

# **Research Data and Primary Materials Policy**

**OVERVIEW** SCOPE AND APPLICATION POLICY PRINCIPLES

- 1. Governance, Stewardship and Compliance
- 2. Ethical, Legal and Risk Considerations
- Effective Management and Care
   Access and Re-use

#### **PROCEDURES**

- 1. Data Planning
- 2. Storage, Retention and Planning
- 3. Access and Re-use
- 4. Disposal
- Resolution of Disagreements
- Related Policies and Guidelines

#### **DEFINITIONS**

## **OVERVIEW**

The University recognises the importance and value of research data and primary materials, digital and nondigital, and is committed to their effective management, noting that these requirements will differ from discipline to discipline and type of data or material. Individual researchers have the primary responsibility for management of data related to their research. In accordance with the Australian Code for the Responsible Conduct of Research 2018 [the Code], and informed by the associated Guide for the Management of Data and Information in Research 2019 [the Guide], research data must be stored safely and securely, be accessible where possible and appropriate, and be accompanied by clear, accurate, secure and complete records.

Good practice in managing research data is focussed on four key Code principles:

- Rigour in the development, undertaking and reporting of research;
- Transparency in declaring interests and reporting research methodology, data and findings;
- Accountability for the development, undertaking and reporting of research; and
- Fairness in relation to giving appropriate credit and treating other researchers with respect.

Furthermore, there is a common expectation and, in some cases a formal requirement, from the community, government, publishers and grant funding agencies that publicly-funded research should provide outcomes and data that are, where ethically and legally possible, made openly accessible to the research and broader community, according to the FAIR Principles: Findable, Accessible, Interoperable and Reusable.

As far as possible, the University will provide centralised, accessible storage for digital (both born-digital and digitised) research data. The University also sanctions the use of data management repositories that are regulated and curated by appropriate external organisations and agencies provided they are utilised in accord with relevant University policies. Non-digital research data and primary materials must be stored and managed by the individual researcher in consultation with the Data Steward and in accordance with this Policy.

#### **SCOPE AND APPLICATION**

This Policy outlines those principles and procedures associated with the ownership and stewardship, storage, access, security sharing, disposal and management of research data and primary materials. It applies to all staff, students and titleholders of the University of Adelaide who are involved in the conduct of research associated with the University anywhere in the world.

Implementation of this Policy will be carried out in accordance with the University's <u>Code of Conduct</u> and the <u>Academic Board Statement on Undue Influence</u>. Any attempts to improperly exert pressure or influence actions or decisions made pursuant to this Policy must be reported in accordance with the <u>Fraud and Corruption Control Policy</u>.

Attention is also drawn to series of <u>additional polices and guidelines</u>, both from within and external to the University of Adelaide, related to the best practice requirements for the creation and use of research data and primary materials.

## **POLICY PRINCIPLES**

- 1. The University requires robust governance, stewardship and compliance in relation to all activities associated with the management of research data and primary materials.
- 1.1 With respect to the management of research data and primary materials (creation, storage, access, use and disposal), the University and its researchers must satisfy their respective responsibilities under the Code, all relevant policies, guidelines, statements, legislative acts and codes, ethical protocols, contractual arrangements and the interests of the community. In doing so, the University and its researchers must also act in accordance with best practices in their respective discipline.
- 1.2 The University will provide training and education to support responsible research conduct for its staff and students.
- 1.3 Subject to any applicable law or agreement with a third party, the University asserts ownership of research data and primary materials created or collected by:
  - a. staff members in the course of their employment with the University;
  - b. students in the course of their enrolment at the University; and
  - c. titleholders and visitors where such data or primary materials are generated solely or primarily through the use of University resources or funds.
- 1.4 While the University asserts ownership of research data, this does not override the ownership of intellectual property rights that may exist in relation to the research data, which are subject to the University's *Intellectual Property Policy*.
- 1.5 For each research project a <u>Data Steward</u> must be nominated, who will be responsible for the overall management (curation, recording, storage and disposal) of research data and primary materials associated with that specific research project. By default, this will be the Lead Chief Investigator of the project, unless another nomination is made.
- 1.6 A research Data Management Plan (DMP) is required for all University of Adelaide-led research projects.
- 1.7 Where research data or primary materials are created by University staff, students or titleholders in collaboration with another institution, there must be an agreement between the University and that other institution on the ownership, storage, access and management of the research data and primary materials. Where collaboration is with individuals rather than an institution, it is prudent to establish a written agreement, but not mandated unless required by a funding sponsor. Any agreements must be consistent with the University's *Contracts and Agreements Policy*. In cases where there are a large number of researchers involved in a project, it is sufficient for there to be a documented understanding about the ownership, storage, access and management of any data and primary materials created in the project.
- 1.8 Failure to store or deposit research data (digital or non-digital) and primary materials in accordance with this Policy may constitute a breach of the Code, and leave the researchers without the benefit or protection of

the University's insurance policies. The loss of such research data or primary materials will be at the sole risk of the researcher.

- 2. The University requires that all ethical, legal and risk considerations associated with research data and primary materials are appropriately managed throughout the life-cycle of research activities.
- 2.1 Researchers are required to treat with respect, and in accordance with the laws, human participants and animals which are the subject of the collection of data.
- 2.2 Researchers may hold data and information used in, or generated by, research involving Aboriginal and Torres Strait Islander peoples and communities, but such research must be conducted in accordance with the Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders, and the AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research
- 2.3 Noting the potential for extraction of information through data mining and aggregation associated with large data sets, and in accord with the requirements of the University <u>Privacy Policy</u> and human research ethics rules and procedures, this Policy prohibits re-identification, by any mechanism, of de-identified data.
- 2.4 The potential for data breaches through unauthorised access must be treated seriously, and all data must be securely managed at the level required by any associated contract, agreement, policy, regulation or other requirement determined by its source or use.
- 2.5 In the event that the processes, methods or outcomes of the research are challenged by any person for any reason, research data and primary materials must be retained by the University and the relevant researcher beyond the minimum periods under Policy Principle 3.4. It is not permissible to destroy records, data, primary materials or related documents and sources that are relevant to allegations of misconduct, or challenged research results.
- 2.6 While data should be made sharable in accordance with FAIR principles whenever possible, researchers must ensure that access or re-use of their data is only allowed in accordance with any associated contract, agreement, policy, regulation or other requirement determined by its use, including, but not limited to, the University's collective <a href="Integrity and National Security Obligations">Integrity and National Security Obligations</a>.
- 3. The University requires that the management and care of research data and primary materials are consistent with best practice processes, FAIR principles and community expectations throughout the life-cycle of research activities.
- 3.1 All research data and primary materials must be stored in a stable and durable format by the researcher in a <u>University-approved</u>, secure, accessible and visible location, with the final version of digital research data relating to any scholarly output deposited in an appropriate data-store and recorded in the preferred <u>University metadata store</u>. Metadata may include descriptions, details of provenance, structure and location, and other information which could aid comprehension and re-use in accordance with the FAIR principles.
- 3.2 If a researcher is to leave the University, the <u>Data Steward</u> must ensure any research data and primary materials held by that researcher are secured.
- 3.3 If a researcher transfers to a different institution, ownership and custody of any research data and primary materials they created may be transferred to that institution, provided that a formal written agreement is entered into between the University and the new institution for the transfer of the data and materials to, and curation by, the latter.
- 3.4 University research data must be retained at least for the minimum period prescribed in the General Disposal Schedule No 24 under the <u>State Records Act</u>. Primary materials must be retained at least for the period sufficient to satisfy minimum retention requirements under relevant legislation or the Code. If longer retention periods apply under professional standards, conditions of funding or other contractual arrangements, they must be observed.
- 3.5 If research data or primary materials are no longer required to be retained to satisfy Policy Principles 2.5 or 3.4, they may be destroyed or disposed of having regard to Policy Principle 1.1, the Information

Management Policy, or any procedures on destruction or disposal that may be determined by the University from time to time.

- 3.6 Where research data comprise 'Class 3' information, appropriate security controls around access, storage, transmission and disposal must be implemented in accordance with the University <u>Information</u> Classification and Protection Guidelines.
- 3.7 Research data may only be stored or processed at a third-party facility (including any cloud storage or software as a service facility), in accordance with the University *Third Party Hosting Security Guidelines*.
- 4. The University requires its researchers to provide appropriate accessibility to research data and primary materials to support transparency, accountability, re-use and the sharing of knowledge.
- 4.1 The assertion of University ownership does not impede further use of research data by researchers where compliant with this Policy and the Code, and enables the University to manage the research data for long-term purposes, including data preservation and data sharing.
- 4.2 Subject to any applicable law, agreement with a third party (including approval from ethics committees and individual consent) or confidentiality or security restrictions, researchers are permitted to retain copies of their research data for their own use. If jointly created, an agreement on data sharing must be reached with the other co-creators who may hold a copy of the data.
- 4.3 The University is committed to enabling open access to its scholarly output, and supports the aspirations of the <u>Sorbonne Declaration</u> on research data rights, to which the Group of Eight is a signatory. Where the University is the owner of research data, data custodians must make the data-sets available under the Creative Commons CC-BY licence v4.0 unless:
  - this is prevented by the requirements of legislation or University policy, ethics approvals, ethical, cultural, contractual or confidentiality obligations; or
  - the research data is comprised of sensitive data that cannot be appropriately de-identified, or is subject to an embargo.

Decisions for not sharing data should be transparent and justifiable, and researchers should keep records on data access.

- 4.4 Researchers seeking to access research data created by other researchers that has not been licensed for re-use, must take reasonable steps to consult the creator(s) of that research data for their consent; and must use those data in accordance with Policy Principle 1.1 and acknowledge the creator(s) of those data.
- 4.5 The University requires that researchers use the Open Researcher and Contributor ID (ORCiD) or Digital Object Identifiers (DOI) and standard terminology, as it assists in making a body of work more accessible by others, and provides a seamless updating of information to University of Adelaide and some external publication and funding systems.

#### **PROCEDURES**

# 1. Data Planning

- 1.1 Research DMPs should address data storage, access and re-use arrangements, and any other aspects required by the relevant funding body. The DMP must reflect the open access approach adopted in this Policy. These plans should be updated throughout the life of the project to take into account significant changes to the research project, e.g. the addition or deletion of investigators.
- 1.2 For staff projects, the DMP must be prepared by the Data Steward, who will be by default the Lead Chief Investigator at the University of Adelaide. The DMP must be stored in compliance with the University Records Policy to ensure it can be produced when audited. In the particular instance of externally-funded research, the University will not release funds unless a DMP is submitted to the University Research Data Planner web portal. Research Data Planner connects with research project and record management systems to ensure record keeping requirements are met.

1.3 Higher Degree by Research (HDR) students, in consultation with their principal supervisor, must provide an initial research DMP as a requirement of their Core Component of the Structured Program, with a final version of the plan provided at the time of final lodgement of the thesis.

# Responsibility: Data Stewards

- a) Prepare a research DMP for all internally- and externally-funded research projects.
- b) For externally-funded research projects, submit the research DMP to the University Research Data Planner web portal following funding approval.

# Responsibility: Higher Degree by Research Students

- c) Prepare an initial research DMP for all research projects, and submit as part of the Core Component of the Structured Program.
- d) Submit a final research DMP with their completed thesis, and lodge their research data with the University. (Refer to Procedure 2 below.)

# Responsibility: Higher Degree by Research Student Supervisors

e) Oversee the preparation of a research DMP for HDR students under their supervision.

# 2. Storage, Retention and Publishing

The storage of data relating to a research project usually falls within two stages:

- During the life of the research project, 'active' or raw data are maintained by the lead researcher for
  use within their research team, and must be stored in a secure, accessible, backed-up and identified
  location, as listed in the associated DMP; and
- Following completion of the research project, the final data must be appropriately archived.

Researchers are encouraged to store their research data in <u>Figshare</u>, the University of Adelaide's official data and digital object repository, and which is a platform for publishing the University community's research outputs.

Additional information on appropriate arrangements for storage is provided by <u>Information Technology and Digital Services (ITDS)</u>.

## 2.1 Selecting a data repository

At the completion of a project, data must be archived in an accessible location. Some funding bodies may have specific retention requirements, which must be complied with as part of a funding agreement. There may also be a requirement by some publishers that research data associated with an approved publication is deposited in a nominated repository.

- a) When selecting a means for data archive and publication, repositories should be evaluated for suitability according to the principles of this Policy by the researcher in consultation with the Data Steward.
- b) In cases where the data cannot be deposited into a repository, it should be retained in appropriate and secure University storage.
- c) In all cases, the location of the data and, where appropriate, an associated data dictionary, must be recorded in the preferred <u>University metadata store</u>
- d) Noting that there may be a requirement by some publishers that research data associated with an approved publication is deposited in a nominated repository, if human participants are involved with the research, they should be made aware of this potentiality at the point of consent.

#### 2.2 Retention

In line with the Code and the <u>State Records Act 1997</u>, all research data and records should be archived for a minimum of 5 years from the date of publication. However, there will be some specific exceptions, e.g.:

- for short-term research projects that are primarily for assessment purposes only, such as research
  projects completed by students, retaining research data for 12 months after the completion of the
  project may be sufficient. However, Higher Degree by Research theses and some Honours and
  postgraduate coursework research projects which also further knowledge, should be retained in line
  with other research requirements;
- for most clinical trials, retaining research data for 15 years or more is necessary;

- for areas such as gene therapy, research data must be retained permanently (e.g. patient records);
   and
- if the work has community or heritage value, research data should be kept permanently, preferably within a national collection.

As far as practicable, non-digital research data and primary materials must be stored by the researcher in a secure, accessible and identified location, and durable records derived from them must be recorded in the preferred <u>University metadata store</u>.

# Responsibility: Researcher

- a) In consultation with the Data Steward, ensure research data and primary materials are stored in a secure, accessible and identified location, and that confidential material is held in an appropriately secure location.
- b) Such data and materials and their location must be recorded in the University metadata store, whether stored within the University or externally.
- c) Maintain accurate, complete, reliable and authentic records of their research methods, data, materials and findings, including any approvals. These records need to be in a durable, organised and accessible format, along with associated metadata. When leaving the University, researchers should arrange for the conversion of any data on obsolescent storage media to be transferred onto current University or University-approved storage technology for re-use and archiving.
- d) Report any inappropriate use of or access to or loss of data to the Area Manager.
- e) If involved in a collaborative or joint research project, ensure that clear procedures are agreed by all parties for the ownership, collection, storage and management of any related data or materials, and that they are well documented.
- f) Comply with the data retention requirements of specific funding bodies, including confidentiality agreements and restrictions on the use of research data.
- g) If supervising research students, ensure the students are aware of the requirements of this Policy.
- h) Where relevant, adhere to the conditions of any research ethics approvals and agreements and restrictions relating to the use of research data.

# Responsibility: Data Stewards

i) Where applicable, ensure exiting staff and research students have deposited all original research data and primary materials created during their research work at the University, and that these data and materials are appropriately stored and catalogued. Subject to the provisions of any applicable contract, agreement, policy, regulation or other requirement determined by its use, copies of the research data or primary materials may be taken by the exiting staff member or student.

# Responsibility: Heads of School or Department (as appropriate)

- j) Ensure researchers store their research data and primary materials in an accessible and identified location.
- k) Ensure exiting staff have left all original research data and primary materials created during their research work at the University, that these data and materials are appropriately stored and catalogued, and that electronic devices that may be re-used by others are checked for pre-existing data, transferred to an appropriate repository and cleared.

# Responsibility: Higher Degree by Research Students

I) Prior to submission of their thesis, deposit research data and primary research materials with your supervisor. Further information is provided in the Research Student Handbook.

#### 3. Access and Re-use

- 3.1 Researchers engaged in publicly-funded research must adhere to the access requirements of the specific funding body. This includes, but is not limited to, the <u>Australian Research Council Open Access Policy</u>, and the <u>National Health and Medical Research Council Open Access Policy</u>.
- 3.2 To mark a University-owned data set as being available under the CC-BY v4.0 licence, researchers should follow the instructions at <a href="https://wiki.creativecommons.org/images/6/61/Creativecommons-licensing-and-marking-your-content\_eng.pdf">https://wiki.creativecommons.org/images/6/61/Creativecommons-licensing-and-marking-your-content\_eng.pdf</a>. The following attribution wording should be applied: "Copyright University of Adelaide ([Name of School / Research Centre], [year]).

- 3.3 In cases where a CC-BY license is not suitable, another form of licence may be appropriate. In such cases, researchers must seek approval from the Deputy Vice-Chancellor (Research) or their delegated representative.
- 3.4 Researchers who are collecting information from or about individuals for their research need to be aware of the requirements and implications of governmental and organisational privacy legislation, including those from other countries, and how this may affect the collection, storage, use and disclosure of data.
- 3.5 Where research involves the personal data of European Union citizens or residents, or goods and services are offered to such people, all researchers, regardless of their home country, must abide by the requirements of the strict General Data Protection Regulation in relation to privacy and security.
- 3.6 The University's ITDS branch will provide an appropriate platform to store sensitive data and assist researchers with managing access to such data.

#### Responsibility: Researcher

- a) Taking into account any privacy or confidentiality requirements and/or legislation, provide authority for other researchers to access and/or share their data.
- b) Where seeking to access research data created by other researchers that is not in the public domain, or licensed for the type of re-use for which the researcher intends to use the data, attain written approval from the latter. If those data are subsequently used, acknowledge the creator(s) of the data in research outputs.

#### Responsibility: Deputy Vice-Chancellor (Research)

a) Consider requests for the use of a data license other than a CC-BY license.

# 4. Disposal

The disposal of data must be compliant with the requirements of the <u>State Records Act 1997</u> and the University <u>Information Management Policy</u>.

#### Responsibility: Data Stewards

a) In consultation with Records Services, provide a recommendation to the relevant Head of School on the disposal of their research data or primary materials, as part of a research DMP.

## 5. Resolution of Disagreements

Where a disagreement arises between researchers about access to or re-use of research data under this Policy, it should be referred to the Deputy Vice-Chancellor (Research), who will make a final determination.

#### 6. Related Policies and Guidelines

The following list of <u>additional polices and guidelines</u> are related to the best practice requirements for the creation and use of research data and primary materials.

# **University of Adelaide**

Responsible Conduct of Research Policy

**Intellectual Property Policy** 

Conflict of Interest Procedure

**Contracts and Agreements Policy** 

Open Access Policy

**Information Management Policy** 

**Privacy Policy** 

IT Acceptable Use and Security Policy

Information Classification and Protection Guidelines

Third Party Hosting Security Guidelines

**Tied Research Funds Policy** 

Research Grants, Contracts and Consultancies Policy

Fraud and Corruption Control Policy

Research Education and Supervision Policy

Research Student Handbook

#### **External**

Australian Code for the Responsible Conduct of Research 2018

Code Management of Data and Information in Research Guide 2019

Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders 2018

AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research.

Australian Code of Practice for the Care and Use of Animals for Scientific Purposes

National Statement on Ethical Conduct in Human Research

South Australian Aboriginal Health Research Accord

Australian Research Council Open Access Policy

National Health and Medical Research Council Open Access Policy

#### **DEFINITIONS**

#### CC-BY v4.0

Refers to an international Creative Commons licensing system (<a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>) under which material is made freely available to the world to copy, use or adapt, with appropriate attribution.

#### **Class 3 information**

Confidential information as defined in the University <u>Information Classification and Protection Guidelines</u>, e.g. medical records and patient data, personally identifiable data, etc.

#### The Code

Refers to the Australian Code for the Responsible Conduct of Research 2018.

#### **Data Steward**

A nominated, senior person responsible for the management of research data and primary materials associated with a specific research project (which may be a component of a larger initiative) during the full lifecycle of that project. By default, this will be the Lead Chief Investigator of the project, unless another nomination is made by the Lead Chief Investigator or their Head of School.

## **Data Ownership**

Original research data and primary materials generated in the conduct of research at the University will be owned and retained by the University subject to any contractual, statutory, ethical, and/or funding body requirements.

## Digital research data

Data and records created and/or maintained by means of electronic equipment and which may also be communicated through electronic means.<sup>1</sup>

# The Guide

Refers to the Code Management of Data and Information in Research Guide 2019.

#### Metadata

Metadata provides information on specific research data or primary materials, and normally includes such details as the means of creation of the data, the purpose of the data, time and date of creation, the creator or author of data, the location of the data, etc. It assists in the discovery, use/re-use and management of the data, and in allowing correct attribution to the creators of the work.

# **Primary materials**

Physical objects acquired through a process of scholarly investigation from which research data may be derived. It may include raw physical materials such as ore, soil samples or biological material, or physical or digital objects such as artefacts, questionnaires, sound recordings or video. Depending on discipline, primary materials may be considered research data, and may be required to be retained if they are required to validate the outcomes of research, and defend those outcomes against challenge.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The University of Melbourne *Policy on the Management of Research Data and Records* http://www.unimelb.edu.au/records/research.html.

<sup>&</sup>lt;sup>2</sup> University of Sydney Research Data Management Policy http://sydney.edu.au/policies/showdoc.aspx?recnum=PDOC2013/337

## Research

Research is 'the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies, inventions and understandings. This could include synthesis and analysis of previous research to the extent that it is new and creative'.<sup>3</sup>

#### **Research Data**

Data are facts, observations or experiences on which an argument, theory or test is based. Data may be numerical, descriptive or visual. Data may be raw or analysed, experimental or observational. Data includes: laboratory notebooks; field notebooks; primary research data (including research data in hardcopy or in computer readable form); questionnaires; audiotapes; videotapes; models; photographs; films; test responses. Research collections may include slides; artefacts; specimens; samples. Provenance information about the data might also be included: the how, when, where it was collected and with what (for example, instrument). The original software code used to generate, annotate or analyse the data is included.<sup>4</sup>

Research data and primary materials will also include evidence to support the formulation of the hypotheses and findings in areas such as text-based research. It also includes creative outputs, for example drafts of original literary and musical works, and musical performances, as recognised or defined by evaluative processes such as Excellence in Research for Australia (ERA).

#### Researcher

A staff member, student, affiliate or titleholder of the University of Adelaide who is involved in the conduct of research associated with the University anywhere in the world.

#### **Sensitive Data**

Sensitive data are data that can be used to identify an individual, species, object, process or location that introduces a risk of discrimination, harm or unwanted attention. Under law and the research ethics governance of most institutions, sensitive data cannot typically be shared *in this form*, with few exceptions. Deidentification (i.e. removing direct identifying details) alone may be insufficient to change the data from being "sensitive data", and a range of steps to confidentialise the data may be necessary. Guidance is provided by the Australian Research Data Commons.

RMO File No.	F. 2021/1199
Policy Custodian	Deputy Vice-Chancellor and Vice-President (Research)
Responsible policy officer	Pro Vice-Chancellor (Research Operations)
Endorsed by	Academic Board on 4 August 2021
Approved by	Vice-Chancellor and President on 4 August 2021
Related Documents and Policies	Refer to Procedure 6 of this Policy.
	·
Related Legislation	State Records Act
Superseded Policies	Research Data and Primary Materials Policy 2015
Effective from	4 August 2021
Review Date	3 August 2024
Contact for queries about the	Director of Research Infrastructure and Platforms, 8313 3050
Policy	

<sup>&</sup>lt;sup>3</sup> The Australian Code for the Responsible Conduct of Research, 2018, p.5

<sup>&</sup>lt;sup>4</sup> Based on the University of Melbourne *Policy on the Management of Research Data and Records* http://www.unimelb.edu.au/records/research.html