



UCL Research Information and IT Services Group (RIISG)

UCL Research Data Policy

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1. Policy Background

1.1 Definition of research data

Data are defined as facts, observations or experiences on which an argument or theory is constructed or tested. Data may be numerical, descriptive, aural or visual. Data may be raw, abstracted or analysed, experimental or observational. Data include but are not limited to: laboratory notebooks; field notebooks; questionnaires; texts; audio files; video files; models; photographs; test responses.

UCL staff and students routinely create data as part of the research workflow. These outputs represent the evidence that underpins academic endeavours and in conjunction with publications, form an important aspect of the scholarly record.

1.2 Research Data Management

Research Data Management (RDM) covers the decisions made during the research data lifecycle to handle the outputs of your research projects from the planning stage through to preserving and sharing your outputs¹. The research data lifecycle comprises of four phases: 1) output management planning; 2) active research phase; 3) archiving, preserving and curating; and 4) discovery, access and sharing.

Harnessing the advantages of an open working environment serves to disseminate research findings more quickly and facilitates even greater collaboration. RDM is an essential enabler of Open Science and Scholarship² – the practice of making research outputs and the research process available to as wide an audience as possible across the research data lifecycle.

1.3 Challenges

Advances in technology have enabled the exponential growth in the creation of data, which in turn has led to both novel methods for conducting research (data-driven research) and a new, significant data management burden. However, there are challenges to managing research outputs that can be broadly categorised into the following:

- a) cultural factors such as a lack of awareness and incentives to engage with the principle of Open Science;
- b) technical factors such as a lack of/inaccessible infrastructure providing access to research outputs in a controlled and mediated way to maximise research benefits;
- c) organisational issues – the need for even greater advice and advocacy to educate and guide; and
- d) financial constraints – sufficiently allocating resources to cover the cost of RDM to further support researchers when engaging with the principle of Open Science and Scholarship.

2. Purpose

The purpose of this Policy is to provide a framework to define the responsibilities of UCL staff and research students in managing their data. This in turn will facilitate the maintenance and

¹ <https://www.ucl.ac.uk/library/research-support/research-data-management>

² <https://www.ucl.ac.uk/library/open-science>

preservation of research data as a first class research object in its own right, making them available to the widest possible audience for the highest possible impact.

This policy is intended to ensure that research data created as part of the research process are FAIR - Findable, Accessible, Interoperable and Reusable³. Data should be:

- Accurate, complete, authentic and reliable;
- Attributable and citable;
- Identifiable, retrievable and available with minimal barriers;
- Secure from loss and degradation;
- Retained for a minimum of ten years⁴ after publication or public release;
- Compliant with legal obligations, ethical responsibilities and the rules of funding bodies.

3. UCL commitment

UCL recognises that appropriate management of research data leads to an enhanced research practice respecting specialist knowledge, supporting synthesis of new knowledge and facilitating collective and collaborative working practices in order to gain wisdom⁵. Further, UCL considers the research data generated by its members as a valuable research output, an asset to the institution and a critical contribution to the knowledge economy⁶. UCL is therefore fully committed to ensuring that all staff and research students receive support in managing their data -and other research outputs- across the research data lifecycle.

4. Policy statements

4.1 Ensure data are as open as possible, as closed as necessary⁷.

UCL staff and research students should safeguard data appropriately by applying data access restrictions where necessary and that are in-line with the nature and complexity of the data. UCL should enable its staff and research students to fulfil the requirements of good research practice by enabling them to manage research data in a manner that maximises data impact and acknowledges the value of data as a primary research outputs, whilst in the most open manner appropriate⁸.

4.2 Share responsibility for managing and preserving research data between all members of UCL.

Section 5 outlines responsibilities of UCL staff and research students and makes recommendations for managing research data.

³ Wilkinson, M., Dumontier, M., Aalbersberg, I. *et al.* The FAIR Guiding Principles for scientific data management and stewardship. *Sci Data* **3**, 160018 (2016). <https://doi.org/10.1038/sdata.2016.18>

⁴ External funding agencies may have different requirements so staff and research students are advised to verify their funders expectations around longer-term preservation of research data

⁵ <https://www.ucl.ac.uk/research/strategy-and-policy>

⁶ <https://www.gov.uk/government/publications/bis-performance-indicators-knowledge-and-innovation>

⁷ http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

⁸ Unless covered by third party contractual agreements, legislative obligations

(<https://www.legislation.gov.uk/ukpga/2018/12/contents/enacted>) or provisions regarding ownership, it is advised that UCL research data be provided using a Creative Commons CC0 waiver (<https://creativecommons.org/>); supported by data citation guidelines similar to existing publishing conventions. This will ensure that re-used data are unambiguously identifiable and that appropriate credit and attribution is made.

4.3 Following primary use (e.g. publication) or when research data is archived for longer-term preservation, these data will be made available in a timely fashion.

UCL staff and research students should utilise research domain-specific archives and repositories where possible. This enables staff and research students to benefit from specialist infrastructures to manage the data. Staff and research students may also use generic repositories such as the UCL Research Data Repository⁹ to fulfil this requirement. Data must be made available in a timely fashion and not kept from being open longer than is necessary.

4.4 Establish clear lines of responsibility so that research data generated at UCL will always have an owner who is responsible for preserving research data.

If the original owner of the data is no longer affiliated with UCL, the data retained by UCL will continue to have an owner to steward its maintenance and preservation.

4.5 All research datasets - regardless of where they are archived and how open¹⁰ they are - should be recorded in UCL Research Publications Services¹¹ or the UCL Research Data Repository.

In recording the location of these data and their level of openness, UCL staff and research students will comply with all national and many international policies and requirements from funders of academic research.

5 Responsibilities and recommendations

5.1 All UCL Staff and research students

All UCL staff and research students should create data management plans to document how they will manage their data across the research data lifecycle¹².

All staff and research students should:

1. Develop and record appropriate procedures and processes to collect, store, use, reuse, access and retain research data associated with their research program;
2. Establish and document agreements for managing research data when involved in a joint research project, collaborative research, or research undertaken in accordance with a contractual agreement;
3. Include within research grant proposals appropriate consideration of the cost and time implications of data storage and management;
4. Ensure that the integrity and security of their data is maintained;
5. Be aware of their obligations and potential liability when handling data protected by the UK Data Protection Act (2018), European General Data Protection Regulation (2018) and any other applicable data protection legislation¹³;
6. Plan for the on-going custodial responsibilities for the research data at the conclusion of the research project or on departure from UCL;

⁹ <https://www.ucl.ac.uk/library/research-support/research-data-management/ucl-research-data-repository>

¹⁰ Access to research data may be controlled or restricted due to ethical, legal or commercial reasons

¹¹ Guidance is available at <http://www.ucl.ac.uk/library/open-access/guides> and <http://www.ucl.ac.uk/isd/services/research-it/help/faqs/rps-faqs>

¹² All staff must comply with research funders' expectations to submit a Data Management Plan as part of grant applications. When such a DMP is not required, it is recommended that Principal or Lead Investigators nevertheless generate, execute and update one. The UCL generic DMP template is available here: https://www.ucl.ac.uk/library/sites/library/files/ucl_dmp_template.docx

¹³ Where staff and research students are collecting data outside of the European Economic Area, they may be subject to local data protection legislation. All staff and research students should consult with the Data Protection Office on which laws apply.

7. Include recommendations for the destruction of research data (if required) to the designated departmental data steward, or, where no such role exists, the Head of Department or Research unit;
8. Create a record of their research datasets in either the UCL Research Publications Services¹⁴ or UCL Research Data Repository¹⁵

Researchers are also encouraged to get an ORCID or any equivalent unique personal identifier that unambiguously indicates the author of a research output¹⁶. Such identifier helps them record and report their work; it can be used in publications, grant applications, and in UCL's Research Publications Service.

5.1.1 Research students and supervisors

Embedding RDM best practice in early career research is critical to establishing an effective data management ethos. Good research practice requires research students and their supervisor to plan the collection, storage, security and use of research data, in accordance with conventions in their fields of study and (if applicable) obligations from their funders.

In addition to the recommendations made in 5.1, research students and supervisors should:

1. Ensure that their plans and activities are documented in accordance with their obligations as defined by relevant funding bodies and UCL policies.
2. Supervisors should encourage their research students to fill out a Data Management Plan¹⁷

5.1.2 Heads of Department or Research Units

In addition to the recommendations made in 5.1, heads should:

1. Promote best practice in all aspects of research including Research Data Management. They should ensure that staff and students are aware of their responsibilities and obligations.
2. Assume stewardship of data once the researchers involved in compiling that data leave UCL. Heads can delegate stewardship to a dedicated data steward.
3. Identify and implement any training or skills development required by researchers to execute their responsibility.
4. Authorise procedures adopted by staff and student researchers (following consultation with their supervisor) for the collection, storage, use and, if required destruction, of their research data.
5. Establish and implement departmental procedures for the storage and retention of research data in line with UCL policy or legislative obligation.
6. Ensure staff and research students conducting human research are aware of, and appropriately trained in, all of their responsibilities and obligations relating to research data collected in the course of their research.
7. Ensure questions relating to data compiled by members of their department can be addressed; particularly those relating to appropriate retention periods, access permissions, and any restrictions that should be applied to re-use and repurpose existing data.

¹⁴ <https://www.ucl.ac.uk/isd/how-to/research-publications-service-rps>

¹⁵ <https://www.ucl.ac.uk/library/research-support/research-data-management/ucl-research-data-repository>

¹⁶ <https://www.ucl.ac.uk/library/open-access/orcid-ucl-researchers>

¹⁷ Where the contents is not specified from an external funder or the research is UCL/self-funded, the generic UCL DMP template should be used https://www.ucl.ac.uk/library/sites/library/files/ucl_dmp_template.docx

5.2 UCL Research Data Services and UCL Library Services

UCL Research Data Services and UCL Library Services are responsible for providing guidance and support relating to good Research Data Management practice. Together, both teams can advise researchers on:

- Planning and writing data management plans;
- Identifying and understanding research funders' requirements;
- Depositing, sharing and citing research datasets in external and local repositories;
- Storing, transferring, and processing data.

5.2.1 UCL Research Data Services

UCL recognises the strategic importance of providing services to manage and preserve research data and is committed to supporting a permanent team within the centralised ISD organisation that will create and support institutional services for all UCL researchers. Therefore, UCL Research Data Services team is responsible for providing large scale, high performance networked storage for research projects and longer-term storage facilities for the preservation and dissemination of UCL research data.

The UCL Research Data Services¹⁸ team provide flexible, resilient, responsive, and cost effective data management facilities and support, in particular:

- The Research Data Storage Service providing research projects with terabyte-scale shared storage¹⁹;
- The UCL Research Data Repository²⁰ for any data which must be archived and preserved beyond the end of a project

The UCL Research Data Services Team also provide advice on technical solutions for Research Data Management and associated policies.

5.2.2 Research Data Management Team

UCL Library Services provides a dedicated Research Data Management²¹ advisory service for all UCL staff and students. The Research Data Management team²² can advise on managing research data – across the research data lifecycle – and in line with best practice, UCL and funders' expectations. The team also provides first line/administrative support including training for the UCL Research Data Repository.

For support and advice, contact the RDM team:

- Research Data Management team: lib-researchsupport@ucl.ac.uk
 - Kirsty Wallis - Head of Research Liaison
 - Dr Christiana McMahon & Dr James Houghton – Research Data Support Officers

¹⁸ www.ucl.ac.uk/isd/services/research-it

¹⁹ www.ucl.ac.uk/isd/services/research-it/research-data/storage

²⁰ <https://rdr.ucl.ac.uk/>

²¹ <https://www.ucl.ac.uk/library/research-support/research-data-management>

²² <https://www.ucl.ac.uk/library/research-support/research-data-management/contact-us/meet-rdm-team>

5.3 UCL Research Information and IT Services (RIISG)

UCL Research Information and IT Services Group is accountable for maintaining and updating the Research Data Policy. They ensure that new developments and evolving best practice is reflected in the policy.

5.4 Vice Provost (Research)

UCL's Vice-Provost (Research) is responsible for overseeing the implementation of the UCL Research Data Policy and ensuring that UCL complies with funder requirements and academic needs for Research Data Management.

5.5 Provost

The Provost, as senior Executive Officer in UCL, in conjunction with the Vice-Provost (Research) and UCL's Senior Management Team, is accountable for ensuring that UCL's policy for, and practice of, Research Data Management is fit for purpose.

6 Policy Implementation and Review Procedures

This policy will not supersede any other UCL policy. If it directly conflicts with research funders' policies, the latter will take precedence.

The Vice-Provost (Research) is ultimately responsible for ensuring that both divisional and central resources are sufficient for compliance with this policy.

The Pro-Vice-Provost (UCL Library Services) and the UCL Records Manager are together responsible for co-ordinating the implementation of the policy.

This policy will be reviewed at least every 3 years by the UCL Office for Open Science.

Related UCL policies

- UCL Data Protection policy²³
- UCL Information Security policy²⁴
- UCL Statement on Research Integrity²⁵
- UCL Records Management policy²⁶

²³ <https://www.ucl.ac.uk/information-security/sites/information-security/files/data-protection.pdf>

²⁴ <https://www.ucl.ac.uk/information-security/information-security-policy>

²⁵ <https://www.ucl.ac.uk/research/integrity/ucl-statement-research-integrity>

²⁶ <https://www.ucl.ac.uk/library/about-us/records-office/university-college-london-records-management-policy>