

University of Glasgow

Good Management of Research Data Policy

1. Introduction

There are increasing pressures to make research data openly available to validate research results, to increase impact, and to facilitate re-use to create new knowledge. The University of Glasgow is committed to supporting its researchers to meet these objectives by providing an environment that recognises and supports research excellence.

The University of Glasgow firmly believes that good research depends upon good research data management and acknowledges that research data management involves numerous stakeholders across the research data lifecycle. To this end, the policy and its associated responsibilities are divided into distinct sections aimed at the key stakeholders within the university.

For the context of this policy, research data should be interpreted as any material (digital or physical) required to underpin research. For different disciplines this may include raw data captured from instruments, derived data, documents, spreadsheets and databases, laboratory notebooks, visualisations, models, software, images, measurements and numbers. A formal definition of research data is included in Section 5 of this policy.

2. General research principles

- Publicly funded research data are a public good, produced in the public interest, which should be made openly available with as few restrictions as possible in a timely and responsible manner that does not harm intellectual property.
- Research data should be actively managed to ensure that research data are available for validation, access and re-use where appropriate and under appropriate safeguards.
- The legitimate interests of research participants must be protected.
- Exclusive rights to reuse or publish research data should not be handed over to commercial publishers or agents without retaining the rights to make the data openly available for re-use, unless this is a condition of funding.
- Data which are retained elsewhere, for example in a disciplinary data service, should also be recorded with the University data registry to facilitate discovery of the dataset via the University web pages and bulk-uploading of research outputs to reporting systems.

3. Scope of the Policy

This research data policy is for all staff, including technical and other support staff and persons with honorary positions and students carrying out or supporting research at, or on behalf of, the University.

It should be noted by all research staff that many major funders now mandate certain research data management actions and failure to meet funder expectations can lead to sanctions as detailed in funder data policies. In addition to this, failure to implement good research data management can potentially lead to situations which expose researchers to research misconduct allegations.

4. Expectations for Good Data Management:

The following sections detail how different stakeholders in the University are expected to implement good research data management:

Researchers

Researchers are central to the University of Glasgow's research culture and to its international reputation. The University therefore aims to provide the highest quality of provision and support at all stages of their time as a student at or employee of the University.

The University of Glasgow expects that researchers will:

- Undertake research activity to the standards outlined in the University's *Code of Good Research Practice*¹.
- Collaborate with support staff in colleges/schools and central services to undertake sound research data management as a fundamental part of good research practice.
- Produce a data management plan² for every research project that will generate a dataset.
- Work with IT Services³ and College IT teams to identify storage requirements that may exceed that currently offered by the institution.
- Store their data during the course of their research in accordance with guidance from IT Services and funder requirements.
- Work with Research Administrators to identify key research data outputs that must be retained to enable validation (and potentially reuse).
- Familiarise themselves with relevant funder data policies and expectations and endeavour to comply with these policies.
- Provide sufficient metadata (descriptive information) about their research data to ensure others can discover and, if permissible, reuse it.
- Ensure published results always include information on how to access the supporting data.
- Deposit data in a reputable repository for long term preservation and sharing (if applicable).
- Clearly state who owns the data that are being generated through the research activity. Where this is not clear, researchers will work with IPR specialists in Research Strategy and Innovation, the Library and College support teams to verify data ownership as early as possible in the research data lifecycle.
- Ensure that sensitive data is properly managed [*as outlined in the University of Glasgow Data Protection Policy*⁴, and *Confidential Data Policy*⁵]
- Ensure that, when leaving the University (for retirement or a position elsewhere), data of long-term value which were generated using University resources remain accessible to the University [*as outlined in the Code of Good Practice in Research*⁶].

School and College Level Support

Research administrators and support staff within Schools and Colleges are often the first point of contact for researchers. The University of Glasgow recognises that these members of staff play an integral role in providing discipline-specific research data management support. The University is committed to building staff capacity to support researchers' data management needs.

The University of Glasgow will provide – and where necessary develop – School and College level support and services to:

- Disseminate the Good Management of Research Data Policy and details of relevant support services.
- Collaborate with researchers to assess technical infrastructure needed to conduct research and to facilitate sound research data management (in conjunction with University Services).
- Where appropriate, provide discipline-specific data management training, support and advice, particularly on aspects such as data ownership and ethics.
- Provide local guidance and support to assist researchers in developing and implementing data management plans as part of their research activity.

University Services

¹ http://www.gla.ac.uk/media/media_227599_en.pdf

² <http://www.gla.ac.uk/services/datamanagement/creatingyourdata/dataplanning/>

³ <http://www.gla.ac.uk/services/it/>

⁴ http://www.gla.ac.uk/media/media_406078_en.pdf

⁵ <http://www.gla.ac.uk/services/it/informationsecurity/confidentialdata/>

⁶ http://www.gla.ac.uk/media/media_227599_en.pdf

Good data management depends upon having the appropriate policies, technical infrastructure and support in place. The University of Glasgow is committed to supporting its researchers to meet the objectives outlined above by providing an environment that recognises and supports research excellence.

The University of Glasgow will provide – and where necessary develop – central infrastructure and services to:

- Assess and, where feasible, improve support and technical infrastructure in collaboration with researchers, Schools, and Colleges to ensure sound research data management, access and re-use.
- Make available a dedicated institutional research data repository with appropriate security and backup, in line with researchers' and funders' requirements.
- Provide mechanisms to register research data assets centrally and make metadata openly available to facilitate access.
- Enable links to be made between awards, publications and underlying research data via the assignment of persistent object identifiers.
- Support the production of metadata (descriptive information) for research data sets and the logging of research data assets into the institutional data registry.
- Provide training and support for researchers on good practice in research data management.
- Monitor the development of data management standards in the field and adopt best practice as it emerges.

5. Definitions

Data - Research data are quantitative information or qualitative statements collected by researchers in the course of their work by experimentation, observation, interview or other methods. 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). The purpose of open research data is to provide the information necessary to support or validate a research project's observations, findings or outputs. Data may include, for example, statistics, collections of digital images, sound recordings, transcripts of interviews, survey data and fieldwork observations with appropriate annotations.⁷

Metadata – metadata is descriptive or contextual information that is associated with publications and data to assist in the identification, location and retrieval of it by users, while facilitating content and access management. Metadata usually take the form of a structured set of elements.

Data management plans (DMPs) – DMPs are living documents that describe how data will be managed during the life of the project. DMPs are often requested by funders at the bid stage and should state what data will be created and how, as well as outlining plans for sharing and preservation. Any restrictions on access to the data should also be noted along with mechanisms to protect unauthorised access.

Persistent object identifier - identifiers attached to publications and their underlying data that make them easier to link and find. Identifiers should be persistent and unique and remain associated with the correct version of the publication and/or data. Ideally it should be possible to locate the items by passing the identifier to a resolver service, as with Digital Object Identifiers (DOIs) and Handles.

6. Further information and support

- Glasgow University research related policies: <http://www.gla.ac.uk/research/aimsassessmentandpolicies/ourpolicies>
- Data Management support and guidance: <http://www.gla.ac.uk/services/datamanagement/>
- The Research Data Management Service: research-datamanagement@glasgow.ac.uk

⁷ RCUK Concordat on Open Research Data. Version 10. 17th July 2015.

- [The Research Strategy and Innovation Office: http://www.gla.ac.uk/services/rsio/](http://www.gla.ac.uk/services/rsio/)
- [DMPonline \(online tool for preparing data management plans\): https://dmponline.dcc.ac.uk/](https://dmponline.dcc.ac.uk/)
- [University of Glasgow IT Services: http://www.gla.ac.uk/services/it/](http://www.gla.ac.uk/services/it/)