

Pubblicazioni accademiche: il buono, il brutto, il cattivo



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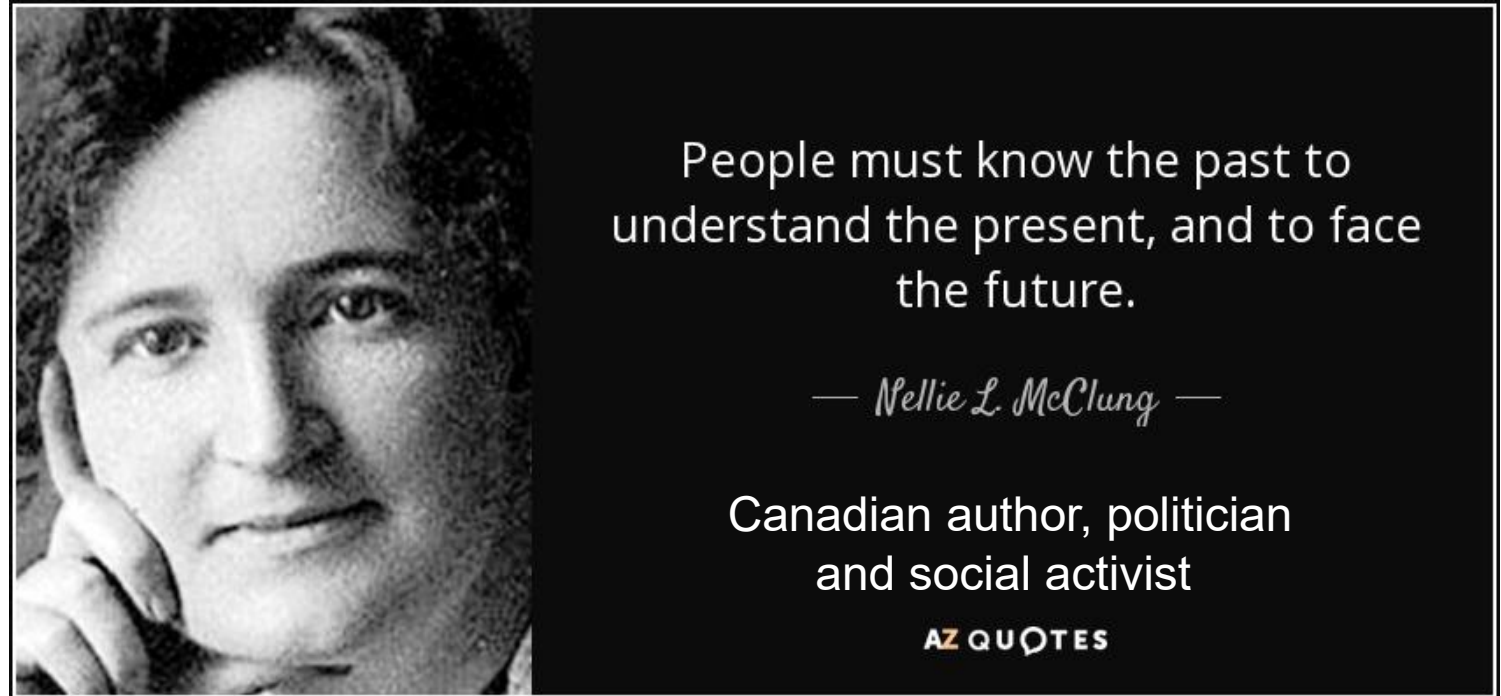
Pédiatrie du sport (DIU)

Échographie musculosquelettique (SSUM)

Agenda



- Publishing models
- Peer-review
- Predatory journals and fraud
- Inequality
- Metrics





To share academic research for the benefits of the society



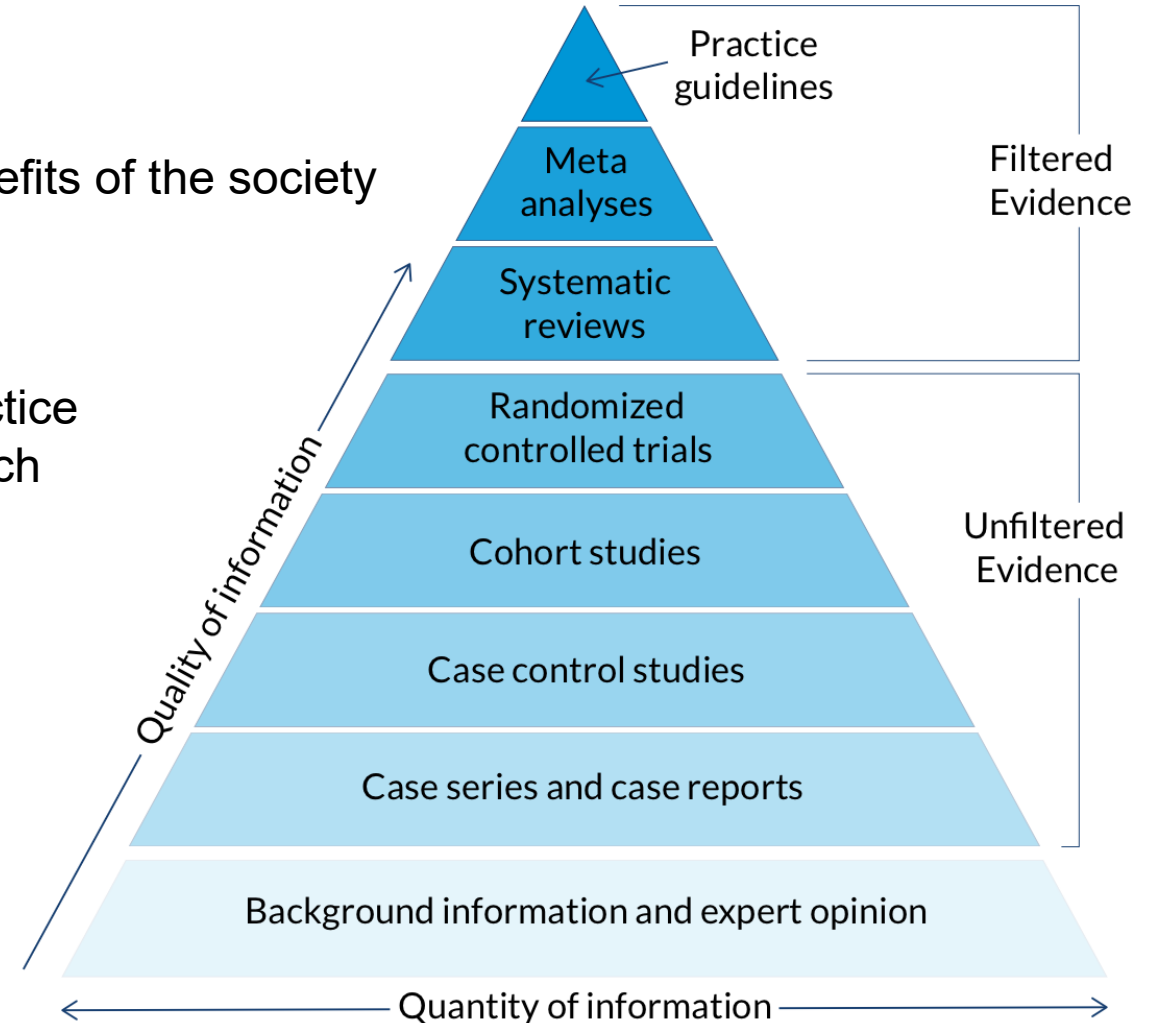
Clinical research : informing clinical practice
Basic research: informing further research



Plenty of bad incentives to do research:

- Career advancement
- Money
- Prestige, etc.

Why academic publishing?



At the roots of academic publishing

LE JOURNAL DES SCAVANS

Du Lundy V. Janvier M. DC. LXV.

Par le Sieur DE HEDOVVILLE.



A PARIS.

Chez JEAN CVSSON, rue S. Jacques, à l'Image de S. Jean Baptiste.

M. DC. LXV.

AVEC PRIVILEGE DV ROY.

January 1665

PHILOSOPHICAL TRANSACTIONS: GIVING SOME ACCOMPT OF THE PRESENT Undertakings, Studies, and Labours OF THE INGENIOUS IN MANY CONSIDERABLE PARTS OF THE WORLD

Vol I.

For Anno 1665, and 1666.

In the SAVOY,
Printed by T. N. for John Martyn at the Bell, a little without Temple-Bar, and James Allestry in Duck-Lane,
Printers to the Royal Society.

March 1665

IL GIORNALE DE LETTERATI.

D. F. N. 1668



IN ROMA.

Per Nicolò Angelo Tinalfi.

M. DC. LXVIII.

Con Licenza de' Superiori.

1668

MISCELLANEA CURIOSA MEDICO-PHYSICA ACADEMIÆ NATURÆ CURIOSORUM EPHEMERIDUM MEDICO- PHYSICARUM GERMANICARUM CURIOSARUM ANNUS PRIMUS

Anni scilicet M. DC. LXX^{mi}.

continens

Celeberrimorum Medicorum in & extra Germaniam Observationes Medicas & Physicas, vel Anatomicas, vel Botanicas, vel Pathologicas, vel Chirurgicas, vel Therapeuticas, vel Chymicas.

Prefixa

EPISTOLA INVITATORIA

ad Celeberrimos Medicos

EUROPÆ.

L I P S I Æ

Sumpt. VITI JACOBI TRESCHERI

Bibliopol. Wratislav.

Typis JOHANNIS BAUERI

ANNO 1670.

1670

Research funding

Aristocratic and royal patronage



Universities & academic societies



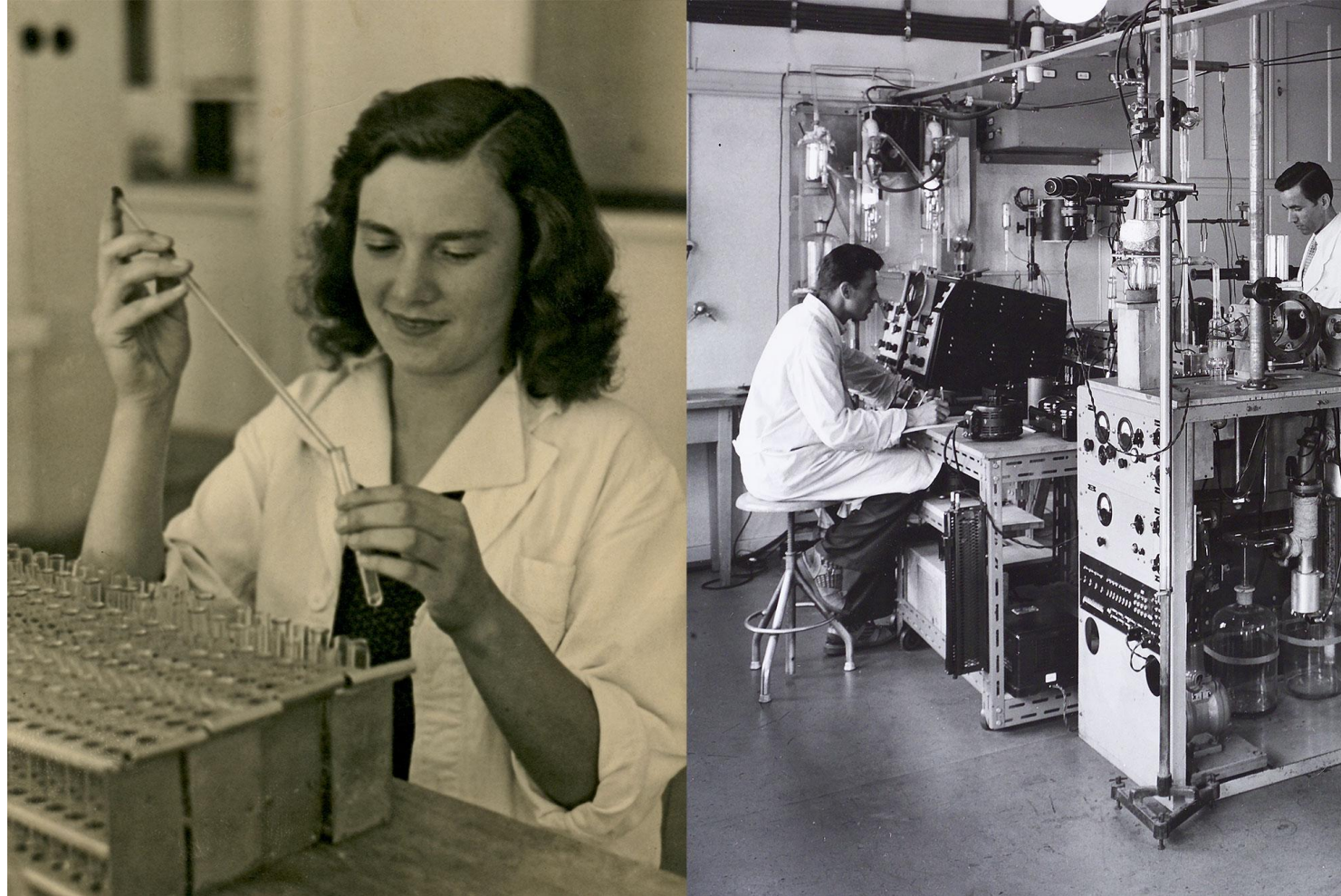
THE
ROYAL
SOCIETY



State-funded military research



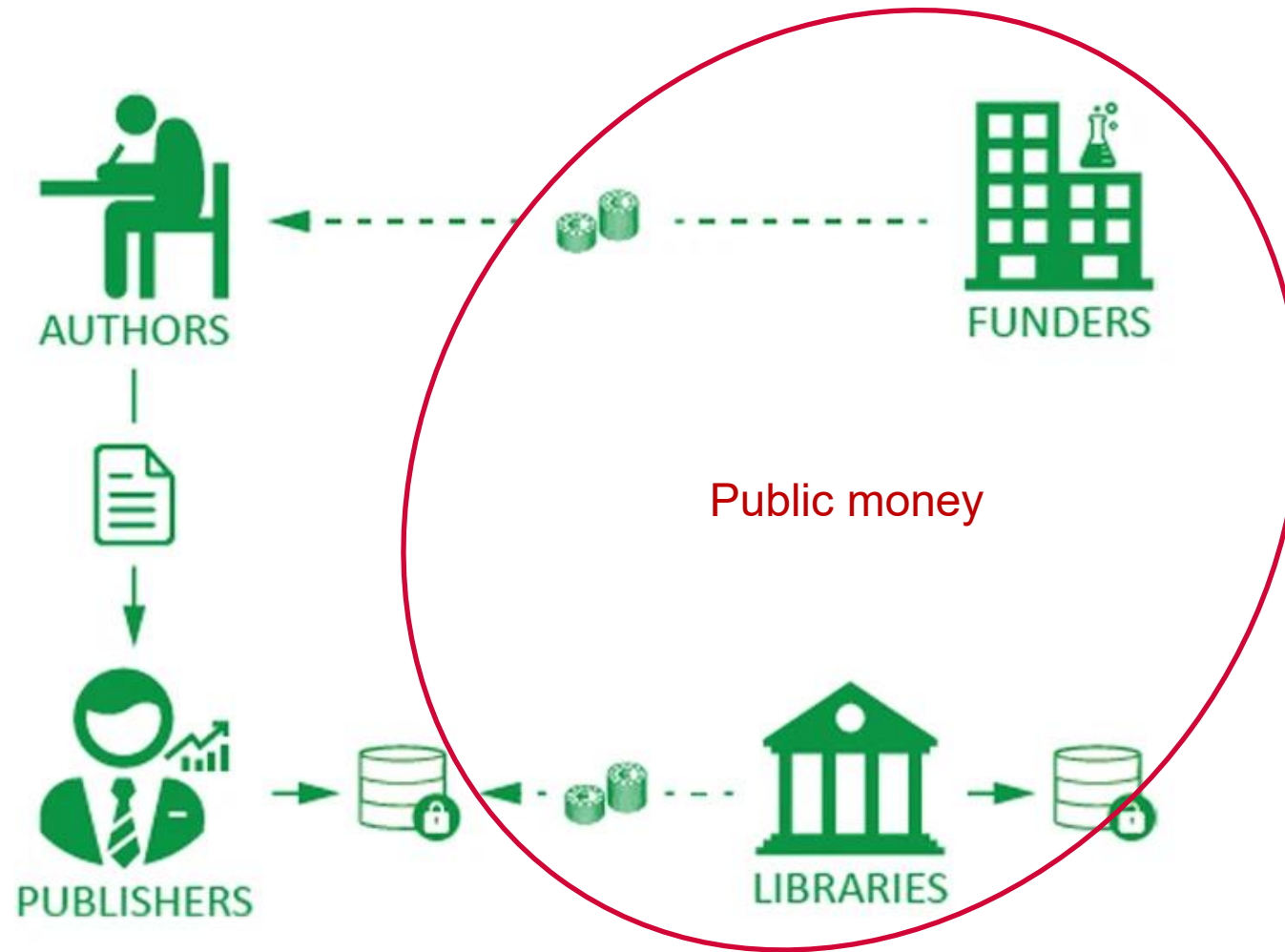
State-funded research grants since the 1950s



Introducing modern academic publishing

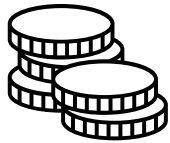


The traditional (closed) publishing model

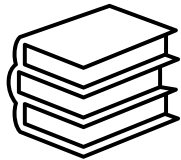




The big money behind academic publishing

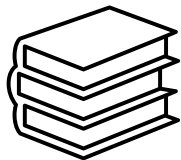


\$19 billion per year (between music and film industry)

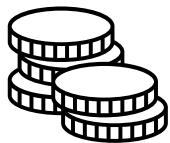


5 publishing houses control 50% of the market:

- Elsevier, Black & Wiley, Taylor & Francis, Springer Nature and SAGE

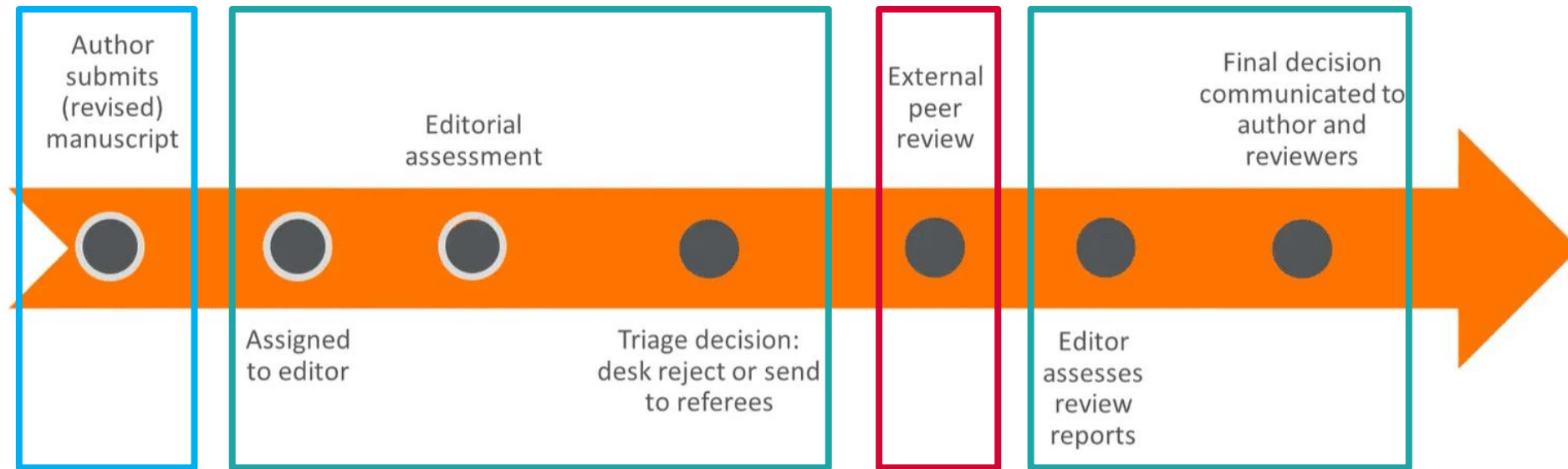


Elsevier : 16 % of the market & >3000 journals



Elsevier : **profit margin of 40 %** (i.e. > Microsoft, Google, Coca Cola)

Peer-review (1970s)





Important point of peer-reviewing

Quality, integrity and credibility

Honesty, positive and constructive feedback

Enough details to allow for replication of the study?

Unpaid

Time-consuming

Little reward or incentive (ORCID, a thank you email)





Predatory journals



Quick acceptance with little or no peer review

(Unclear) publication fees

Aggressively campaigning for academics to submit articles

Listing academics as editors without their permission

Fake academics on editorial boards

The Predatory Journal List <https://predatoryjournals.org/the-list>

The Beall List <https://beallslist.net>



Asian Journal of Medicine and Health

18(9): 14-21, 2020; Article no.AJMAH.60013
ISSN: 2456-8414

SARS-CoV-2 was Unexpectedly Deadlier than Push-scooters: Could Hydroxychloroquine be the Unique Solution?

**Willard Oodendijk^{1*}, Michaël Rochoy², Valentin Ruggeri³, Florian Cova⁴,
Didier Lembrouille⁵, Sylvano Trotтинetta⁶, Otter F. Hantome⁷,
Nemo Macron⁸ and Manis Javanica⁹**

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²*General Practitioner and Independent Seeker of Science, Ankh, Morpork, France.*

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⁷*University of Melon, Melon, France.*

⁸*Palais de l'Élysée, Paris, France.*

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Authors' contributions

High level of transparency and honesty

This work was carried out in collaboration among all authors. Author WO launched idea on Twitter, added some sentences, submitted the paper, corresponded with the kind publisher. Author MR launched MP group on Twitter and Google Docs, performed study 1, added some sentences here and there, responded to reviewers. Author VR needed SIGAPS points, did the minimum. Found a beautiful picture for figure 3. Author FC wrote a lot of sentences but didn't need too many SIGAPS points, so fourth place was not as bad. Also, performed Study 3 in his head (philosophers are good at thought-experiments). Author DL was on holidays and added his name at the last time. Author ST wrote nothing but provided the push-scooters and did the outside job. Author ÖFH did nothing but is a very good friend of us; he helped us get some administrative paperwork. Author NM said "waouf" when the authors started to doubt (doubts are common in science, don't let them win you over, believe in yourself and what you do, don't let anyone distract you from the truth you know). Author MJ wrote sentences and said that the last place will be "enough for him". He does it every time, and it works pretty well on interns, we have to admit. All authors read and approved the final manuscript.



A strong method...

Participants in both groups were asked to go down a 45° slope with a steep brick wall at the end on a push-scooter. They were instructed to go as fast as possible and brake at the last moment before hitting the brick wall. To reinforce ecological validity, sounds of cars and insults from other push-scooter drivers were broadcasted from the experimenters' phones (sounds were recorded in Paris prior to lockdown) [10]. Due to limited resources and fundings, only two push-scooters (one very old, one brand new) were available. The old, rusty push-scooter was randomly attributed to participants in the control group. It should be noted that the brand new push-scooter was in zinc, which might have contributed to potentialize the HCQ + AZ combination.

This study was retrospective, which is why we did not need an opinion from the ethics committee.



A powerful conclusion

In our study, hydroxychloroquine was associated with lower odds of push-scooters accidents. It is urgent to prescribe hydroxychloroquine for all push-scooters users.

Can we publish anything right now? I think that the question, it is quickly answered, and peer-review has never been a scientific method anyway [15].

Otherwise, the adjunction of zinc [17], ivermectin [18] or any other drug [19] to the association HCQ + AZT should be considered. As the great French scientist Jean-Claude Dusse once said: "you never know, on a misunderstanding, it might work" [20].



Jean-Claude Dusse





Asian Journal of Medicine and Health

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Asian Journal of Medicine and Health (ISSN: 2456-8414) aims to publish **high quality papers** ([Click here for Types of paper](#)) in the areas of Medicine and Health Science. By not excluding papers based on novelty, this journal facilitates the research and wishes to publish papers as long as they are **technically correct** and **scientifically motivated**. The journal also encourages the submission of useful reports of negative results. This is a **quality controlled, OPEN peer-reviewed, open-access** INTERNATIONAL journal.



Fraud at the “highest” academic level

Covid-19: Lancet retracts paper that halted hydroxychloroquine trials

Retraction made after Guardian investigation found inconsistencies in data

- [How doubt snowballed over Covid-19 drug research](#)
- [Coronavirus - latest updates](#)
- [See all our coronavirus coverage](#)



Hydroxychloroquine has been pushed by Donald Trump and others as a possible treatment for people with coronavirus. Photograph: George Frey/Reuters



The NEW ENGLAND
JOURNAL of MEDICINE

THE LANCET



HARVARD MEDICAL SCHOOL AND
BRIGHAM AND WOMEN'S HOSPITAL



UniversitätsSpital Zürich

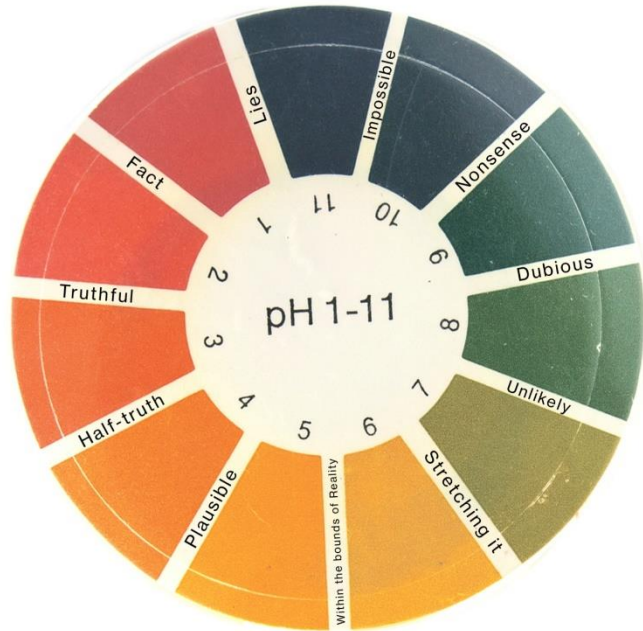


Recommended reading about fraud in science

'Required reading for everyone' ADAM RUTHERFORD

SCIENCE FICTIONS

STUART RITCHIE



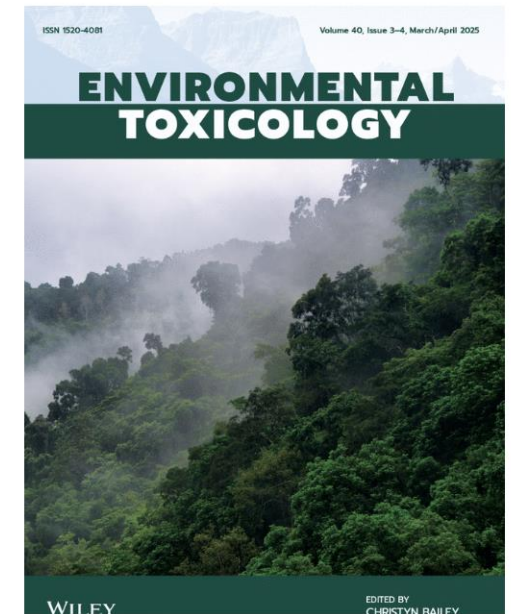
Exposing Fraud, Bias,
Negligence and Hype in Science

The retraction watch

Wiley journal retracts 26 papers for 'compromised peer review'

A Wiley journal has retracted more than two dozen articles in the last few months for peer review issues.

The articles, which appeared in *Environmental Toxicology*, have been retracted in batches, the latest on February 16-17, with previous sets in January and November.





Is It Time for Pre-Publication Peer Review to Die?

August 28, 2018 / [billsullivan](#) / [Mentorship](#)

Peer review is far from
fair and objective

Peer review is far
from efficient

Senior investigators may
be given a “free pass”

Reviewers and editors are not
always qualified or free of bias

Difficult to recruit
good reviewers



Negative results
rarely get published

Thankless job:
unpaid,
doesn't facilitate career advancement.
siphons off time that could be spent on research

Findings that challenge dogma
can be complex to publish

We pay to publish...
We pay to read papers...
We volunteer to review papers...
An outsider would call us suckers



Potential solution: **post-publication peer review** (Biorxiv, F1000 Research, PubPeer, etc.)

Pre-publication peer review should be done **internally** before posting.



Acceleration of science reporting
Everyone can make her/his judgment about the work
Interactive discussion threads
Living document: editing/updating the manuscript

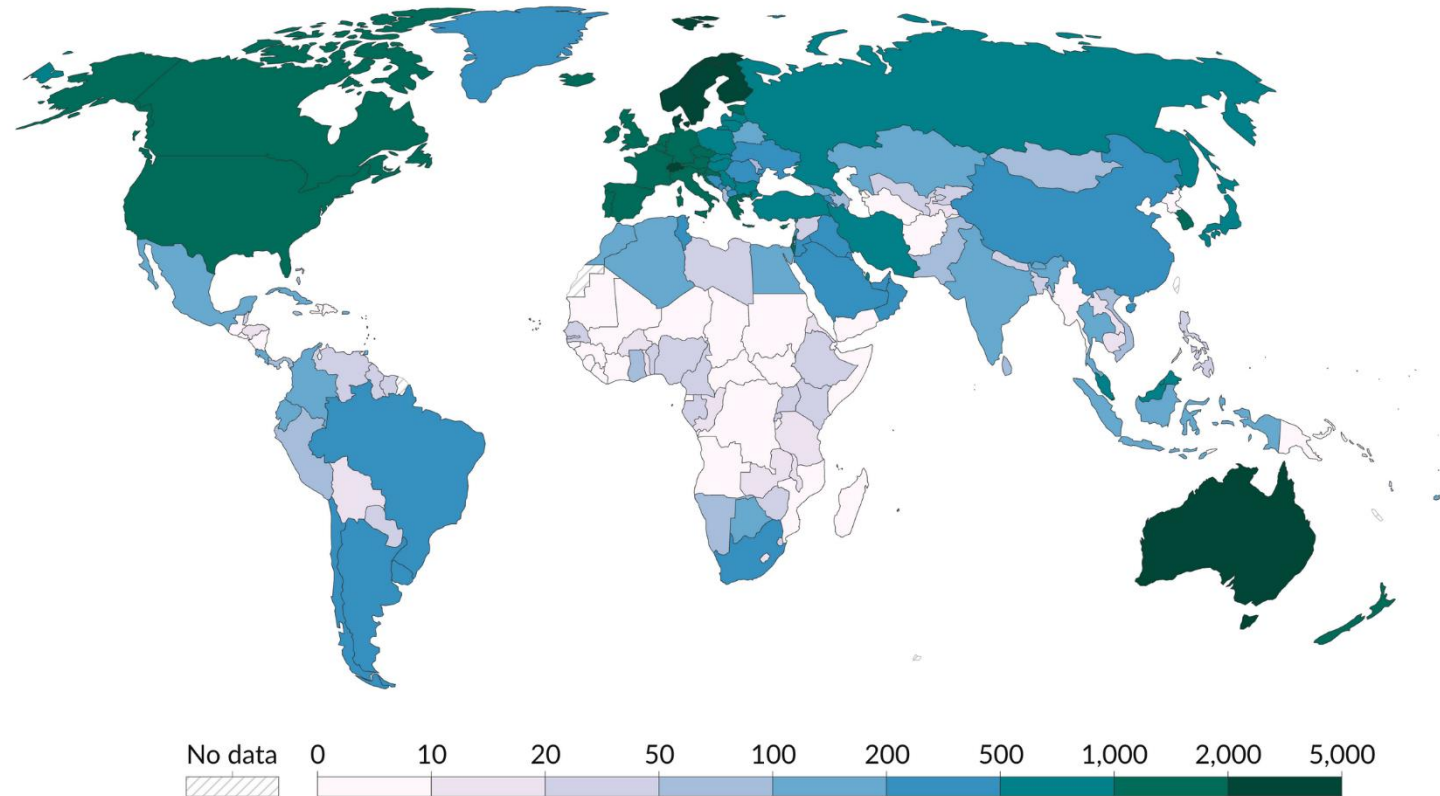


Inequality in academic publishing

Annual articles published in scientific and technical journals per million people, 2020

Our World
in Data

Includes physics, biology, chemistry, mathematics, clinical medicine, biomedical research, engineering and technology, and earth and space sciences.



Data source: World Bank (2023); United Nations (2022)

OurWorldinData.org/research-and-development | CC BY

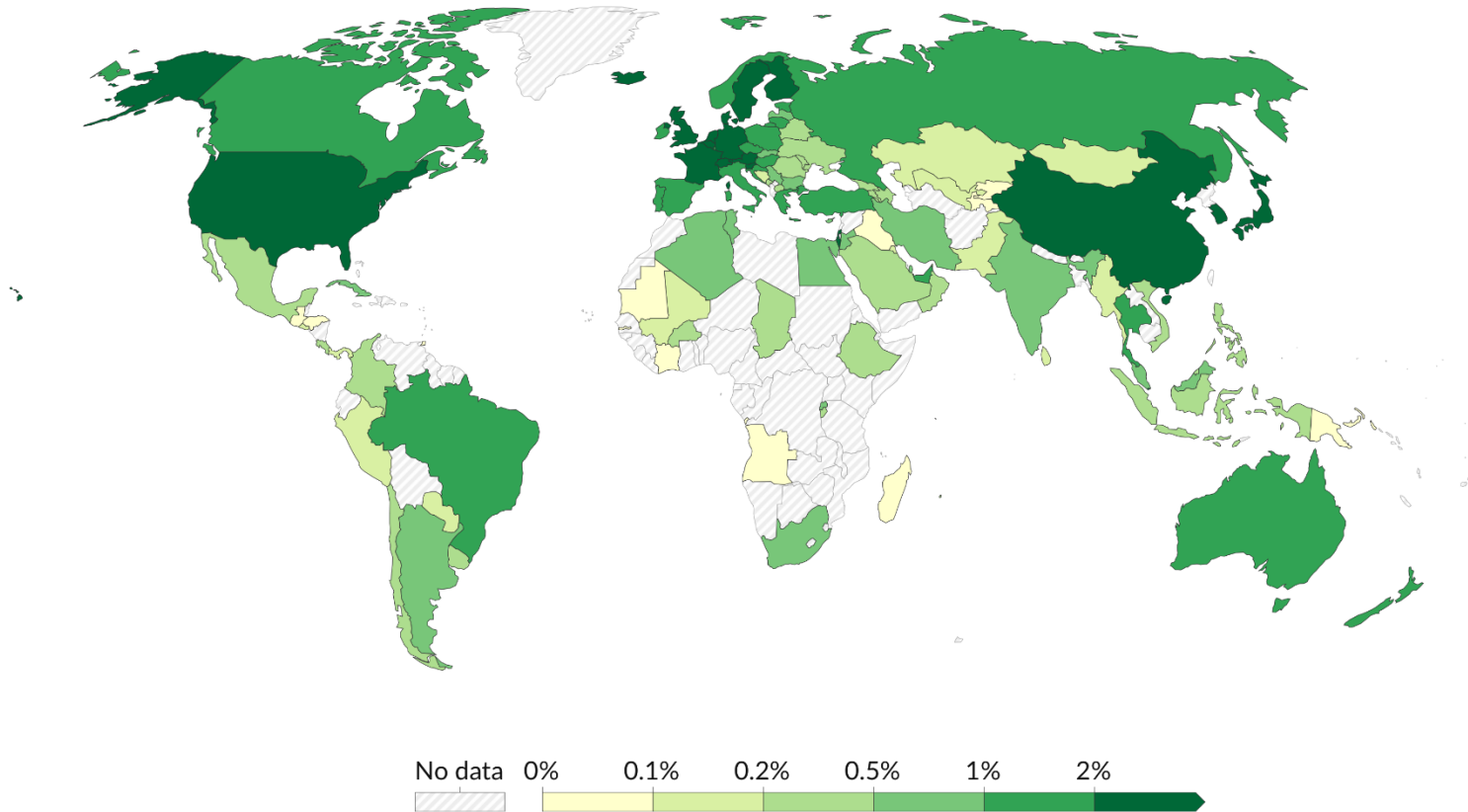
Note: Articles are assigned based on the country of the first author's institution.



Inequality in academic publishing

Research & development spending as a share of GDP, 2021

Includes basic research, applied research, and experimental development.

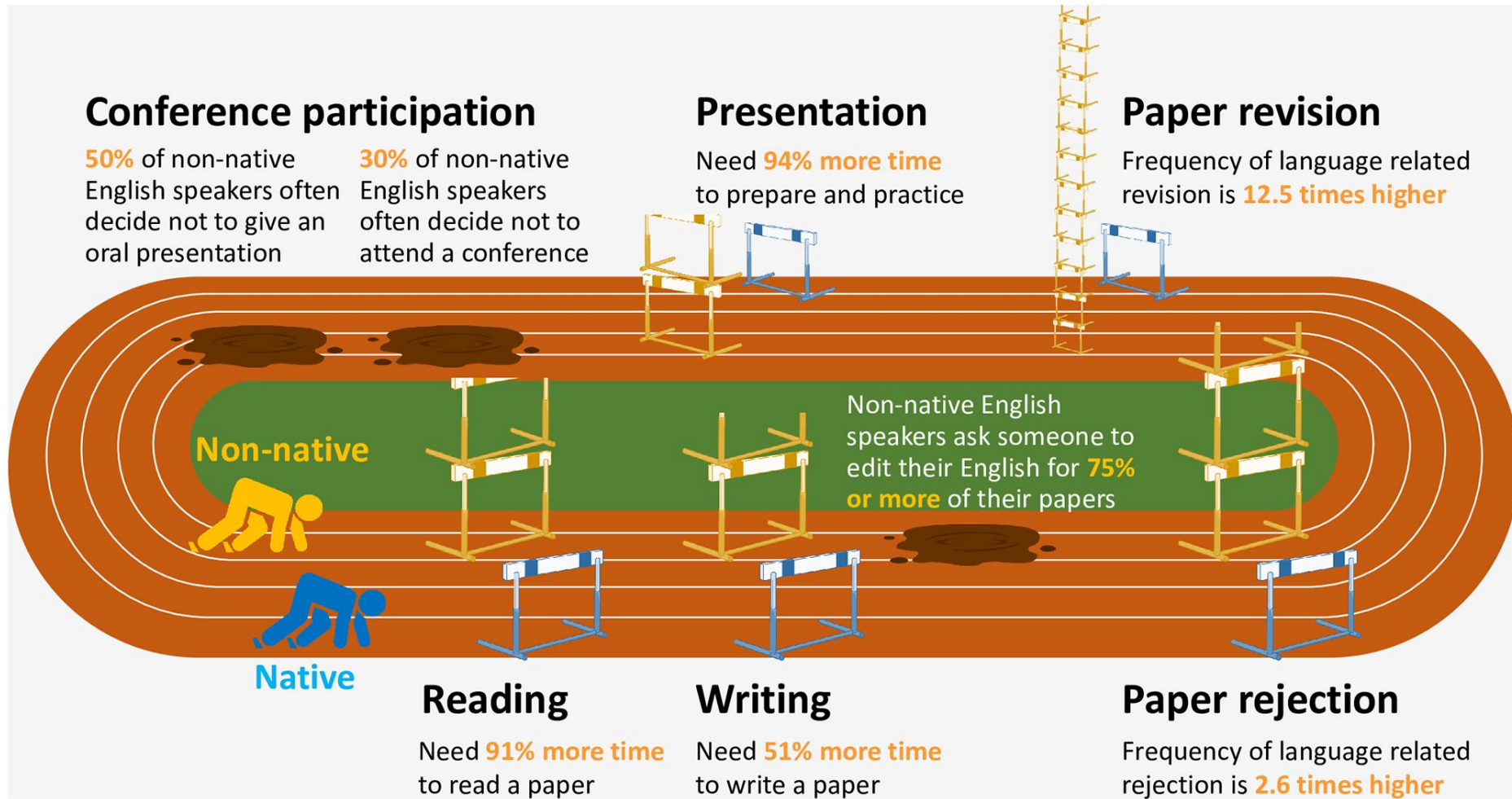


Data source: Multiple sources compiled by World Bank (2024)

[OurWorldinData.org/research-and-development](https://ourworldindata.org/research-and-development) | CC BY

Note: Spending includes current and capital expenditures (public and private) on research.

Disadvantages of being a non-native English speaker in science



Open Access





Fact-checking

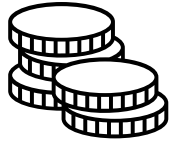
nature

2 – Gold Open Access – same publishing process as above. The difference is that when an article is accepted for publication, the author/s or funder/s pay an Article Processing Charge (APC). The final version of the published article is then free to read for everyone. The APC to publish Gold Open Access in *Nature* is £8890.00/\$12290.00/€10290.00.



Ending profiteering from publicly-funded research

Tackling the academic publishing oligopoly




Australia: **AUS\$ 1 billion paid yearly** to publishing houses (subscription, OA fees)



Grant allocation: favouring publication in OA journals with reasonable publication fees
Grant allocation: less value on publication metrics

Metrics


$$\text{Impact Factor 2014} = \frac{\text{All citations in 2014}}{\text{Articles published in the journal in 2013 + 2012}} \text{ to}$$

 All articles
ARE EQUAL
but some articles
ARE MORE
EQUAL
THAN OTHERS

• Animal Farm •
George Orwell

A user's guide to inflated and manipulated impact factors

John P. A. Ioannidis^{1,2,3,4} | Brett D. Thombs^{5,6}

Only original articles and reviews are included in the IF denominator...
But all citations (editorial, letters, etc.) count in the numerator



Plan S

Making full & immediate
Open Access a reality

Public-funded research should be published Open Access

Let's change
what we value
in research.



Sign
DORA

**Metrics do not allow for an accurate
& fair estimation of individual
achievements**

Comprehensive approach

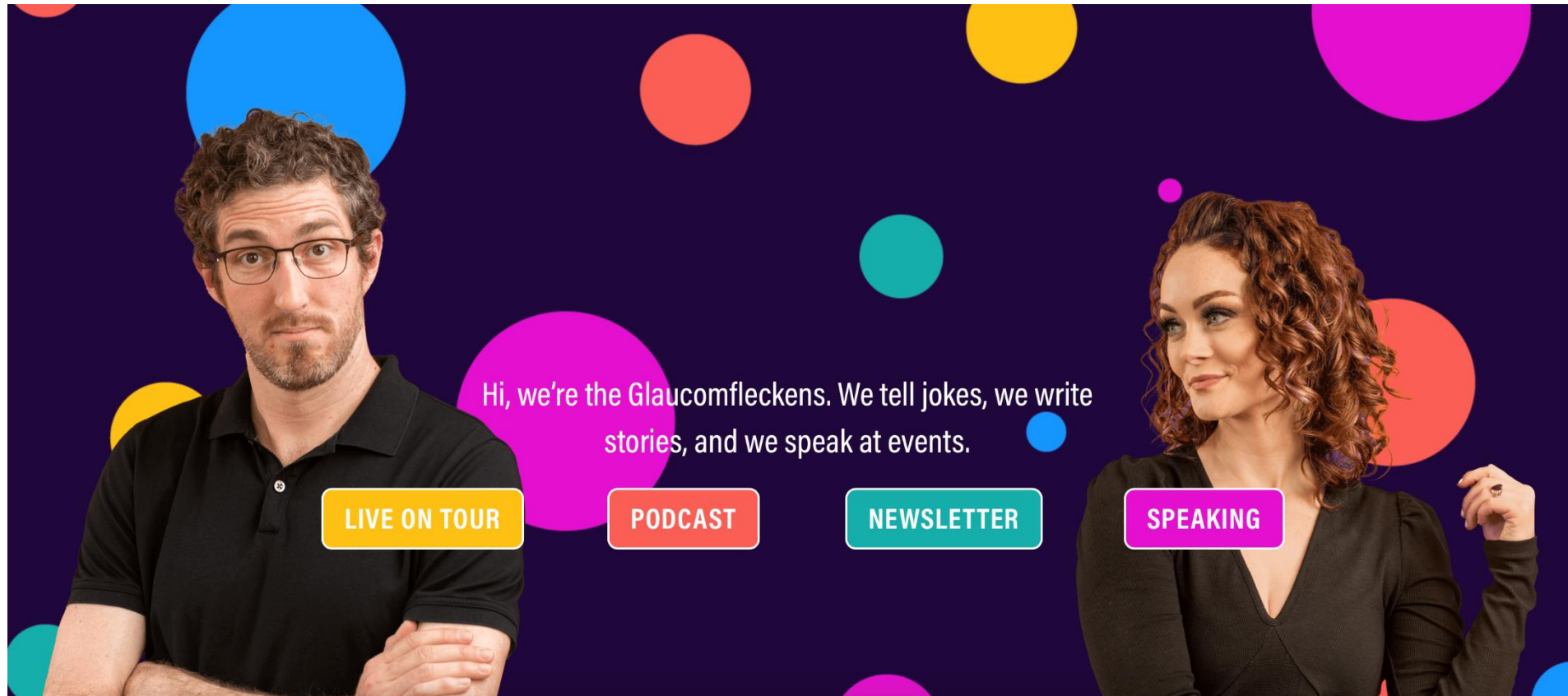




Thoughts for discussion

- Modern medicine is based on **evidence** (EBM) and therefore requires **research**
- Research is distributed as **academic articles**
- **Peer review** is a critical step to ensure the **integrity** and **credibility** of science
- The **quality** of the pre-publication peer-review process is **highly variable**
- The current publishing system **does not reward peer review correctly** (solutions?)
- Publishers are making **huge profits on the back of taxpayers**
- **Open Access** could be the future if publication fees are accessible to everyone (solutions?)
- Assessing research should be **comprehensive** (rather than focused on journal metrics) (solutions?)

Dr Glaucomfleck (William E. Flanary)



Thank you!



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