



FAIR data principles

Before acquiring images at the Facility check if you are ready for the FAIR principles.

Written By: José Maria Mateos Melero

F_{indable} A_{ccesible} I_{nteroperable} R_{eusable}



INTRODUCTION

Make your data Findable, Accessible, Interoperable and Reusable (FAIR) by considering the following steps.

Principles based on:

Wilkinson, M. D., M. Dumontier, I. J. J. Aalbersberg, G. Appleton, M. Axton et al., 2016 The FAIR Guiding Principles for scientific data management and stewardship. Scientific data 3: 1–9. 10.1038/sdata.2016.18

Step 1 — To be Findable

F

indable



- **To be Findable:**
- F1. (meta)data are assigned a globally unique and persistent identifier
- F2. data are described with rich metadata (defined by R1 below)
- F3. metadata clearly and explicitly include the identifier of the data it describes
- F4. (meta)data are registered or indexed in a searchable resource

Step 2 — To be Accessible

A

ccesible



- **To be Accessible:**
- A1. (meta)data are retrievable by their identifier using a standardized communications protocol
- A1.1 the protocol is open, free, and universally implementable
- A1.2 the protocol allows for an authentication and authorization procedure, where necessary
- A2. metadata are accessible, even when the data are no longer available

Step 3 — To be Interoperable

I

nteroperable



- **To be Interoperable:**
- I1. (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
- I2. (meta)data use vocabularies that follow FAIR principles
- I3. (meta)data include qualified references to other (meta)data

Step 4 — To be Reusable

R

eusable



- **To be Reusable:**
- R1. meta(data) are richly described with a plurality of accurate and relevant attributes
- R1.1. (meta)data are released with a clear and accessible data usage license
- R1.2. (meta)data are associated with detailed provenance
- R1.3. (meta)data meet domain-relevant community standards