1 PURPOSE

1.1 CQUniversity recognises the value of data sharing in order to promote research work, publications and the University’s contribution to research.

1.2 This policy and procedure:
- ensures that research data is retained appropriately in order to justify the outcomes of research and to defend them if they are challenged
- provides guidance to CQUniversity researchers and research higher degree candidates on the responsible recording, management and protection of research data, and
- sets outs how the University will assist researchers and RHDC candidates to adhere to the Australian Code for the Responsible Conduct of Research principles of rigour, transparency and accountability.

2 SCOPE

2.1 This policy and procedure applies to researchers and research higher degree (RHD) candidates at CQUniversity.

3 POLICY STATEMENT

3.1 CQUniversity is committed to conducting high quality research which is robust, repeatable and transparent.

3.2 Research conducted at, and by CQUniversity researchers and RHD candidates, will comply with the principles contained in the Australian Code for the Responsible Conduct of Research and in accordance with the National Statement on Ethical Conduct in Human Research and the Australian Code for the Care and Use of Animals for Scientific Purposes regarding ethical research.
3.3 Data stored by the University will be retained in accordance with national guidelines for retention and destruction of research data, any additional contractual or legal requirements, and with regard to ethics guidelines, privacy legislation, other relevant laws, and research-specific practices and standards.

3.4 Where possible, the University will follow the Fair Data Principles in relation to storage and accessibility of research datasets owned by CQUniversity.

3.5 Subject to any applicable law or agreement with a third party, the University will assert ownership of research data and materials created or collected by employees in the course of their employment with the University, or by visitors engaged in activities using the University resources (collectively termed ‘researchers’ in this document).

3.6 The University will not assert ownership of research data and materials created or collected by CQUniversity RHD candidates except where there is a written agreement between the University and the candidate assigning ownership to the University. However, the University does require RHD candidates to accept University guidance in the appropriate handling and storage of research data to ensure that research outcomes can be justified and defended.

3.7 The University will provide guidance to its researchers and research trainees through this policy and procedure on the appropriate handling of research data, such that the outcomes of the research can be justified and defended, and to facilitate the availability of data for further research where practical.

3.8 The University will assist researchers to access adequate storage facilities to ensure the safe and secure storage of research data created by University researchers and RHD candidates.

3.9 Where CQUniversity researchers or RHD candidates contribute to research data as a named investigator, a Research Data Management Plan will be submitted to the University outlining storage arrangements, access, and ownership of the research data.

3.10 Where research data or materials are created in collaboration with another institution or individuals external to CQUniversity, a written agreement must be formed between the parties which sets out the ownership, storage, access and management of the research data.

3.11 Training will be provided to CQUniversity researchers and RHD candidates to facilitate compliance with this policy and procedure.

3.12 The University will facilitate access to data and data sharing, as appropriate, in accordance with current national principles.

3.13 If a CQUniversity researcher leaves CQUniversity and moves to another institution an agreement may be formed to transfer research data or materials to that institution, subject to this policy and procedure. Any agreement must also comply with the Intellectual Property and Moral Rights Policy.

4  PROCEDURE

4.1 Data arising during research conducted at CQUniversity must be recorded in a durable and appropriately referenced form in a storage facility approved by the University.

Data management responsibilities

4.2 Researchers are required to complete a Research Data Management Plan for each new research project.

4.3 The Research Data Management Plan will set out:

    a) the location/s where the research data and materials will be stored
    b) in what form the research data and materials will be stored (identified, coded, de-identified), the location of the code key or identifiers, if any, and risk management strategies regarding avoidance of possible re-identification
    c) the duration for which research data and materials will be stored and the reason for the nominated duration
d) custodianship, and details of who will have access to the research data, identifiers and materials, including any third parties, and limitations of their rights to access

e) ownership of the research data and materials, and limitations or restrictions applying to access, storage, disposal, sharing and re-use of data, and

f) whether the research data and materials are required to be submitted to an external party (e.g. as a contractual requirement of the funding agreement or publisher).

4.4 Researchers must submit their Research Data Management Plan online. Where a research project includes multiple researchers, the first-named researcher is responsible for completing and submitting the Research Data Management Plan on behalf of the research team.

4.5 RHD candidates must complete their Research Data Management Plan at the time of completion of their Memorandum of Understanding requirements.

4.6 Researchers and RHD candidates must review their Research Data Management Plan annually and provide a revised Plan, as necessary.

4.7 The Research Data Management Plan is required to be finalised with the Final Report on a research project, or the final submission of the thesis to the University.

Data management register

4.8 The University Research Data Management Register will collate and store Research Data Management Plans.

4.9 The Register will include information about any confidentiality, patent, contractual, ethical or privacy considerations that apply to the research, which may impact any request for access.

Data storage

4.10 Research data, materials and related records should be stored securely in at least three different locations to ensure adequate protection. The University will assist researchers to access a location for centralised storage of research data, materials and related records. Researchers and RHDs are also encouraged to store electronic copies of research data, materials and related materials in a secure location on a shared drive. Researchers and RHDs may retain an active copy of research data and materials on a local computer or portable hard drive.

4.11 Original or master copies of research data, materials and related records should not be stored on portable hard drives, USB devices or laptops.

4.12 A master copy of all research data, materials and related records must be stored on University approved data storage infrastructure.

4.13 Appendix A sets out a matrix of available and suggested storage locations for different types of research data, materials and related records.

4.14 At the end of a research project all research data, materials and related records created by CQU researchers will be owned by CQU University unless subject to a written agreement between CQU University and a third party.

4.15 Upon conferral of the RHD, the candidate will submit one complete copy of the candidate’s dataset to the University to be retained in secure storage, for the requisite retention period, in accordance with the procedure outlined on the Final Lodgement of Thesis Form.

Data retention and disposal

4.16 Research data, materials and related records must be retained for at least the minimum periods advised by the Queensland Archives University Sector Retention and Disposal Schedule and any requirements stipulated by ethical approvals or contractual agreements.
4.17 As a minimum, research data and materials should be retained for at least five years after the date of last publication.

4.18 Research data identifier information must be preserved for long enough to ensure that participants can be traced in the event that evidence of long term health-related impacts related to the research emerges.

4.19 Research which has community or heritage value should be retained indefinitely, and submitted to national collections, as appropriate.

4.20 Research data and materials must not be disposed of unless written permission for destruction has been provided by the University.

**Data access and re-use**

4.21 Researchers undertaking research which has been approved by the Human Research Ethics Committee must adhere to the *National Statement on Ethical Conduct in Human Research*, which requires research data and information is stored in such a way that it can be used for future research projects, unless sufficient justification is provided to not make the data or information accessible.

4.22 Researchers engaged in publicly-funded research must adhere to the access and re-use requirements of the applicable funding body. Specifically, research funded by the Australian Research Council (ARC) must be managed in accordance with the [ARC Open Access Policy](#) and research funded by the National Health and Medical Research Council (NHMRC) must be managed in accordance with the [NHMRC Open Access Policy](#).

4.23 The University’s digital institutional repository, ACQUIRE, will provide citation information about completed data sets and the access and availability of the research data or materials.

4.24 Research datasets and metadata for datasets for display in ACQUIRE are to be submitted via Research Elements.

4.25 Information should be retained in ACQUIRE setting out whether data is open access, mediated access, or closed.

4.26 The University follows the *Five Safes Risk Assessment Framework* in decisions to provide mediated access to sensitive data. The Five Safes are:

- Safe projects: is the intended use appropriate?
- Safe people: can the user/s be trusted to use the information appropriately?
- Safe settings: are there appropriate access controls for collaborating or sharing?
- Safe data: is there a confidentiality risk in any data being shared?
- Safe outputs: are individuals identifiable in the data outputs?

4.27 The Library will provide information about the procedure for access, including mediated access.

5 **RESPONSIBILITIES**

**Compliance, monitoring and review**

5.1 The Deputy Vice-Chancellor (Research) is responsible for monitoring, reviewing and ensuring compliance with this policy and procedure.

**Reporting**

5.2 The Research Division, in cooperation with the Information and Technology Directorate, will provide an annual report to the Research Committee on current and future research data and material management and requirements.
Records management

5.3 The Research Division and Information and Technology Directorate are jointly responsible for maintaining and managing the Data Management Register.

5.4 Citation information and metadata information will be stored in the University’s institutional repository, ACQUIRE, under management of the University Library.

5.5 Employees must manage records in accordance with the Records Management Policy and Procedure. This includes retaining these records in a recognised University recordkeeping information system.

5.6 University records must be retained for the minimum periods specified in the University Sector Retention and Disposal Schedule on the Queensland State Archives website.

6 DEFINITIONS

6.1 Terms not defined in this document may be in the University glossary.

Terms and definitions

**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, 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.¹

**Metadata:** information on specific research data or 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 the data, the location of the data, etc.

**Research data:** 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 software code used to generate, annotate or analyse the data may also be included.²

7 RELATED LEGISLATION AND DOCUMENTS

- Australian Code for the Care and Use of Animals for Scientific Purposes
- Australian Code for the Responsible Conduct of Research
- ARC Open Access Policy
- Code of Conduct for Research
- Final Lodgement of Thesis Form
- Institutional Repository Policy and Procedure
- Intellectual Property and Moral Rights Policy
- National Statement on Ethical Conduct in Human Research
- NHMRC Open Access Policy
- NHMRC Statement on Data Sharing
- Principles for accessing and using publicly funded data for health research

¹ University of Sydney Research Data Management Policy
² University of Melbourne Management of Research Data and Records Policy
### 8 FEEDBACK

8.1 University staff and students may provide feedback about this document by emailing policy@cqu.edu.au.

### 9 APPROVAL AND REVIEW DETAILS

<table>
<thead>
<tr>
<th>Approval and Review</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>Approval Authority</td>
<td>Research Committee</td>
</tr>
<tr>
<td>Advisory Committee to Approval Authority</td>
<td>N/A</td>
</tr>
<tr>
<td>Administrator</td>
<td>Deputy Vice-Chancellor (Research)</td>
</tr>
<tr>
<td>Next Review Date</td>
<td>5/12/2021</td>
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<thead>
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<th>Approval and Amendment History</th>
<th>Details</th>
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<tbody>
<tr>
<td>Original Approval Authority and Date</td>
<td>Academic Board 26/09/2016</td>
</tr>
<tr>
<td>Amendment Authority and Date</td>
<td>Research Committee 5/12/2018.</td>
</tr>
<tr>
<td>Notes</td>
<td></td>
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</table>
## APPENDIX A – CQUniversity research data storage options

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Dedicated local Research Data Storage service</th>
<th>High Performance Computing Storage (not suitable for research data)</th>
<th>U Drive (not suitable for research data)</th>
<th>QCIF QRIScloud</th>
<th>AARNet's CloudStor service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you require storage that is physically close to computing facilities for processing purposes?</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Do you require data storage for archiving purposes?</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Are you working with very large datasets?</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Are you using active data?</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Are you using sensitive data (e.g., identifiable data, commercial in confidence, etc.)</td>
<td>✓ (This is the most recommended service for supporting sensitive data)</td>
<td>✗ (Though HPC storage can support sensitive data, it is not a recommended service to support this)</td>
<td>✓ (Though U: Drive storage can support sensitive data, it includes only basic user-level security)</td>
<td>✓ (Though QRISCloud Service can support sensitive data, it is not a recommended service to support this)</td>
<td>✓ (Though CloudStor Service can support sensitive data, it is not a recommended service to support this)</td>
</tr>
<tr>
<td>Are you sharing your data with researchers at CQUniversity?</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Are you sharing your data with researchers NOT at CQUniversity?</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Do you require remote access?</td>
<td>✓ (Through the use of the VPN client)</td>
<td>✓ (Through the use of the VPN client)</td>
<td>✓ (Through the use of the VPN client or via ftp)</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Note:**

*Archiving purposes is data that requires permanent storage and will be stored and remain unchanged*

**Large Data Set are considered to be more than 100GB’s of data*

***Active data is the term given to a data set that is currently being used and produced as part of ongoing research – for example, data that is frequently accessed, modified and/or being added to.***
<table>
<thead>
<tr>
<th>About</th>
<th>Benefits</th>
<th>Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated local Research Data Storage service</td>
<td>Data is stored at our local Campus, thus there are no data sovereignty issues</td>
<td>Extremely difficult to provide access to data for external collaborators</td>
</tr>
<tr>
<td>Designed to store data which is actively being developed, as well as completed managed data collections (in particular, datasets that are confidential / non publishable)</td>
<td>Provides access to significant amounts of storage capacity (e.g. 10 TB)</td>
<td></td>
</tr>
<tr>
<td>To gain access to this facility, you will need to fill out the Research Data Management Form and forward it to the Technology and Services Assistance Centre (TaSAC) at <a href="mailto:tasac@cqu.edu.au">tasac@cqu.edu.au</a></td>
<td>Facilities are located behind our corporate firewalls, thus providing an extra layer of security</td>
<td></td>
</tr>
<tr>
<td>Only CQUni staff have access to the servers (unlike what occurs with external cloud providers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Performance Computing Storage</td>
<td>Provides significant storage near computing high performance computing facilities</td>
<td>Not designed for permanent storage, nor for any other user case, other than to be used in conjunction with the HPC system</td>
</tr>
<tr>
<td>The HPC System is not designed to permanently store files and data, but rather to provide access to significant capacity near computing resources, thus allowing heavy processing, simulation and data analysis of any data stored on the system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U Drive</td>
<td>Data stored at our local (Rockhampton) Campus, thus there are no data sovereignty issues</td>
<td>Limited storage capacity</td>
</tr>
<tr>
<td>The University provides students and Staff with access to a personal storage U: drive. This drive is accessible from all University computers and includes 50MB of storage space for students and 500MB for staff</td>
<td>This storage should already be automatically be available on any CQUniversity computer – thus providing simple access</td>
<td>Not designed to allow access to other collaborators, either CQUniversity or external</td>
</tr>
<tr>
<td>QCIF QRIScloud</td>
<td>QRISCloud also provides significant compute capability near this substantial storage capacity</td>
<td>QCIF staff (system administrators) have access to the system, thus this external cloud provider can access your data</td>
</tr>
<tr>
<td>A data storage and cloud computing service run by the Queensland Cyber Infrastructure Foundation (QCIF). To apply for QRIScloud storage for your research data collection, contact TaSAC</td>
<td>provides the infrastructure to tackle research opportunities that ‘institutional' facilities simply could not handle</td>
<td></td>
</tr>
<tr>
<td>Merit based allocation designed to store large national “open” data collections considered to be of “national significance”</td>
<td>Provides data access to research communities, both nationally and internationally</td>
<td></td>
</tr>
<tr>
<td>QRISCloud (Queensland Research and Innovation Services Cloud - [<a href="http://www.qcif.edu.au/services/qrisc">http://www.qcif.edu.au/services/qrisc</a> cloud](<a href="http://www.qcif.edu.au/services/qrisc">http://www.qcif.edu.au/services/qrisc</a> cloud)) provides 'RDSI' data storage to the Queensland research community</td>
<td>All data is kept ‘On-shore’ and stored on data centres throughout Australia, thus there are no data sovereignty issues</td>
<td></td>
</tr>
<tr>
<td>AARNet’s CloudStor service</td>
<td>Provides 100 GB of free ‘research only’ storage to each CQUniversity researcher</td>
<td>QCIF staff (system administrators) has access to the system, thus this external cloud provider can access your data</td>
</tr>
<tr>
<td>Australia’s Academic and Research Network’s (AARNet) CloudStor service enables researchers to store, access and share small or large files at high speed</td>
<td>Data is stored on the AARNet network and provides high speed connectivity</td>
<td>It is not recommended to store large “project” based research collections</td>
</tr>
<tr>
<td>Designed to store individual research data and can be considered as additional method for backing up precious research data</td>
<td>CloudStor can be used as a replacement for Dropbox</td>
<td>Not recommended for the storage for highly sensitive or confidential research data</td>
</tr>
<tr>
<td>For more information, please visit <a href="https://my.cqu.edu.au/web/eresearch/aarnet-cloudstorplus">https://my.cqu.edu.au/web/eresearch/aarnet-cloudstorplus</a></td>
<td>There is support for synchronising clients for Windows, Mac OS X and Linux and mobile clients available for Android and IOS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can be used as a research data sharing tool</td>
<td></td>
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</table>

Research Data Management Policy and Procedure
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Effective Date: 24/04/2019

Once PRINTED, this is an UNCONTROLLED DOCUMENT. Refer to Policy Portal for latest version
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