

Training

Research Reproducibility Practices

- Scientific Data Management
- Best Practices
- FAIR Data Principles
- Open Science

Data Science Practices

- Experimental Design
- Data Preprocessing
- Data Analysis
- Data Quality
- Statistics

Plan

Collect

Describe

Process & Analysis

Publish & Preserve

Reuse

Documentation & Management of end-to-end experiment workflow for Reproducible Research

- Documentation of the instruction and directions to use the data, methods, and code
- Licensing

- Use of data management platforms during the whole research lifecycle
- Storage and backup
- Use of Collaboration tools

- Use tools to link between steps, data, people and results
- Citation of datasets, software, and results
- Long-term data preservation
- Use of public repositories
- Use of persistent identifiers like ORCIDs, DOIs

- Usage and adoption of metadata standards
- Use of consistent vocabularies and ontologies for interoperability

- Use of reproducibility tools
- Use of versioning systems
- Documentation of negative trials and results of an experiment
- Documentation of the provenance of results