

# IS THE FUTURE OPEN?

Stephen Curry  
Imperial College London  
DORA

*04 April 2019*



# Let me introduce myself...

Stephen Curry

Department of Life Sciences

Professor of Structural Biology

Director of Undergraduate Studies (retd.)

Assistant Provost (Equality, Diversity & Inclusion)

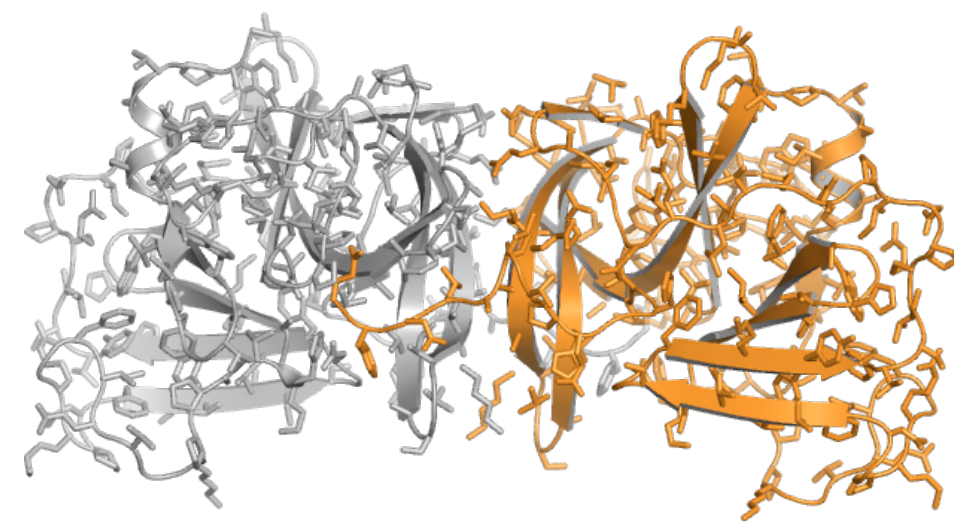
Science blogger/writer

Vice-chair, Science is Vital

Board member, CaSE

Member, HEFCE Metrics Review

Chair, Declaration on Research Assessment (DORA)



**PLOS** PATHOGENS

RESEARCH ARTICLE

## A Conserved Interaction between a C-Terminal Motif in Norovirus VPg and the HEAT-1 Domain of eIF4G Is Essential for Translation Initiation

Eoin N. Leen<sup>1\*</sup>, Frédéric Sorgeloos<sup>2</sup>, Samantha Correia<sup>1ab</sup>, Yasmin Chaudhry<sup>2</sup>, Fabien Cannac<sup>1ab</sup>, Chiara Pastore<sup>1</sup>, Yingqi Xu<sup>1</sup>, Stephen C. Graham<sup>2</sup>, Stephen J. Matthews<sup>1</sup>, Ian G. Goodfellow<sup>2</sup>, Stephen Curry<sup>1\*</sup>

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**OPEN ACCESS**

### Reciprocal Space

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Home About Stephen

← Coming Soon

I'm a Scientist – making the film →

#### Is Massively Collaborative Scientific Publishing Possible?

Posted on September 7, 2011 by Stephen

The job of a newspaper columnist is to agitate and George Monbiot did exactly that last week with a [furious rant](#) in *The Guardian* about academic publishers. It may have been an odd choice for most of his readers but Monbiot seemed to be actually shaking with rage as he laid into the companies that gather and disseminate the academic literature, flogging them repeatedly for charging scientists to publish, for demanding that they provide peer review services for free and, damn them all, for stashing journals behind paywalls that impoverish universities and prevent the public from accessing the fruits of research that their taxes have probably funded.

#### Recent Posts

- How to look at Art?
- ICYMI No. 5: Asking universities to be open about research assessment
- Transitory Mercury
- ICYMI No. 4: Books to read before university
- ICYMI No. 3: Academic publishing on the radio

<http://occamstypewriter.org/scurry/>



**DORA**

the guardian

home > science UK world politics sport football opinion culture b all

Science Occam's corner

## The scientific impact of Brexit: it's complicated

Stephen Curry

Is UK science better off in or out of the EU? The arguments are complex and only partially evidence-based. And that's not surprising



Don't be distracted by flag-waving – have a closer look at the 'facts'. Photograph: Christopher Furlong/Getty Images

@Stephen\_Curry

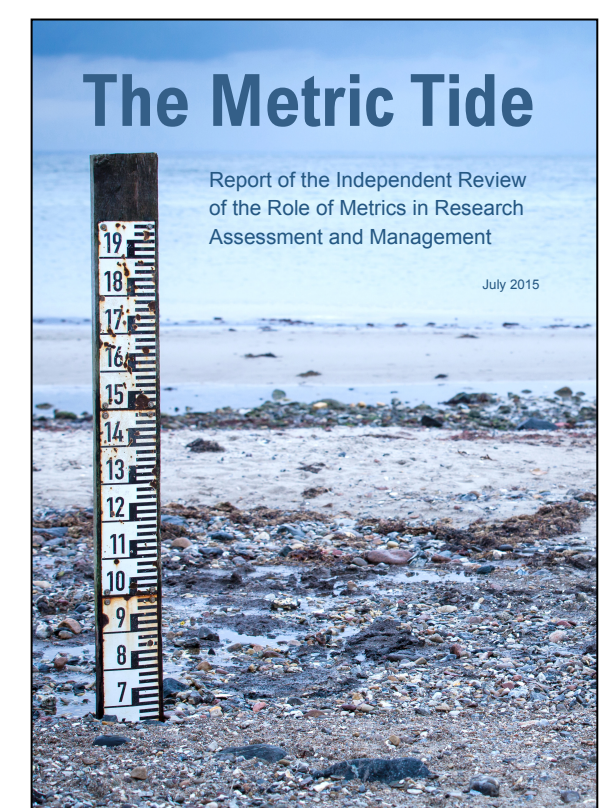
Wednesday 6 April 2016 12:00 BST

31 Shares 66 Comments

Save for later

Politics is so much more complicated than science. For every action there isn't an equal and opposite reaction and nor are there equations that predict how the system will respond to changes in the input conditions. So how do we work out what to do when it comes to the referendum on whether or not Britain should stay in the European Union?

<http://www.theguardian.com/profile/stephen-curry>





Sönke Bartling & Sascha Friesike



opening science

The Evolving Guide on How the Internet is Changing Research,  
Collaboration and Scholarly Publishing

 Springer Open

# Open Science: One Term, Five Schools of Thought

Benedikt Fecher and Sascha Friesike

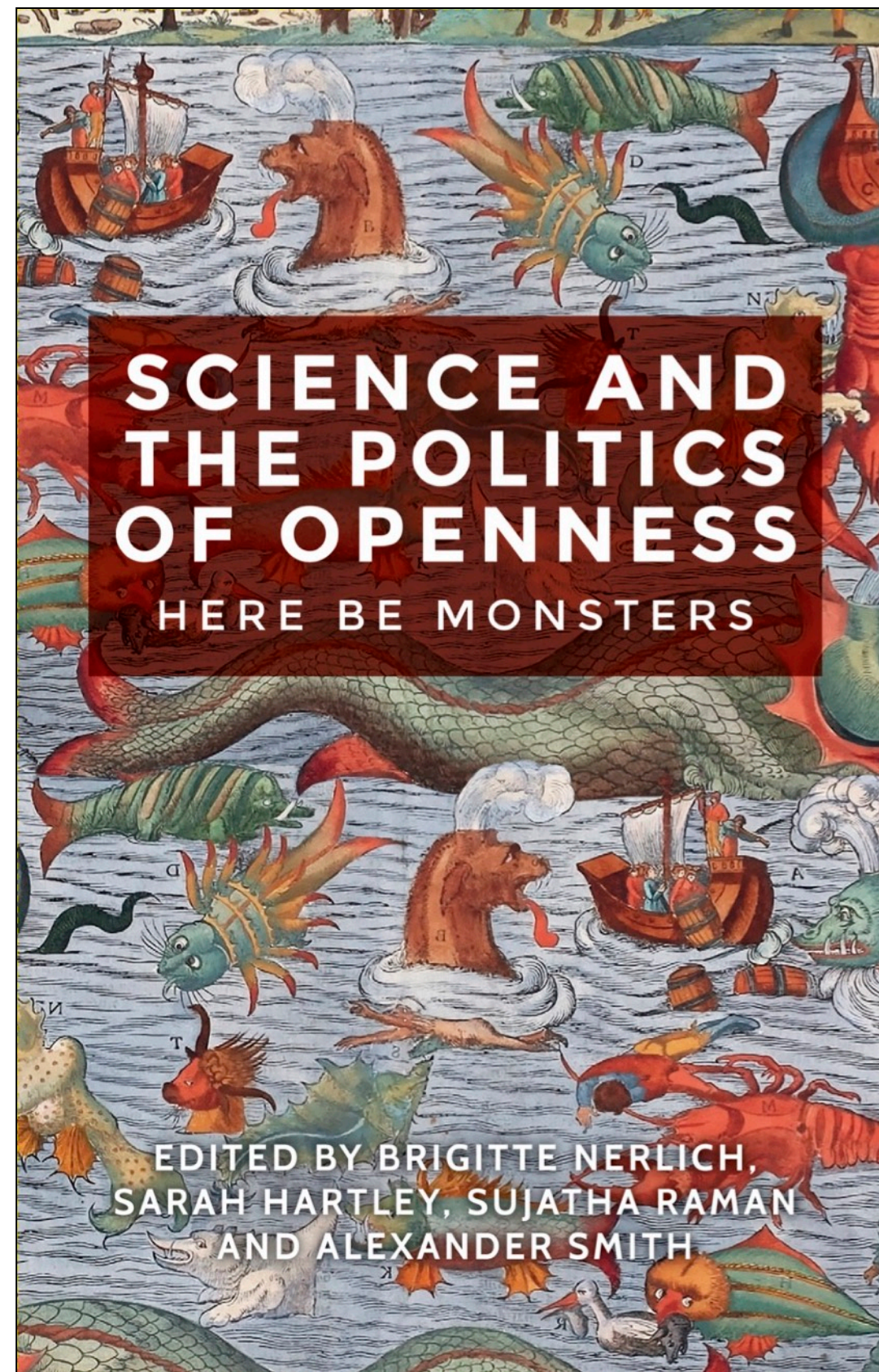
**Abstract** Open Science is an umbrella term encompassing a multitude of assumptions about the future of knowledge creation and dissemination. Based on a literature review, this chapter aims at structuring the overall discourse by proposing five Open Science schools of thought: The *infrastructure school* (which is concerned with the technological architecture), the *public school* (which is concerned with the accessibility of knowledge creation), the *measurement school* (which is concerned with alternative impact measurement), the *democratic school* (which is concerned with access to knowledge) and the *pragmatic school* (which is concerned with collaborative research).

5 schools

There is scarcely a scientist who has not stumbled upon the term ‘Open Science’ of late and there is hardly a scientific conference where the word and its meaning are not discussed in some form or other. ‘Open Science’ is one of the buzzwords of the scientific community. Moreover, it is accompanied by a vivid discourse that apparently encompasses any kind of change in relation to the future of scientific knowledge creation and dissemination; a discourse whose lowest common denominator is perhaps that science in the near future somehow needs to open up more. In fact, the very same term evokes quite different understandings and opens a multitude of battlefields, ranging from the democratic right to access publicly funded knowledge (e.g. Open Access to publications) or the demand for a better bridging of the divide between research and society (e.g. citizen science) to the development of freely available tools for collaboration (e.g. social media platforms



# Open access – freedom and responsibility



## Open access: the beast that no-one could – or should – control?

*Stephen Curry*

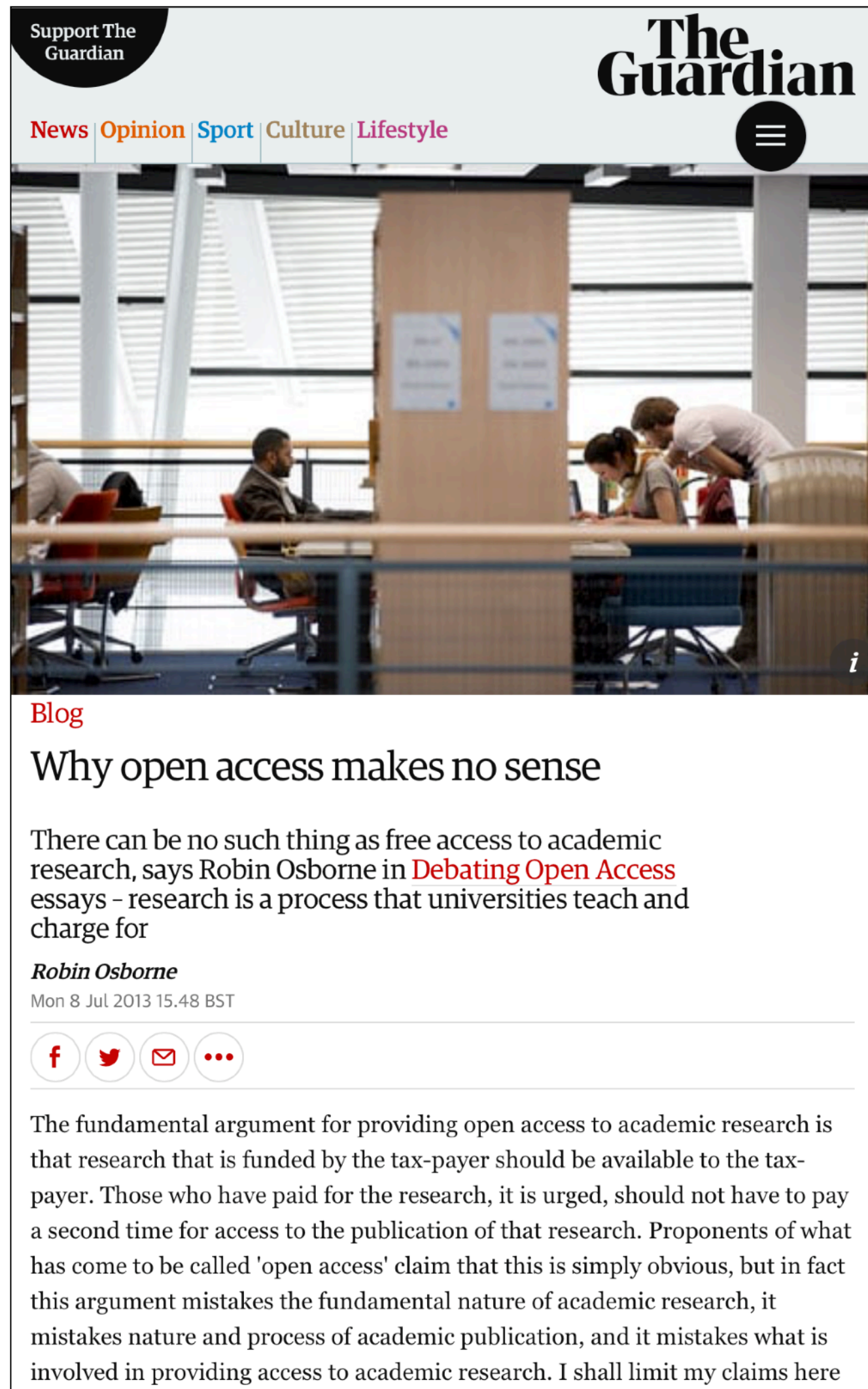
‘The main thing, it seems to me, is to remember that technology manufactures not gadgets, but social change,’ declared science historian and broadcaster James Burke in a lecture given in 1985 (Burke, 2005). This was several years before the rise of the personal computer and the internet. But history’s knack of repeating itself means that the words are no less true of the digital transformation of the world in the last two decades. The recasting of information into digital forms that can be replicated and transmitted instantly across the globe has changed our relationship with it in myriad ways. This poses commercial challenges in some industries – music, film and newspapers, for example – but at the same time has given rise to whole new businesses such as search engines, social networking and online retailing. It has also created opportunities for the public to access public information, which is changing the provision of government services and opening up new avenues for democratic dialogue.

**Rick Anderson:** Does academic freedom include the right to choose *where* to publish?

**Richard Poynder:** Is the linkage of OA policy to the REF “coercive”?



# Open access is important – but not to everyone?



The screenshot shows the top of The Guardian website with the logo and navigation links (News, Opinion, Sport, Culture, Lifestyle). Below the navigation is a large photograph of a modern library or study area with people working at long tables. The main content area features a blog post titled "Why open access makes no sense" by Robin Osborne, dated Monday 8 July 2013 15.48 BST. The post text begins with "There can be no such thing as free access to academic research, says Robin Osborne in *Debating Open Access* essays - research is a process that universities teach and charge for". Below the text is a social media sharing bar with icons for Facebook, Twitter, Email, and a generic share icon. The bottom of the screenshot shows the cover of the book "Debating Open Access" edited by Nigel Vincent and Chris Wickham, published by the British Academy.

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Blog

## Why open access makes no sense

There can be no such thing as free access to academic research, says Robin Osborne in *Debating Open Access* essays - research is a process that universities teach and charge for

**Robin Osborne**  
Mon 8 Jul 2013 15.48 BST

f t e ...

The fundamental argument for providing open access to academic research is that research that is funded by the tax-payer should be available to the tax-payer. Those who have paid for the research, it is urged, should not have to pay a second time for access to the publication of that research. Proponents of what has come to be called 'open access' claim that this is simply obvious, but in fact this argument mistakes the fundamental nature of academic research, it mistakes nature and process of academic publication, and it mistakes what is involved in providing access to academic research. I shall limit my claims here

**DEBATING OPEN ACCESS**

Edited by Nigel Vincent and Chris Wickham

BRITISH ACADEMY  
for the humanities and social sciences

“Academic research is not something to which free access is possible. Academic research is a process – a process which universities teach (at a fee)...”

“For those [others] who wish to have access, there is an admission cost: they must invest in the education prerequisite to enable them to understand the language used.”



# Academic freedom is important – but not for everyone?



## Saving Science

Science isn't self-correcting, it's self-destructing. To save the enterprise, scientists must come out of the lab and into the real world.

*Daniel Sarewitz*

The story of how things got to this state is difficult to unravel, in no small part because the scientific enterprise is so well-defended by walls of hype, myth, and denial. But much of the problem can be traced back to a bald-faced but beautiful lie upon which rests the political and cultural power of science. This lie received its most compelling articulation just as America was about to embark on an extended period of extraordinary scientific, technological, and economic growth. It goes like this:

Scientific progress on a broad front results from the free play of free intellects, working on subjects of their own choice, in the manner dictated by their curiosity for exploration of the unknown.



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## Life science organisations call on Government to invest in basic research

By MARTIN TURNER | Published: 08/09/2015

Almost 200 life sciences organisations – from funders to pharmaceuticals companies – have written to the *Financial Times* to ask the UK government to protect its investment in science in the forthcoming Spending Review. The letter, signed by leading investors, companies, and charities, many of which are CaSE members, argues that long-term public funding provides the foundation for the country's world-leading multidisciplinary research base. This delivers wide-ranging improvements to people's health and wellbeing, underpins the development and retention of a highly skilled workforce, and ultimately drives economic growth and productivity.



## Tell Them Science is Vital

Now that parliament has been dissolved and the election campaign is in full swing, we are moving into the second phase of our [Tell them Science is Vital](#) campaign.

All the candidates vying for your vote on May 7th will be out and about in your constituency. So if you meet them – in the street, at hustings or on the doorstep – we'd really like you to ask them about science funding.

Ask them about their plans to ensure that the UK retains the world-class research base needed to boost the economy and tackle many of the problems – healthcare, climate change, energy and food supply – facing the country. And if they don't have a plan, give them some ideas!

Remember that the freeze on science spending since 2010 means that the budget has depreciated in real terms by up to 20%. In fact, it has now dropped below 0.5% of GDP for the first time in 20 years. The time to act is now.

## What can you do?

We want you to help us push public investment in science and innovation to the forefront of candidates' minds. To do that we are providing [an eye-catching poster](#) highlighting your support for science that you can put in the

This house supports UK science

## About us...

Find out more about who we are, and what we're doing.

## Latest News

Tell them Science is Vital – Phase II  
13 April 2015  
Now that parliament has been dissolved and the election campaign is in full swing, we are moving into the second phase of our Tell them read more >

## Get campaign updates

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European Union funding  
for Research & Innovation

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Home > Projects & figures > Stories

STORIES

17-05-2017

CAN ALGORITHMS STEAL ELECTIONS?

The effect social media have on political discourse has been subject of intense discussion, especially since the UK referendum and US elections in 2016. A researcher funded by the European Research Council (ERC) is trying to shed light onto the ways politicians use online social networks and the murky world of political algorithms.

02-05-2017

MIGRATION AND CRIME CONTROL PRACTICES ACROSS EUROPE

Regulating migration has become a key priority for European countries and, according to Prof. Katja Franko, crime control practices and penal cultures have evolved across the continent as a consequence. With ERC support, she has studied these new hybrid and intertwined forms of migration and crime control policies, a phenomenon she calls 'Crimmigration control'.

28-04-2017

BRINGING EQUAL OPPORTUNITIES TO IMMIGRANT CHILDREN

Some school systems in Europe are highly segregated, the Belgian one especially. Poorer standards of education

Free text search

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Domain/Panel

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Publication year

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# On being open with the public



*“People in this country have had enough of experts.”*

Michael Gove, MP

the guardian  
website of the year

home > science UK world politics sport football opinion culture business all

Science  
Political science

## Why science needs progressive voices more than ever

Amid the row over Brexit, the sector must loosen links to society's elite and speak up for those who have been marginalised



Scientists were among those who participated in the People's Climate March in New York and cities around the world in September 2014. Photograph: Jason DeCrow/AP

Alice Bell 

Wednesday 6 July 2016 16.00 BST

      Save for later

Shares 153 Comments 29

Brexit has thrown British science [into a mess](#). During this period of political upheaval, it might be tempting to duck the challenge of picking sides, and instead

<https://www.theguardian.com/science/political-science/2016/jul/06/why-science-needs-progressive-voices-more-than-ever>

“too often [public engagement initiatives] fail to build meaningful relationships between science and the public, preferring instead to act as fluffy PR agents for the scientific establishment. **We badly need more projects [...] that share the benefits of expertise and lets people feel part of driving science and engineering.**”

Alice Bell

“One reason there is not enough truth in the public square is that we have taken academia's contribution in scholarly journals and locked it up behind paywalls where the rest of the world cannot see it. That simply has to end, not because of a moral crusade but because we need that truth, out in the open, fighting for us.”

William Cullerne-Bown

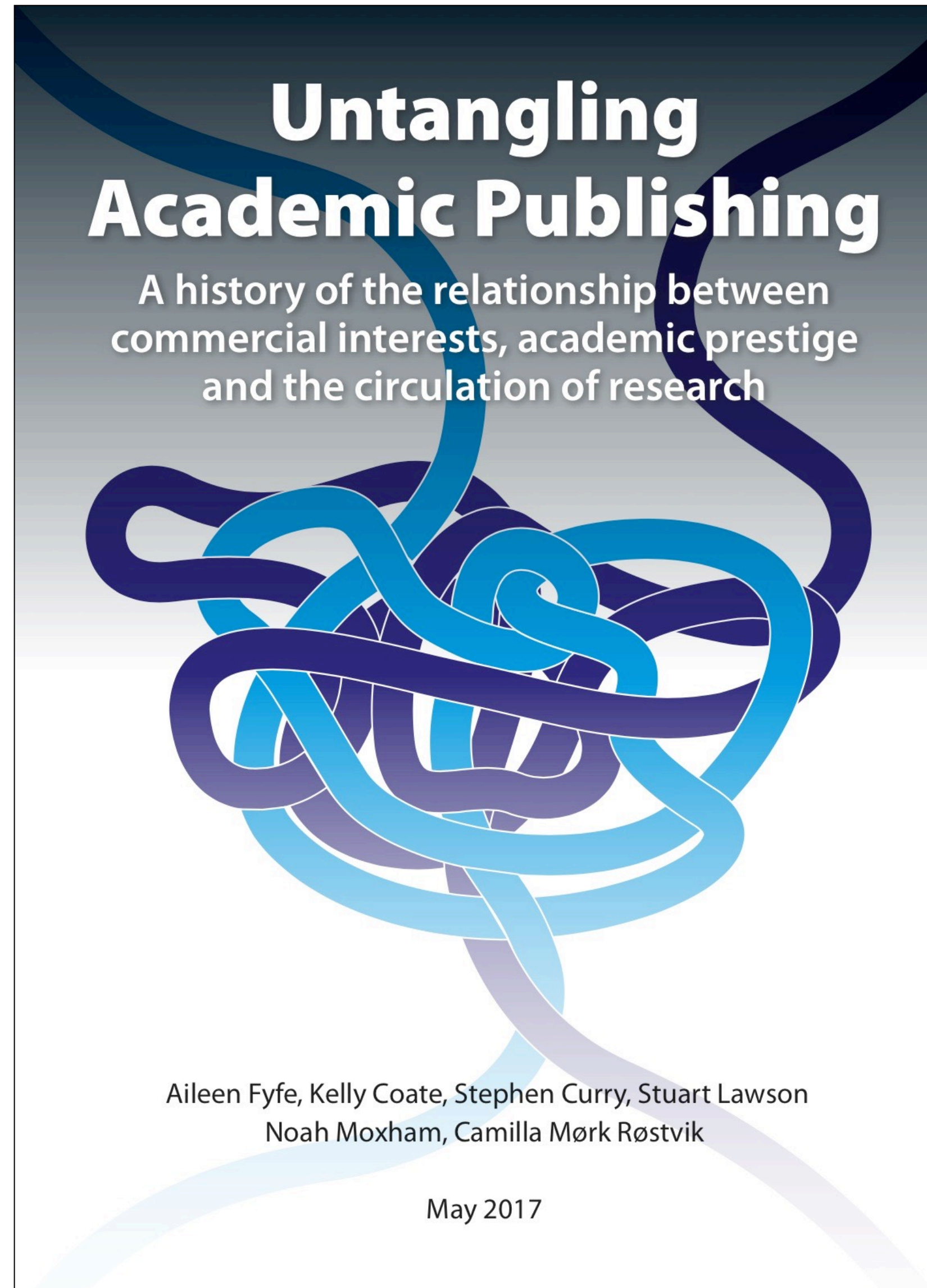
<https://research.unity.ac/content/rr/S1gKZQaAl>



# Academic prestige as a drag on openness



“The professional incentives for academic scientists to assert their elite status are perverse and crazy, and promotion and tenure decisions focus above all on how many research dollars you bring in, how many articles you get published, and how often those articles are cited in other articles.”



“Since the Second World War, academic publishing practices have had to cope with enormous changes in the **scale** of the research enterprise, in the **culture and management** of higher education, and in the ecosystem of scholarly publishers. The pace of change has been particularly rapid in the last twenty-five years, thanks to **digital technologies**. This has also been a time of **growing divergence** between the different roles of academic publishing: as a **means of disseminating validated knowledge**, as a **form of symbolic capital for academic career progression**, and as a **profitable business enterprise**.”



# Negative effects of over-reliance on metrics based on academic papers

## Sick of Impact Factors

Posted on August 13, 2012 by Stephen

I am sick of impact factors and so is science.

The impact factor might have started out as a good idea, but its time has come and gone. [Conceived by Eugene Garfield](#) in the 1970s as a useful tool for research libraries to judge the relative merits of journals when allocating their subscription budgets, the impact factor is [calculated](#) annually as the mean number of citations to articles published in any given journal in the two preceding years.



<http://occamstypewriter.org/scurry/2012/08/13/sick-of-impact-factors/>

- slows publication & reduces productivity
- positive bias in the literature
- JIF correlates with retraction rate
- impact on reliability & public trust?



“The most common complaint from reviewers is that authors are overselling their work.”

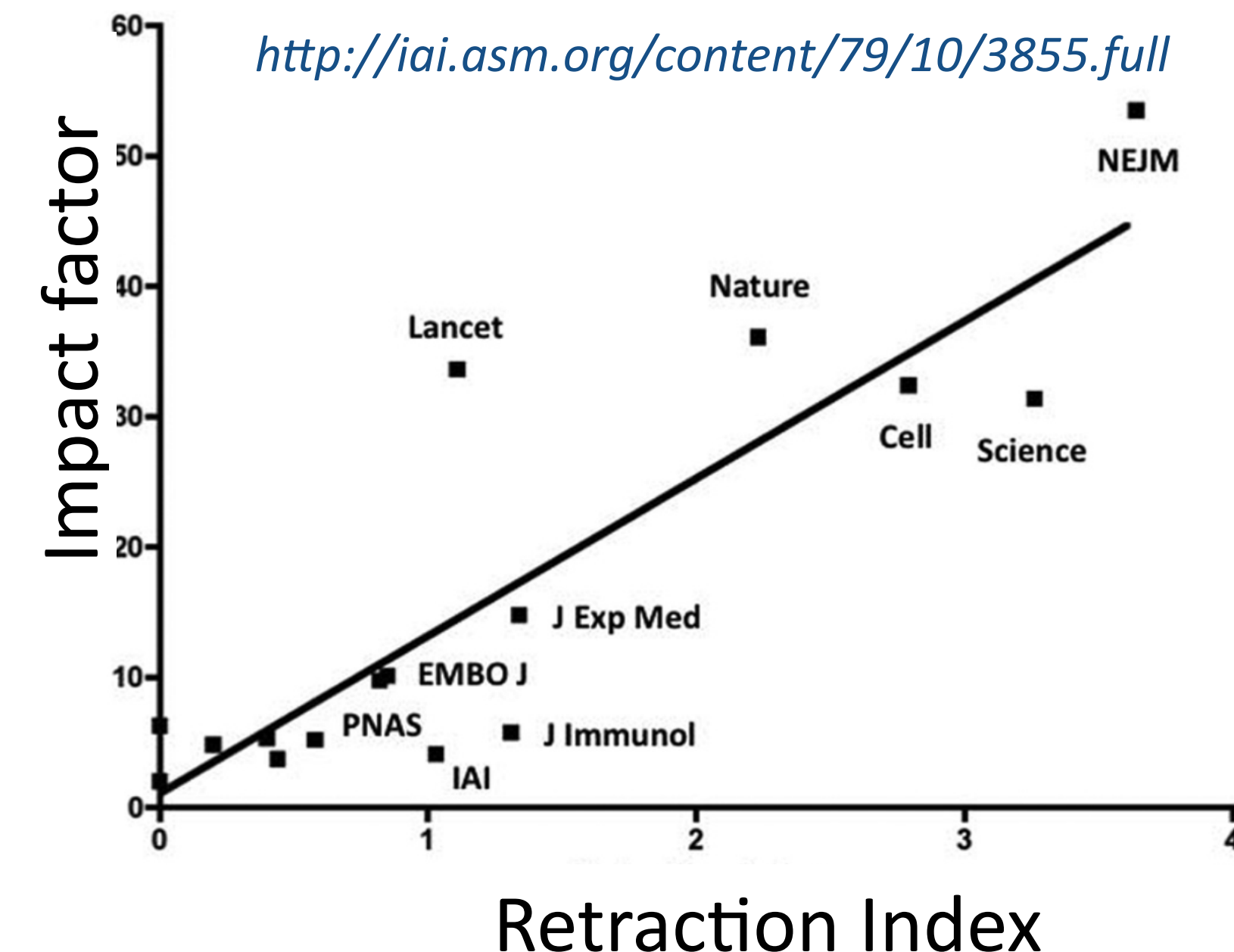
Jan 2015

*“Our people know how to get the Nature papers...”*

*Faculty Dean (University of X)*

*“I’m really excited. We just had a big paper in Cell... !”*

*Postdoc (University of Y)*





# Negative effects of over-reliance on metrics based on academic papers

- devaluation of other important activities
- growing cynicism among academics?
- stress on the individual

## THE CULTURE OF SCIENTIFIC RESEARCH IN THE UK

- In some cases the culture of scientific research does not support or encourage scientists' goals and the activities that they believe to be important for the production of high quality science.
- There seem to be widespread misperceptions or mistrust among scientists about the policies of those responsible for the assessment of research.

<http://nuffieldbioethics.org/project/research-culture/>

Aug 2014

**nature** International weekly journal of science

Home | News & Comment | Research | Careers & Jobs | Current Issue | Archive | Audio & Video | For Authors

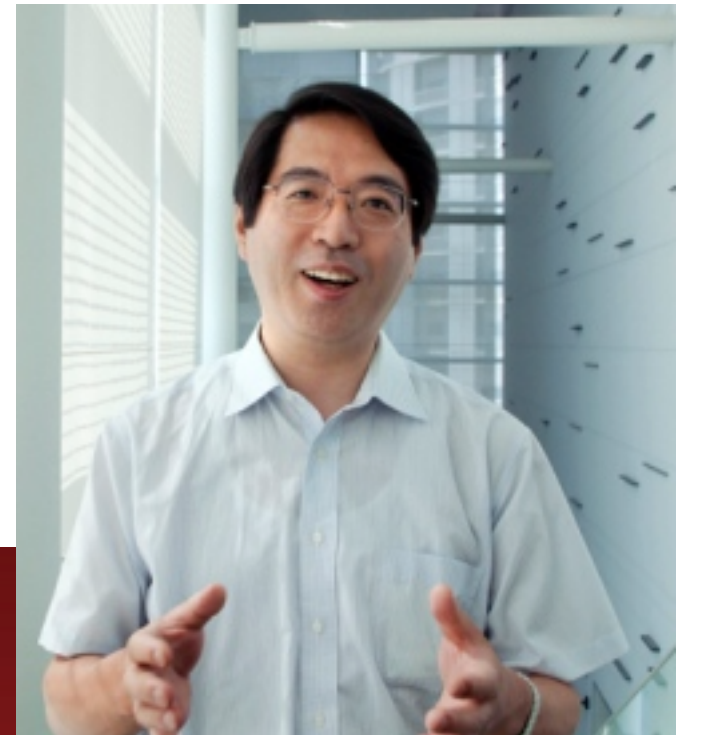
News & Comment > News > 2015 > January > Article

NATURE | NEWS



### Stem-cell scientists mourn loss of brain engineer

A famous name in regenerative medicine, Yoshiki Sasai was found dead on 5 August.



“...metrics favour basic research over fields of research that are closer to practice...”

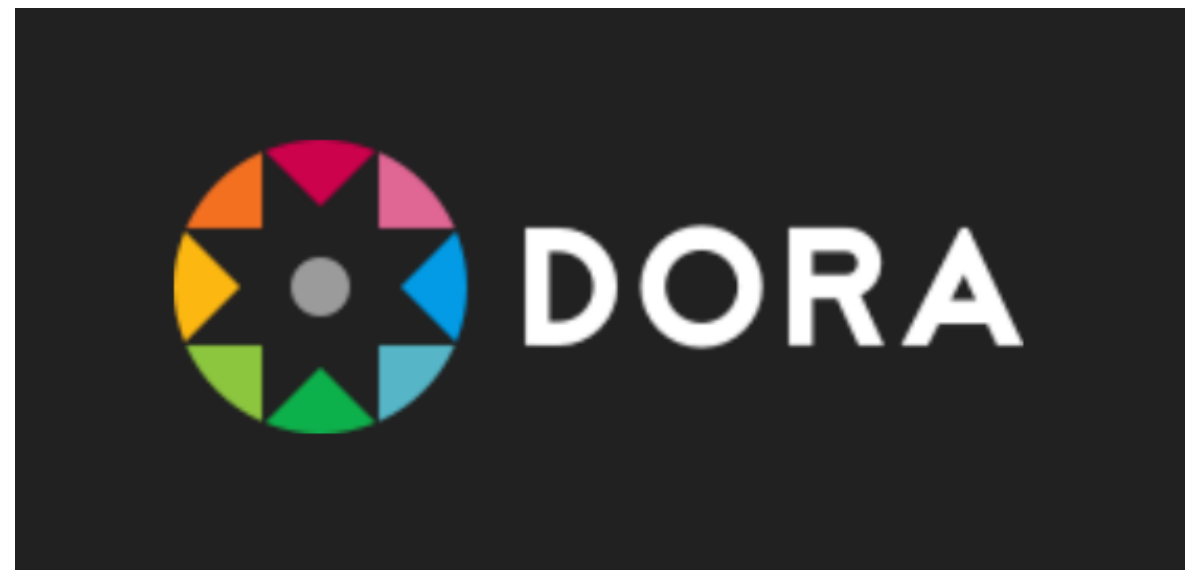
*Despite* personal ideals and good intentions, in this incentive and reward system researchers find themselves pursuing not the work that benefits public or preventive health or patient care the most, but **work that gives most academic credit** and is better for career advancement.”

Frank Miedema

<https://blogs.bmj.com/openscience/2018/01/24/setting-the-agenda-who-are-we-answering-to/>



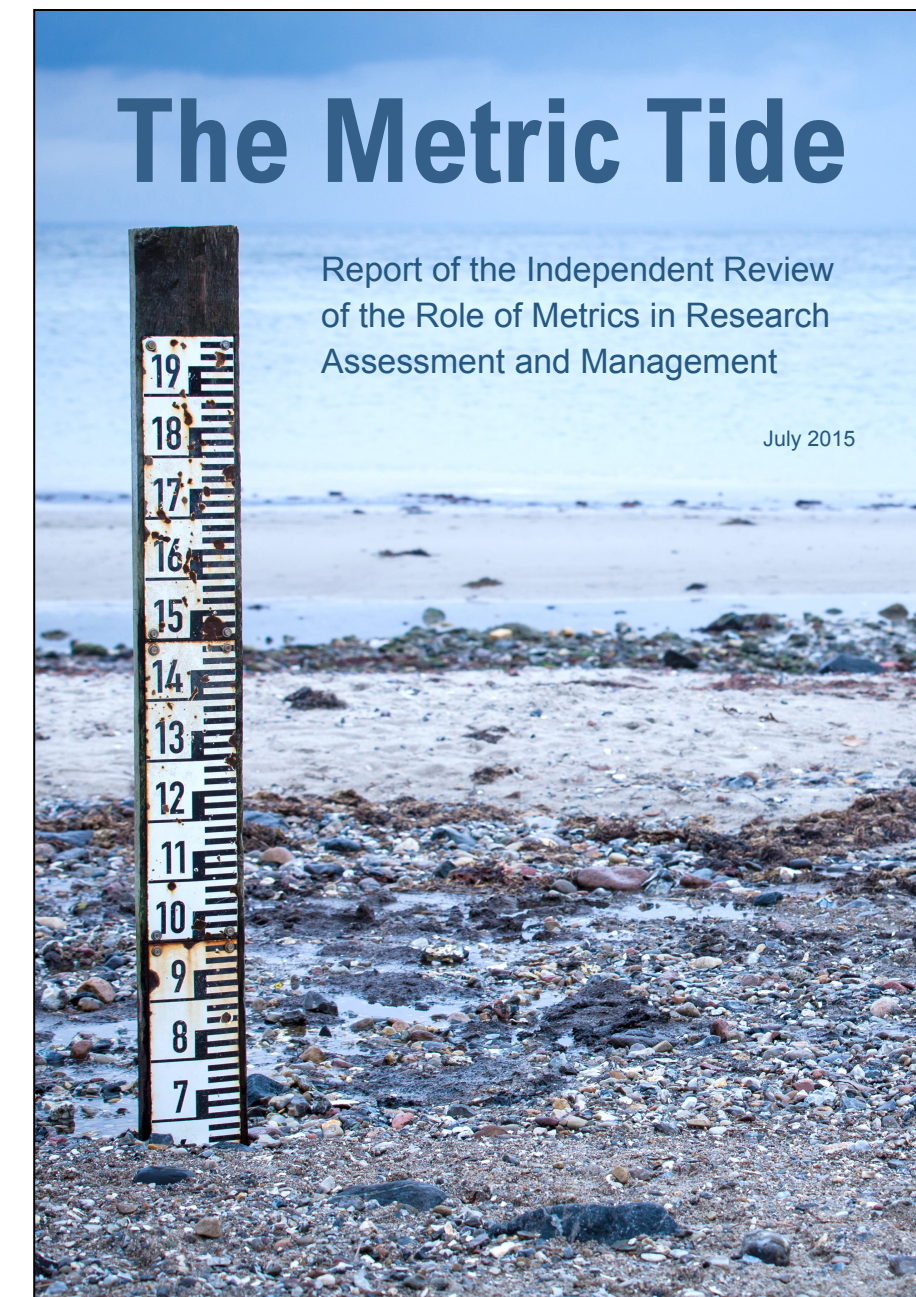
# Can we swim against the metric tide?



<http://sfdora.org>



<http://www.leidenmanifesto.org>



*UK Forum for Responsible Research Metrics*

## Researcher assessment at UMC Utrecht

1. Research, publications, grants
2. Managerial & academic duties
3. Mentoring & teaching
4. Clinical work (if applicable)
5. Entrepreneurship & outreach

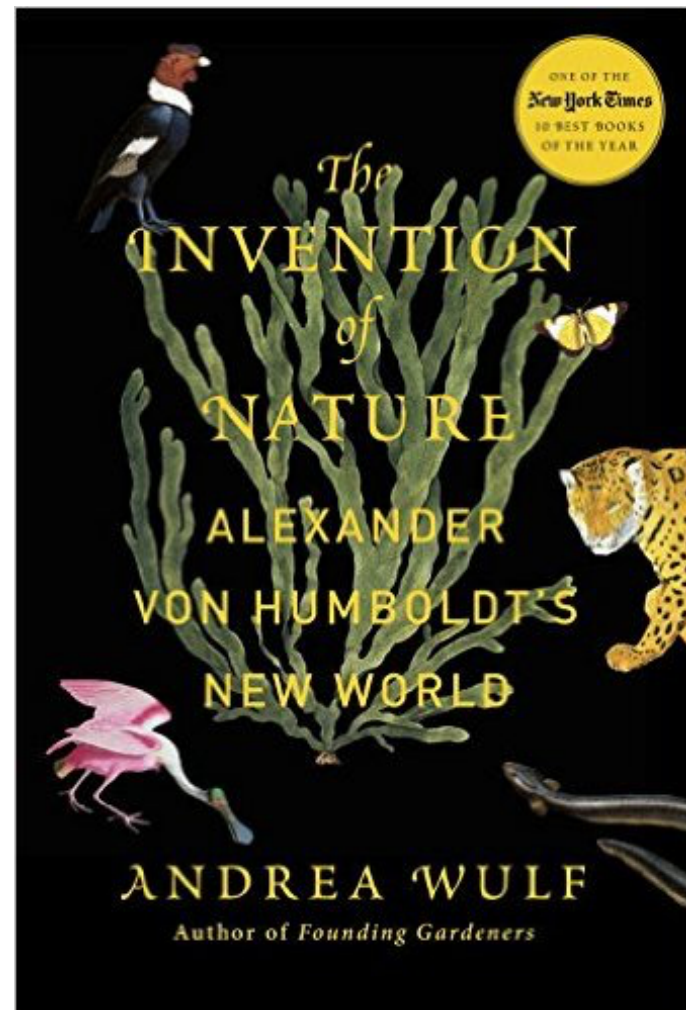


## Fewer numbers, better science

Scientific quality is hard to define, and numbers are easy to look at. But bibliometrics are warping science — encouraging quantity over quality. Leaders at two research institutions describe how they do things differently.



# Can the **openness** of our scientific heritage help us?



Maths, objective observation and controlled experiments paved this path of reason across the western world. Scientists became citizens of their self-proclaimed 'republic of letters', an intellectual community that transcended national boundaries, religion and language. As their letters zigzagged across Europe and the Atlantic, scientific discoveries and new ideas spread. This 'republic of letters' was a country without borders, ruled by reason and not by monarchs.

Does the republic of letters still exist?

Is our amateur (and open) ethos *still* one of the norms of the academy?



# Openness as a good in itself: a path to greater scientific integrity, impact *and* public trust



“The principle that the results of research that has been **publicly funded** should be **freely accessible** in the public domain is a compelling one, and **fundamentally unanswerable.**”

Dame Janet Finch (2012)

Declarations are not enough...

Positive moves:

- Funder mandates
- Funder support for preprints & OA mega-journals: faster, open, better...
- Largest possible audience (sharing & scrutiny = public trust)
- Fosters open peer review
- Focus on the content, not the container ('objective' peer review)
- Support for data and code-sharing

Peer review and scientific publishing

Occam's corner

Stephen Curry

@Stephen\_Curry

Monday 7 September 2015 11.00 BST

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Save for later

Peer review, preprints and the speed of science

Peer review is often claimed to be the guarantor of the trustworthiness of scientific papers, but it is a troubled process. Preprints offer a way out

Subediting skills for writers Photograph: Joanna Penn/Flickr

A few weeks ago my collaborators and I submitted our latest paper to a scientific journal. We have been investigating how noroviruses subvert the molecular machinery of infected cells and have some interesting results. If it passes peer review, our paper could be published in three or four months' time. If it's rejected, we may have to re-work the manuscript before trying our luck with another journal. That will delay publication even further - it's not unheard of for papers to take a year or more to get out of the lab and into the world, even in the digital age.

Science

Occam's corner

Zika virus initiative reveals deeper malady in scientific publishing

Stephen Curry

Moves to speed up the release of Zika virus research in response to the public health crisis highlight a systemic failure in scientific publishing. Help could be at hand at the ASAPbio meeting today in the USA

Contact author

@Stephen\_Curry

Tuesday 16 February 2016 11.54 GMT

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Save for later

Too far behind a screen - Zika scientists are set to benefit from the rapid release of research on the virus Photograph: Victor Moriyama/Getty Images

In response to the rapid spread of Zika virus across Central and South America, now [declared to be an international public health emergency](#) by the World Health Organisation, a consortium of research funders, institutes and publishers have committed to sharing data and results relevant to the crisis “as rapidly and openly as possible.”

W

wellcome

Wellcome Open Research

A new way for Wellcome-funded researchers to rapidly publish any results they think are worth sharing.

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For Wellcome-funded researchers

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For UCL-based researchers

UCL Child Health Open Research

SUBMIT

HRB

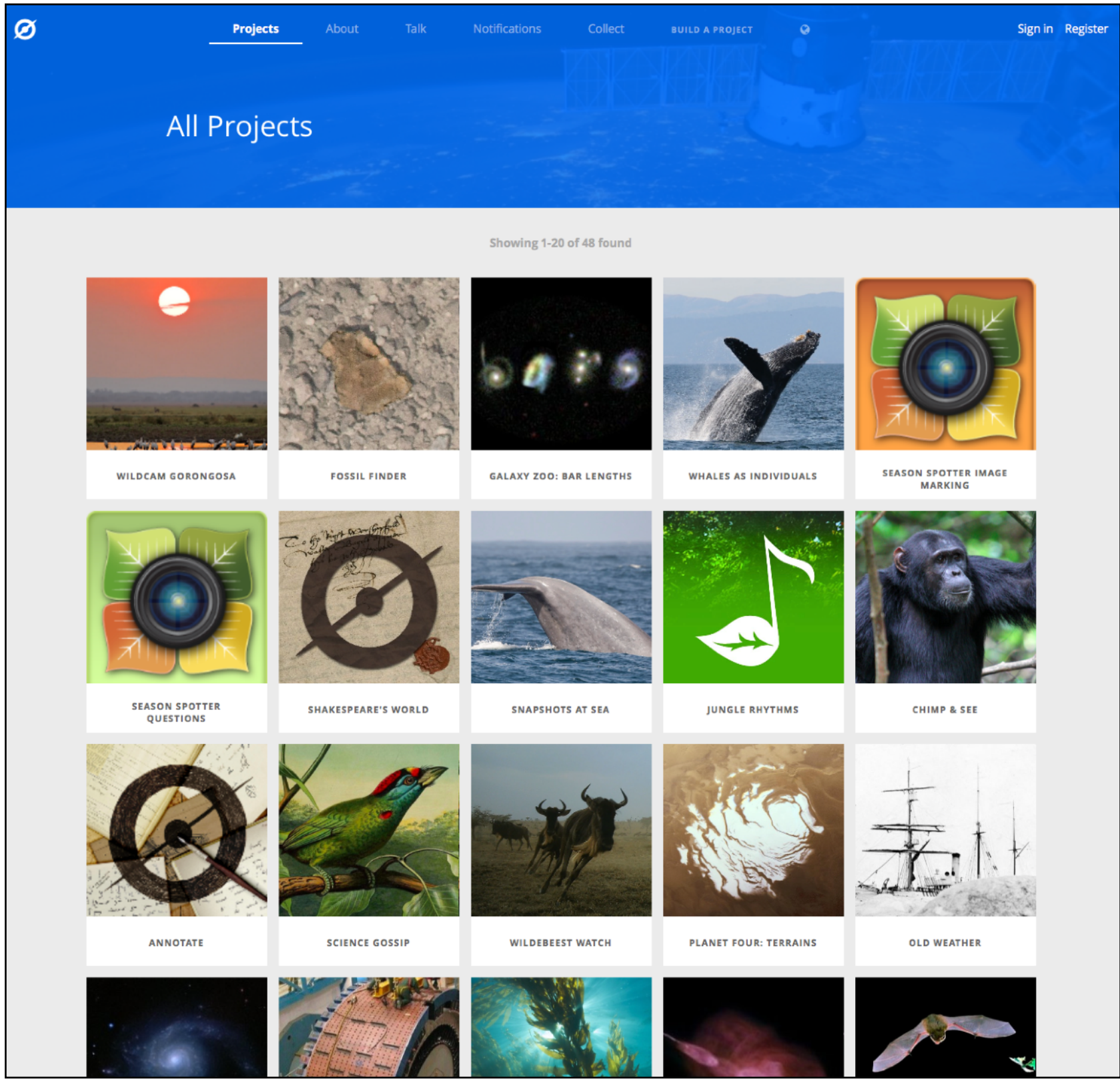
For HRB-funded researchers


HRB Open Research

SUBMIT



# Openness as a good in itself: a path to greater scientific integrity, impact *and* public trust





## Principles for Predicting RNA Secondary Structure Design Difficulty

**Jeff Anderson-Lee<sup>1,†</sup>, Eli Fisker<sup>1,†</sup>, Vineet Kosaraju<sup>1,2,†</sup>, Michelle Wu<sup>1,3,†</sup>, Justin Kong<sup>1,4</sup>, Jeehyung Lee<sup>1,4</sup>, Minjae Lee<sup>1,4</sup>, Mathew Zada<sup>1</sup>, Adrien Treuille<sup>1,4,5</sup> and Rhiju Das<sup>1,2,6</sup>**  
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<http://dx.doi.org/10.1016/j.jmb.2015.11.013>  
**Edited by A. Pyle**

### Abstract

Designing RNAs that form specific secondary structures is enabling better understanding and control of living systems through RNA-guided silencing, genome editing and protein organization. Little is known, however, about which RNA secondary structures might be tractable for downstream sequence design, increasing the time and expense of design efforts due to inefficient secondary structure choices. Here, we present insights into specific structural features that increase the difficulty of finding sequences that fold into a target RNA secondary structure, summarizing the design efforts of tens of thousands of human participants and three automated algorithms (RNAInverse, INFO-RNA and RNA-SSD) in the Eterna massive open laboratory. Subsequent tests through three independent RNA design algorithms (NUPACK, DSS-Opt and MODENA) confirmed the hypothesized importance of several features in determining design difficulty, including sequence length, mean stem length, symmetry and specific difficult-to-design motifs such as zigzags. Based on these results, we have compiled an Eterna100 benchmark of 100 secondary structure design challenges that span a large range in design difficulty to help test future efforts. Our *in silico* results suggest new routes for improving computational RNA design methods and for extending these insights to assess “designability” of single RNA structures, as well as of switches for *in vitro* and *in vivo* applications.

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Citizen science teaches researchers about  
new (non-traditional) audiences & scientists

Communication + Participation = Public Trust





# Our open future in Europe...?

<https://publications.europa.eu/en/publication-detail/-/publication/47a3a330-c9cb-11e7-8e69-01aa75ed71a1/language-en>

## Evaluation of Research Careers fully acknowledging Open Science Practices

Rewards, incentives and/or recognition for researchers practicing Open Science

### EXECUTIVE SUMMARY

Open Science represents an approach to research that is collaborative, transparent and accessible<sup>1</sup>. There are a wide range of activities that come under the umbrella of Open Science that include open access publishing, open data, open peer review and open research. It also includes citizen science, or more broadly, stakeholder engagement, where non specialists engage directly in research. Open Science goes hand in hand with research integrity and requires legal and ethical awareness on the part of researchers. A driver for Open Science is improving the transparency and validity of research as well as in regards to public ownership of science, particularly that which is publicly funded.

The conclusion is actually simple: the evaluation of research is the keystone, and it has already been identified by scholars around the world, and by various expert groups within the European Commission, as structuring a global research architecture characterised by an unlimited quest for rankings. The ranking imperative affects all levels of the research structure, and it tends to constrain change for nearly all actors. This is true of individual researchers, of research groups, of whole research institutions, and even of whole countries. Symmetrically, publishers design their marketing strategies around journal rankings. But they too have become prisoners of this strategy, even though they benefit from it, and they have difficulties seeing beyond it.

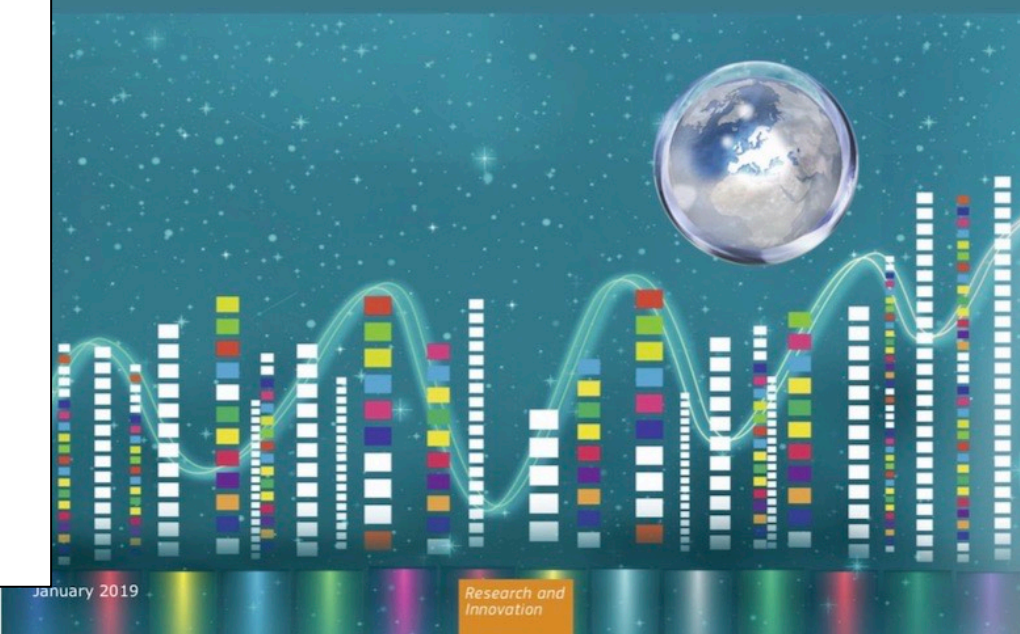
Funding agencies also use rankings, sometimes abundantly. However, unlike the other actors, private funding charities are not ranked, and public, national, funders are ranked only indirectly, through their own country. As a result, funders in general enjoy more latitude than the other actors in scholarly communication and publishing. The European

<https://publications.europa.eu/en/publication-detail/-/publication/464477b3-2559-11e9-8d04-01aa75ed71a1>




## Future of Scholarly Publishing and Scholarly Communication

Report of the Expert Group to the European Commission





# Plan S and research evaluation



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Research


NEWS • 04 SEPTEMBER 2018

## Radical open-access plan could spell end to journal subscriptions

Eleven research funders in Europe announce 'Plan S' to make all scientific works free to read as soon as they are published.


Holly Else

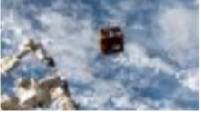





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**LATEST NEWS ARTICLES**

Ice-tracking satellite launches after 10 years in the works

Stand back, Aquaman: Harpoon-throwing satellite takes aim at space junk

AI helps unlock 'dark matter' of bizarre superconductors

Robert-Jan Smits, the European Commission's special envoy on open access, spearheaded the Plan S initiative. Credit: Nikolay Doychinov/EU2018BG

Research funders from France, the United Kingdom, the Netherlands and eight other European nations have Display a menu dical open-access initiative that could

“We also understand that researchers may be driven to do so by a misdirected reward system which puts emphasis on the wrong indicators (e.g. journal impact factor). **We therefore commit to fundamentally revise the incentive and reward system of science**, using the San Francisco Declaration on Research Assessment (DORA) as a starting point.

<https://www.scienceeurope.org/coalition-s/>

News | 5 November 2018

## Wellcome is updating its open access policy

Following a six-month review, we're updating our open access (OA) policy. The changes will apply from 1 January 2020. Robert Kiley, Head of Open Research, explains what will be different and why.

“5. Wellcome-funded organisations must sign or publicly commit to the San Francisco Declaration on Research Assessment (DORA), or an equivalent. **We may ask organisations to show that they're complying with this as part of our organisation audits.** This is a new requirement to encourage organisations to consider the intrinsic merit of the work when making promotion and tenure decisions, not just the title of the journal or publisher.”

<https://www.nature.com/articles/d41586-018-06178-7>



# Plan S: the debate

## A Response to Plan-S from Academic Researchers: Unethical, Too Risky!

### Summary

Open access (OA) publishing in general has many advantages over traditional subscription, or toll access (TA), publishing: it not only makes science accessible to a larger public, but also expands the reach of individual researchers and the potential impact of their research. Plan S is a noble effort

### Academic freedom and responsibility: why Plan S is not unethical

Posted on [October 1, 2018](#) by [Stephen](#)

Since its [announcement](#) on 4th September the European Commission's plan to make a radical shift towards open access (OA) has caused [quite a stir](#). Backed by eleven\* national funding agencies, the plan aims to make the research that they support free to read as soon as it is published. This is a major challenge to the status quo, since the funders are effectively placing subscription journals off limits for their researchers, even if the journals allow green OA (publication of the author-accepted manuscript) after cases where journals are "admirably strong" in certain aspects. Others [academics](#) is the is published and

## On Academic Freedom and Responsibility

Posted on [October 1, 2018](#) by [jbrittholbrook](#)

Today, Stephen Curry published a piece on his [blog](#) on "[Academic freedom and responsibility: why Plan S is not unethical](#)," and I want to offer a response to some of his arguments here.

The first thing to say is that I think Curry and I agree on quite a few points. We especially agree that to speak of academic freedom means we should also to speak of academic responsibility. For six years (2012-2018), I was a member of the American Association for the Advancement of Science (AAAS) Committee on Scientific Freedom and Responsibility. I fully support the [AAAS Statement on Scientific Freedom and Responsibility](#), which the Committee co-authored:

### Reaction of Researchers to Plan S; Too far, too risky?

*An Open Letter from Researchers to European Funding Agencies, Academies, Universities, Research Institutions, and Decision Makers*

We support open access (OA) and Plan S is probably written with good intentions. However, Plan S<sup>1</sup>, as currently presented by the EU (and several national funding agencies) goes too far, is unfair for the scientists involved and is too risky for science in general. Plan S has far-reaching consequences, takes insufficient care of the desires and wishes of the individual scientists and creates a range of unworkable and undesirable situations:



### The Open Letter: Reaction of Researchers to Plan S: too far, too risky.

### A response of the Fair Open Access Alliance

We write to provide a counter view to the recent open letter ("Plan S: Too Far, Too Risky"),<sup>1</sup> partly based on our FOAA recommendations for the implementation of Plan S.<sup>2</sup> We are glad to note that the researchers who have signed the open letter support open access as their very first principle. However, the letter itself goes on to make a number of highly problematic and logically fallacious statements with which we strongly disagree and here contest.



# Our open future: the responsibility of researchers



“We would ask scholars to consider the responsibilities that sit alongside academic freedom and to reflect on whether they might re-prioritise the duty to communicate rapidly and widely in the face of the reputational credit that is earned through publication. Given the crucial role that academics play in peer review, we occupy a central and influential position.”

The image is a screenshot of the UKSCL website. At the top is a dark navigation bar with the UKSCL logo and links for 'ABOUT THE UK-SCL', 'POLICY', 'INFORMATION FOR . . .', 'RESOURCES', 'ENDORSEMENTS', 'NEWS & VIEWS', and 'CONTACT'. Social media icons for Facebook, Twitter, LinkedIn, and a search icon are on the right. The main banner features a background image of hands typing on a laptop. The text on the banner reads: 'UK SCHOLARLY COMMUNICATIONS LICENCE AND MODEL POLICY', followed by the large heading 'RESEARCHERS RETAIN RE-USE RIGHTS IN THEIR OWN WORK'. Below this, a paragraph states: 'The UK-SCL is an open access policy mechanism which ensures researchers can retain re-use rights in their own work, they retain copyright and they retain the freedom to publish in the journal of their choice (assigning copyright to the publisher if necessary)'. This is followed by two bullet points: 'Re-use rights retention enables early public communication of research findings and use in research and teaching, including online courses. Increased visibility of research outputs greatly improves opportunities for increased impact and citations.' and 'A single deposit action under the model policy ensures eligibility for REF2021 and compliance with most funder deposit criteria. Researchers retain copyright and remain free to assign it to the publisher'.

<https://ukscl.ac.uk>



# Good (open) practices don't spread by themselves

## *Why was anaesthesia adopted more rapidly than antiseptics?*

**“First**, one combatted a visible and immediate problem (pain); the other combatted an invisible problem (germs) whose effects wouldn't be manifest until well after the operation.

**“Second**, although both made life better for patients, only one made life better for doctors.”

**“People talking to people is still the way that norms and standards change.”**

ANNALS OF MEDICINE JULY 29, 2013 ISSUE

## SLOW IDEAS

*Some innovations spread fast. How do you speed the ones that don't?*

 **By Atul Gawande**

**W**hy do some innovations spread so swiftly and others so slowly? Consider the very different trajectories of surgical anesthesia and antiseptics, both of which were discovered in the nineteenth century. The first public demonstration of anesthesia was in 1846. The Boston surgeon Henry Jacob Bigelow was approached by a local dentist named William Morton, who insisted that he had found a gas that could render

the pain of  
dramatic claim. In  
for tooth  
ating. Without  
surgeons learned  
speed.  
tients down as  
rashed, until they  
y. Nothing ever tried had made much difference.  
agreed to let Morton demonstrate his claim.



*We yearn for frictionless, technological solutions. But people talking to people is still the way that norms and standards change.*

ILLUSTRATION BY HARRY CAMPBELL





Thank you

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