A New Odyssey

Pioneering the Future of Scientific Progress Through Open Collaboration

Sara El-Gebali

BOSC- 2023

“The rich get richer and the poor get poorer”

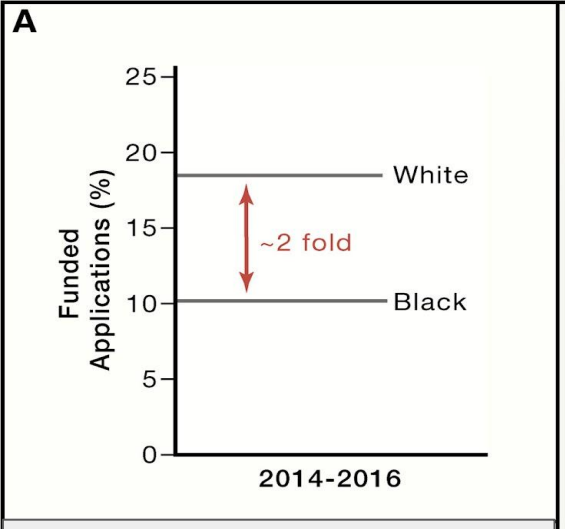
“The rich get richer and the poor get poorer”

The myth of scientific meritocracy

The Matthew effect

By Robert Merton

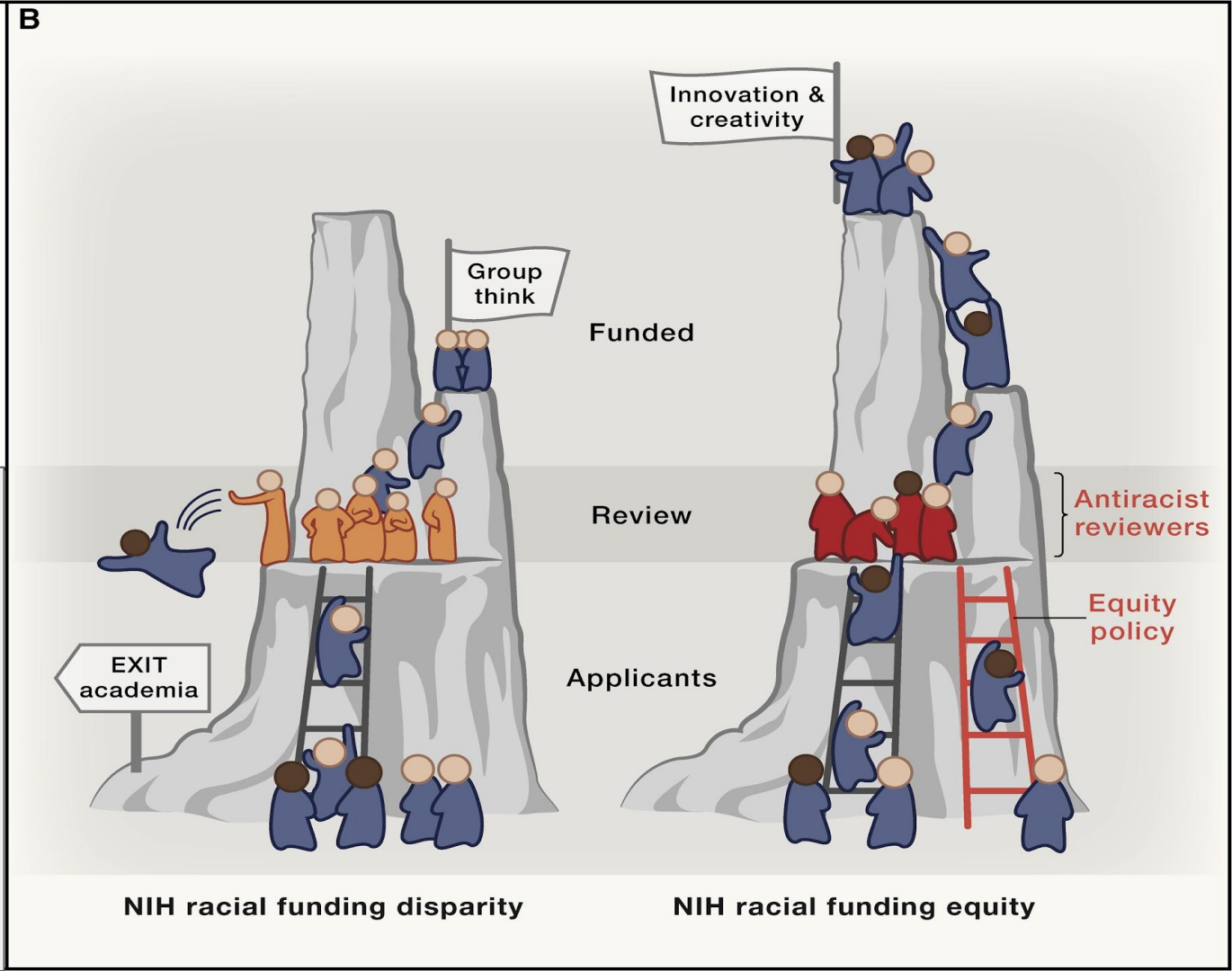
"For unto everyone that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath."



Fund Black scientists

Metaphoric illustration of current NIH funding procedures

https://doi.org/10.1016/j.cell.2021.01.011



SCIENCEINSIDER | FUNDING

NSF grant decisions reflect systemic racism, study argues

Funding success rates for white scientists far exceed the NSF average, whereas Black and Asian researchers do worse

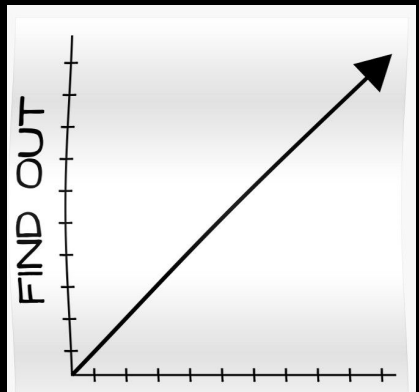
26 JUL 2022 • 5:35 PM • BY JEFFREY MERVIS

NEWS | 25 August 2022

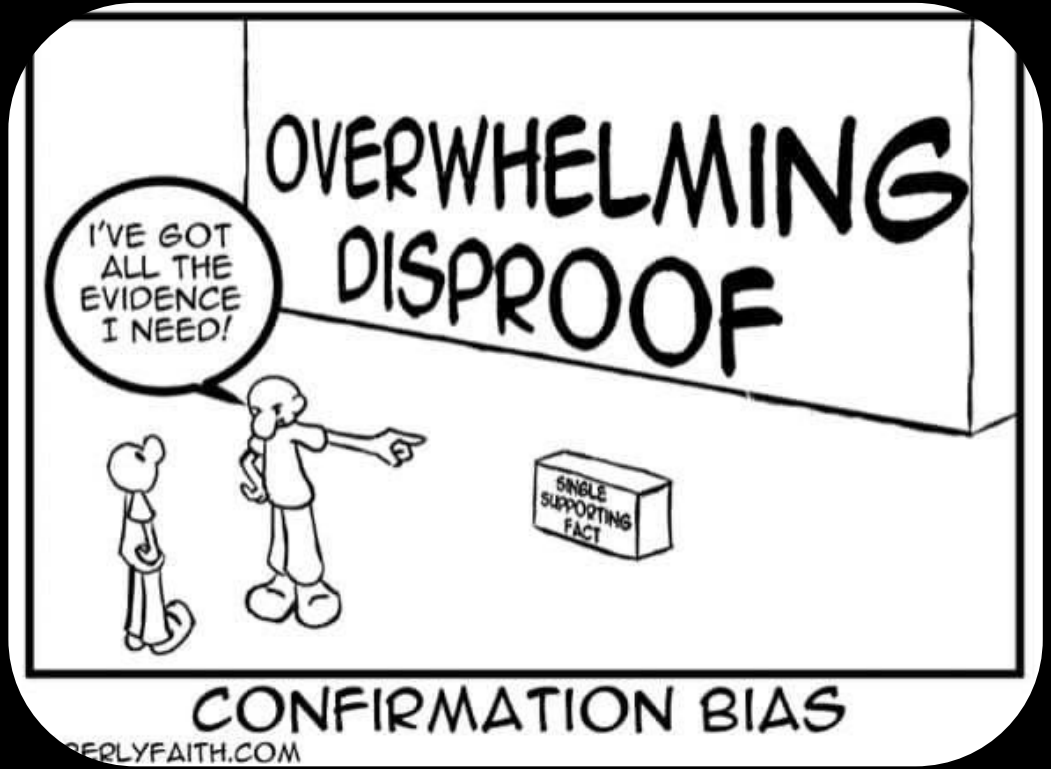
Wellcome says it has perpetuated ‘systemic racism’ in science

The research funder’s admission has been largely welcomed, but experts say many institutions need to do much more to implement anti-racism pledges.

Why should we care?



Confirmation bias & the reproducibility crisis



The story of Alzheimer's Research


Garbage in,
Garbage out

ARTIFICIAL INTELLIGENCE | OPINION

Police Facial Recognition Technology Can't Tell Black People Apart

AI-powered facial recognition will lead to increased racial profiling

By Thaddeus L. Johnson, Natasha N. Johnson on May 18, 2023

POLICY

Take Racism Out of Medical Algorithms

Tools used in health care are harming people of color. It's time to fix them

ARTIFICIAL INTELLIGENCE | OPINION

Police Facial Recognition Technology Can't Tell Black People Apart

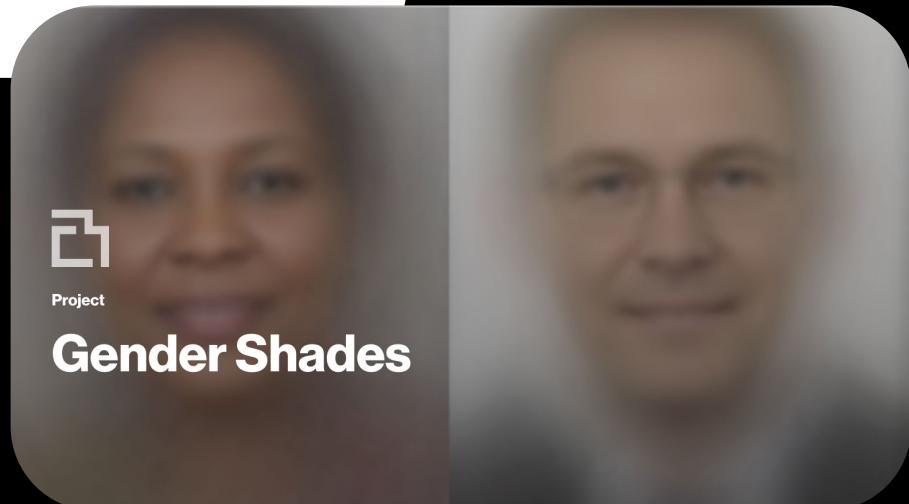
AI-powered facial recognition will lead to increased racial profiling

By Thaddeus L. Johnson, Natasha N. Johnson on May 18, 2023

POLICY

Take Racism Out of Medical Algorithms

Tools used in health care are harming people of color. It's time to fix them

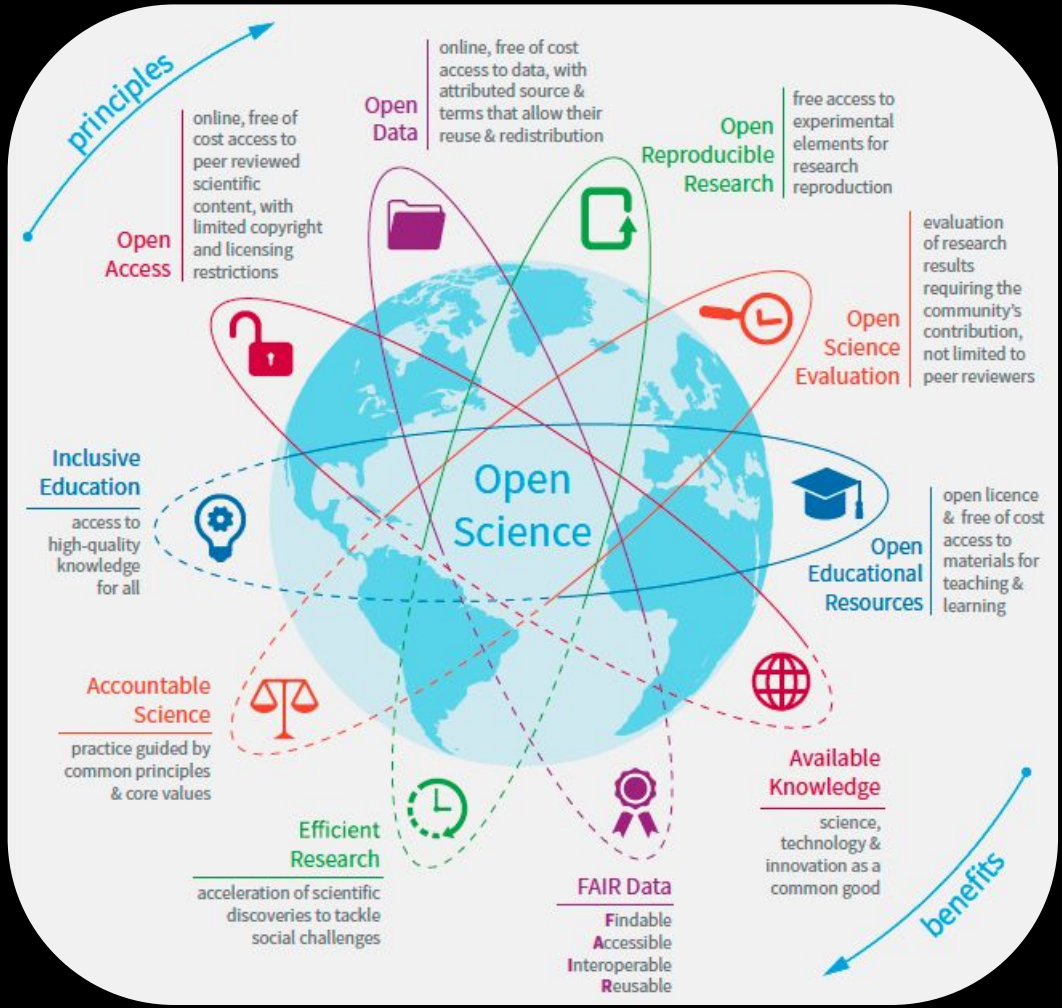


Genomics & Precision medicine


Biopiracy & Helicopter Research


UNITY
IN
DIVERSITY

Open
Collaborative
Inclusive
Science



Equitable access to knowledge

Open Science Beyond Open Access: For and with communities, A step towards the decolonization of knowledge

Chan, Leslie; Hall, Budd; Piron, Florence; Tandon, Rajesh; Williams, Wanósts'a7 Lorna

UNESCO is launching international consultations aimed at developing a Recommendation on Open Science for ad

Published: 25 April 1953

Molecular Structure of Nucleic Acids: A Structure for Deoxyribose Nucleic Acid

J. D. WATSON & F. H. C. CRICK

Nature **171**, 737–738 (1953) | Cite this article

187k Accesses | **8602** Citations | **2268** Altmetric | I

Buy article

Get time limited or full article access on ReadCube.

$32.00

Buy

All prices are NET prices.

Subscribe to Journal

Get full journal access for 1 year

199,00 €

only 3,90 € per issue

Subscribe

Tax calculation will be finalised during checkout.

Capacity building

Front. Genet., 15 February 2019
Sec. ELSI in Science and Genetics
Volume 10 - 2019 | https://doi.org/10.3389/fgene.2019.00095

Genomics for All: International Open Science Genomics Projects and Capacity Building in the Developing World

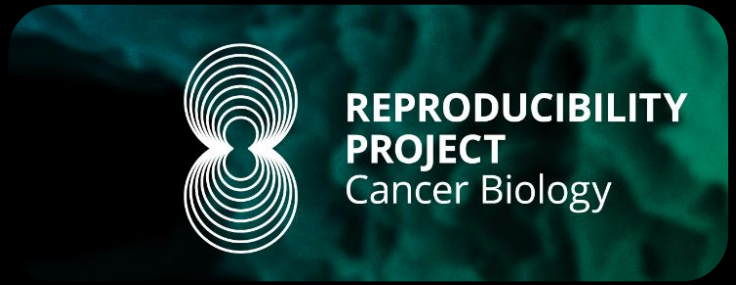
Martin Hetu[1]*, Konstantia Koutouki[2] and Yann Joly[1]

[1] Department of Human Genetics, Faculty of Medicine, Centre of Genomics and Policy, McGill University, Montreal, QC, Canada
[2] Faculty of Law, Université de Montréal, Montreal, QC, Canada

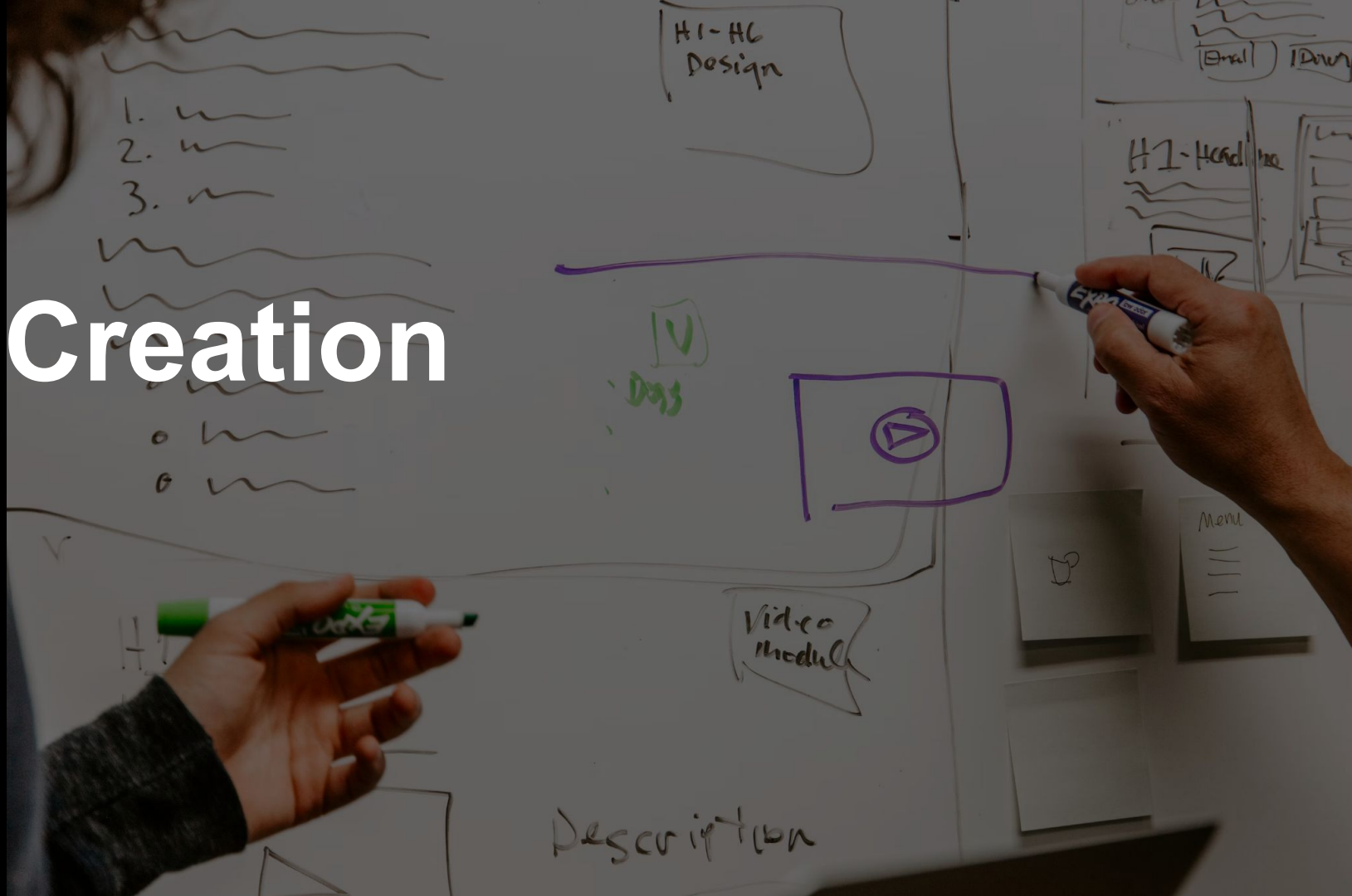
Genomic medicine applications have the potential to considerably improve health care in developing countries in the coming years. However, if developing countries do not improve their capacity for research and development (R&D) in the field, they might be left out of the genomics revolution. Large-scale and widely accessible databases for storing and analyzing genomic data are crucial tools for the advancement of genomic medicine. Building developing countries' capacity in genomics is accordingly closely linked to their involvement in international human genomics research initiatives. The purpose of this paper is to conduct a pilot study on the impact of international open science genomics projects on capacity building in R&D in developing countries. Using indicators we developed in previous work to measure the performance of international open science genomics projects, we analyse the policies and practices of four key projects in the field: the International HapMap Project, the Human Heredity and Health in Africa Initiative, the Malaria Genomic Epidemiology Network and the Structural Genomics Consortium. The results show that these projects play an important role in genomics capacity building in developing countries, but play a more limited role with regard to the potential redistribution of the benefits of research to the populations of these countries. We further suggest concrete initiatives that could facilitate the involvement of researchers from developing countries in the international genomics research community and accelerate capacity building in the developing world...


Open Science
&
FAIR Principles

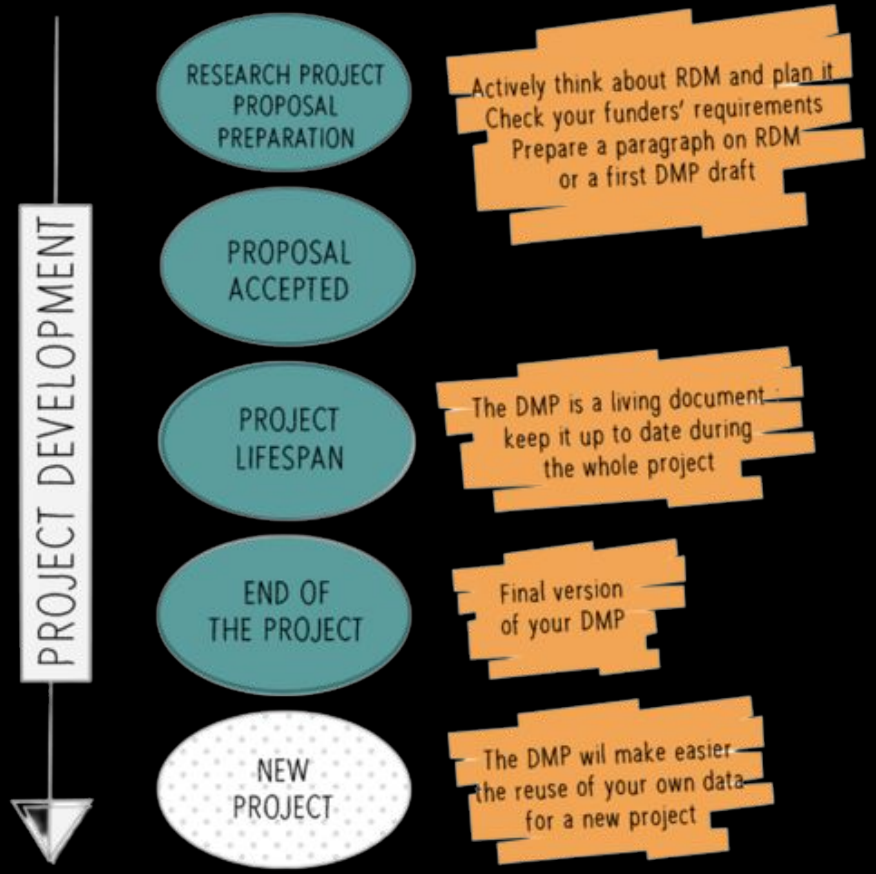
Transparent & Reproducible science



Co Creation



Data Management Plans



Provenance & Credit

Policies & Legislations

Do authors comply with mandates for open access?

The first large-scale analysis of compliance with open-access rules reveals that rates vary greatly by funder, report **Vincent Larivière** and **Cassidy R. Sugimoto**.

Funding

Level The Playing Field

Funding

Level The Playing Field

Build Robust Infrastructure

Funding

Level
The Playing
Field

Build
Robust
Infrastructure

Support
Open Access
Publishing

Funding

Level
The Playing
Field

Build
Robust
Infrastructure

Support
Open Access
Publishing

Support
Collaborative
research

Revamping Research Rewards


The Power
of
Community

Build it & they will come?

Co-Create
&
Engage

Build it &
they will
come?

Acknowledge & Reward

Build it & they will come?

Commit & Invest

Build it & they will come?

Feedback

Build it & they will come?

Respect & Empathy

Build it & they will come?

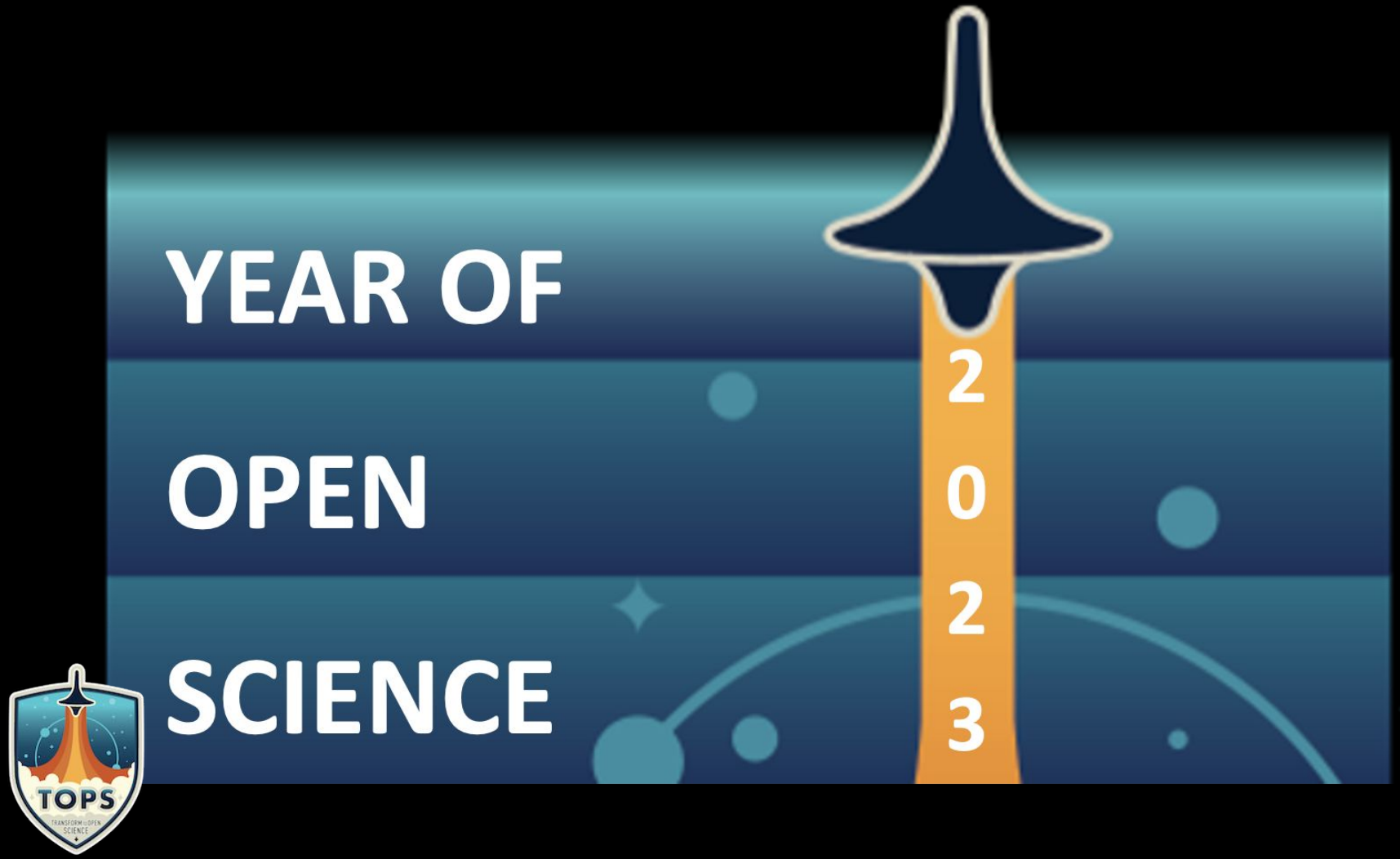
Build it & they will come?


Acknowledge bias
Learn from mistakes
Embrace diversity
Recognize your role & privilege
Leverage your position


Shift the burden
Engage & Seek feedback
Represent values of Open Science
Build new habits
Open Science & FAIR!


Recognize inequalities
Uphold commitment
Implement
Reflect & measure progress
Cultivate Respect


Establish Feedback system
Create risk management
Shift the burden
Invest in experts
Open Science & FAIR!

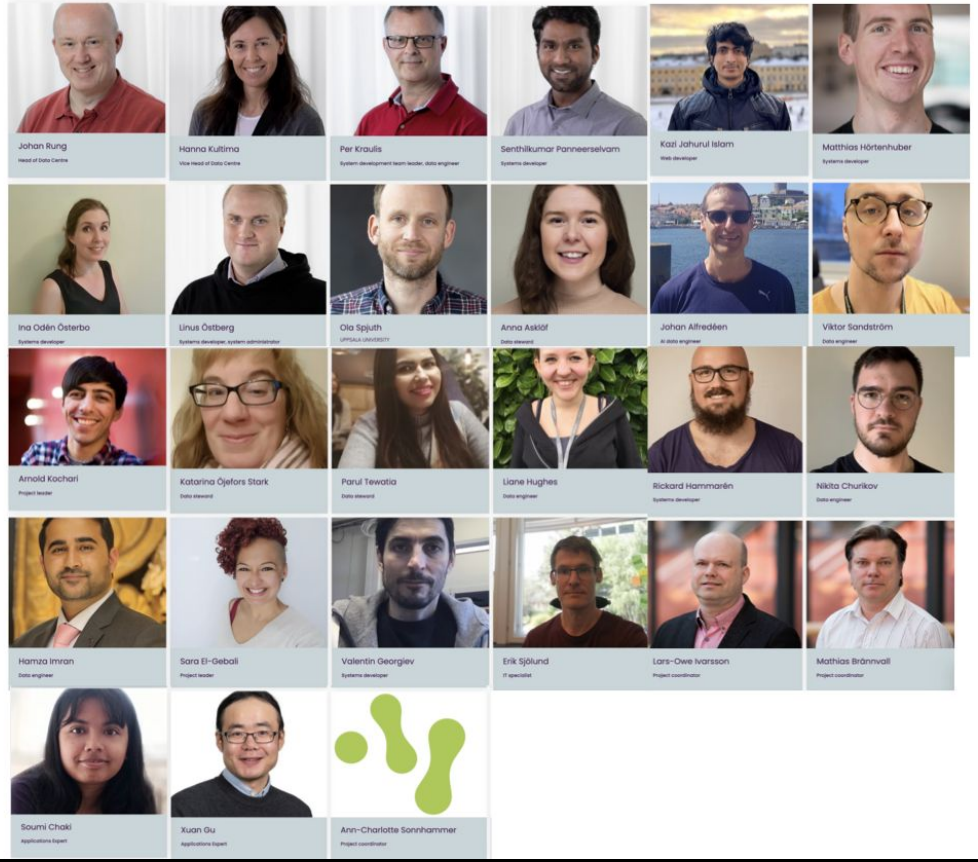

YEAR OF
OPEN
SCIENCE
2023
TOPS
TRANSFORM to OPEN SCIENCE

STARFLEET SCIENCE

UNITED FEDERATION OF PLANETS

"Infinite Diversity in Infinite Combinations" (IDIC).

SciLifeLab Data Centre Team Feb 2023



SciLifeLab

Knut and Alice Wallenberg Foundation

Swedish Research Council

BY-COVID

scilifelab.se/data

@SciLifeLab_DC

Scilifelab-Data-Centre





FAIRPoints team

Get in touch:
fairpoints.org

Congratulations, I'm done!

Unless you have any questions?

Email:
sara.elgebali@scilifelab.uu.se

Twitter: @yalahowy