Journal of Dairy Research (2018) **85** 401. © *Hannah Dairy Research Foundation 2018*
doi:10.1017/S0022029918000833

Editorial: Everyone must see what is in Pandora's box

Christopher H Knight

University of Copenhagen Faculty of Medical Sciences, DK1870 Frb C, Denmark

"*With the increasing pace of scientific discovery and growing public demand for reliable information, there has never been a greater need for immediate, universal, access to the latest research findings*." These are the words of Carlos Moedas, Commissioner for Research, Science and Innovation in the EU introducing cOAlition S, the EU's new strategy for Open Access publishing (Moedas, 2018).

This strategy is simple: commencing at the beginning of 2020 most[¥] EU funded research must be published Open Access. Marc Schiltz, President of Science Europe, goes further, claiming that: "*Science, as an institution of organised criticism, can (therefore) only function properly if research results are made openly available to the community*" (Schlitz, 2018). The statements specify *reliable* information and *organised* criticism, and whilst most scientists would quickly sign up to the principles of Open Access, the pragmatic ones might quite rightly ask the question, who will ensure the reliability and organisation, and how? Technologies for disseminating information have expanded enormously in the last few years, but so has the concept of "false news". Is simply putting information, data, sequences etc. out there enough? Is there a risk? We are familiar with the consequences of Cheap Food policies; making food more accessible has harmed the diet of many in the Western world and failed to alleviate hunger elsewhere. If we rush into Open Access without ensuring that current standards of Peer Review are maintained, will we do the same for science? There is a natural assumption that Open Access maximizes actual usage of an article, but is that necessarily the case? Usage has several drivers, including promotion by publisher, author, and their Institution and the overall standing of the journal. The EU recognizes that dissemination carries a cost and, whilst this might be simplistic, what Open Access basically does is to transfer the cost from pay-to-read to pay-to-publish. Currently there is a mix, such that authors do have a choice. The cOAlition S approach tends to assume that the only significant player in the equation is the reader, and that is simply not true. For a quarterly, specialist journal such as ours, moving to a pay-to-publish model without prohibitively-expensive page charges would most likely mean accepting more articles than we do at present, with a consequent reduction in scientific quality. Getting a business model right is important for the scientific community: the income that our Journal generates is shared between the publisher, Cambridge University Press, and the owner, the Hannah Dairy Research Foundation. Almost all of the latter feeds back directly into support for dairy research, whilst the Press exists to further the research and teaching objectives of the University. I support the principle of Open Access and will continue to work diligently towards it, but I caution against a one-size-fits-all approach and suggest that the best solutions for the scientific community will be found by meaningful collaboration between publishers and researchers that recognizes and responds to the opportunities offered by digital dissemination technologies whilst preserving the core historical values of ensuring scientific veracity. The story does not end there. Recognizing that researchers would often choose a pay-to-read high Impact Factor journal over an Open Access journal with a lower Impact Factor, the cOAlition S strategy also commits to "*fundamentally revise the incentive and reward system of science*." The proposed starting point would be the San Francisco Declaration on Research Assessment (DORA, 2012). These two issues are linked for one simple reason: Impact Factor was created as a tool to enable librarians to identify which journals to purchase, and was never intended to provide an objective measure of the scientific quality of research articles. DORA provides 18 recommendations for how funding agencies, institutions, publishers, metric compilers and researchers might improve research assessment, and I can thoroughly recommend their adoption. Finally, and as an example of responsible collaboration, whilst this article will not be Open Access in the classical sense, as its author I am able to share it *via* Cambridge Core Share which allows anyone with access to an article, whether they are an author or subscriber, to easily generate a Core Share link for that article. The link can be freely distributed online. The link allows anyone to immediately access the final published version of the article in a form that is free-to-read but which cannot be downloaded or printed.

[¥] All research that is funded either by the EU or by any of the twelve national funding agencies that have joined the coalition will be included.

For correspondence; e-mail: chkn@sund.ku.dk

References

DORA 2012 https://sfdora.org/

Moedas C 2018 'Plan S' and 'cOAlition S' – Accelerating the transition to full and immediate Open Access to scientific publications. https://ec.europa.eu/commission/commissioners/2014-2019/moedas/announcements/plan-s-and-coalition-s-accelerating-transition-full-and-immediate-open-access-scientific_en

Schlitz M 2018 Science without publication paywalls, a preamble to: cOAlition S for the Realisation of Full and Immediate Open Access. https://www.scienceeurope.org/wp-content/uploads/2018/09/cOAlitionS_Preamble.pdf