

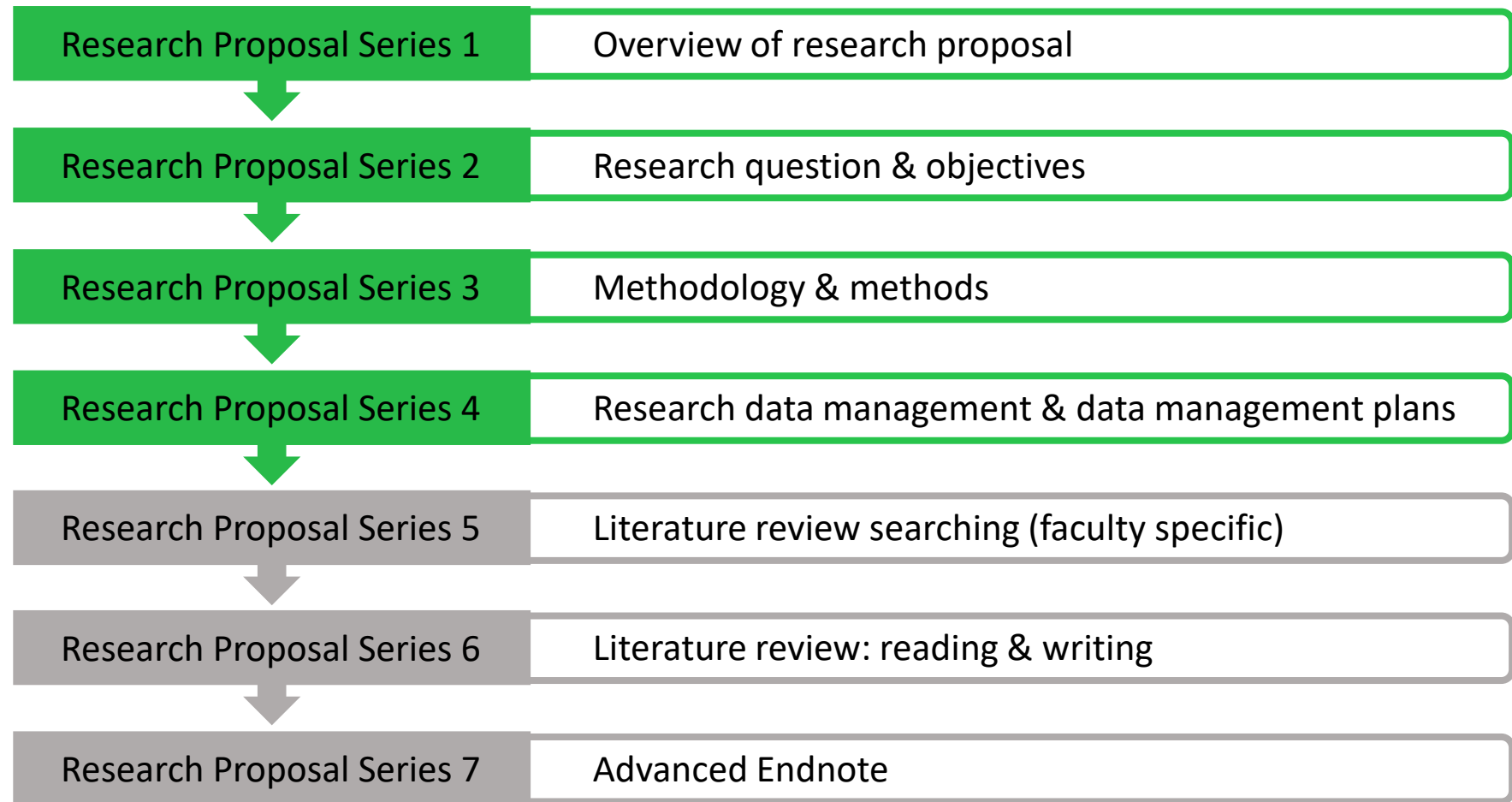


Graduate Research Advanced Skills Program (GRASP)

**Research Proposal Series
(Milestone 1)**

Research Data Management and Data Management Plans

Molly Tebo & John Brown, Sem 2 2022



We would like to acknowledge the traditional owners of the land on which we live and work, the Wadjuk Noongar people. We would like to pay our respects to their elders past and present and extend that respect to any First Nations people present today.



About us

Molly Tebo

Program Coordinator

Research Data Management

John Brown

Librarian

Research & Copyright

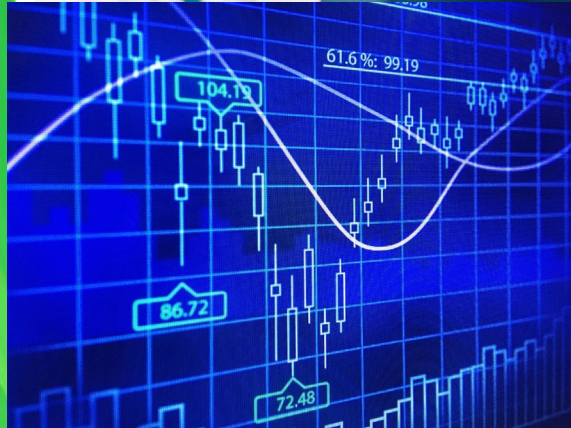
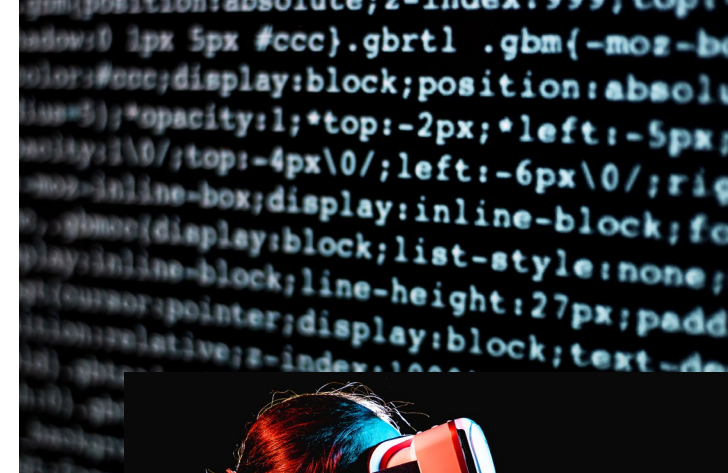
Padlet link for questions:


<https://padlet.com/mtebo2/sarcy5l1j6pmj3p>



What is data?





A decorative vertical bar on the left side of the slide, featuring a series of concentric, wavy green lines that create a sense of depth and movement.

Research data is **any documentation**, in **any format**, of findings, observations or outcomes created through the research process.

Help with Research Data Management

- [Library Research & Copyright team](#) (that's us!)
- [Curtin Institute for Computation \(CIC\)](#)
- [Research Office at Curtin \(ROC\)](#)
- [Pawsey](#)

Useful resources





Research Toolkit

Search this Group

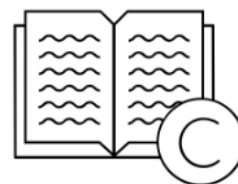
Search

Resources for staff and higher degree by research students



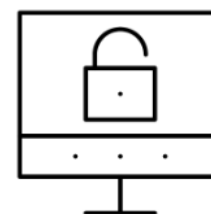
GRASP

The Graduate Research Advanced Skills Program helps students develop skills in scholarly reading, thinking, analysing and writing.



Publishing

Resources on sharing research findings in the most impactful way including selecting the best journal and Open Access options.



Curtin espace

Curtin University's institutional repository - an open access digital collection of Curtin research publications and HDR theses.



Advanced searching

Resources and techniques to enable specialist searching for your research question, literature review and systematic review.





Research Data Management

Introduction

[Welcome](#)

[Types of data](#)

[FAIR](#)

[Ownership](#)

[Policies](#)

[More resources](#)

Data management planning

Documentation and description

Storage and access

File management

Publication

Retention and preservation

Finding and reusing data

Help and training

Notes about this resource

Welcome

The data that Curtin researchers create has an incredible value.

- It's valuable to you - you're building your research and publications on it
- It's valuable to the discipline you're working in - every discipline moves forward by building on shared information
- It's valuable to the university - it's a critical output of every research project, which aids Curtin's reputation

As with all things of great value, there is a high cost associated with it.

- It takes time and effort to develop the skills and knowledge required to conduct research
- It takes time to go through the whole research process
- It takes financial resources to complete the research

Because of this balance of value and cost, it's in the interests of the researcher and the university to ensure that the maximum benefit is obtained by research conducted - by following practices described in this guide and managing research data well, researchers can help ensure their research has the greatest impact and benefit possible.

Types of data

Research data is any documentation, in any format, of findings, observations or outcomes created through the research process. This definition is broad by necessity - the range of research activity at Curtin is very broad. Each different field and discipline have their own ways of collecting and using data; each research question will require different data; and each research project will create different forms of data.

You data could be:



Copyright at Curtin

We'll help you understand your copyright obligations and entitlements



Learning and teaching

Learn how to meet your copyright requirements while studying and teaching at Curtin.



Research

For information on meeting copyright requirements while researching, including publishing articles and thesis obligations.

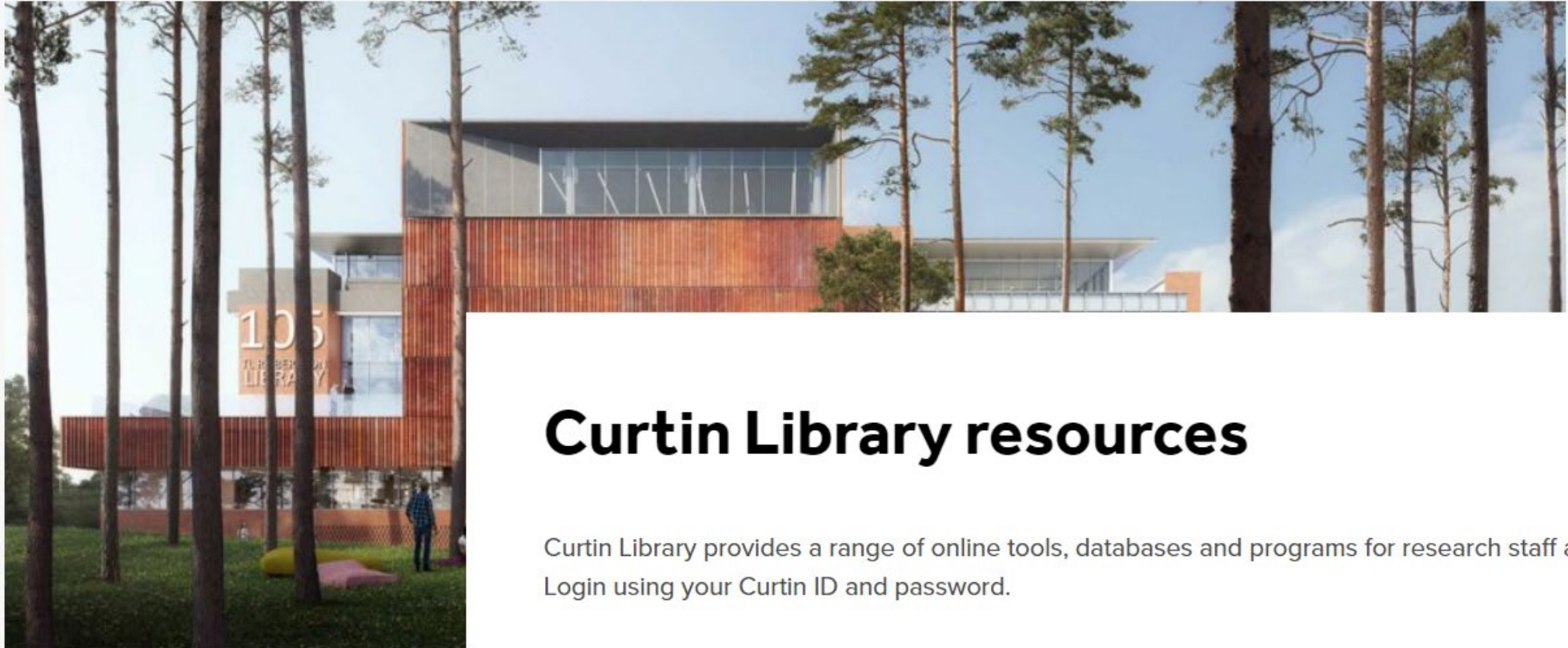


Resources

Useful information sheets, checklists, how-tos and templates.

Research support

Curtin provides a range of research tools and resources to assist researchers in the pursuit of research excellence, inputs and impact.



Curtin Library resources

Curtin Library provides a range of online tools, databases and programs for research staff and students. Login using your Curtin ID and password.

Curtin Library's resources include journal articles and other content across all research subjects. Search the Curtin Library Catalogue for the full range of library collections, and access citation databases including Scopus and Web of Science.

eResearch

eResearch is broadly defined as research that involves the use of significant computing, data, communication, visualization, analytics or online collaboration. This page provides an overview of eResearch tools, resources, and services available to Curtin researchers. Please join the Curtin eResearch Discussion Facebook Group to discuss eResearch issues and opportunities. For more information, please contact Peter Green, Chair of the Curtin eResearch Special Interest Group.

Filter by type

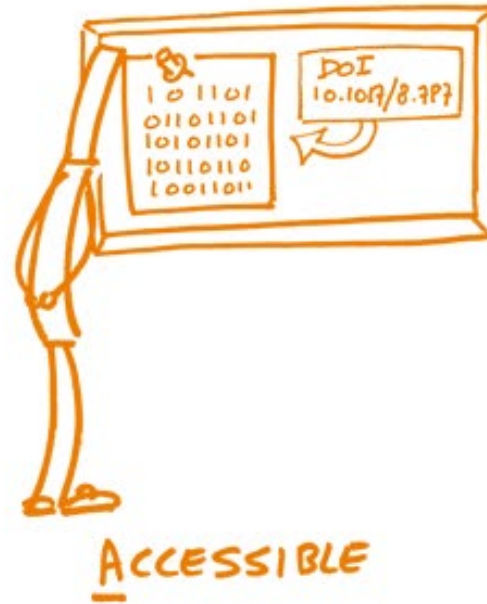
[All](#)[Analysis](#)[Assessment](#)[Discovery](#)[Dissemination](#)[File transfer](#)[Guide](#)[Planning](#)[Reporting](#)[Service](#)[Storage](#)[Training](#)

Altmetric Explorer

The [Altmetric Explorer](#) is a digital database that enables users to monitor and report on the online activity of the research outputs of individual Curtin researchers, research groups or schools. Users can generate customisable reports and alerts on the engagement specific research and researchers generate in social media, emedia, patents and policy documents.

Contact: [Library Research Support](#)

FAIR DATA PRINCIPLES



DMP process & resources

- <https://dmp.curtin.edu.au/>
- Required for M1 & Ethics
- Required for R: access
- [Full step-by-step video](#)
- [Example plans](#)

It's **not** a test, it's to help you avoid pitfalls!

Data storage

- Curtin has many options available, but you'll need to consider:
 - How do I need to access my data?
 - Who else needs to access my data and how can they get to it?
 - Are there any other restrictions specific to my project?
- [Chart to help you decide](#)
- In *most cases* you should be using:
 - Local storage with a backup plan and a level of security appropriate for your research
 - OneDrive to share with active Curtin collaborators
 - R: drive as your long-term storage (and possibly your active storage, too!)

Cloud computing options

You may find that regular desktop computers are not powerful enough to do the processing and analysis you need for your research, or you need to interact in sophisticated ways with external collaborators!

There are cloud computing options that might be available to you -

- [Nectar](#) – provided by ARDC
- [Nimbus](#) – provided by Pawsey Supercomputing Centre
- [Cloudstor](#) – provided by aarnet
-and others!

Publishing, DOIs and ORCID

- DOI – Digital Object Identifier
- ORCID - **O**pen **R**esearcher and **C**ontributor **I**dentifier

Data Publication

This is usually done at the end of your research

- May be required when you publish
- May be recommended by grants/funders
- Can give huge benefits to your discipline, the reproducibility of your research and to your career
- Make sure you consider the downstream reuse of your dataset – the more documentation and description you have, the more it will be useful
- Can be done in many places, including for free in the [Curtin Research Data Collection](#)

Finding and citing secondary data

- *Why would you?*
 - Saves time
 - Saves money
 - Already validated
- *Why not?*
 - Might be untrustworthy
 - Might not be licensed for reuse
 - Might not be actually relevant for your project

Finding and citing secondary data

Where can you find data?

- Collaborators/other people in your field
- There are also many, many online sources of data (usually called repositories – here's a [list](#))

Important:

- Check reuse permission
- [Cite!](#)

[More information](#)

File naming and versioning

- There is no one-size-fits all approach!
- Good principles:
 1. Write the system down and communicate it with your collaborators (including your future self)
 2. Any file name should give you a solid clue as to what is in that file/folder and how it is different to other files in the same directory and other folders

Versioning is the way you keep a track of the changes you've made in a dataset – this can be very simple (a change table or an “Archived” folder) or more sophisticated software systems (Git)

Analysis tools

- The library has a number of online modules for common analysis tools such as SPSS, Nvivo and Qualtrics
- <https://uniskills.library.curtin.edu.au/digital/>
- [Digital Research Skills Australasia](#) also have a large collection of useful training material on a range of topics.



ResBaz

It's coming up

Here's what might happen

It costs

A decorative vertical element on the left side of the slide, consisting of several overlapping, wavy green bands of varying shades, creating a sense of movement and depth.

QUESTIONS?

Questions

GRASP webpage

<https://libguides.library.curtin.edu.au/grasp>

Help

LibraryResearchSupport@curtin.edu.au

Feedback (Stop – Start – Continue)

https://docs.google.com/spreadsheets/d/1t7roPInys2xK_0zY69ivY9s09ZNs2iY_byLVdCSKD7M/edit?usp=sharing