



# SCIENCE EUROPE CONFERENCE ON OPEN SCIENCE

18 & 19 OCTOBER 2022

MARC SCHILTZ

# Open Science and the Ethos of Science

Robert K. Merton, 1942. The Normative Structure of Science :

***“The institutional conception of science as part of the public domain is linked with the imperative for communication of findings. Secrecy is the antithesis of this norm; full and open (sic) communication its enactment.”***

# Reasons to push for Open Science

## 1. Scientific

Paywalls hamper the dissemination of research outcomes within the scientific community

## 2. Societal

Paywalls hamper the uptake of research outcomes by society

## 3. Ethical

Outcomes from publicly-funded research should remain in the public domain

## 4. Economic

Unsustainable publishing models

Opportunity costs of not making data and outcomes available

# Reasons to push for Open Science



Cape Town | The mission of the South African Medical Research Council (SAMRC) is to improve the health of the country's population, through research, development and health innovation, so that South Africans can enjoy a better quality of life. The SAMRC is largely funded from South African tax payers through the South African government.

The SAMRC believes that the best way to improve the health of the nation is to facilitate a move in which all the world's research is freely available and accessible at the time of publication and licensed in ways that encourages others to build on this knowledge. This ambition however, will only be realised if funding agencies – in partnership with others – work together. As such, the SAMRC has agreed to align its open access policy with Plan S and join the global coalition of research funders - cOAlition S. We recognise that there are significant challenges in bringing about this global change, but by working collaboratively these can be addressed.

# Shaping the future of research ?

**Vox**

## **The 7 biggest problems facing science, according to 270 scientists**

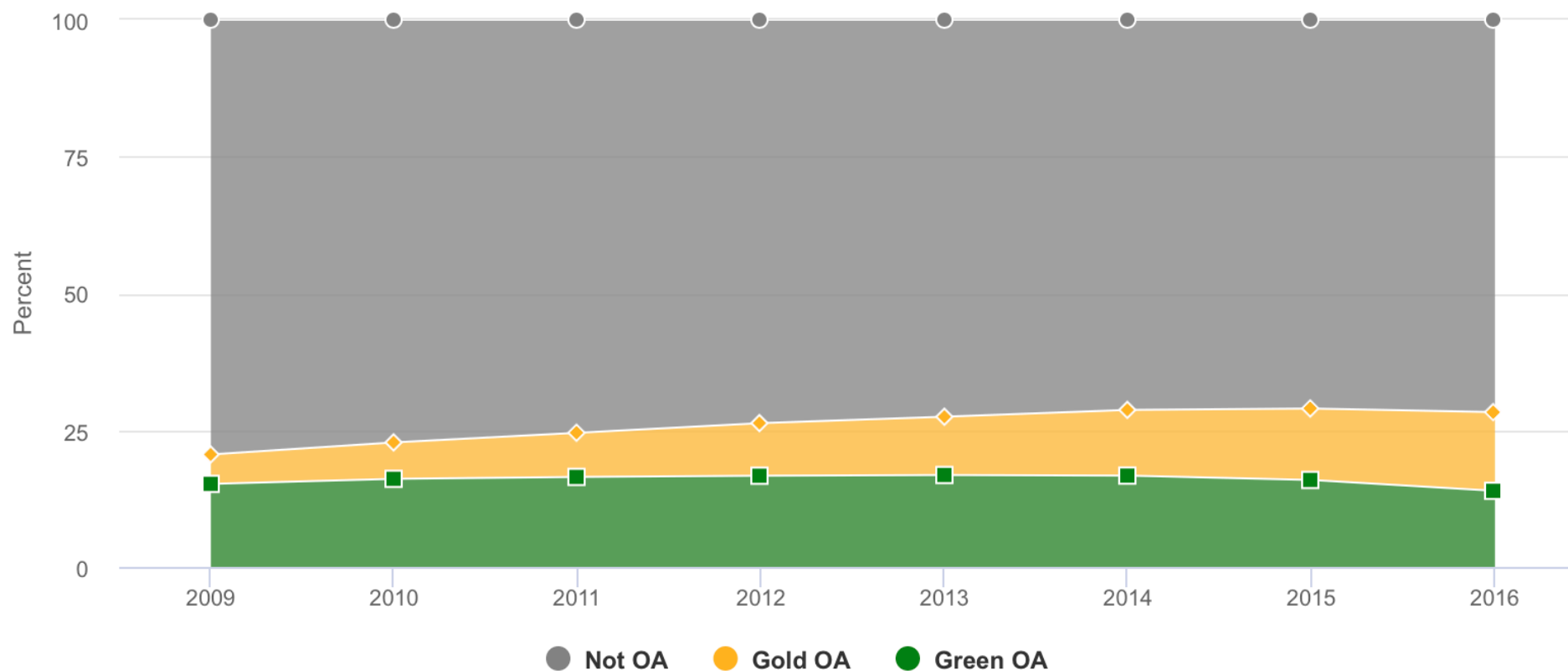
By Julia Belluz, Brad Plumer, and Brian Resnick | Updated Sep 7, 2016, 10:13am EDT

1. **Academia has a huge money problem**
2. **Too many studies are poorly designed**
3. **Replicating results is crucial — and rare**
4. **Peer review is broken**
5. **Too much science is locked behind paywalls**
6. **Science is poorly communicated**
7. **Life as a young academic is incredibly stressful**

# Why we needed to launch Plan S

Percentage of open access publications (gold and green) by year on total

Source: Consortium's own analysis of Scopus database



# Plan S

- Plan S entails **mandating** OA by funders
- Plan S is about **principles**, not about particular publication models
  - immediate OA (no embargo period)
  - open license allowing reuse; rights retention
  - funders will not pay for hybrid
- Plan S aims to **align OA policies**
- Funders **commit to cover costs** (APCs, platforms, journal flipping)
- Plan S sets clear **timelines: 2021 and 2025**


# 4 September 2018 : launch of Plan S

The Economist Topics Current edition More

Scientific publishing

## European countries demand that publicly funded research be free

The S-Plan diet



Print edition | Science and technology > Sep 15th 2018

MANY scientists have championed the idea that publicly funded research should be available to all and not locked away in pricey journals. Although

Le Monde Se connecter

ACTUALITÉS ÉCONOMIE VIDÉOS OPINIONS CULTURE M LE MAG SERVICES

SCIENCES

## Le plan qui fait trembler les revues scientifiques

Les agences de financement européennes ont annoncé un plan S qui vise à contraindre les chercheurs de publier dans des journaux en « open access ».

Par David Larousserie · Publié le 16 septembre 2018 à 19h00 · Mis à jour le 16 septembre 2018 à 19h00 · Lecture 3 min.

Article réservé aux abonnés

**Vie des labos.** Onze agences de financement européennes, baptisées cOAlition S, ont annoncé le 4 septembre un « Plan S », dont l'objectif est de changer radicalement les règles de publication des travaux scientifiques qu'elles financent. Après le 1<sup>er</sup> janvier 2020, les résultats d'équipes soutenues notamment par l'Agence nationale de la recherche en France (ANR) et le

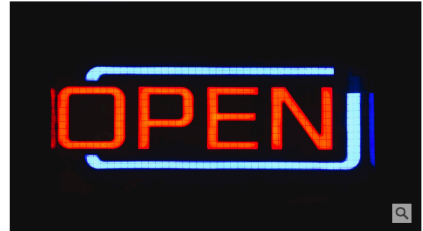
München 2° Süddeutsche Zeitung SZ.de Zeitung Magazin Login Abo

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Home > Wissen > Publikationswesen - Wissen soll für alle sein

12. September 2018, 18:51 Uhr Publikationswesen

## Wissen soll für alle sein



Den freien Zugang zu wissenschaftlicher Information fordern Universitäten und Forschungseinrichtungen. (Foto: Alex Holyoake/Unsplash)

Organisationen aus elf europäischen Ländern wollen Forschung künftig nur noch fördern, wenn die Ergebnisse offen im Netz stehen. Gelingt Open Access nun der Durchbruch?

Von Jan Schwenkenbecher

Die Daten der **Made in Germany** hat Google und Facebook, aber das Wissen der Welt, das liegt Screenshot großer Teil davon ist in der Hand einiger

Abonnemente

Neue Zürcher Zeitung

Menü Startseite > Wissenschaft

## Europa macht vorwärts mit Open Access

Forschungsergebnisse sollen rascher als bisher öffentlich zugänglich gemacht werden. Was ein neuer europäischer Plan regelt, stösst in der Schweiz nur auf halbe Zustimmung.

Martin Angler  
13.9.2018, 14:24 Uhr



# Recent developments



[Administration](#) [Priorities](#)

BRIEFING ROOM

## OSTP Issues Guidance to Make Federally Funded Research Freely Available Without Delay

AUGUST 26, 2022 • PRESS RELEASES

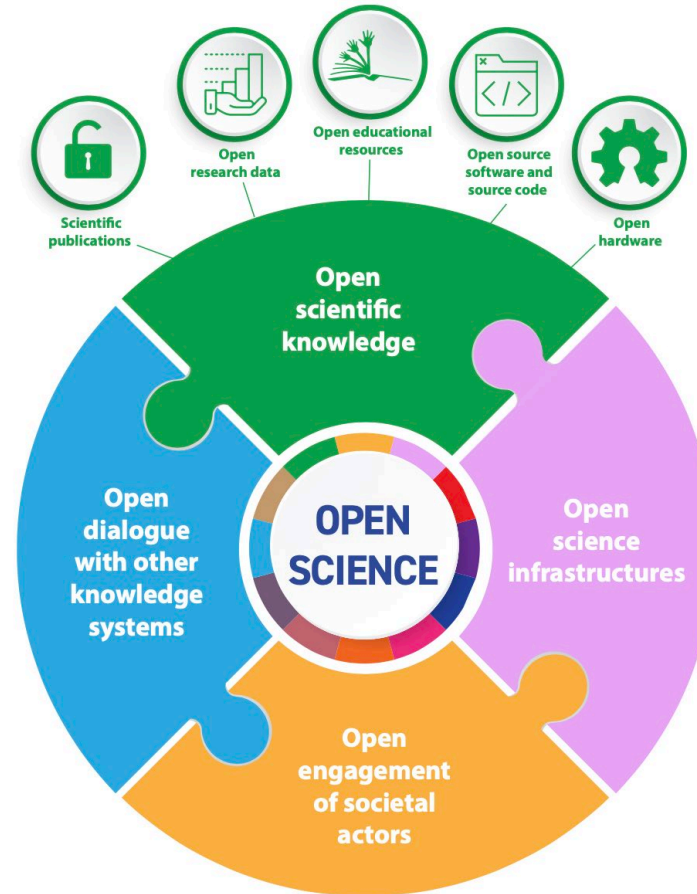
# COVID-19

## Sharing research data and findings relevant to the novel coronavirus (COVID-19) outbreak



- all peer-reviewed research publications relevant to the outbreak are made immediately open access, or freely available at least for the duration of the outbreak
- research findings relevant to the outbreak are shared immediately with the WHO upon journal submission, by the journal and with author knowledge
- research findings are made available via preprint servers before journal publication, or via platforms that make papers openly accessible before peer review, with clear statements regarding the availability of underlying data
- researchers share interim and final research data relating to the outbreak, together with protocols and standards used to collect the data, as rapidly and widely as possible - including with public health and research communities and the WHO
- authors are clear that data or preprints shared ahead of submission will not pre-empt its publication in these journals

# UNESCO



# Current Challenges in Open Science

1. Future publication models : innovative, sustainable, equitable
2. Rights & ownerships
3. Research data : FAIR, infrastructure, costs, valuing
4. Research assessment : what do we value in science ?



Peer Review: Implementing a "publish, then review" model of publishing



# Reform of Research Assessment

## San Francisco Declaration on Research Assessment



Opinion | 10 September 2019

## Why we need to reimagine how we do research



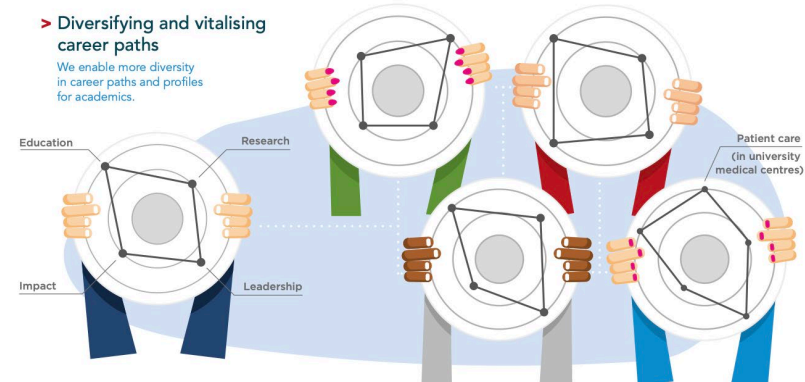
**Jeremy Farrar**  
Director  
Wellcome

The emphasis on excellence in the research system is stifling diverse thinking and positive behaviours. As a community we can rethink our approach to research culture to achieve excellence in all we do.

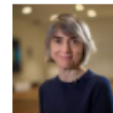
## Room for everyone's talent

*towards a new balance in the recognition and rewards of academics*

> **Diversifying and vitalising career paths**  
We enable more diversity in career paths and profiles for academics.



## We must reshape the system to value and support difference



**Professor Dame Ottoline Leyser**  
UKRI Chief Executive

# Reform of Research Assessment



**eua** EUROPEAN UNIVERSITY ASSOCIATION

**SCIENCE EUROPE** Shaping the future of research

## The European University Association and Science Europe Join Efforts to Improve Scholarly Research Assessment Methodologies

14 May 2019



## Paris Call on Research Assessment

*This text was prepared by the French Open Science Committee and presented to the Paris Open Science European Conference (OSEC) held in Paris on 4th and 5th February 2022, organised in the context of the French Presidency of the Council of the European Union, following the publication of the UNESCO recommendation on Open Science and the publication by the European Commission of Towards a reform of the research assessment system: scoping report.*

## AGREEMENT ON REFORMING RESEARCH ASSESSMENT

20 July 2022

# Reform of Research Assessment

1. **Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research**
2. **Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators**
3. **Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index**
4. **Avoid the use of rankings of research organisations in research assessment**



**Thank you**

**Collaboration is a constitutive element of science**  
**Competition is contingent**