NEWS RELEASE 16 JUL 2020

Principles to enhance research integrity and avoid 'publish or perish' in academia

PLOS

Amid growing criticism of the traditional "publish or perish" system for rewarding academic research, an international team has developed five principles that institutions can follow to measure and reward research integrity. Publishing on July 16, 2020 in the open access journal PLOS Biology, the team believes that applying these principles in academic hiring and promotion will enhance scientific integrity and amplify the benefits of research to society.

Canadian scientist Dr. David Moher led the team that developed the principles, which are referred to as the Hong Kong Principles, since they were presented and discussed during the 6th World Conference on Research Integrity in Hong Kong in 2019.

"The traditional 'publish or perish' system involves evaluating researchers based on the number of papers they publish, how often these papers are referenced by other researchers, and the value of research grants they are awarded" said Dr. Moher, a senior scientist and expert in scientific publishing at The Ottawa Hospital and associate professor at the University of Ottawa. "While easy to measure, these criteria do not give a full picture of the rigor of the researcher's work, or of their contributions to research and society."

The newly published Hong Kong Principles aim to fill this gap in the way that researchers are evaluated by their institutions. The five principles include:

- Principle 1: Assess researchers on responsible practices from study conception to delivery, including the development of the research idea, research design, methodology, execution and effective dissemination
- Principle 2: Value the accurate and transparent reporting of all research, regardless of the results
- Principle 3: Value the practices of open science (open research), such as open methods, materials and data
- Principle 4: Value a broad range of research and scholarship, such as replication, innovation, translation, synthesis, and meta-research
- Principle 5: Value a range of other contributions to responsible research and scholarly activity, such as peer review for grants and publications, mentoring, outreach, and knowledge exchange

The paper also includes examples of how each principle has been implemented and can be measured. "Because responsible research practices can be time and resource intensive, they may result in a smaller number of grants and publications," said Dr. Moher. "These principles send a clear message that behaviors
that foster research integrity need to be acknowledged and rewarded.

###

Peer reviewed; Opinion Piece; N/A

In your coverage please use these URLs to provide access to the freely available articles in *PLOS Biology*:
http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000737

2 comments on PubPeer (by: Sinskea Flammea, David Moher)


2 comments on PubPeer (by: Sinskea Flammea, David Moher)

Funding: PG is funded by an Australian National Health and Medical Research Council NHMRC Fellowship APP1155009. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Competing Interests: I have read the journal's policy and the authors of this manuscript have the following competing interests: MC works for Wellcome. Through this, the organization and she are engaged in a lot of advocacy work to promote a more positive research culture. The guidance asks about advocacy work so I include this for completeness. VB was involved in the creation of a Research Integrity course at QUT. QUT licenses this course to other institutions and provides a proportion of any income to the creators. VB is employed by QUT and the Australasian Open Access Strategy Group. She sits on and is paid for work on the NHMRC's Research Quality Steering Committee. She is an unpaid advisor to a variety of open access and scholarly communication initiatives, including DORA.

**Disclaimer:** AAAS and EurekAlert! are not responsible for the accuracy of news releases posted to EurekAlert! by contributing institutions or for the use of any information through the EurekAlert system.

**Media Contact**

David Moher
dmoher@ohri.ca

http://www.plos.org