

San Francisco Declaration on Research Assessment (DORA) & Open Science

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“Open Science

=

Science done according to its definition”

(Brian Nosek, 2014)



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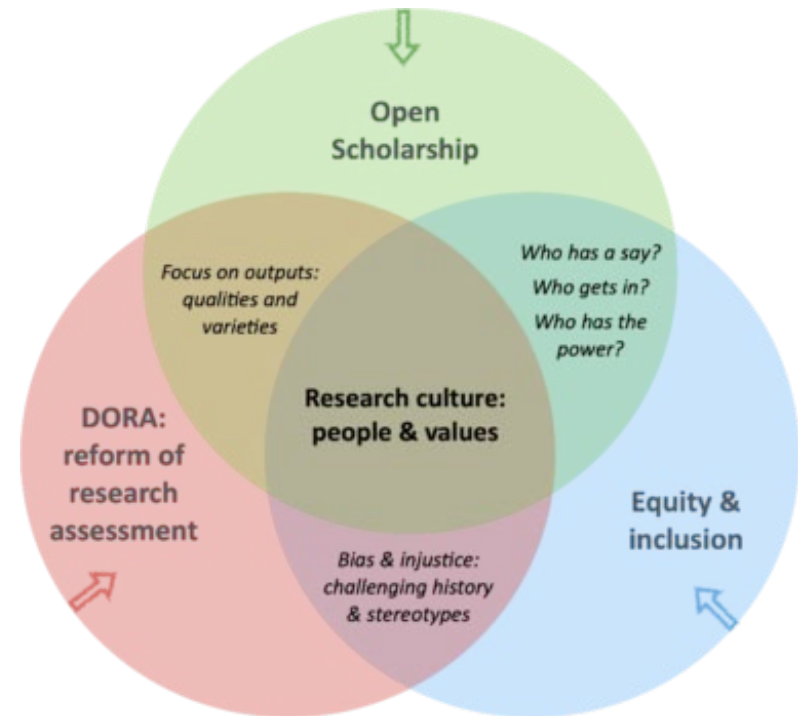
San Francisco Declaration on Research Assessment (DORA)

- American Society for Cell Biology, 2012
- <https://sfdora.org/>
- Assess the quality of research itself, regardless of where or by whom it is published
- Do not use journal-based metrics (e.g. Journal Impact Factor) -> article-level metrics
- Include other forms of research output (e.g. datasets, software,..)
- Interdisciplinarity, collaboration and valorisation



DORA & Open Scholarship

*“Open Scholarship is the practice of applying principles of openness throughout the research and scholarly environment. This results in **transparent and accessible knowledge** that is shared and developed through collaborative networks. Practicing Open Scholarship means **sharing research outputs (such as research protocols, methodology, code, data, and publications) as early as possible in the research process** in a way that enables access and reuse by others.”*



DORA and the Open Scholarship movement have the same destination in mind: quality research that enriches all of humanity.

<https://sfdora.org/>





DORA & Open Scholarship

- include other types of research output: data, review articles, reagents, software, peer review, expert advice, training, new techniques, technologies, processes and materials
- share openly to maximize the value and impact of new knowledge
- use of persistent digital identifiers
- promote equity and inclusion research assessment practices

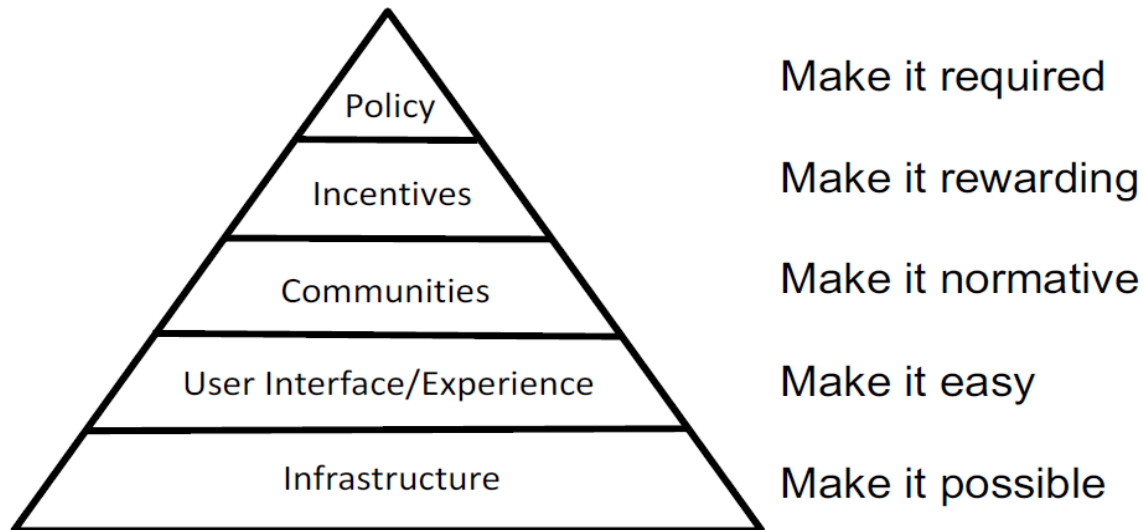


How to change a research culture?

- Prof. Brian Nosek
 - Social psychology
 - Honorary doctorate UGent 2019: research implicit bias
 - Center for Open Science ([COS](#)): increase openness, integrity, and reproducibility of research
 - Open Science Framework ([OSF](#)): free, open platform to share research (protocols, materials, data, code, preprints..)
 - “gap between scientific values and scientific practices”
- Community engagement & peer influence



Changing a Research Culture



(Nosek, 2019)

The changing behavior must be visible to the community to stimulate the diffusion of innovation.



Changing a Research Culture

- Steps towards more transparency and reproducibility
 - Open data: FAIR
 - Open materials: materials & methods
 - Preregistration: submit research plan to a registry in advance of study
(more info: www.cos.io/initiatives/prereg)
 - Preprints:
 - preprint server (e.g. www.cos.io/products/osf-preprints)
 - rapid dissemination of research ideas and data
 - more rapid feedback



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(Nosek, 2021)



VLIZ Open Science Platform (VOSP)

- Open Access: Open Marine Archive (OMA)
- FAIR data: IMIS, Marine Data Archive (MDA)
- (Inter)national Open Science Networking: FOSB, FRDN, FRIS, EOSC,...
- Other research outputs
- Open coding
- DORA
- Metrics & impact
- Research Integrity
- Ocean Literacy (Education, Training, Skills)
- Citizen Science
- ...

Towards Open Science as common practice!





**OPEN SCIENCE:
JUST
SCIENCE
DONE RIGHT**

(Imming, 2018)



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