



# UCL



## Research Data Management: The 2020 review

Dr Christiana McMahon  
Dr James Houghton





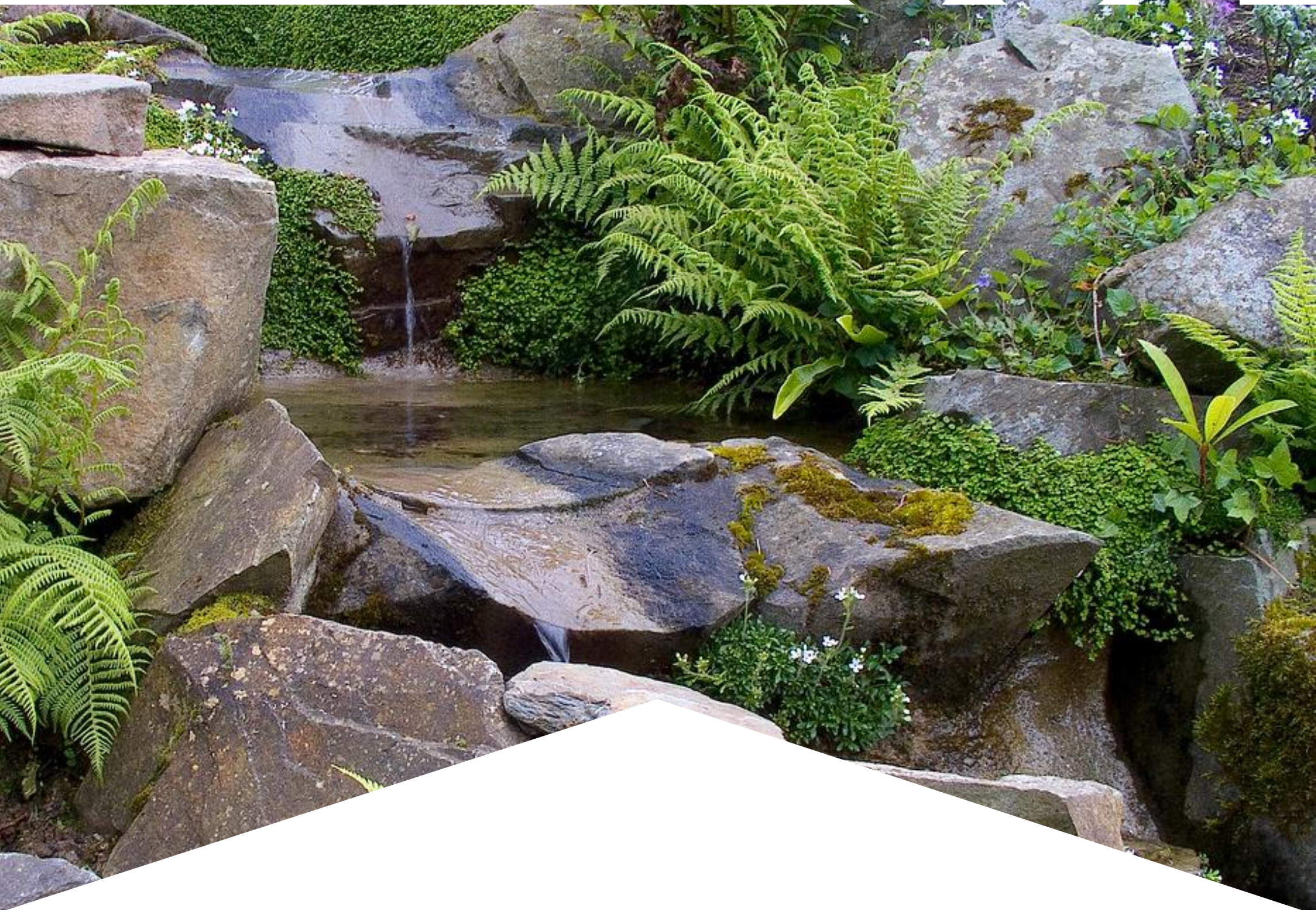
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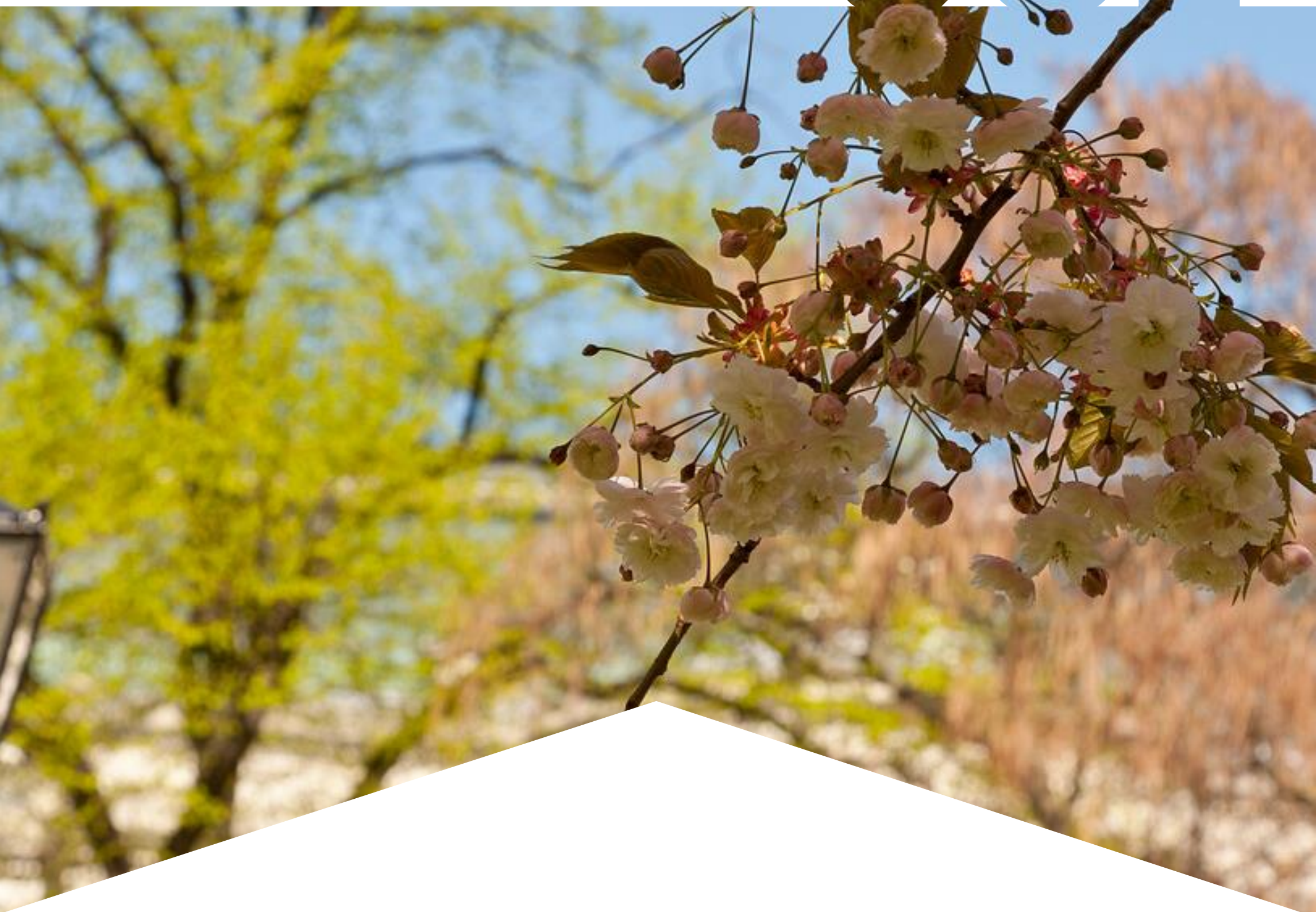
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# Introduction

2020 was a year like no other - and as we proceed cautiously but optimistically into 2021, it seems fitting to look back and reflect on the past 12 months.





## Research Data Management

RDM covers the decisions made across the research data lifecycle to handle outputs of research from the planning stage through to preserving and sharing these with the wider community.





## Research Data Lifecycle

The RDL maps the different phases of research helping individuals to manage research outputs as their study proceeds.







## According to the UCL Research Data Policy 2020, data are:

“...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.”





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Data management and  
sharing plans





## We reviewed 46 data management and sharing plans

- 16 UKRI Future Leaders Fellowship
- 4 MRC
- 4 ESRC
- 3 AHRC
- 2 MRC/NIHR CARP
- 1 NERC
- 1 CRUK
- 1 Royal Society
- 14 Other





## We published the new UCL data management plan template

Topics include:

- Study information
- Collection of data and study materials
- Storage, security and back up
- Archiving, preservation and curation
- Discovery, access and sharing
- Metadata
- Rights and responsibilities

<https://bit.ly/36ctuUv>





UCL Research Data  
Repository





# UCL

Nearly **900GB** data were deposited

In total there were over **55000** views

There were over **20000** downloads from **50+** countries

<https://rdr.ucl.ac.uk/>





## We published 122 research outputs:

- 96 datasets
- 6 software code
- 4 presentations
- 4 workflows
- 3 models
- 3 posters
- 2 data management plans
- 2 figures
- 2 media



## The most downloaded items were:

1. Raw data - Ravagli et al. 2020 - Imaging fascicular organization of rat sciatic nerves with fast neural Electrical Impedance Tomography (EIT) - **2090 downloads**, <https://doi.org/10.5522/04/13177073.v1>
2. Impacts\_temperatures\_global yields\_up\_to\_2012\_code+data – **607 downloads**, <https://doi.org/10.5522/04/12768425>
3. Ab initio calculations and high P-T experiments on iron, iron alloys and other materials: hcp-Fe-Si-S-C elasticity 6500 K – **415 downloads**, <https://doi.org/10.5522/04/10769435.v1>
4. Writings on Political Economy Volume IV. Preliminaries and preliminary text. All text files (1-16) now uploaded. – **371 downloads**, <https://doi.org/10.5522/04/9897596.v2>
5. Data and code for Figures for the article “Real-time 3D movement correction for two-photon imaging in behaving animals” - **315 downloads**, <https://doi.org/10.5522/04/11949063>





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Research data policy and  
practice



# Creating and using FAIR data

Together with the new **UCL Office for Open Science and Scholarship**, the RDM team are providing enhanced support to the UCL community in **understanding, producing and curating FAIR data - Findable, Accessible, Interoperable and Reusable.**

When combined, these four elements are designed to **help lower barriers to research outputs**, facilitating potential secondary researchers to **find, understand, reuse and repurpose** them to **realise additional research opportunities and maximise existing resources.**

<https://bit.ly/3bSWjsB> | <https://bit.ly/2LOsJK9>





## New UCL Research Data Policy 2020

In September 2020, the new Research Data policy was published. UCL staff and research students are advised to adopt a cyclical approach to managing research outputs and harness the advantages of embracing open research practices.

<https://bit.ly/39MoM0q>



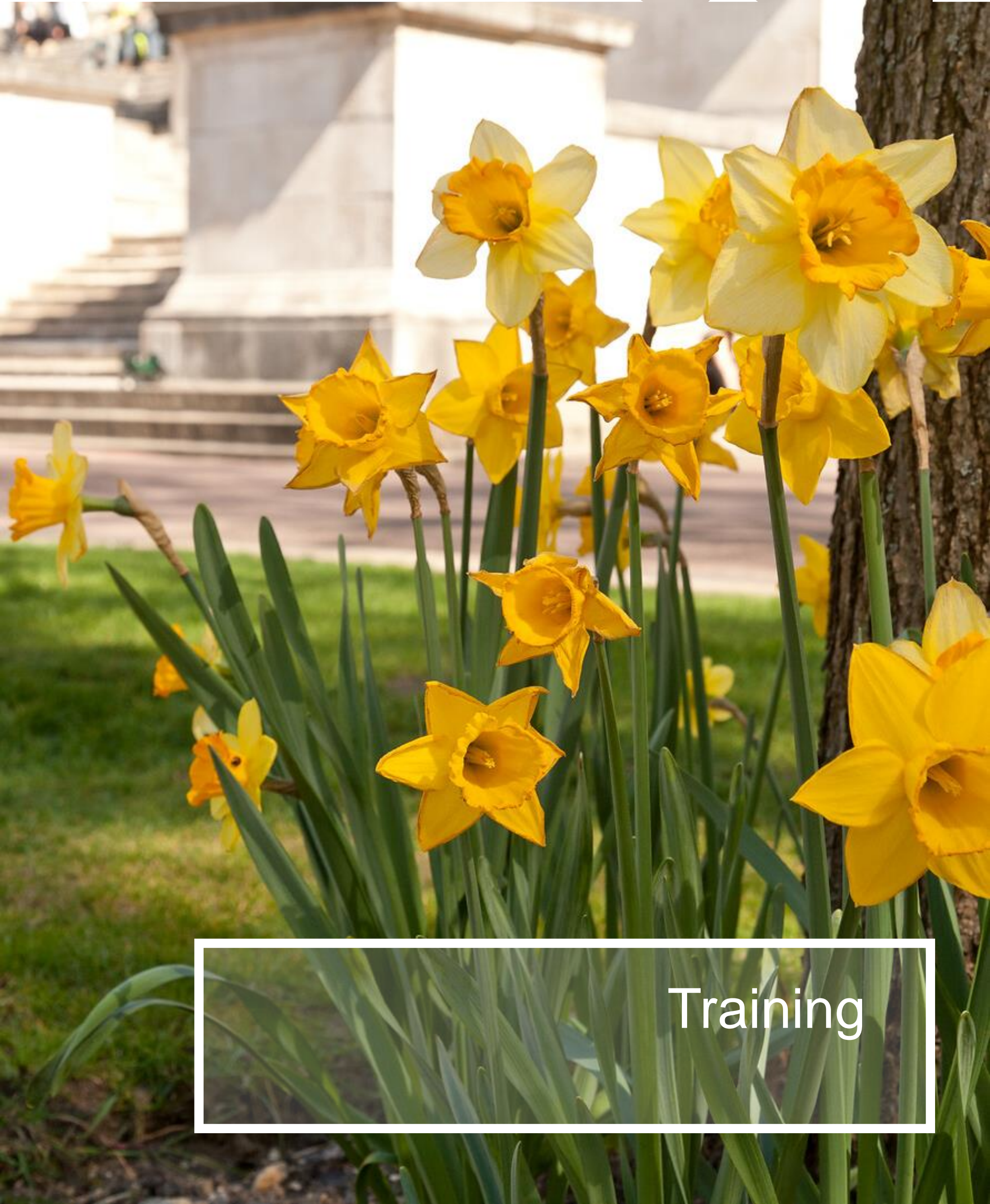
## UCL staff and research students should...

- Ensure **data** are as open as possible, but closed as necessary
- **Share responsibility** for managing and preserving data between all members of UCL
- Make research **data available in a timely fashion** following primary use
- Identify **clear lines of responsibility** and ensure research **data always have an owner**
- **All research data** – regardless of where they are archived – **should be recorded** in either the **UCL Research Publications Services** or the **UCL Research Data Repository**





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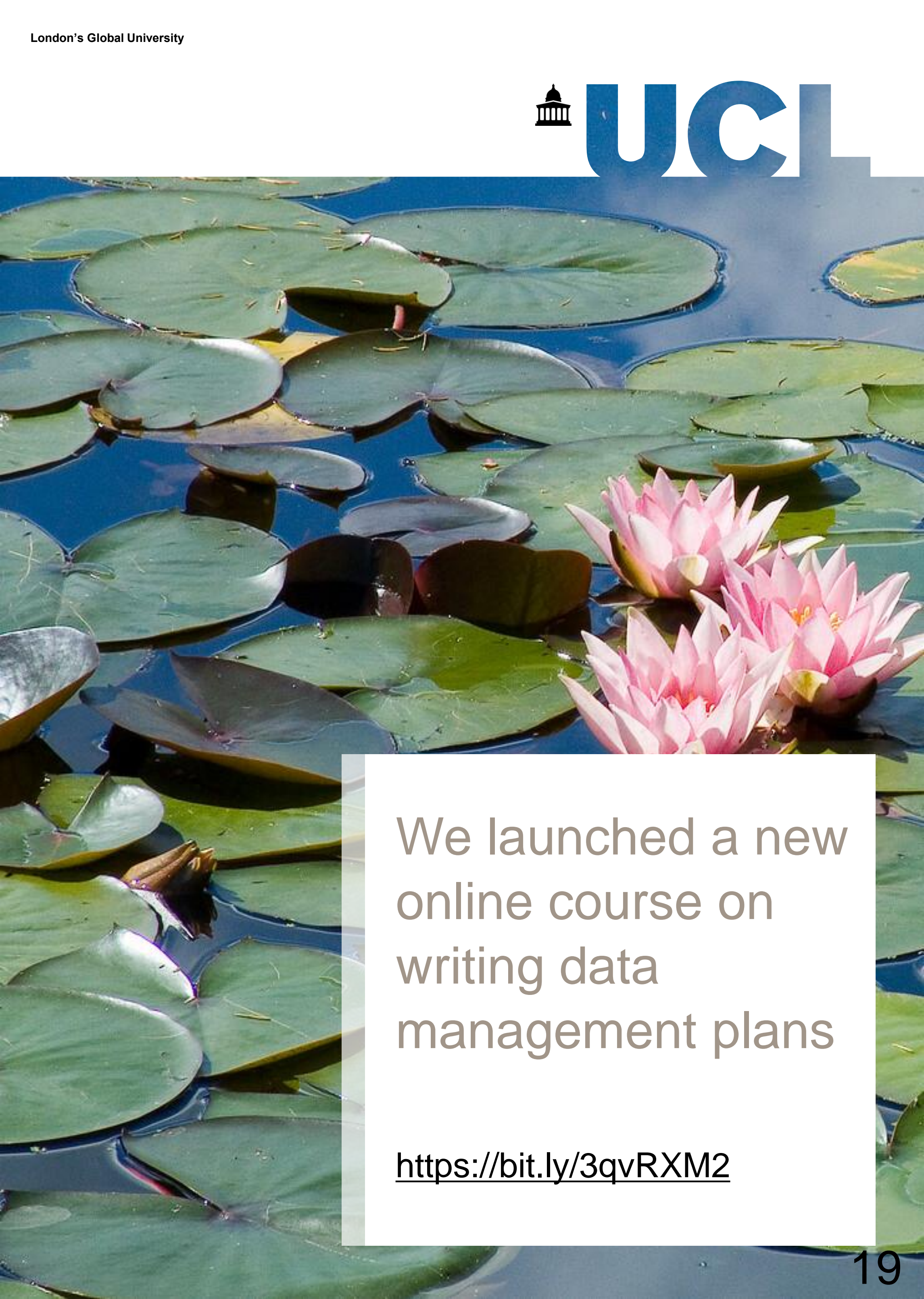


Training





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A photograph of a pond with several large, round, green lily pads floating on the water. In the lower right corner, there are three pink water lilies in various stages of bloom. The water is a deep blue color.

We launched a new  
online course on  
writing data  
management plans

<https://bit.ly/3qvRXM2>





# UCL

We collaborated with the Bibliometrics and Open Access teams to create the new Open Science and Scholarship course

<https://bit.ly/2LG00qZ>





# UCL

## Going forwards

Embracing open research practices will inevitably impact how individuals manage research outputs across the research data lifecycle. The RDM team will continue to support the UCL community to maximise the value of their data.

[lib-researchsupport@ucl.ac.uk](mailto:lib-researchsupport@ucl.ac.uk) | <https://bit.ly/3bVmFu3>