

# Connecting processes and systems to future proof research data

The UC Research Data Management Framework project

Dr Anesh Nair

Mr Alberto Zigoni



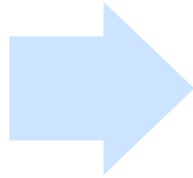
# Acknowledgement of Country

The University of Canberra acknowledges the Ngunnawal people, traditional custodians of the lands where Bruce Campus is situated. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of Canberra and the region. We also acknowledge all other First Nations Peoples on whose lands we gather.

# Research Data Management at UC

**2018**

Australian Research Council publishes the **Australian Code for the Responsible Conduct of Research**



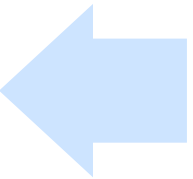
**2019**

UC conducts an audit of existing RDM practices and resources



**2021**

Launched tools to support RDM best practices and monitor compliance



**2020**

UC develops institutional data management policy and procedure

- all researchers will need to develop data management plans

# State of play: policies, processes, actors

- Researchers are required to submit DMPs and obtain ethics clearance before they start a research project
- Researchers are encouraged / required to publish their data according to FAIR principles
- Institutions are actively involved in the process
  - Helping researchers comply with policies and best practices
  - Disseminating research outputs
  - Monitoring compliance
- All these tasks are performed by different actors using a variety of tools
- This makes the process inefficient and error prone
- The institution cannot monitor compliance without a unified view

# State of play: tools

Four major systems for researchers to use



Research Data Management plans  
Administered by eResearch team

Pure

Grants Management  
Research Information Management  
Administered by Research Grants team



Ethics applications platform  
Administered by Research Ethics team

Digital Commons Data

Research Data Repository  
Administered by eResearch team



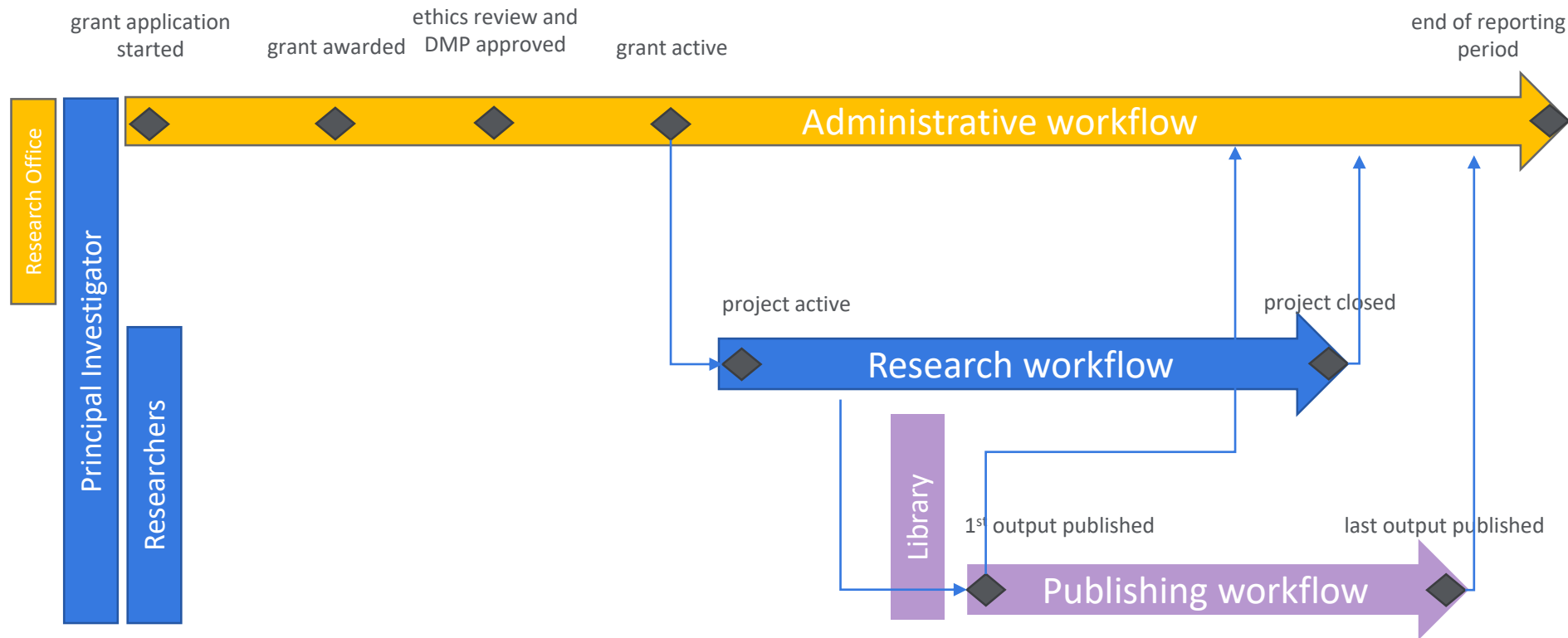
ELSEVIER

# How it works

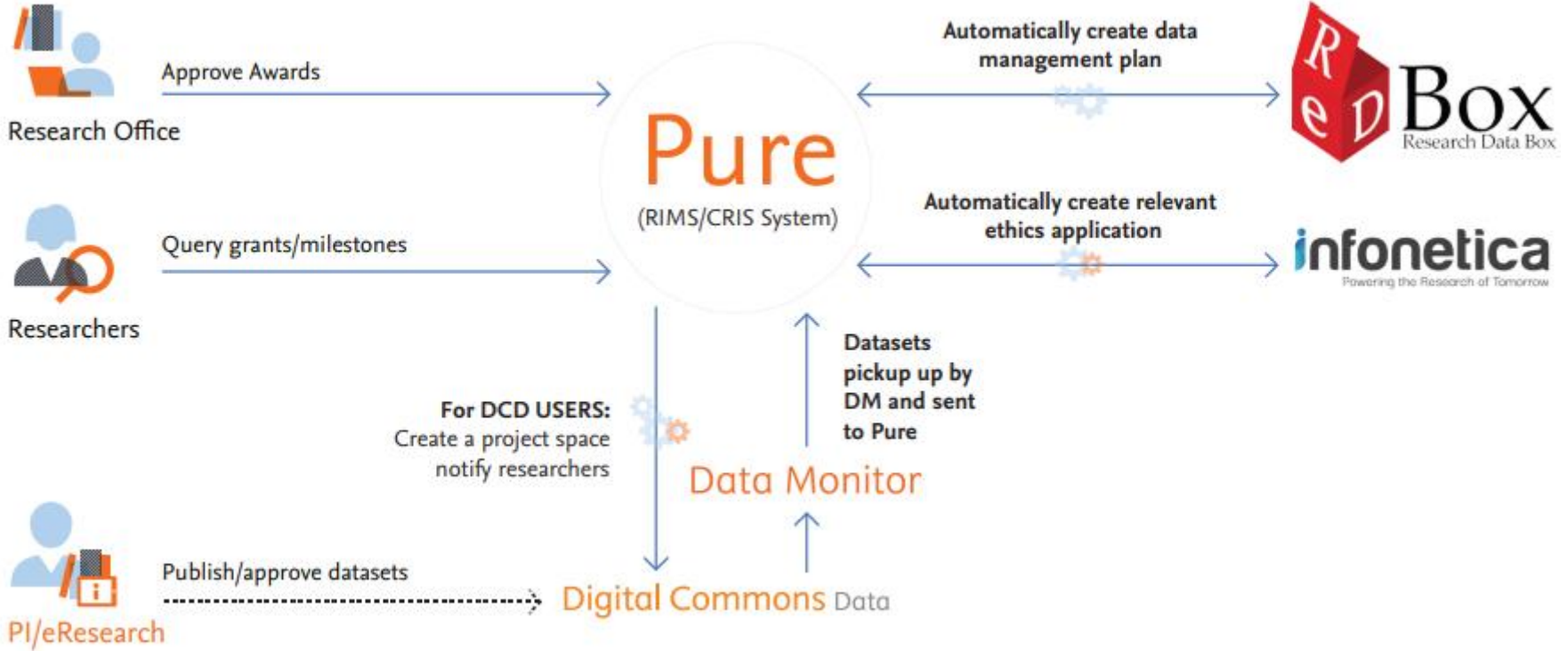
End-to-end Research Data Management



# The integrated workflow: functional view



# The integrated workflow: architectural view



# From award to RDMP

## Pure



**Calm and Alert – Ready to Learn: A transition program created by families, EC service:**  
Award: Other > Award

**Identification**

Title \*  
Calm and Alert – Ready to Learn: A transition program created by families, EC service

Short title  
Calm & Alert

Acronym  
ASRP

Description  
This project will investigate the effectiveness of a play-based program to enhance pre-schoolers' self-regulation (SR) in the transition to school, with a particular focus on children and families from diverse backgrounds and those experiencing risk or vulnerability. The program will be co-designed with families, Early Childhood (EC) educators, and school teachers. The program will subsequently be trialed in a pilot study involving two transition teams (EC providers and schools). Children's SR, learning dispositions, and developmentally appropriate academic learning will be assessed following a quasi-experimental pre-/post-test design. Findings will inform a funding application for a larger scale study that will scale-out the program more widely in the ACT and/or into other jurisdictions.

IDs  
DMP ID: 031bb0b01c3a11eca9d2a9baa0ff674a Edit

Add ID...

## Calm and Alert – Ready to Learn: A transition program created by families, EC services and schools

Edit this plan Create a data record from this plan

**Description**  
This project will investigate the effectiveness of a play-based program to enhance pre-schoolers' self-regulation (SR) in the transition to school, with a particular focus on children and families from diverse backgrounds and those experiencing risk or vulnerability. The program will be co-designed with families, Early Childhood (EC) educators, and school teachers. The program will subsequently be trialed in a pilot study involving two transition teams (EC providers and schools). Children's SR, learning dispositions, and developmentally appropriate academic learning will be assessed following a quasi-experimental pre-/post-test design. Findings will inform a funding application for a larger scale study that will scale-out the program more widely in the ACT and/or into other jurisdictions.

Expand/Collapse all

- Project

### Project overview

**Project ID**  
58236613

**Keywords**

**Project website**

**Enter the start date of your project.**  
01/02/2021

**End Date**  
31/12/2022

**Funding source**  
ACT Government

### Link back

This content is sourced from an external system. You may view the content in the external system by following the links below.

View content in external system:

• DMP ID: 031bb0b01c3a11eca9d2a9baa0ff674a

# From award to ethics application

# Pure



**Calm and Alert – Ready to Learn: A transition program created by families, EC service:**  
Award: Other > Award

### Identification ⓘ

**Title \***  
Calm and Alert – Ready to Learn: A transition program created by families, EC service

**Short title** **Acronym**  
Calm & Alert ASRP

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This project will investigate the effectiveness of a play-based program to enhance pre-schoolers' self-regulation (SR) in the transition to school, with a particular focus on children and families from diverse backgrounds and those experiencing risk or vulnerability. The program will be co-designed with families, Early Childhood (EC) educators, and school teachers. The program will subsequently be trialed in a pilot study involving two transition teams (EC providers and schools). Children's SR, learning dispositions, and developmentally appropriate academic learning will be assessed following a quasi-experimental pre-/post-test design. Findings will inform a funding application for a larger scale study that will scale-out the program more widely in the ACT and/or into other jurisdictions.

**IDs**  
DMP ID: 031bb0b01c3a11eca9d2a9baa0ff674a Edit -

Add ID...



### Research Ethics Applications

Work Area   Contacts   Help ▾

Previous	Next	Navigate
View as PDF	Documents	Signatures
Save	Share	Collaborators
Completeness Check		

## 2. Information about the research project

### 2.1. Short Project Title

Calm & Alert

### 2.2. Full Project Title

Calm and Alert - Ready to Learn: A transition program created by families, EC services and schools

### 2.3. Anticipated Start Date

01/11/2022

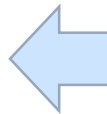
### 2.4. Anticipated Completion Date

31/10/2024

### Related ethical reviews ⓘ

Related ethical reviews

**Calm and Alert – Ready to Learn: A transition program created by families, Early Childhood services and schools**  
Ethical review: Ethical Review



# Automated notification of researchers

Admin

Dear Researcher,  
Congratulations on your recent award *Australia Council for the Arts Quantitative Research Support*. 69260404.

[University of Canberra policy](#) states that all research projects must have a Data Management Plan (DMP). UC uses ReDBox as its DMP tool.



We have created a [template](#) ReDBox plan for your project, please:

- [Click here](#) to open your new DMP, please update it and check whether the project details are correct.
- [Click here](#) for information about updating, finalising, and printing your DMP, and archiving your data.

Your DMP is an important resource throughout the life of your project – please update it regularly. It will help you and the university to protect your data.

#### Useful Links

[Storing Research Data](#)

[Digital Commons Data](#)

[Access DC Data](#) as an option for storing and publishing your data.

If you have any questions, please contact us at [eresearch@canberra.edu.au](mailto:eresearch@canberra.edu.au)

Regards,

The UC eResearch Team

Dear Susan,  
Congratulations on your recent award "Global Insect Threat-Response Synthesis ([GLITRS](#)): a comprehensive and predictive assessment of the pattern and consequences of insect declines".

In accordance to the [Code of Practice for the Care and use of Animals for Scientific Purposes](#), all projects undertaken at the University of Canberra that involve the use of animals either for research, teaching or other experimental study in which animals are used must be approved by the Animal Ethics Committee (AEC).



We have created a [template](#) Animal Ethics application for your project, please:

- [Click here](#) to open your new animal ethics application, please update it and check whether the project details are correct.
- [Click here](#) for information on the application process including submission deadlines, meeting information and instructions for applying for your individual license

#### Training

The University has a [mandatory online training course](#) for all staff seeking authorisation to conduct experiments using animals. The course provides information and training in relation to Animal Ethics legislation and requirements.

Your animal ethics application and your individual license application will need to be approved by the UC Animal Ethics Committee before you can commence your research.

If you have any questions, please contact us at [animaethicscommittee@canberra.edu.au](mailto:animaethicscommittee@canberra.edu.au)

Regards,

The UC Ethics and Integrity Team

# From award to project in Pure



Related project ⓘ

Related project  
+ 🗑️

Create project based on this award.  
Save and create project...

Create project

Create a new project based on this award. Note: You have to save the new project before making changes to the existing award.

**Calm and Alert – Ready to Learn: A transition program created by families, EC services and schools**  
Award: Other > Award

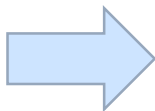
Project type  
Project: Research project

Copy these fields to the new project:

- Nature of activity type
- Title
- Short title
- Acronym
- Descriptions
- IDs
- Related award holders
- Managing organisational unit
- Actual start/end date
- Organisations

Once you click **Create**, the new project will be created and you will be able to add and change fields.

Close Create



**Calm and Alert – Ready to Learn: A transition program created by families, EC service!**  
Project: Research project

EDIT  
Metadata  
Time tracking  
Link back

OVERVIEW  
Relations  
Fingerprints  
Display

HISTORY AND COMMENTS  
History and comments

Classifications ⓘ

Project type  
Research project

Nature of activity type  
Research

Add nature of activity type...

Identification ⓘ

Title \*  
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Layman's description

Key findings

NOTIFICATIONS  
ditors responsible for handling his submission: None

Comment on workflow step change:  
[Text area]

Status: For approval Save

# From project to data workspace



## Your research project is now available for you on Digital Commons Data

Dear Alberto,

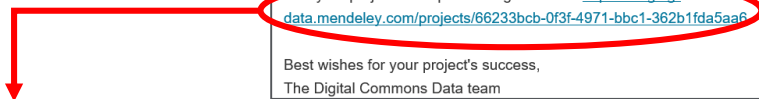
Congratulations on the commencement of your research project, titled: test project




Your institution has provided a research data workspace for your project, within Digital Commons Data repository, to help you collect, manage and share your project data.

Here, you can connect your data sources to your project, invite your project team, and start working on your datasets, to share data privately or publicly.



Visit your project workspace and get started: <https://staging-data.mendeley.com/projects/66233bcb-0f3f-4971-bbc1-362b1fda5aa6>

Best wishes for your project's success,  
The Digital Commons Data team





< My projects  **Calm and Alert – Ready to Learn: A transition program created by families, EC services and schools**  3 


This project will investigate the effectiveness of a play-based program to enhance pre-schoolers' self-regulation (SR) in the transition to school, with a particular focus on children and families from div... Members Settings

Shared draft datasets  **Published data** 

Your shared datasets [+ Import dataset](#)

 Test DMP integration 

[+ Add a new shared dataset](#)



No datasets have been published for this project yet  
Publishing Datasets makes them available to the world.

## Publishing triggers moderation workflow

**Published information**

Status: Draft (Version 1)

Published version:

Visibility: Open access

[Preview](#) [Share](#)

[Delete](#) [Publish](#)

Reserved DOI: 10.17632/c5gz62jrw7.1

**Test dataset for DMP integration**

Contributors  
Alberto Zigoni

 NE-H010343-1

 my-research-data-from-institutional-cloud-storage.xlsx 17 KB 

## Collaborative dataset creation

# From draft to FAIR dataset: data curation workflow



## Datasets in moderation

Waiting for review

Returned to owner

Submitter	Date Submitted	<a href="#">View draft</a>	<a href="#">Activity</a>
Alberto Zigoni	21 Oct 2021 09:05	<a href="#">View draft</a>	<a href="#">Activity</a>
Elsevier Jones	19 Oct 2021 19:03	<a href="#">View draft</a>	<a href="#">Activity</a>

[Edit dataset title and description](#)

### Test dataset for DMP integration

Reason previously returned  
Please enter steps to reproduce

Description  
Test dataset for DMP integration

Steps to reproduce

Submitter: Alberto Zigoni

Contributors: Alberto Zigoni

Institutions: Elsevier BV

Departments

Categories: Testbed

Version: 1

[Request changes](#) [Approve](#)

### Before you publish

- I understand that I cannot delete or change the dataset. You will not be able to edit or delete this version of your data. You can publish a new version of the dataset if you need to make changes.
- I understand the dataset will be accessible to the public. This version of your dataset will be discoverable, citable (with DOI), and downloadable by anyone.
- I confirm the dataset does not contain confidential information. You have verified that your dataset does not contain confidential information. (See full terms which must be complied with)

[Cancel](#) [Publish](#)

### Activity

- Alberto Zigoni submitted a dataset into moderation  
21 Oct 2021 09:05
- Comment added by a moderator:  
"Please enter steps to reproduce"  
21 Oct 2021 09:04
- Alberto Zigoni submitted a dataset into moderation  
21 Oct 2021 09:04

# Full audit log available to ensure provenance

Publishing

Datasets Users Audit Log Customise Homepage

## Audit Log

Filter by

From

01/01/2018

Until

01/01/2018

Anytime

Last 24 hours

Last week

Last month

User ID

User ID

Dataset ID

zwcnxvp6fx

Action type

All users

Admin only

100 Results

Export results

Dataset ID	Version	Action	Entity	User ID
zwcnxvp6fx	1	mode...	draft_dataset	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	update	method	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	mode...	draft_dataset	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	publis...	draft_dataset	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	update	description	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	create	categories	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	create	files	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	create	files	ec6e9505-5131-3b69-9e55
zwcnxvp6fx	1	create	files	ec6e9505-5131-3b69-9e55

### ACTION DETAILS

X

Dataset ID zwcnxvp6fx  
Title [Test dataset for DMP integration](#)  
Dataset DOI: [10.17632/zwcnxvp6fx.1](#)  
Version 1  
Owner Alberto Zigoni  
User ID: [ec6e9505-5131-3b69-9e55-6a7023469acc](#)

### Action

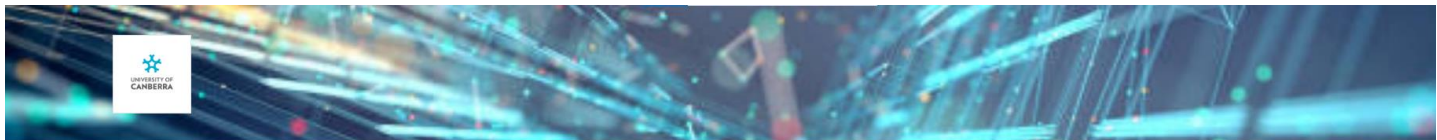
Actioner Alberto Zigoni  
User ID: [ec6e9505-5131-3b69-9e55-6a7023469acc](#)  
Date 21 Oct 2021 09:05  
Admin Yes  
Action Update  
Entity method

Original steps to reproduce

Updated steps to reproduce

Steps to reproduce

# From curated to published dataset



University of Canberra



Sign In / Register

## Australian HCP Acceptance of SIV March 23

Published: 13 April 2023 | Version 1 | DOI: 10.17632/gkjfkrzrs7.1  
Contributor: [Caroline Hall](#)

### Description

The aim of this qualitative research was to understand the attitudes and behaviours, enablers and barriers of Seasonal Influenza Vaccination among Australian healthcare personnel (HCP-nurses, midwives, doctors and pharmacists) in the context of Covid 19. Utilising a question guide underpinned by the Triandis Theory of Interpersonal Behaviour, and an Intergrative Review, we conducted 14 semi-structured interviews with Australian HCP. Application of Braun and Clarke's reflective thematic analysis facilitated the identification and exploration of 6 pertinent themes. Most significantly professional responsibility and identity appeared highly associated with positive vaccine intention. Protection particularly of others, habit, risk perception, experience and knowledge, and convenience and ease of access were also found to influence HCP decision making around SIV. Vaccination complacency, not hesitancy, was found to impede the progress of vaccination intention (acceptance) to vaccine behaviours (uptake). Interventions targeting professional identity and social norms may overcome vaccine complacency to nudge vaccination intention to vaccination positive behaviour.

Download All 113 KB

### Files



Thematic Analysis De-Identif. March 2023.xlsx

117 KB

### Institutions

University of Canberra

### Dataset metrics

#### Usage

Views: 7  
Downloads: 2



[View details >](#)

### Latest version

Version 1  
Published: 13 Apr 2023  
DOI: 10.17632/gkjfkrzrs7.1

#### Cite this dataset

Hall, Caroline (2023), "Australian HCP Acceptance of SIV March 23", University of Canberra, V1, doi: 10.17632/gkjfkrzrs7.1

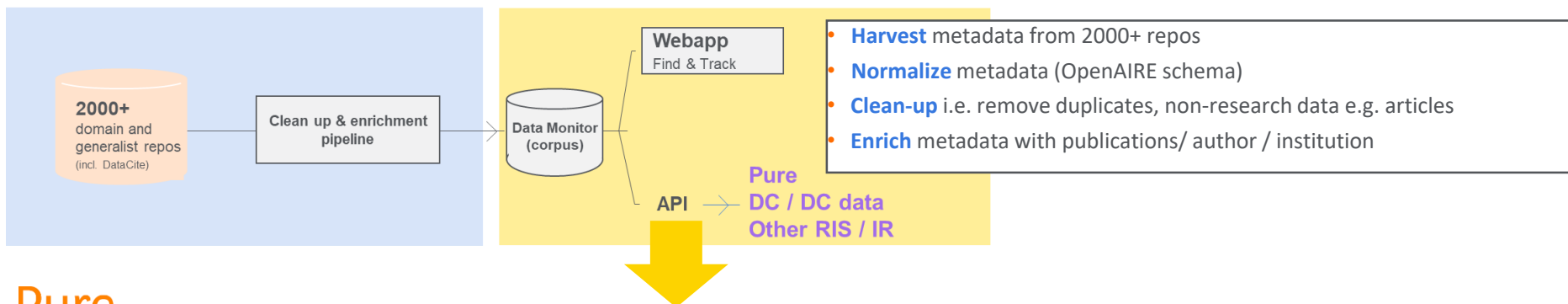
Copy to clipboard

# From published dataset to Pure record

## Data Monitor

Track and Analyse your institutional research data across over 2000 domain specific and generalist data repositories

Admin



## Pure

Project (by created date)	Nature of activity	Funder	Ethical reviews	Applications	Awards	Awarded	Spend	Funded period	Allocated time (H)	Spend time (H)	Documents	Overdue milestones	Upcoming milestones	Research outputs	Activities	Acronym	Impacts	Datasets	Prizes	Facilities/Equipment	Press/Media
ACT Longitudinal Survey on Climate Change	ACT Government Environment and Sustainable Development Directorate	SCHIRMER, J., HANIGAN, I. & YABSLEY, B.				47,628.00 AUD	0.00 AUD														

Datasets

- Australian HCP Acceptance of SIV March 23
  - Hall, C. (Creator), University of Canberra, 2023
  - DOI: 10.17632/gkjkfkrzrs7.1, <https://researchdata.canberra.edu.au/datasets/gkjkfkrzrs7>
  - Dataset

# Engagement and Outcomes



# Getting the message out there

- Support materials
  - Benefits
  - Processes
  - Access, tool use
- Engagement talk
- Pilot, survey

# Support Materials

**Data  
Management  
Planning**

**Data Storage  
& Sharing**

**Soft  
&**

## Data Management Planning

Every research project at UC is expected to have a data management plan. Does your research project need one? And how do you create, update or check it?

The sections below will help you answer these questions for your particular project. Contact the [eResearch Team](#) if you have any questions.

### Data Management Planning Steps

[Purpose of data management planning](#)

[Data management plans in ReDBox](#)

[Purpose of a data management plan](#)

[Where your data is stored](#)

**Specific Guidelines**

[Guidelines](#)

[Storage](#)



DISTINCTIVE BY DESIGN

## Guidelines for Data Management Planning in ReDBox

### Academic Staff

[Table of Contents](#)

# Engagement Talk Strategy

## Address user needs

### Researchers

- HDRs, Academics, Supervisors
- Faculties, Centres

### Processes

- What, when, how

### Structure

- 30 min presentation + Qs
- Benefits, processes, access

# Outcomes

- 90+ active DMPs
- BAU talk, support
- Pilot, surveys useful
- Positive feedback
- Open access guidelines



**Prof. Charles Lemckert**

Honorary Appointment, Faculty of Arts & Design,  
University of Canberra

“Enabling users to develop a data management plan at the initiation of any project ensures that the data is appropriately located and stored as per regulatory standards. The deployment of Pure and the integration with various related systems seem well suited for the purpose.”

Case Study: University of Canberra

## Building an integrated research data management framework around Pure



### Pure

Your brilliance, organized for action

Make confident program decisions, streamline funding analysis and forge new partnerships with complete, correct, current and connected information around research activities.



# Contribution to Institutional Underpinnings

- UC's integration work helped test the Active Data Management element of the Underpinnings framework
  - Integrating systems to provide a seamless user experience
  - Educating researchers
  - 11 output document published for public access via DC Data:  
<https://researchdata.canberra.edu.au/datasets/bfrr75n8wh>

























## Files

Version 1

16 January 2023

Root > Outputs

 00-README.rtf	4 KB	
 01-Data Management Planning User Guidelines .pdf	938 KB	
 02-Data management planning & ReDBox IU.pptx	7 MB	
 03-Data management planning & ReDBox IU.pdf	3 MB	
 04-eResearch Australasia 2023 slides.pptx	6 MB	
 05-PilotStudy_Feedback_REDCap_Survey_template.csv	3 KB	
 06-ReDBox_Feedback_REDCap_Survey_template.csv	3 KB	
 07-Research-Data-Classification-Guidelines-Final-version.pdf	150 KB	
 08-Metadata schema mapping - ReDBox DMP to Pure Award.pdf	168 KB	
 09-Integration requirements for RDM workflows.pdf	182 KB	
 10-PURE Awards Integration documentation.pdf	503 KB	

## Compare to version

 Version 1

## Institutions

University of Canberra

## Categories

Metadata, Data Management

## License

CC BY 4.0

[Learn more](#)

# Key takeaways

- UC tapped into PURE's potential as a workflow tool
- We focused on workflows rather than point-to-point integrations
  - Enables the design of general-purpose solutions that can be adapted to different scenarios
- Designed solution with end users in mind
  - Minimised administrative burden to maximise uptake
- Project helped validate a national research data management framework

# Acknowledgements



ELSEVIER

- Daniel Boydell, Alberto Zigoni, Grahame Pearson



- Lachlan Hoole, Andrew Brazzatti, Hoylen Sue, Matthew Mulholland



- Richard Parrot, Belinda Seeto, Craig Gambriel



- Kyle Hemming, Magdalena Slabuszewska, Sean Sinclair, Arvind Reddy