**Research data sharing and reuse**

*What is this survey about?*

This survey is part of a joint project between CWTS and Elsevier to understand research data sharing and re-use practices, and the drivers (and/or barriers) acting on researchers in this regard.

This survey takes about 15-20 minutes to complete.

**Interpreting the phrase ‘research data’ in this survey**

Research data is defined as ‘recorded factual material generated (and commonly retained) and accepted in the research community as necessary to derive and validate research findings’.

**Q1a. Categories of research data used**

Please select the categories of research data that you used in your last research project:

* Observational or empirical: e.g. sensor data, survey data, interview transcripts, sample data, neuroimages, ethnographic data, diaries.
* Experimental: e.g. gene sequences, chromatograms, toroid magnetic field data.
* Simulation: e.g. climate models, economic models.
* Derived or compiled: e.g. text and data mining, compiled database, 3D models.
* Reference or canonical: e.g. gene sequence databanks, chemical structures, spatial data portals.

**Q1b. Research data format(s) used**

Please select the research data formats that you used or created as part of your last research project:

* Text: e.g. flat text files.
* Numerical: e.g. SPSS, Stata, Excel.
* Databases: e.g. MS Access, SQL Server, MySQL, Oracle.
* Multimedia: e.g. jpeg, tiff, mpeg, QuickTime, mp3, DICOM.
* Models: e.g. 3D, statistical.
* Software: e.g. Java, C.
* Discipline specific: e.g. FITS in astronomy, CIF in chemistry.
* Instrument specific: e.g. proprietary microscope formats such as Olympus Confocal Microscope Data Format, Carl Zeiss Digital Microscopic Image Format (ZVI).

**Q1c. Research data format(s) to be shared**

Which of the following research data formats you have indicated that you used or created as part of your last research project are important to be made available to others for the purpose of validation?

[Populate with choices from previous data formats question]

* Text: e.g. flat text files.
* Numerical: e.g. SPSS, Stata, Excel.
* Databases: e.g. MS Access, SQL Server, MySQL, Oracle.
* Multimedia: e.g. jpeg, tiff, mpeg, QuickTime, mp3, DICOM.
* Models: e.g. 3D, statistical.
* Software: e.g. Java, C.
* Discipline specific: e.g. FITS in astronomy, CIF in chemistry.
* Instrument specific: e.g. proprietary microscope formats such as Olympus Confocal Microscope Data Format, Carl Zeiss Digital Microscopic Image Format (ZVI).

**Q1c1. File size**

Approximately, what is the volume of the data you created as part of your last research project?

* Less than 1 gigabyte
* 1-9 gigabytes
* 10-49 gigabytes
* 50-99 gigabytes
* 100-1000 gigabytes (up to 1 terabyte)
* 1-10 terabytes
* More than 10 terabytes
* Don’t know

**Q1c2. Number of data files**

Approximately how many files of data did you produce as part of your last research project?

* Fewer than 10
* 10-19
* 20-49
* 50-99
* 100-249
* 250-499
* 500-999
* 1000 or more
* I don’t know

**Q1d. Funding source**

What was the **primary** source of funding for your last research project?

* A country- or subject-specific research funder: e.g. a research council.
* A regional research funder: e.g. European Commission.
* A charity or other ‘third sector’ funder
* A corporate/privtae/commercial organisation
* My institute
* Crowd-funded
* Self-funded
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Don’t know

**Q1e. Research data ownership**

Who do you believe ‘owns’ the research data that you have made or will make available to others as part of your last research project?

**Before publication After publication**

* Funder
* Institute
* My department
* Colleagues/collaborators
* Myself
* Publisher
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_
* Don’t know [EXCLUSIVE PER COLUMN]

Q1f. Publishing research data

Have you published the research data that you used or created as part of your last research project in any of the following ways?

* As an appendix to a peer-reviewed research publication (e.g. journal article or book chapter)
* As a stand-alone peer-reviewed data publication (e.g. an article in a dedicated data journal)
* In a data repository
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* None of the above [EXCLUSIVE]

Q2a. Attitudes towards research data sharing and reuse

To better understand your attitudes towards researchdata access, please think about the research data that typically **is not** published (e.g. **not** summary charts, tables or images), and indicate how much you agree or disagree with the following statements.

[Randomise statements]

|  | Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree | Don’t know |
| --- | --- | --- | --- | --- | --- | --- |
| Having access to others’ research data benefits/would benefit my own research | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| I am willing to allow others to access my research data | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| I have previously shared my research data with others | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| I rely on research data shared with me from outside of my research team | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| I encounter obstacles sharing my research data with others | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Sharing research data is associated with credit or reward in my field | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Sharing research data is important for doing research in my field | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| I have received sufficient training in research data sharing | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| I provide my research data to publishers so that it can be made accessible with my research article | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Research data management specialists need to play a role in research data sharing  | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |

Q2b. Benefits of access to others’ research data

[If response to Q2a. ‘Having access to others’ research data benefits/would benefit my own research’ = Agree or Strongly Agree]

 How has (or would) accessing others’ research data benefitted you?

|  |
| --- |
|  |

Where have (or would) you accessed others’ research data? Please list specific websites, for example.

|  |
| --- |
|  |

**Q2c. Benefits of publishing research data alongside article**

Which, if any of the following, do you think are benefits to you as an author for sharing your research data alongside your research article?

[If response to Q2a. ‘I provide my research data to publishers so that it can be made accessible with my research article’ = Agree or Strongly Agree]

* Article more likely to be accepted for publication
* Article more likely to be cited
* Compliance with funding body mandates
* Compliance with journal or publisher requirements
* Reproducibility of research
* Data reuse
* Research aggregation (e.g. for meta-analysis)
* More possibilities for collaboration
* Encourage other researchers to make their data publicly available
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Don’t know [exclusive]

**Q2d. Drawbacks of not publishing research data alongside article**

Using the space below, please indicate what, if any, would be the drawback for you as the author if you were to share your research data with your research article?

[If response to Q2a. ‘I provide my research data to publishers so that it can be made accessible with my research article’ = Disagree or Strongly Disagree]

|  |
| --- |
|  |

**Q2e. Research data management and archiving**

Do you take steps to manage your research data and/or archive it for potential re-use by yourself and/or others?

* Yes- always
* Sometimes
* Never

Q2f. Approach to research data management

[If response to Q2e. ‘Do you take steps to manage your research data and archive it for potential re-use by yourself and/or others?’ = Yes or sometimes]

How would you describe your approach to research data management?

* Very structured
* Structured
* Unstructured
* Very Unstructured
* Unsure
* I don’t have any data to manage

**Q2g. Research data sharing locations**

[If response to Q2e. ‘Do you take steps to manage your research data and archive it for potential re-use by yourself and/or others?’ = Yes or sometimes]

Which of the following locations do you use to archive your research data?

* Repository provided by my funder
* Repository provided by a publisher
* Repository provided by my institute
* Repository provided by my department
* I don’t archive my research data
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Q2h. Research data sharing actions**

[If response to Q2g. ‘Which of the following locations do you use to archive your research data?’ = Any answer except ‘I don’t archive my research data’]

Who usually does the archiving of your research data at these locations?

* Someone else on my behalf (e.g. respository manager)
* Myself
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Q2i. Drivers of research data management**

[If response to Q2e. ‘Do you take steps to manage your research data and archive it for potential re-use by yourself and/or others?’ = Yes]

Which of the following impacts your decision to archive research data?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No impact** | **Some impact** | **Great impact** | **Mandates archiving** |
| Funder | **🞎** | **🞎** | **🞎** | **🞎** |
| Publisher | **🞎** | **🞎** | **🞎** | **🞎** |
| Institute (e.g. Library, Research Office, IT Department, etc.) | **🞎** | **🞎** | **🞎** | **🞎** |
| My department (e.g. Department Head and/or Supervisor) | **🞎** | **🞎** | **🞎** | **🞎** |
| Colleagues/collaborators | **🞎** | **🞎** | **🞎** | **🞎** |
| My wider research field (e.g. documented code of conduct or informal practice) | **🞎** | **🞎** | **🞎** | **🞎** |
| Myself (i.e. own initiative) | **🞎** | **🞎** | **🞎** | **🞎** |
| Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | **🞎** | **🞎** | **🞎** | **🞎** |

**Q2j. Role of research data management plans**

[If response to Q2i. ‘Which of the following impacts your decision to archive research data?’ = Mandates archiving for at last one category, randomly assign the following questions]

In your previous response you are mandated to archive your research data by the following category: [name of category]. Do they have a research data management plan that you follow?

* Yes
* No
* Don’t know

**Q2k. Implementation of research data management plans**

[If response to Q2j. ‘In your previous response you are mandated to archive your research data by the following category: [name of category]. Do they have a research data management plan that you follow?’ = Yes]

Who is responsible for the execution this research data management plan?

* Funder’s research data management organisation
* Institutional Library (e.g. Librarian)
* Institutional Research Office (e.g Research Administrator)
* Institutional IT Department
* My department (e.g. Department Head and/or Supervisor)
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Don’t know [EXCLUSIVE]

**Q2l. Compliance with research data management plans**

[If response to Q2j. ‘In your previous response you are mandated to archive your research data by the following category: [name of category]. Do they have a research data management plan that you follow?’ = Yes]

Who is responsible for monitoring compliance this research data management plan?

* Funder’s research data management organisation
* Institutional Library (e.g. Librarian)
* Institutional Research Office (e.g Research Administrator)
* Institutional IT Department
* My department (e.g. Department Head and/or Supervisor)
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Don’t know [EXCLUSIVE]

**Q2m. Funding in place**

[If response to Q2e. ‘Do you take steps to manage your research data and/or archive it for potential re-use by yourself and/or others?’ = Yes]

Does your institute allocate funds to cover the costs of managing and/or archiving research data?

* Yes
* No
* Don’t know

**Q2n. Funding growth**

[If response to Q2m. ‘Does your institute allocate funds to cover the costs of managing research data?’ = Yes]

Thinking about the funding your institute spent on managing and archiving research data , do you expect the funding in 2016 to increase, remain the same or decrease when compared to 2015? [Single-code]

* Increase
* Remain the same
* Decrease
* Don’t know

**Q2o. Funding change**

(IF Q2n= 2 Punch “0” IF Q2n = 1 OR 3.)

Approximately, by what percentage do you expect it to [INSERT increase / decrease FROM Q2m]?

\_\_\_\_\_\_\_\_\_\_\_%

**Q3a. Research data I have shared directly**

Have you shared directly (i.e. person-to-person sharing) with others any or all of the research data that you used or created as part of your last research project?

* Yes
* No
* Don’t know

**Q3b. Groups research data shared with directly**

[If response to Q3a. ‘Have you shared directly with others any or all of the research data that you used or created as part of your last research project?’ = Yes]

Irrespective of public sharing (e.g. archiving your research data in a respository accessible to others), have you done any of the following with any or all of the research data that you used or created as part of your last research project?

* Shared directly with researchers working on the same research project in a research collaboration
* Shared directly with researchers NOT working on the same research project who I know personally
* Shared directly with researchers NOT working on the same research project who I DON’T know personally
* Shared directly with research project partners (e.g. funders)
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Q3c. Research data shared with me by others**

Was any or all of the research data that you used or created as part of your last research project shared with you by others, either directly (i.e. person-to-person sharing) or indirectly (i.e. downloaded from a repository)?

* Yes
* No
* Don’t Know

**Q3d – Whether will use Creative Commons**

Thinking your next set of research data, if you were to make it available under which license(s) would you make it available?

[NOTES explanation in brackets to appear as hovers]

* CC 0 (no rights reserved by the creator)
* CC BY Attribution (allows others, even commercially, to distribute and modify your work as long as they credit you for the original creation)
* CC BY-NC NonCommercial (allows non-commercial use but others do not have to license derivative work on the same terms)
* CC BY-NC-ND Attribution-NonCommercial-NoDerivs (others can download your work and share, as long as they credit you, but cannot modify or use your work commercially)
* Other, please specify\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Don’t know

**Q3e. Trust in others’ research data**

[If response to Q3c. ‘Was any or all of the research data that you used or created as part of your last research project shared with you by others, either directly (i.e. person-to-person sharing) or indirectly (i.e. downloaded from a repository)?’ = Yes]

How important were the following factors when deciding to use others’ research data that the data...

[Randomise statements. Single code each statement]

|  | Very important | Important | Somewhat important | Unimp-ortant | Not at all important | Don’t know |
| --- | --- | --- | --- | --- | --- | --- |
| Are from someone I know personally | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Are from someone I DON’T know personally but who has a good reputation | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Are from someone at an institute with a good reputation | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Are from a repository with a good reputation | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Comply with guidelines around collection and/or formatting | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Have good documentation and/or metadata | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Are certified or accredited by a third party | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Are commonly used by others | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |
| Have been cited in a publication in the formal literature (journals, books, etc.) | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 | 🔾 |

**Q3f. Citing others’ research data**

Publications in the formal literature (journals, books, etc.) typically make reference to (cite) other published literature, usually in a separate cited references section. There is an increasing need to also cite research data that is not itself included in the formal literature but has been shared directly (i.e. person-to-person sharing) or indirectly (i.e. downloaded from a repository). [SINGLE CODE]

Please select from the following statements about standards for citing research data.

* There are no agreed standards for citing research data in my field
* There are agreed standards for citing research data in my field, but most researchers follow them
* There are agreed standards for citing research data in my field, but most researchers do not follow them
* There is no need for to have standards for the citation of research data

**Q3g. Effort required prior to sharing data**

Prior to sharing, research data typically needs to be formatted and often has documentation and/or metadata added to make it re-useable by others. How would describe the effort typically required to make your research data re-useable by others?

* A lot of effort
* Some effort
* Little effort
* No effort
* I don’t share my research data

**Q3g. Why Effort**

[If response to Q3c. ‘Prior to sharing, research data typically needs to be formatted and often has documentation and/or metadata added to make it re-useable by others. How would describe the effort typically required to make your research data re-useable by others?’ = A lot of effort]

You said that it takes a lot of effort to make your research data re-useable, what is the main reason for this?

|  |
| --- |
|  |

DEMOGRAPHIC SECTION

You are nearly at the end of the survey. Some questions to help us classify your answers.

P1 - Country

In which country are you based?

* Afghanistan

to

* Zimbabwe

P2 - Subject
In which subject discipline do you specialize?

|  |  |
| --- | --- |
| * Agriculture
* Arts and Humanities
* Astronomy
* Biochemistry, Genetics, and Molecular Biology
* Biological Sciences
* Chemical Engineering
* Chemistry
* Computer Sciences / IT
* Earth and Planetary Sciences
* Economics
* Electrical / Electronic Engineering
* Engineering and Technology
 | * Environmental Sciences
* Immunology and Microbiology
* Materials Science
* Mathematics
* Medicine and Allied Health
* Neuroscience
* Nursing
* Pharmacology, Toxicology and Pharmaceutics
* Physics
* Psychology
* Social Science
* Other (please specify)\_\_\_\_\_\_\_\_\_\_\_\_
 |

P2a - Medical/allied health specialty

Which one of the following fields of medicine / allied health are you mainly involved in?

* Allergy, Asthma & Immunology
* Anesthesiology & Pain Management
* Cardiology
* Critical Care
* Dentistry
* Dermatology
* Emergency Medicine
* Endocrinology & Metabolism
* General / Family Medicine
* Gastroenterology
* Geriatric Medicine
* Hematology
* Imaging technology
* Infectious Disease
* Internal Medicine
* Laser Vision Surgery
* Medical Genetics
* Nephrology
* Neurology
* Neurosurgery
* Obstetrics & Gynecology
* Occupational & Environmental Medicine
* Oncology
* Ophthalmology
* Orthopedic Surgery
* Otorhinolaryngology
* Osteopathy
* Pathology
* Pediatrics
* Physical Medicine & Rehabilitation
* Physical Therapy
* Plastic Surgery
* Preventive Medicine
* Proctology
* Psychiatry
* Pulmonary Medicine
* Radiology (including Radiology Technicians)
* Rheumatology
* Sports Medicine
* Surgery, General
* Thoracic Surgery
* Urology
* Veterinary Medicine
* Other Specialties

P3 - Number articles published in career

Approximately how many articles have you published so far in your career?

* 1
* 2-5
* 6-15
* 16-25
* 26-50
* 51-75
* 76-100
* 101-200
* Over 200
* None

P5 - Organization

What type of organization do you work for?

* University or college
* Research Institute
* Medical School/ hospital
* Corporate
* Consultant
* Other (Please specify)\_\_\_\_\_\_\_\_\_\_\_\_

P6 - Position

What is your position within your organization?

* Head of Department/ Senior Management
* Senior Researcher/ Middle Management
* Researcher/ Staff Member
* Other (please specify)\_\_\_\_\_\_\_\_\_\_\_\_

P7 - Main role

What is your MAIN role within your organization?

* Research and/or development
* Teaching
* R&D and teaching equally
* Management/Administration
* Practitioner (clinical)
* Practitioner (engineering/technology)
* Advisory/Consultancy
* Other (please specify)\_\_\_\_\_\_\_\_\_\_\_\_

P8 - Medical profession only

Which of the below best describes your profession?

* Resident
* Fellow
* Physician
* RN
* Pharmacist
* Physician Assistants

P9 - Gender

Which gender are you?

* Male
* Female
* Other
* Prefer not to say

P10 - Age

Please indicate your age group:

* Under 26
* 26-35
* 36-45
* 46-55
* 56-65
* Over 65
* Prefer not to say

|  |  |
| --- | --- |
| STOP | **Complete** – Complete*The survey is now complete and your results have been submitted. Thank you for taking part in this important study. You may now close this window.* |