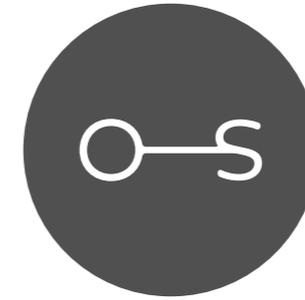


EURODOC 2017



open scholar

WHY TRUE SCIENCE IS ONLY OPEN SCIENCE

Dr. Pandelis Perakakis

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Mind, Brain and Behaviour Research Centre (CIMCYC), University of Granada

Co-founder of Open Scholar <http://www.openscholar.org.uk/>



The brain is a scientist!

The scientific method is a fundamental process that evolved as the optimal strategy for the survival of the individual



Doubt & Fear
Just Ahead



**Humanity's collective effort to minimise
uncertainty**

Open-minded scepticism

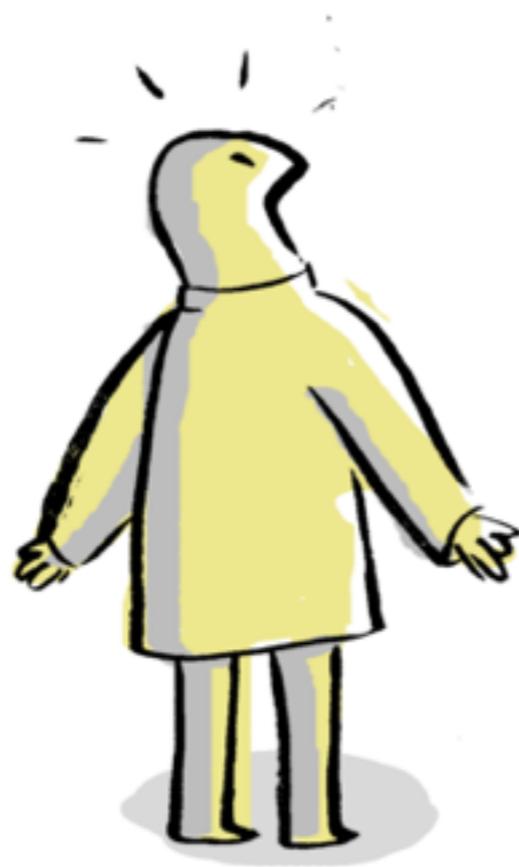
**A scientist has no investment in the outcome
of the experiment**

THE EVOLUTION OF ACADEMIA

PUBLISH



PUBLISH
OR
PERISH



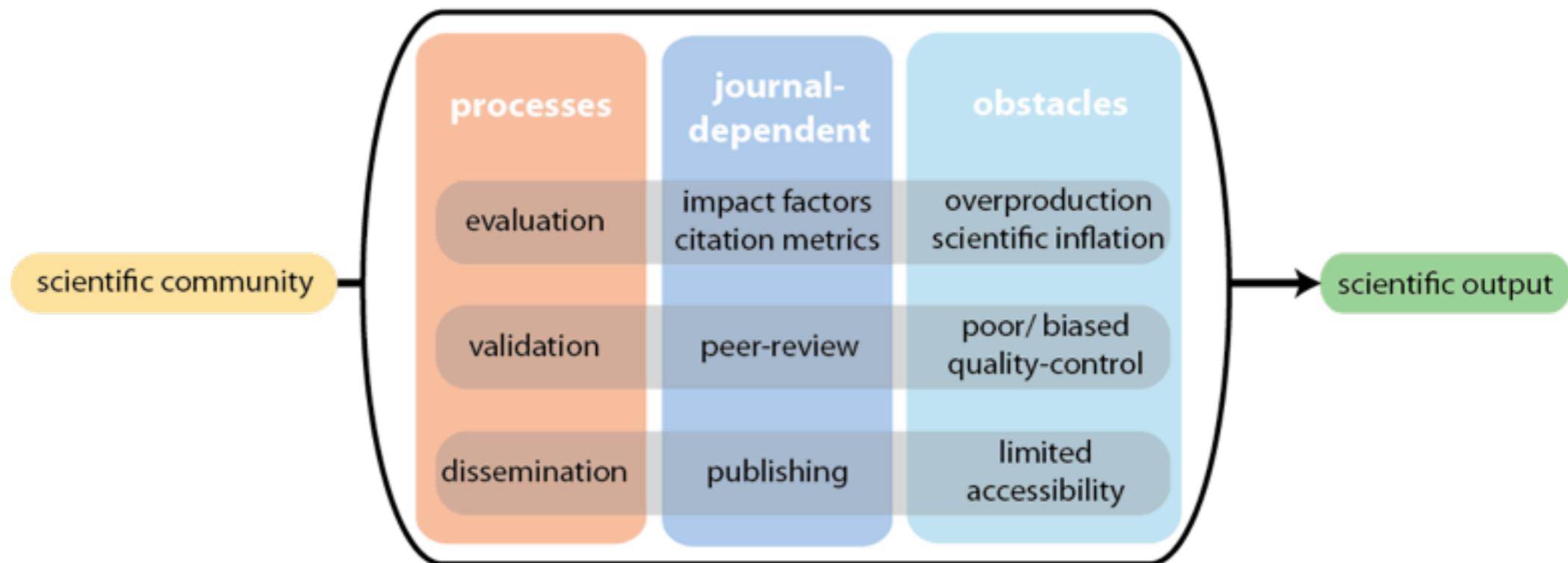
PUBLISH
IN HIGH IMPACT
JOURNALS
OR
PERISH



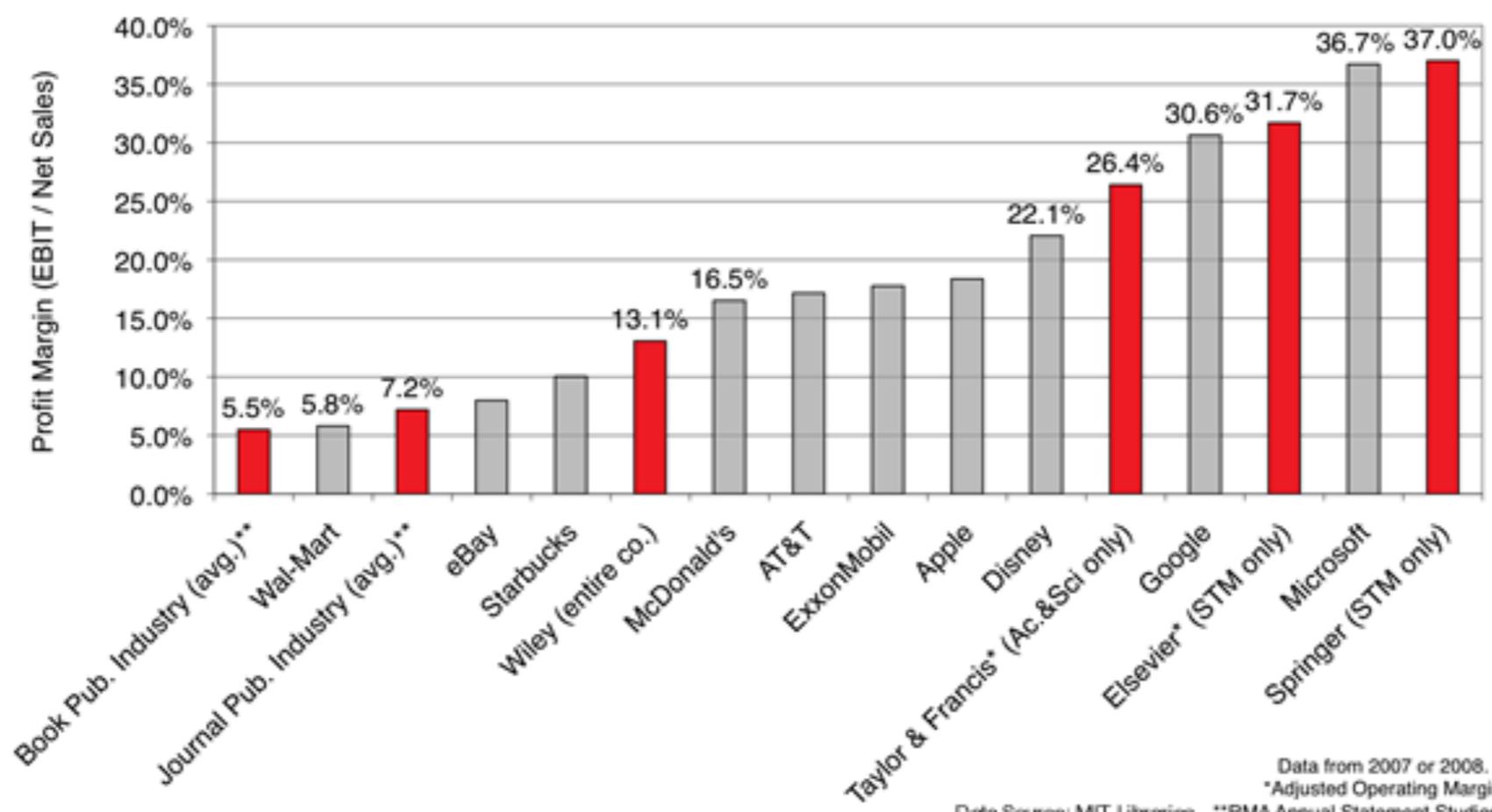
PUBLISH
FREQUENTLY IN
HIGH IMPACT
JOURNALS
AND
MAYBE
YOU WON'T
PERISH



scholarly communication model

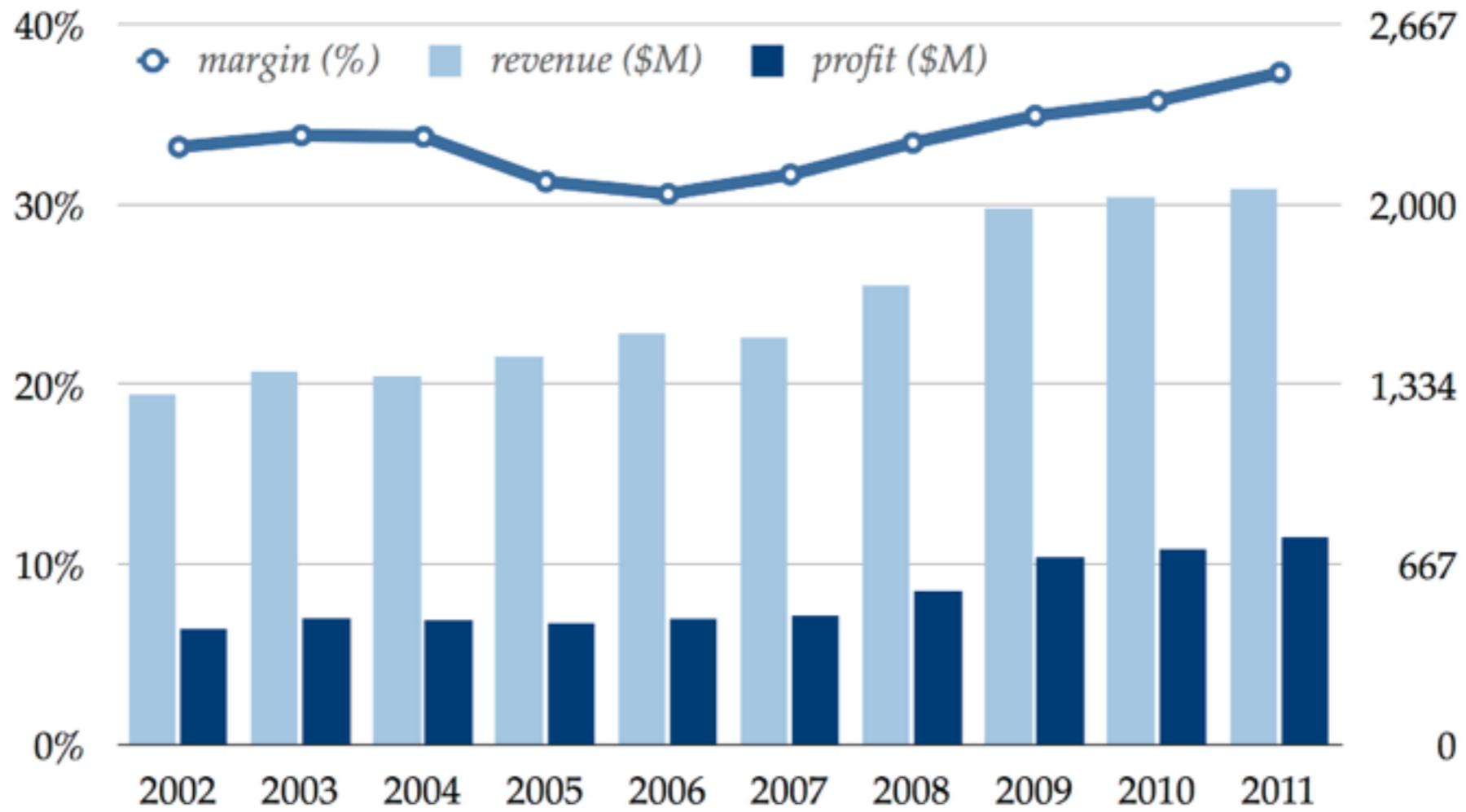


Profit Margins: Journal Publishers v. Other Companies



Data from 2007 or 2008.
 *Adjusted Operating Margin
 Data Source: MIT Libraries **RMA Annual Statement Studies, 2007

Elsevier historical profit margin



<u>Scientist</u>	<u>Academic</u>
Open-minded	Content journal editors
Sceptical	No replications or negative results
Consider all data	Inaccessible articles, data, software code
Collaborate	Compete for scarce resources
No investment in the outcome	p-hacking

GOLD

Create or convert 23,000 open-access journals

Find funding support for open-access publication costs

Persuade the authors of the annual 2,500,000 articles to publish in new open-access journals instead of the existing toll-access journals

GREEN

Persuade the authors of the annual 2,500,000 articles they publish in the existing toll-access journal to also self-archive them in their institutional open-access archives



Whatever one may think about the relative merits of Green and Gold OA (a matter that my colleagues on the Kitchen and myself have discussed numerous times) or the economic implications of embargoes of various lengths, what is clear is that Green OA has no promise of delivering augmented revenues to the publisher, but Gold OA opens up a new customer, the author him or herself, who in many instances pays for the article to be OA. Gold OA, in other words, represents a business opportunity, whereas Green OA represents a business problem.

Thus we have the emergence of a relatively new market, where publishers fight to collect fees from this new class of customers: authors. How to compete is another matter. Most traditional publishers rely on the strength of their brands to bring the articles in. This is most obvious in cascading peer review, where the established publication represents the wide end of the marketing funnel and the Gold OA venues sit at the narrow end. (It's worth remembering that this model works for purely toll-access publications as well, as the enormous success of *Nature's* line-extension proves.) Other publishers focus on metrics of different kinds and boast of their Web-friendly tools for submission, discovery, and dissemination. As one would expect, wherever there is competition, the matter of pricing comes up. And here the established publisher may have a problem.



About Joseph Esposito

I am a management consultant working primarily in the world of digital media, software, and publishing. My clients include both for-profits and not-for-profits. A good deal of my activity concerns research publishing, especially when the matter at issue has to do with the migration to digital services from a print background. Prior to setting up my consulting business, I served as CEO of three companies (Encyclopaedia Britannica, Tribal Voice, and SRI Consulting), all of which I led to successful exits. Typically I work on strategy issues, advising CEOs and Boards of Directors on direction; I also have managed a number of sticky turnarounds. Among other things, I have been the recipient of grants from the Mellon, MacArthur, and Hewlett Foundations, all concerning research into new aspects of publishing.

[View all posts by Joseph Esposito »](#)



The peer review drugs don't work

A process at the heart of science is based on faith rather than evidence, says Richard Smith, and vested interests keep it in place

Peer review is supposed to be the quality assurance system for science, weeding out the scientifically unreliable and reassuring readers of journals that they can trust what they are reading. In reality, however, it is ineffective, largely a lottery, anti-innovatory, slow, expensive, wasteful of scientific time, inefficient, easily abused, prone to bias, unable to detect fraud and irrelevant.

Perhaps the biggest argument against the peer review of completed studies is that it simply isn't needed. With the World Wide Web everything can be published, and the world can decide what's important and what isn't. This proposition strikes terror into many hearts, but with so much poor-quality science published what do we have to lose?

Richard Smith, former *British Medical Journal* editor

May 28, 2015

News Feature

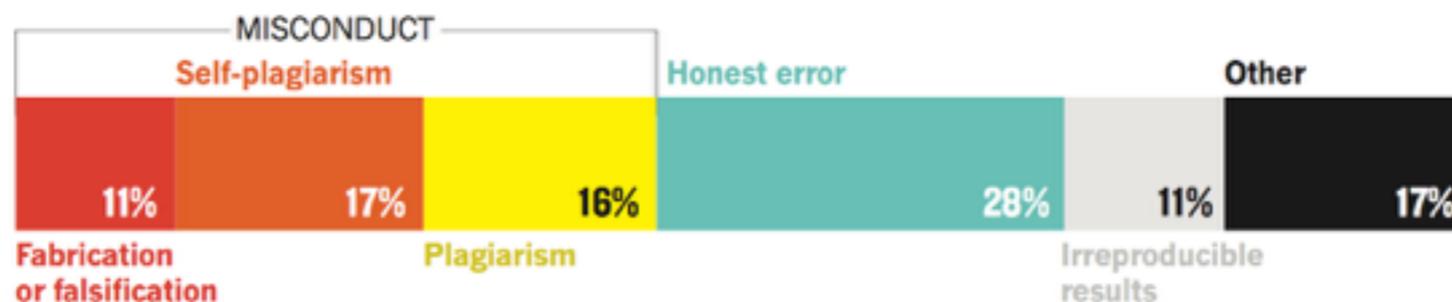
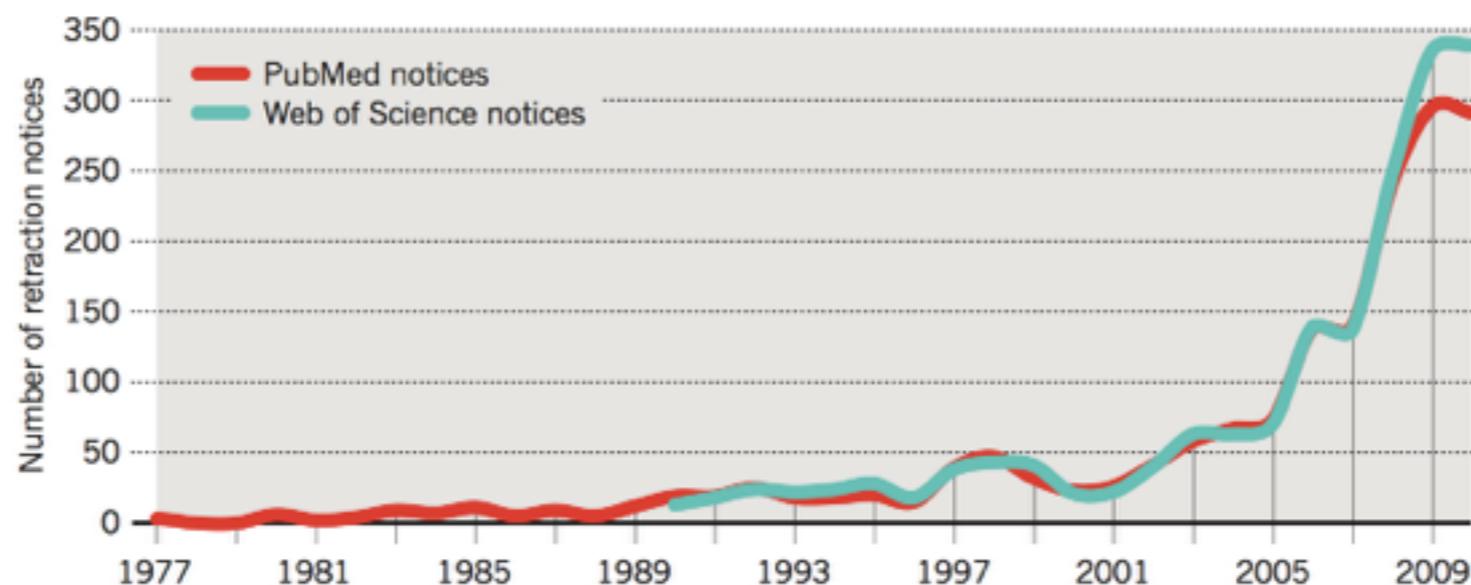
Science publishing: The trouble with retractions

A surge in withdrawn papers is highlighting weaknesses in the system for handling them.

Richard Van Noorden

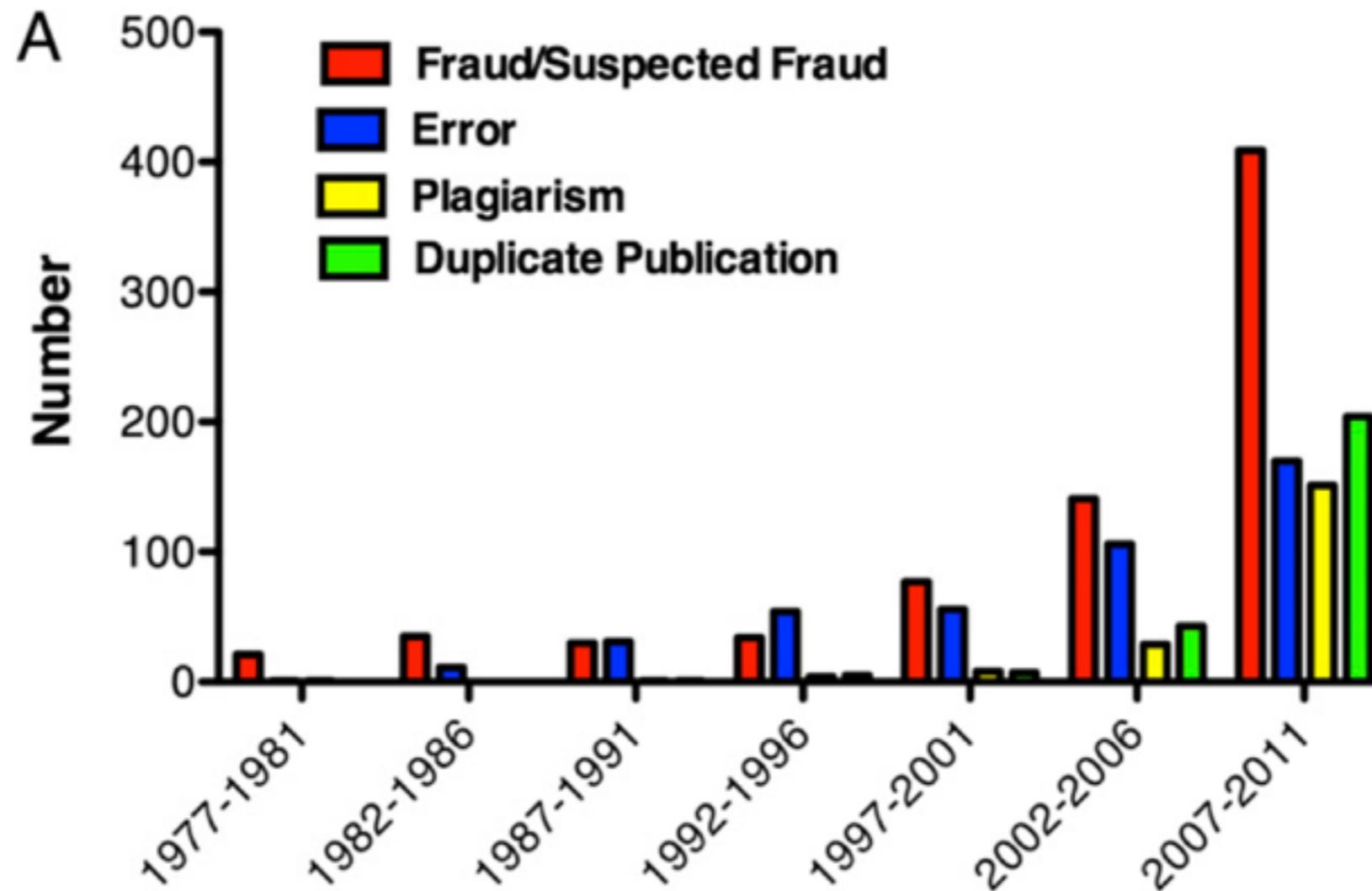
RISE OF THE RETRACTIONS

In the past decade, the number of retraction notices has shot up 10-fold (**top**), even as the literature has expanded by only 44%. It is likely that only about half of all retractions are for researcher misconduct (**middle**). Higher-impact journals have logged more retraction notices over the past decade, but much of the increase during 2006–10 came from lower-impact journals (**bottom**).



Misconduct accounts for the majority of retracted scientific publications

Ferric C. Fang^{a,b,1}, R. Grant Steen^{c,1}, and Arturo Casadevall^{d,1,2}



RESEARCH ARTICLE

Estimating the reproducibility of psychological science

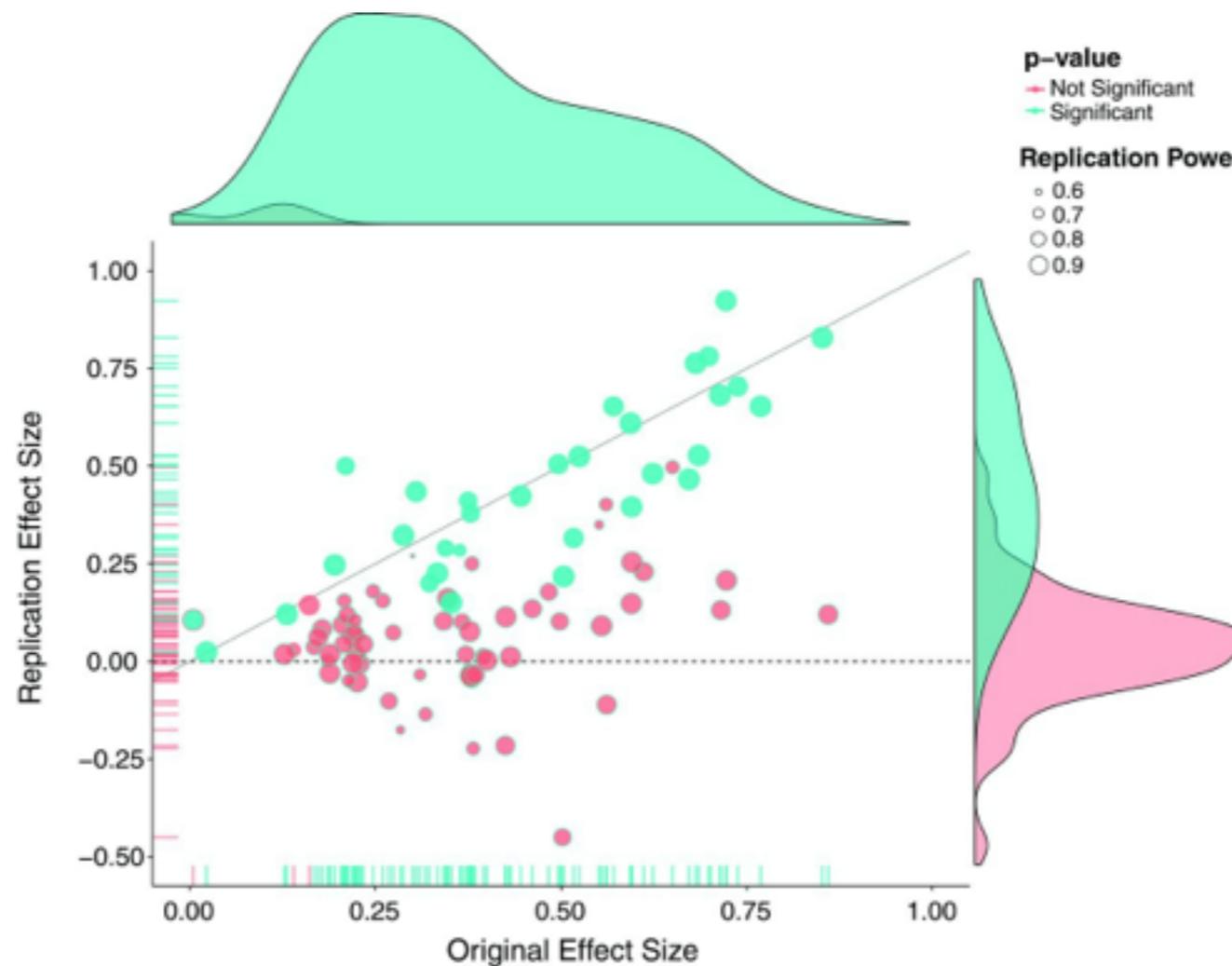


Open Science Collaboration^{*,†}

**All authors with their affiliations appear at the end of this paper.*

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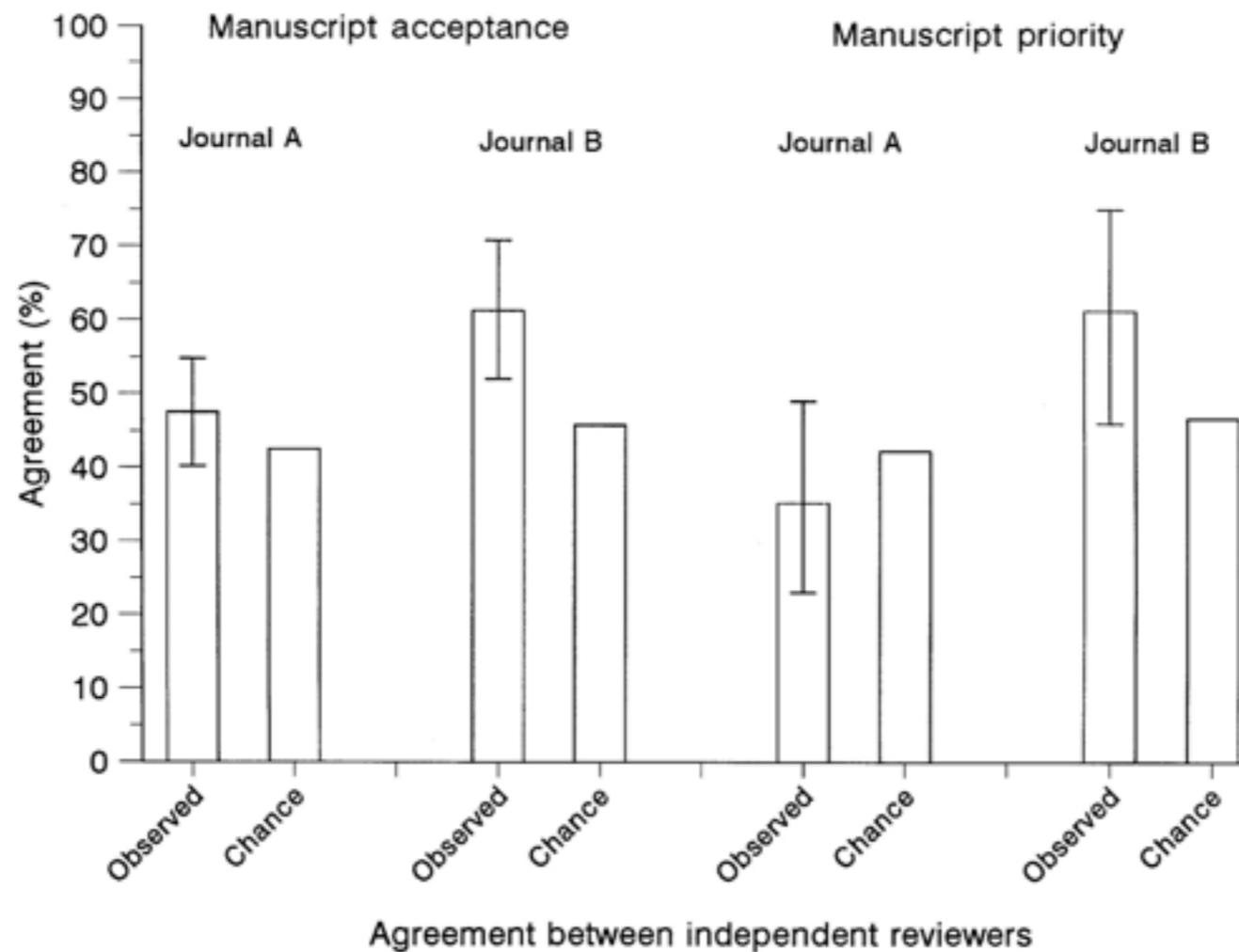
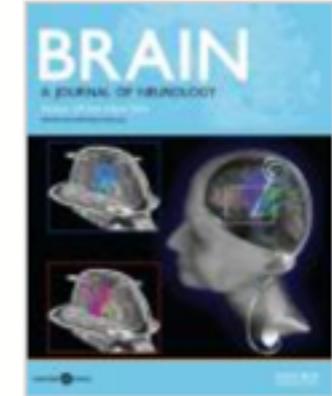
Science 28 Aug 2015:
Vol. 349, Issue 6251,
DOI: 10.1126/science.aac4716



Reproducibility of peer review in clinical neuroscience: Is agreement between reviewers any greater than would be expected by chance alone? 🚫

Peter M. Rothwell, Christopher N. Martyn

DOI: <http://dx.doi.org/10.1093/brain/123.9.1964> 1964-1969 First published online: 1 September 2000



Drug development: Raise standards for preclinical cancer research

C. Glenn Begley & Lee M. Ellis

85 per cent of preclinical studies could not be replicated

Building a stronger system

What reasons underlie the publication of erroneous, selective or irreproducible data? The academic system and peer-review process tolerates and perhaps even inadvertently encourages such conduct⁵. To obtain funding, a job, promotion or tenure, researchers need a strong publication record, often including a first-authored high-impact publication. Journal editors, reviewers and grant-review committees often look for a scientific finding that is simple, clear and complete — a 'perfect' story. It is therefore tempting for investigators to submit selected data sets for publication, or even to massage data to fit the underlying hypothesis.

Nature **483**, 531–533 (29 March 2012) | doi:10.1038/483531a

Published online 28 March 2012

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and Springer, Dordrecht*

Scientometrics, Vol. 81, No. 2 (2009) 549–565

DOI: 10.1007/s11192-008-2141-5

Rejecting and resisting Nobel class discoveries: accounts by Nobel Laureates

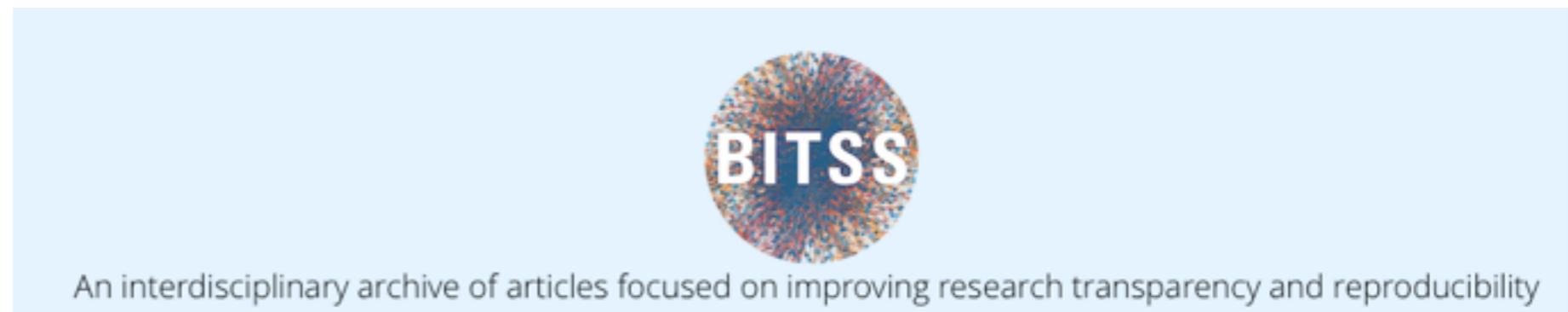
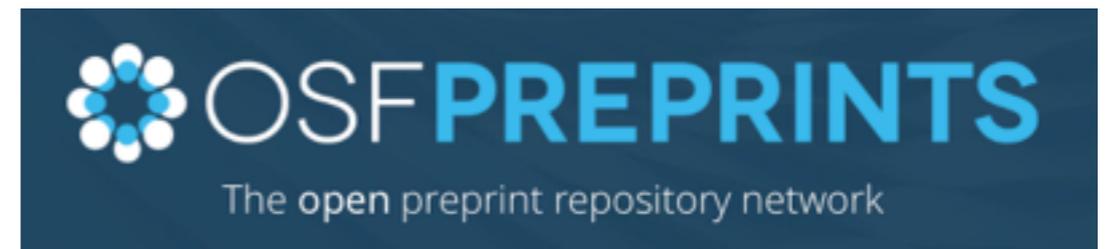
JUAN MIGUEL CAMPANARIO

Departamento de Física, Universidad de Alcalá, 28871 Alcalá de Henares, Madrid, Spain

I review and discuss instances in which 19 future Nobel Laureates encountered resistance on the part of the scientific community towards their discoveries, and instances in which 24 future Nobel Laureates encountered resistance on the part of scientific journal editors or referees to manuscripts that dealt with discoveries that later would earn them the Nobel Prize.



The **Self**-Journal of Science





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Title:  Towards a unified paradigm for sequence-based identification of fungi

Authors: Kõljalg, Urmas; Dueñas, Margarita; Martín, María P. ; Tellería, M.^a Teresa; Larsson, Karl-Henrik

Keywords: Bioinformatics
DNA barcoding
Ecological genomics
Fungi
Microbial diversity

Review this work

Issue Date: 2013

Publisher: Wiley-Blackwell

Citation: Molecular Ecology 22(21): 5271-5277 (2013)

Researcher page at DIGITAL.CSIC

Reputation as author: 90



Reputation as reviewer: 75



Profile

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Priority
3 Who?
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Abstract

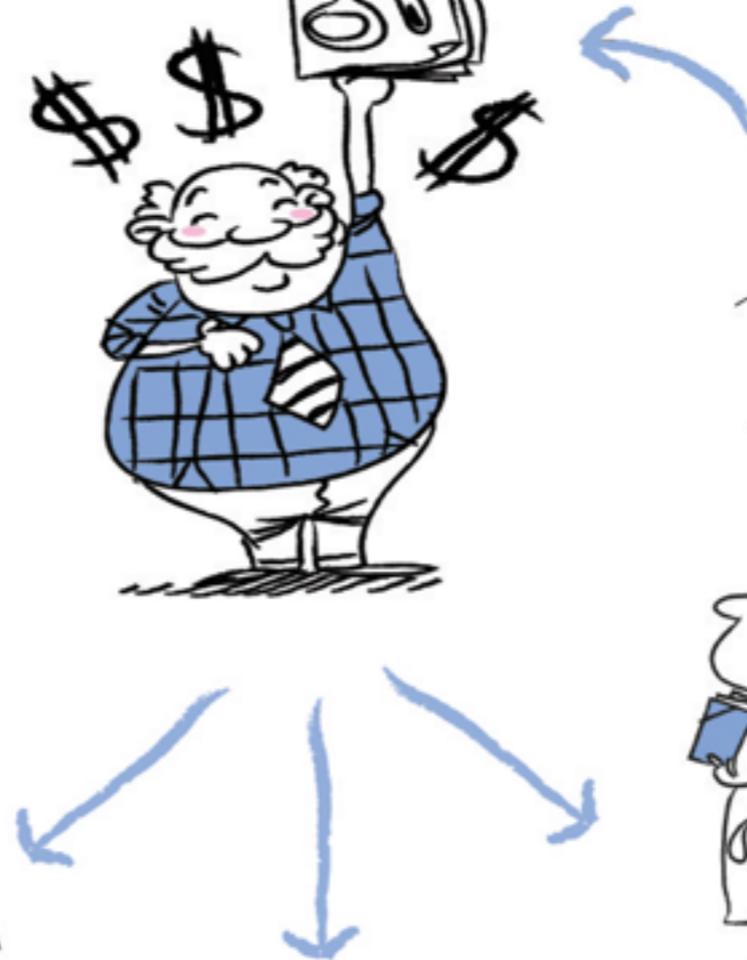
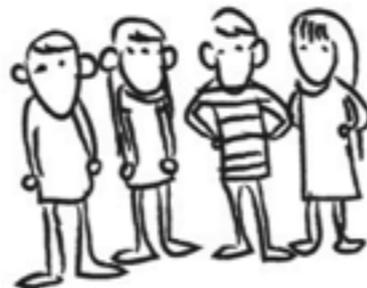
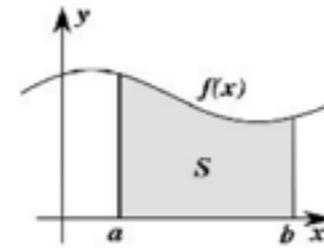
Essay and Opinion

Novel processes and metrics for a scientific evaluation rooted in the principles of science

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Michaël Bon¹, Michael Taylor², Gary S McDowell^{3,4}

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