Research Data Policy

Background

1. Management of data is an essential part of good research practice and all researchers in the University have an obligation to record, store and archive their data appropriately. This brings with it the assurance that data supporting publications are available for analysis and will enable access by other researchers who could use the data, thus maximising the effectiveness of our research funding. The precise requirements of this and the procedures that should be used is a very complex issue when considering the wide range of information generated in research. Thus the primary responsibility for research data management lies with individual researchers, and it is these staff who need to consider each individual project, whether it is appropriate to archive data and exactly what data should be stored. However, this policy sets out our expectations, support and processes that are aimed at ensuring that research data from Lancaster is managed in the best possible way.

IT SHOULD BE NOTED THAT THIS IS A RAPIDLY EVOLVING ENDEAVOUR SO THAT THE UNIVERSITY WILL BE CONTINUALLY AIMING TO DEVELOP THESE GUIDELINES.

What should researchers do?

- 2. Researchers at Lancaster University will identify which projects are appropriate and which data are to be archived. In this context they will then manage their data in such a way that they:
 - ensure research data and records are accurate, complete, authentic and reliable;
 - meet funding body grant requirements;
 - ensure that confidentiality and anonymisation requirements are achieved;
 - comply with the Data Protection Act and Freedom of Information legislation;
 - maximise research efficiency by enabling others to use the data;
 - minimise the risk of data loss (e.g. by data backup).
- 3. More specifically, Lancaster University expects that:
 - (I) all research will be carried out according to the principles laid out in the <u>University Research Ethics Code of Practice</u>;
 - primary responsibility for research data management during any research project or programme lies with the principal investigator;
 - (III) the principal investigator will be responsible for clarifying responsibilities where data ownership may be ambiguous (e.g. in a multi-partner collaboration). If a PI leaves Lancaster their Head of Department should ensure that appropriate provision has been made for data access;
 - (IV) every member of a research team should be familiar with the data requirements of the organisation funding their research and of this University policy;

- each project will have a data management plan that is produced at funding application stage or at the beginning of the project. Note that some funders will have more rigorous conditions than those described here;
- (VI) as a minimum, research data directly associated with publications should be archived;
- (VII) all research data to be archived must be associated with metadata which meets minimum standards set out in guidelines given on RSO website. The metadata should be sufficient to enable other researchers to understand how it was created or acquired, and, if it is to be made openly available, to discover it and assess its reuse potential;
- (VIII) all research data will be stored in either electronic or paper form for a minimum of 10 years after the end of a project, unless ethical considerations, participant confidentiality, FOI requirements or external agencies e.g. NHS, specifically require otherwise;
- (IX) research data will be submitted to national or international data services and repositories where available or required by either funders or publishers and this will replace the need for local archiving;
- (X) 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 the funding.

What will the University do?

- 4. In order to support researchers and satisfy the requirements of the funders the University will:
 - 4.1 store research processes/governance information and research management documentation in accordance with the <u>Record Retention and Disposal</u> <u>Schedule Guidance</u>. The Research Support Office will store the following information in accordance with the Schedule and funders' requirements: funders' award letters, contracts and collaboration agreements, financial statements, claims and their relevant evidential documentation, audit certificates and ethical approval documentation;
 - 4.2 aim to provide mechanisms whereby research data that may be useful for other researchers but is not suitable for national repositories, can be archived appropriately. The University will not provide central storage for physical items such as notebooks, artefacts etc. Individual researchers will be responsible for this;
 - 4.3 provide guidance and training where necessary, through our web site and Research Support Office, on the following:
 - (a) access to external repositories;
 - (b) access to information on requirements of funders;
 - (c) appropriate formats for data storage;
 - (d) appropriate meta data for stored data;
 - (e) decisions on what data to store;
 - (f) the production of data management plans;

- 4.4 establish a review group, chaired by the Pro-Vice-Chancellor (Research and Enterprise), that will act as a point of advice and reference on decisions over the nature of data that needs to be archived;
- 4.5 review annually, through the University Research Committee, this policy and the progress of the implementation plan;
- 4.6 consider collaborative approaches to data storage with other Universities.

Supporting resources

5. Guidance on how to store data and the current requirements of major funders can be found at the <u>Research Support Office Website</u>.

Definitions

Research: The HEFCE definition of research in relation to the REF is: 'Research' is understood as original investigation undertaken in order to gain knowledge and understanding. It includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship [*]; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.

Research Data: This is not easy to define in a comprehensive way it is therefore important for each researcher to consider this in detail in the context of their own project. To give a broad view the University of Melbourne uses the following definition: "Research Data are facts, observations or experiences on which an argument, theory or test is based. Data may be numerical, descriptive or visual. Data may be raw or analysed, experimental or observational. Data includes: laboratory notebooks; field notebooks; primary research data (including research data in hardcopy or in computer readable form); questionnaires; audiotapes; videotapes; models; photographs; films; test responses. Research collections may include slides; artefacts; specimens; samples. Provenance information about the data might also be included: the how, when, where it was collected and with what (for example, instrument). The software code used to generate, annotate or analyse the data may also be included".

Researcher: In this context a researcher is a member of staff or student of Lancaster University who is performing research in the name of the University.

Funders policies

Many funders now require that data management and sharing plans form part of the research application. The <u>Digital Curation Centre (DCC)</u> has summarised the requirements of UK funders and also provides full details of funders' data policies. **Summary guidance** from some of the University's major research funders is available at the following links.

AHRC (Arts and Humanities Research Council)

BBSRC (Biotechnology and Biological Sciences Research Council)

CRUK (Cancer Research UK)

EPSRC (Engineering and Physical Sciences Research Council)

ESRC (Economic and Social Research Council)

MRC (Medical Research Council)

NERC (Natural Environment Research Council)

STFC (Science and Technology Facilities Council)

Wellcome Trust