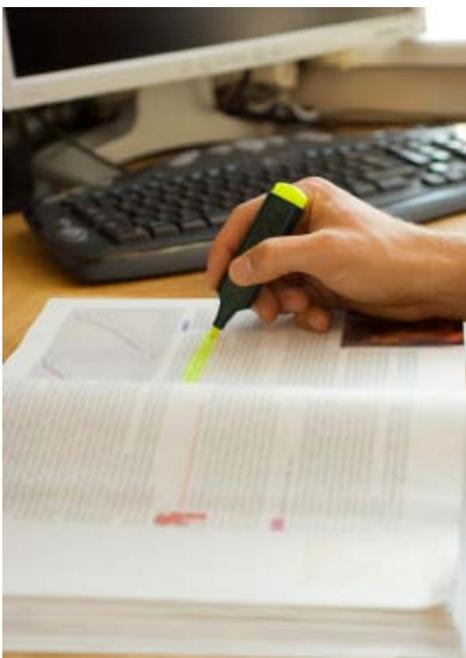
Regulatory privacy considerations

All research involving identified personal information (note: opinion has been defined as personal information) that is conducted under the auspices of Griffith University is subject to the [Queensland Information Privacy Act](#) (2009). This is the case even when the context or jurisdiction where the research will occur is not otherwise subject to either Australian or Queensland privacy regulation.

The [Queensland Act](#) covers matters such as: the generation of, or access to, existing identified personal information; the storage and security of the information; the publication of the information, and sharing it with others; an individual's right to access and annotate identified personal information about them; and related consent issues.

University archiving facilities

Between the date on which a researcher stops using the data and the end of the required retention period, the data must be stored. It is important that if it is needed (eg to respond to a challenge of the published results), the data can be located and retrieved, to ensure that any privacy or confidentiality requirements are met, and that the disposal date for the data is tracked.



The responsible management of research data and materials - page 5

OR Contacts

Office for Research

Senior Manager, Research Ethics and Integrity

Dr Gary Allen
ext: 55585
g.allen@griffith.edu.au

Policy Officer, Research Ethics and Governance

Chris Rose'Meyer
ext: 27227
c.rosemeyer@griffith.edu.au

Animal Ethics Officer

David Rounsevell
ext: 56618
d.rousevell@griffith.edu.au

Systems and Support Officer

Julia Newman
5552 7226:
julia.newman@griffith.edu.au

There has been a growing impetus for Griffith University to establish procedural guidelines to provide secure and adequate storage facilities for research data / materials.

Corporate Archives & Records Management Services (CARMS) has established a process to enable elements to transfer eligible data formats to a third party off-site storage provider - ensuring appropriate recording and tracking of the records. Further information on how to arrange for off-site storage of your research data is available from the CARMS website at <https://intranet.secure.griffith.edu.au/records-management/team-resources/business-processes/businessprocesses/offsite-storage-of-research-data>

Disposal of data

Once the end of the retention period has been reached (see Retention requirements), and unless the data are to be banked for reuse (see above), the data / materials should be disposed of.

If the data / materials are sensitive (eg because they are identified personal information relating to a sensitive matter - such as illegal conduct), commercially significant (eg proprietary information relating to a patent), or otherwise require confidentiality, the disposal method needs to preserve the confidentiality and security of the data / materials. In some cases, this will require the use of a commercial secure service, but in many cases a cross-cut shredder will be sufficient.

When data / materials have been archived using the University's archiving arrangements, the secure disposal of the data is an element of these arrangements.

Scope of these guidelines

These guidelines apply to all forms of research data and materials arising from research by Griffith University researchers, regardless of whether the results will be reported in refereed or non-refereed publications, online or offline, books, conference proceedings, internal reports, formal or more informal publications.

The guidelines also apply to all research, irrespective of whether it requires animal ethics or human research ethical clearance, or how the work was funded (if at all).

