

OPEN SCIENCE DALLA A ALLA Z 2-L'ALTERNATIVA OPEN

<https://doi.org/10.5281/zenodo.4483434>

INRIM, febbraio 2021

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In questo modulo impareremo:

1. Open Science è solo la scienza, fatta bene
2. come potete aprire tutti i passi del ciclo della ricerca

MESSAGGI CHIAVE

- C'è una comunità lì fuori che vi sostiene (soprattutto giovani ricercatori)
- potete fare un passo alla volta...
- ...ma fatelo, provateci!...

...un po' di ispirazione...

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.



...cosa ci ha insegnato il COVID?

CORRIERE DELLA SERA / OPINIONI

Il coronavirus insegna: la scienza ha sempre bisogno di trasparenza



di Massimo Sideri | 30 gennaio 2020

La grande rivoluzione nata in un piccolo centro veneto specializzato nel passaggio dei virus da animali a umani, allora diretto da Ilaria Capua. E a quel tempo fu osteggiata Jan. 30, 2020

**SOLO COLLABORANDO SI
TROVA UNA SOLUZIONE
ALL'EMERGENZA**

We find ourselves at a pivotal moment in history—we must cooperate effectively to respond to an unprecedented global health emergency. The mantra, “when we share, everyone wins” applies now more than ever.

Now Is the Time for Open Access Policies—Here’s Why



Victoria Heath and Brigitte Vézina
March 19, 2020

March 19, 2020

creative commons

Open Science

Open Science Depends on Open Minds



Neelie Kroes ✓

Iscriviti 851



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

'Open Science' stands for the transition to a new, more open and participatory way of conducting, publishing and evaluating scholarly research. Central to this concept is the goal of increasing cooperation and transparency in all research stages. This is achieved, among other ways, by sharing research data, publications, tools and results as early and open as possible.

Qeios

Open Access | Lic. Info | Cite

<https://doi.org/10.32388/838962>

Open Science

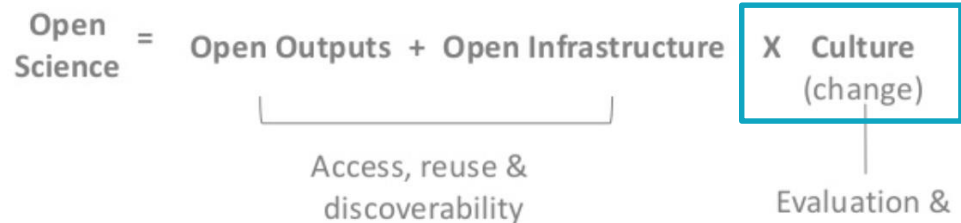
Open Science leads to more robust scientific results, to more efficient research and (faster) access to scientific results for everyone. This results in turn in greater societal and economic impact.

<https://www.accelerateopenscience.nl/what-is-open-science/>



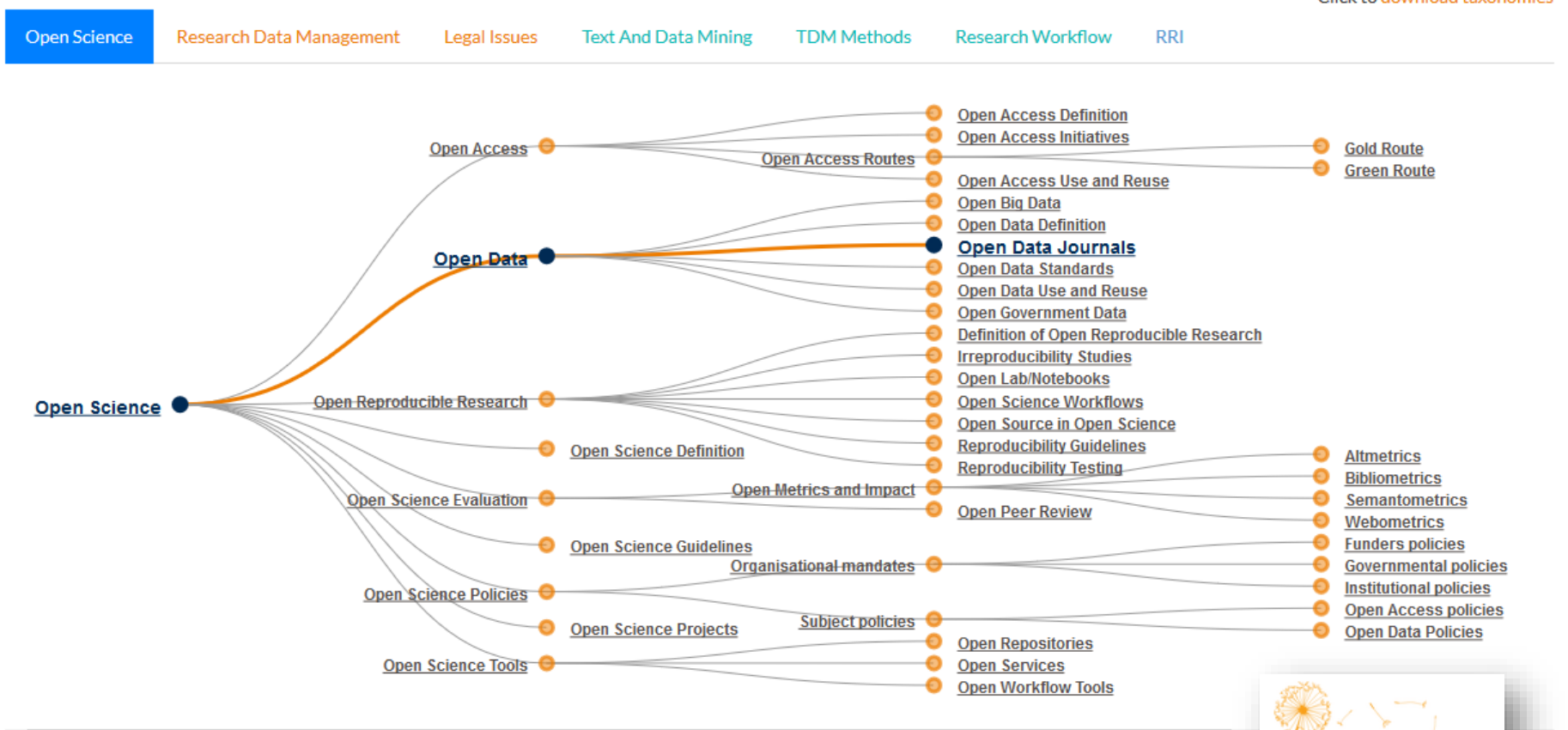
Open Science @openscience · 5 h
"Being open and transparent is an ongoing practice and not a check box at the end." - @biocrusoe #openscience

13 8



...Open Science è

Click to download taxonomy



FOSTER taxonomy



Open Science

Jon Tennant ✓

107.241 Tweet

Following

[Open] Science is a Human Right

Article 27

- 1) Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to **share in scientific advancement and its benefits.**
 - 2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.
- 1) Toda persona tiene derecho a participar libremente en la vida cultural de la comunidad, a gozar de las artes y a participar en el **progreso científico y en los beneficios que de él resulten.**
 - 2) Toda persona tiene derecho a la protección de los intereses morales y materiales que le correspondan por razón de las producciones científicas, literarias o artísticas de que sea autora.

<https://www.un.org/en/universal-declaration-human-rights/>

Sept. 21, 2019

@protohedgehog

Open Science

OPEN SCIENCE: JUST SCIENCE DONE RIGHT

Principles

Scholarship

Transparency	Accountability	Inclusivity
Responsibility	Community & Collaboration	Visibility
Rigour	Equality	Public good

 **Jon Tennant** ✓
@Protohedgehog

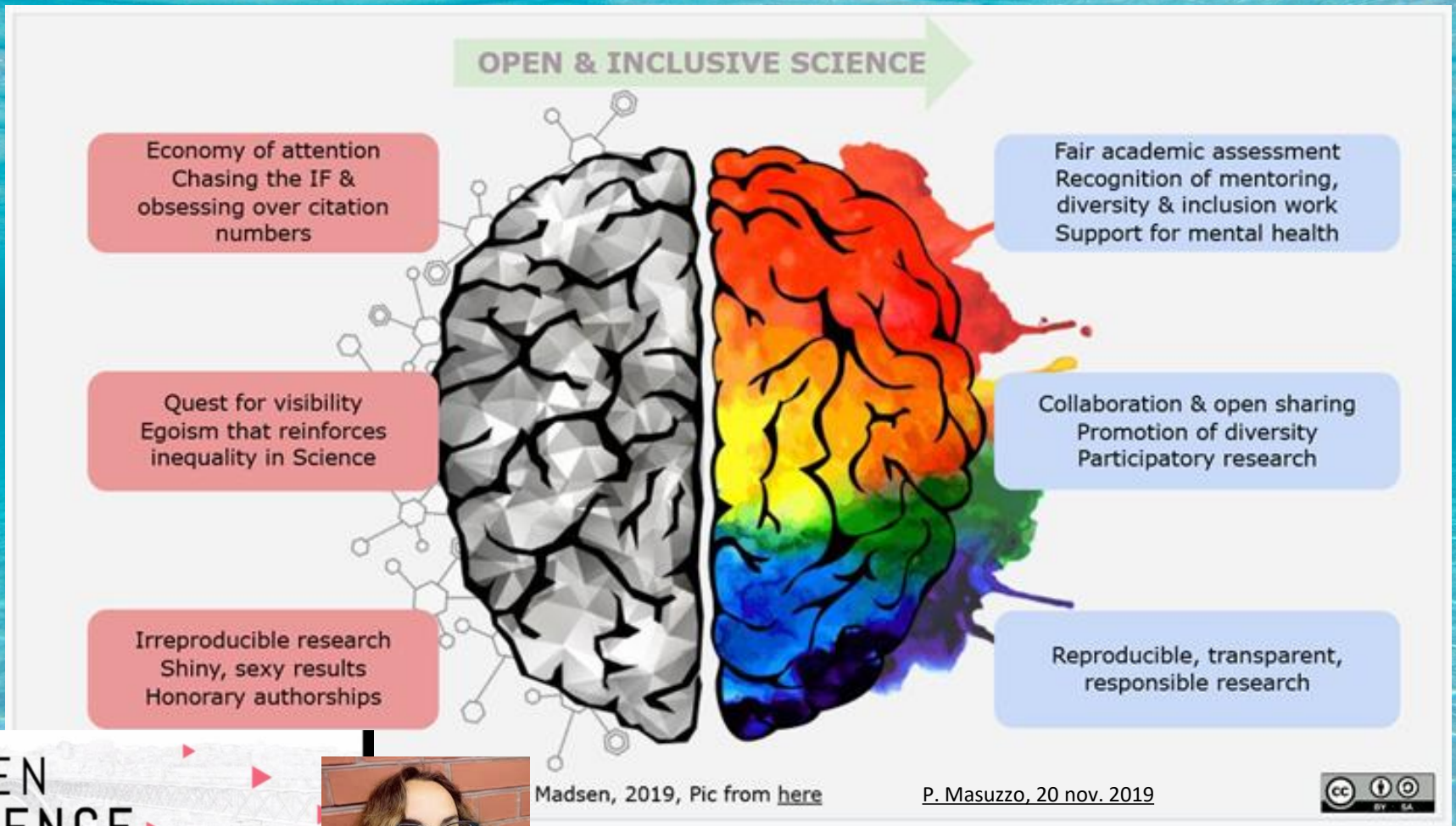
Following

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

Tony Ross-Hellauer, 2017

Open and inclusive science



OPEN
SCIENCE
FAIR

Synergies for Sustainable, Open & Responsible Research
P. Masuzzo, Keynote, Sept. 2019



Open Science

WEBINAR 19 OTTOBRE 2020



NON SOLO ARTICOLI MA
DATI, SOFTWARE...

recognize that formal papers and manuscripts are not the only units of scientific knowledge



VALORI: DIVERSITÀ,
INCLUSIONE...

redefine research excellence towards *values*: leadership, diversity work, mental health support



RIPORTARE LA
SCIENZA AL CENTRO
DELLA SOCIETÀ

invest in tools, services, and community-driven initiatives to help make science better by engaging more people to participate in the process



tell it like it is: redefine failure, nurture slower, responsible science, shift the focus from the outputs to the practice



INVESTIRE IN STRUMENTI
PARTECIPATIVI



@pcmasuzzo
Oct.5, 2020

RISULTATI NEGATIVI,
«FAR CRESCERE»,
«RESPONSABILE»

BY-SA

...in altre parole...

It was really helpful to have in mind there is an alternative way [Open Science] that gives us the chance of being treated with dignity and truly focus on the essence of our work

[Petra, PhD, May 2020]

Open Science: solo in Europa?


OPEN SCIENCE SIGNIFICA PORTARE LA
SCIENZA NEL 21° SECOLO

PERSPECTIVE ARTICLE [Provisionally accepted](#) [The full-text will be published soon.](#) [Notify me](#)

[Nov.2019]

Front. Big Data | doi: 10.3389/fdata.2019.00043

Open science, open data and open scholarship: European policies to make science fit for the 21st century

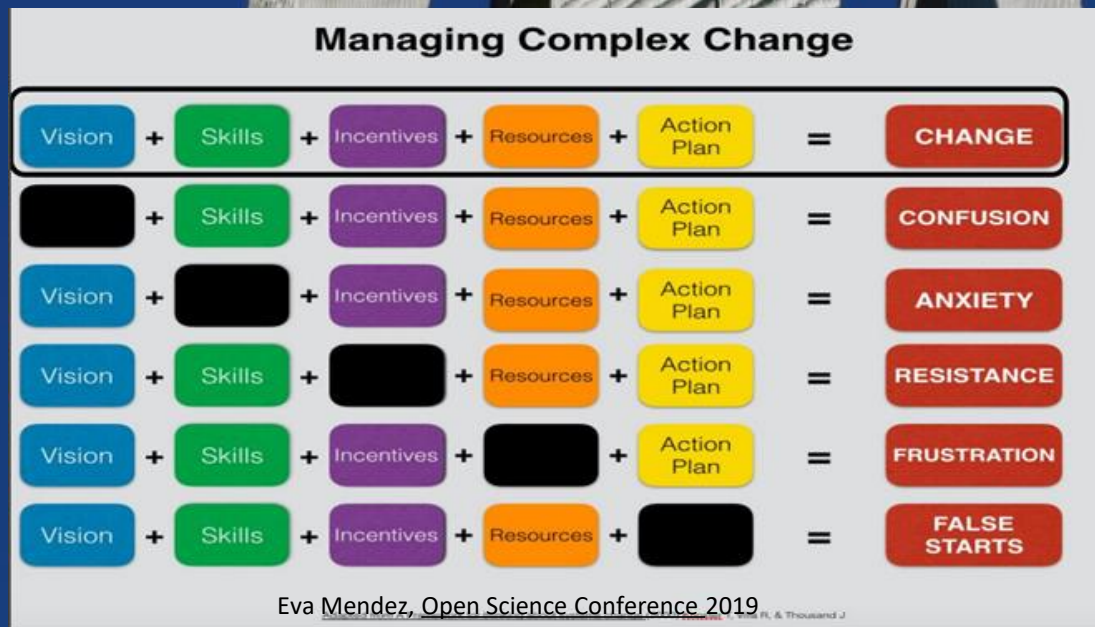
Jean-Claude Burgelman^{1*},  Corina Pascu^{1*}, Katarzyna Szkuta¹, Rene Von Schomberg¹, Athanasios Karalopoulos¹, Konstantinos Repanas¹ and Michel Schouppe¹

Transition to open science is a multidimensional and multistage process. There is value and risk of being a first mover, but there is higher risk of being a follower. The European Commission has taken

RISCHI A ESSERE I PRIMI, RISCHI
MAGGIORI A ESSERE GLI ULTIMI

[Transizione: è un processo]

Open Science and its role in universities:
A roadmap for cultural change
2018



**SERVE UNA
VISIONE
ORGANICA E
COERENTE**

national plan open science

Home Open science National Plan Open science in Nederland Open science international

<https://www.openscience.nl/>

Zoeken in de site

National Plan Open Science

"Where society feels the need to understand the world it regularly turns to the scientific community."

<https://zenodo.org/record/34079#.W00wY2fOPIU>

OPEN ACCESS

Recommendati Open A

Working Group "National Strategy"

Head of the University Library at the Medical University of Vienna

VALTO

Valtioneuvoston julkaisuarkki

Cerc

DSpace Home > Op

Francia - National Plan, July 2018

NATIONAL PLAN FOR OPEN SCIENCE

4TH JULY 2018

E POLITICHE NAZIONALI

Open science and research leads to surprising creative insights: Open science and research leads to surprising creative insights: Open science and research leads to surprising creative insights: <http://urn.fi/URN:ISBN:978-952-263-111-1>
<http://iulkaisut.va>

PER PASSARE DA «RACCOMANDAZIONI» A «IMPEGNI PER L'IMPLEMENTAZIONE»

June 4, 2020

European Commission

Progress on Open Science: Towards a Shared Research Knowledge System

Final Report of the Open Science Policy Platform

This specific mandate implied a shift from 'Recommendation Mode' to 'Implementation Mode', through PCIs: Practical Commitments for Implementation at stakeholder level. A PCI is a

Open Science: chi la sostiene / 1

The participants reached a consensus on the following views

- I. Open Science is an accelerator of the Sustainable Development Goals (SDGs).
- II. Publicly funded science should be Open Science.
- III. We are not on track to achieve the SDGs. We must work collaboratively toward the goals of humanity laid out in the SDGs.
- IV. The importance of Open Access (OA) is key takeaway from the 2019 Global Sustainable Development Report.
- V. Open Science must be inclusive. Important relevant research is not the same as popular highly-cited research.
- VI. Incentives for research should be aligned with openness in service of the SDGs and for the good of humanity.
- VII. Open Science requires the opening of barriers to a set of inter-related scientific research processes. Libraries are natural information/data brokers and curators in the Open Science suite of processes, and their role is essential.



UNITED NATIONS

Roundtable Discussion on a Global Science Commons
Outcome Document

United Nations Headquarters, Monday, 18 November 2019
Nov. 18, 2019



SUSTAINABLE DEVELOPMENT GOALS
17 GOALS TO TRANSFORM OUR WORLD



Open Science: chi la sostiene / 2



Access to publicly funded data has become more important than ever during the COVID-19 crisis.

We look at what countries can do to encourage [#DataAccess](#) in our report oe.cd/2ZO

[#researchdata](#) [#opendata](#)

[Traduci il Tweet](#)



Enhanced Access to Publicly Funded Data for Science, Technology and Innovation

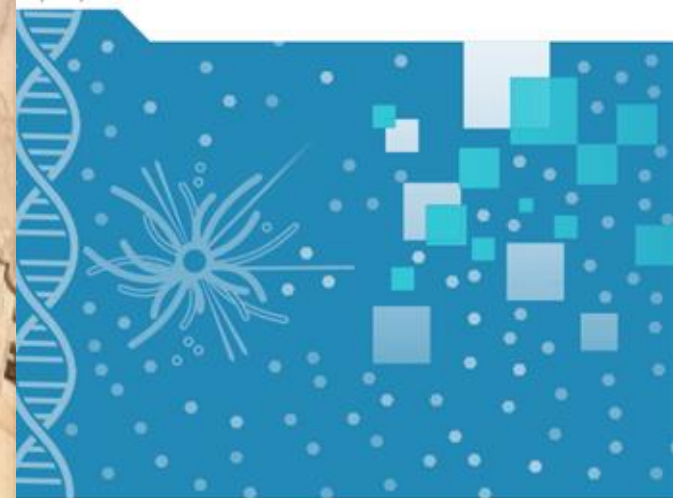


Enhanced Access to Publicly Funded Data for Science, Technology and Innovation



7 main challenges addressed

- 1/ Data governance for trust
- 2/ Discoverability/findability, machine readability and data standards.
- 3/ Recognition and reward system for data authors.
- 4/ Definition of responsibility and ownership.
- 5/ Business models for open data provision.
- 6/ Building human and institutional capabilities.
- 7/ Exchange of sensitive data across borders.



APPELLO CONGIUNTO PER LA OPEN SCIENCE

Oct. 27, 2020

Joint Appeal for Open Science UNESCO, WHO, HCHR,
CERN

We, the Directors-General of UNESCO, WHO and CERN, and the United Nations High Commissioner for Human Rights, reaffirm the fundamental right to enjoy the benefits of scientific progress and its applications and advocate for open, inclusive and collaborative science

APERTA, INCLUSIVA, COLLABORATIVA

Considering that Open Science can reduce inequalities, help respond to the immediate challenges of Covid-19 and accelerate progress towards the implementation of the 2030 Agenda for Sustainable Development, we therefore:

- (i) Call on every Member State to ensure the fundamental right to access scientific research and its applications, with a view to creating a global knowledge commons and closing existing gaps in science, technology and innovation, especially in developing countries and with respect to women;
- (ii) Commit to supporting the international scientific community by fostering a culture of collaboration and solidarity, rather than competition, and by sharing research outcomes and knowledge wherever possible in order to make science v

CONOSCENZA COME BENE COMUNE

COLLABORAZIONE vs COMPETIZIONE

The core idea behind Open Science is to allow scientific information, data and outputs to be more widely accessible (Open Access) and more reliably harnessed (Open Data) with the active engagement of all stakeholders (Open to Society). The Open Science movement has emerged from the scientific community and has rapidly spread across nations, calling for the opening of the gates of knowledge. In a fragmented scientific and policy environment, a stronger global understanding of the opportunities and challenges of Open Science is needed.

ACCESSO, TRASPARENZA, COINVOLGIMENTO – APRIRE LE PORTE

Open Science: chi la sostiene



UNESCO Recommendation on Open Science

At the [40th session of UNESCO's General Conference](#), 193 Members States tasked the Organization with the development of an international standard-setting instrument on Open Science in the form of a UNESCO Recommendation on Open Science to be adopted by Member States in 2021.

Nov. 2020

8. The term 'Open Science' refers to an umbrella concept that combines various movements and practices aiming to make scientific knowledge, methods, data and evidence freely available and accessible for everyone, increase scientific collaborations and sharing of information for the benefits of science and society, and open the process of scientific knowledge creation and circulation to societal actors beyond the institutionalized scientific community.

Considering that Open Science should not only foster enhanced sharing of scientific knowledge but also promote inclusion of scholarly knowledge from marginalized groups (such as women, minorities, Indigenous scholars, non-Anglophone scholars, scholars from less-advantaged countries) and contribute to reducing inequalities in access to scientific development, infrastructures and capabilities among different countries and regions;

Recognizing that Open Science respects the diversity of cultures and knowledge systems around the world as foundations for sustainable development, fostering open and robust dialogue with indigenous peoples and local communities and diverse knowledge holders for contemporary problem-solving and emergent strategies towards transformative change;

Acknowledging the transformative potential of Open Science for reducing the existing inequalities in science, technology and innovation and accelerating progress towards the implementation of the Agenda 2030 and the achievement of the Sustainable Development Goals and beyond;

- INCLUSIONE
- RIDUZIONE
DELLE
DISEGUAGLIANZE
- POTENZIALE
TRASFORMATIVO

Open Science: chi la sos

RACCOMANDAZIONE ERAC

EUROPEAN UNION
EUROPEAN RESEARCH AREA
AND INNOVATION COMMITTEE
- ERAC -
Secretariat

Brussels, 14 December 2020
(OR. en)

ERAC, Dec. 14, 2020

ERAC 1211/20

Executive summary

The current COVID-19 pandemic presents unique opportunities for Open Science and Open Innovation. Preprints have shown their potential for fastened discussion of research results between peers and a certain ability to auto-correct, while the benefits of opening the access to research outputs in all disciplines - including the social sciences and the humanities -, investing in FAIR data infrastructures and services as well as promoting training in data stewardship have been made obvious.

RICONOSCE IL VALORE E INSISTE
SULLA VALUTAZIONE!

Hence the ERAC recommends that open access to publications resulting from publicly funded research activities be generalized in all disciplines. Proper data standards should be agreed early on, taking into account the disciplinary specificities, while interoperable and federated ecosystems of FAIR data have to be implemented, as well as distributed analytics and machine learning. Furthermore we recommend that research assessment and research integrity policies take more into account, and in a more systematic way, the requirements connected to Open Science and Open Innovation, in order to foster researchers' engagement in these areas, as well as the trustworthiness of scientific knowledge.

Open Science: chi la s



LINDAU
NOBEL LAUREATE
MEETINGS

Lindau declaration

Welcome Overview

The Lindau Declaration 2020 on Sustainable Cooperative Open Science is an initiative first presented and suggested by Elizabeth Blackburn during the 68th Lindau Nobel Laureate Meeting held in June 2018 in

GOAL 01
**Cooperate Globally
on Global Problems**

The vast majority of the most pressing problems of the 21st century are global. They affect large populations, they cannot be solved by any one country. Therefore, scientists and politicians must increase effectiveness of differing approaches.

GOAL 04
**Publish Data
to Repositories**

Publishing is not limited to scientific findings. Any kind of data found, generated or used shall also be archived in appropriate data repositories. means storing vast amounts of technological and administrative infrastructure must be improved and adapted

GOAL 02
**Share
Knowledge**

Knowledge becomes most powerful when it is shared.

GOAL 05
**Work
Transparent and Truthful**

Research must be transparent and truthful: First, in methodology, data and findings, meaning that these have to be performed

GOAL 03
**Publish Results
Open Access**

Scientific results shall be published in an open access format.

GOAL 06
**Change
Reward Systems**

Currently, working along the outlined standards and investing in transparency, openness, accessibility etc. is not

GOAL 07
**Support
Talent Worldwide**

Scientific talent exists in all parts of the world and all parts of society. All work and research environments as well as all structures related to that shall support

GOAL 08
**Communicate
to Society**

Science has a distinct responsibility to communicate its procedures and results to society. Not only is most basic research funded by tax-payers money. Research and

GOAL 09
**Engage
in Education**

While research is at the core of the scientific discovery process, engaging education of the next generation is equally crucial.

GOAL 10
**Ensure
Global Funding**

Basic research requires reliable funding, even more so than other forms of science, such as industry research. In almost all cases, insights from basic research, or even blue-sky research, lay the ground for inventions and products that directly benefit people.

Open [collaborative] essere inclusivi

Stephen Curry ✓

64.823 Tweet

Sept. 19, 2019

Following

LERU @LERUnews · 19 set

Important message to bring to university leadership is that we miss out on talent by not making equality and diversity a priority. Mixed teams work better. Addressing diversity issues is a win-win situation for students, staff and institutions, says @Stephen_Curry



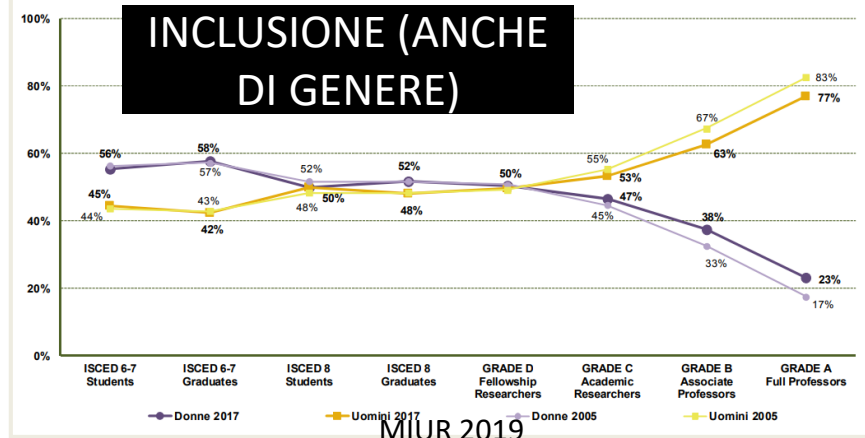
It's time to talk explicitly about inclusiveness

We have talked enough about diversity in an **implicit** way but we have not focused on it in an **explicit** way and we may therefore have missed the real point: **equity, diversity and inclusiveness are non-negotiable** and they must be built into the foundation of what we do.



Cameron Neylon, Twitter [thread](#); Image by Cyle De Guzman on Unsplash Photos

Gráfico 1: Proporzione di donne e uomini in una tipica carriera accademica: studenti e personale docente e ricercatore - Anni 2005 e 2017



Open Science Manifesto
Towards an Inclusive Open Science for Social and Environmental Well-being

Contextualizing Openness

Situating Open Science

@JFSmith434

"If we are not careful, we will have an open science that perpetuates the inequalities in academia and science." @mendulla #osfair2017



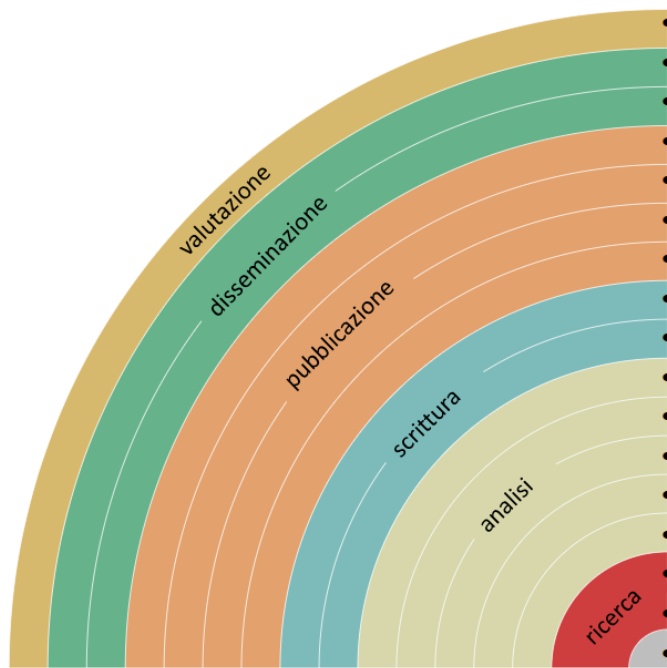
Edited by Leslie Chan
Angela Okune, Rebecca Hillier, Denise Albornoz, and Alejandro Posada
University of Ottawa Press



46.24 Inclusive Open Science, 7 Sept. 2017

Open science un passo per volta...

Come puoi rendere Open ogni passo della ricerca...



- 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



Bianca Kramer & Jeroen Bosman <https://101innovations.wordpress.com>

DOI: [10.5281/zenodo.1147025](https://doi.org/10.5281/zenodo.1147025)

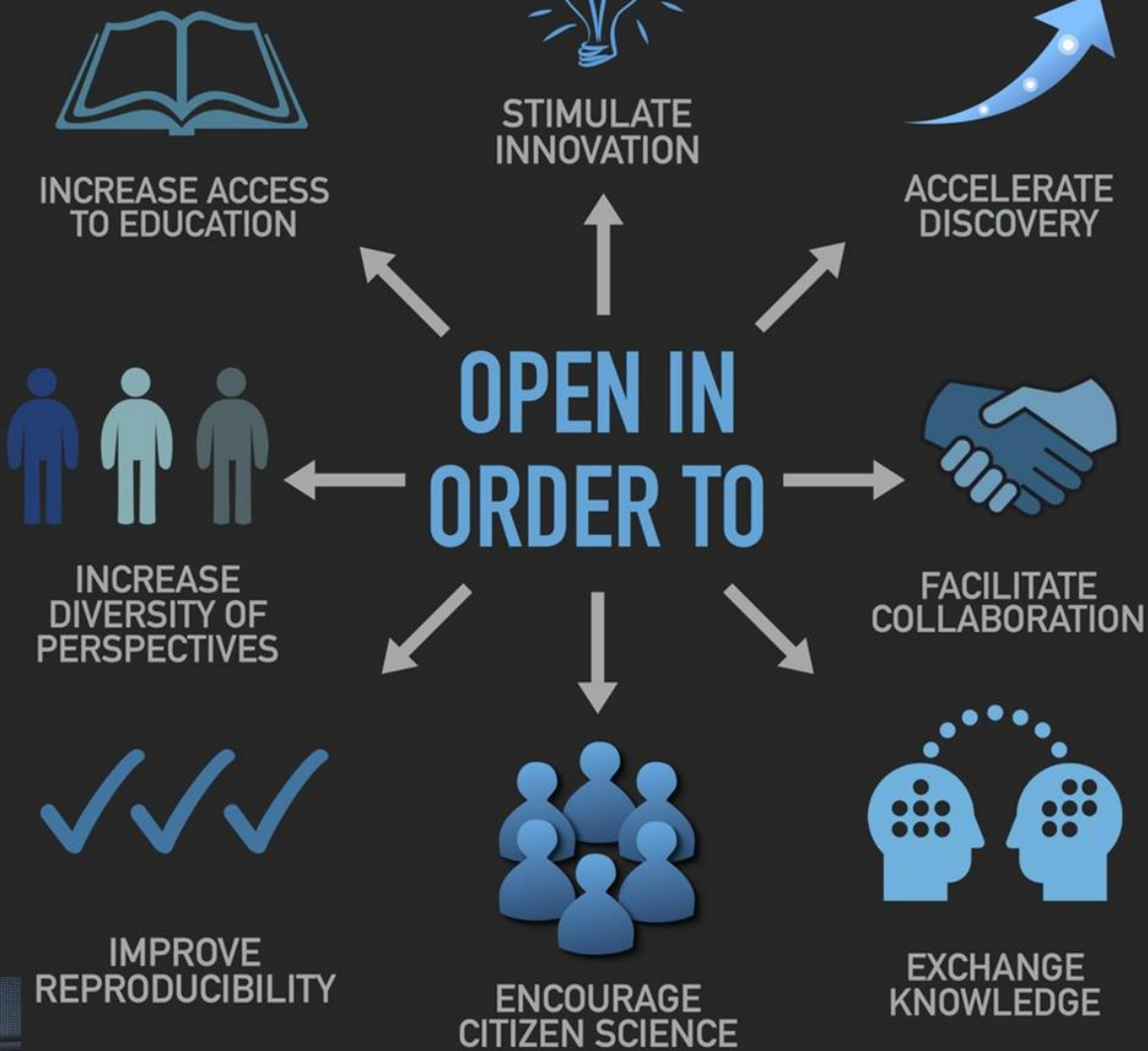
Traduzione: Elena Giglia

DOI: [10.5281/zenodo.1195648](https://doi.org/10.5281/zenodo.1195648)

SI PUÒ FARE SEMPRE! **NONOSTANTE** I CRITERI ATTUALI DI VALUTAZIONE. NESSUNO VE LO VIETA! E NON RICHIEDE TANTO TEMPO (ANCHE PERCHÉ, QUANTI ARTICOLI/ANNO???) 10? PER 10 VOLTE SU 365 GIORNI...)



Open per...



whyopenresearch.org

#OAweek

Open science e innovazione



...È IL MODO MIGLIORE PER APRIRSI AL TERRITORIO, PMI, START UP...
(TRASFERIMENTO TECNOLOGICO = BREVETTO???)

... un altro mondo è possibile SE...

Removing barriers to open science

1. Change assessment, evaluation and reward systems in science 8
2. Facilitate text and data mining of content. 10
3. Improve insight into IPR and issues such as privacy 12
4. Create transparency on the costs and conditions of academic communication 4

Developing research infrastructures

5. Introduce FAIR and secure data principles. 16
6. Set up common e-infrastructures 18

Fostering and creating incentives for open science

7. Adopt open access principles. 22
8. Stimulate new publishing models for knowledge transfer. 23
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

Stimulating and embedding open science in science and society

11. Involve researchers and new users in open science 32
12. Encourage stakeholders to share expertise and information on open science 34



Amsterdam Call for Action
on Open Science

... [nuovi giocatori: MIUR] [???



«COORDINAMENTO-STRATEGIA» - SONNO DI MESI – RIPRESA?

NATIONAL PLAN OPEN SCIENCE
COMMISSIONE OPEN SCIENCE (CRUI, ANVUR, CUN, AIB, AIE, AISA, IOSSG, ICDI)

...un modo nuovo di fare ricerca

Box 1. Some Research Practices that May Help Increase the Proportion of True Research Findings

- › Large-scale collaborative research
- › Adoption of replication culture
- › Registration (of studies, protocols, analysis codes, datasets, raw data, and results)
- › Sharing (of data, protocols, materials, software, and other tools)
- › Reproducibility practices
- › Containment of conflicted sponsors and authors
- › More appropriate statistical methods
- › Standardization of definitions and analyses
- › More stringent thresholds for claiming discoveries or “successes”
- › Improvement of study design standards
- › Improvements in peer review, reporting, and dissemination of research
- › Better training of scientific workforce in methods and statistical literacy



...nuove funzioni

Dissemination

How can the future provide more usable, accessible and relevant dissemination?

In the future, studies should be presented as a collection of interlinked research objects and associated metadata. Data, code, protocols, and other elements such as reagents can all be independently identified and verified, allowing for readers to more easily find and access the elements most relevant to them.

Recognition

How can reward and incentive systems be improved to provide researchers with credit for more of their research?

Peer-reviewed protocols give authors a formal publication that enables their methods to be cited, shared and used as a signal of accomplishment. Similar opportunities exist for sharing, describing and citing research datasets and software, which need to be more widely adopted by the wider scientific community, furthering chances for additional recognition.

Verification

How can widespread adoption of Open Science provide more reliable and reproducible research?

Transparency enables verification. Preregistration enables interrogation of what was planned and what was carried out, and publishing peer reviews and preprints allow readers to view changes that occur during peer review. Direct links to deposited data and executable code gives an opportunity to work with the same material as the original authors.

Community Building

How can Open Science provide more opportunities to collaborate and connect?

The scientific community has made great progress in making Coronavirus research as Open as possible. With authors across disciplines depositing their articles as preprints and publishers making relevant research fully accessible, the benefits of Open Science have been made even clearer. By connecting researchers through peer review and providing structures

Imagining a Transformed Scientific Publication Landscape

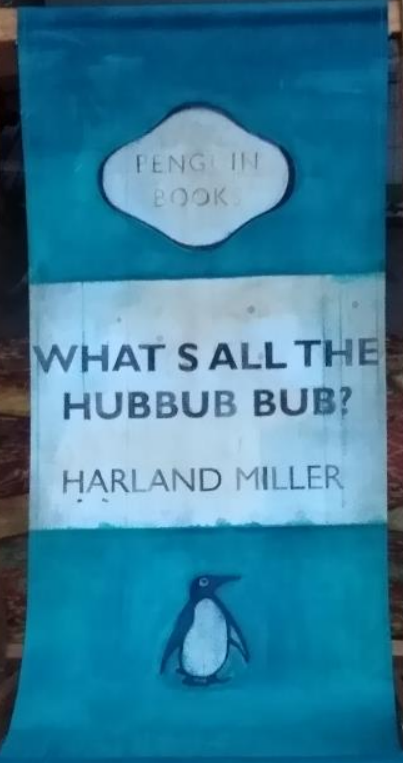
Jan 12, 2020

[January 13, 2021](#) / [PLOS](#) / [Innovation](#) [Open Science](#) [Publishing](#) [Thought Leaders](#)

...con Open Access ai testi



DEPOSITO

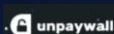


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AUTORI HANNO DEPOSITATO



<https://openknowledgemaps.org/>

Map a research topic

Get an overview - Find papers - Identify relevant concepts

PubMed (life sciences)

BASE (all disciplines)

Refine your search

Enter your search term

GO

Try out: sugar digital education

What is Open Knowledge Maps?

Finding KNOWLEDGE about

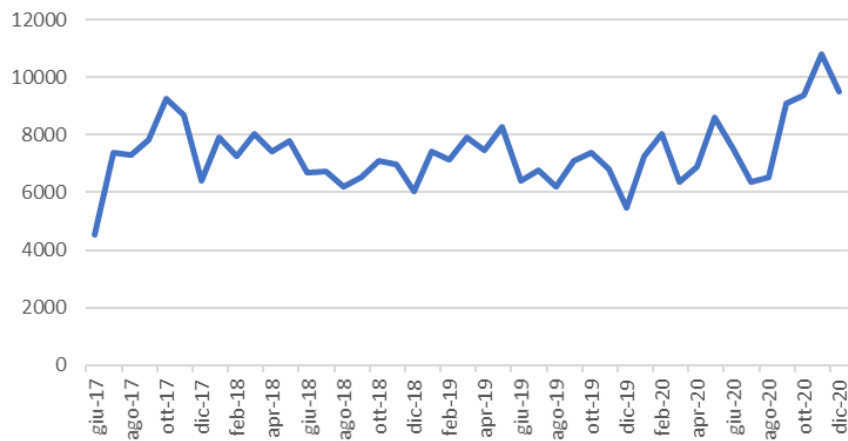


https://www.youtube.com/watch?v=5IYzOZ2Cv_I

Literature

TEXT AND
DATA MINING

PubMed LinkOut June 2017/Dec.2020



316.545 downloads da maggio 2017
[7.362 media]

PUBMED
LINKOUT

NCBI Resources How To

PubMed 2900032[uid]

US National Library of Medicine National Institutes of Health Create RSS Create

Format Abstract

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

Full text links




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...collegando ricerca e industria...

FRANCO TOSI

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- Journal >
- Conference Name >
- Publication Type >
- Publisher >
- Subject Matter >
- Open Access >
- Scholar Structured Search >
- Patents 
- Search 127,471,322 Patents
- Applicants >
- Jurisdictions >
- Inventors >
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...scrivendo in modo diverso

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ANNOTAZIONI, PIATTAFORME DI
PUBBLICAZIONE

... con Open peer review

SYSTEMATIC REVIEW

What is open peer review? A systematic review [version 1; referees: 1 approved, 3 approved with reservations]

Tony Ross-Hellauer 

- Author details
- Grant information

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This article is included in the [The Future of Scholarly Publishing](#) collection.

Abstract

Background: "Open peer review" (OPR), despite being a major pillar of Open Science, has neither a standardized definition nor an agreed schema of its features and implementations. The literature reflects this, with a myriad of overlapping and often contradictory definitions. While the term is used

Open Peer Review

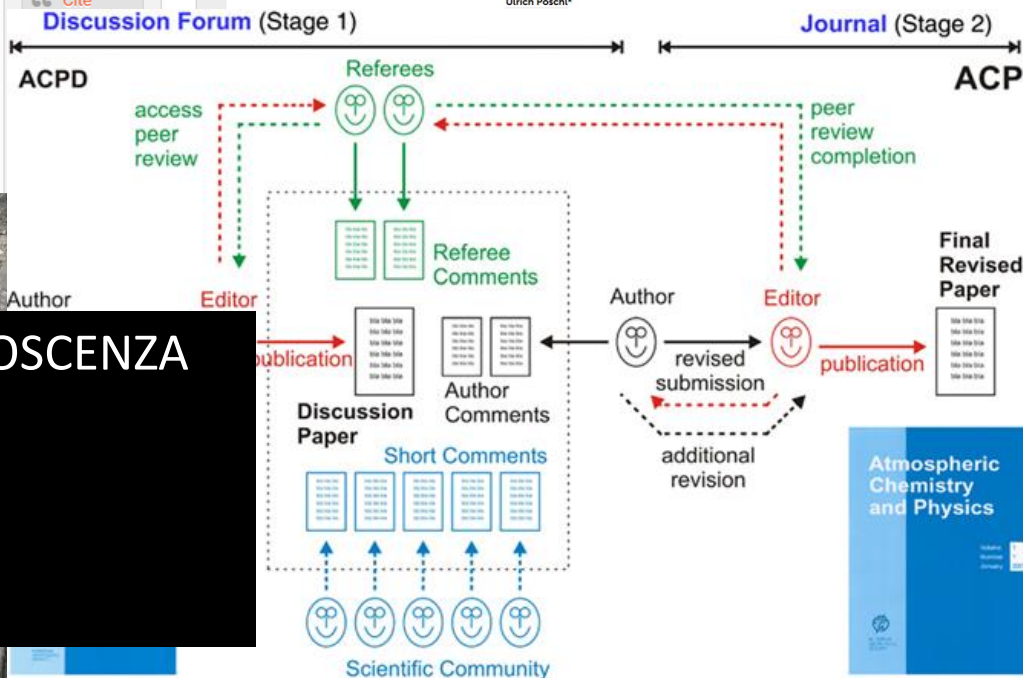
Referee Status: ✓✓✓✓

Invited Referees

Version(s)	1	2	3	4
REVISED Version 2 published 31 ago 2017	✓ read report	✓ read report	✓ read report	✓ read report
Version 1 published 27 apr 2017	✓ read report	? read report		

Multi-stage open peer review: scientific evaluation integrating the strengths of traditional peer review with the virtues of transparency and self-regulation
Ulrich Pöschl*

Poschl 2012



- REVISIONI COME «PEZZI» DI CONOSCENZA
- HANNO UN DOI
- SONO CITABILI
- DEVONO ESSERE VALUTATE COME «PRODOTTI» DELLA RICERCA

... e non solo

PREPRINT

PLOS COMPUTATIONAL BIOLOGY

May, 2017

OPEN ACCESS

EDITORIAL

Ten simple rules to con

Philip E. Bourne, Jessica K. Polka, Ronald D

Published: May 4, 2017 • <https://doi.org/10.1371>

- PUBBLICAZIONE IMMEDIATA DEI RISULTATI
- PRIORITÀ SCIENTIFICA
- ELIMINA IL «LIMBO» DI ATTESA POST SUBMISSION
- FOCUS SUL CONTENUTO E NON SUL CONTENITORE

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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

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CULTURA E SCIENZA / APPROFONDIMENTO 30 sett 2020

Scienza aperta e Covid-19: che cosa non ha funzionato. Ma la condivisione è la strada giusta

di Giovanna Borrelli e Francesco Sparano — 30 Settembre 2020

How Science Beat the Virus

And what it lost in the process

Story by Ed Yong

Dec.14, 2020

papers, or “preprints,” to freely accessible websites, allowing others to immediately dissect and build upon their results. This practice had been slowly gaining popularity before 2020, but proved so vital for sharing information about COVID-19 that it will likely become a mainstay of modern biomedical research. Preprints accelerate science, and the pandemic accelerated the use of preprints. At



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Open-notebook science

From Wikipedia, the free encyclopedia

Open-notebook science is the practice of making the entire primary record of a research project publicly available online as it is recorded. This involves placing the personal, or laboratory, notebook of the researcher online along with all raw and processed data, and any associated material, as this material is generated. The approach may be summed up by the slogan 'no insider information'. It is the logical extreme of transparent approaches to research and explicitly includes the making available of failed, less significant, and otherwise unpublished experiments; so called 'dark data'.^[1] The practice of open notebook science, although not the norm in the academic community, has gained significant recent attention in the research^{[2][3]} and general^{[3][4]} media as part of a general trend towards more open approaches in research practice and publishing. Open notebook science can therefore be described as part of a wider open science movement that includes the advocacy and adoption of open access publication, open data, crowdsourcing data, and citizen science. It is inspired in part by the success of open-source software^[5] and draws on many of its ideas.

Contents [hide]

- 1 History
- 2 Practitioners
 - 2.1 Active
 - 2.1.1 Experimental (alphabetical by last name)
 - 2.1.2 Theoretical
 - 2.2 Archived (alphabetical by last name)
 - 2.3 Recurrent (educational)
 - 2.4 Partially open/pseudo-open notebooks



What is an Open Notebook?

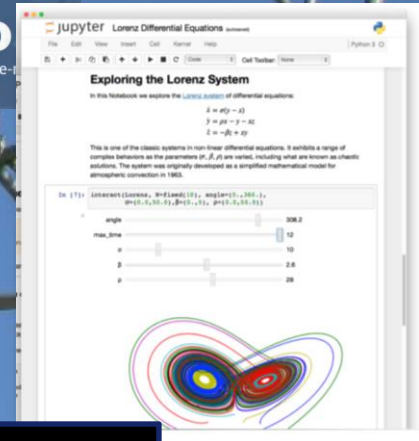
Open Notebooks are documents that contain equations, visualisations, narrative text and live code that can be executed independently and interactively, with output visible immediately beneath the input.

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



RStudio

Open source and enterprise professional software for R



OPEN LAB NOTEBOOK CONTENGONO TUTTO: TESTO, METODO, DATI, SOFTWARE, CODICE ESEGUIBILE... SERVONO ANCORA LE RIVISTE CHE PUBBLICANO SOLO LA SINTESI DELLA RICERCA?

[Plan I]

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Communities

Jan. 21, 2021

January 21, 2021

Proposal

Open Access

Plan I - Towards a sustainable research information infrastructure

Björn Brembs; Konrad Förstner; Michael Goedicke; Uwe Konrad; Klaus Wannemacher; Jürgen Kett

Public institutions in many countries are required by law ("spending rules") to initiate a bidding/tender process above a certain procurement threshold. Scholarly journals are exempt from these spending rules, because the content of each journal can only be obtained from a single publisher - the "single source procurement" exemption. One consequence of this publisher monopoly are prices ranging 10-20 fold above publishing costs [1], or difficult and drawn-out negotiations to achieve technically trivial improvements (such as, e.g., improved accessibility, 'open access'). This "vendor lock-in" prevents market-based price pressure and stifles innovation. Therefore, functionalities such as efficient citation linking, interactive data visualizations or interoperabilities with data and code have yet to be implemented in the scholarly literature despite sometimes decades of scientist demands. The European Commission (DG Competition) has also acknowledged this problem [2]. For future services, concerning research data and scientific source code there is still a possibility to prevent such a vendor lock-in, with all its detrimental consequences, but time is of the essence. In this document, we would like to elaborate on the problem and provide suggestions for solutions. We see our suggestions as alternatives to "Plan S" or "Plan U", so we chose to name our suggestion "Plan I", for infrastructure.

...e non più riviste...


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by Liberate Science 8 days ago 2 MIN READ

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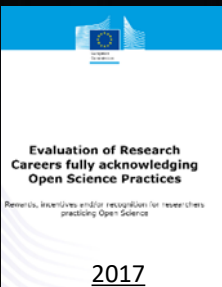
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OS-CAM, the Career Assessment Matrix

	R1	R2	R3	R4
Research output	+	++	+++	++++
Research Process	+	+++	++++	++++
Service & Leadership		+	+++	++++
Research Impact	+	++	+++	++++
Teaching and supervision	(++)	+	++	++++
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Open Science will never prevail without a thorough revisiting of the way evaluations of researchers are conducted

Bernard Rentier

...non solo testi

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15 September 2015

Dataset Open access

Data set 1 for CARBON AND GENE FLOW MEDIATED BY VIRUS LIFE

Wilson, Willie; Martinez Martinez, Joaquin; Archer, Steve; Fields, David; Gilg, Ilana; Floge, Sheri

(show affiliations)

Experimental data sets used for manuscripts associated with coccolithovirus infection of *Emiliania huxleyi*. Flow cytometry data; expression data of genes associated with photophysiology, fatty acid metabolism and sulphur cycling.

Please contact Willie Wilson (wilwil@sahfos.ac.uk) for further information.

Publication date:

15 September 2015

DOI

[10.5281/zenodo.31006](https://doi.org/10.5281/zenodo.31006)

Keyword(s):

Virus, *Emiliania huxleyi*, photophysiology, sulphur cycling,

fatty acid metabolism

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Willie (on 15 September 2015)

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Multiplex_3_photophys_and_Dddd443_Expression_Rep_1.xlsx	15 Sep 2015	141.2 kB	Download

The screenshot shows the GitHub interface for the repository 'zimeon/signposting'. It displays 18 commits, 2 branches, 0 releases, and 1 contributor. The main content is a file list for the 'master' branch, including files like 'css', 'examples', 'graphsaver', 'notes', 'gignore', 'Makefile', 'README.md', 'TO_DO.md', and various 'arxiv_no_item' files. The repository is described as 'Signposting for the scholarly web'.

The screenshot shows the protocols.io website interface. A purple banner at the top contains the logo and the URL 'https://www.protocols.io/'. Below the banner, the interface shows a protocol being edited, with a list of steps on the left and a detailed view of a step on the right. The step is titled 'Fixation' and includes a timer set to 45 seconds and a note about optional overnight incubation.

SI POSSONO DEPOSITARE DATI, SOFTWARE, IMMAGINI, POSTER, INTERI PROTOCOLLI... DIVENTANO «BLOCCHI» DI CONOSCENZA CHE POSSONO ESSERE RICHIAMATI E RIUSATI

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The FAIR Guiding Principles for scientific data management and stewardship

Mark D. Wilkinson, Michel Dumontier [...] [FAIR guide](#), Nature, March 2016

IN BREVE

Module 1: Introduction

Module 2: FAIR principles

Module 3: Data Management Plans



Reference: Vlachos, E., Larsen, A.V., Zurcher, S., Hansen, A.F. (2019). 'Introduction'. In: Holmstrand, K.F., den Boer, S.P.A., Vlachos, E., Martínez-Lavanchy, P.M., Hansen, K.K. (Eds.), *Research Data Management (eLearning course)*. doi: 10.11581/du.0000048

Reference: Martínez-Lavanchy, P.M., Huser, F.J., Buss, M.C.H., Andersen, J.J., Begtrup, J.W. (2019). 'FAIR Principles'. In: Holmstrand, K.F., den Boer, S.P.A., Vlachos, E., Martínez-Lavanchy, P.M., Hansen, K.K. (Eds.), *Research Data Management (eLearning course)*. doi: 10.11581/du.0000049

Reference: den Boer, S.P.A., Buss, M.C.H., Huser, F.J., Smed, U. (2019). 'Data Management Plans'. In: Holmstrand, K.F., den Boer, S.P.A., Vlachos, E., Martínez-Lavanchy, P.M., Hansen, K.K. (Eds.), *Research Data Management (eLearning course)*. doi: 10.11581/du.0000050

[Video](#)



FARM DATA TRAIN

[perché c'è EOSC!]

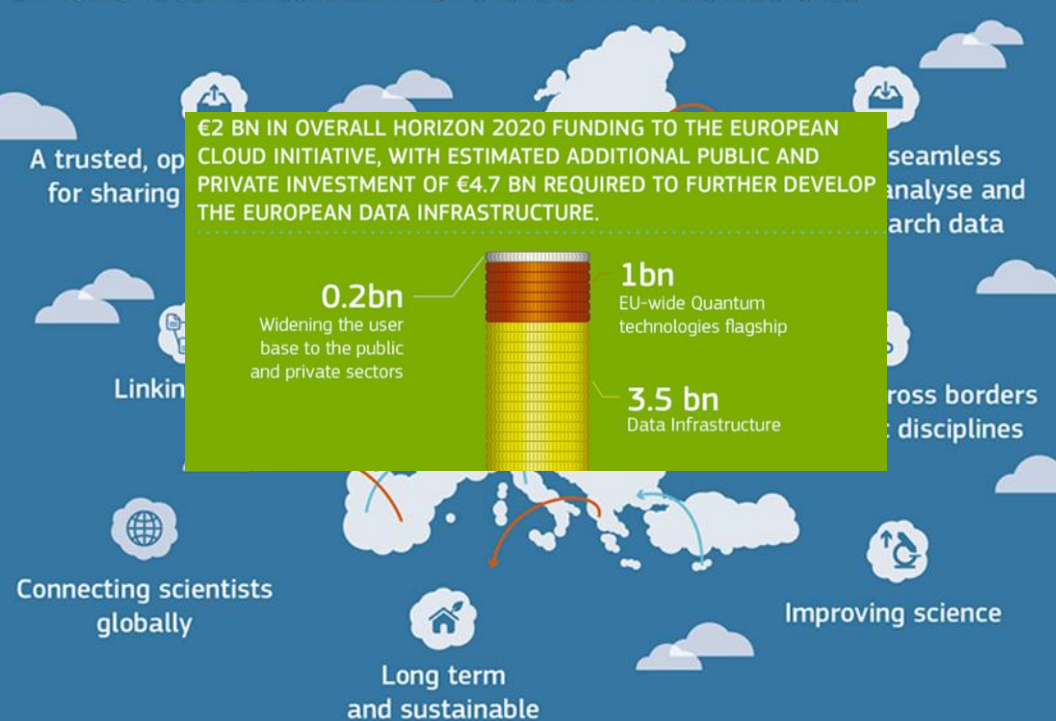
The Vienna

Vienna, 23 Novem

We, Ministers European Op

1. **Recall** the challenge of the European Open Science Cloud Declaration signed in Brussels on 10 July 2018.
2. **Reaffirm** the political commitment of the European Council to the vision of the European Open Science Cloud, sustainable and based on the FAIR data principles.
3. **Recognise** that the European Open Science Cloud is an iterative and based on consensus among researchers and institutions across disciplines and Member States, by its nature able to build trust and facilitate the application of cloud computing to the world, and the federated structure of the European Open Science Cloud.
4. **Highlight** that the European Open Science Cloud provides services for Science and Innovation, reaching out over the world.
5. **Recall** that the European Open Science Cloud is a reality, hinting at the need to further strengthen the ongoing dialogue across institutions and with stakeholders, for a new governance framework to be launched in Vienna, on 23 November 2018.

BRINGING TOGETHER CURRENT AND FUTURE DATA INFRASTRUCTURES



**ACCESSO TRASPARENTE A DATI FAIR
«AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY»**

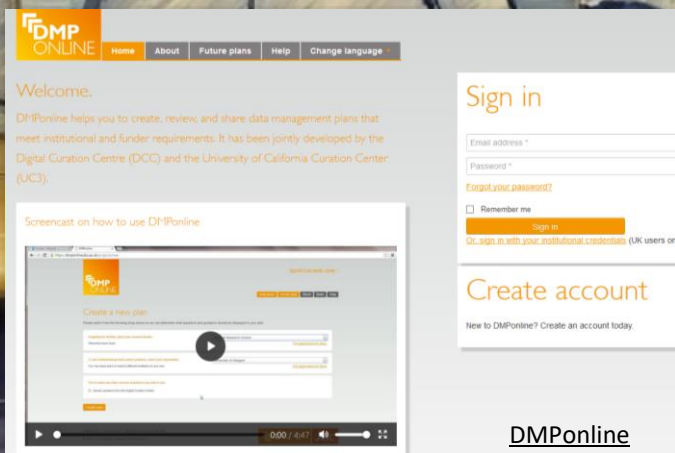
9. Call for the European Open Science Cloud to provide all researchers in Europe with seamless access to an open-by-default, efficient and cross-disciplinary environment for storing, accessing, reusing and processing research data supported by FAIR data principles.

Note that the 2018 EOSC Summit (held on 11 June 2018) called for acceleration towards making the European Open Science Cloud a reality, hinting at the need to further strengthen the ongoing dialogue across institutions and with stakeholders, for a new governance framework to be launched in Vienna, on 23 November 2018.

... con un Data Management Plan

DMP È

- UN MODO STRUTTURATO DI PENSARE AI PROPRI DATI:
raccolta, conservazione, descrizione, condivisione
- DICHIARAZIONE DI COME SI TRATTERANNO I DATI
 - living document: va aggiornato
 - ...E SOPRATTUTTO VA MESSO IN PRATICA...



The screenshot shows the DMPonline website. At the top, there is a navigation bar with the DMPonline logo and links for Home, About, Future plans, Help, and Change language. Below the navigation bar, there is a 'Welcome' section with a brief description of the service. A 'Sign in' section follows, with fields for email address and password, and a 'Remember me' checkbox. Below the sign-in section is a 'Create account' section with a link to 'New to DMPonline? Create an account today'. At the bottom, there is a video player showing a screencast on how to use DMPonline.

DMPonline



<https://ds-wizard.org/>

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VI GUIDANO NELLA
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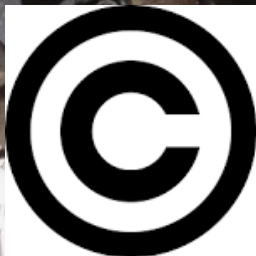
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TUTTI I DIRITTI RISERVATI

...disseminando in modo diverso

Ten steps to innovative dissemination

1. Get the basics right

Define your objectives, map your audience(s), target and frame your messages and bring this together into a dissemination plan of what you'll release and when.

2. Keep the right profile

Use personal websites, social media accounts, researcher identifiers and academic social networks to make you and your research visible.

3. Encourage participation

In the age of Open Science, don't just broadcast, go for multi-directional dissemination. Invite & engage with others to participate & collaborate.

4. Open science for impact

Open Access publications and preprints mean more citations. In addition, publishing datasets, software and peer reviews increase your number of citable research outputs.

5. Remix traditional outputs

Give traditional outputs like research articles and books an impact-boost with accompanying lay-summaries, press-releases, blogs, and visual/video abstracts.

6. Go live

In person dissemination doesn't just have to be at stuffy conferences – hit the road and take part in science festivals, science slams, TEDx talks, science festivals, or roadshows.

7. Think visual

Disseminate findings through art or multimedia interpretations. Let your artistic side loose or use new visualisation techniques to produce intuitive, attractive data displays.

8. Respect diversity

Research should reach all who might benefit. Respect inclusion in scientific dissemination by creating messages which reflect gender, demography and ability diversity.

9. Find the right tools

Choose media, format and dissemination strategy based on your communication objectives. Find tools via, e.g., the OpenUP Hub: openuphub.eu/disseminate/services

10. Evaluate, evaluate, evaluate

Assess your dissemination activities. Are they having the right impact? If not, why not?

PLOS COMPUTATIONAL BIOLOGY

Apr. 2020

OPEN ACCESS

EDITORIAL

Ten simple rules for innovative dissemination of research

Tony Ross-Hellauer, Jonathan P. Tennant, Vítě Banelyte, Edit Gorogh, Daniela Luzzi, Peter Kraker, Lucio Pisacane, Roberta Ruggieri, Electra Sifacaki, Michela Vignoli

Published April 16, 2020 • <https://doi.org/10.1371/journal.pcbi.1007704>

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...con una diversa idea di «impatto sociale»

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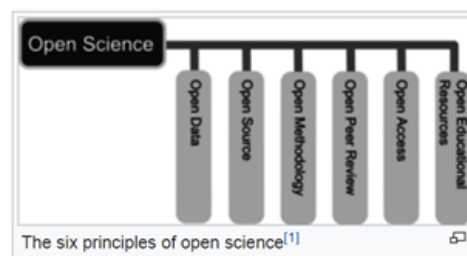
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Open science

From Wikipedia, the free encyclopedia

Open science is the movement to make scientific research (including publications, data, physical samples, and software) and its dissemination **accessible** to all levels of an inquiring society, amateur or professional.^[2] Open science is transparent and accessible knowledge that is shared and developed through collaborative networks.^[3] It encompasses practices such as publishing **open research**, campaigning for **open access**, encouraging scientists to practice **open notebook science**, and generally making it easier to publish and communicate scientific knowledge.

Open Science can be seen as a continuation of, rather than a revolution in, practices begun in the 17th century with the advent of the **academic journal**, when the societal demand for access to scientific knowledge reached a point at which it became necessary for groups of scientists to share resources^[4] with each other so that they could collectively do their work.^[5] In modern times there is debate about the extent to which scientific information should be shared.^[6] The conflict that led to the Open Science movement is between the desire of scientists to have access to shared resources versus the desire of individual entities to profit when other entities partake of their resources.^[7] Additionally, the status of **open access** and resources that are available for its promotion are likely to differ from one field of academic inquiry to another^[8]



...facendo comunità



INOSC Starter Kit



Search...

Preface

Section I: An introduction to Open Science Communities

Section II: Start and Foster your Open Science Community

Acknowledgements

Preface

Open Science improves the **quality, accessibility, and efficiency** of science, but 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 common practice**, we need to engage a critical proportion of the research community. This is where Open Science Communities come into play!

Open Science Communities provide a place where **newcomers and experienced peers** interact, **inspire each other to adopt** Open Science practices and values, identify **opportunities and pitfalls**, and **provide feedback on policies, infrastructure, and support services**. By the same token, Open Science Communities are places where researchers and societal stakeholders can meet, inspire and co-create.

OS community

Open Science???

<https://www.fosteropenscience.eu/toolkit>

FOSTER About Resources Events Courses News

Open Science Training Courses

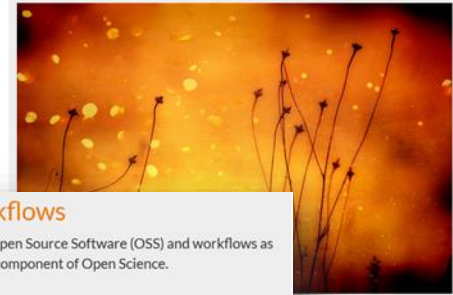
What is Open Science?

This introductory course will help you to understand what open science is and why it is something you should care about.



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This course introduces funding body policies and other environmental factors that influence good practice in opening up research practice.



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This course introduces Open Source Software (OSS) and workflows as an emerging but critical component of Open Science.



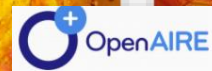
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Open Access Basics

An Open Access primer to get you started

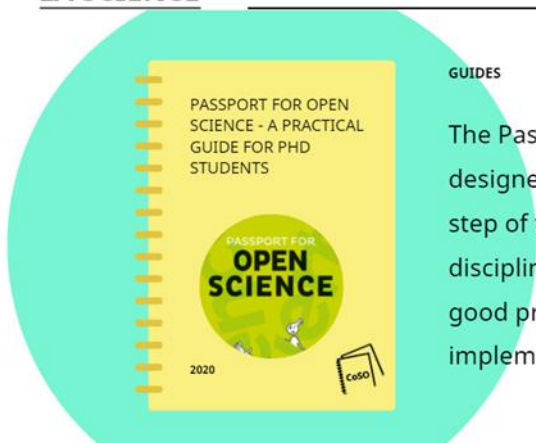


An RDM Handbook

A primer on managing your research data

OpenAIRE

Open



2021

GUIDES

The Passport For Open Science is a guide designed to accompany PhD students at every step of their research career, whatever their disciplinary field. It provides a set of tools and good practices that can be directly implemented.

Act now

When you can, submit your publications to open access journals.

Deposit your publications in an open archive:

- Keep the latest version approved by peers but not yet formatted by the publisher.
- Ask your co-authors for approval.
- Deposit the latest version approved by the peer reviewers in an open archive.

Take part in discussions within your disciplinary community about pre-publications deposited in the open archive.

Document and share research data and/or the source code you developed:

- Store data using a perennial system or format in compliance with your team or institution's policy.
- Document the data with metadata so that they are reusable.
- Deposit the datasets associated with your publications in an online repository.
- Deposit your codes in a dedicated perennial open archive like **Software Heritage**.

Follow the evolutions of open science and get involved!

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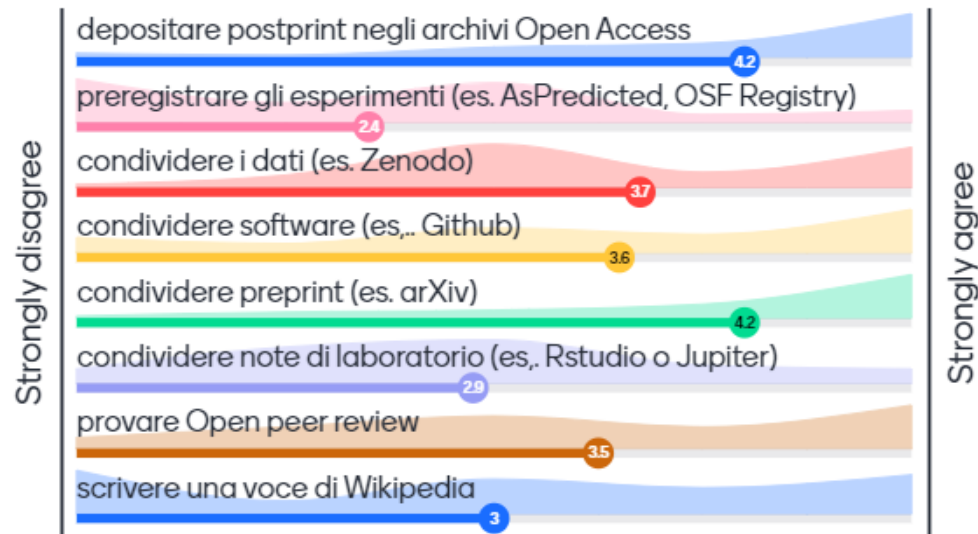
Quando soffia il VENTO del CAMBIAMENTO
c'è chi costruisce MURI
e chi MULINI A VENTO



...grazie!

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Il primo passo verso la Open Science che potrei fare domani



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Cosa può favorire l'adozione di pratiche Open Science?



Grazie per il vostro contributo!