UNIVERSITY OF BRISTOL DATA SHARING SUB-POLICY AND GUIDANCE

1. ABOUT THIS SUB-POLICY AND GUIDANCE

This sub-policy and guidance provides practical advice on how to enhance the transparency, rigour, and reproducibility of your research.

The term **must** is used to denote actions that are compulsory or necessary, **should** denotes best practice and aspiration to lead by example.

2. SHARE YOUR DATA

Make research data available to others using FAIR principles - **Findable, Accessible, Interoperable, and Reuseable**. Data should be 'as open as possible, as closed as necessary' and shared using a clear reuse licence. Speak with the University's Research Data Service about repository options and access levels for sharing data. If your data has sensitivities, such as data about human participants, i.e. qualitative data with interview transcripts, or quantitative data with variables which can identify individuals, see section below 'how can we share sensitive data'.

3. WHAT DATA SHOULD BE SHARED

Nearly all research either uses or creates data. This data often underpins a research claim, and is an asset for other researchers, our wider society, and the University. Data should be generated using FAIR principles, and shared as soon as possible, regardless of discipline or funding.

Some examples of data you can share are:

- Scan of a laboratory notebook
- Interview transcripts
- Databases of measurements
- Digital photographs or videos
- Audio recordings
- Metadata about copyrighted materials or archival sources
- 2D and 3D scans
- Online survey results
- Code (see separate code sub-policy [insert link])

You may have other types of data, and this list is non-exhaustive. Digital Humanities, may use a wealth of different archival resources and cultural collections, and/or use a practice as research model. You should consider any data used or generated as valuable to others.

Write a Data Management Plan, and design your research so data collection, documentation, file formats and storage support sharing data with others. Make sure you have consent for data sharing from study participants and/or permissions from third parties where appropriate.

4. WHY IS IT IMPORTANT?

Publicly funded research depends on public money. Data created or used during research should be made available as openly as possible so it can be accessed by anyone with an interest in it – researchers, independent scholars, citizen scientists, charities, policy makers, community organisations, schools, and governments, for example.

Sharing your data allows for the verification of findings, supports research reproducibility, and makes the research process transparent. Your data may have a high re-use value for others – it may be impossible to recreate the same conditions under which data was collected or generated. Creating and sharing FAIR data makes it easier for others to reuse it. Research with FAIR data is more robust, reliable, understandable, avoids duplication of work, and reduces the costs of research for everyone.

Sharing data with an open licence encourages collaboration and interdisciplinary working. It helps others build upon your research, which increases your reputation as a researcher, and the wider societal impact of your research. It is also increasingly a requirement of many journals.

5. WHAT DOES IT MEAN IN PRACTICE?

5.1 RESPONSIBILITIES OF RESEARCHERS

Researchers should:

- Plan from the start to share data, and to share it as openly as possible – datasets with sensitivities may need to be shared with access restrictions (see below).
- Share data using open file formats, with a readme.txt file, good documentation and appropriate metadata (information related to the data which makes it easy to understand and reuse) so your data is FAIR.
- Share in a repository that provides maximum visibility, such as a disciplinary repository or a funder repository, whenever possible (see the Registry of Research Data Repositories for more information).
- If no suitable repository is available, use the University's Research Data Repository, data.bris.
- Use a repository which provides a Persistent Identifier, such as a Digital Object Identifier (DOI). For example, data.bris provides a British Library DataCite DOI, which is stable for 20 years minimum.
- Use a licence with clear information about the terms of reuse of the data, such as a Creative Commons licence.
- Add a data access statement to all publications so readers can find your data; say where your data is, and any conditions for accessing it.
- Include statements stating no data were created where appropriate, as these still have value. 'Contact the author' is not an acceptable statement, as long-term preservation cannot be guaranteed.

5.2 RESPONSIBILITIES OF THE UNIVERSITY

The University will provide the infrastructure and resources to help researchers manage and share their research data appropriately, including:

- Providing a secure Research Data Storage Facility that researchers are strongly encouraged to use.
- Preserving and providing access to research data, beyond the duration of a research activity and in accordance with specific retention requirements.
- Provision of an institutional research data repository to allow researchers to openly publish their data as well as methods and procedures for providing access to restricted data to approved external researchers.
- Provision of training, advice and support for data management planning, storage and sharing or research data.
- The University, as a member of the Russell Group, is a signatory to The Sorbonne Declaration on Research Data Rights.

6. HOW CAN WE SHARE SENSITIVE DATA?

The University's Research Data Repository, data-bris, has a process which allows researchers to share data with access restrictions. Data are only released to researchers when ethical approval, information security and information governance are adequate, after a data access agreement has been signed by their institution.

Examples of the types of data released in this way are:

- Data about people which will lose value if it is aggregated or stripped of its context – for example, interview transcripts or video, or health data with small sample sizes, where we cannot sufficiently protect participant privacy.
- Data about the location of rare flora or fauna – for example, endangered species or rare plants, protected by law.
- Data generated from research with commercial partners where you need permission to share – contact the Research Contracts team in DREI to establish if any restrictions are in place.
- Third party data and data with copyright restrictions – for example, archival data, photographs, scanned objects, others' data. Remember to check permissions at the time of data collection, or check licence conditions. If you are unable to share the data, provide documentation providing details on the source and parameters used so others can validate your research.

The Research Data Service's Disclosure Risk Assessment Service can advise on formal, statistical and functional methods to anonymise data.

Controlled and restricted data can be requested through a data access process. If the request is not able to meet the process criteria, and an appeal is unsuccessful, access to the data may still be requested under the Freedom of Information Act. You can contact the Freedom of Information Team for more information.

6.1 GDPR, PERSONAL INFORMATION, AND INFORMATION SECURITY

Personally identifiable information must not be shared without explicit consent. You must ensure any data you prepare for sharing has been adequately anonymised, that risks have been appropriately assessed, and that the access level is appropriate for the consent agreed by participants. The Research Data Service has a Disclosure Risk Assessment Service to help with this. The University also has guidance on GDPR and research and a Information Security Policy.

7. WHEN SHOULD DATA *NOT* BE RELEASED?

The default position is that research data is shared, either openly or with some restrictions in place, but there will be instances when this is not possible.

These include data containing information on research participants which cannot be adequately anonymised, and which could cause significant harm to participants if disclosed; third party data accessed under conditions of confidentiality (for example, data provided with a non-disclosure agreement).

Research data relating to ongoing or planned patent applications, data relating to issues of national security, subject to export controls (for STEM research), or trade secrets may need extra consideration. Please contact the Research Compliance Team prior to sharing your data.

If research data must remain completely closed, the reasons for this should be clearly documented in the Data Management Plan.

8. STORING YOUR RESEARCH DATA

Research data should be stored appropriately, using University of Bristol storage systems. The Research Data Storage Facility (RDSF) provides secure, long-term storage for research data. It provides nightly backup of all data, with further resilience provided by three geographically distinct storage locations. A tape library is used for backup purposes. Only authorised users can access data stored within the RDSF.

It is essential that any data requiring extra consideration, as detailed in the section above, must be stored on the RDSF.

The RDSF is managed by Bristol's Advanced Computing Research Centre (ACRC) which has a dedicated steering group and a rigorous data storage policy. You may also use your University of Bristol OneDrive and SharePoint for transient and/or working data storage.

The University's overarching [Information Security Policy](#) includes a [Mobile and Remote Working Policy](#) and researchers must ensure they are handling data safely and securely when working off-campus.

9. HOW WILL BEING OPEN HELP YOUR RESEARCH?

Sharing your data will encourage:

- Validation of your findings
- Reproducibility
- Transparency
- Opportunities for collaboration

10. REFERENCES AND FURTHER INFORMATION

- [Research Governance and Integrity Policy](#)
- [University Ethics Policy and Procedure](#)
- [Data Protection Guidance](#)
- [Freedom of Information Guidance](#)
- [Information Security Policy](#)
- [University of Bristol Intellectual Property Policy for Students](#)
- [Guide to Creative Commons Licences](#)
- [UK Reproducibility Network Open Research Primers](#)

11. GLOSSARY

https://www.bristol.ac.uk/media-library/sites/staff/documents/open_research_glossary.pdf