

Research Data Governance & Materials Handling Policy

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Purpose		 Outline the access, retri and material Provide be requirement Ensure that operational seems 	est practice measure s t UNSW complies w standards.	es and responsibilitions, and backup of UN s to enable com	data') at UNSW. as associated with ISW research data
Scope Policy Prov		consultants, or affiliated v All research UNSW affilia Research da	Researchers and Read external parties en	saged in research a sed or generated a of form, including but	ctivities associated t UNSW or during

1. Introduction

Research data are a strategic asset of UNSW, making the appropriate governance regarding management and use of research data critical to our operations. Lack of governance could expose the University to unwanted risks and may lead to improper management of UNSW assets.

Research data and material allow research findings to be validated and have long-term value as a potential resource for future research and teaching. Good practice in research data governance and materials handling penefits the wider research community by enabling future researchers to publish, share, cite and reuse the research data and material by reducing the risk of loss and corruption.

'Good data management is good research' is the principle upon which our approach to managing research data and material at UNSW is founded. This Policy has been developed in response to the specific needs of the research community. Additionally, an overarching UNSW Research Data Covernance Framework (RDGF) has been developed.

2. Research data at UNSW

Research data and materials are the original sources that have been created, generated or collated in the conduct of research. They can be digital or non-digital.

Research data and materials are data generated in the conduct of research that include, but are not limited to:

- Any data that are generated in the conduct of research
- Any recorded data that are of significance to research undertaken by the university's researchers
- Any source or primary materials, in particular where these may be necessary to validate research results
- Annotated bibliographies and readings

- Clinical records of treatments and test results
- Collection of digital objects acquired and generated during the process of research
- Contents of an application (e.g. input, output, logfiles for analysis software, simulation software, schemas)
- Curated data from other research projects
- Database contents (video, audio, text, images)
- · Design portfolios, mock-ups
- Documentation of a research journey
- · Documents (text, Word), spreadsheets
- · Drafts of music scores
- Experimental results and the contents of laboratory notebooks, field notebooks, diarie
- Human / animal / geological materials (e.g. slides, artefacts, specimens, samples)
- Images or visualisations
- Metadata
- · Methodologies and workflows
- Models, algorithms, scripts
- Notes, audiotapes, videotapes, (including those collected during interviews or by other means)
- Numerical or graphic results obtained as the output of simulations, modelling or any other software
 or as the result of analysis of experimental results
- Personnel and medical information and similar information the disclosure of which would constitute a
 clearly unwarranted invasion of personal privacy, such as information that could be used to identify a
 particular person in a research study
- Photographs, films
- Plant materials, cell/bacterial/viral samples or specimens
- Protein or genetic sequences
- Questionnaires, transcripts, codebooks
- Records of interviews in the form of notes, audio or video recordings
- References stored in management software (e.g. Zotero, Mendeley, Endnote)
- Responses to surveys or questionnaires
- Spectra
- Standard operating procedures and protocols
- Survey responses
- Test responses
- rade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information that is protected under law.

The following data and materials are not considered to be research data and materials, unless the use of such data and materials is for research purposes, and they are outside the scope of the Policy:

- Administrative data such as payroll, student enrolments, research administration
- Learning and teaching data (consisting of data relating to students who are studying at UNSW and their progress in their courses)
- Library management systems such as UNSW Research Outputs System (ROS) and UNSWorks
- Research management systems such as Info Ed, MyEthics, GRIS, BORIS
- Research publications.

3. The Policy framework and principles

The following framework outlines the principles and minimum standards that are applicable to all individuals fitting the scope of the Policy:

3.1. Roles and responsibilities

The Policy applies to everyone involved in research at UNSW, e.g. researchers, research trainees, staff and consultants. This Policy provides guidance on the different types of roles involved in a research project. A brief description of these roles follows below:

- Data Custodian: UNSW, rather than any individual or Organisational Unit, is the Custodian of
 the data and materials and any information derived from the data. 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.
- Chief Data & Insights Officer: is responsible for the overall management of the iniversity's Data and Information Governance.
- Data Governance Steering Committee: is responsible for defining the overall vision and Data and Information Governance principles, and oversees initiatives designed to result in more effective and efficient use of data across UNSW.
- Research Data Management Committee: is the committee delegated by the Data Governance Steering Committee for the governance of research data at UNSW.
- **UNSW IT:** is responsible for establishing and maintaining secure locations to store research data.
- Research Data Owners: are typically Heads of Schools, Heads of Research Institutes, Chief
 Investigators or Principal Investigators and are accountable for ensuring effective local protocols
 are in place to guide the appropriate use of their data and materials. They (or delegated
 Research Data Stewards) are responsible for ensuring that all legal, regulatory, and policy
 requirements are met in relation to the specific data and that the data and materials conform to
 legal, regulatory, exchange, and operational standards.

Higher Degree Research (HDR) students are the data owner for their research data in respect of their HDR enrolment.

The Research Data Owner must ensure that the process for the administration of data and material is in accordance with the Research Data Management Lifecycle (refer <u>Appendix 1</u>).

Heads of Schools (or Chief Investigators or Principal Investigators) are responsible for ensuring that the requirements outlined in the Policy can be implemented prior to approving a research project, including that there is sufficient space and resource to accommodate the research data and material.

Heads of Schools (or Chief Investigators or Principal Investigators) are responsible for maintaining a register of the establishment and ownership of databases containing confidential information within their school. Access to these databases must be restricted to researchers with approved involvement in specific research projects.

- Heads of Schools (or Chief Investigators or Principal Investigators) are responsible for liaising with the Pro-Vice-Chancellor (Research Infrastructure) to ensure staff are trained on security of data and documentation.
- Research Data Stewards: are responsible for the quality, integrity, implementation and enforcement of data management within their research project. Every research dataset may have one or more Data Steward (refer Appendix 2).
 - The Research Data Steward will classify and approve user access to the data and materials, under delegation from a Research Data Owner, based upon the appropriateness of the User's role and the intended use. Where necessary, approval from the Research Data Owner may be required prior to authorisation of access to other users.
- Research Data Creators: are people who create original research data and materials during a
 research project at UNSW. This includes academics, professional and technical staff, students,
 collaborators at other institutions, contractors, and consultants who participate in a research
 project.

- Data Specialists: are subject matter experts in relation to the data and materials. They are specialists who are responsible for providing ongoing support in respect of research data and related systems.
- UNSW Researchers and Research Trainees: Researchers have a responsibility to keep full, accurate and legible records of research methods, research data and primary materials (including laboratory notebooks and electronic data) in a durable, organised and accessible manner.

3.2. Quality and integrity

Everyone responsible for research projects at UNSW must ensure appropriate research data standards are followed to uphold the quality and integrity of the data they create, access, manage and destroy. This responsibility includes:

- Keeping research data and material records up-to-date throughout every stage of the research project and in an auditable and traceable manner.
- Maintaining a catalogue of all research data and materials in an accessible form that can be traced back to their source.
- Recording data that supports research conducted at UNSW (including electronic data) in a durable and appropriately referenced form.
- Making research data and material related to research outputs available or discussion with other researchers (unless confidentiality provisions apply).
- Ensuring research data and materials remain the property of UNSW, unless subject to a third-party agreement.
- Restricting the collection of research data and materials to legitimate uses, to optimise research outcomes and to add value to the University.
- Producing a written agreement between all relevant parties when research is carried out at
 multiple organisations, which clearly specifies the principles of storage, destruction and retention
 of research data and materials within each organisation.
- Ensuring any confidential data and material, including data and materials held in computing systems, are kept appropriately secure according to any applicable privacy laws as well as the UNSW Privacy Management Plan, which has been created to comply with the *Privacy and* Personal Information Protection Act. 998 (NSW).

3.3. Storage, retention and disposal of research data

Everyone responsible for research at UNSW must ensure that research data and materials, as well as registers of these data and materials, are kept in a format, and for a period, that conforms to the requirements of the *State Records Act 1998* (NSW), funding agencies' or publisher guidelines, or in accordance with discipline norms, whichever is the longer period. A table outlining minimum retention periods for the various classes of research data is at:

https://www.recordkeeping.unsw.edu.au/documents/Retention_Periods_for_Records_relating_to_Research_November 2017.pdf.

They should also ensure that:

- wherever possible, original research data and materials (and, where relevant, materials or samples) are retained in the school or research unit in which they are generated. If required, individual researchers can hold copies of the data for their own use are retained in the school or research unit in which they are generated. If required, individual researchers can hold copies of the data for their own use.
- Where research material is not kept within the school, a written record of the location of data is retained by the researcher and school.
- At the end of any research project hosted by UNSW, research data and materials remain the property of UNSW, unless subject to a third-party agreement.
- When the specified period of retention has finished, researchers fulfil their responsibility to
 dispose of research data and materials in a secure and safe manner (for more details, click here)
 and in accordance with the UNSW Recordkeeping Policy.

- Where a researcher moves from UNSW, original data and materials remain at UNSW unless a
 written agreement has been reached with the researcher's new organisation covering ownership,
 use, storage and disposal of research data and materials.
- Research materials are stored and used in an appropriate Biosecurity Containment (BC) or Physical Containment (PC) facility as required by the relevant Commonwealth and NSW Biosecurity Acts, as well as UNSW HSE policies and procedures.
- Wherever relevant, research data and materials storage and handling adhere to the conditions of human research ethics approvals.

3.4. Classification and security:

People working on UNSW Research Projects must refer to the *Data Classification Standard* and the *Data Handling Guidelines* for information on classification and security requirements. To comply with these requirements, they must:

Always use appropriate research data security measures (see the UNSW Data Classification Standard and UNSW Data Handling Guidelines) to ensure the safety, quality and integrity of UNSW's research data and materials.

- Store research data in an electronic format that is protected by appropriate electronic safeguards and/or physical access controls that restrict access only to authorised user(s), including research data in any UNSW or external data repository (databases etc.).
- Ensure research data and materials are always accessible and available during the life of a research project unless subject to confidentiality/security provisions. This Policy applies to data in all formats (see Section 2 for examples).
- If research is undertaken in collaboration with other institutions, government agencies, or any third party, ensure that a written agreement is in place to over research data and materials ownership, sharing, storage, accessibility, retention, and disposal.

4. Import and export of research material

People working on UNSW research projects must obtain relevant permits before shipping any research materials that have import/export restrictions in Australia. An importation permit, together with the appropriate packaging and labelling, will expedite the clearance of such packages through the Australian Quarantine Inspection Service (AQIS) and release by Australian Customs. Researchers must ensure that they meet the relevant Customs and AQIS or other requirements for the import or export of research material (for more details, click here).

5. Data accessibility

Researchers must make available any research data and materials related to publications for discussion with other researchers. Where confidentiality provisions apply (for example, where the researchers or the institution have given undertakings to third parties, such as the subjects of the research), it is desirable for researchers to keep data in a way that allows necessary third parties to reference the information without breaching such confidentiality.

6. Failure to comply with the Policy

The Policy forms part of the UNSW Research Code of Conduct ('the Research Code'). Non-compliance with any of the requirements of the Policy may be considered as a breach of the Research Code or Research Misconduct in accordance with the Research Misconduct Procedure.

7. Further assistance

Any staff member who requires assistance in understanding the Policy should first consult their nominated supervisor who is responsible for the implementation and operation of these arrangements in their work area. Should further assistance be needed, the staff member should contact the Contact Officer for clarification.

Accountabilities					
Responsible Officer	Deputy Vice-Chancellor Research				
Contact Officer	Chief Data & Insights Officer, UNSW Planning & Performance				
	Pro-Vice-Chancellor (Research Infrastructure)				
Supporting information					
Legislative Compliance	This Policy supports the University's compliance with the following legislation:				
	State Records Act 1998 (NSW)				
Supporting Documents	Data Governance Policy				
	Data Classification Standard				
	Data Handling Guidelines				
	UNSW Privacy Management Plan				
	Research Code of Conduct				
Related Documents	Research Authorship and Publication Dispute Management Procedure				
	Cold Storage Procedure				
	Collibra Data Governance Centre: https://unsw.collibra.com				
	Conflict of Interest Disclosure and Management Policy				
	Information Security Management System				
	Insider Trading Policy				
	Intellectual Property Policy				
	IT Security Policy - Information Security Management System (ISMS)				
	IT Security Standards				
	Paid Outside Work by Academic Staff Policy				
	Radiation Research Safety Procedure				
	Recordkespine Policy				
	Research Export Controls Procedure				
• •	Research Misconduct Procedure				
	Statement of Authorship and Location of Data Form				
	UNSW Register of Delegations				
	UNSW Risk Management Framework				
Superseded Documents	Nil				
File Number	2019/15967				
Definitions and acronym					

Definitions and acronyms

Please refer to the Collibra Data Governance Centre (zID and zPass required) and search for up-to-date definitions (https://unsw.collibra.com).

To establish operational definitions and facilitate ease of reference, the following terms are defined:

Access	The right to read, copy, or query data.		
Data set	A term use to denote a set of research data.		
Chief Data & Insights Officer	Senior officer of UNSW responsible for Data and Information Governance.		

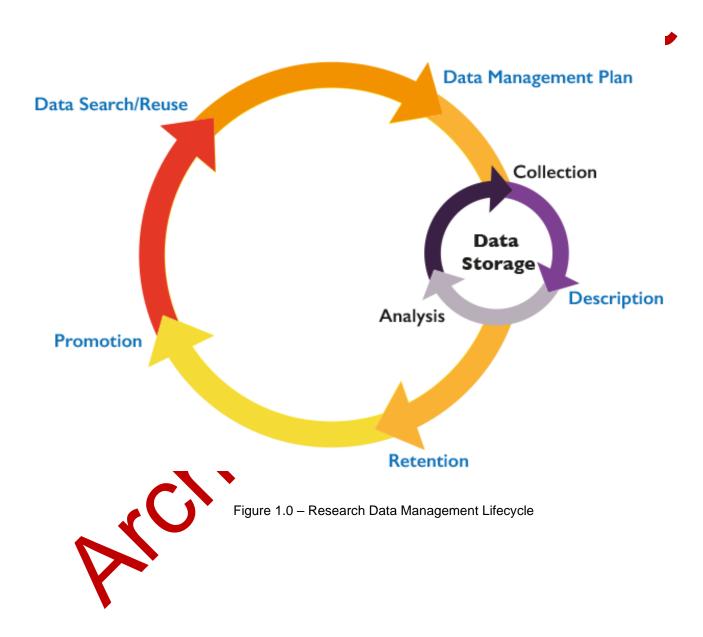
The representation of facts, concepts or instructions in a formalised (consistent and agreed) manner suitable for communication, interpretation or processing by human or automatic means. Typically comprised of numbers, words or images. The format and presentation of data may vary with the context in which they are used. Institutional data Data are not Information until used in a particular context for a particular purpose. (Office of the Australian Information Commissioner (OAIC), 2013) Data are typically considered to be conceptually at the lowest level of abstraction. In the context of this Policy this term includes all institutional data including research, administrative, and learning and teaching artefacts. Research data and materials are the original sources or material that have been created, generated or collated in the conduct of research. They can be digital or non-Research data and materials digital. The response to a particular research question is based on the analysis of the research data and material. Research data and material may include but are not limited to any data that are generated in the conduct of research clinical records of treatments and test results annotated bibliographies and readings records of interviews in the form of notes, and or video recordings audiotapes, videotapes collection of digital objects acquired and generated during the process of research contents of an application (e.g. input, output, logfiles for analysis software, simulation software, scheme curated data from other re earch projects database contents (video audio, text, images) design portfolios, mockdocumentation of the research journey xt, Word), spreadsheets documents (scores erimental results and the contents of laboratory notebooks, field notebooks, Examples of research data numan/animal materials (e.g. slides, artefacts, specimens, samples) images or visualisations metadata methodologies and workflows models, algorithms, scripts photographs, films protein or genetic sequences questionnaires, transcripts, codebooks references stored in management software (e.g. Zotero, Mendeley, Endnote) responses to surveys or questionnaires numerical or graphic results obtained as the output of simulations, modelling or any other software or as the result of analysis of experimental results plant materials, cell/bacterial/viral samples or specimens spectra standard operating procedures and protocols survey and test responses

		any other source or primary materials, in particular where these may be necessary to validate research results						
		trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information that is protected under law						
		personnel and medical information and similar information the disclosure of which would constitute a clearly unwarranted invasion of personal privacy, such as information that could be used to identify a particular person in a research study						
		any other recorded data that are of significance to research undertaken by the University's researchers.						
Research D	ata Creator	Research Data Creators are persons responsible for the creation of research data and primary materials.						
Data Govern Committee DGSC	nance Steering	A University-wide committee with members consisting of Data Executives, Data Owners, Data Stewards and designated Data Users, senior academic and professional staff members.						
Data Specia	llist	Data Specialists are subject matter experts in relation to the data or information asset.						
Information Management		The ISMS provides information security governance and sets out people, process and technology related controls to assure the confidentiality, integrity and availability of all UNSW data. The ISMS is a response to UNSW data classification and data handling requirements. Moreover, the deployment and measurement of ISMS controls provides input into the risk management process enabling informed business decisions.						
Integrity or	data integrity	Refers to the accuracy and consistency of data over their entire lifecycle.						
Managemer	nt Board (MB)	The senior executive team of the University.						
Record		Any recorded information made or received by a staff member of the university in the course of undertaking their duties. Records are evidence or information about University activities. They exist in any format.						
Research Data Management Committee Is responsible for providing consultation and input in relation to resegue governance, data quality, and research data and materials management across UNSW.								
Research Data Management Lifecycle		Refers to the process for planning, creating, managing, storing, implementing, protecting, improving and disposing of all research data across the University.						
Research Data Owner		Accountable for research data and materials including, but not limited to: the collection, development, maintenance, distribution and security of research data and materials. Research Data Owners are expected to have high-level knowledge and expertise in the content of data and materials within their responsible area.						
Research Data Steward		Every research data set may have one or more Research Data Steward, who are accountable for the quality and integrity, implementation and enforcement of data management within their research project.						
Research Data User		Any staff member, contractor, consultant, third party or authorised agent who accesses, inputs, amends, deletes, extracts or analyses research data. Data Users are not generally involved in the governance process but are responsible for the quality assurance of data.						
Security		Access co	Refers to the safety of University data in relation to the following criteria: Access control; Authentication; Effective incident detection, reporting and solution; Physical and virtual security; and change management and version control.					
Revision	History							
Version	Approved by		Approval date	Effective date	Sections modified			
1.0 President and Vice Chancellor		e-	18 April 2019	18 April 2019	This is a new Policy			

APPENDIX 1 - RESEARCH DATA MANAGEMENT LIFECYCLE

The Research Data Management Lifecycle refers to the process for planning, creating, managing, storing, implementing, protecting, improving and disposing of all institutional research data of UNSW.

The Research Data Management Lifecycle



APPENDIX 2 - RESEARCH DATA GOVERNANCE ROLES AND RESPONSIBILITIES

