

# Correspondence

## COVID-19: time to re-imagine academic publishing

High-profile retractions have highlighted how the conventional model of academic publishing has struggled to keep pace with the race to understand the new coronavirus, SARS-CoV-2. The system is ripe for innovation. To that end, an open-access overlay journal known as *Rapid Reviews: COVID-19* (RR:CI9; see [go.nature.com/3fufauw](https://go.nature.com/3fufauw)) uses the speed of technology to democratize the review process and strengthen the quality of research.

RR:CI9 was launched this year by the MIT Press and the University of California, Berkeley, with support from the Patrick J. McGovern Foundation. Scientists, publishers and philanthropic foundations work together to swiftly deploy new models for digitally enabled publishing. The journal promotes rapid and transparent peer review of promising or controversial preprints, as well as dynamic curation of content (see B. M. Stern and E. K. O'Shea *PLoS Biol.* **17**, e3000116; 2019).

Philanthropic foundations have been leaders in funding risky scientific ventures. In our experience, extending that support to advance the publishing process will boost the quality of research and accelerate its dissemination.

**Vilas Dhar\*** Patrick J. McGovern Foundation, Boston, Massachusetts, USA.

**Amy Brand\*** The MIT Press, Cambridge, Massachusetts, USA. amybrand@mit.edu  
\*V.D. and A.B. declare competing interests; see [go.nature.com/2xajntz](https://go.nature.com/2xajntz)

## COVID-19: indexed data speed up solutions

Since the COVID-19 pandemic began, cross-disciplinary data sets for the virus have been proliferating daily. However, these can be difficult for researchers to find, link to and reuse – for example, if they want to explore new hypotheses or to test existing ones. To this end, we have developed the COVID-19 Data Index ([www.covid19dataindex.org](http://www.covid19dataindex.org)).

Originally funded by the US National Institutes of Health as part of the Big Data to Knowledge project, the index hosts a metadata catalogue of COVID-19 data sets.

These range from, for example, clinical, sociodemographic, environmental, economic and mobility data to case statistics and genomic sequences. These data are collected from large repositories, research papers and individual online sources, among others. Users can filter search results by type ('-omics' data versus clinical data, for instance), repository or geographic location. The index then supplies links to the original data and the download page.

We update the COVID-19 Data Index daily. Finding data on COVID-19 is no longer an obstacle that could delay discoveries.

**Lucila Ohno-Machado\*** University of California, San Diego, La Jolla, California, USA. lohnomachado@health.ucsd.edu

**Hua Xu** The University of Texas Health Science Center at Houston, Texas, USA.

\*L.O.-M. declares competing interests; see [go.nature.com/3gfcgv](https://go.nature.com/3gfcgv)

## Denmark recycling plan will cut waste by two-thirds

As one of the European Union's largest energy consumers and greenhouse-gas polluters ([go.nature.com/33piuuv](https://go.nature.com/33piuuv)), Denmark will launch the EU's most-ambitious recycling plan in July next year. It aims to cut the country's annual amount of waste for incineration from 800 to 250 kilograms per capita, reducing carbon dioxide emissions to 0.7 million tonnes by 2030. Citizens will sort their waste into ten different types.

The move is in part a response to the COVID-19 pandemic and to a new EU directive for environmental sustainability that promotes a circular economy, lower emissions and a reduction in the use of raw materials and hazardous substances (J. B. Zimmerman *et al. Science* **367**, 397–400; 2020). It is hoped that the plan will limit ecosystem damage and the health effects of toxic industrial chemicals. It will also discourage Denmark's unacceptable export of waste to low-income countries.

If other countries were to adopt similar practices, the world would align faster with the United Nations Sustainable Development Goals on sustainability and planetary health.

**Su Shiung Lam** Universiti Malaysia Terengganu.

**Aage K. O. Alstrup** Aarhus University, Aarhus, Denmark.

**Christian Sonne** Aarhus University, Roskilde, Denmark. cs@bios.au.dk

## COVID-19: full peer review in hours

The impetus to rapidly disseminate scientific results during a crisis ahead of peer review could cause governments and international organizations to act prematurely – or to be reluctant to act at all. Having struggled with such challenges in our COVID-19 work, we recommend our tested review system, which has an ultrashort submission-to-acceptance time.

One of us (W.S.) runs a workshop every September to identify horizon-scanning issues in conservation, which we aim to report on in *Trends in Ecology and Evolution* the following January. The journal's editor (formerly K.A.L.) agrees a submission date and selects referees. Authors send in a working draft a week before formal submission so that referees have time to prepare their comments. In the first year (2009), the time from formal submission to return of detailed comments was 90 minutes.

The crucial features of this process are advance selection of referees and the provision of a draft manuscript. Agreeing a submission date makes planning easier for referees but is not essential.

Our model could be used for ultrafast peer review of COVID-19 papers (see M. A. Johansson and D. Saderi *Nature* **579**, 29; 2020). Setting up a pool of referees dedicated to rapid review of key papers would help relieve pressure on overstretched individuals.

**William J. Sutherland** University of Cambridge, UK. w.sutherland@zoo.cam.ac.uk

**Katrina A. Lythgoe** University of Oxford, UK.