Octopus: 
A quick introduction

@science_octopus
https://octopuspublishing.org
What’s wrong with the current system?
What’s wrong with the current system?

- It takes too long to publish anything
What’s wrong with the current system?

• It takes too long to publish anything

• There are no good guides to quality
What’s wrong with the current system?

• It takes too long to publish anything

• There are no good guides to quality

• Problems of reproducibility, publication bias and ‘questionable research practices’ [eg. p-hacking, HARKing, cherry-picking]
What’s wrong with the current system?

- It takes too long to publish anything
- There are no good guides to quality
- Problems of reproducibility, publication bias and ‘questionable research practices’
- Problems with discoverability and accessibility
What’s wrong with the current system?

Journals are trying to do two jobs at once:
What’s wrong with the current system?

Journals are trying to do two jobs at once:

• Disseminating useful findings to practitioners and researchers
What’s wrong with the current system?

Journals are trying to do two jobs at once:

• Disseminating useful findings to practitioners and researchers

• Being the primary research record: what has been done, by whom, when and with what result, in full detail
What’s wrong with the current system?

Journals are trying to do two jobs at once:

- Disseminating useful findings to practitioners and researchers
- Being the primary research record: what has been done, by whom, when and with what result, in full detail

(Leading to being used as the only record for researchers of their work and its quality)
What can we do?  
Split the two jobs
A new ‘primary research record’
digital-first,
free to read; free to write,
with automatic language translation.

Not based around papers
but smaller publication units, in a new structure
PROBLEM: Obedience to Authority in the Milgram Paradigm

Authors: Andrew Vonasch
Date added: 22nd June 2020, 22:55:09

Linked Problems
No linked problems available.

Reviews
No linked reviews available.

Downloaded PDF  Write a linked publication  Write a review  Red flag

Full text
What percentage of people will obey authority figures in the Milgram paradigm?

Keywords: obedience, authority, Milgram, social, psychology
• Instant publication

⇒ instant ‘priority’ for researchers, as well as faster dissemination of knowledge
• Instant publication

⇒ instant ‘priority’ for researchers, as well as faster dissemination of knowledge

• Smaller author groups

⇒ more meritocratic recognition, especially for specialists
  (eg. technicians designing and publishing protocols; statisticians doing analyses)

⇒ more accountability (it’s clear who’s doing what work)
• Instant publication

⇒ instant ‘priority’ for researchers, as well as faster dissemination of knowledge

• Smaller author groups

⇒ more meritocratic recognition, especially for specialists
  (eg. technicians designing and publishing protocols; statisticians doing analyses)

⇒ more accountability (it’s clear who’s doing what work)

• No need for ‘narrative’

⇒ removes pressure for ‘questionable research practices’ (excluding data that doesn’t fit a hypothesis) as ‘a story’ no longer important

⇒ Researchers can publish ‘just a hypothesis’ or a small data set etc.
  (meaning more work will be shared, avoiding waste)
How can you tell what’s ‘good’?

- Rating system

  ⇨ Sets the definitions of ‘good work’ for each kind of publication
  ⇨ Allows a community consensus on what defines ‘good’
  ⇨ Makes it easier to sort well-rated publications from poorly-rated
  ⇨ Creates more subtle metrics to record ‘success’ for individuals
**PROTOCOL: Behavioral study of obedience**

**Authors:** Clare Conry-Murray, Anne Lohmann  
**Date added:** 22nd June 2020, 23:13:42

**Linked Problems**  
No linked problems available.

**Reviews**  
No linked reviews available.

**Full text**  
The subjects were 40 males between the ages of 20 and 53, drawn from New Haven and the surrounding communities. Subjects were obtained by a newspaper advertisement and direct mail solicitation. Those who responded to the appeal believed they were to participate in a study of memory and learning at Yale University. A wide range of occupations is represented in the sample. Typical subjects were postal clerks, high school teachers, salesmen, engineers, and laborers. Subjects ranged in educational level from one who had not finished elementary school to those who had doctorate and other professional degrees. They were paid $4.50 for their participation in the experiment. However, subjects were told that payment was simply for coming to the laboratory, and that the money was theirs no matter what happened after they arrived. Table 1 shows the proportion of age and occupational types assigned to the experimental condition. Personnel and Locale The experiment was conducted on the grounds of Yale University in the elegant interaction laboratory. (This detail is relevant to the perceived legitimacy of the experiment. In further variations, the experi-
• Post-publication peer review

⇒ no hierarchical ‘editor’ system that can lead to publication bias

⇒ encourages collaborative working
  (authors can reversion a publication in the light of reviews, and include
   reviewers as authors on the new version)

⇒ reviews are all open for others to read, giving readers various ‘expert perspectives’
  on the work
Post-publication peer review

⇒ no hierarchical ‘editor’ system that can lead to publication bias

⇒ encourages collaborative working
   (authors can reversion a publication in the light of reviews, and include reviewers as authors on the new version)

⇒ reviews are all open for others to read, giving readers various ‘expert perspectives’ on the work

Reviews are a publication type equal to all others

⇒ reviews and reviewing given the equal status they deserve
   (i.e. good reviewers get credit for their work)
INTERPRETATION: Could treatment for COPD be protective against COVID-19 symptoms?

Authors: Alexandra Freeman
Date added: 28 April 2020, 12:15:15

Linked Problems
No linked problems available.

Reviews
No linked reviews available.

Download PDF  Write a linked publication  Write a review  Flag

Full text

The lower reported prevalence of asthma and COPD in patients diagnosed with COVID-19 might be due to one or a number of factors. First, it is possible that, in contrast to the diagnosis of diabetes, there was substantial undiagnosed or poor recognition of chronic respiratory disease in patients with COVID-19, particularly in China. However, this seems unlikely, as in very recent data (March 23, 2020, from Italy, among 266 patients dying with COVID-19 mean age 70.5 years), diabetes was reported in 20.3% of patients but COPD was not listed as a comorbidity for any patient. Similarly, provisional data from the USA (March 31, 2020) show that chronic respiratory disease and diabetes were comorbidities in 8.6% and 10.2% of patients with COVID-19, respectively, compared with US mortality figures for the population as a whole of 11.3% for chronic respiratory disease and 10.2% for diabetes; however these data are based on only 7,462 of the 74,425 patients reported.

A second possibility is that having a chronic respiratory disease protects against COVID-19, perhaps through different immune responses elicited by the chronic disease itself. However, this theory is not supported by the finding that among those with COVID-19 who have COPD as a comorbidity, mortality is increased, as would otherwise be expected.

A third possibility is that therapies used by patients with chronic respiratory diseases can reduce the risk of infection or of...
What’s in it for researchers?

- Removes barriers to access, worldwide
- Instant ‘priority’ and easy to publish
- Easier to find relevant work
- More meritocratic
- Can easily publish all ideas, data etc.
What’s in it for researchers?

- Removes barriers to access, worldwide
- Instant ‘priority’ and easy to publish
- Easier to find relevant work
- More meritocratic
- Can easily publish all ideas, data etc.

What’s in it for institutions?

- Can instantly assess what type of researcher a candidate is
- Much better way to see what their peers think of their work
What’s in it for researchers?

• Removes barriers to access, worldwide
• Instant ‘priority’ and easy to publish
• Easier to find relevant work
• More meritocratic
• Can easily publish all ideas, data etc.

What’s in it for institutions?

• Can instantly assess what type of researcher a candidate is
• Much better way to see what their peers think of their work

What’s in it for funders?

• Can search well-rated publications and offer funding for ‘the next bit of the chain’ (potentially to multiple groups) ⇒ Avoiding wasteful grant application process
• Can easily assess individual researchers
What’s in it for researchers?

• Removes barriers to access, worldwide
• Instant ‘priority’ and easy to publish
• Easier to find relevant work
• More meritocratic
• Can easily publish all ideas, data etc.

What’s in it for institutions?

• Can instantly assess what type of researcher a candidate is
• Much better way to see what their peers think of their work

What’s in it for funders?

• Can search well-rated publications and offer funding for ‘the next bit of the chain’ (potentially to multiple groups)
  ⇒ Avoiding wasteful grant application process
• Can easily assess individual researchers

What’s in it for journals?

• Become more focused on synthesizing, editorializing and disseminating to their audiences (not expensive primary research publication)
Thank you!

Alex.freeman@maths.cam.ac.uk
@alex_freeman