



Qualcosa da portare via

...se non si capisce il valore trasformativo della Open Science, la si vede solo come ennesimo obbligo burocratico

Open Access/Open Science è un'opportunità, non una minaccia



My first talk of the year! Message is going to be that the opposite of 'open science' isn't 'closed science' - it's bad science. ...il contrario di Open Science è «Bad Science», non «Closed Science»

Open Science e Open Innovation hanno un legame stretto

...si può fare Open Science a piccoli passi, non «tutto e subito»

... fare Open Access e farlo correttamente è molto semplice...

comunicazione scientifica,



May 13,

The Taylor & Francis journal _Medical Teacher_just published a 5-paragraph (1page) comment on another article. doi.org/10.1080/014215...

For 24 hrs of access to the comment, T&F charges \$54. For 30 days of access to the issue in which the comment appears, it charges \$526.

Traduci il Tweet

Jon Tennant

We spend 1/3 of the total globa research budget (~£59/175bn) (

> ommunicating res eople cannot acces

MSTWFAAT NOAL GOT archers, 7 Sept 2017

Researchers. Do you want your work to be read by other people? Do you honestly think that sticking a \$40 paywall in front of each paper is the best way to achieve this? There are dozens of choices available to you that don't cost money or your career. Learn them. Use them.

44 Retweet 96 Mi piace

https://twitter.com/Protohedgehog/status/98553413358034534ina & SE Asia

Total Academic Library Spend

Open Access Revenues

Total A&S Content

The Oligopoly of Academic Publishers in the Digital Era

Published: June 10.

Article

Jon Tennant 🔮

Vincent Larivière . Stefanie Haustein, Philippe Mongeon

@Protohedgehog

Following

The smartest business model ever. Have all of your products and services performed for free by researchers, and then sell it back to them with an unholy markup. Try describing the model to a non-researcher, and they mock us for falling for it.

https://twitter.com/Protohedgehog/status/98543931889741004

Steven Salzberg @StevenSalzberg1

Nature and other Springer journals make all of their money from free labor provided by scientists, who write all the papers and do all of the peer review. And now they are cashing in: "Springer Nature aims to raise 1.2 billion euros in new money in IPO" reut.rs/2qqhp93

Elsevier: +38%

journal publisher, had a margin last year of 38% on revenues ion (\$3.2 billion). Springer, a German firm that is the gest journal publisher, made 36% on sales of 1 billion) in 2011 (the most recent year for which available). Such firms are Firee, floo allh 4 amay 2013 or

... paghiamo gli editori commerciali perché mettano sotto chiave il nostro contenuto...

RoW

se no, non esisterebbe Sci-Hub





Scientists should be solving problems, not struggling to access journals

It takes an average of 15 clicks for a researcher to find and access a journal article. This time could be much better spent

Mon 21 May 2018 07.30 BST

May 21, 2018

In rich and poor countries, researchers turn to the Sci-Hub website.

http://www.sciencemag.org/news/2016/04/whos-downloading-

Scientific publishing is a rip-off. We fund the research - it should be free George Monbiot



Following

The single fact that providing free information on universal Science is illegal tells us a lot about how absurd it has become, in the Internet era, to rely on the old research publication model. #FreeOpenAccessNow

Jon Tennant 🔮 @Protohedgehog

Oh wow. Looks like anyone can now create their own @sci hub mirror github.com/bsidio/sci-hub You can use this to help accelerate research and society by providing free access to millions of research articles. But it's probably illegal, so don't do it.

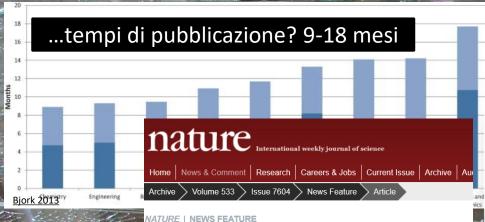
Traduci il Tweet

08:37 - 10 mag 2018

March 10, 2018

outrageous legacy. In the meantime, as a matter of principle, do not pay a penny to read an academic article. The ethical choice is to read the stolen material published by Sci-Hub.

...funziona?



TOTAL | HETTOT EXTORE

1,500 scientists lift the lid on reproducibility

Survey sheds light

Monya Baker

25 May 2016 | Corr

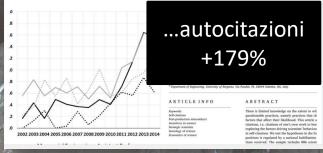
...crisi della riproducibilità

Tweet

Jelte Wicherts
@JelteWicherts

March 2018

Gaming the system: When in 2010 Italian universities incorporated citations in promotion decisions, self-citation rates among social scientists went up by 81-179% sciencedirect.com/science/articl...

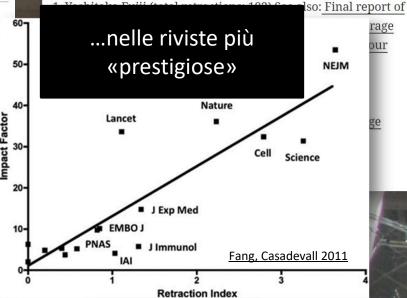


Harvard chiede il ritiro di 31 pubblicazioni del noto cardiologo Piero Anversa

Oct. 16, 2018

The Retraction Watch Leaderboard

...crescente numero di ritrattazioni per dati falsificati o fabbricati



Does scientific misconduct t harm? The case oldt

the real-life effects
ote that some of the
tiny obscure
ds. But a new metaMA today suggests



Contengono dati falsificati e/o inventati, come riferiscono la Harvard Medical School e il Brigham and Vomen's Hospital di Boston. Gli studi sotto accusa riguardano la possibilità – dimostrata falsa – di tilizzare le staminali per rigenerare il cuore

Foto: Brigham and Women's Hospital. Piero Anversa, M.D.

e la valutazione? «Ossessione»

ROYAL SOCIETY

communication

"Not only are we failing to provide the right incentives, we are actually providing perverse ones."

As long as journal impact factors retain some role in the career development, journals should publish the distribution of their citations. The participants strongly supported the adoption of the San Francisco Declaration on Research Assessment

(DORA) by publis

ROARS 28 marzo 2018 Return On Academic ReSearch

means | published better

having to rely on

Impact or perish. L'ossessione per l'impatto delle pubblicazioni scientifiche

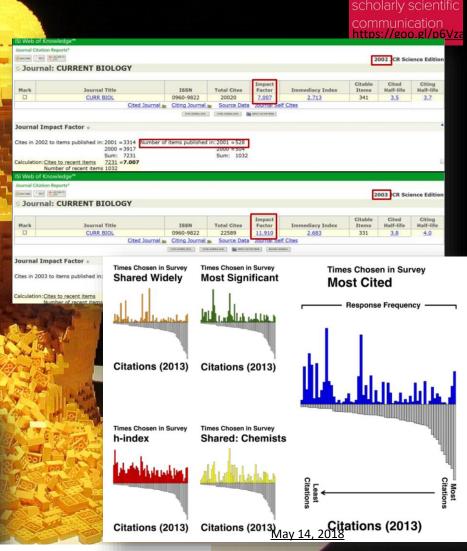
genera frodi e condotte abusive

Goodhart's Law: "when a measure becomes a target, it ceases to be a good measure."

Metrics are subject to manipulation, so we should

is that number purports to measur

look carefully not only at the numt "People game the system at every level and this risks the loss of valuable research in favour of fashionable research."



[siamo sulla strada sbagliata]

Spinal Cord

Sept. 7, 201

Editorial | Published: 07 September 2018

Guest Editoria

Publication pressure and scientific misconduct: why we need more open governance

cord injury. First, there is incremethodology. These range fro neurological diseases, the lack contamination of neural cell lipoor reliability of published reparticipant numbers are low). published research findings meaning them to be surprisingly then, the rate of the second contamination of neural cell lipoor reliability of published research findings meaning the second commonly low in the biomedical commonly low in the rate of the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability of published research findings meaning the second contamination of neural cell lipoor reliability o

This research culture can lead to cost- and corner-cutting, with hasty publication of irreproducible results and poor-quality work—it's an era in which scientists can fall prey to the temptation to do whatever they can get away with in order to publish. This leads to scientific misconduct, commonly defined as 'fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in

is slow and problematic [3]. Second, the number of papers retracted

from the peer-reviewed literature is also increasing [4]. Third, the is an over-reliance on a scientist's publication metrics (numbers, journal impact factors, citation numbers) for progression, promo

prizes, and research grants. Indeed, gaming the metrics of scien an occupational requirement for scientists, journal staff and university administrators. Publications now contain more spin (reliance on findings which are not justified by the statistics) and more liberal use of words such as 'novel' [5]. These trends are due by an unhealthy culture in which it can be more important to present the scientific of scientists.

a result than publish a correct result [6, 7]. The trends also expodeep flaws in the current systems of peer review.

- metodologia non solida
- risultati falsi, peer review debole
 - enfasi sulla pretesa «novità»
 - metriche onnipotenti, per cui truffarle è obbligo
- «PUBBLICARE UN RISULTATO»
 INVECE DI UN «RISULTATO
 CORRETTO»

...un abbraccio mortale



Bernard Rentier

@bernardrentier

Following

The accomplices are you and me, the researchers who pay to publish, the researchers who evaluate them, the researchers who review their articles graciously for the benefit of the publishers, the researchers who pay to read. All being afflicted with prestigedependency syndrome.

Traduci dalla lingua originale: inglese

10:13 - 18 feb 2018

Realising the European Open Science Cloud

of the Commission High Level Expert Group



But let's not ignore the facts: the science system is in landslide transition from data-sparse to data-saturated. Meanwhile, scholarly communication, data management methodologies, reward systems and training curricula do not adapt quickly enough if at all to this revolution. Researchers, funders and publishers (I always thought that meant making things public) keep each other hostage in a deadly embrace by continuing to conduct, publish, fund and judge science in the same

way as in the past century.

So far, no-one seems to be able to break this deadlock. Open Access articles are solve only a fraction of the problem. Neither 'open research data' alone will do. W







The best thing about **Internet** is that it's **open**. In every field **it let us** share and innovate.

In science, **OPENNESS IS ESSENTIAL.**

Open science doesn't mean ignoring economic reality.

Of course we need business models to be sustainable. But that doesn't mean we have to carry on doing things the way they have always been done.

So, wherever you sit in the value chain, whether you're a researcher or an investor or a policy maker, my message is clear: let's invest in collaborative tools that let us progress...

Let's tear down the walls that keep learning sealed off.

And let's make science open.

Open Science

Open Definition

"Open data and content can be **freely used**, **modified**, **and shared** by **anyone** for **any purpose**"

http://opendefinition.org/

A new approach to the research process



 Shifting focus from "publishing as fast as possible" to "sharing knowledge as early as possible"

Burgelman, Venice Nov 2016

Open Science



Open Science Depends on Open Minds



Neelie Kroes 🖾





"Being open and transparent is an ongoing practice and not a check box at the end." - @biocrusoe #openscience











Open Science



Jeff Rouder

@JeffRouder

Segui

What is Open Science? It is endeavoring to preserve the rights of others to reach independent conclusions about your data and work.

Traduci il Tweet

21:47 - 5 dic 2017

Open Science

Open Outputs + Open Infrastructure

X Culture

Access, reuse & discoverability

Evaluation & Researcher behaviour

(change)

C. Mac Callum, UKSG, April 2018

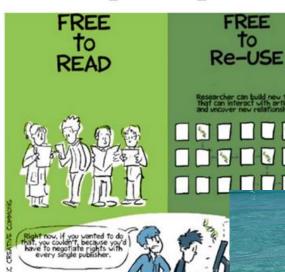
Open Science: risultati aperti + infrastruttura aperta x cambiamento culturale

Open Science

Open Science principles

Socio-cultural

- · Inclusivity
- · Equality
- Accountability
- Freedom
- Fairness



Jon Tennant



good science!

Jon Tennant

@Protohedgehog My first talk of the year! Message is going to be that the opposite of 'open science' isn't

'closed science' - it's bad science.

Open Science is just

Technical

Rigour

- Transparency
- Reproducibility
- FAIR

TOP



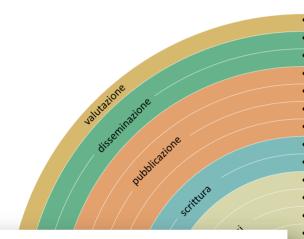
Following

What is the difference between open science and good science? If research papers are inaccessible, with no code or data, cherry picked results, inability to even attempt to reproduce, is that really even science? Science without openness is more anecdote and faith than science. Tennant Sept.2018



Open per...

Come puoi rendere Open ogni passo della ricerca...



Following



To support 'open science' you don't have to agree with or practice the whole messy bulk of it. Share your papers openly; version your code; cite data sets; use open source software; blog. Small steps can make a big difference.

Traduci dalla lingua originale: inglese

aggiungendo misure di impatto alternative, es. altmetrics 🔘 comunicando sui social media, es. Twitter condividendo poster e presentazioni, es. su FigShare utilizzando licenze aperte, es. Creative Commons BY depositando in archivi o pubblicando su riviste Open provando la open peer review, es. PubPeer o F1000 condividendo preprints, es. su OSF, arXiv o bioRxiv con formati leggibili dalle macchine, es. Jupyter o CoCalc con la scrittura collaborativa, es. Overleaf o Authorea condividendo protocolli e workflow, es. su Protocols.io condividendo note di laboratorio, es. OpenNotebookScience 📾 condividendo software, es. su GitHub con licenza GNU/MIT 🦃 condividendo i dati, es. su Dryad, Zenodo o Dataverse pre-registrando esperimenti, es. su OSF o AsPredicted commentando pagine web, es. su Hypothes.is o Pund.it usando bibliografie condivise, es. su Zotero condividendo progetti di ricerca, es. su RIO Journal

DOI: 10.5281/zenodo.1147025

Traduzione: Elena Giglia

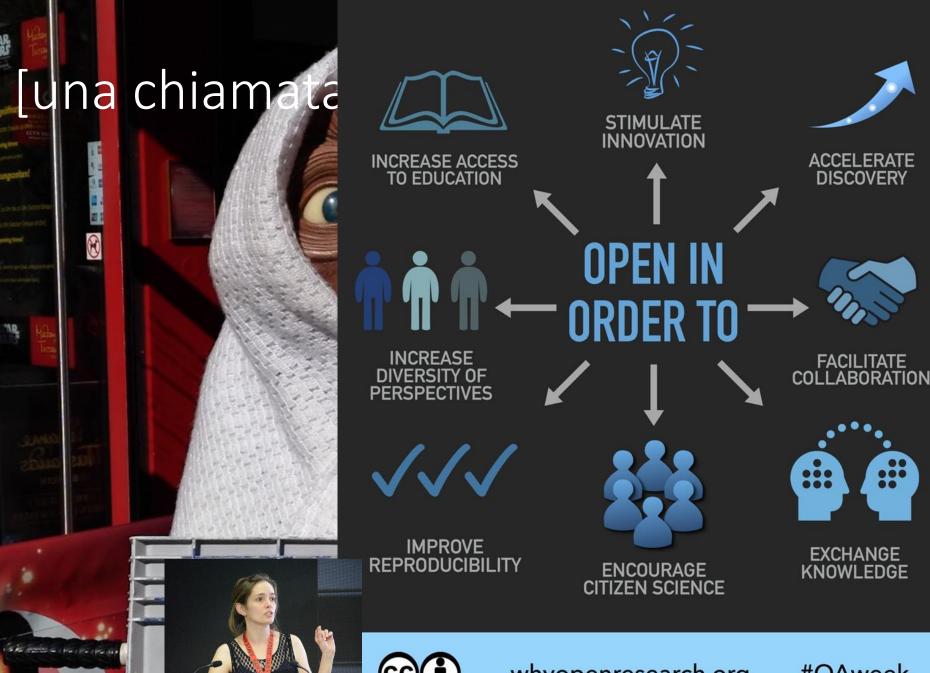


DOI: 10.5281/zenodo.1195648

arXiv.org bioRχiv

zenodo

h.





Open Science (Open A



Carlos Moedas



2/4 "Open as possible, as closed as necessary" is the new principle for all #data from publicly funded #research in Europe #openaccess

Newsroom

shift towards making research findings available free of charge s, so-called 'Open access', has been a core strategy in the Commission to improve knowledge circulation and . It is illustrated in particular by the general principle for open scientific publications in Horizon 2020 and the pilot for research

76

32



Iryna Kuchma @irynakuchma · 18 nov 2015

#Openscience is about making sure that science serves innovation & growth -Günther Oettinger & Carlos Moedas



Wilma van Wezenbeek @wvanwezenbeek



#osc2018 @BurgelmanJean "2018 is the year of no return in #openscience"

Traduci il Tweet

10:32 - 13 mar 2018

TESTI E DATI OPEN BY DEFAULT (come fare)





Open Science

European Commission Open Research Publishing Platform

The Commission proposes to fund a European Commission Open Research Publishing

Open Science in Europa



- · Rewards and Incentives
- · Research Indicators and Next-Generation Metrics

Removing barriers to open science

- · Future of Scholarly Communication
- · European Open Science Cloud
- FAIR Data
- · Research Integrity
- · Skills and Education
- Citizen Science

Providing researchers with the skills and competencies they need to practise Open Science

Open Science Skills Working Group Report

Integrated advice of the Open Science Policy Platform on

8 prioritised Open Science ambitions May 29, 2018

EUROPEAN COMMISSION

Politiche nazionali e di ogni ateneo su Open Access e Open Data

COMMISSION RECOM

of 25.4.201

on access to and preservation of

	1.	Change assessment, evaluation and reward systems in science on Open Science		
	2.	Facilitate text and data mining of content		
	3.	Improve insight into IPR and issues such as privacy		
	4.	Create transparency on the costs and conditions of academic communication 4 $\frac{1}{6}$		
	Developing research infrastructures			
	5.	Introduce FAIR and secure data principles		
	6.	Set up common e-infrastructures		
	Fostering and creating incentives for open science			
	7.	Adopt open access principles		
	8.	Stimulate new publishing models for knowledge transfer		
	9.	Stimulate evidence-based research on innovations in open science 26 $$		
Mainstreaming and further promoting open science policies				
	10.	Develop, implement, monitor and refine open access plans 30		
	Sti	mulating and embedding open science in science and society		



Report, Sept.2017

Evaluation of Research Careers fully acknowledging Open Science Practices

Rewards, incentives and/or recognition for researchers practicing Open Science

Report on OS and careers, July 2017



cOAlitionS



Open access to scientific publications must become a reality by 2020 -Robert-Jan Smits March 23, 2018

IN ADDITION:

Sept. 4, 2018

The key principle is as follows:

"After 1 January 2020 scientific publication by national and European research coun-Access Journals or on compliant Open Acc

- NO RIVISTE IBRIDE
 - TETTO ALLE APC
- APC PAGATE SEMPRE DA ISTITUZIONI
- **AUTORI MANTENGONO** COPYRIGHT, LICENZE CC BY

- Authors retain copyright of their publication with no restrictions. All publications must be published under an open license, preferably the Creative Commons Attribution Licence CC BY. In all cases, the license applied should fulfil the requirements defined by the Berlin Declaration:
- · The Funders will ensure jointly the establishment of robust criteria and requirements for the services nat compliant high quality Open Access journals and pen Access platforms must provide;

case such high quality Open Access journals or latforms do not yet exist, the Funders will, in a pordinated way, provide incentives to establish and upport them when appropriate; support will also e provided for Open Access infrastructures where ecessary;

here applicable, Open Access publication fees re covered by the Funders or universities, not by idividual researchers; it is acknowledged that all cientists should be able to publish their work Open ccess even if their institutions have limited means:

- When Open Access publication fees are applied, their funding is standardised and capped (across Europe);
- The Funders will ask universities, research organisations, and libraries to align their policies and strategies, notably to ensure transparency;
- The above principles shall apply to all types of scholarly publications, but it is understood that the timeline to achieve Open Access for monographs and books may be longer than 1 January 2020;
- The importance of open archives and repositories for hosting research outputs is acknowledged because of their long-term archiving function and their potential for editorial innovation;
- The 'hybrid' model of publishing is not compliant with the above principles;
- The Funders will monitor compliance and sanction
 - **REAZIONI**

EOSC – European Open Science



BRINGING TOGETHER CURRENT AND FUTURE DATA INFRASTRUCTURES



- necessario cambiamento culturale e formazione
- NESSUNA DISCIPLINA, NESSUNA ISTITUZIONE E NESSUN PAESE DEVE ESSERE LASCIATO INDIETRO
 - 500.000 data stewards



Connecting across borders and scientific disciplines

Open and seamless services to analyse and

reuse research data



Improving science

Long term and sustainable

CLOUD INITIATIVE, WITH ESTIMATED ADDITIONAL PUBLIC AND PRIVATE INVESTMENT OF €4.7 BN REQUIRED TO FURTHER DEVELOP THE EUROPEAN DATA INFRASTRUCTURE.

0.2br

Widening the user base to the public and private sectors

globally

1_{bn}

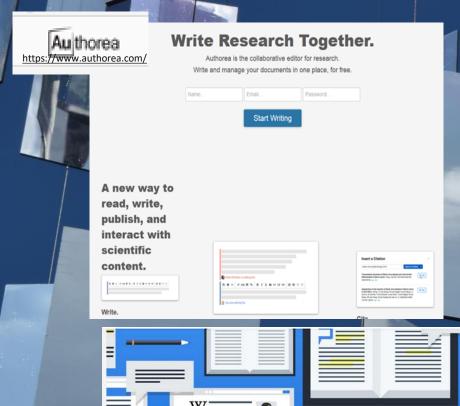
EU-wide Quantum technologies flagship

3.5 bn

Data Infrastructure

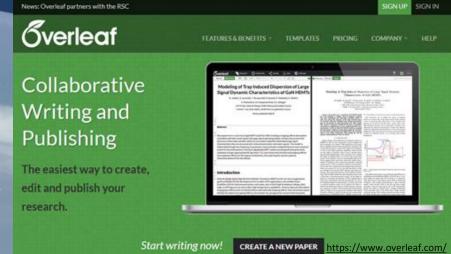


...scrivendo in modó diverso



Pundit Web Annotation

PundIT video





Annotate with anyone, anywhere

Our mission is to bring a new layer to the web. Use Hypothesis to discuss, collaborate, organize your research, or take personal notes.

Get Bookmarklet Or. Pasto a link... Annotate.

There's also a Chrome extension or you can add it to your website.

SCRIVERE COLLABORATIVAMENTE,
ANNOTARE IL WEB

Hypothesis announces a coalition of over 40 scholarly organizations bringing annotation to all knowledge. Learn more

https://hypothes.is/

PRFPRINT E OPEN NOTEBOOK



going to

"begoo

What is an Open Notebook?

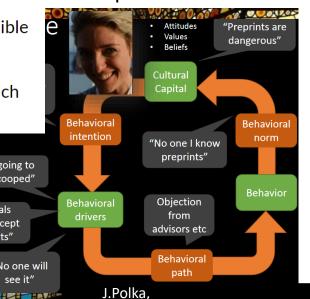
Open Notebooks are documents that contain equations, visualisations, narrative text and live code that can be executed independently and interactively, with output visible immediately beneath the input.

They bring together analysis descriptions and results, which can be executed to perform the data analysis in real time.



Il valore dei preprint: pubblicazione immediata dei risultati

priorità scientifica elimina il «limbo» di attesa post submission



Rule 1: Preprints speed up dissemination

Rule 2: Preprints should be licensed and formatted to facilitate reuse

Rule 3: Preprints provide a record of priority

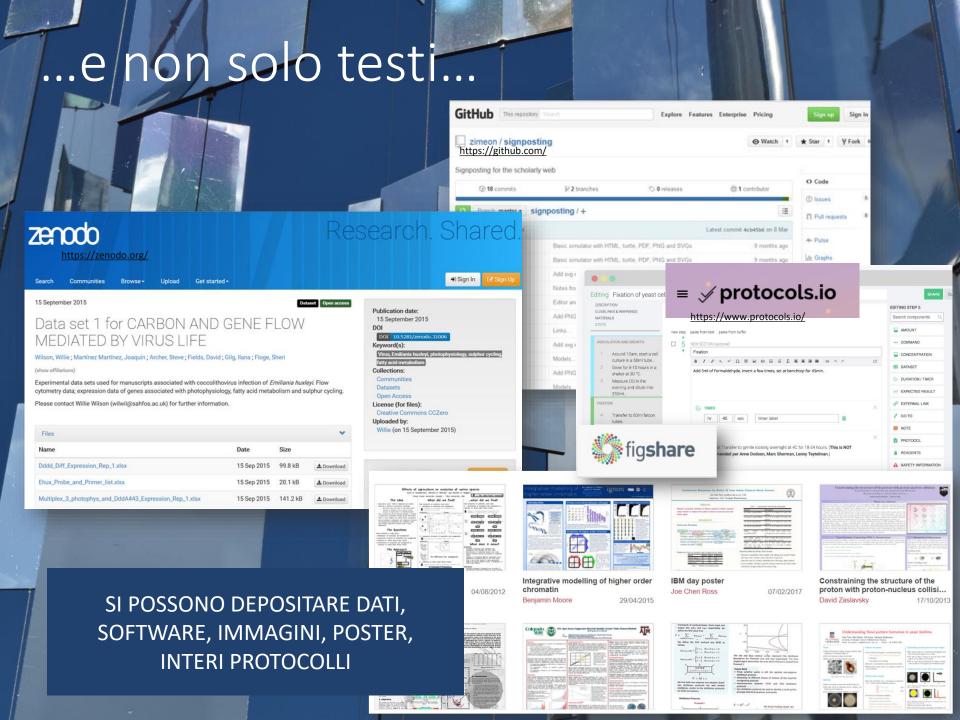
- e 4: Preprints do not d to being scooped
- e 5: Preprints provide ess to scholarly tent that would erwise be lost
- e 6: Preprints do not ly low quality

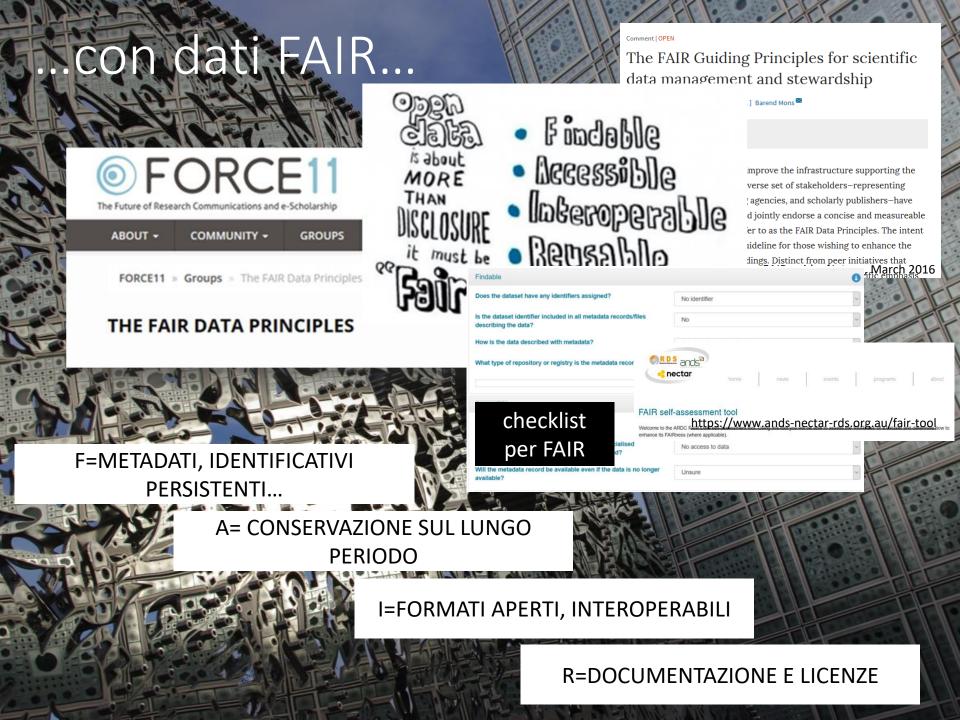
Rule 7: Preprints support the rapid evaluation of controversial results

Rule 8: Preprints do not typically preclude publication

Rule 9: Preprints can further inform grant review and academic advancement

Rule 10: Preprints—one shoe does not fit all





...e con un Data Management Plan



Descrivere i dati esistenti o che si intendono creare.

indicandone provenienza, natura e ordine di grande

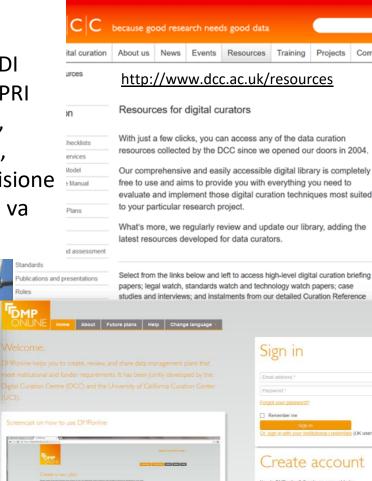
Motivare la creazione di nuovi dataset e relativo val-

DMP È **UN MODO** STRUTTURATO DI PENSARE AI PROPRI DATI: raccolta, conservazione, descrizione, condivisione

living document: va aggiornato

Smart Data Management Plans for FAIR Open Science

erence data set for future research (by



Provenance of data (content) Descrivere se i dati provengono da interviste, indagini, sono estratti da archivi disciplinari, banche dati e/o da altri progetti (in tal caso, seanalare il titolo dei proaetti) a ta Stewardship Wizard Provenance of metadata Type of data Descrivere se sono qualitativi, quantitativi Data Stewardship Wizard Data integration Nature and formats Data interpretation Is there any pre-existing data? Are there any data sets available in the world that are relevant to your planned research? Information and insight Data Stewardship for Open Science: atq Will reference data be created? Amount of data Data Wizard per Requirements for software gestire i dati Requirements for hardware

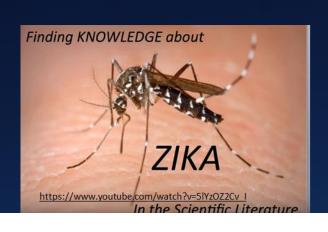
DATASET DESCRIPTION

https://app.dsw.fairdata.solutions/questionnaire

Create account New to DMPonline? Create an account todal

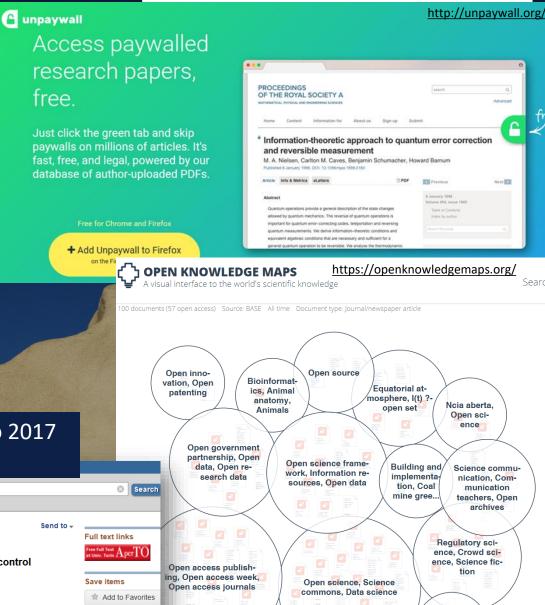
...abilitando servizi

POSSIBILE **SOLO SE** RICERCATORI DEPOSITANO IN OPEN ACCESS



TEXT E DATA MINING

- sono cruciali
- ma servono i testi e dati aperti



Engaging in

118.000 download da maggio 2017 [7242 di media]

PubMed gov
US National Library of Medicine
National Institutes of Health
National Institutes of Health
National Abstract

Format: Abstract

Send to

Full text I

Breast Cancer Res Treat, 1988 May;11(2):147-53.

Distribution of Ha-RAS-1 proto-oncogene alleles in breast cancer patients and in a control population.

Saglio G¹, Camaschella C, Giai M, Serra A, Guerrasio A, Peirone B, Gasparini P, Mazza U, Ceppellini R, Biglia N, et al.

Author information

...e aprendo l'intero ciclo





https://aspredicted.org/

Create a new AsPredicted pre-registration

See your existing AsPredicteds (e.g. approve, make public)

Pre registrare uno studio su OSF Registries o AsPredicted [garanzia]

Your email address (used in AsPredicted)

SEE OWN

What's an AsPredicted?

It is a standardized pre-registration that requires only what's necessary to separate exploratory from confirmatory analyses. You will easily generate a pre-registration document that takes less effort to evaluate than it takes to evaluate the published study itself.



How does it work?

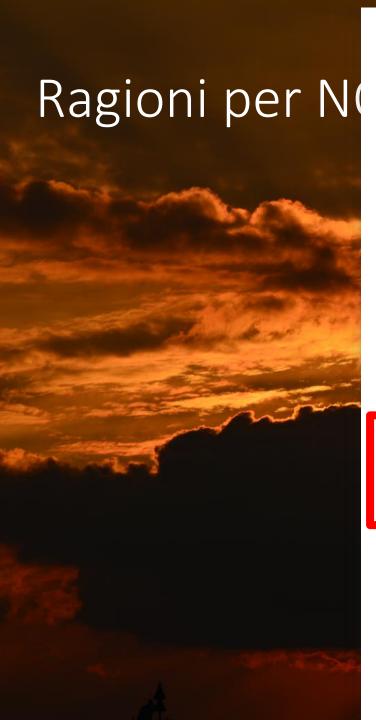
- · One author briefly answers 9 questions.
- · All participating authors receive an email asking for approval.
- If everyone approves, it is saved and stays private until an author acts to make it public, or it remains private forever. (Why?)
- · Authors may share anonymous .pdf with reviewers.
- If made public, a single-page .pdf is generated. That document can be used as a supplement. (See sample)
- The .pdf contains a unique URL that allows for one-click verification.
 That URL can be included in the paper.
- The .pdf is automatically stored in the web-archive. (See sample)
- There are no accounts, userids, or passwords.

What if things don't go "as predicted"

You can just say so in the paper:

- . "Contrary to expectations, we found that..."
- "Unexpectedly, we also found that..."
- "In addition to the analyses we pre-registered we also ran..."
- "We encountered an unexpected situation, and followed our Standard Operating Procedure" (.pdf)





Valid reasons not to participate in open science practices

Casper J. Albers*

Abstract

The past years have seen a sharp increase in the attention for open science practices. Such practices include pre-registration and registered reports, sharing of materials, open access publishing and attention to reproducibility of research. Despite the overwhelming amount of evidence highlighting the benefits of open science, some researchers remain reluctant. In this paper, I will outline valid reasons for researchers not to participate in open science practices.

Discussion

There are no valid reasons.

^{*}Heymans Institute for Psychological Research, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands. https://twittencom/CaAl/status/966279936028958720

