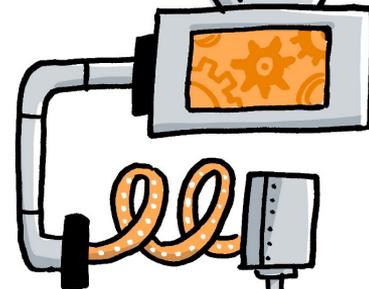


Our Journey Towards the Adoption of Open Science (OS)

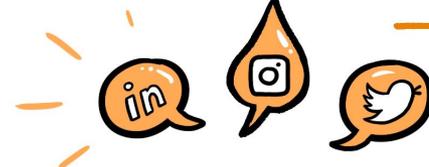
By **Batool Almarzouq (She/her)**
Computational Biologist @batool664



OUTREACH



HELPING
COMMUNICATE
COMPLEX
SCIENCE



Batool Almarzouq

Post-doc in KAIMRC



Community Lead



Committee member + Organisers



Honorary research Fellow



Core contributor



Organiser

What will I talk about?

1

Open Science!

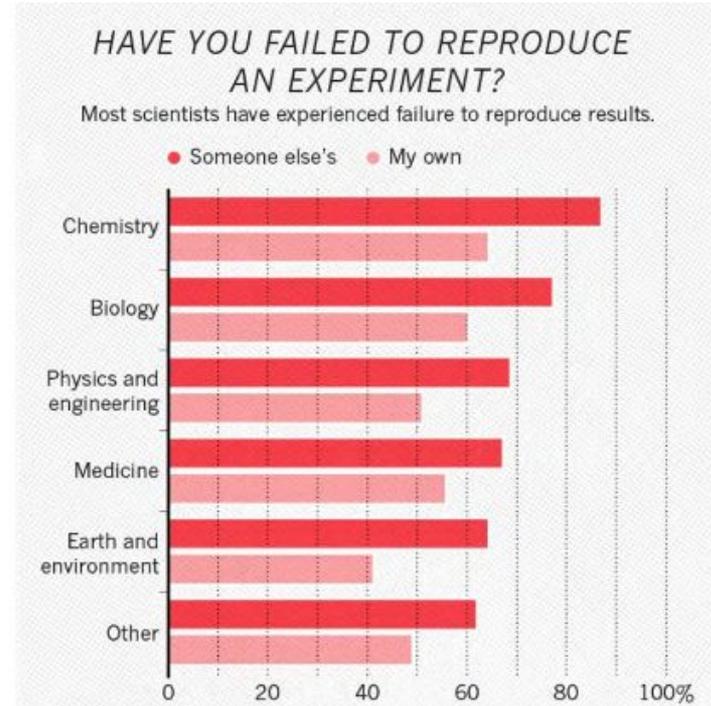
How I started to care about Open Science and how did it benefit my career?

2

Challenges

Challenges in the adoption of OS in the Arabic-speaking countries

Why care about Open Science?



Credits: Ioannidis et al. 2009

Why care about Open Science?

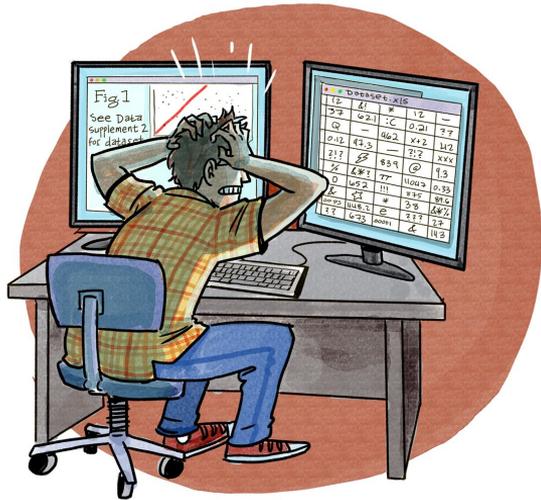
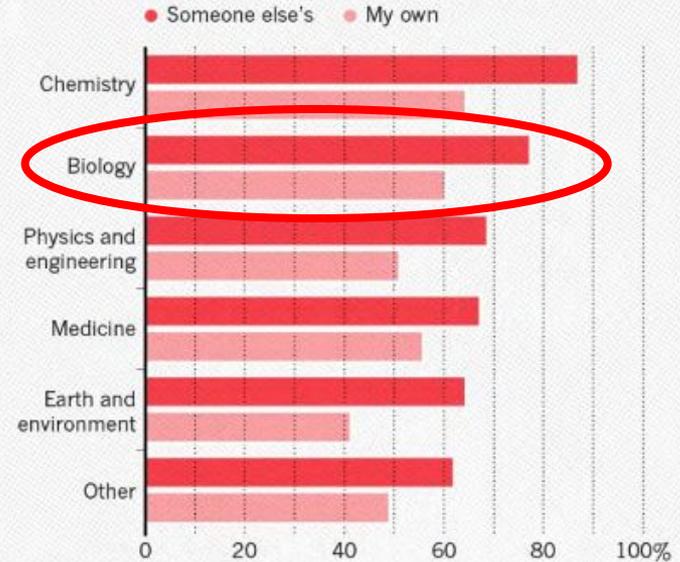


Illustration by [Ainsley Seago](#) (CC-BY 4.0).

HAVE YOU FAILED TO REPRODUCE AN EXPERIMENT?

Most scientists have experienced failure to reproduce results.



Why care about Open Science?

NEWS | 09 December 2021

Half of top cancer studies fail high-profile reproducibility effort

Barriers to reproducing preclinical results included unhelpful author communication, but critics argue that one-time replication attempts don't tell the whole story.



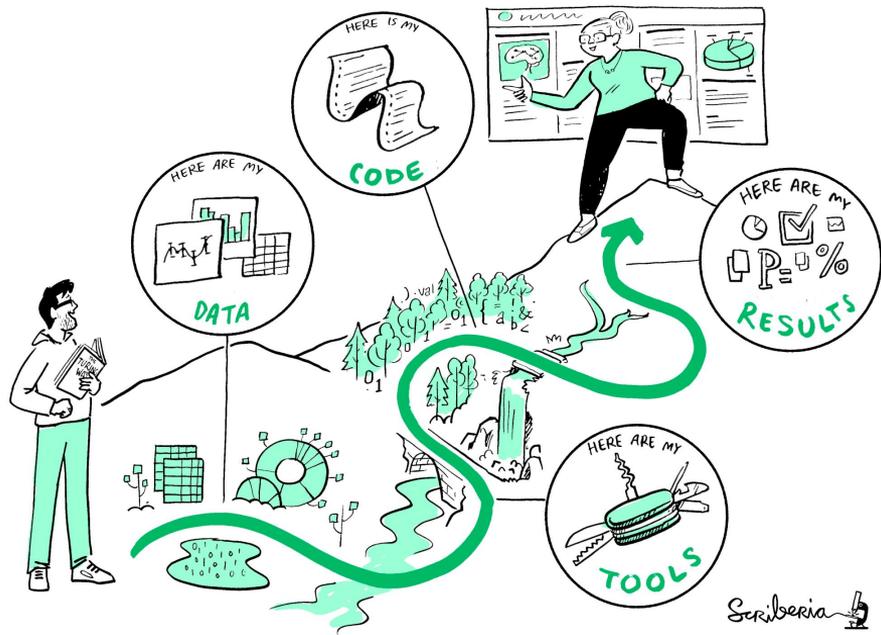
Evaluating the replicability of social science experiments in *Nature* and *Science* between 2010 and 2015

The \$28 Billion a Year Research Reproducibility Crisis

📅 October 19, 2015

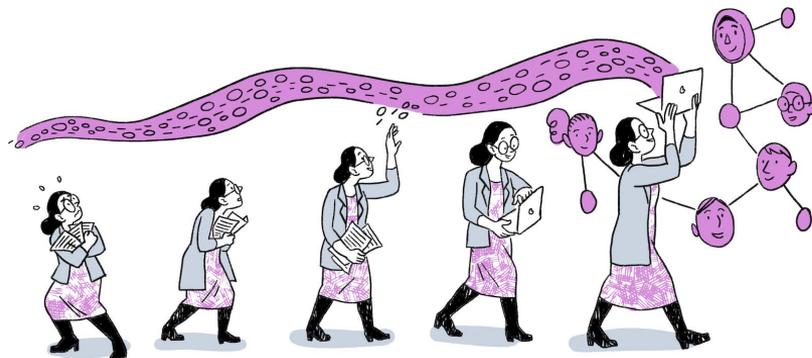
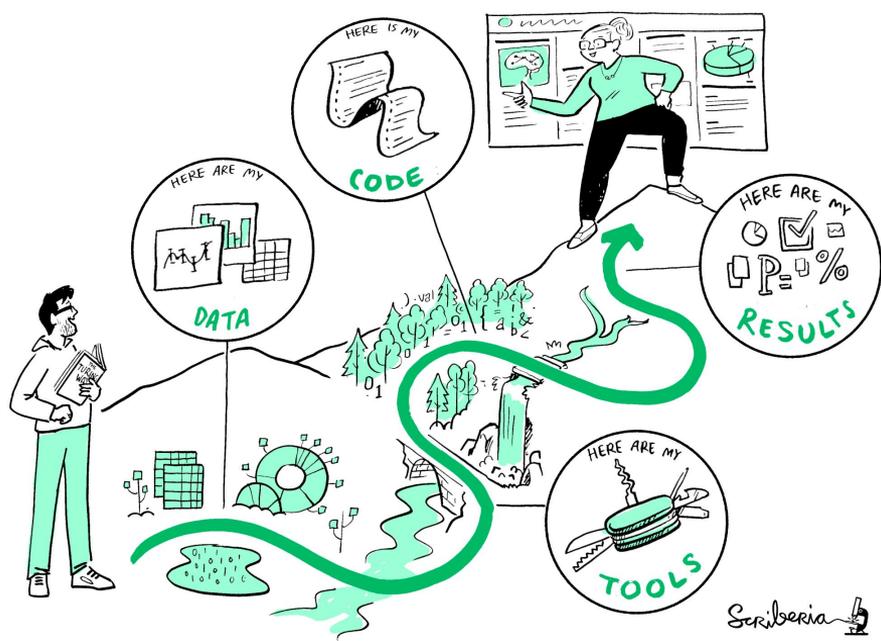
The biggest crisis in the future of healthcare has nothing to do with the kind of issues that politicians talk about, such as payment systems and accessibility. Since cost-effective solutions to tragic and costly conditions like heart disease, dementia, diabetes, and cancer depend on bringing to market new treatments that rely upon genomics, nanotechnology, and molecular biology, the *biggest* problem is

Sneaking into Open Science!



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Sneaking into Open Science!



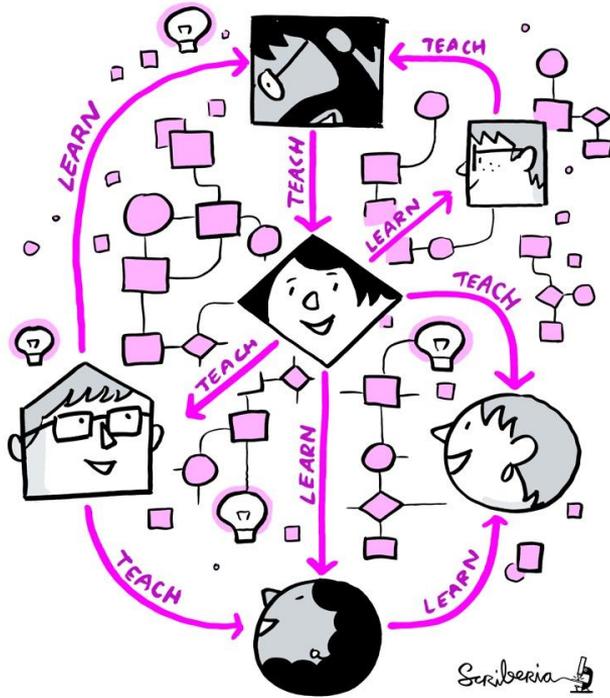
EVOLVING TOWARDS AN ERA OF
OPEN RESEARCH

Scriberia 

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Sneaking into Open Science!



Working openly **increased** my **visibility & opportunities** for collaboration!

More in ["Open Research"](#) Sub-chapter in the TW

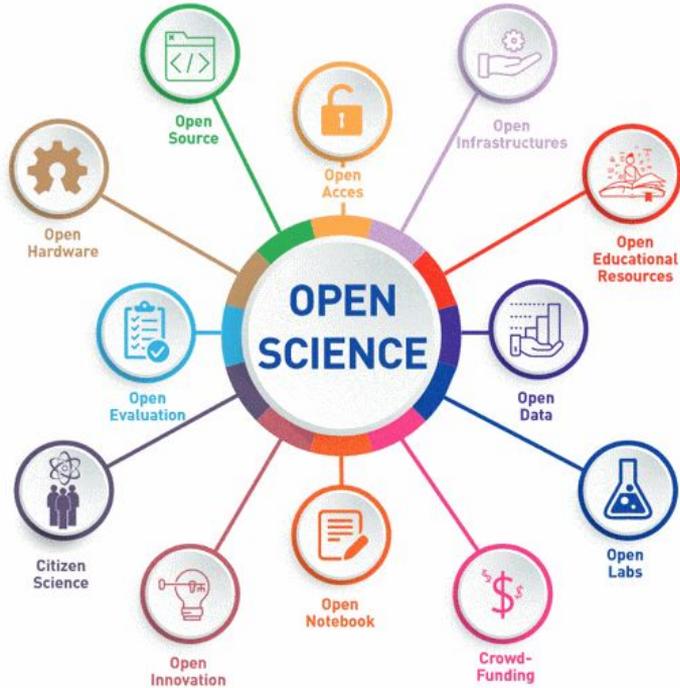
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Components of Open Science



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Components of Open Science



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Deepdive into Open Science!

"The most important book about technology today,
with implications that go far beyond programming."
—Guy Kawasaki

Revised & Expanded

THE CATHEDRAL & THE BAZAAR

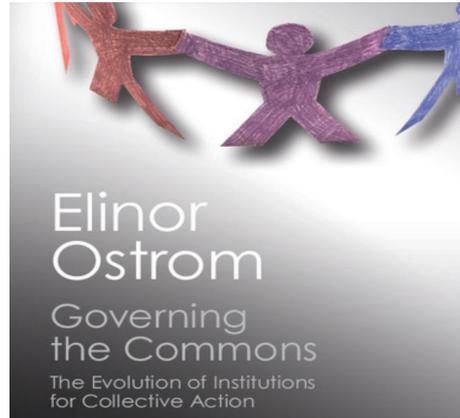
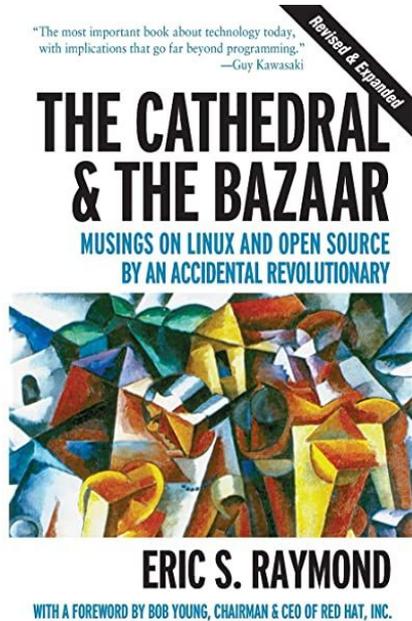
MUSINGS ON LINUX AND OPEN SOURCE
BY AN ACCIDENTAL REVOLUTIONARY



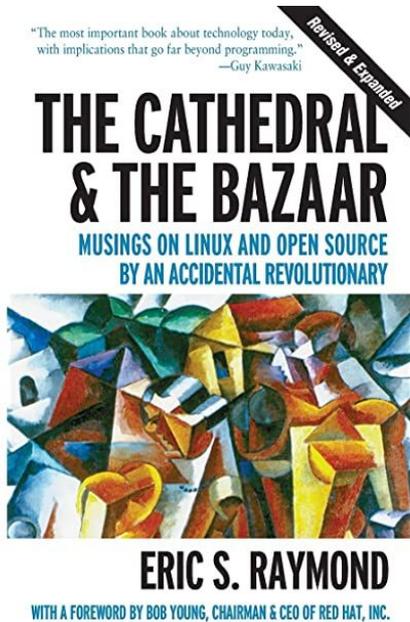
ERIC S. RAYMOND

WITH A FOREWORD BY BOB YOUNG, CHAIRMAN & CEO OF RED HAT, INC.

Deepdive into Open Science!



Deepdive into Open Science!



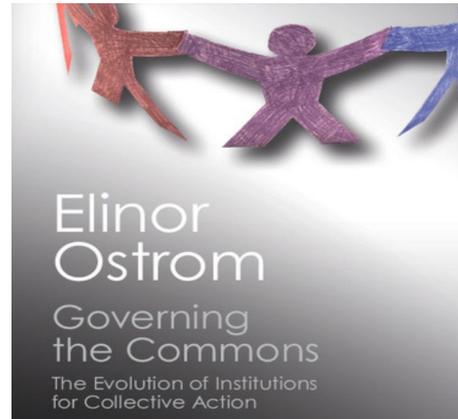
SustainOSS: exploring sustainability for open source communities

The Principles of Governing Open Source Commons

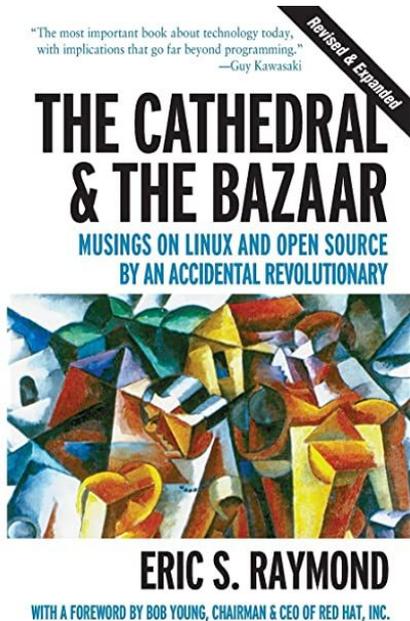
Greg Bloom

Published on: Jun 11, 2020

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Deepdive into Open Science!



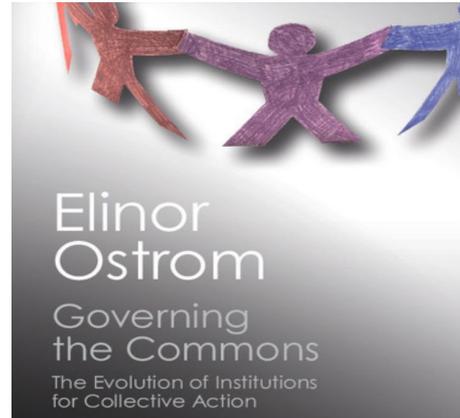
SustainOSS: exploring sustainability for open source communities

The Principles of Governing Open Source Commons

Greg Bloom

Published on: Jun 11, 2020

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Producing Open Source Software

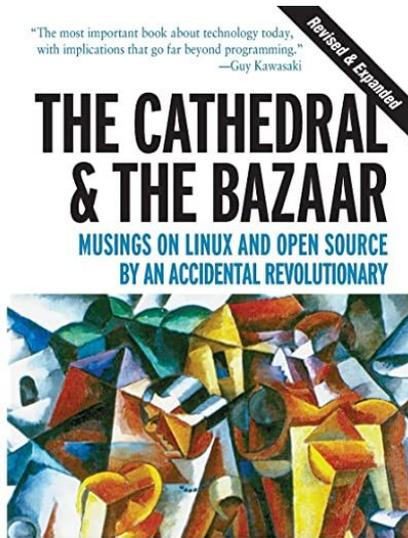
How to Run a Successful Free Software Project

Karl Fogel

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Version: 2.3287 (21 Feb 2022)

Deepdive into Open Science!



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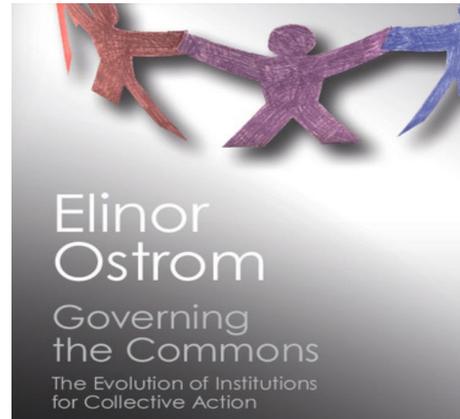
SustainOSS: exploring sustainability for open source communities

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Greg Bloom

Published on: Jun 11, 2020

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Elinor Ostrom, *Governing the Commons*

Elinor Ostrom, *Governing the Commons* 

Jason Brennan

The Oxford Handbook of Classics in Contemporary Political Theory
Edited by Jacob T. Levy

Subject: Political Science, Political Theory Online Publication Date: Feb 2017
DOI: 10.1093/oxfordhb/9780198717133.013.61

Producing Open Source Software

How to Run a Successful Free Software Project

Karl Fogel

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Version: 2.3287 (21 Feb 2022)

Deepdive into Open Science!



The Evolution of Institutions for Collective Action

ions

The Commons

Contemporary Political Theory

Online Publication Date: Feb 2017

Source Software

Software Project

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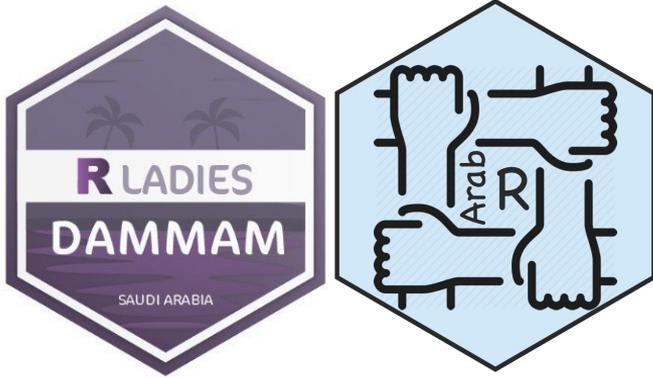
Deepdive into Open Science!

Back to the **basic** again!



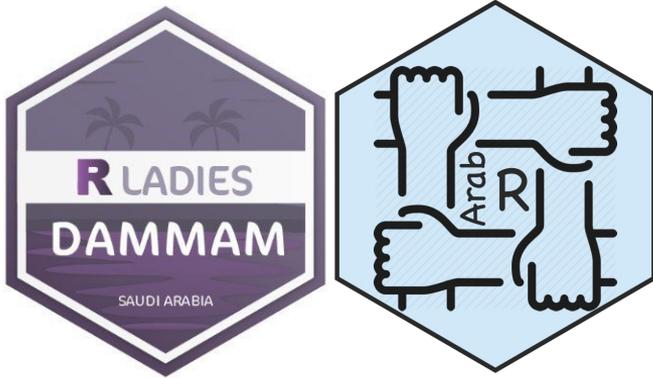
There is **NO** existence for Open Science **Communities, resources** or any type of OS infrastructure in the Middle East.

We initiated OS CoP to address this needs!



The Turing Way project illustration by Scriberia. Used under a CC-BY 4.0 licence. DOI: 10.5281/zenodo.4906004

We initiated OS CoP to address this needs!



The Turing Way project illustration by Scriberia. Used under a CC-BY 4.0 licence. DOI: 10.5281/zenodo.4906004



+



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Contribute to **Open Source**

+

Learn about **Open Science**

+

Get paid



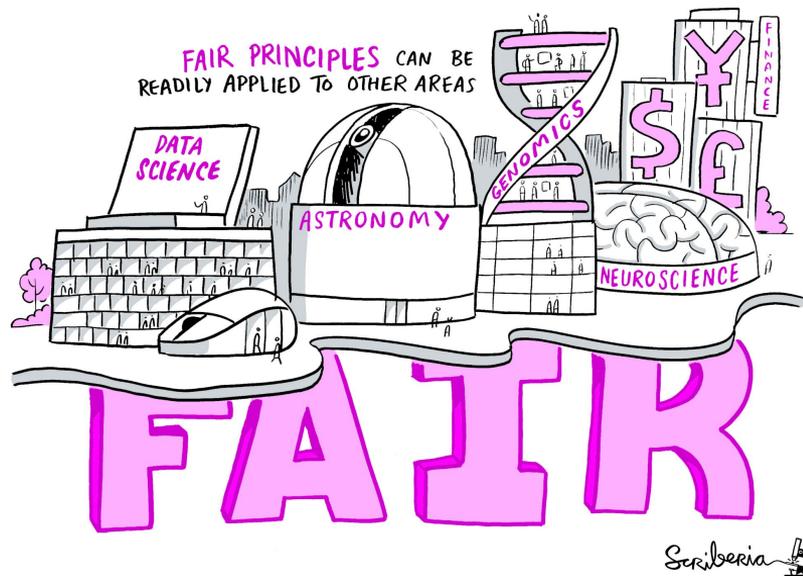
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The research systems is relatively **new** in Middle East, which makes it easier to incorporate OS principles rather than shifting and shaping established systems.

From article by Sandersan Onie titled "Redesign open science for Asia, Africa and Latin America" DOI: <https://doi.org/10.1038/d41586-020-03052-3>



We are exploring limitation of the current digital infrastructure to **adopt FAIR data practice** in Arabic-speaking countries by identifying the needs of the local community towards recommendations that can **drive new policy that fosters a FAIR data culture.**

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Open science advocates in the MENA face **legal, technical, and cultural blockers** unfamiliar to champions of open science elsewhere.

The road might be long and not smooth but **good science matter!**

A Call for Action!

Join a **community of practise (CoP)** in your region!

Join *The Turing Way* Bookdash 16-20 May 2022!



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Deadline: 21st April

A Big Thank You!



Anelda van der Walt



Malvika Sharan



Emmy Tsang



Yo Yehudi



Berenice Batut