

Open access and beyond : means, opportunities and challenges

ED211 - École doctorale des Sciences Exactes et leurs applications de l'université de Pau et des Pays de l'Adour

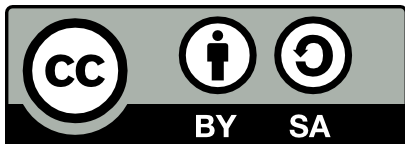
31st January 2019

Training material available [here](#)

Frédérique Flamerie

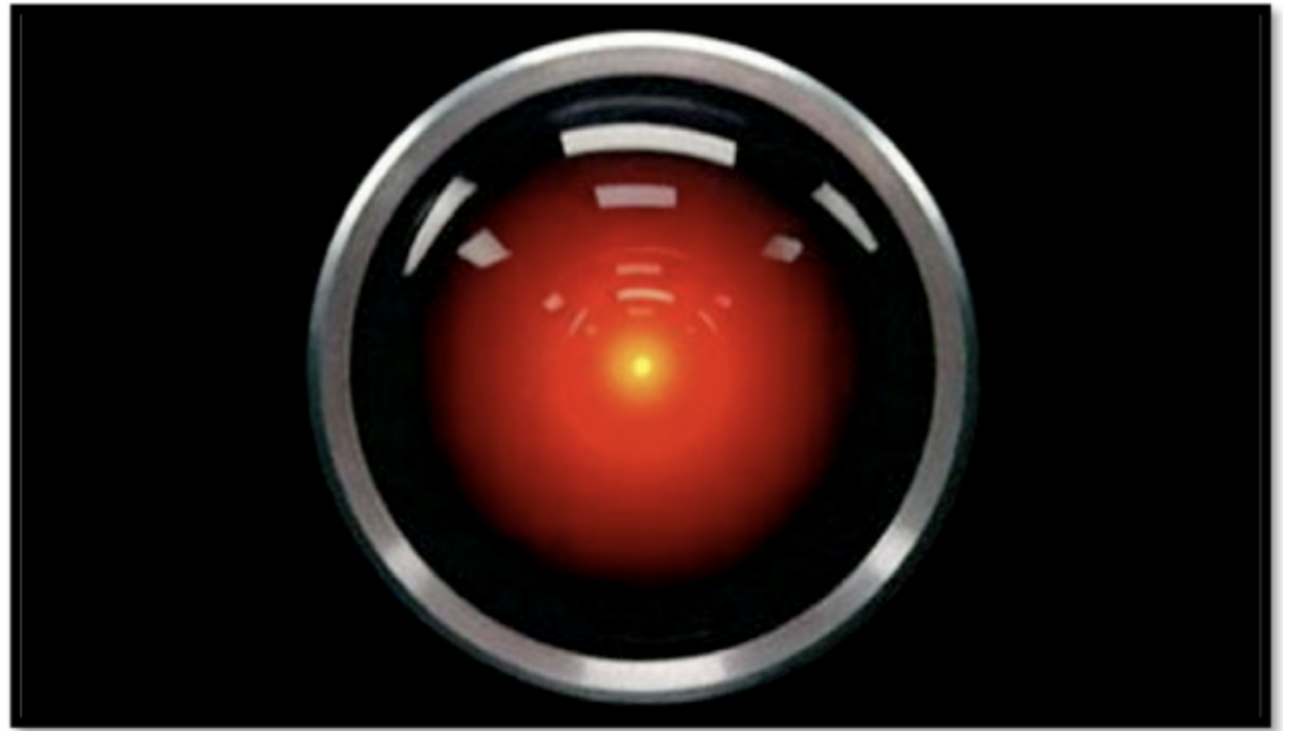
open access and data librarian

University of Bordeaux - Documentation department



Agenda

Movies and TV Game



Discussions : ? Q01 ? Q02

Agenda

DataGueule « Privés de savoir? » and addenda

Open access avatars

Focus on open access journals

What opportunities for you ?

The big picture

DataGueule « Privés de savoir? »



Available at : <https://www.youtube.com/watch?v=WnxqoP-c0ZE>

"Privés de savoir? " - *addendum 1* : French Law

The Law for a Digital Republic promulgated on 8 October 2016 includes an article dedicated to open access to scientific articles, article 30.



Image from : Magron, A. (2016). 'Vos dépôts dans HAL: ce qui change avec la loi pour une République Numérique'. CCSD. Retrieved from <https://www.ccsd.cnrs.fr/2016/10/vos-depots-dans-hal-ce-qui-change-avec-la-loi-pour-une-republique-numerique/>

"Privés de savoir? " - *addendum 1* : French Law

In short, all scientific **articles** resulting from public research can now be deposited into an open access repository :

- in a manuscript format : **author accepted manuscript** (AAM),
- with a maximum **embargo** of 6 months (science and medicine)/12 months (humanities and social sciences),

regardless of the publisher's open access policy.

Do you want to know more?

- [Read article 30 of the law on Legifrance](#)
- Questions? See the [detailed FAQ in French](#) provided by Couperin

"Privés de savoir? " - *addendum 2* : versions of an article

Version of Record (VoR) : <https://doi.org/10.1016/j.epsl.2016.09.032> / AAM : <http://hal.archives-ouvertes.fr/hal-01386646>

Earth and Planetary Science Letters 456 (2016) 124–133

Contents lists available at ScienceDirect

Earth and Planetary Science Letters

www.elsevier.com/locate/epsl

ELSEVIER

Sea surface temperature variability in the North Western Mediterranean Sea (Gulf of Lion) during the Common Era

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atmospheric blocking

ABSTRACT

This study investigates the multidecadal-scale variability of sea surface temperatures (SSTs) in the convection region of the Gulf of Lion (NW Mediterranean Sea) over the full past 2000 yr (Common Era) using alkenone biomarkers. Our data show colder SSTs by 1.7°C over most of the first millennium (200–800 AD) and by 1.3°C during the Little Ice Age (LIA; 1400–1850 AD) than the 20th century mean (17.9°C). Although on average warmer, those of the Medieval Climate Anomaly (MCA) (1000–1200 AD) were lower by 1°C. We found a mean SST warming of 2°C/100 yr over the last century in close agreement with the 0.22 and 0.26°C/decade values calculated for the western Mediterranean Sea from *in situ* and satellite data, respectively. Our results also reveal strongly fluctuating SSTs characterized by cold extremes followed by abrupt warming during the LIA. We suggest that the coldest decades of the LIA were likely caused by prevailing negative EA states and associated anticyclone blocking over the North Atlantic resulting in cold continental northeasterly winds to blow over Western Europe and the Mediterranean region.

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1. Introduction

In the past decade, major efforts have been done to document the multi-decadal variability of the sea surface temperatures during the Common Era (last 2,000 yr) and to explore the role of external forcings (solar, volcanism, greenhouse gases) by combining intensity of these climate zones can substantially alter the Mediterranean climate making this region particularly vulnerable to global warming (Lionello et al., 2006). In its history, the Mediterranean region has undergone important changes that can be investigated to better understand present-day interactions between global and regional climate and the underlying driving mechanisms.

1 **Sea surface temperature variability in the North Western Mediterranean Sea**
2 **(Gulf of Lion) during the Common Era**
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"Privés de savoir? " - *addendum 2* : versions of an article

Definition of AAM :

Paper as accepted for publication, including all changes resulting from peer review, but not necessarily incorporating the publisher's formatting or layout.

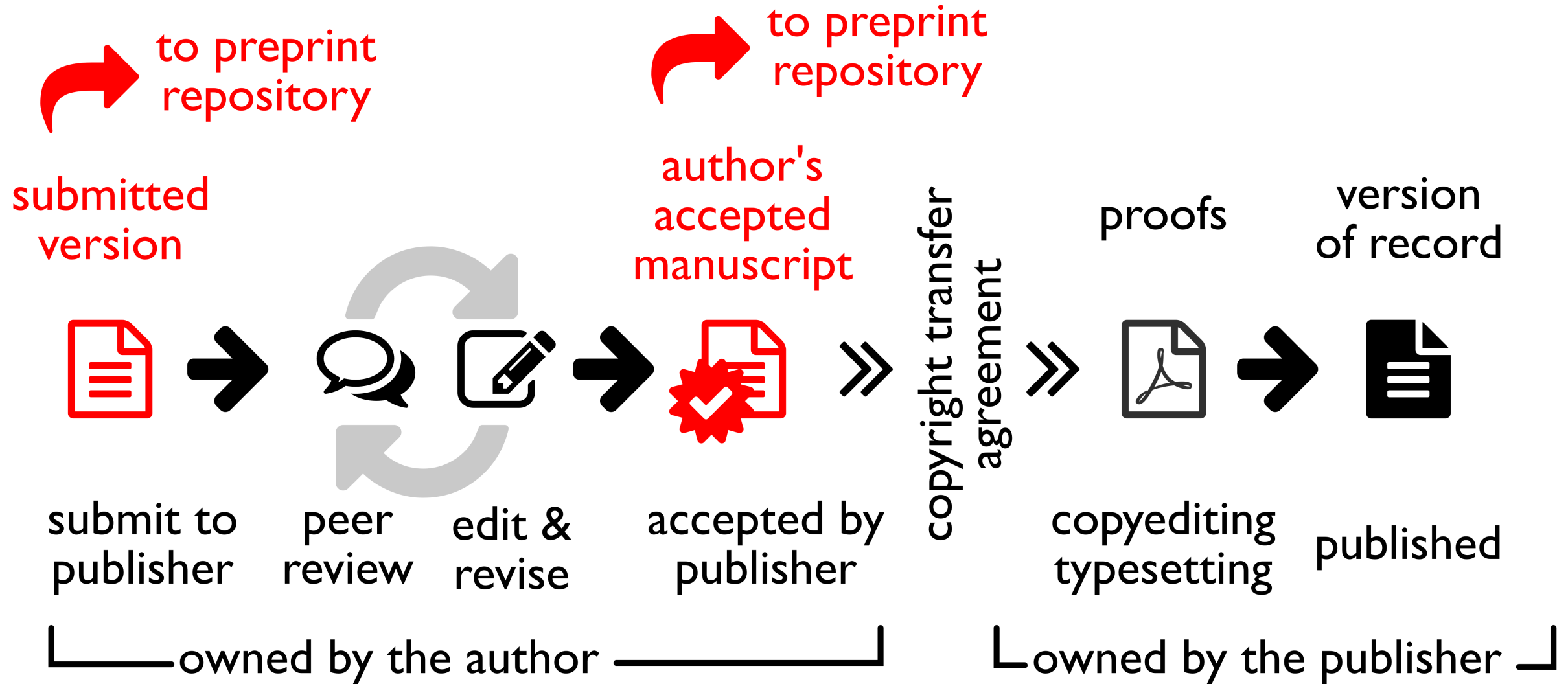
From : Oxford University. 'Glossary'. open access oxford. Retrieved from <http://openaccess.ox.ac.uk/glossary/>

It is different from the proofs.

➡ How to get this version of your article from publishers' submission systems?

Open Access Button. (2018). 'Direct2AAM: Helping Authors Find Author Accepted Manuscripts'. Open Access Button. Retrieved from <https://openaccessbutton.org/direct2aam>

"Privés de savoir? " - *addendum 2* : versions of an article



"Privés de savoir? " - *addendum 3* : who needs access to scientific publications?

? Q03

Tennant, J. P. et al. (2016). 'The academic, economic and societal impacts of Open Access: an evidence-based review'. F1000Research, 5, 632. <https://doi.org/10.12688/f1000research.8460.3>

A dedicated website : <http://whoneedsaccess.org>

This site is run collaboratively by the [@access working group](#) — a loose coalition of academics in various fields — plus you. We want to know your stories about how access to scientific literature has enabled you to do more, create more, and give more back to the world. If that's you, please see the [Contribute](#) page.

"Privés de savoir? " - *addendum 3* : what does access means?

By "open access" to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.

Chan, L. et al. (2002). 'Read the Budapest Open Access Initiative'. Budapest Open Access Initiative. Retrieved from <https://www.budapestopenaccessinitiative.org/read>



Open access avatars

Open access avatars : is this open access 1/3? ? Q04

What is the limit for photoautotrophic plankton growth rates?

Kevin J. Flynn^{1,*} and John A. Raven^{2,3,†}

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Corresponding editor: Pia Moisander

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Abstract

Knowing the potential maximum photoautotrophic growth rate for planktonic primary producers is fundamental to our understanding of trophic and biogeochemical processes, and of importance in applied phycology. When day-integrated C-specific growth is considered over natural light:dark cycles, plausible RuBisCO activity (K_{cat} coupled with cellular RuBisCO content) caps growth to less than a few doubling per day. Prolonged periods of C-specific growth rates above ca. 1.3 d^{-1} thus appear increasingly implausible. Discrepancies between RuBisCO-capped rates and reported microalgal-specific growth rates, including temperature-growth rate relationships, may be explained by transformational errors in growth rate determinations made by reference to cell counts or most often chlorophyll, or by extrapolations from short-term measurements. Coupled studies of enzyme activity and day-on-day C-specific growth rates are required to provide definitive evidence of high growth rates. It seems likely, however, that selective pressure to evolve a RuBisCO with a high K_{cat} (with a likely concomitant increase in K_m for CO_2) would be low, as other factors such as light limitation (developing during biomass growth due to self-shading), nutrient limitations, CO_2 depletion and pH elevation, would all rapidly depress realized specific growth rates.

Key words RuBisCO • specific growth rate • temperature • microalga • phytoplankton

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This Article

J. Plankton Res. (2016)
doi: 10.1093/plankt/fbw067
First published online:
September 10, 2016

» Abstract **Free**

Full Text (HTML) **Free**

Full Text (PDF) **Free**

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Open access avatars : is this open access 2/3? ? Q05

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Research Article

How subscription-based scholarly journals can convert to open access: A review of approaches

[Mikael Laakso](#) , [David Solomon](#), [Bo-Christer Björk](#)

First published: 19 September 2016 [Full publication history](#)

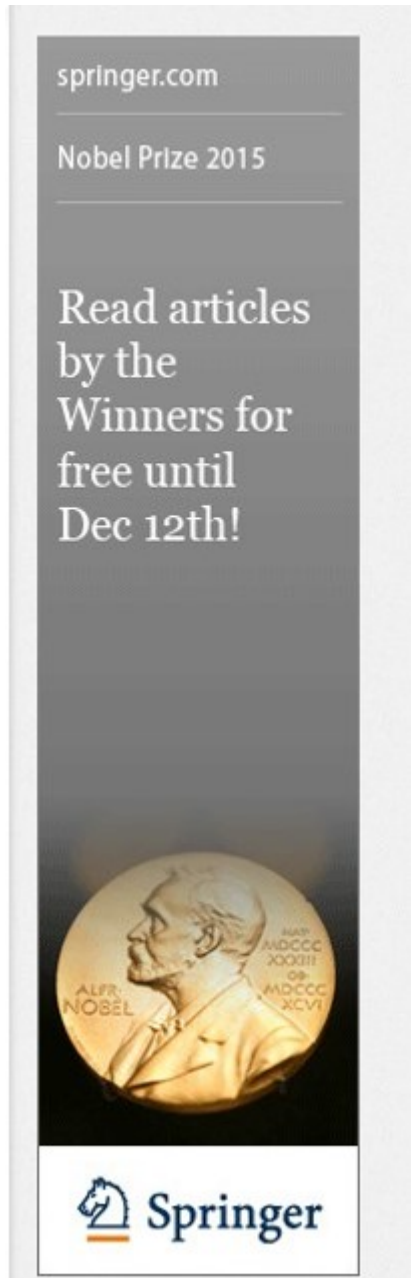
DOI: 10.1002/leap.1056 [View/save citation](#)

Cited by: 0 articles  [Citation tools](#)

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Volume 29, Issue 4
October 2016
Pages 259–269

Open access avatars : is this open access 3/3?

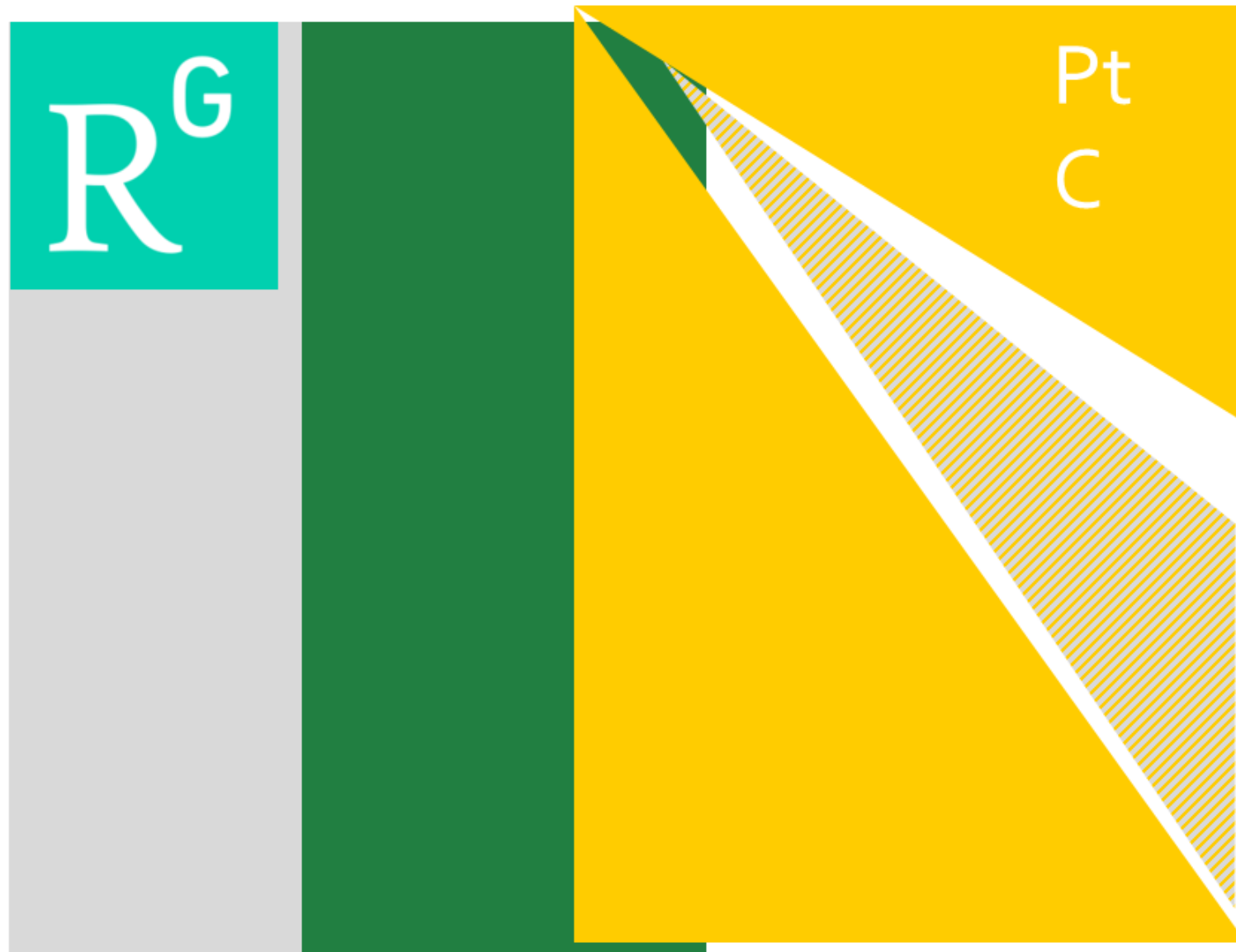


Open access avatars

arXiv.org



Open access avatars



The green and the grey

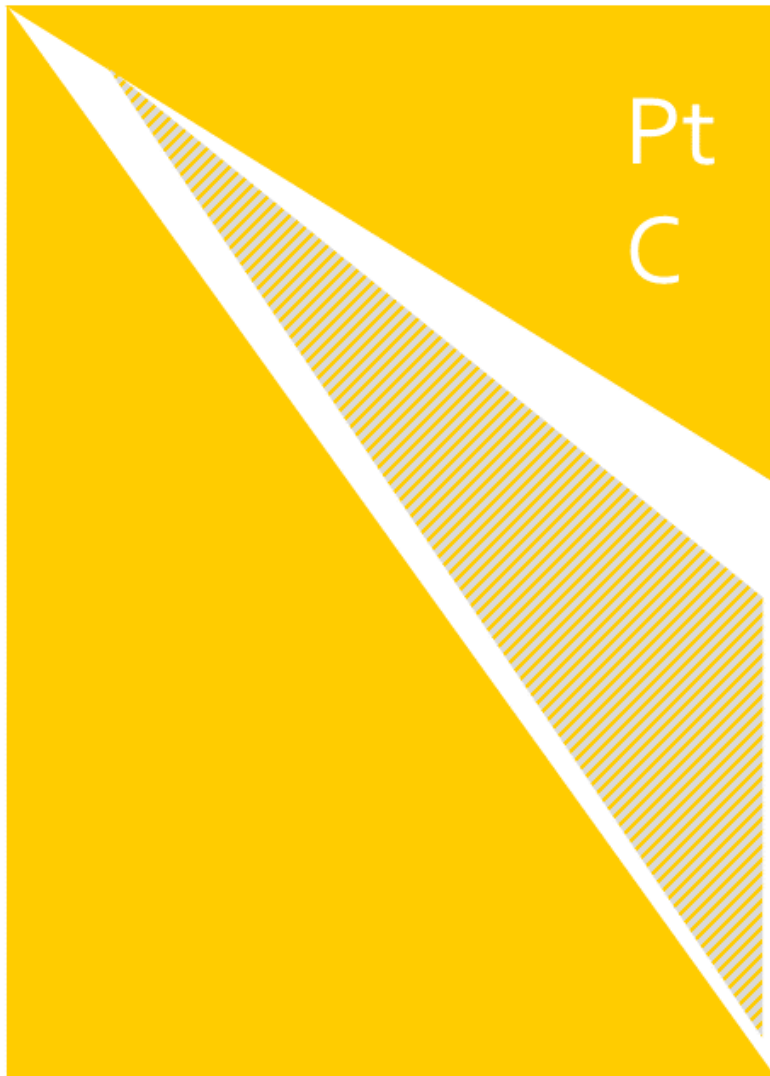
We will go into more details regarding these services later on, for the moment let's just check the following chart.

	Open access repositories	Academia.edu	ResearchGate
Supports export or harvesting	Yes	No	No
Long-term preservation	Yes	No	No
Business model	Nonprofit (usually)	Commercial. Sells job posting services, hopes to sell data	Commercial. Sells ads, job posting services
Sends you lots of emails (by default)	No	Yes	Yes
Wants your address book	No	Yes	Yes
Fulfills requirements of UC's OA policies	Yes	No	No

 <http://creativecommons.org/licenses/by/4.0/> University of California OSC

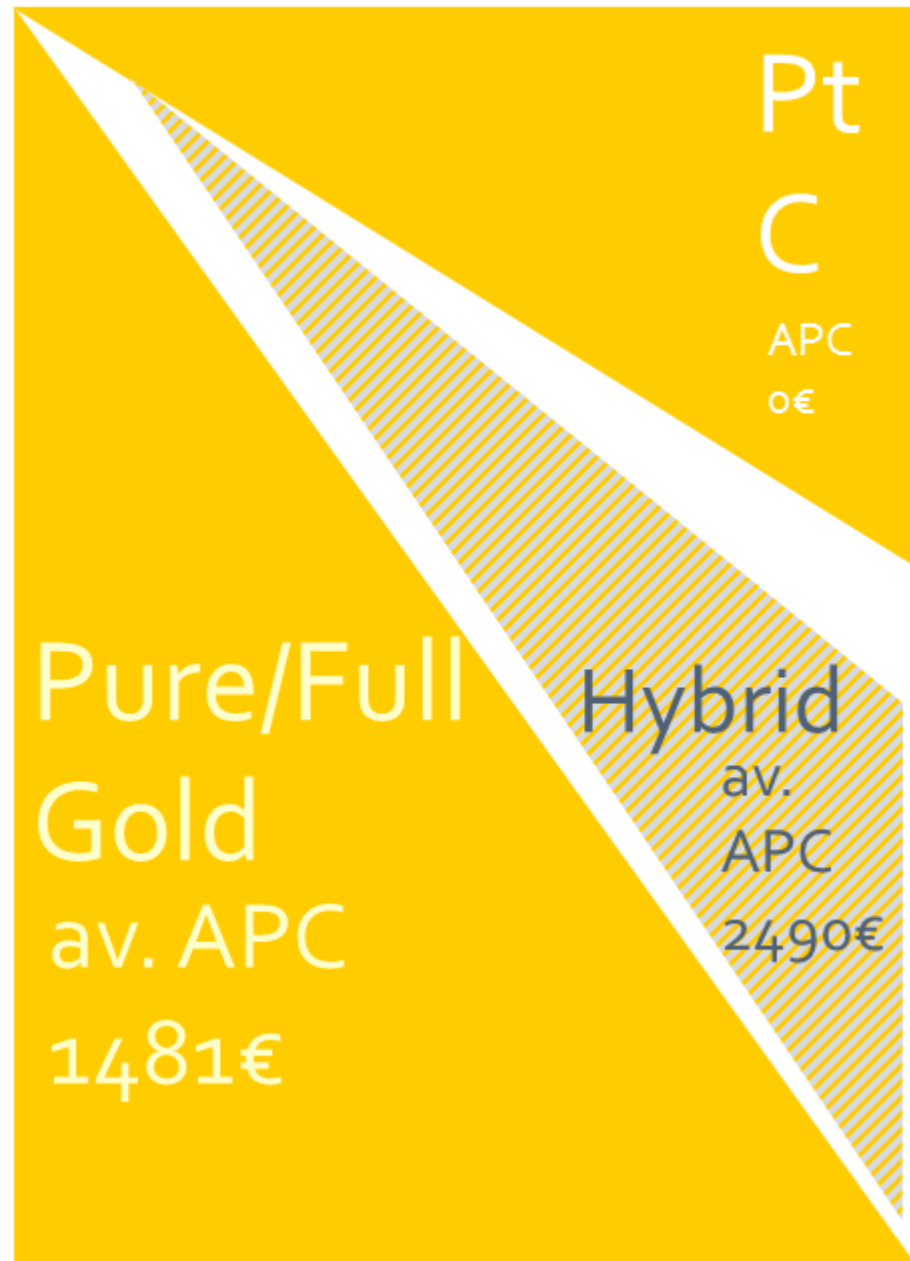
From : Fortney, K. & Gonder, J. (2015). 'A social networking site is not an open access repository'. Office of Scholarly Communication - University of California. Retrieved from <http://osc.universityofcalifornia.edu/2015/12/a-social-networking-site-is-not-an-open-access-repository/>

The gold and the grey, focus on journals



? Q06

Focus on journals : economic typology



Focus on journals : economic typology

Data from [Open APC](#) : 2005-2018, 158 research institutions

Value in €	Full OA	Hybrid OA
average	1481	2490
median	1407	2443

There is hence concern that hybrid APCs often reflect traditional publishers' concern to maintain existing profit margins and market position rather than the true costs of publishing.

Ross-Hellauer, T. et al. (2018). 'Are funder Open Access platforms a good idea?' PeerJ Preprints, 6, e26954v1. <https://doi.org/10.7287/peerj.preprints.26954v1>

Open access journals : hybrid parenthesis

An other concern regarding articles published in hybrid journals : are they indeed made open access?

Two stories :

Beynon, R. (2018). 'OK Molecular and Cellular Proteomics @molcellprot @ASBMB I'm calling you out publicly. I just tried to access one of my own papers, for which we paid for GOLD OA, and it is paywalled. Poor show. I hope you will refund any poor sap who paid for access. Please fix this [immediately.pic.twitter.com/dGh9MYpYVS](https://twitter.com/dGh9MYpYVS)' [Tweet]. @astacus. Retrieved from <https://twitter.com/astacus/status/951020844251340800>

Gadd, E. (2018). 'Dear @SpringerOpen ,We have just published a paper (<https://bit.ly/2EZGyvL>) with you under a CC-BY licence, but when you click on the article's Reprints & Permissions link it takes you to a page that says the article is under a CC-BY-NC-ND licence. Please can you correct this?[pic.twitter.com/rdWVsMWSoz](https://twitter.com/rdWVsMWSoz)' [Tweet]. @LizzieGadd. Retrieved from <https://twitter.com/LizzieGadd/status/986932905694949376>

Open access journals : economics : the fair price? 1/2

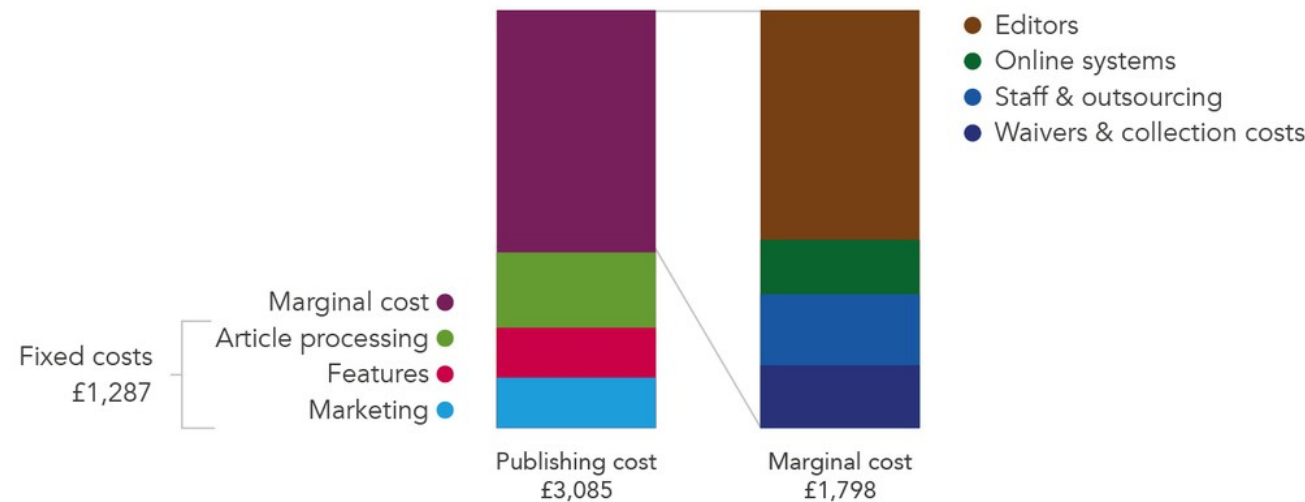


Figure 1. Fixed and marginal costs of publishing, based on projected 2017 cost per article

We have assumed a US\$ to Sterling exchange rate of 1.30, so the fee of \$2,500 will cover the marginal costs of £1,798 and also contribute a small amount towards our fixed costs, for the time being. This will also give us some protection against having to revise the publication fee as the exchange rate moves.

From : Patterson, M. & McLennan, J. (2016). 'Setting a fee for publication'. eLife. Retrieved from <https://elifesciences.org/inside-elife/b6365b76/setting-a-fee-for-publication>

Open access journals : economics : the fair price? 2/2

More about calculating the costs : Tennant, J. (2018). 'Why the term "Article Processing Charge" (APC) is misleading'. Green Tea and Velociraptors. Retrieved from <http://fossilsandshit.com/the-term-article-processing-charge-is-misleading/>

Towards non-profit scholarly communication ?

Adema, J. & Stone, G. (2017). 'Taking back control: the new university and academic presses that are re-envisioning scholarly publishing'. LSE Impact Blog. Retrieved from <http://blogs.lse.ac.uk/impactofsocialsciences/2017/09/20/taking-back-control-the-new-university-and-academic-presses-that-are-re-envisioning-scholarly-publishing/>

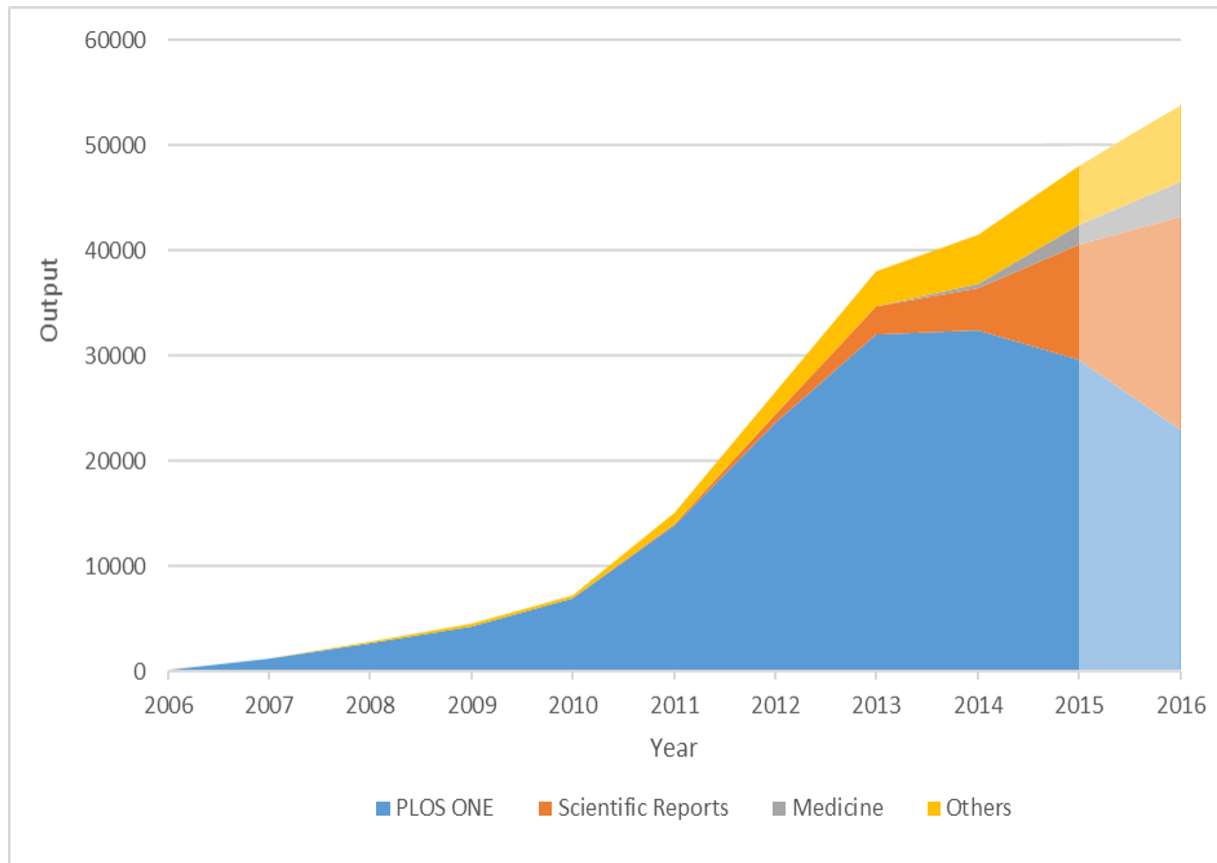
Pooley, J. (2017). 'Scholarly communications shouldn't just be open, but non-profit too'. LSE Impact Blog. Retrieved from <http://blogs.lse.ac.uk/impactofsocialsciences/2017/08/15/scholarly-communications-shouldnt-just-be-open-but-non-profit-too/>



Open access journals : editorial models

Megajournals	Two-stage journals with public peer-review and interactive public discussions	Overlay journals
 The logo for Scientific Reports, featuring the words "SCIENTIFIC" and "REPORTS" in a sans-serif font, with a red gear icon integrated into the letter "O" of "REPORTS".	 The logo for the European Geosciences Union (EGU), consisting of a blue circular arrow surrounding the letters "EGU", followed by the text "European Geosciences Union" in a smaller blue font.	 The logo for épisciences.org, featuring a stylized black and green icon above the text "épisciences.org" in a green sans-serif font.

Megajournals : overview



Total number of articles published in 11 mega-journals (Plos One, Scientific Reports, Medicine, and others: BMC Research Notes, BMJ Open, AIP Advances, SpringerPlus, PeerJ, SAGE Open, F1000 Research and FEBS Open Bio). Includes projected figures for 2016. From : Pinfield, S. (2016). 'Mega-journals: the future, a stepping stone to it or a leap into the abyss?' Times Higher Education (THE). Retrieved from <https://www.timeshighereducation.com/blog/mega-journals-future-stepping-stone-it-or-leap-abyss>

Megajournals : characteristics

4 main characteristics :

1. broad scope (accepting articles across a range of disciplines); 2) large output (aiming for high volume of published articles); 3) an open access publishing model (typically based on an Article Processing Charge paid prior to publication); and 4) a peer review system based solely on the basis of technical/scientific soundness.

Fry, J. & Wakeling, S. (2019). 'Who are you writing for? The role of community membership on authors' decisions to publish in open access mega-journals'. LSE Impact Blog. Retrieved from <http://blogs.lse.ac.uk/impactofsocialsciences/2019/01/11/who-are-you-writing-for-the-role-of-community-membership-on-authors-decisions-to-publish-in-open-access-mega-journals/>

Megajournals : peer review

The value of a peer review process that doesn't rely on subjective assessments of significance. A methodology that is all-too-frequently dismissed as "peer review lite", the soundness-only methodology for peer review differs in scope rather than rigor. The technical soundness review itself is rigorous and for most megajournals, involves a number of internal and external checks and assessments.

Mudditt, A. (2018). 'Countering the Über-Brands: The Case for the Megajournal'. The Scholarly Kitchen. Retrieved from <https://scholarlykitchen.sspnet.org/2018/01/18/countering-uber-brands-case-megajournal/>

How to find your way around?

Think, check, submit

Helps you identify trusted journals, using among others DOAJ

DOAJ

The Directory of Open Access Journals is an independant, community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals.

QUOAM

Quality Open Access Market is developed ad maintained by researchers from Radboud University Nijmegen, QUOAM is a market place, including **quality scoring** based on academic crowd sourcing and **price information** with institutional licensed pricing.

What opportunities for you?



You are using publications : broaden your scope

In terms of disciplinary coverage

In terms of types of document retrievable

? Q07

? Q08

You are using publications : tools to find journal articles : Google Scholar

Search interface

+ Browser extension

+ Source for the browser extension [Lazy Scholar](#)

More about Google Scholar invention here : Levy, S. (2014). 'The Gentleman Who Made Scholar'. Backchannel. Retrieved from <https://medium.com/backchannel/the-gentleman-who-made-scholar-d71289d9a82d> -

You are using publications : tools to find journal articles : other tools

Unpaywall 

Browser extension

+ integrated into Zotero, Scopus, Web of Science, etc.

Open Access Button 

Browser extension : search and request, articles

+ might be integrated into library services

More about Unpaywall and Open Access Button

See the page https://openaccessbutton.org/skip_the_paywall

You are using publications : tools to find other open access materials



BASE - Bielefeld Academic Search Engine

- Non commercial
- Defined sources
- Advanced search : including/excluding document types
- Sorting and filtering results

You are producing publications : publishing preprints?

Definitions :

Preprint (n): a complete but unpublished manuscript yet to be certified by peer review, distributed by its author before or at submission to a journal

Preprint server (n): a journal-independent mechanism for distributing preprints in a defined domain

Inglis, J. (2018). 'Preprints in Biology and Medicine'. Presented at the NISO Webinar. Retrieved from <https://www.slideshare.net/BaltimoreNISO/inglis-preprints-in-biology-and-medicine>

You are producing publications : publishing preprints?

A story :

Quintana, D. (2018). 'Last year I posted a preprint. Doing this set off a chain of events that convinced me I should post a preprint for ALL my manuscripts. Here's my story (1/17)' [Tweet]. @dsquintana. Retrieved from <https://twitter.com/dsquintana/status/962214636312461312>

A how-to :

Bourne, P. E. et al. (2017). 'Ten simple rules to consider regarding preprint submission'. PLOS Computational Biology, 13(5), e1005473. <https://doi.org/10.1371/journal.pcbi.1005473>

with a broader definition :

In short, a preprint is a research output that has not completed a typical publication pipeline but is of value to the community and deserving of being easily discovered and accessed.

You are producing publications : enhancing your visibility as a researcher

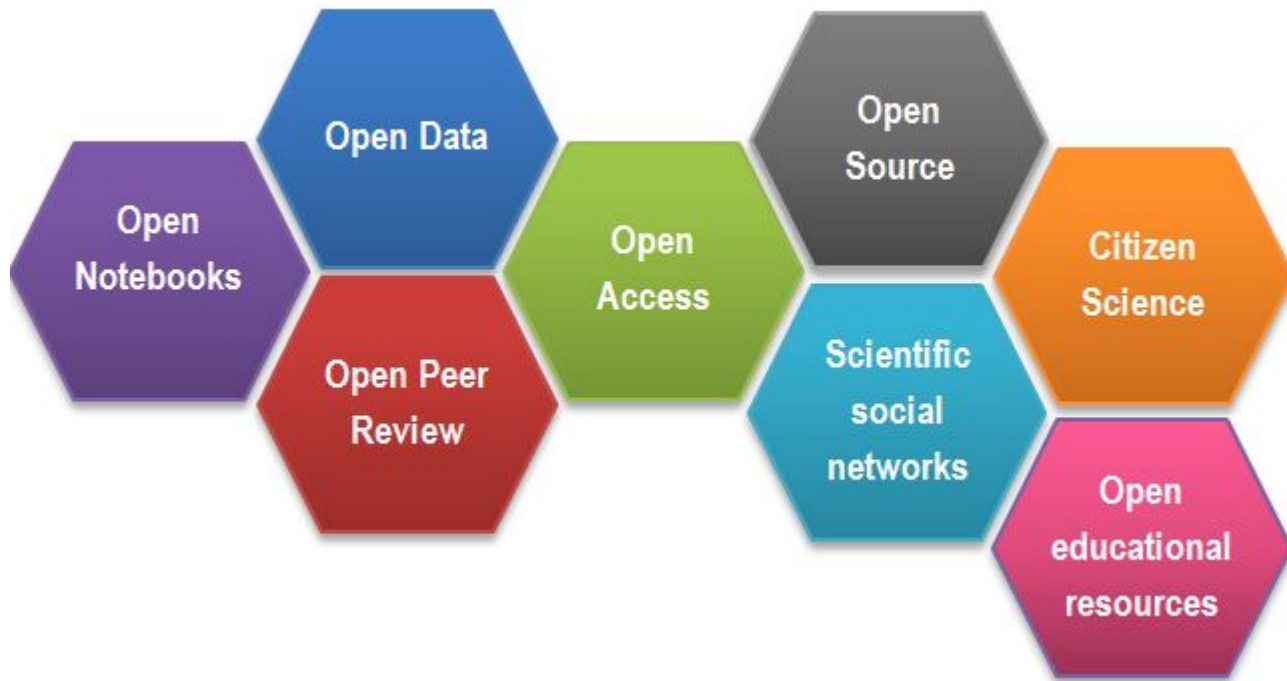
ORCID + other tools (after the break)

- Building your reputation
 - be visible as a **researcher**
 - be identified in a unique and unambiguous way
- Giving full text access to **ALL** your productions and outputs (articles, data, thesis, etc.)



The big picture

Open access is one facet of open science



Stakeholders' policies

Are you aware of funders' expectations and requirements ?

- European Commission

Dechamp, J.-F. (2018). 'Research and Innovation in transformation: the transition to Open Science'. Presented at the NARMA2018, Lillestrom. Retrieved from <https://www.slideshare.net/OpenAccessEC/research-and-innovation-in-transformation-the-transition-to-open-science>

- Wellcome Trust

Wellcome Trust. (2018). 'Open access policy 2020'. Wellcome Trust. Retrieved from <https://wellcome.ac.uk/sites/default/files/wellcome-open-access-policy-2020.pdf>

- cOAlition S - including ANR

Science Europe. (2018). 'Plan S: Making full and immediate Open Access a reality'. Retrieved from <https://www.scienceeurope.org/coalition-s/>

Thank you for your attention!

Des **!?**

Des 

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