UKSG webinar Q&A

'Research Integrity 2020: New challenges for a new decade'

Questions that came during the presentation (please note that some questions have been grouped):

• What are the dangers of image manipulation?

Image manipulation can range from practices that improve the clarity of an image through to fabrication and falsification. The latter clearly undermine the integrity of the published record. That is why authors should be transparent about how and why they might have made changes to their images. Image fabrication and falsification make the published record untrustworthy.

• What is salami slicing?

This is when data collected from one piece of research is split up and reported in different manuscripts without justification, the aim being to generate as many publications from that research as possible.

• Many cases get stuck due to differences in vision between publishers and institutions. How to get over that problem?
• What advice would you give Publishers who get no response when asking an institution to investigate?

It helps to remember that the role of the publisher is to help preserve the integrity of the published record, not punish authors. Publishers and journal editors sometimes need help from institutions to establish whether research reported in a publication is ethical and/or sound. Where this cannot be established because of an unresponsive institution, the publisher/editor can still alert the reader that there is a concern, for example, by publishing an editor's note or expression of concern so that the concern is recorded. In very serious cases, the publisher can approach funders and government organisations that regulate institutions for help.

•   What advice do you have with engaging senior management to pull the threads of ethics, integrity, open research data and open access together?
•   How can Librarians demonstrate this key role play within an institution and gain support from the Senior Management teams?

I think it helps to remember the purpose of scholarly research - to inform real world practices- and the need to be able to trust it. This can be forgotten in both competitive commercial environments, where growth, revenue and meeting shareholder expectations are pressing needs, and in academic environments, where grants, jobs, promotions and recognition for the institutions and individuals are so important. As more and more research becomes available in the public domain via different routes, *demonstrating* the trustworthiness of what is published or available will become more important. Those who have engaged with ethics, integrity, open research data and open access, will be able to do this more easily. This is the message I'd try to get across to senior management teams.
I think librarians can play an influential role in research integrity because librarians will be faced with deciding what research they can trust.
There is potential for librarians to collectively and collaboratively decide what 'scholarly trustworthiness' will look like in the future.

•   I'm glad you mentioned training for reviewers and editors. How much progress has there been on this? And what does the future look like?

Everybody is recognising how important this is. Institutions are beginning to provide training on how to peer review and most large publishers provide some guidance and courses on how to peer review. They are also providing training for their editors. The problem is that institutions, journals and publishers are providing training for their own researchers, authors and peer reviewers within their organisations. It would help to establish and maintain common standards so that everybody gets training to the same standard.
I and others have written about training for peer reviewers
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4243268/
http://www.peere.org/wp-content/uploads/2016/05/Moher.pdf

The idea of core competencies for editors has also been discussed before - See this article:
Core competencies for scientific editors of biomedical journals: consensus statement
David Moher, James Galipeau, […]Getu Zhaori
https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-017-0927-0

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• Will journals accept these manuscripts for publication? Some have historically not accepted manuscripts if they were published elsewhere, and depositing the preprints in online archives is a form of publication.

Publishers and journals do accept manuscripts deposited in pre-prints because pre-prints are not peer reviewed publications. Pre-prints, which bypass traditional peer review in favour of community peer review could challenge traditional publishing, which is why some publishers are choosing to form collaborations with pre-print servers. See this blog for more about this. https://scholarlykitchen.sspnet.org/2019/10/16/the-second-wave-of-preprint-servers-how-can-publishers-keep-afloat/

• Could you explain a bit about how citation cartels operate and what this means for research integrity?

I explained about peer review rings which is where a group of researchers agree to suggest each other as peer reviewers and positively peer review each other's manuscripts. This is done to increase the likelihood their manuscripts will get published. This type of activity completely undermines peer review and research integrity because manuscripts are published without proper independent assessment. Citation cartels are slightly different in that a group or researchers agree to cite each other's work in order to boost their own publication records. The result is a biased representation of existing work in the relevant area.

• Do you feel that AI will have a part to play in identifying misconduct in publications e.g. by spotting patterns in citations, peer review etc.?

Yes, I think that AI would be very suited to screening for patterns that might suggest misconduct and manipulation. The challenge is finding high quality data to 'teach' the AI. Also, before we look to AI as the solution to detecting misconduct, we need to agree on standards for its use and how to deal with false positives and false negatives. We cannot get away from the need for human decision making and human accountability.

• Are there any examples of good practice in pre-print databases? Ones where it's nice and clear what has happened to the article?

Most do state that the articles have not undergone peer review and where they are eventually published. For example, medRxiv: https://www.medrxiv.org/

Research Square is another example. The status of each manuscript is clearly stated and you can filter for manuscripts that have undergone peer review and been accepted. https://www.researchsquare.com/article/rs-28226/v1

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•   You mentioned how editors are experts in their fields but not necessarily expert researchers...does the same apply therefore to University Lecturers and teachers?

I meant that academic editors are experts in their research fields but not expert editors, so they would not necessarily be aware of editorial standards or how to deal with research integrity issues. Hence the need for training and resources about research integrity specifically designed for editors. I think there is a need for greater awareness of the broad spectrum of issues covered by the term research misconduct. This is relevant to teachers, lectures and anyone else involved in the research and publication process.