

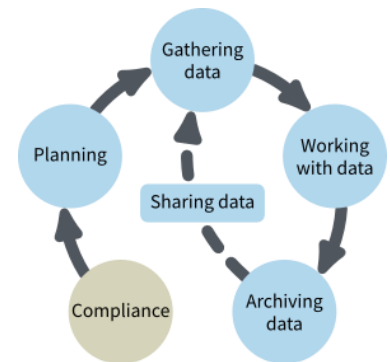
## Research Data Management

### What are Research Data?

Research data are materials created or collected for the purposes of analysis to generate original research results, irrespective of the format of data. Research data may be digital, paper based or in other forms. Research data are typically the evidence that underpins research findings.

### What is Research Data Management?

Research data management involves planning and managing research data at every stage of your research, from applying for funding for a new research project, through gathering, storing, and working with data, to selecting valuable data to preserve and, where possible, share. Managing, archiving and sharing research data are key to the reproducibility and transparency of science and to the extraction of maximum benefit for the public from publicly funded research. Managing research data also involves familiarising yourself with any legislative, contractual, and policy requirements that apply to your data, to ensure that you fulfil your obligations to protect your research participants and commercial partners, whilst also sharing the outputs of your research as openly as possible.



### Data Management Planning

A data management plan explains how you will gather, organise, store, and document your data during your project, and how you will ensure those who need to can access your data once your project has ended. Data management planning is such an important activity that many funders include it as a mandatory part of the grant application process. If you are on a doctoral research programme, you must complete a data management plan, and your supervisor must review it, before you can pass your transfer/confirmation progression point. It is also University policy that all research projects have a data management plan.

There are a range of templates and tools available to help you structure the content of your data management plan and focus on the topics relevant to research. The DMPonline tool contains helpful templates and guidance for all UK Research Councils and a number of other funders, as well as the University's template designed specifically for postgraduate research students. You can find instructions for how to access DMPonline at <http://www.bath.ac.uk/research/data/planning/dmponline/>. You can also find out more about what data management planning involves at <http://www.bath.ac.uk/research/data/planning/>.

### Archiving and Sharing your Data

Archiving your research data means submitting them to a data centre, archive or repository where they will be preserved and protected in the long term against loss, deterioration, and unauthorised access. Archiving

data is the first step towards data sharing, but is still important even if you do not plan to share the data with others. At a minimum, data supporting your publications and data with acknowledged long-term value should be preserved. Archived data should be well documented and sufficient for other researchers to reproduce or validate your published research findings. If you plan to share your data, you should also ensure they are suitably licensed so that it is clear to other users how they may use your data.

Ideally data should be archived in a suitable discipline-specific data repository, archive or data centre. If you can't find a suitable external archive for your data, you can use the University's Research Data Archive: <http://researchdata.bath.ac.uk/>. You can find step-by-step guides on how to use the Research Data Archive at <http://www.bath.ac.uk/research/data/archiving-data/>.

## **Data Access Statements**

Data Access Statements should be included in research papers, so that other researchers can find out if and how the underlying data can be accessed. The statement should also include a persistent identifier such as a DOI. You can find guidance on how to write a data access statement, including examples for different types of archive and restricted access, at <http://www.bath.ac.uk/research/data/archiving-data/writing-a-data-access-statement/>. If you plan to archive and share your data using the University's Research Data Archive, the Research Data Service can predict what the DOI will be so you can include it in your draft manuscripts.

## **Research Data Policy**

The University's Research Data Policy sets out the University's expectations of its research staff and students for how research data are managed and shared. You can read the policy, and some helpful guidance, at <http://www.bath.ac.uk/research/data/policy/>. Many funding bodies have policies on research data that expect data underpinning published research articles to be made as openly available as possible in a timely and responsible manner. Some publishers or journals also now require that the data underlying a publication are made openly available so that research findings can be validated. You can find out what your funder's data policy means in practice at <http://www.bath.ac.uk/research/data/compliance/>.

## **Support for Research Data Management**

The Library's Research Data Service provide expert advice on all aspects of data management, including online guidance available at <http://www.bath.ac.uk/research/data/>. We the Research Data team run regular introductory and advanced training courses for both research staff and postgraduate students, some of which are available as recorded webinars that can be viewed on demand. Details of how to book forthcoming training courses, and how to access webinars, can be found at <http://www.bath.ac.uk/research/data/support/>.

## **Contact Us**

You can ask the Research Data Service for help by email at [research-data@bath.ac.uk](mailto:research-data@bath.ac.uk).