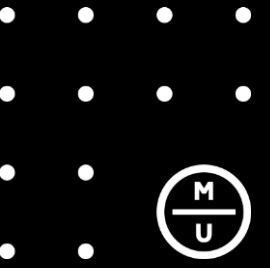




Data Initiative and GRDC Data Catalogue

GRDC Data Management Workshop
Penghao Wang
Murdoch University



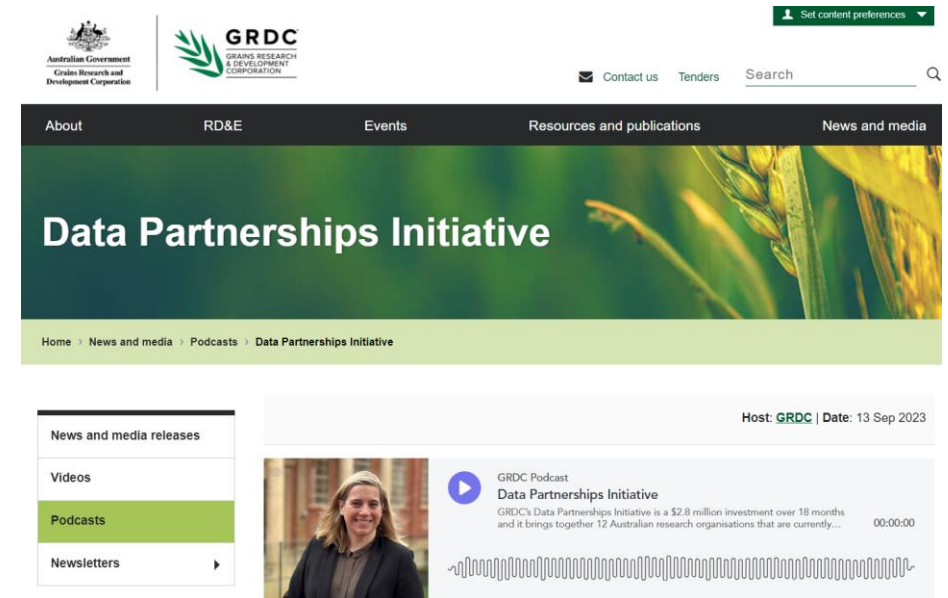
GRDC Data Partnership Initiative

A New Initiative for Data Management



GRDC Data Initiative - background

- GRDC is the biggest investor in grain research
 - Over 20M over 3 years
- Previously GRDC funded project data are managed by researchers
- GRDC is pushing a new FAIR data management strategy for future projects and some valuable past projects
- MU is one of 12 key GRDC partners and participates in numerous projects

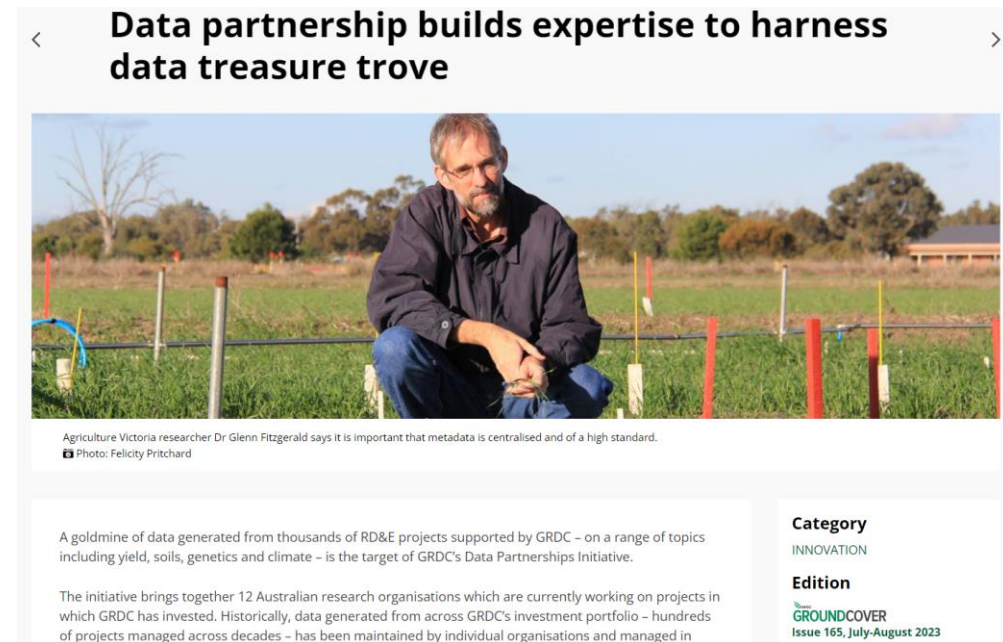


GRDC Data Initiative Project

- The new management strategy is implemented in 2 phases.
- Phase one: collection of valuable past and/or current projects through 12 key partner institutions
 - Data identification, data collection, data storage, and data catalogue
 - Establish a strategy for each institution
 - Resources and training to help MU researchers for future compliance
- Phase two: GRDC Data Catalogue online, all future projects follow the new data management strategy

Data management requirements from GRDC

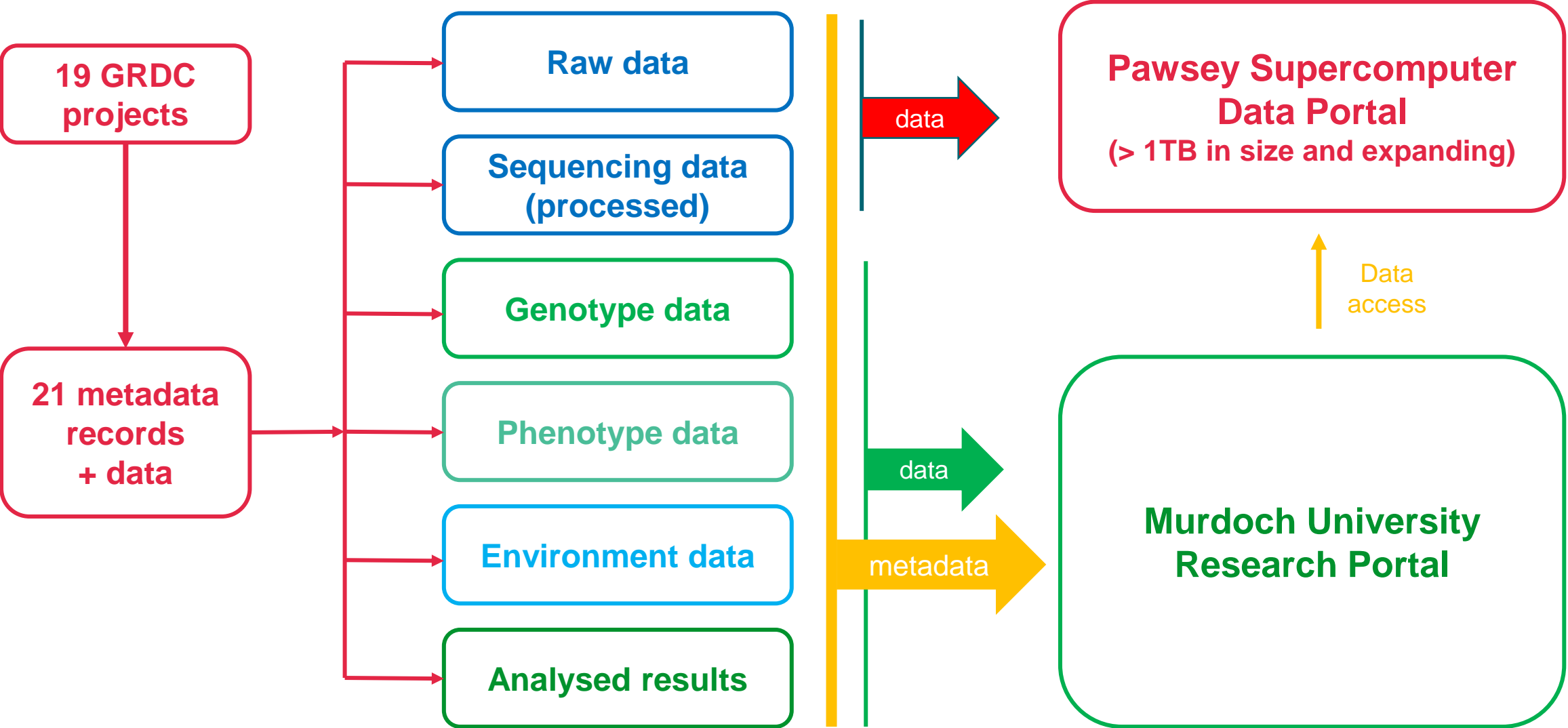
- Future projects will conform with a new data management requirement
 - Data and results need to be stored at institutional repository – MU Research Portal
 - Detailed data annotation - metadata
- Link to project milestones
- Many benefits
 - Better data identifiability and searchability
 - Data aggregation – new resources/repositories
 - Data re-use – new discovery



GRDC Data Initiative Project

- GRDC funded/co-funded projects need to store data at Institution level
 - Metadata
 - Data and/or results
 - Harvestable by GRDC Catalogue
- 20 projects identified as the Initiative (excluding 5 duplicated/included)

Collected data/metadata




GRDC Data Initiative - alignment activities

- Educational documents and guidelines for data storage and management.
 - Data ID, metadata creation, FAQ.
- 2 workshops for MU staff.
 - Practical tutorial sessions
 - 2 repeats (September, November)
- Development of a local data management server with analytical tools

GRDC Data Initiative – What means for MU

- Future projects will conform with a new data management requirement
 - Data and results need to be stored at institutional repository – MU Research Portal
 - Detailed data annotation - metadata



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DATASET

Manipulating barley phenology to maximise yield potential (phenotype datasets)

Chengdao Li, Camilla B Hill, Tefera T Angessa, Steve Brown, Sue Broughton, Xiao-Qi Zhang, Reg Lance, Haden Kuchel, David Moody, Paul Telfer, ... [Show details for 15 authors](#)

Murdoch University
30/06/2014 - 01/01/2023

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Metrics

Files and links



UMU00050_Phenotype_1

173.33 kB



ZIP

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Abstract

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[Cereal \(Grains\)](#) / [Barley](#) / [Phenology](#) / [Grain Yield](#) / [Genomics](#) / [Breeding](#) / [Crop and pasture improvement \(incl. selection and breeding\)](#)

Phenotype datasets collected from 823 barley accessions; grown in Perth, Geraldton, Katanning, Merredin and Esperance from 2014 to 2016. This dataset is an output of the GRDC-funded project Manipulating barley phenology to maximise yield potential (UMU00050).

Details

TITLE

Manipulating barley phenology to maximise yield potential (phenotype datasets)

AUTHORS/CREATORS

Chengdao Li (Principal Investigator) - Murdoch University, Centre for Crop and Food Innovation
 Camilla B Hill (Contributor) - Murdoch University, Centre for Crop and Food Innovation
 Tefera T Angessa (Contributor) - Murdoch University, Centre for Crop and Food Innovation
 Steve Brown (Contributor) - Department of Primary Industries and Regional Development
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PUBLISHER

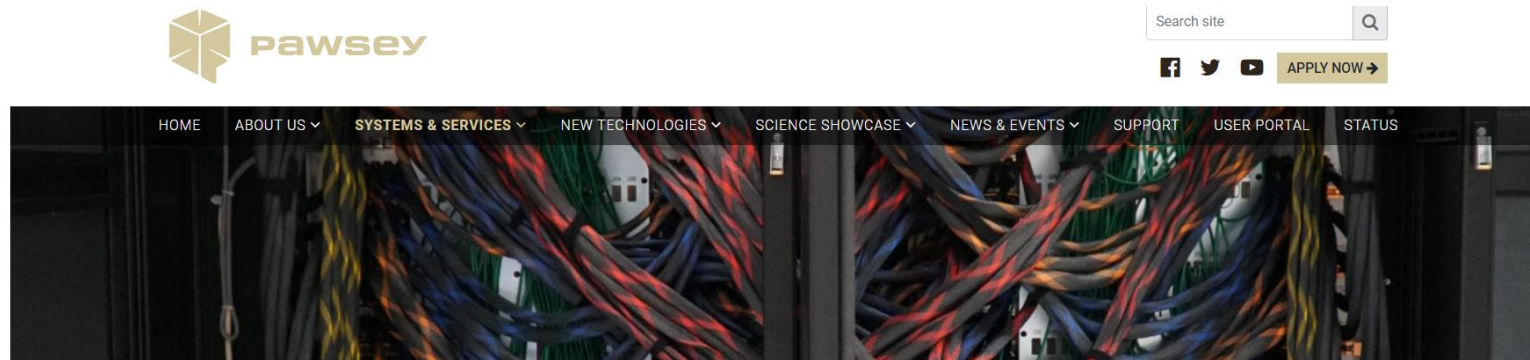
Murdoch University

GRANTS

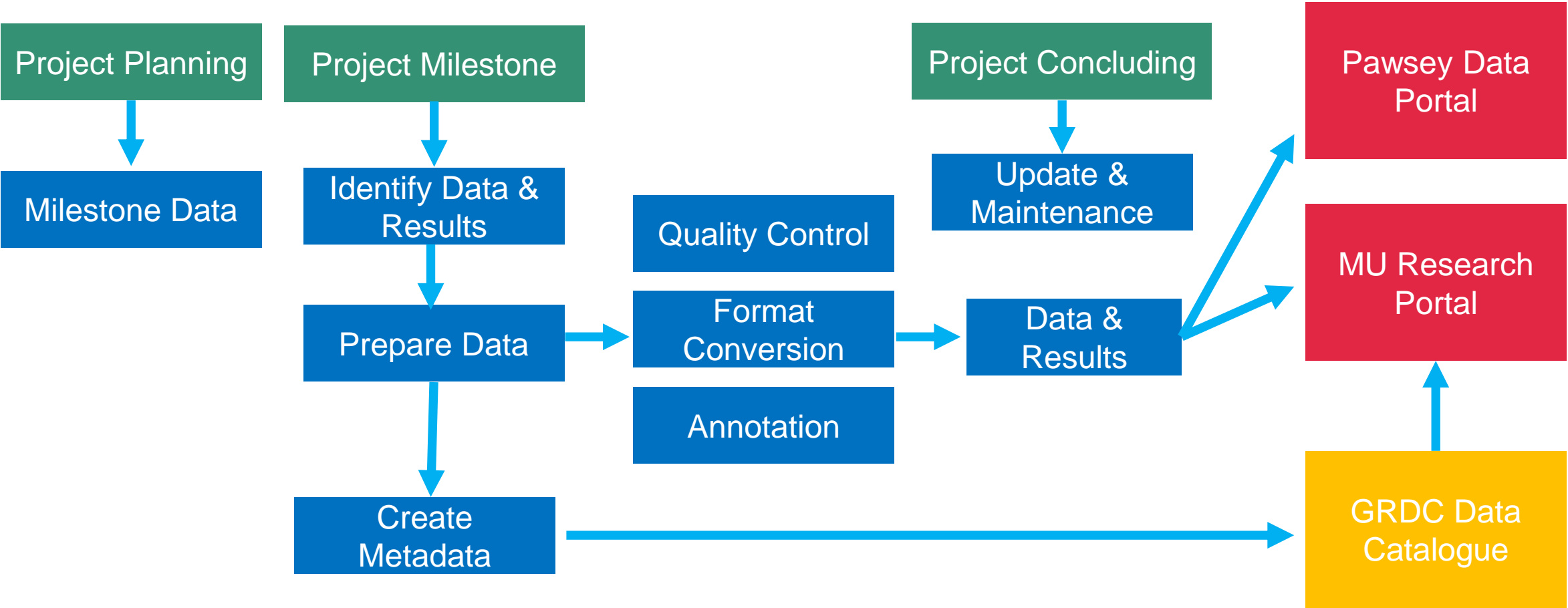
Manipulating barley phenology to maximise yield potential, UMU00050, Grains Research and Development Corporation (Australia. Canberra) -

Alternative Data Storage Platforms

- Pawsey SuperComputing Data Portal (MU is a member)
- Currently houses > 40 Petabytes of data
- Automatic backup
- Seamless link to super computing servers for data analysis



The Overview of the Data Management



What Resources will be Available

- Detailed documents, guides and FAQs
- Educational materials (workshop, tutorial)
- Templates and examples
- Software tools and scripts
- Continue support and maintenance



Thank you

Any questions, please feel free to contact Penghao or Chengdao

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FAIR practical workshop – 26th Sep 2023

Venue: Room 360.4.023 - Boola Katitjin Building – Murdoch University Perth Campus

WORKSHOP PROGRAM

TIME	TOPIC	PRESENTER
08:45 – 09:00	Welcome and Introduction	Chengdao Li
09:00 – 09:20	Murdoch University Research Portal Introduction	Helen Bronleigh
09:25 – 09:45	GRDC Data Catalogue Introduction & Data Aggregation	Penghao Wang & Brett Chapman
09:50 – 10:10	FAIR Principles and How to?	Viet Dang
10:10 – 10:30	Tea Break	
10:30 – 10:50	Murdoch University Data Management Policies and Plans	Zoe Martin
10:55 – 11:15	Data Management Plans for GRDC projects	Viet Dang
11:20 – 12:20	Practical workshop: FAIR and Repository submission	Viet Dang and Penghao Wang
12:20 – 12:30	Questions and Discussion	-
12:20	Lunch	