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From Open Science to Inclusive Science @pcmasuzzo



**we need open science
to build a (sustainable) future**



**SUSTAINABLE
DEVELOPMENT**

GOALS

Open Science: where are we?

FAIR Data

Open Access

Open Source

Peer Review

Preprints

Replication

Reproducibility

Incentives & Behavior

Assessment & Evaluation





Tsunami, by Katsushika Hokusai - Metropolitan Museum of Art, online database: [entry 45434](#), Public Domain





Equity, diversity and
inclusiveness are
non-negotiable

and they must be built into
the **foundation** of
democratizing knowledge



It's about time we move away from **research excellence**, and shift the conversation towards the need for responsible and inclusive research



It's about time we move
away from research
excellence, and shift the
conversation towards **values**
~~the need for responsible and
inclusive research~~

Why does research excellence hamper inclusion and diversity in science?



What is research excellence?

Some possible answers

- the holy grail of academic life (Michèle Lamont)



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- [something that] tells us nothing about how important the science is and everything about who decides (Jack Stilgoe)
- used in its current unqualified form, research excellence is pernicious and dangerous rhetoric that undermines the very foundations of good research and scholarship (Moore *et al.*)



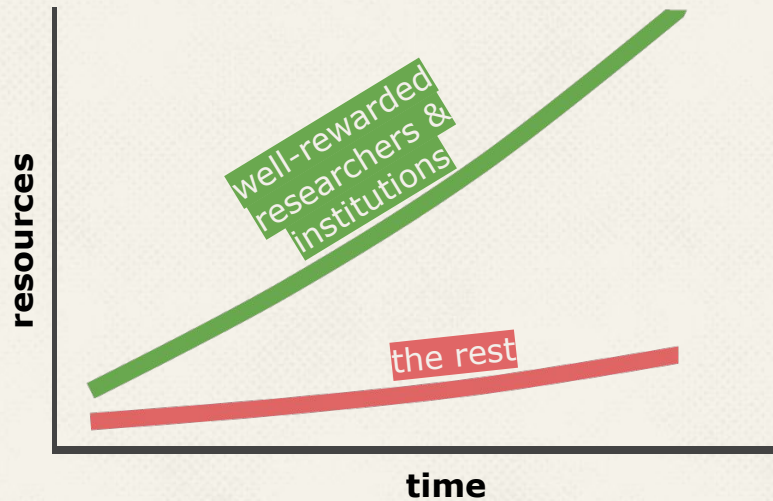
Research excellence is a neo-colonial agenda

Research excellence reinforces systemic biases in power structures, reduces diversity, and excludes many participants from the processes of scholarship



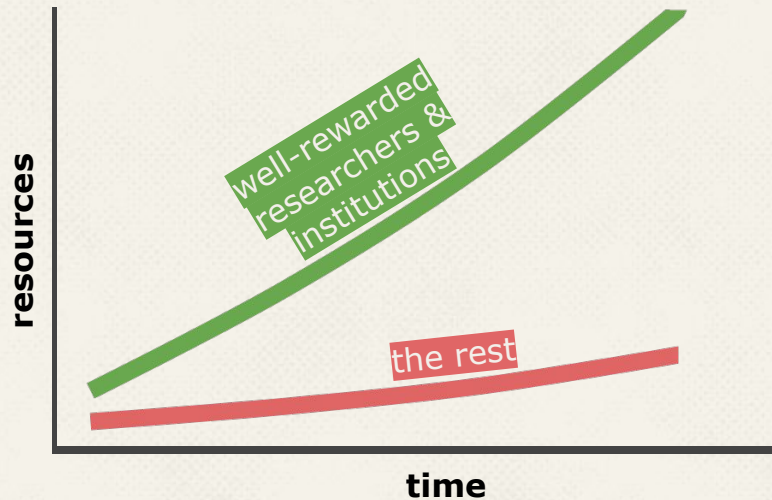
Research excellence and the Matthew effect

'To those who have, more will be given
and to those who have not, more will be
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Research excellence and the Matthew effect

'To those who have, more will be given and to those who have not, more will be taken away'



The **cumulative advantage effect** that comes with the rhetoric of excellence increases the stakes of the **competition for resources**; encourages **gamesmanship**; discourages the pursuit and publication of types of “**Normal Science**” (such as replication studies); creates a **bias** towards novel, positive, and even inflated results

Why we need Inclusive Science

We must find a way to remove the inequalities promoted by modern science while making sure its huge potential benefits work for everyone, instead of letting it become a tool for oppression and divisions

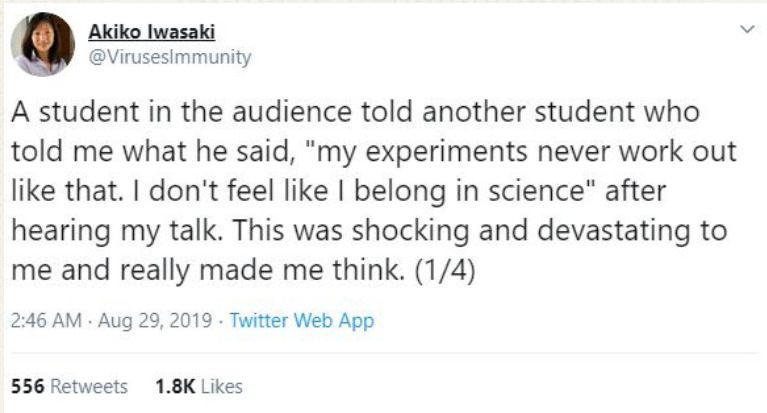


We need to hear more #failtales



Every time we present shiny results, omitting to talk honestly about our failures, we risk sending the message to ECRs and students that says: **you do not belong in Science**

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#failtales are everywhere

If your experiment fails, it doesn't mean the science was badly done, or much less, that you're a bad scientist.

When we reject failure, we create a culture of **punishment, artificial rewards, and scientific bias.**

When we embrace failure, we cultivate a culture of **acceptance, tolerance, and learning.**

Which one would you prefer?

And talk more about #mentalhealth



Paola Masuzzo 
@pcmasuzzo

Heard quite some horrryng stories today about PIs taking their stress, frustration and pressure out on their PhD students.

How about we start caring more about [#mentalhealth](#) and less about fucking impact factors? Please and thank you.

1:08 PM · Aug 17, 2019 · [Twitter for Android](#)

How many research evaluation committees ask scholars about how they have felt so far in their working environment?

~~Impact~~ **Happiness factor.**

We need to start recognizing elements such as **good mentoring, leadership, diversity and inclusion work, support for mental health.**

All of the things that make academia better and help our students and researchers.

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We cannot let papers and money be the only currency in science.

Languages are still a major barrier to global science

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- just one example: key articles reporting the infection of pigs with **avian influenza viruses in China** initially went unnoticed by the WHO because they were published in Chinese-language journals

Languages are still a major barrier to global science

- as publication in English has become prevalent, much scientific knowledge is now unavailable in local languages (pressure on scientists under the premise that the IF of a journal is positively related to the quality of the science it publishes and that publishing in high IF journals is the best way to demonstrate the excellence of local scientists)

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- many journals, previously published in local languages, are now publishing mainly in English to increase their impacts on scientific communities globally (see SciELO Brasil journals)
- there is a clear **knowledge transfer problem**, especially for local practitioners, policy makers and the public at large who wants (and has all the rights) to access this knowledge

How to recover lost Science in translation

Transcending language barriers requires societal, institutional, and individual-level changes

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- especially in influential global assessments, scientific literature published in non-English languages should be included and considered equally (again, include native speakers in the conversation)
- work is needed towards the development of **global databases of major non-English journals** across disciplines

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- **promote language diversity** in research assessment, evaluation, and funding systems

How to recover lost Science in translation



The screenshot shows the Helsinki Initiative on Multilingualism website. It features a teal header with the text "Helsinki Initiative on Multilingualism" and a smaller teal speech bubble containing "Hi!". To the right is the hashtag "#InAllLanguages". Below the header is a dark navigation bar with the links "READ", "SIGN", "SIGNATORIES", and "INFO". On the right side of the navigation bar is a language dropdown menu currently set to "ENGLISH". Below the navigation bar is the main heading "Helsinki Initiative on Multilingualism in Scholarly Communication".

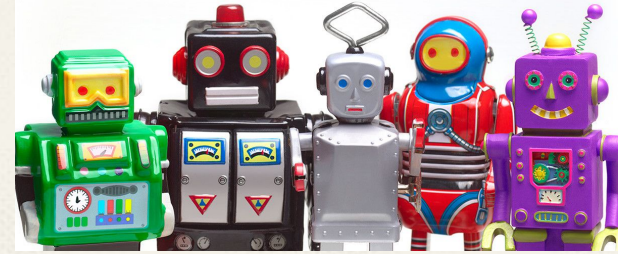
COMMUNITY

Isn't Open Science already Inclusive Science?

COMMUNITY

Diversity
Inclusion
Inclusiveness

Diversity



Diversity = attract different people of diverse backgrounds, skills and experiences

Diversity + Inclusion



Diversity = attract different people of diverse backgrounds, skills and experiences

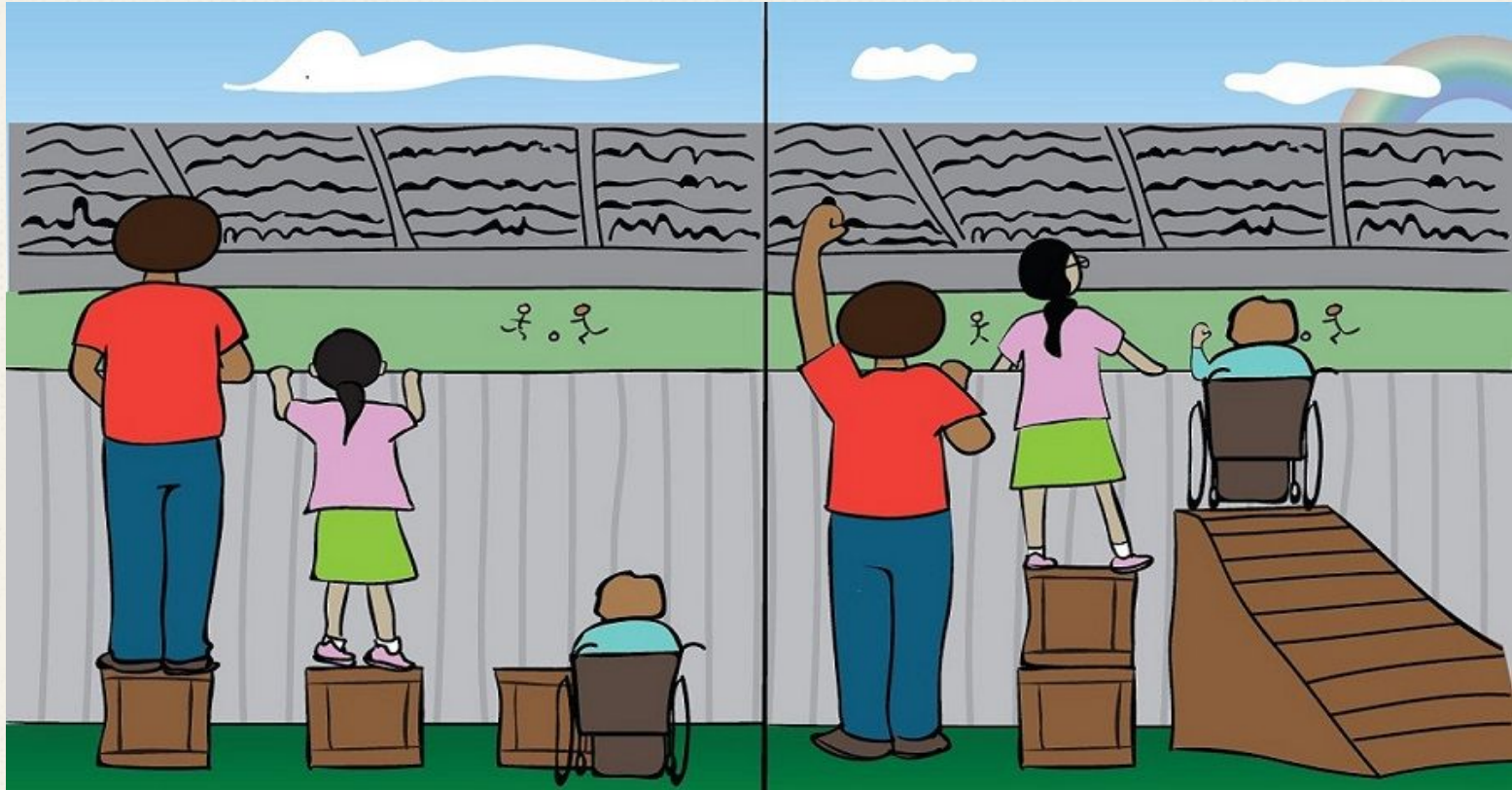
Inclusion = empower these people by providing them an environment that welcomes the best of those backgrounds, skills and experiences

Inclusion puts diversity in action

Inclusion puts the concept and practice of diversity into action by creating an environment of **involvement**, **respect**, and **connection** - where the richness of ideas, backgrounds, and perspectives are harnessed to **create value**

Science needs both diversity and inclusion

Equity and Equality



How about inclusiveness?

Inclusiveness = inclusion of individuals or groups who were previously excluded

measured in terms of eligibility, opportunities and involvement in decision-making and leadership

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we have talked enough about diversity in an *implicit* way but we have not focused on it in an *explicit* way and we may therefore have missed the real point:

equity, diversity and inclusiveness are non-negotiable



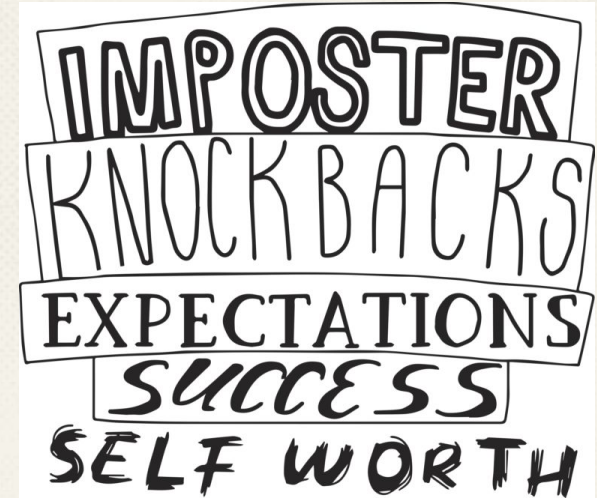
It's up to each and every one of us

it's everyone's responsibility to do equality and diversity work, most importantly because it's the right thing to do, but also because it's "good for business": innovation needs diversity to thrive, to develop ideas, push boundaries and create knowledge



Then why does it seem like not enough is being done?

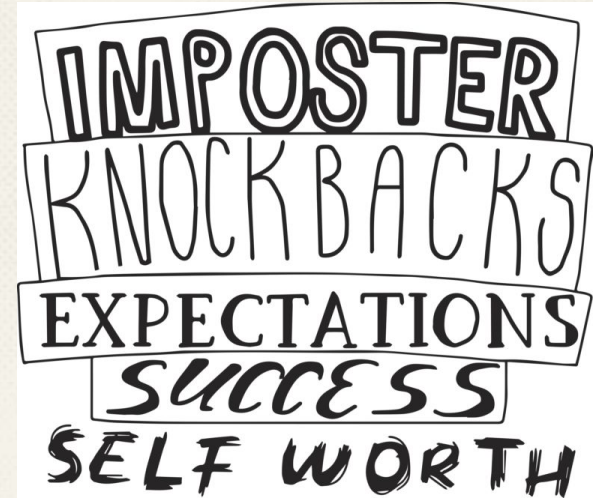
One of the reason is simply that researchers are too busy
Too busy to look up, learn, listen, read, imagine
themselves in another's shoes, call out, and stand against
inequalities, because their privilege protects them from
having to get involved, but also because their demanding
workloads have caused their sense of humanity to take a
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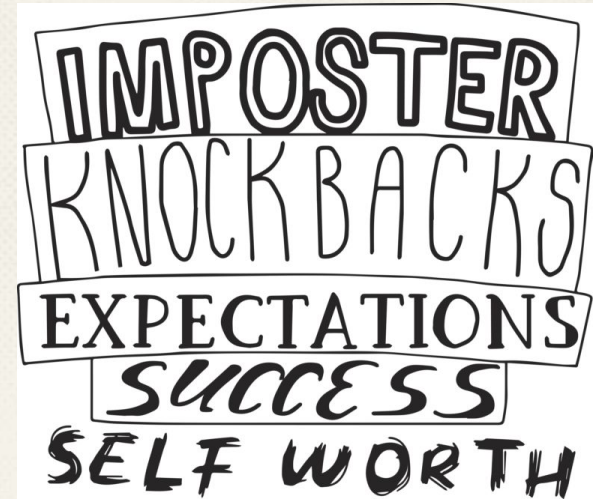


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We can't change something if we don't (all) recognize that
it is a problem



What can we all do?

- shape the culture by **engaging** with our communities
- reach out, **be kind**, seek aid, give aid
- support, recommend, acknowledge, advertise, nominate and **motivate each other**
- if we enjoy some privilege, we can acknowledge it, work towards understanding this privilege, and towards greater inclusion & diversity: be **allies**

Together is better!



the Open Science
Massive Open Online Course
(and Community!)



<https://opensciencemooc.eu/>

Our mission is to help make “Open” the default setting for all global research

We want to help create a welcoming and supporting community, with good tools, teachers, and role-models, and built upon a solid values-based foundation of freedom and equitable access to research





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950 Slack community members
7700 Twitter followers
150 strong GitHub development team
45 strategic partnerships
2 more modules in progress



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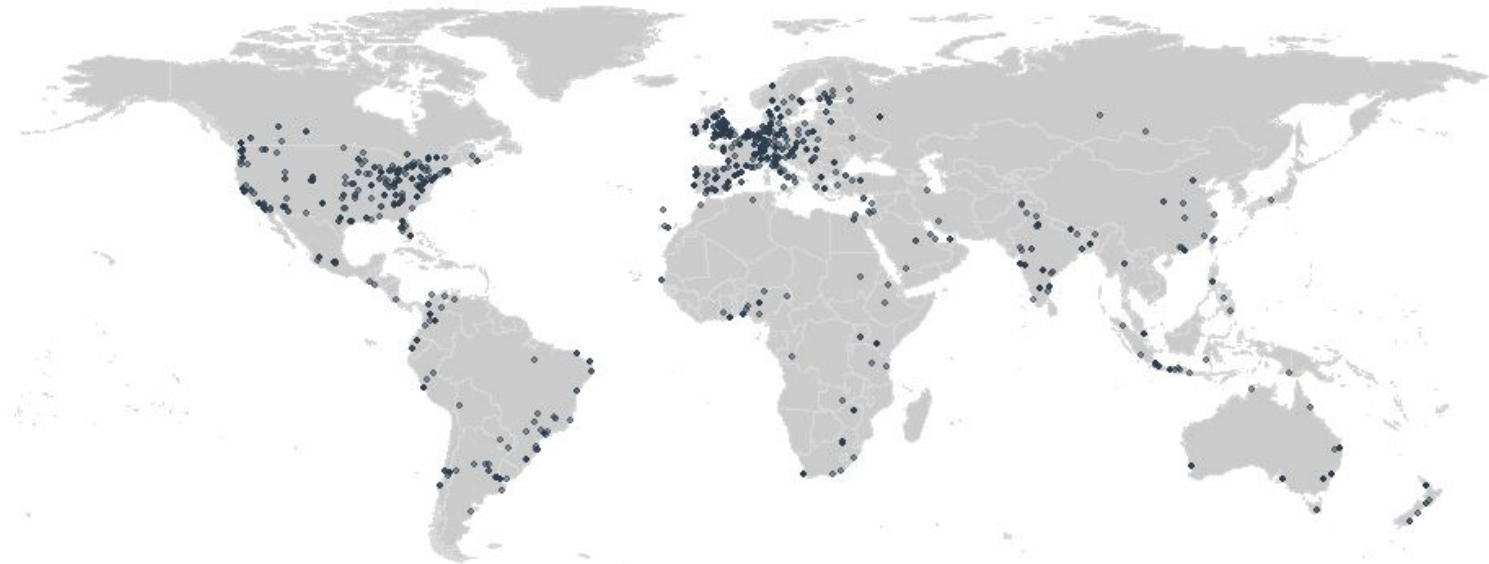
info@opensciencemooc.eu



<https://github.com/OpenScienceMOOC>

I invite you all to join us!

Locations of Open Science Twitter MOOC-ers
Profile locations geocoded with OpenStreetMap Nominatim (N = 2221)



**ongoing translations of released modules
to Italian, Portuguese, Russian, Chinese,
and hopefully more to come!**



Paola Masuzzo 
@pcmasuzzo



Equity, diversity and inclusiveness are non-negotiable. They must be built at the foundation of democratising knowledge and cannot be an afterthought or a one-off exercise. Continuous intentionality is needed, followed by actions. #OAWeek2019 #OAWeek

 SPARC @SPARC_NA · 17h

As we kickoff #OAWeek, we're sharing our thoughts on unpacking the connection between equity & open, and how @SPARC_NA has been working to internalize the question at the heart of this year's theme, "Open for Whom? Equity in Open Knowledge." #OpenForWhom

openaccessweek.org/profiles/blogs...



11:16 PM · Oct 21, 2019 · Twitter for Android



köszönöm
grazie dank je
thank you obrigado
ありがとうございました
gràcies merci
dankie gracias
Dankeschön
谢谢 teşekkür ederim
Dziękuję Ci Kiitos
благодарю вас

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