

- Reproducibility and transparency
 - → credible science
- Irreproducible findings:
 "reproducibility crisis"
- Open practices: promote collaboration, efficiency, public trust
- Funders: increasingly mandate openness

Why Open Research?

Why Open Research?

Enhancing transparency

Reproduciblity
Reliability
Integrity



Steering Research in the right direction!

Open Research

Best Practice Guide

Open Research in BES



Unlock your research potential with our guide tailored for Biological and Environmental Sciences at Liverpool John Moores University.

Explore open access publishing, data sharing, reproducible workflows and public engagement. Enhance transparency, collaboration and impact.

Start your journey towards more open and impactful science today!

LIBRARY TEAM
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Made in collaboration with Dr Susanne Zajitschek, Maria Follett, Phebie Watson and Amie Longthorne

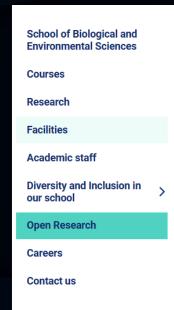
V1 03/25



Open Research at BES

https://www.ljmu.ac.uk/aboutus/faculties/school-ofbiological-and-environmentalsciences

https://www.ljmu.ac.uk/aboutus/faculties/school-ofbiological-and-environmentalsciences/open-research



Open Research in the School of Biological and Environmental Sciences

This guide aims to promote the adoption of open research best practices. It provides resources and guidance to enhance the transparency and robustness of research findings by encouraging practices like open access publishing, preprints, open peer review, open educational resources, and open research data.

By embracing these principles, we can improve research integrity, facilitate validation and reproduction of work, prevent duplication and misconduct, and foster a collaborative and inclusive research culture that drives innovation and addresses global challenges.



Collaboration

Sharing data

Sharing code

Sharing drafts



Sharing versions

OSF – Open Science Framework



Center for Open Science

- non-profit
- Free, opensource platform



Supports research lifecycle

Planning to publication



Project Management

- File organisation
- Sharing
- Version control

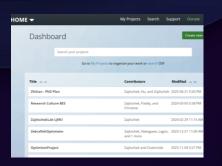


Combined funding sources

Preservation fund: 50yrs + accessibility

OSF.io Home screen





Key Features

- Projects and components
- File storage
- Version control
- Collaboration



Preprints & Pre-registration

Study plan / methods:

- Documented
- Pre-Reg: Peerreviewed
- Decouples study design from outcome

OSF in practise



Individual project

Manage Thesis
Analysis pipeline
Admin project

Lab/Group space

Centralise resources
Share protocols
Store shared files

Collaborative space

Open access: data, code, protocols
Link preprints, papers, supplements

Tour...

https://osf.io/dashboard

Wiki Files

Contributors

Activity logs

Project overview Documentation Key information

Uploads
Linked services

Manage permissions

Automatic tracking

OSF and FAIR Principles

Findable Accessible

Interoperable

Reusable

Projects and data indexed

DOIs available

Public sharing

Embargo options

Supports metadata

Common file types

Wikis structured templates

Publications

Link preprints, published papers supplements

Pre-registration and Preprint registries

Pre-registration on OSF

- **OSF** Registries
- What: Time-stamped record of study design
- Why: Improves credibility, reduces hindsight bias
- How: OSF pre-registration templates
 - AsPredicted, Prereg Challenge, Standard Pre-registration

- Public, searchable repository of registered studies
- Domain-specific registries: PsyArXiv, BioArXiv, OSF Registries, etc.
- Permanent DOI links for citation
- Promotes visibility and credit for study design

Options to embargo

Advantages / Limitations



Single file

limit: 5GB

Facilitates reproducibility

Centralised

Free of charge

Modular

Community support

No storage limit per user

Requires getting used to

Public projects: 50 GB each

Private projects: 5 GB max



Thank you!

Resources and Support

COS Help Center: https://help.osf.io

Example projects: Browse featured OSF projects

OSF YouTube tutorials and webinars

COS Ambassadors and community forums