

# ARIDHIA FAIR DATA SERVICES

Aridhia FAIR Data Services gives researchers and innovators the ability to discover and understand data through dataset search, classification and efficient metadata browsing capabilities described via dataset catalogues, dictionaries and associated attached assets. Our service is built upon the FAIR Data Principles of making data Findable, Accessible, Interoperable and Reusable:



**Findable** - Data and metadata should be easily discoverable by both humans and machines through the use of standard identification mechanisms.



**Accessible** - Once found, data should be easy to download and use either locally or in a trusted digital research environment. The hosting repository should also have plans in place to keep metadata accessible even in the event of the data itself no longer being available.



**Interoperable** - Utilise standard vocabularies and ontologies in order to ensure the data can be easily mapped and combined with other datasets. This, along with the ability to transform data into standardised formats like FHIR, enables sharing between various scientific disciplines and organisations.



**Reusable** - Data and metadata should be richly described with the least restrictive licenses, allowing it to be easily reused in future research. Integration with other data sources should be easy, facilitated by proper citations and descriptions. The standard identification of items improves data provenance and allows researchers to not only re-use data, but to identify how aspects of it may be reproduced in their own research.

FAIR Data Services is designed for research and to help reduce the barriers to entry of discovering and browsing data – tasks that researchers can spend up to 80% of their time performing to facilitate their research. FAIR Data Services also provides a secure and compliant environment that is designed with security and privacy in mind, prevents unauthorised access or use of data and adheres to information governance standards.

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| <b>Data Discovery</b>                      | <ul style="list-style-type: none"> <li>• Search for datasets relevant to your research project using text-based simple or complex search queries.</li> </ul>  |
| <b>Metadata Browsing</b>                   | <ul style="list-style-type: none"> <li>• Understand existing datasets by viewing metadata including catalogue and field-level descriptions.</li> <li>• Download machine-readable dataset metadata.</li> </ul> |
| <b>Metadata Management</b>                 | <ul style="list-style-type: none"> <li>• Upload your dataset metadata and associated attachments (e.g. PDFs, json, etc) to be discovered by others.</li> </ul>  |
| <b>Data Publishing</b>                     | <ul style="list-style-type: none"> <li>• Generate and assign Digital Object Identifiers (DOIs) to datasets to share within your community and enhance findability.</li> </ul>                                 |
| <b>Role-based Access Control</b>           | <ul style="list-style-type: none"> <li>• Self-service signup with role-based user permissions. This includes read only and edit/update roles.</li> </ul>  |
| <b>Built on Standards</b>                  | <ul style="list-style-type: none"> <li>• Uses the Data Catalog Vocabulary (DCAT) for dataset instance-level descriptions.</li> </ul>  |
| <b>Integration with Aridhia Workspaces</b> | <ul style="list-style-type: none"> <li>• Single Sign On (SSO) between FAIR and Workspace services.</li> <li>• Consistent Aridhia DRE user interface.</li> </ul>   |
| <b>Privacy by Design</b>                   | <ul style="list-style-type: none"> <li>• Secure data access and management via MFA, RBAC, encryption and secure key management.</li> <li>• ISO 27001 accredited.</li> </ul>                                   |
| <b>Cloud-native Service</b>                | <ul style="list-style-type: none"> <li>• Developed and hosted on the cloud.</li> <li>• Integrates with and improves on cloud technologies.</li> </ul>   |