



ISMPP University

The Asia Pacific ISMPP U:
*Demystifying Data Sharing In
Scholarly Publishing*

will begin shortly





ISMPP Would Like to Thank...

... the following Titanium and Platinum Corporate Sponsors for their ongoing support of the Society:








CHC GROUP
An ICON plc Company



CMC
A McCANN HEALTH COMPANY



CELLO HEALTH COMMUNICATIONS
MedErgy|SciFluent



CMC AFFINITY | CMC CONNECT








ISMPP Announcements

- **REGISTER NOW** for the 2018 European Meeting of ISMPP, *Advancing Medical Publications in a Complex Evidence Ecosystem*, 23-24 January, London
- **COMING SOON:** Registration for the 14th Annual Meeting of ISMPP opens in December 2017; stay tuned!
- **The ISMPP U Committee wants to hear from you!** Groups or individual members can submit topic ideas via the ISMPP U proposal form located on the ISMPP U Committee page: <http://www.ismpp.org/ismppu>



INTERNATIONAL SOCIETY FOR MEDICAL PUBLICATION PROFESSIONALS

- **ISMPP (not-for-profit)**
 - > 1400 members
 - Write, plan, edit, publish, peer-review, research . . .
- **Education**
 - Members-only webinars (Asia-Pacific, international)
 - Conferences, including in the Asia-Pacific region
- **International Certification**
 - ISMPP Certified Medical Publication Professional™ (CMPP)
 - Testing centres: 62 in Asia-Pacific region!
 - Increasing ISMPP CMPP™ professionals in Asia-Pacific region



BECOME AN ISMPP CMPP™!

The ISMPP CMPP™ credential certifies the following:

- Expertise as a medical publication professional
- Proficiency in good publication practices
- Commitment to ethical and transparent data dissemination standards
- Leadership in upholding and fostering integrity and excellence in medical publication
- We are proud to have more than 1,000 CMPPs!
- Visit ismpp.org for more information!



For Your Best ISMPP U Experience...

To optimize your webinar experience today:

- Use a hardwired connection if available
- Use the fastest internet connection available to you
- If you are accessing the presentation over your computer, please be sure to increase the volume of your computer speakers

Questions

- To ask a question, please type your query into the Q&A box
 - To ensure anonymity and that all panelists receive your question, please choose the drop down box option, **"ALL Panelists"** Otherwise, all audience members will be able to see your submitted question
- We will make every effort to respond to all questions

1. Click on the question mark to view the Q&A box

2. Type your question into the Q&A box and SEND

NOTE: Make sure you send your question to "ALL Panelists"

The screenshot displays the Zoom meeting interface. At the top, a red box highlights a question mark icon in the top right corner, with a red arrow pointing to it. Below this, the 'Participants' window is visible, showing the host 'Lisa Klos (Host, me)' and one attendee. The 'Chat' window is also visible, showing a message from 'Laine Capaccio' asking 'can you see my q&a?'. At the bottom, the 'Q&A' window is open, showing a question from 'Lisa Klos' and a dropdown menu for 'Send to' with 'All Panelists' selected. A red arrow points from the 'Send to' dropdown to the 'All Panelists' option.



Introductions

- **FACULTY:** **Natasha Simons** is a Senior Research Data Specialist with the Australian National Data Service (ANDS), working with a variety of people and groups to improve data management platforms, policies and practices. With a background in libraries, IT and eResearch, she has a history of developing policy, technical infrastructure and staff skills to support research and researchers.
- She is co-chair of the Research Data Alliance Interest Group on Data Policy Standardisation and Implementation, which focuses on support for publisher/journal data policies internationally. Natasha is also a member of the Australian ORCID Advisory Group and is an ORCID Ambassador. A writer and reviewer of books and papers related to libraries, persistent identifiers, repositories and research data, Natasha is located at the University of Queensland in Brisbane, Australia.



Introductions

- **MODERATOR:** **Jake Burrell**, PhD, ISMPP CMPP™, was awarded his PhD in oncology from the Institute of Cancer Research in London. He began his career in medical communications in London, where he worked with a range of top-20 pharma companies across a range of therapy areas including oncology, virology and hematology.
- He speaks fluent Chinese and has worked in Shanghai for over 5 years, where he is currently the Operations Director of Rude Health Consulting. Jake is an ISMPP Certified Medical Publication Professional™ (CMPP) and is co-chair of ISMPP's Asia-Pacific Education Taskforce.



Disclaimer

Information presented reflects the personal knowledge and opinion of the presenters and does not necessarily represent the position of their current or past employers or the position of ISMPP



Demystifying data sharing in scholarly publishing

- Natasha Simons, Australian National Data Service (ANDS)



NCRIS
National Research
Infrastructure for Australia

ands.org.au



Webinar overview

Data sharing:

What is it? Who shares and why? Why not?

Why is the culture of data sharing growing?

Journal data sharing policies:

What does a journal data policy look like?

Common approaches and examples

Policy challenges:

Stakeholders – requirements, challenges, help

Data policy standardisation and implementation (global)



Data sharing



What is data sharing?

- **Data sharing** is the practice of making data used for scholarly research available.
- **Types** of shared data might include:
 - Observational
 - Experimental
 - Simulation
 - Derived/compiled
 - Reference or canonical
- **Formats** of shared data might include:
 - Text, Image, Spreadsheets
 - Audio/video files
 - Drawings, Lab notebooks
 - Numeric data etc



Photo by [chuttersnap](#) on [Unsplash](#)



What is data sharing?



<https://vimeo.com/125783029>



Studies on data sharing

Figshare open data survey 2017:

- 82% aware of open data sets
- 80% willing to reuse open data sets in own research
- 60% routinely share their data (frequently or sometimes)
- 21% have never made a data set openly available
- 74% are now curating their data for sharing
- 77% value a data citation the same as an article

Science, Digital (2017): The State of Open Data 2017 Report - Infographic.
figshare. <https://doi.org/10.6084/m9.figshare.5519155.v1> pp. 7-11



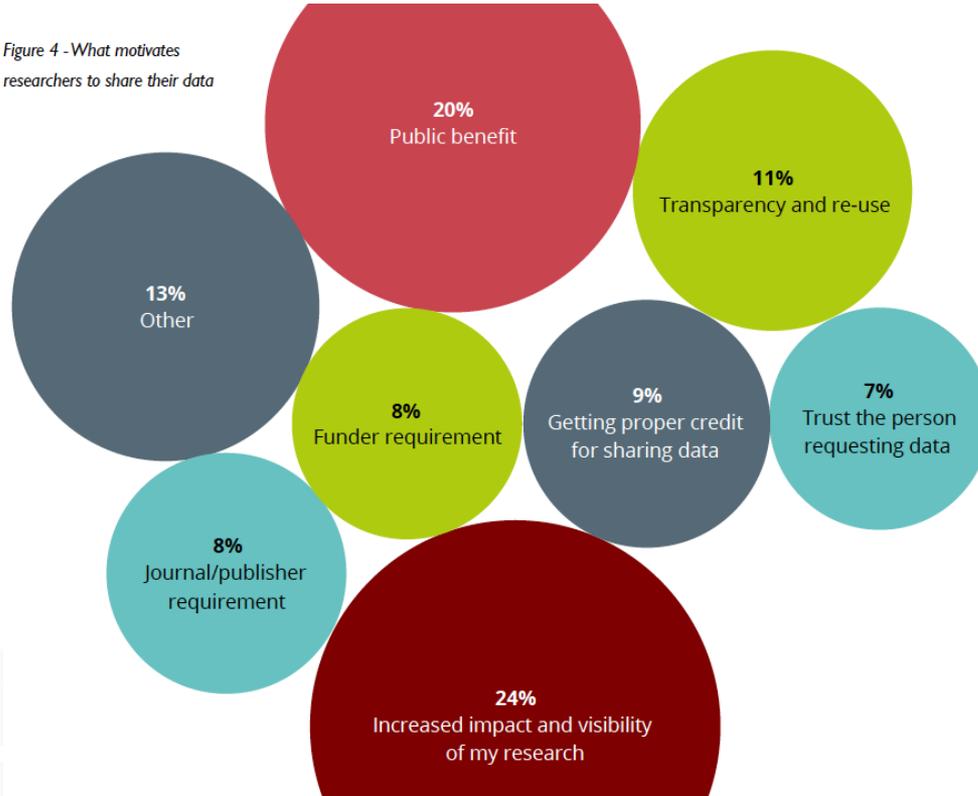
Studies on data sharing

Figshare open data survey 2017

- Where respondents publish their data:
 - +30% article appendix, -30% data repository, 20% data journal
- Why use open data?
 - +50% to validate own results
 - 50% to avoid duplication or complement own data
- 36% have lost data they were working on!

Studies on data sharing

Figure 4 - What motivates researchers to share their data



We can see strong signals that open data is becoming more embedded [but] there is still a lack of confidence around open data.

Figshare open data survey 2017



Studies on data sharing

[A 2011 study of 500 papers](#) that were published in 2009 from 50 top-ranked research journals showed that only 47 papers (9%) of those reviewed had deposited full primary raw data online.

[As another study](#) notes, the number of datasets being shared annually has increased by more than 400% from 2011 to 2015, and this pace will likely continue.

What Constitutes Peer Review of Data? A Survey of Peer Review Guidelines by Todd A. Carpenter. Scholarly Kitchen blog post 11 April 2017. <https://scholarlykitchen.sspnet.org/2017/04/11/what-constitutes-peer-review-research-data/>

Studies on data sharing

Global Data Sharing Trends*

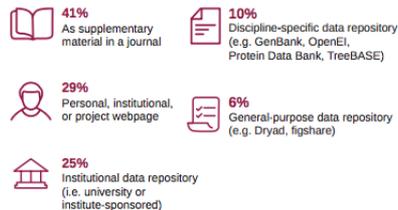
Over 4,600 Wiley authors from 112 countries completed our 2016 Wiley Open Science Researcher Insights Survey

By collating results of our Wiley authors from surveys on Open Science topics in 2013, 2014, and 2016, we have started to build a valuable dataset for analysis and trend identification. Despite geographical and subject-level differences among authors, there are underlying commonalities in Open Science practices. The insights reported by our respondents show a willingness to move forward with open initiatives, but confusion around the best ways to do so.

Data sharing in 2016



Ways data is shared

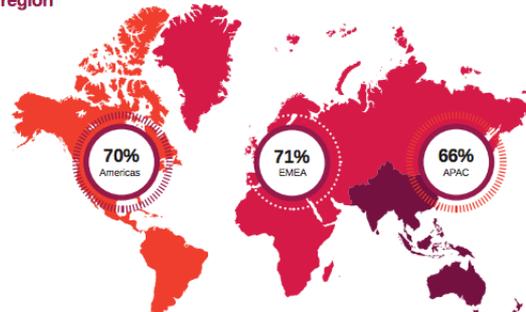


Researchers also report sharing their data in other ways including: 49% are sharing their data at conferences while 34% of researchers share their data upon informal request (email, direct contact, etc).

Top 4 researcher motivations for sharing data



Researchers sharing data by region



Data accessibility trends



Top 4 reasons why researchers are hesitant to share their data

- 50% - Intellectual property or confidentiality issues
- 31% - Ethical concerns
- 23% - I am concerned about misinterpretation or misuse of my research
- 22% - I am concerned that my research will be scooped

More than two thirds of Wiley researchers reported they are now sharing their data. Though this varies geographically and across research disciplines we are seeing that more researchers are sharing their data and taking efforts to make it reproducible.

Wiley Global Data Sharing Infographic June 2017.

<https://authorservices.wiley.com/author-resources/Journal-Authors/licensing-open-access/open-access/data-sharing.html>



Why data sharing is growing

- Funder data sharing policies e.g. [Wellcome Trust](#).
- Publisher/Journal data sharing policies e.g. [PLOS](#), [Springer Nature](#), [Elsevier](#), [Wiley](#)
- Government open data initiatives e.g. [USA](#), [Australia](#), [Europe](#)
- Publishers are at the forefront of data sharing policy initiatives e.g. [COPDESS](#), [TOP Guidelines](#), [JDAP](#)



Journal data sharing policies



Common approaches

Data availability statements provide a statement about where data supporting the results reported in a published article can be found. Required by many journals/publishers (PLOS, BMJ, Nature, BMC, new ICMJE policy) and some funding agencies (e.g. EPSRC in the UK). Common forms:

- The datasets generated during and/or analysed during the current study are available in the [NAME] repository, [PERSISTENT WEB LINK TO DATASETS].
- The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.
- All data generated or analysed during this study are included in this published article (and its supplementary information files).

Springer Nature – Data availability statements. <http://www.springernature.com/gp/group/data-policy/data-availability-statements>



Example: Nature

A condition of publication in a Nature journal is that **authors are required to make materials, data, code, and associated protocols promptly available to readers without undue qualifications.**

- Supporting data must be made available to editors and peer reviewers at the time of submission for the purposes of evaluating the manuscript.
- All manuscripts reporting original research published in Nature journals must include a data availability statement.
- Nature journals encourage authors to consider the publication of a Data Descriptor in [Scientific Data](#) to increase transparency and enhance the re-use value of data sets used in their papers.
- Nature journals' data availability policies are compatible with the standardised [research data policies](#) set out by Springer Nature.

Nature – policies – availability of data, material and methods.
<http://www.nature.com/authors/policies/availability.html>

Example: Nature

Human glia can both induce and rescue aspects of disease phenoty...
 effects can be measured then by movement of this group in the
 orthogonal direction, and by movement of the hGPC-treated WT
 group in any direction.

Data availability

All relevant data and methodological detail pertaining to this study are available to any interested researchers upon request to Dr Goldman.

Additional information

How to cite this article: Benraiss, A. *et al.* Human glia can both induce and rescue aspects of disease phenotype in Huntington disease. *Nat. Commun.* 7:11758 doi: 10.1038/ncomms11758 (2016).

<https://www.nature.com/articles/ncomms11758#additional-information>

PDF

Tools ▾

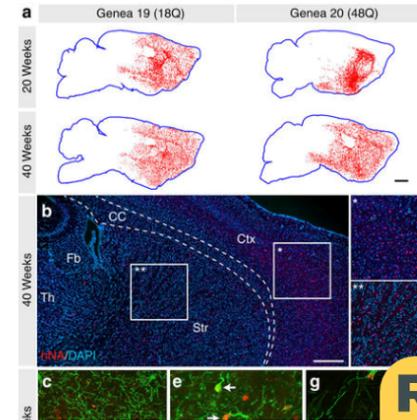


Sections

Figures

References

Figure 1: Mice may be generated with striata chimeric for human HD ESC-derived glia.





Example: Nature's Scientific Data



Data Descriptor | [OPEN](#)

Advancing The Cancer Genome Atlas glioma MRI collections with expert segmentation labels and radiomic features

Spyridon Bakas , Hamed Akbari, Aristeidis Sotiras, Michel Bilello, Martin Rozycki, Justin S. Kirby, John B. Freymann, Keyvan Farahani & Christos Davatzikos 

Scientific Data **4**, Article number: 170117

(2017)

doi:10.1038/sdata.2017.117

[Download Citation](#)

Cancer imaging CNS cancer

Computational models Image processing

Translational research

Received: 20 March 2017

Accepted: 14 July 2017

Published online: 05 September 2017

Data Records

We selected only the pre-operative multimodal scans of the TCGA-GBM [Data Citation 1: The Cancer Imaging Archive <http://doi.org/10.7937/K9/TCIA.2016.RNYFU9E9>] and TCGA-LGG [Data Citation 2: The Cancer Imaging Archive <http://doi.org/10.7937/K9/TCIA.2016.L4LTD3TK>] glioma collections, from the publicly available TCIA repository. The generated data, which is made publicly available through TCIA's Analysis Results Directory (wiki.cancerimagingarchive.net/x/sgHi) [Data Citation 3: The Cancer Imaging Archive <https://doi.org/10.7937/K9/TCIA.2017.KLXWJ1Q>] and Data Citation 4: The Cancer Imaging Archive <https://doi.org/10.7937/K9/TCIA.2017.GJQ7R0EF>], comprise pre-operative baseline re-oriented, co-registered and skull-stripped mMRI

Sections Figures References

Abstract

Background & Summary

Methods

Data Records

Technical Validation

Additional Information

References

Data Citations

Acknowledgements

Author Information



Example: PLOS

PLOS journals require authors to make all data underlying the findings described in their manuscript **fully available without restriction, with rare exception.**

- When submitting a manuscript online, authors must provide a *Data Availability Statement* describing compliance with PLOS's policy.
- Refusal to share data and related metadata and methods in accordance with this policy will be grounds for rejection.

PLOS – Data availability. <http://journals.plos.org/plosone/s/data-availability>



Example: PLOS

More than 75 percent decline over 27 years in total flying insect biomass in protected areas

Caspar A. Hallmann, Martin Sorg, Eelke Jongejans, Henk Siepel, Nick Hofland, Heinz Schwan, Werner Stenmans, Andreas Müller, ...

(PDF)

Abstract

Introduction

Materials and methods

Results

Discussion

Supporting information

Acknowledgments

References

Reader Comments (10)

Media Coverage (24)

Figures

S1 Appendix. Malaise trap permissions.

<https://doi.org/10.1371/journal.pone.0185809.s001>
(PDF)

S2 Appendix. Malaise traps.

<https://doi.org/10.1371/journal.pone.0185809.s002>
(PDF)

S1 Code.

<https://doi.org/10.1371/journal.pone.0185809.s003>
(PDF)

S1 Dataset.

<https://doi.org/10.1371/journal.pone.0185809.s004>
(CSV)

S2 Dataset.

<https://doi.org/10.1371/journal.pone.0185809.s005>
(CSV)

S1 Fig. Map of study area.

Insect trap locations (yellow points) in Nordrhein-Westfalen (n = 57), Rheinland-Pfalz (n = 1) and Brandenburg (n = 5), as well as weather stations (crosses) used in the present analysis.
<https://doi.org/10.1371/journal.pone.0185809.s006>
(TIFF)

S2 Fig. Temporal variation in weather variables.

Annual means (A-C), daily means (D-F), and mean daily residual values (G-I) of temperature,

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0185809#sec012>





Example: BMJ journals

We encourage authors to include a data sharing statement when submitting their article, explaining:

- What additional unpublished data from the study - if any - are available
- Who can access the data
- How to obtain the data

At present there is no major repository for clinical data, but [Dryad](#) has declared its willingness to accept medical datasets.

BMJ Author Hub: Data sharing. <http://authors.bmj.com/submitting-your-paper/data-sharing/>



Example: BMJ

Citation

Krusche A, Cyhlarova E, King S, *et al* Mindfulness online: a preliminary evaluation of the feasibility of a web-based mindfulness course and the impact on stress. *BMJ Open* 2012;**2**:e000803. doi: 10.1136/bmjopen-2011-000803

Publication history

Received 19 January 2012

Accepted 24 April 2012

Published in print 1 January 2012.

Published online 21 May 2012.

[Previous versions](#)

[Review history](#)

Supplementary Data

This web only file has been produced by the BMJ Publishing Group from an electronic file supplied by the author(s) and has not been edited for content.

Files in this Data Supplement:

[Data supplement 1](#) - Online Appendix A

[Online Statement](#)

Related Data



Example: BMJ



DRYAD About ▾ For researchers ▾ For organizations ▾ Co

BMO Data Dryad

Krusche A, Cyhlarova E, King S, Williams JMG

Date Published: June 25, 2012

DOI: <https://doi.org/10.5061/dryad.f4688/1>

When using this data, please cite the original publication:

Krusche A, Cyhlarova E, King S, Williams JMG (2012) Mindfulness online: a preliminary evaluation of the feasibility of a web-based mindfulness course and the impact on stress. *BMJ Open* 2(3): e000803. <https://doi.org/10.1136/bmjopen-2011-000803>

Additionally, please cite the Dryad data package:

Krusche A, Cyhlarova E, King S, Williams JMG (2012) Data from: Mindfulness online: a preliminary evaluation of the feasibility of a web-based mindfulness course and the impact on stress. Dryad Digital Repository. <https://doi.org/10.5061/dryad.f4688>

[Cite](#) | [Share](#)

Pageviews 135

Downloaded 224 times

Keywords [mindfulness](#), [stress](#), [web-based](#), [online](#), [therapy](#)

Contained in Data Package Data from: Mindfulness online: a preliminary evaluation of the feasibility of a web-based mindfulness course and the impact on stress.

Show Full Metadata

Files in this item



Name: BMO Dryad Data.xlsx
Size: 21.42 Kb
Format: Microsoft Excel 2007
Description: dataset-file
Checksum (MD5): a3e6f924e32bf5ae3f8d5c5ac1ef2da3

[View/Open](#)



Name: README.docx
Size: 15.24 Kb
Format: Microsoft Word 2007
Description: dc_readme
Checksum (MD5): d816b6ca0d8c4fa413cbd9eca0fdc4c7

[View/Open](#)



ICMJE policy on clinical trials data

The International Committee of Medical Journal Editors (ICMJE) believes there is an ethical obligation to responsibly share data generated by interventional clinical trials because trial participants have put themselves at risk.

ICMJE will require the following as conditions of consideration for publication of a clinical trial report in our member journals:

1. As of 1 July 2018 manuscripts submitted to ICMJE journals that report the results of clinical trials must contain a data sharing statement
2. Clinical trials that begin enrolling participants on or after 1 January 2019 must include a data sharing plan in the trial's registration.

Data Sharing Statements for Clinical Trials: A Requirement of the International Committee of Medical Journal Editors. ICMJE June 2017. http://www.icmje.org/news-and-editorials/data_sharing_june_2017.pdf



ICMJE policy on clinical trials data

Data sharing statements must indicate the following:

- whether individual deidentified participant data (including data dictionaries) will be shared;
- what data in particular will be shared;
- whether additional, related documents will be available (e.g., study protocol, statistical analysis plan, etc.);
- when the data will become available and for how long;
- by what access criteria data will be shared (including with whom, for what types of analyses, and by what mechanism).

Data Sharing Statements for Clinical Trials: A Requirement of the International Committee of Medical Journal Editors. ICMJE June 2017. http://www.icmje.org/news-and-editorials/data_sharing_june_2017.pdf



Policy challenges



Policy stakeholders

| Stakeholder | Contributes | Challenges | Who can help? |
|-------------------|--------------------------|---|---|
| Researchers | Data | Clear requirements? Help to make data available? | Journal Editors Data Librarians Publishers |
| Journal Editors | Policy | Where to start? What should be included? | Publishers Others e.g. ANDS |
| Data repositories | Technical infrastructure | How to support? | Publishers Journal Editors Researchers Data Librarians |
| Peer reviewers | Reviews | Clear guidelines? Workflow support? | Journal Editors Publishers Repositories |



Journal data sharing policy challenges

Wide variance between journals on:

- Existence of data policy: the higher the Impact Factor of the journal the more likely they are to have a data availability policy and to enforce it (1)
- Data policy aspects: content, discoverability, ease of interpretation, infrastructure providers, support for compliance (2)
- Most data sharing policies do not provide specific guidance on the practices that ensure data is maximally available and reusable (3)

- (1) Piwowar, HA and Chapman, WW (2010) Public sharing of research datasets: A pilot study of associations. *Journal of Informetrics*, 4 (2). 148 - 156. ISSN 1751-1577
- (2) Naughton, L. & Kernohan, D., (2016). Making sense of journal research data policies. *Insights*. 29(1), pp.84–89. DOI: <http://doi.org/10.1629/uksg.284>
- (3) Vasilevsky NA, Minnier J, Haendel MA, Champieux RE. (2017) Reproducible and reusable research: are journal data sharing policies meeting the mark? *PeerJ* 5:e3208 <https://doi.org/10.7717/peerj.3208>



A standardised approach

- There is clear benefit in a more standardised approach (1).
- Greater standardisation could also facilitate the construction of a register of data policies, similar to the SHERPA registers for funder and publisher policies on open access (1).
- Springer Nature research data policy types as standardisation example: more than 1,000 (~45%) Springer Nature journals have adopted a standard policy (2).

(1) Naughton, L. & Kernohan, D., (2016). Making sense of journal research data policies. *Insights*. 29(1), pp.84–89.

DOI: <http://doi.org/10.1629/uksg.284>

(2) Springer Nature Research Data Policy Types <https://www.springernature.com/de/authors/research-data-policy/data-policy-types/12327096>



Example: Springer Nature

SPRINGER NATURE

☰ Authors

Research Data Policy Types

The 4 types of research data policy are provided in full below. These policy texts are templates and journals may make minor changes to fit with their journal scope and website style. See FAQs for a summary of the requirements of each policy type.

Springer Nature has made the research data policy texts, unless otherwise stated, available for reuse by the research data community under a [Creative Commons attribution license](#).

Here are examples of journals that support each policy type:

| Policy Type | Policy summary | Example Journal |
|---|---|--|
| Type 1 for Authors) | Data sharing and data citation is encouraged | <i>Photosynthesis Research</i> (click, ' Instructions for Authors ') |
| Type 2 Authors) | Data sharing and evidence of data sharing encouraged | <i>Plant and Soil</i> (click, ' Instructions for Authors ') |
| Type 3 policies) | Data sharing encouraged and statements of data availability required | <i>Palgrave Communications</i> (see Editorial policies) |
| Type 4 | Data sharing, evidence of data sharing and peer review of data required | <i>Scientific Data</i> (see Data policies) |



Community & stakeholder engagement

[RDA Data Policy Standardisation and Implementation Interest Group:](#)

- Co-chairs: Iain Hrynaszkiewicz (Springer Nature), Natasha Simons (ANDS), Simon Goudie (Wiley), Azhar Hussain (Jisc)
- Activities: RDA plenary discussions, community calls to identify policy components etc. More to come!

[ANDS activities:](#)

- Working with editors, publishers, infrastructure providers, librarians, academies, societies and more
- Two roundtables – one Health and Medical with AHMEN
- Guide: [Research Data for Journal Editors](#)
- RDA Data Policy co-chair



Thank you!

Contact:

Natasha Simons

Senior Research Data Specialist

Australian National Data Service

natasha.simons@ands.org.au



Questions

- To ask a question, please type your query into the Q&A box
- To ensure anonymity, before sending please choose the drop-down box option, "**Hosts, Presenters and Panelists.**" Otherwise, **ALL** audience members will be able to see your submitted question



Upcoming ISMPP U's

- November 29, 2017 – Review Articles:
Challenges, Opportunities, Best Practices
- Stay tuned: Next AP ISMPP U will be in **March 2018**



Thank You for Attending!

- We hope you enjoyed today's presentation. **Please check your email for a link** to a survey that should take only a few minutes to complete. We depend on your feedback and take your comments into account as we develop future educational offerings. Thank you in advance for your participation!