Open Science Incentives for Researchers: The Role of Societies and Organizations

5 March 2021 Chat Discussion

- 10:13:32 From Richard Nakamura to Everyone : What would make it easier to track researcher performance in open science.
- 10:15:01 From Sarah Nusser to Everyone : +1 to Richard's question
- 10:15:18 From Shelley Stall to Everyone: projectopen.io
- 10:17:54 From Amy Nurnberger (she/her) [MIT] to Everyone: *community* science (citizenship can be so fraught...)
- 10:18:40 From Michael N. Evans to Everyone : Open publication costs are a problem: https://www.agu.org/Publish-with-AGU/Publish/Author-Resources/Publication-fees
- 10:18:41 From Bruce Wilson (ORNL DAAC) to Everyone : I happen to like Public Participation in Scientific Research (which I first heard from Andrea Wiggins).
- 10:18:47 From Michael N. Evans to Everyone : Usually double the non-open costs.
- 10:19:16 From Amy Nurnberger (she/her) [MIT] to Everyone : Nice, Bruce!
- 10:20:32 From Johannes Wagner to Everyone : There are well established diamond OA options @Michael, at least for the Earth Sciences
- 10:22:29 From Bruce Wilson (ORNL DAAC) to Everyone : Very much agree with Greg's point about differences in what's appropriate across disciplines. But there are also important cultural differences, not all of which are productive.
- 10:24:33 From David Tarboton to Everyone: Great to hear of MIT work, but 51% of papers open access given a policy since 2009 seems a low percentage. What are the barriers, and to what extent are APC fees the barrier.
- 10:25:06 From Michael N. Evans to Everyone : @ Johannes, I have no idea what a diamond OA option is, please explain?
- 10:25:50 From Richard Nakamura to Everyone : How can open science better deal with dishonest discussions of science, with attempts to highjack the interpretation of science in politics
- 10:25:56 From Guy Jones to Everyone : @ Michael Diamond OA is free to publish, free to read. No subscription. No APC.
- 10:26:01 From Jake Yeston to Everyone :
- https://agu.zoom.us/j/96780729550?pwd=UTVHT2RML0tvRkRiRVFUblprM2tlQT09
- 10:26:14 From Jake Yeston to Everyone:
- https://scholarlykitchen.sspnet.org/2017/06/01/diamond-open-access-societies-mission/
- 10:27:18 From Johannes Wagner to Everyone : Apologies @Michael, I should have been more clear. Jake and Guy are exactly right.

- 10:27:19 From Bruce Wilson (ORNL DAAC) to Everyone: Building on Richard N.'s question, I often hear the concern about misinterpretation as one of the reasons for not sharing.
- 10:27:19 From Jennie Larkin to Everyone : oh, my YES! these challenges are very familiar!
- 10:28:30 From Jennie Larkin to Everyone: there is also reluctance to share base don fear -- that someone will look at your data and find problems with it, that will create a stain on your scientific reputation
- 10:29:49 From Bruce Wilson (ORNL DAAC) to Everyone : And on the other side of Jennie's comment making data usable by others is just as hard as making computer software usable by others.
- 10:30:48 From Shelley Stall to Everyone : Shout out to Amy Nurnberger!!
- 10:30:48 From Ramapriyan (Rama SSAI/NASA GSFC) to Everyone: Also fear about data not being mature enough before sharing (causes delay in sharing). Used to hear this in early to mid 1990s in NASA's Earth science program.
- 10:30:55 From Merce Crosas to Everyone: +1 to @Amy!
- 10:31:34 From Michael N. Evans to Everyone: Since funding agencies support data collection, and often require OA, could funding agencies directly support the open access costs?
- 10:31:38 From Mark Hahnel Figshare to Everyone : 100% Bruce, we need to move to a world where every piece of research data is checked by a human before publication
- 10:31:43 From Guy Jones to Everyone: "More rewarding career-wise to hoard data than to share it." This has been an elephant in the room for years, but I've never heard anyone say it. Great honesty about the practicalities of changing entrenched views.
- 10:31:44 From Amy Nurnberger (she/her) [MIT] to Everyone : concerns about data sharing? here is a resource speaking to some of these
- https://docs.google.com/document/d/1nDtHpnIDTY G32EMJniXaOGBufjHCCk4VC9WGOf7jK4/e dit
- 10:31:46 From Johannes Wagner to Everyone: Creating recognition and rewarding those that go through with the challenging task of data curation: that is why data journals exist.
- 10:32:07 From Michael N. Evans to Everyone: +1 Bruce, that's a problem to tackle.
- 10:32:08 From Deb Agarwal (she/her) to Everyone : We find that the emphasis on first author publications being the primary promotion credit vehicle is a high barrier.
- 10:32:19 From Danielle Cooper to Everyone: Really appreciate Chris' recognition of the nuances in when it is appropriate to share data open and how that varies by research discipline/area. This has implications for how data sharing can most effectively encouraged. Most notably I've been finding through my research that the most successful research data sharing happens through distinct communities that are cross-disciplinary: https://sr.ithaka.org/publications/data-communities/

10:32:49 From Bruce Wilson (ORNL DAAC) to Everyone : +1 Deb. As always.

10:32:52 From Anne Cambon-Thomsen to Everyone : European Commission grants cover costs for OA. There are also the institutional/national archives, no?

10:32:53 From Erin Robinson to Everyone: +1 Deb

10:33:00 From Guy Jones to Everyone: @Johannes. Good point, but there needs to be the same career reward for using a data journal than a high profile "regular" one

10:33:50 From Deb Agarwal (she/her) to Everyone : @Guy +1 but also credit for publishing valuable datasets and ways to value datasets

10:33:53 From Amy Nurnberger (she/her) [MIT] to Everyone : +1 Deb

10:33:55 From Shelley Stall to Everyone: +1 Anne on EC covering costs of OA!

10:34:28 From Daniella Lowenberg to Everyone: Check out the Make Data Count initiative, where we are building the social and technical infrastructure for including research data in responsible research assessment — https://makedatacount.org

10:34:32 From Johannes Wagner to Everyone : @Guy, this is why data journals and others advocate data citations. Impact factors follow suit

10:34:37 From Anne Cambon-Thomsen to Everyone : The RDA interest group SHARC (Sharing rewards and credit) is specifically this "credit" of making data sharable.

10:34:48 From Dennis Brown to Everyone : @ Guy Jones - indeed, even post docs have the Nature, Science, Cell fixation in my area

10:34:58 From Bob Samors to Everyone : What does giving "credit" for data sharing actually mean

10:35:07 From Chris Bourg (she/her) to Everyone : LINKS:

MIT Open Access Task Force: https://open-access.mit.edu/

MIT Framework: https://libraries.mit.edu/scholarly/publishing/framework/

MIT Research Data Principles: https://libraries.mit.edu/data-management/mit-research-data-principles/

10:35:15 From Shelley Stall to Everyone : @Daniella +1 on Make Data Count project supporting the value of data usage and credit!

10:35:27 From Anne Cambon-Thomsen to Everyone : addressing this issue... (forgot the verb in the previous message...); .

10:35:34 From Jonathan Petters to Everyone: Getting P&T committees to value things apart from pubs is very important, for sure. But there is evidence that pubs are more cited when data is made accessible! https://doi.org/10.1371/journal.pone.0230416

10:35:41 From Deb Agarwal (she/her) to Everyone : Daniella +1

10:35:57 From Johannes Wagner to Everyone : @Bob citations

10:36:00 From Erin Robinson to Everyone: To Deb's point, Ted Habermann has been doing some work on process for updating metadata with identifiers for people and affiliations (ORCIDS/RORs) for additional authors

10:38:02 From Shelley Stall to Everyone : We include references to relevant work in the materials of this seminar. If you haven't shared yet, please add links to this chat.

10:39:00 From Mark Hahnel - Figshare to Everyone : https://knowledge.figshare.com/state-of-open-data

10:39:30 From Bruce Wilson (ORNL DAAC) to Everyone : It is interesting to note that my datasets (that have DOIs) do show up in Google Scholar, but not in Scopus.

10:40:13 From Shelley Stall to Everyone : @Mark - thank you - the State of Open Data report is something I value and constantly reference. Really good work from FigShare and collaborators.

10:41:27 From Amy Nurnberger (she/her) [MIT] to Everyone : would also suggest visiting RDA's research data for disciplines: https://www.rd-alliance.org/groups/community-of-practice

10:41:29 From Shelley Stall to Everyone : This seminar slides, recording, resources, and chat will be preserved in this Community: https://zenodo.org/communities/data-sharing-seminar-series-for-societies/?page=1&size=20

10:41:42 From Kevin to Everyone : Bruce, Google Scholar is searching the fulltext where the doi's are buried. Scopus only gives you access to abstract and subject headings

10:42:05 From Johannes Wagner to Everyone : @bruce, that is true unfortunately. A possible route to take would be a data paper. The dataset will be findable through the paper in scopus crossref et al

10:43:00 From Bruce Wilson (ORNL DAAC) to Everyone : On the glass half-full side, there is a place I can go to get a sense of the citations of the datasets, and that is a source that at least has some weight within my present institution.

10:43:02 From Johannes Wagner to Everyone : http://www.scholix.org/ is another initiative trying to link paper <-> data

10:43:04 From Deb Agarwal (she/her) to Everyone: Right now many dataset usage policies do not request citation. If we think citation is the path to recognition (this idea is still up for debate), then we need to get repositories and other data publishers to move to that standard. One of my data sources did not have that as a need and now I can not find the publications that used the data even though we have had DOIs on the data for more than 5 years and it is highly used data. Even in Google scholar it is hard to find the full usage of the data.

10:43:29 From Cynthia Hudson Vitale to Everyone : Open Science also encompasses software, code, protocols, and other research assets. Curious about society and institutional approaches to encouraging the sharing and credit of these research assets.

10:43:40 From Shelley Stall to Everyone : +1 Deb - For credit and linking to a publication - a citation in the references is important.

10:44:15 From Ramapriyan (Rama - SSAI/NASA GSFC) to Everyone : +1, @Deb

10:44:31 From Amy Nurnberger (she/her) [MIT] to Everyone : +1 data citation beyond data availability statements

10:44:50 From Dennis Brown to Everyone: Its easy for me to understand the sharing of large datasets I(genomics, proteomics etc) but many physiologists perform hundreds of small experiments that generate thousands of data points over days, weeks and months sometimes. We do lots of microscopy - and generate thousands of individual images, some large 4D images. How do we share those - would anyone actually look at them? DO we just share the final quantification?

10:44:56 From Daniella Lowenberg to Everyone: +1 Cynthia

10:44:58 From Howard Ratner to Everyone : One great place to see publisher Data Availability Policies is https://www.chorusaccess.org/resources/chorus-for-publishers/publisher-data-availability-policies-index/

10:48:10 From Guy Jones to Everyone: Especially in chemistry @Jake? Fields where the researcher "makes things" (that are "theirs") rather than study them? Easier to change that mentality if we know the motivations

10:48:11 From Graham Smith to Everyone : one resource on advantage of data sharing: https://doi.org/10.1371/journal.pone.0230416

10:48:26 From Susan Ivey to Everyone : Yes- +1 to Cynthia's comment

10:49:02 From Allen Lee to Everyone: @Cynthia we've been working to preserve computational models (alongside narrative documentation, peer review, dependencies) at comses.net for over a decade now (https://www.comses.net/codebases/). We've also been tracking the state of software citation in agent based modeling at https://catalog.comses.net and have been contacting authors of publications without software references directly to request that they publish / archive their code

10:50:36 From Guy Jones to Everyone : Good point @Chris (on tenure committees), but understandably US-specific.

10:50:44 From Doug Schuster to Everyone: The American Meteorological Society is in the process of developing a policy statement on "Software Preservation, Stewardship, and Reuse". Hopefully that will be published within the next few months.

10:50:56 From Chris Bourg (she/her) to Everyone : Totally fair @guy

10:51:10 From Shelley Stall to Everyone : +1000 Chris - Societies highlighting the value of data sharing in P&T - Love this!!

10:51:56 From Daniella Lowenberg to Everyone: Important as well for societies, publishers, etc to not default to any sort of impact factor for data. Data usage/re-use and citation differ across disciplines and understanding what are proper indicators for data is essential moving forward (through bibliometrics research and other methods)

10:51:56 From Brooks Hanson to Everyone : @Jake and chris—it's also building trust and integrity in science as a whole and thus public support—very important in today's world.

10:52:50 From David Rosenberg to Everyone: In my mind, the goal is to change our culture so researchers make their materials more available and reproducible. This requires training and incentives.

10:52:56 From Bruce Wilson (ORNL DAAC) to Everyone: Impact is also an interesting challenge. What's the impact of a dataset that was directly displayed/cited in a New York Times article on greenhouse gas emissions from automobiles?

10:53:04 From Elisha Wood-Charlson (she/her) to Everyone : We are working with a society to elevate a society award on a Data Prize - we are trying to determine how to brand it. Data generation or data management or... but could get to Chris's point about changing the culture of peer letters?

10:53:12 From David Rosenberg to Everyone : American Society of Civil Engineering-The Journal of Water Resources Planning and Management has a new reproducible results policy (Dec 2020). Free open access for papers with verified reproducible results. Awards for authors and reproducible reviewers. Badges. Special Collection. See

https://ascelibrary.org/doi/abs/10.1061/%28ASCE%29WR.1943-5452.0001368

10:53:34 From Amy Nurnberger (she/her) [MIT] to Everyone : @Dennis. you may be interested in PhysioNet for this

10:53:39 From Raul Miranda to Everyone: for funders, the "rewards" are mainly two: advancing the agency's mission faster; and being credited for advancing a science field/topic. Both are very influential for funders to pay for and require more strongly OA policy compliance. These are two unresolved issues that necessitate more discussion.

10:54:04 From Erin Robinson to Everyone : that is awesome on data award, Elisha. Would be curious about Chris's perspective too

10:54:36 From Shelley Stall to Everyone : RDA SHARC group: https://www.rd-alliance.org/groups/sharing-rewards-and-credit-sharc-ig

10:55:15 From Dennis Brown to Everyone: I was on a recent promotion committee who questioned a female candidate's qualifications because a peer letter complained that she had not had a paper in Cell since her previous 2008 Cell paper!! So we are contributing the problem, not only institutions.

10:55:27 From Chris Bourg (she/her) to Everyone: I am 100% in support of scholarly society awards for data sharing. I think that gives letter writers something specific to point to

10:55:37 From Jonathan Petters to Everyone : Are there concerns within societies that if they push for better data and software sharing from their community, that they will (in the short term anyway) push their community members to publish/work elsewhere where they don't have to do this 'extra stuff'?

10:55:39 From Chris Erdmann (AGU) to Everyone : There is also this project Open Science Registry http://openscienceregistry.org/ Rewards and Incentives for Open Science

10:55:44 From Susan Ivey to Everyone: Promoting again the MDC initiative as they are building, researching, and advocating for exactly these things discussed today for data -- https://makedatacount.org

10:55:46 From Brian Westra to Everyone: Societies and journals have a tremendous amount of influence on where data is shared, by the options that they promote. The level of curation provided by those repositories, in turn, can facilitate discovery and connections.

10:55:48 From Carly Huitema to Everyone: Anne makes a good point. Discussions with our researchers show that they understand the value of putting data in repositories (even if not open) but they don't have the time to manage it. And presumably they mean when they lack the time it means the time spent is not recognized.

10:56:26 From Cynthia Hudson Vitale to Everyone : +1 to Brian Westra's comment about curation by repos

10:56:31 From Elisha Wood-Charlson (she/her) to Everyone : Joined the RDA group - thanks!

10:56:36 From Myranda Uselton to Everyone: Is there a framework for researchers working with data scientists/data cleaners to prep their data for sharing? That way the researcher can focus on their research while also supporting open science

10:56:51 From Guy Jones to Everyone : @Brian - I would say "some influence" :)

10:57:04 From Graham Smith to Everyone : on the point of being hassle to do and time cost - sharing data at or before publication and doing it well may also be less effort/hassle than sharing on request later on, taking time to retrospectively locate and curate data

10:57:26 From Deb Agarwal (she/her) to Everyone: Anne +1 - changing credit for data and broadening will also enable better data curation. If there is no credit for publishing data - there is even less credit for doing a good job of curating that data

10:57:27 From Ramapriyan (Rama - SSAI/NASA GSFC) to Everyone : ESIP Research Artifact Citation Cluster is looking at various roles that need to be credited for different types of research artifacts (data, software, physical samples, etc.) - https://wiki.esipfed.org/Research Object Citation

10:58:01 From Sarah Bowman (she/her) to Everyone: In the structural biology community, it is integrated and expected to share data via the Protein Data Bank. Generating expectations across a specific community seems important. There is still a lot of metadata that curated and maintained, even so.

10:58:13 From Guy Jones to Everyone : On hassle, I like "Data behind the figures" (I think the American Astronomical Soc

10:58:17 From Susan Ivey to Everyone: +1 again to Brian's curation comment

10:58:17 From Sarah Nusser to Everyone : @myranda I am part of a research project that is trying to develop a framework that helps spell out practices in preparing data and associated outputs for reuse.

10:58:19 From Deb Agarwal (she/her) to Everyone : People working on curation at repositories are not normally credited at all!

10:58:20 From Amy Nurnberger (she/her) [MIT] to Everyone: some great questions about how to support the work required to make data and its associated assets open! the technical university of delft has some goof organizational examples here. Also, your Libraries are good resources for this guidance

10:58:51 From Anne Cambon-Thomsen to Everyone : the last publication of the SHARC RDA group: https://datascience.codata.org/articles/10.5334/dsj-2020-032/ "FAIRness Literacy: The Achilles' Heel of Applying FAIR Principles"

10:58:52 From Tom Koetzle to Everyone: Data accessibility is a long-term challenge. In our discipline of crystallography, where data sharing is quite universal, a number of the databases are many decades old.

10:59:45 From Amy Nurnberger (she/her) [MIT] to Everyone : (and, of course, all of those data professionals should be recognized and funded)

11:00:01 From Erin Robinson to Everyone: +1 Amy!