



THE
CARPENTRIES

مدخل في العلوم المفتوحة

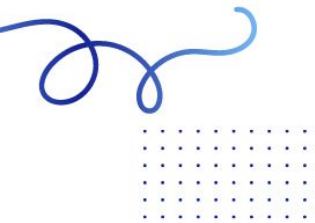
بتول المرزوق



Open Science Community Saudi Arabia

مجتمع العلوم المفتوحة في المملكة العربية السعودية





Day 1

اليوم الأول



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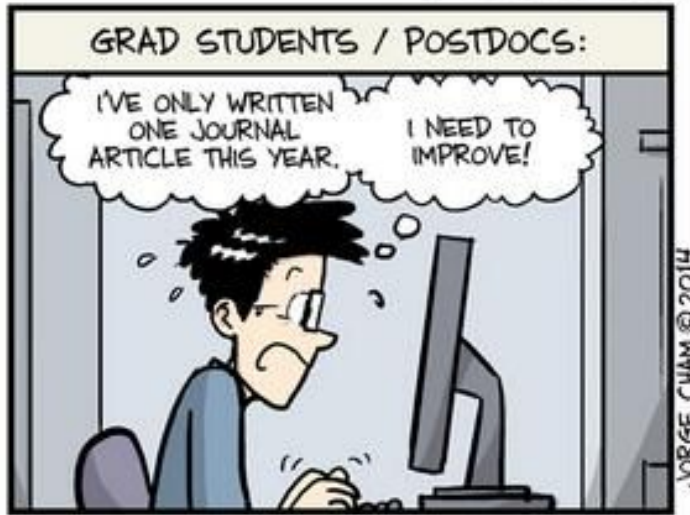
<https://osc-ksa.com/>



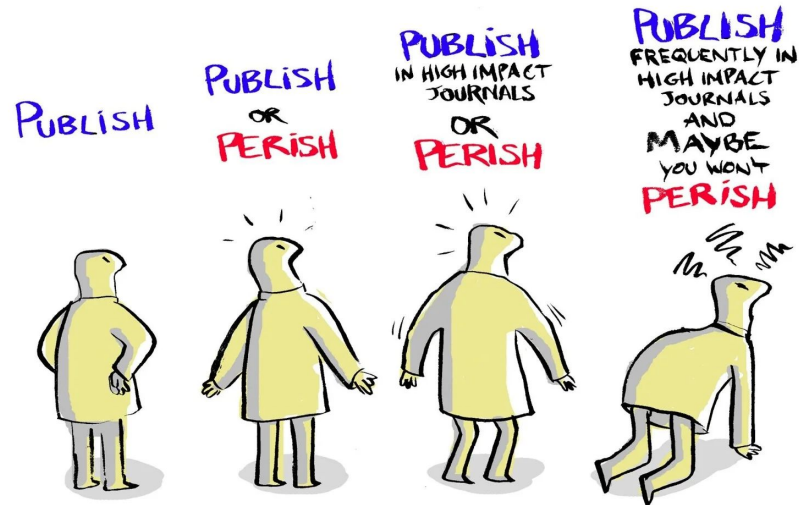
هل يبدو هذا مألوفاً بالنسبة لك؟



THE EVOLUTION OF ACADEMIA



Credit: phdcomics.com



[Source Link](#)

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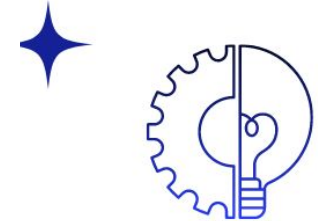
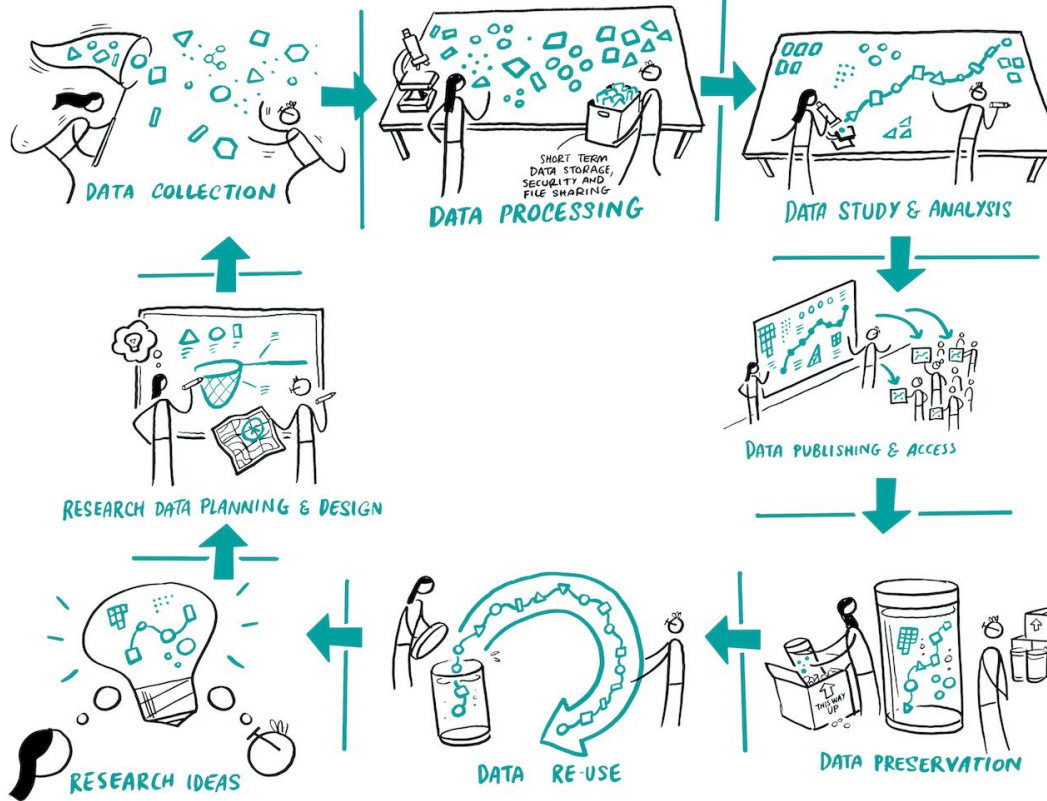
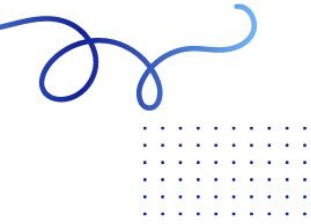


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<https://osc-ksa.com/>



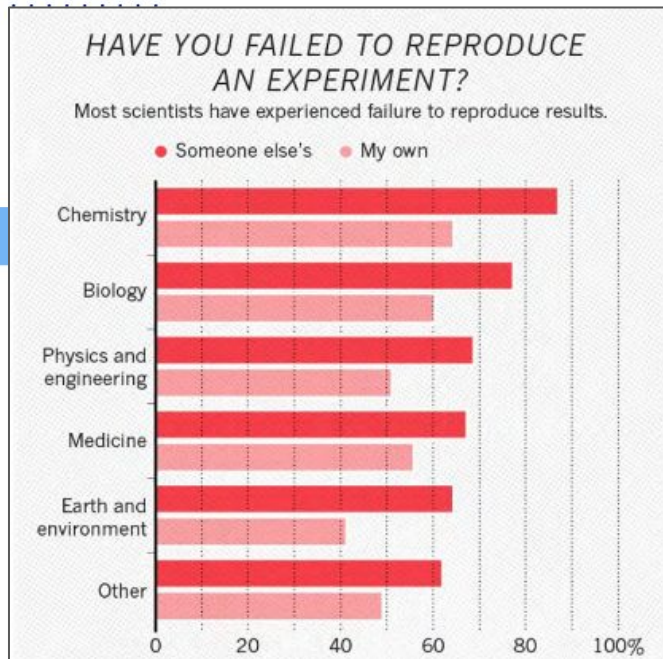


Scriberia

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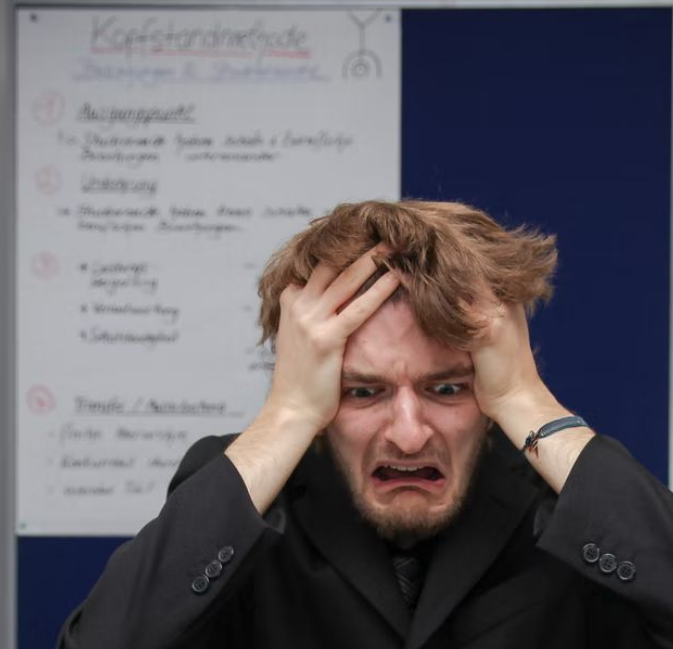


هل يبدو هذا مألوفاً بالنسبة لك؟



Baker, M. 1,500 scientists lift the lid on reproducibility. *Nature* 533, 452–454 (2016).
<https://doi.org/10.1038/533452a>



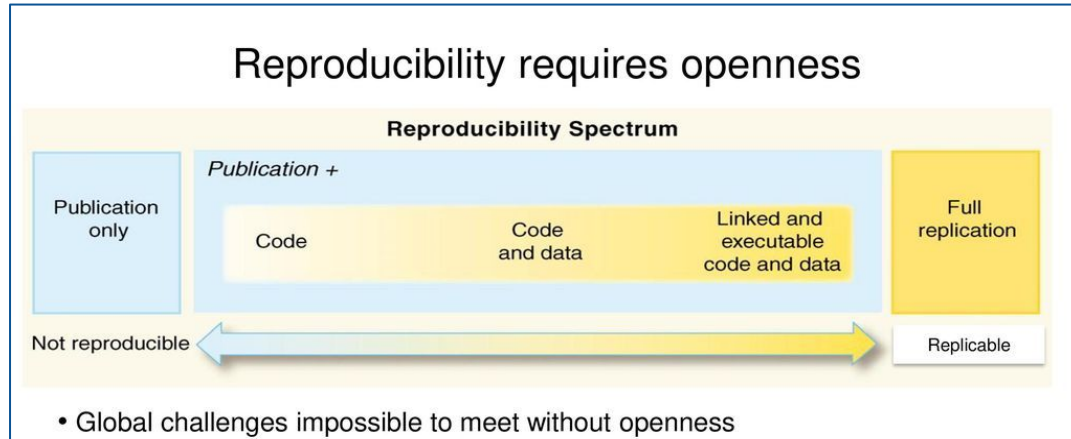


ما الذي يمكننا القيام به لتعزيز القيمة العلمية لبحوثنا وجعلها

قابلة للإنتاج والبناء عليها؟



Reproducibility requires openness



Peng (2011)

Credit: Yang-Min Kim, Jean-Baptiste Poline, Guillaume Dumas, Experimenting with reproducibility: a case study of robustness in bioinformatics, *GigaScience*, Volume 7, Issue 7, July 2018, giy077, <https://doi.org/10.1093/gigascience/giy077>



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Why Open Science?

We are facing **Big** Challenges:

Covid, Climate change, ...

We need **more** people - more hands, more eyes, more brains - with diverse experiences to participate so that we ask the best questions and find the best solutions

Creates research that is:

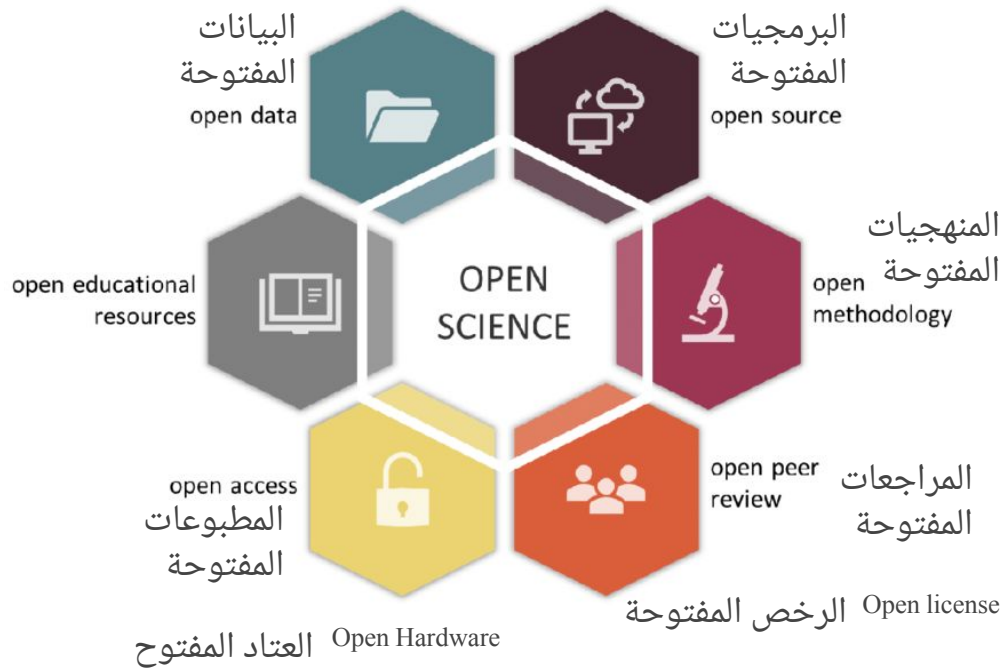
- Cited more
- Creates a bigger impact
- Increases transparency
- Generates more scholarly collaborations



The Turing Way project illustration by Scriberia. Zenodo <http://doi.org/10.5281/zenodo.3332807>

Slide Provided by NASA TOPs

معنى العلوم المفتوحة



Credit: [10.32942/osf.io/kac45](https://doi.org/10.32942/osf.io/kac45)



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معنى العلوم المفتوحة ✨



Credit: Edinburgh Napier University



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Cite

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Discover



Published datasets get a DOI that others can use to give researchers credit for their work.

Published datasets are licensed by Creative Commons to make it easier for the data to be re-used in the future.

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> [Neuroinformatics](#). 2018 Jan;16(1):51-63. doi: 10.1007/s12021-017-9348-7.

A Novel Public MR Image Dataset of Multiple Sclerosis Patients With Lesion Segmentations Based on Multi-rater Consensus

Žiga Lesjak¹, Alfiia Galimzianova², Aleš Koren³, Matej Lukin³, Franjo Pernuš², Boštjan Likar⁴, Žiga Špiclin²

Affiliations + expand

PMID: 29103086 DOI: [10.1007/s12021-017-9348-7](https://doi.org/10.1007/s12021-017-9348-7)

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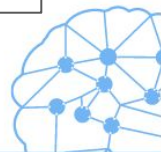
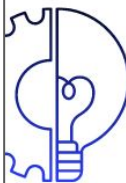
Where *Journal Title* is one of:

- *Journal of Physics: Conference Series*
- *IOP Conference Series: Materials Science and Engineering*
- *IOP Conference Series: Earth and Environmental Science*

15:23	8. Data Wrangling and Analyses with Tidyverse	How can I mani
16:18	9. Data Visualization with ggplot2	What is ggplot, What is mappin What is the pro
17:48	10. Producing Reports With knitr	How can I integ
19:03	11. Getting help with R	How do I get he
19:18	Finish	

The actual schedule may vary slightly depending on the topics and exercises chose

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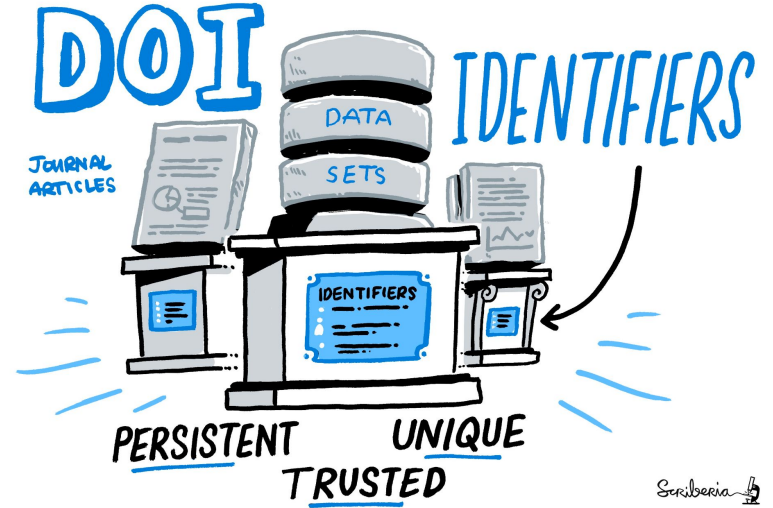


قم بتحميل أنشطتك إلى مستودع رقمي !

المستودع الرقمي يوفر كلاً من **الترخيص و DOI**.

سيؤدي ذلك إلى زيادة قابلية اكتشاف أعمالك
وأنشطتك مما يجعلها قابلة للاستدلال.

هذا أيضا يخدمك في توفير مقاييس لكمية استخدام
عملك والإستشهاد به



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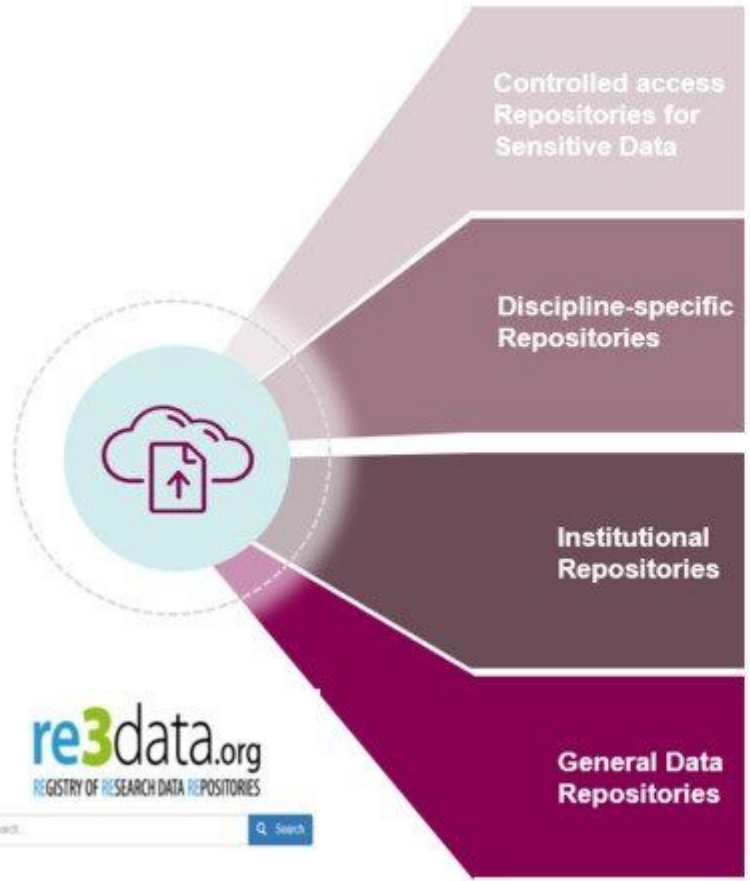


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Protocols.io



mcSCRb-seq protocol

Steps Guidelines Materials Forks Metadata Metrics

PDF
<https://protocols.io/view/mscrub-seq-protocol-nrkd4w.pdf>

HTML
<https://protocols.io/view/mscrub-seq-protocol-nrkd4w.html>

EXTERNAL LINK
<https://www.nature.com/articles/s41467-018-05347-6>

PROTOCOL CITATION

Johannes JWB Bagnoli, Christoph Ziegenhain, Aleksandar Janjic, Lucas Esteban LEW Wange, Beate Vieth, Swati Parekh, Johanna Geuder, Ines Hellmann, Wolfgang Enard 2018. mcSCRb-seq protocol. protocols.io <https://dx.doi.org/10.17504/protocols.io.nrkd4w>

MANUSCRIPT CITATION please remember to cite the following publication along with this protocol

Johannes W. Bagnoli, et al (2018) Sensitive and powerful single-cell RNA sequencing using mcSCRb-seq. *Nature Communications*9:2937. doi: [10.1038/s41467-018-05347-6](https://doi.org/10.1038/s41467-018-05347-6)

PROTOCOL STATUS

Working
We use this protocol and it's working

KEYWORDS
molecular crowding, scRNA-seq, SCRb-seq

LICENSE
 This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

WIDGET

DOIs: Aid in **citation tracking**, ensuring a researcher has **accurate metrics** on how and where their research outputs are being used or referenced.

المعرفات الرقمية (DOI) والتي تساعد في تتبع الاقتباس ، مما يضمن حصول الباحث على مقاييس دقيقة حول كيفية ومكان استخدام مخرجات أبحاثهم أو الإشارة إليهما

License: It describe how the work can be used?

الرخصة: تصف كيف يمكن استخدام العمل؟



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<https://osc-ksa.com/>



Protocols.io

- موصى به من مجموعة كبيرة من
المجلات العلمية المحكمة

- توفر فرصة للأستشهاد بعملك من قبل
نشره مع حفظ كامل الحقوق الفكرية!



Credit: www.repro4everyone.org



Morgan Halane

@themorgantrail

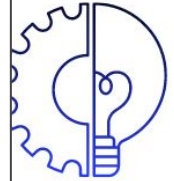
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Looking for protocol in 1997 paper: "as described in (x) et al '96". Finds '96 paper: "as described in (x) '87." Finds '87 paper: Paywall.



9:20 PM - 1 Nov 2017 from Pohang-si, Republic of Korea

35 Retweets 83 Likes



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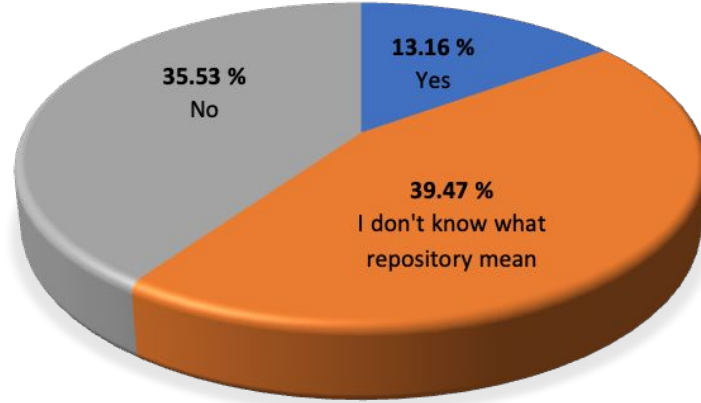
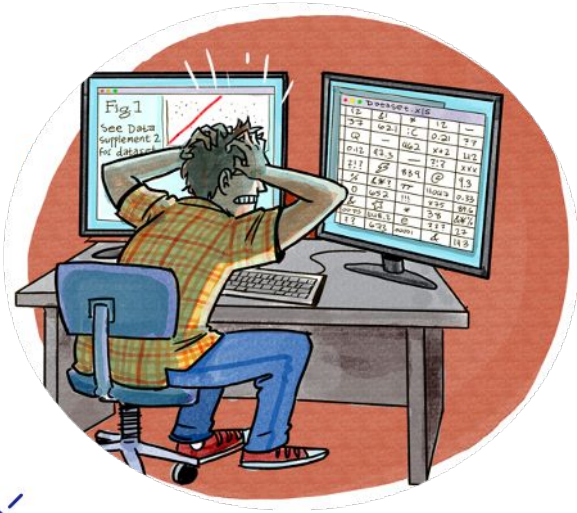


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الوصول لبيانات محلية في العالم العربي كانت في الكثير من الأحيان تكتنفها بعض المصاعب



رسم توضيحي بواسطة
[Ainsley Seago \(CC-BY 4.0\)](#).

مسح أجراه مجتمع العلوم المفتوحة المملكة العربية السعودية
لـ 80 فردًا من 2022-2-24 حتى 2022-4-11.



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مبادئ FAIR

قواعد وأساسيات FAIR

- Findable (يُمكن إيجاداه)
- Accessible (يمكن الوصول إليه)
- Interoperable (يُمكن تشغيله)
- Reusable (صالح للاستخدام)



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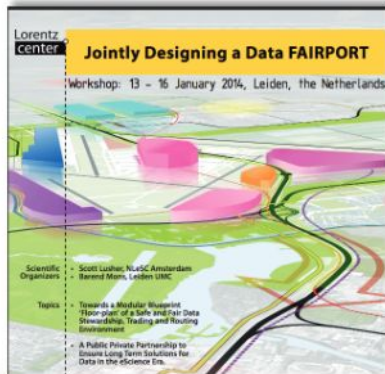


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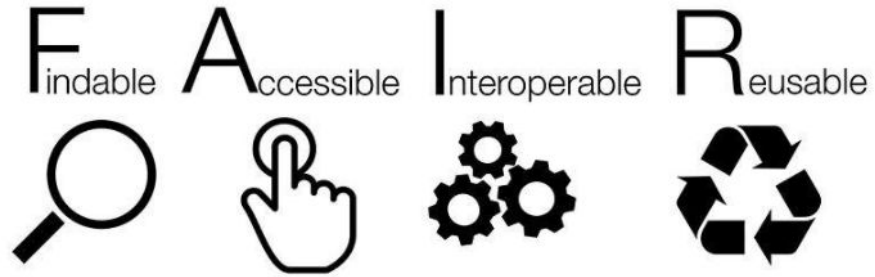


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2014



2016



A set of principles to enhance the value of all digital resources

Developed and endorsed by researchers, service providers, publishers, funding agencies and industry partners

تم تطوير المبادئ في (2016) Wilkinson et al.
DOI: 10.1038/sdata.2016.18

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تطبيق FAIR

● سحابة الأبحاث الأوروبية المفتوحة (EOSC) هي الجهة المسؤولة الأساسية لـ FAIR في الاتحاد الأوروبي فيما يخص:

- مشاريع التنفيذ التجريبية
- البنية التحتية
- التدريب

EOSC - A TOOL FOR ENABLING OPEN SCIENCE IN EUROPE



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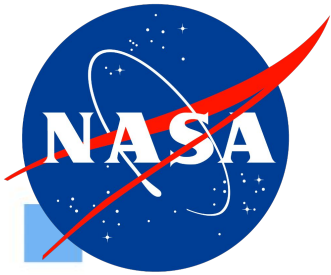
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Transforming to Open Science!

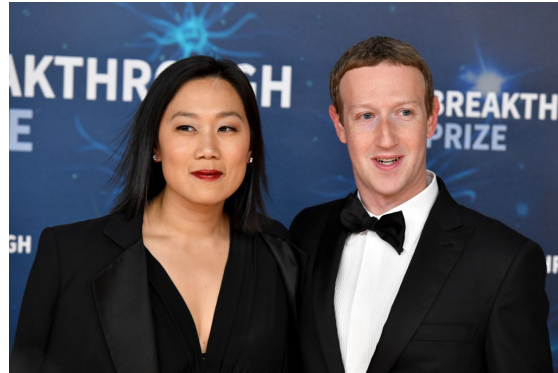


Chan Zuckerberg Initiative



Horizon Europe

THE NEXT EU RESEARCH & INNOVATION PROGRAMME (2021 – 2027)



The **UNESCO Recommendation on Open Science** was adopted by the 41st session of UNESCO General Conference in November 2021



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إستخدام المستودعات العامة ✨



Open Science Community Saudi Arabia

Recent uploads

October 27, 2022 (v1) Presentation Open Access

View

NASA's Transform to Open Science (TOPS): A Toolkit for Fostering Open Science Practices

Batool Almarzouq;

This talk discusses capacity building with emphasis on NASA's Transform to Open Science (TOPS) initiative. The second part of the talk goes through the presenter's experience in capacity building in the MENA region.

Uploaded on October 27, 2022

August 23, 2022 (2.0.0) Software Open Access

View

Lextale R-package: A package which calculates %correctAV of the LexTALE test

Elotteebi, Ghozayel;

Full Changelog: <https://github.com/Ghozayel/Lextale/compare/v1.2.0...v2.0.0>

Uploaded on October 2, 2022

2 more version(s) exist for this record

New upload

Community



Open Science Community Saudi Arabia

Open Science improves the quality, accessibility, and efficiency of science, which is not yet the norm in research. While pioneering scholars are developing and embracing Open Science practices, the majority sticks to the status quo. To move from pioneers to...



إستخدام المستودعات العامة



April 9, 2022

Journal article Open Access

Leveraging Communities to Advance R and Open Science (Arabic only)

Batool Almarzouq

A talk in Arabic under the title "Leveraging Communities to Advance R and Open Science" in JeelAIDM. It can also be accessed through [this link](#).

Preview

Page: 1 of 70 Automatic Zoom?

SCSCA Open Science Community Saudi Arabia

Jeelaidm

النهوض بالعلوم المفتوحة ولغة الآر (R)
من خلال المجتمعات العلمية

Leveraging Communities to Advance R and Open Science

بتول المرزوق
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April 9, 2022

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Keyword(s):

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community FAIR zenodo Saudi Arabia's 2030 vision

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Batool Almarzouq. (2022, March 11). Reflection on Open Science practices and Research Software in the Kingdom in alignment with Saudi Arabia's Vision 2030. Zenodo.
<https://doi.org/10.5281/zenodo.6345895>

Start typing a citation style...



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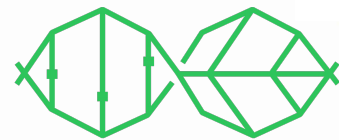
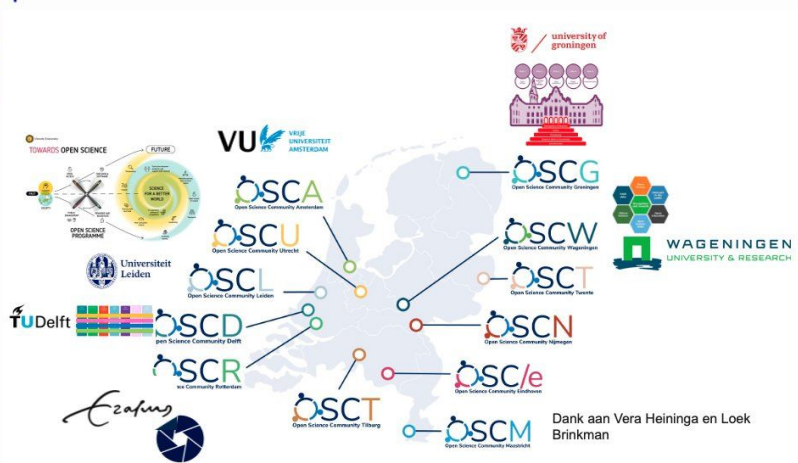
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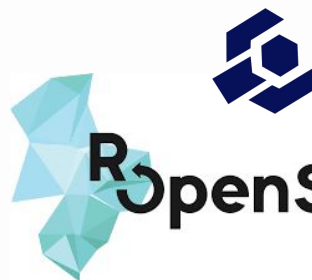
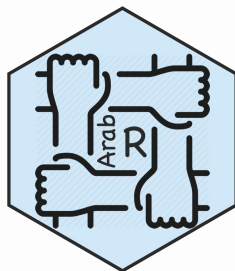
Growing in Community of Practice (CoP) around the world!



Open Life Science



eLIFE Community Ambassadors



THE CARPENTRIES



@ToOpenScience, @batool664, @OpenSciSaudi



BatoolMM



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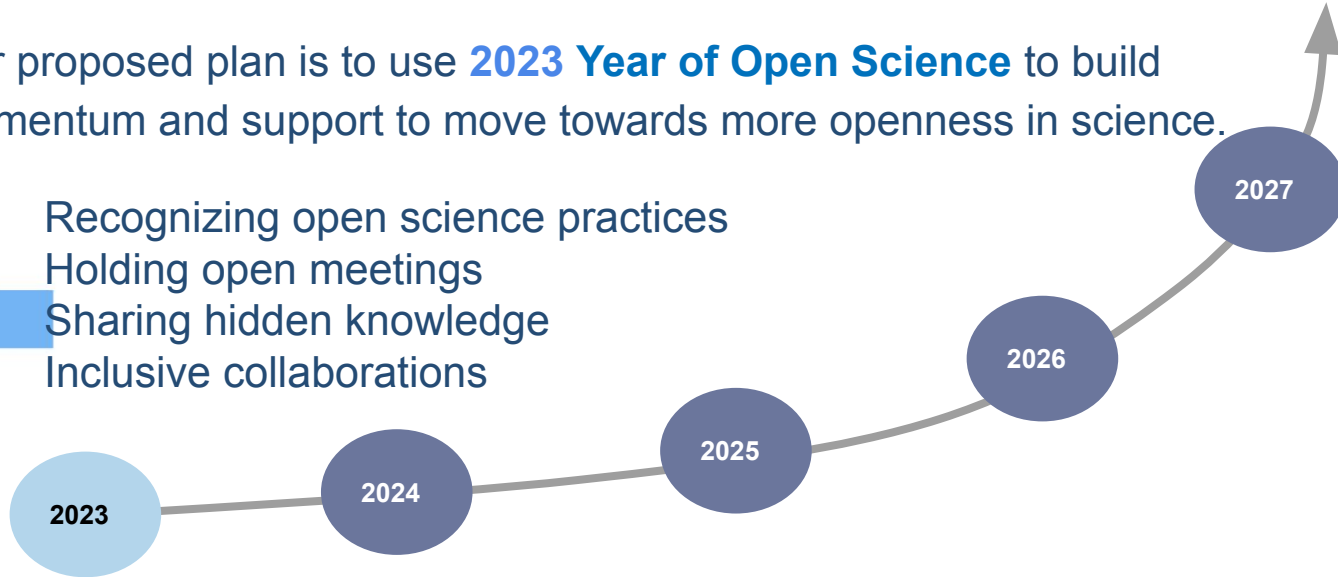


Area of Action: Moving towards Openness

Year of Open Science and the Future

Our proposed plan is to use **2023 Year of Open Science** to build momentum and support to move towards more openness in science.

- Recognizing open science practices
- Holding open meetings
- Sharing hidden knowledge
- Inclusive collaborations



Require a lot*



Require a little more*



Require a little*

Slide Provided by NASA TOPs



**Proposed: Update necessary systems to allow for documentation of past open science activities and proposed data, software, and publication plans*



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Best Practices in Bioinformatics



Allison Horst illustration



Scriberia



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