

University of Liverpool Research Data Management Policy

Title	University of Liverpool Research Data Management Policy
Version Number	2.0
Document Status	Active
Document Classification	Public
Effective Date	05 June 2024
Review Date	30 June 2027
Responsible Department	Open Research Team, Libraries Museums and Galleries
Policy Author	Jacqueline Vigilanti, Research Data Services Manager
Approval Route	Information Governance Committee
Comments	

Contents

1.	Introduction	. 1
2.	Purpose	. 1
3.	Scope	. 2
4.	Definitions	. 2
5.	Responsibilities	. 3
	5.1 Statement of Responsibility	. 3
	5.2 Responsibilities of the University	. 4
	5.3 Responsibilities of researchers	. 4
6.	Key expectations and guidance	. 5
	6.1 Data Management Plans	. 5
	6.2 Compliance and contracts	. 5
	6.3 Ethical approval.	. 6
	6.4 Health and Social Care research	. 6
	6.5 Data storage	. 6
	6.6 Data ownership, Copyright, and Intellectual Property	. 6
	6.7 End-of-project	. 7
	6.8 Open access to research data	. 7
	6.9 FAIR data, discoverability, and accessibility	. 7

1. Introduction

- **1.1** The University of Liverpool recognises that the effective management of research data is an integral part of good research practice. It is essential for data integrity as well as safeguarding and handling data responsibly in accordance with ethical, legal, and regulatory requirements. Good data management underpins research integrity, transparency, and reproducibility by ensuring data associated with research outputs are documented, preserved, and accessible, thereby allowing for the verification of research results.
- **1.2** Good management also facilitates data sharing which maximises the reuse of research data, the benefits of which include promoting the work of researchers, fostering collaboration, increased resource efficiency, and securing public trust. The University promotes compliance with relevant funder and publisher policies and supports the <u>Concordat on Open Research Data</u>, and <u>UKRI's Common Principles on research data</u>. The University acknowledges there are valid reasons data may not, or cannot, be shared such as where a contract is in place or data are sensitive. The University endorses <u>Horizon Europe's</u> principle that data should be "as open as possible as closed as necessary" and follow <u>FAIR Principles</u> (Findable, Accessible, Interoperable and Reusable).

2. Purpose

2.1 The purpose of this policy is to promote good management of research data with the aim

of making it openly available where possible so that university research can have the greatest potential impact.

- **2.2** This policy outlines the expectations and responsibilities of both researchers and the University to support best practice in research data management, the preservation of research data and research related records, and sharing research data.
- **2.3** The aims of this policy are to:
 - Promote best practice in research data management together with FAIR Principles to ensure research data are managed in a way that maximises their reproducibility and long-term accessibility.
 - 2. Support researchers to make their research data as open as possible in a responsible and timely manner.
 - 3. Outline the roles and responsibilities of researchers and the University in supporting good research data management.

3. Scope

- **3.1** This policy applies to all research regardless of whether it is externally funded and is subject to the provisions of any relevant contracts including funding agreements.
- **3.2** It applies to all staff, including technical staff, visiting researchers, individuals on honorary contracts, and post graduate research (PGR) students engaged in research, hereafter referred to as researchers.
- **3.3** Statements 5.3.8, 6.1, 6.3, 6.5 apply to taught course students who have obtained ethical approval and supervisors of those students. However, all students are encouraged to adopt best practice in research data management since all those engaged in academic work have a personal responsibility to contribute to research integrity.
- **3.3** This policy covers the management of all research data (active and archive data) collected during the course of research regardless of format, and research related records. It also covers the sharing of research data.
- **3.4** The retention of research related records, records documenting the conduct of research projects, including documents such as protocol, consent procedure, participants and adverse effects arising from research projects, research grant documentation, consent forms, contracts, etc. are covered by the University's Information Management Policy.

4. Definitions

For the purposes of this policy, the following terms are defined:

4.1 Research: Broadly, this is an activity that leads to new insights and knowledge. There are a number of definitions for research, one being the Frascati definition that states "Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humankind, culture and society, and the use of this stock of knowledge to devise new applications."

- **4.2 Researcher:** Any individual who conducts research under the auspices of the University.
- **4.3 Principal Investigator (PI)**: A researcher with overall responsibility for a research project. In clinical research where a project has a Chief Investigator (CI) as well as one or more Principal Investigators (PI), the CI has overall responsibility for the research project while each PI has responsibility for an individual recruiting site.
- **4.4 Research Data:** The University adopts the definition laid out in the <u>Concordat on Open Research Data</u> (p.3) which states that "research data are the evidence that underpins the answer to the research question, and can be used to validate findings regardless of form (e.g. print, digital, or physical)¹. These might be quantitative information or qualitative statements collected by researchers in the course of their work by experimentation, observation, modelling, interview or other methods, or information derived from existing evidence. Data may be raw or primary (e.g. direct from measurement or collection) or derived from primary data for subsequent analysis or interpretation (e.g. cleaned up or as an extract from a larger data set), or derived from existing sources where the rights may be held by others."
- **4.5 Sponsor:** A body that guarantees and oversees a research project or clinical trial, ensuring that there are proper arrangements in place to initiate, manage, monitor and finance a study. A Sponsor can be external to the University.
- **4.6 Clinical Trials Unit (CTU):** An academic specialised research unit with the purpose of designing, conducting, analysing, and publishing clinical trials and other studies. At Liverpool Clinical Trials Centre, the Director of the CTU is typically the data custodian and is responsible for ensuring the proper handling and security of trial data.
- **4.7 Data Controller:** The organisation responsible for data security and meeting data protection requirements.
- **4.8** There are three main states of research data:

Active data: "Live" project data regularly accessed and/or analysed as part of a research project.

Archive data: End-of-project or finished data. These data are prepared for long-term preservation and archived for legal, regulatory, or contractual purposes. They may contain sensitive or personal information and might not be openly available. Some archive data may also be shared data.

Shared data: Research data that are made available for reuse. This may include restrictions or conditions of access and reuse.

5. Responsibilities

5.1 Statement of Responsibility

Researchers are responsible for the management of their research data, but the University recognises that researchers cannot meet expectations for open research without support

¹ For example, statistics, collections of digital images, sound recordings, transcripts of interviews, survey data and fieldwork observations with appropriate annotations, an interpretation, an artwork, archives, found objects, published texts or a manuscript.

from the institution. The University also recognises that support for research data management falls to a variety of stakeholders across the institution, including, but not limited to: Libraries, Museums, and Galleries; IT Services; Information and Records Management; Research Support Office including Research Integrity and Research Ethics; Legal and Governance; Clinical Research Governance Team (Clinical Directorate); and Faculty Research and Impact Support.

5.2 Responsibilities of the University

- **5.2.1** The University is responsible for providing support and guidance to researchers on aspects of data management across the research lifecycle.
- **5.2.2** The University is responsible for providing and promoting the availability and security of appropriate systems and infrastructure to facilitate good research data management and ensure researchers can meet expectations of relevant polices.
- **5.2.3** The University will raise awareness and provide relevant training, materials, and research data management services to ensure researchers have the necessary resources and skills to manage their data to best practice standards and in accordance with relevant policies. See **Section 6. Key expectations and guidance**.

5.3 Responsibilities of researchers

For associated guidance and resources, see Section 6. Key expectations and guidance.

- **5.3.1** Researchers are responsible for familiarising themselves with the requirements of this Research Data Management Policy and any relevant legislation, policies, or contracts from research funders and other stakeholders.
- **5.3.2** Individual researchers, or, in the case of collaborative research projects the Principal Investigator (PI) or Clinical Investigator (CI), are responsible for ensuring data management adheres to all relevant policies including complying with legal, ethical, or regulatory frameworks governing the processing and safeguarding of personal and sensitive research data. In the case of Clinical Trials or Sponsored research, the Sponsor will delegate the task of data management to the CI, and will retain oversight of the study. Relevant policies include, but are not limited to, the University's Policy on Research Integrity, Data Protection Policy, Information Security Policy, IT Acceptable Use Policy and the Freedom of Information Policy.
- **5.3.3** The PI has overall day-to-day responsibility for the effective management of research data and research related records including delegating responsibility for data management to co-investigators or other project members where appropriate and ensuring all project members are informed of data-related decisions. For Clinical Trials or Sponsored research, the Sponsor is responsible for delegating data management tasks.
- **5.3.4** Researchers are responsible for the effective management of research data and research related records and making appropriate decisions about data collection, processing, storage, safeguarding, archiving, and data sharing in their field. An accurate and comprehensive record of the research should be kept including documenting standards, protocols, and responsibilities.
- **5.3.5** Researchers are responsible for ensuring all required governance approvals including ethical approval and sponsorship is obtained for applicable research projects before any

data collection has begun in line with relevant policies including the University's <u>Policy on Research Ethics</u>, <u>Human Materials Research Policy</u>, <u>Clinical Trials of Investigational Medicinal Products Sponsored by the University</u> and the <u>Sponsorship of Research Policy</u>.

- **5.3.6** Researchers are responsible for making appropriate appraisal decisions for the retention, transference of ownership, or destruction of research data at the end of the project and/or when they leave the University. These decisions should consider legal or funder requirements as well as the University's Information Management Policy and Records Retention Schedule.
- **5.3.7** In the case of postgraduate research (PGR) projects, overall responsibility for ensuring data are managed in line with relevant policies lies with the PGR's supervisor. PGRs are responsible for the day-to-day management of the data including writing the ethics application (where applicable) which should be shared with their academic supervisor or PI. PGRs and their supervisors are also subject to the PGR Code of Practice.
- **5.3.8** In the case of undergraduate and postgraduate taught course (PGT) students undertaking research, the responsibility lies with the student's supervisor or PI for ensuring resulting research data are managed in line with relevant policies, including the University's Policy on Research Ethics, Information Security Policy, IT Acceptable Use Policy, and the Programme Terms and Conditions. Data acquired in undergraduate or taught postgraduate projects will not normally be retained. It is the responsibility of the PI or supervisor to ensure that any research data collected during such projects is deleted at the end of the project except in exceptional circumstances including but not limited to where legal or regulatory requirements are in place or research findings are included in published outputs.

6. Key expectations and guidance

6.1 Data Management Plans

All research projects are expected to have an associated <u>Data Management Plan</u> (DMP) and clearly document data collection, storage, security, access, ownership, retention, deletion, sharing, and reuse. The DMP should be completed before ethical approval is sought.

 Guidance and training for DMPs as well as best practice for managing research data throughout the project can be found on the Library's <u>Research Data Management</u> <u>Essentials</u> web pages. Further support can be sought from the <u>Research Data</u> <u>Management Team</u>.

6.2 Compliance and contracts

Where a research project is conducted with other institutions or independent researchers, all parties should comply with existing agreements and contracts. Obligations should be documented, and parties should agree a plan for managing the data generated during the study. University of Liverpool researchers are responsible for the management and security of any research data held by the University of Liverpool. For Clinical Trials or Sponsored research where the Clinical Trials Unit or Sponsor is external to the University, the security of any research data is not the formal responsibility of the University of Liverpool. In these cases, responsibility for data security lies with the designated data controller. It is best practice to have e.g. a research contract, collaboration agreement, confidentiality agreement, joint data controllership agreement, and/or data sharing agreement in place before the project begins.

Contractual support is provided by the Research Contracts team.

6.3 Ethical approval

Ethical approval must be in place for all relevant research projects before data collection has begun.

 Researchers can consult the University's <u>Research Ethics Decision Tool</u> for guidance to determine whether University research ethics approval will be needed for their study.

6.4 Health and Social Care research

Research projects that are being undertaken within the remit of the UK Policy Framework for Health and Social Care Research must have an identified Sponsor before the study can begin. This research also requires review by a Health Research Authority (HRA) Research Ethics Committee (REC). Transfer of research data between the University of Liverpool and partner NHS Trusts must be controlled appropriately and detailed within the protocol and Data Management Plan.

- The University Sponsorship team can provide advice on such research.
- Researchers should be aware that access to this data can be requested and requires a written request through the Sponsorship team.

6.5 Data storage

The University expects all active research data to be stored within University centrally managed IT facilities and services, using University managed devices as per the IT Acceptable Use Policy. Centrally contracted and managed IT facilities and services align with the University's Data Protection Policy and Information Security Policy.

- The <u>Information Protection Guide</u> underpins the Information Security Policy and provides support on classifying and protecting information throughout its lifecycle.
- A list of storage options and guidance for choosing the most appropriate service can be found on the Knowledge Base article <u>Where can I store my research data</u> (KB0012515).
- By exception, where University centrally managed storage is deemed not suitable for the research project, the PI should discuss their requirements with relevant subject experts including, but not limited to, Research IT and Information Security via the IT Services self-service portal.

6.6 Data ownership, Copyright, and Intellectual Property

Researchers are expected to be clear about data ownership and/or terms and conditions of use at the beginning of the project (see also section 3.1 of the <u>Information Security Policy</u>). Unless specified by a research funder or other contract, such as in the case of collaborative projects with external organisations or where using third-party or secondary data, data ownership is outlined in the University's <u>Intellectual Property Policy</u>. Researchers are expected to recognise Intellectual Property (IP) arising from their research activities and manage that Intellectual Property according to any funder requirements, contractual obligations, or in line with the University's Intellectual Property Policy.

• Contact the Enterprise Team (internal staff only) for advice on IP related matters.

6.7 End-of-project

At the end of a research project, an assessment of which data must be retained and which data are destroyed should be undertaken. Data should be disposed of or retained (archived) in accordance with relevant requirements. Where no such funder or other contractual requirements exist, retention should follow the University's Records Retention Schedule.

- Guidance on managing research records, as well as help with various other topics, can be found on the <u>Information and Records Management</u> webpages and via the <u>Information and Records Management Guidance Index</u> (internal staff only and via Microsoft 365).
- Contact the <u>Information and Records Management team</u> for further support.

6.8 Open access to research data

Research data should be made openly available with their associated metadata in line with any relevant research funder or publisher policies. Where no policy exists, researchers are encouraged to share data underpinning research publications or of long-term value under the Horizon Europe principle "as open as possible, as closed as necessary". Data should be shared in an appropriate manner (e.g. anonymised), with as few restrictions as possible, and in a timely manner.

 Contact the Library's <u>Research Data Management Team</u> for support and guidance around Open Access to research data.

6.9 FAIR data, discoverability, and accessibility

Data and accompanying documentation and metadata should follow <u>FAIR Principles</u> to facilitate the discoverability and reuse of the data. Data should be deposited in an appropriate research repository such as the University of Liverpool's <u>Data Catalogue</u>, a funder-mandated repository, or discipline specific repository with clear accessibility and reuse rights including an appropriate licence. Repositories should support the use of <u>Open Research and Contributor IDs</u> (ORCIDs) and Digital Object Identifiers (DOIs). Researchers are strongly encouraged to link datasets to their publication record using their author ORCID. A <u>data access statement</u> or citation should accompany any associated output or publication.

- Information and support on ORCID can be found on the Library's <u>Open Research</u> webpages and by contacting the <u>Open Research Team</u>.
- Contact the Library's <u>Research Data Management Team</u> for support and guidance for data sharing including FAIR principles, identifying a suitable repository, and choosing an appropriate licence.