Research Data Governance & Materials Handling Policy

Version: 0.15 Effective [Consultation draft 17 December 2018 to 25 January 2019]

Research Data Governance and Materials Handling Policy

Policy Statement

The UNSW Research Data Governance and Materials Handling Policy ('the Policy') covers principles related to maintaining the integrity, security, quality, and proper usage of research data and materials ('research data') at UNSW.

The purpose of the Policy is to:

- Outline the requirements and roles and responsibilities associated with access, retrieval, storage, disposal, and backup of UNSW research data and materials
- Provide best practice measures to enable compliance with the requirements
- Ensure that UNSW complies with applicable laws, regulations, and operational standards.

Scope

The Policy applies to:

- All UNSW Researchers and Research Trainees, staff, contractors, consultants, and external parties engaged in research activities associated or affiliated with UNSW
- All research data and materials used or generated at UNSW or during UNSW affiliated research
- Research data and materials in any form, including but not limited to, print, electronic, audio visual, backup and archived data.

Policy Provisions

1. Introduction

Research data is a strategic asset of UNSW and the appropriate governance regarding management and use of research data is 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 allows research findings to be validated and has long term value as a potential resource for future research and teaching. Good practice in research data governance and materials handling benefits 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 Governance 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 which is 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, audio or video recordings
- Notes, audiotapes, videotapes, (including those collected during interviews or by other means)
- Methodologies and workflows
- Models, algorithms, scripts
- Photographs, films
- Protein or genetic sequences
- Questionnaires, transcripts, codebooks
• 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
• Numerical or graphic results obtained as the output of simulations, modelling or any other software or as the result of analysis of experimental results
• 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, diaries
• Human/animal/geological materials (e.g. Slides, artefacts, specimens, samples)
• Any source or primary materials, in particular where these may be necessary to validate research results
• Metadata

• References stored in management software (e.g. Zotero, Mendeley, Endnote)
• Responses to surveys or questionnaires
• Database contents (video, audio, text, images)
• Plant materials, cell/bacterial/viral samples or specimens
• Spectra
• Standard operating procedures and protocols
• Survey responses
• Test responses
• Images or visualisations
• Trade secrets, commercial information, materials necessary to be held confidential by a researcher until they are published, or similar information which 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

The following data and materials are not considered 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)
• Research publications
• Research management systems such as Info Ed, F1 Ethics, GRIS, BORIS
• Library management systems such as UNSW Research Outputs System (ROS) and UNSWorks.

3. The Policy Framework and Principles

The following framework outlines the principles and minimum standards which 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, 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 University’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.

• **Research Data Owners**: are typically Heads of School or 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.

The Research Data Owner must ensure that the process for the administration of data and material is in accordance with the Research Data Management Life Cycle (refer Appendix 1).

Heads of Schools 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 School 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.

• **Research Data Stewards**: are responsible for the quality and integrity, implementation and enforcement of data management within their research project. Every research dataset may have one or more Data Stewards (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 the course of 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:

All UNSW research projects must ensure appropriate research data standards are followed to uphold the quality and integrity of the data they create, access, manage and destroy.

• Research data and material records must be kept up-to-date throughout every stage of the research project and in an auditable and traceable manner.

• Researchers must maintain a catalogue of all research data and materials in an accessible form and all research data and materials must be traceable back to its source.

• Data supporting research conducted at UNSW (including electronic data) must be recorded in a durable and appropriately referenced form.

• Research data and material related to research outputs must be available for discussion with other researchers (unless confidentiality provisions apply).

• Research data and materials remain the property of UNSW, unless subject to a third-party agreement.

• Research data and materials should only be collected for legitimate uses, to optimise research outcomes and to add value to the University.

• When research is carried out at multiple organisations, an agreement must be reached in writing that clearly specifies the principles of storage, destruction and retention of research data and materials within each organisation.

• UNSW has formulated a Privacy Management Plan to comply with the *Privacy and Personal Information Protection Act 1998 (NSW)*. Researchers are responsible for ensuring appropriate
security for any confidential data and material, including data & materials held in computing systems.

3.3. Storage, Retention and Disposal of Research Data

Research data and materials, and registers of these data and materials must be kept in a format, and for a period, that conform 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

- Wherever possible, original research data and materials (and, where relevant, materials or samples) should be 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 must be retained by the researcher and School.

- At the end of a research project which has been 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 have a 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 must remain at UNSW, otherwise written agreement must be reached with the new organisation covering ownership, use, storage and disposal of research data and materials.

- Research materials must be stored and used in an appropriate Biosecurity Containment (BC) or Physical Containment (PC) facilities as required by the relevant Commonwealth and NSW Biosecurity Acts, as well as UNSW HSE policies and procedures.

3.4. Classification and Security:

People working on UNSW Research Projects must refer to the Data Classification Standard and the Data Handling Guideline for further information on classification and security.

- For UNSW Research Projects, appropriate research data security measures (see the UNSW Data Classification Standard and UNSW Data Handling Guidelines) must be adhered to at all times to ensure the safety, quality and integrity of UNSW’s research data and materials.

- Research data stored in an electronic format must be 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.).

- Research data and materials must be accessible and available at all times 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, a written agreement should be in place to cover Research data and materials ownership, sharing, storage, accessibility, retention, and disposal.

4. Import and export of research material

Certain research materials are restricted for import/export into/out of Australia, and importation/exportation permits must be obtained prior to the shipping of such materials. The importation permit, together with the appropriate packaging and labelling, will expedite the clearance of the package through the Australian Quarantine Inspection Service (AQIS) and release by Australian Customs. Researchers must ensure that they meet the relevant Customs, Australian Quarantine Inspection Service (AQIS), or other requirements for the import and export of research material.

5. Data accessibility

Research data and materials related to publications must be available 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 data to be kept in a way such that reference to them by necessary third parties can occur 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 dealt as a breach of the Research Code or Research Misconduct in accordance with the Handling Allegations of 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.

<table>
<thead>
<tr>
<th>Accountabilities</th>
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<tr>
<td><strong>Responsible Officer</strong></td>
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<td><strong>Contact Officer</strong></td>
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<th>Supporting Information</th>
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<tr>
<td><strong>Legislative Compliance</strong></td>
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<th>Supporting Documents</th>
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<tr>
<td>Data Governance Policy</td>
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<td>Data Classification Standard</td>
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<tr>
<td>Data Handling Guidelines</td>
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<td>UNSW Privacy Management Plan</td>
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<td>UNSW Research Code of Conduct</td>
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<th>Related Documents</th>
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<tr>
<td>Authorship and Resolving Disputes Between Authors Procedure</td>
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<tr>
<td>Collibra Data Governance Centre: <a href="https://unsw.collibra.com">https://unsw.collibra.com</a></td>
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<tr>
<td>Conflict of Interest Policy</td>
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<tr>
<td>Handling Allegations of Research Misconduct Procedure</td>
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<tr>
<td>Handling Research Material &amp; Data Procedure</td>
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<tr>
<td>Information Security Management System</td>
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<tr>
<td>Insider Trading Policy</td>
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<tr>
<td>Intellectual Property Policy</td>
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<td>IT Security Policy – Information Security Management System (ISMS)</td>
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<td>IT Security Standards</td>
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<tr>
<td>Paid Outside Work by Academic Staff Policy</td>
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<tr>
<td>Recordkeeping Policy</td>
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<tr>
<td>Research Code of Conduct</td>
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<tr>
<td>Research Export Controls Procedure</td>
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<tr>
<td>Statement of Authorship and Location of Data Form</td>
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<td>UNSW Privacy Management Plan</td>
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<td>UNSW Register of Delegations</td>
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<tr>
<td>UNSW Risk Management Framework</td>
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<td>UNSW Cold Storage Procedure</td>
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<tr>
<td>Handling Research Material and Data Procedure</td>
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<td>Radiation Research Safety Procedure</td>
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<th>Superseded Documents</th>
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### 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](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 (CDO)** | Senior officer of UNSW responsible for Data and Information Governance. |

**Institutional Data**

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 it is used.

Data is not Information until it is used in a particular context for a particular purpose. (Office of the Australian Information Commissioner (OAIC), 2013)

Data is 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**

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-digital. The response to a particular research question is based on the analysis of the research data and material.
Examples of research data

Research data and material may include but is not limited to:

- any data which is 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, audio 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, schemas)
- curated data from other research projects
- database contents (video, audio, text, images)
- design portfolios, mock-ups
- documentation of the research journey
- documents (text, Word), spreadsheets
- drafts of music scores
- experimental results and the contents of laboratory notebooks, field notebooks, diaries
- human/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 which 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 is of significance to research undertaken by the University's researchers.

Research Data Creator

Research Data Creators are persons responsible for the creation of research data and primary materials.
<table>
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<tr>
<th><strong>Data Governance Steering Committee</strong>&lt;br&gt;DGSC</th>
<th>A University wide committee, with members consisting of Data Executives, Data Owners, Data Stewards and designated Data Users, senior academic and professional staff members.</th>
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<tr>
<td><strong>Data Specialist</strong></td>
<td>Data Specialists are subject matter experts in relation to the data or information asset.</td>
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<tr>
<td><strong>Information Security Management System</strong>&lt;br&gt;ISMS</td>
<td>The ISMS provide 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.</td>
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<td><strong>Integrity or data integrity</strong></td>
<td>Refers to the accuracy and consistency of data over its entire life-cycle.</td>
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<td><strong>Management Board</strong>&lt;br&gt;MB</td>
<td>The senior executive team of the University.</td>
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<tr>
<td><strong>Record</strong></td>
<td>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 exit in any format.</td>
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<tr>
<td><strong>Research Data Management Committee</strong></td>
<td>Is responsible for providing consultation and input in relation to research data governance, data quality, and research data and materials management activities across UNSW.</td>
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<td><strong>Research Data Management Life Cycle</strong></td>
<td>Refers to the process for planning, creating, managing, storing, implementing, protecting, improving and disposing of all research data across the University.</td>
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<td><strong>Research Data Owner</strong></td>
<td>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.</td>
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<tr>
<td><strong>Research Data Steward</strong></td>
<td>Every research data set may have one or more Research Data Stewards, who are accountable for the quality and integrity, implementation and enforcement of data management within their research project.</td>
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<tr>
<td><strong>Research Data User</strong></td>
<td>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.</td>
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<tr>
<td><strong>Security</strong></td>
<td>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.</td>
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### Revision History

<table>
<thead>
<tr>
<th>Version</th>
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*Consultation Draft*
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**

![Research Data Management Lifecycle Diagram](image)

*Figure 1.0 – Research Data Management Lifecycle*
APPENDIX 2 – RESEARCH DATA GOVERNANCE ROLES AND RESPONSIBILITIES

<table>
<thead>
<tr>
<th>Role</th>
<th>High Level Definition</th>
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| Research Data Owner   | • Provides leadership in resolving conflict  
                        | • Leads the principles, policies and standards across the Data Area  
                        | • Ensure the administration of data with the Research Data Management life cycle |
| Research Data Steward | • Responsible for checking data quality, understanding and ensuring the enforcement of data management in research projects  
                        | • Identify and fix data quality issues in relation to the data  
                        | • Provide defined processes for conformance of data to acceptable levels |
| Research Data Creator | • Is academic researcher who creates original research data during an academic appointment with UNSW  
                        | • Ensure the maintenance and management of data |
| Data Specialist/Technical Support | • Business and Technical SMEs  
                              | • IT/Source System/Application SMEs  
                              | • Responsible for following UNSW policies, standards, procedures and guidelines in relation to data governance and data management |