

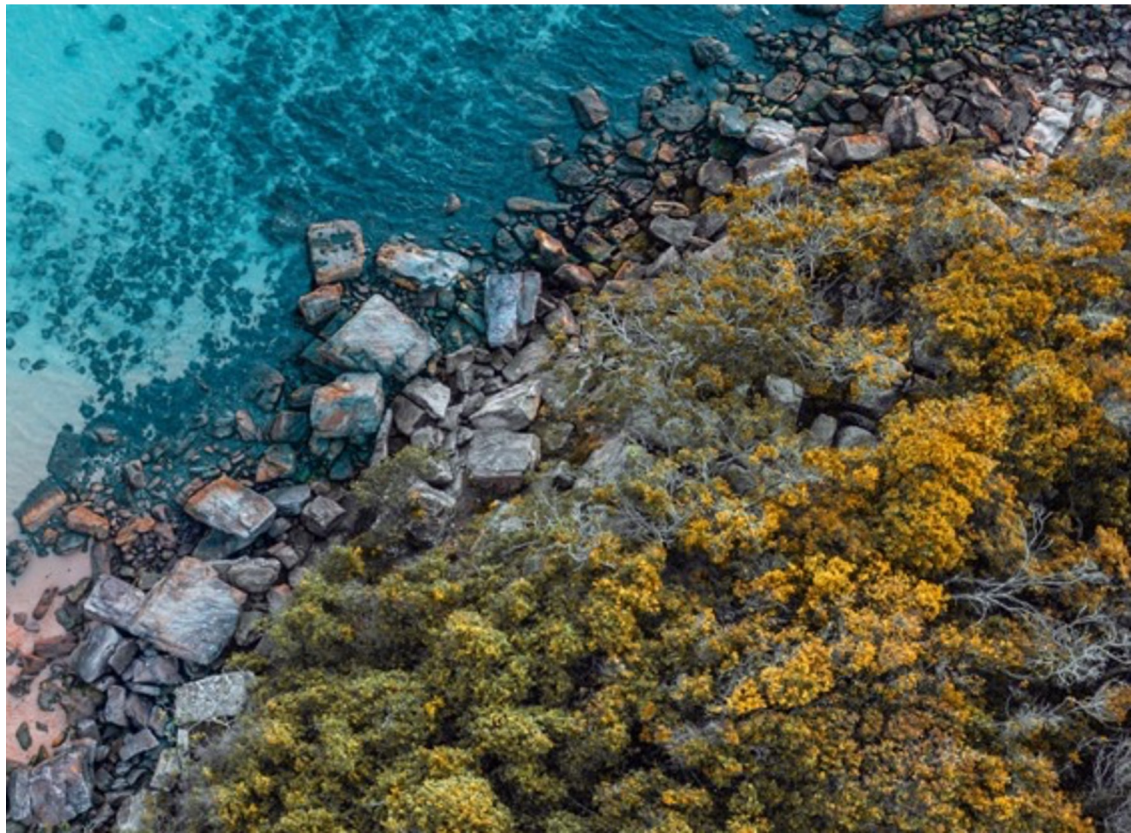
# About the Australian Research Data Commons (ARDC)

11 October 2023

PRESENTED BY  
Sheida Hadavi

# ACKNOWLEDGEMENT OF COUNTRY

We acknowledge and celebrate the First Australians on whose traditional lands we meet, and we pay our respect to their elders past, present and emerging.





About the ARDC

Supporting  
NCRIS Capability



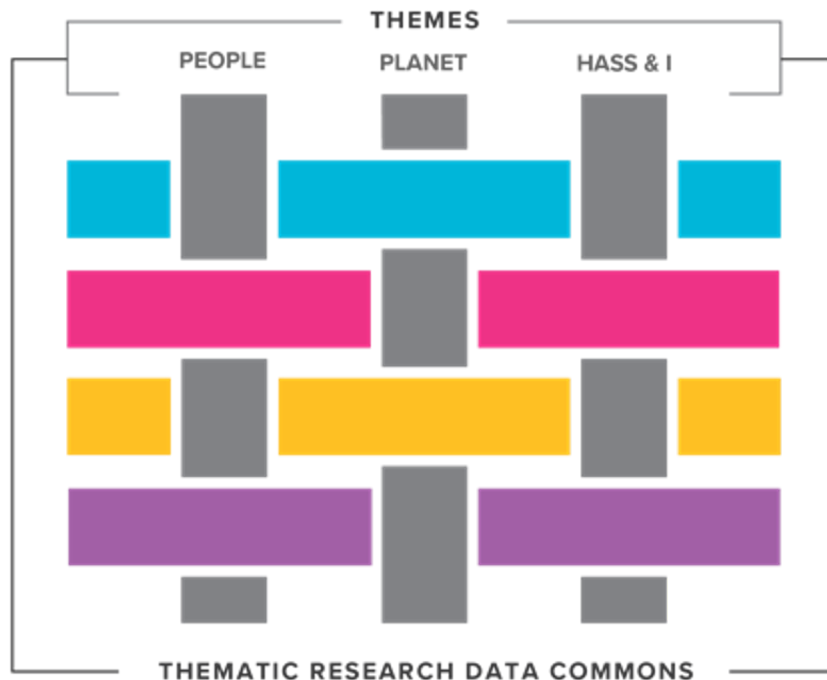
# THE ARDC STRATEGY

## OUR PURPOSE

To provide Australian researchers with competitive advantage through data.

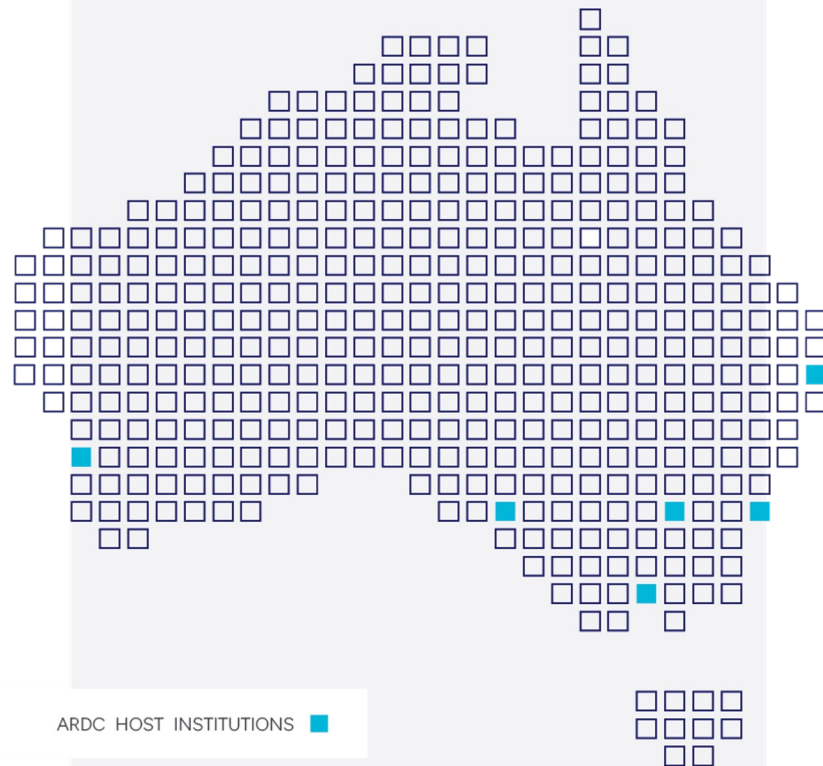
## OUR MISSION

To accelerate research and innovation by driving excellence in the creation, analysis and retention of high-quality data assets.





# MEMBERS



About the ARDC



## WHAT IS A RESEARCH DATA COMMONS?

A research data commons brings together people, skills, data, and related resources such as storage, compute, software, and models to enable researchers to conduct world class data-intensive research.

# OUR AUDIENCES



## Researchers

Researchers  
from any discipline  
(academic, but also  
government and industry)



## People who work with researchers

Infrastructure providers  
Universities / Research Institutions  
Data Managers  
Trainers  
Librarians  
eResearch / Research  
Support Offices



## Key stakeholders

Australian Government  
Department of Education (funders)  
/ NCRIS  
Government / Policy  
International Data Organisations  
National Data Organisations  
ARDC Members

# WHAT WE DO

The ARDC runs programs and facilitates partnerships that ensure Australian researchers are internationally competitive through having access to high-quality data assets, platforms, infrastructure, policies, people and training to transform our lives.

## About the ARDC





F

Findable



A

Accessible



I

Interoperable



R

Reusable



About the ARDC

# ARDC PROGRAMS



Thematic Research  
Data Commons



Translational Research  
Data Challenges



National Data  
Assets



Platforms



Research Software



Digital Research Skills



Data Retention

## About the ARDC



## NATIONAL DATA ASSETS PROGRAM

The National Data Assets initiative was a multi-year, \$20 million+ investment by ARDC to provide Australian researchers with access to a portfolio of national-scale data assets that support leading-edge research.

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## HeSANDA - Health Studies Australian National Data Asset

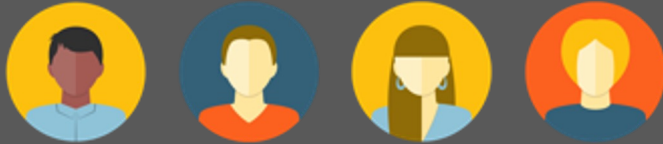
A strategic partnership with the Australian health research community to build a distributed national data asset from the outputs of health studies such as clinical trials to support health data sharing & secondary use.

- \$3.5M co-investment over 3 years



## HeSANDA 'Node'

Primary researchers / Data custodians



Research outputs

Study protocol  
Data dictionary  
Participant data

Data governance  
policies  
&  
procedures

**Metadata**

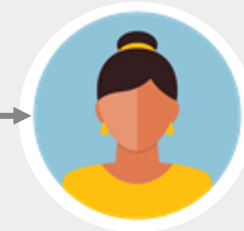
Descriptions of  
outputs  
& governance

3. Transmit &  
track data  
request

1. Provide metadata **ONLY**

Health Data  
Australia

4. Provide access to data



Secondary researcher

2. Search metadata & raise data request

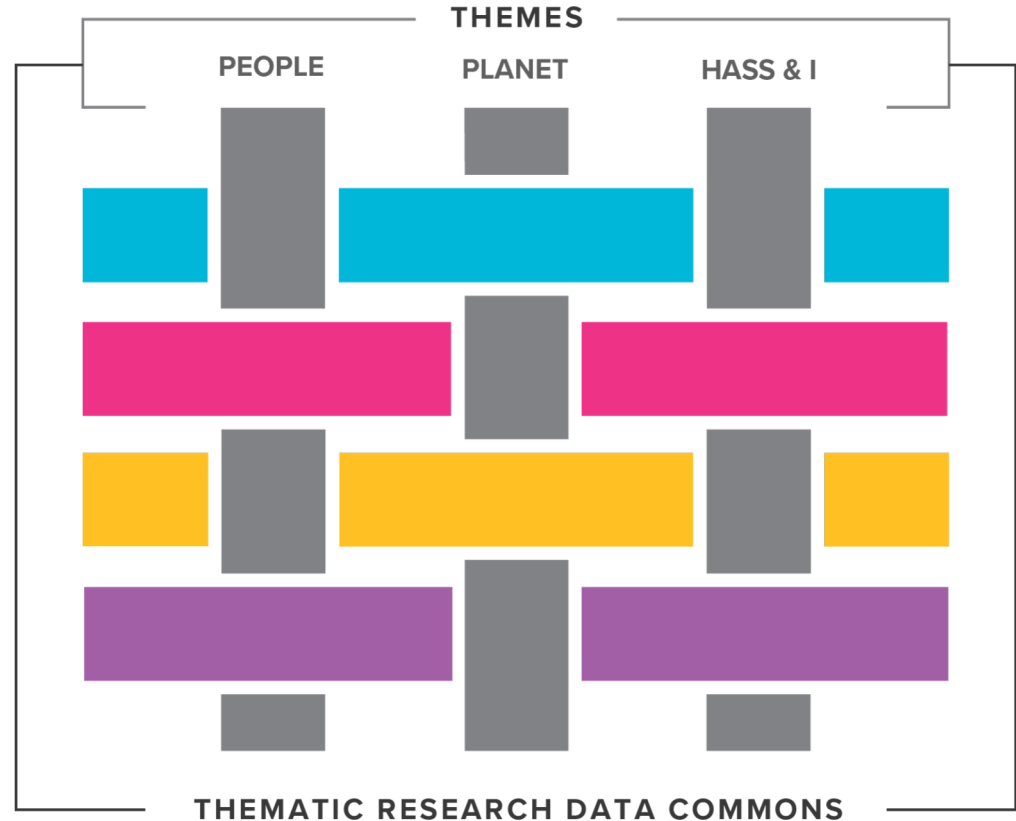
# RESEARCH PLATFORMS



Domain-oriented online environments that draw together research data, models, analysis tools and workflows to support collaborative research across institutional and discipline boundaries.

About the ARDC

# THEMATIC RESEARCH DATA COMMONS



# PEOPLE RESEARCH DATA COMMONS

A national-scale data  
infrastructure for health  
research and research  
translation

*Image — Gorodenkoff - 236237514 /*

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# PLANET RESEARCH DATA COMMONS

National-scale data  
infrastructure for  
environmental research  
and decision making

Image — *themorningglory* -391783296 /

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# HUMANITIES, ARTS, SOCIAL SCIENCES (HASS) AND INDIGENOUS RESEARCH DATA COMMONS

National-scale data infrastructure  
for HASS and Indigenous research  
and decision making

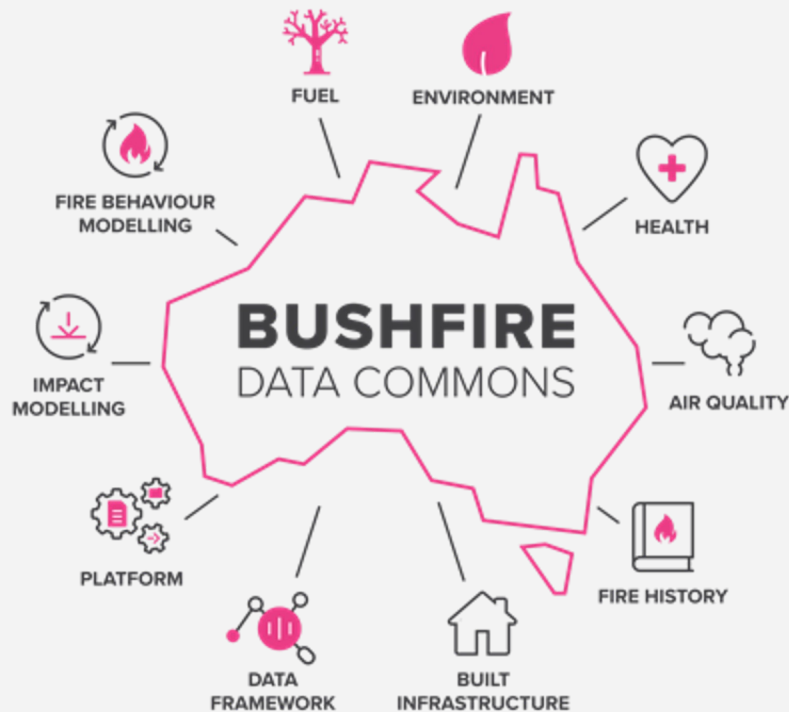
*Image — Mario Purisic - jG1z5b7NCq4 /*

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# TRANSLATIONAL RESEARCH DATA CHALLENGES: BUSHFIRES

*Image — jamenpercy - 318878058 / AdobeStock.com*



Research resilience, response and recovery

# TRANSLATIONAL RESEARCH DATA CHALLENGES: BUSHFIRES

## Understanding bushfire

- Behaviour
- Impact

# ARDC SERVICES



ARDC Nectar Research Cloud



ARDC Research Vocabularies Australia



ARDC Research Data Australia



Persistent Identifiers



Communities of Practice



Engagement, Expertise  
and Support

## About the ARDC





Platforms for information exchange,  
problem solving, peer support and  
development of best practice

## COMMUNITIES OF PRACTICE

- Sensitive Data Community
- Machine Learning Community of Practice for Australia (ML4AU)
- Identifiers for Instruments in Australia
- Australian Research Data Management Community
- Data Management Plans Interest Group
- Australian Research Containers Orchestration Service (ARCOS)



193,945 research data collections  
are catalogued on ARDC's Research  
Data Australia.



**Research Data Australia**  
is Australia's portal to find  
research data and associated  
projects, researchers,  
and data services.

# HUB OF EXPERTISE: HELP TACKLING YOUR DATA CHALLENGES



## **POLICY & PROCEDURES**

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Data Governance  
Sensitive Data  
Data Retention  
Data Management  
Maturity



## **ARCHITECTURE & SYSTEMS**

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Systems  
Architecture  
Data Architecture  
Data Management  
Planning tools  
(Trusted) Data  
Repositories



## **COMPUTE & ANALYSIS**

---

Research software  
AI/Machine  
Learning & Data  
Cloud Compute  
Containerising Data  
& Code



## **FAIR DATA PRINCIPLES**

---

Findable Data  
Persistent IDs  
Metadata  
Interoperable Data  
Vocabularies  
Data Licensing  
Data Quality



## **SKILLS DEVELOPMENT**

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Skills Frameworks  
Learning Design & Evaluation  
Training Materials  
Development  
Community Building



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## THANK YOU



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