

OPEN SCIENCE





Inclusivity

**"Science is like building a house.
This is not something that you can
do alone."**



OPEN SCIENCE





FAIR

"Findable, Accessible,
Interoperable, and Reusable"



OPEN SCIENCE





Transparency

"Transparent research practices and processes also serve to demonstrate more rigorous methodologies or experimental protocols and to strengthen public perceptions of research quality, integrity and trust in the results, claims, conclusions and assertions derived from research activities."



OPEN SCIENCE





Cat Memes

"Publish or Purrrish"



OPEN SCIENCE





Capitalism

"the appropriation of traditional knowledge, privatization of the intellectual commons, commodification of teaching materials, scholarship, scientific research, and scientific publications"



OPEN SCIENCE





Judicious Connections

"a process-oriented epistemology of science that recognizes the situated, embodied and goal-directed nature of communication and collaboration among researchers"



OPEN SCIENCE





Commercial Publishing

**"Is the staggeringly profitable
business of scientific publishing
bad for science?"**



OPEN SCIENCE





Digital Sovereignty

"the ability to have control over your own digital destiny: the data, hardware, and software that you rely on and create - is paramount for universities and other academic institutions as a prerequisite for equitable and open research and teaching"



OPEN SCIENCE





Beyoncé

"Okay, ladies, now let's get
in-formation."



OPEN SCIENCE





Preprint

"Sharing preprints is a way to receive feedback and attract attention to your research at an early stage, which positively benefits the quality and impact of your research."



OPEN SCIENCE





Precarity

"Open Science is primarily a labour issue, not an epistemological one."



OPEN SCIENCE





Free License

"When you make a creative work (which includes code), the work is under exclusive copyright by default. Unless you include a license that specifies otherwise, nobody else can copy, distribute, or modify your work without being at risk of take-downs, shake-downs, or litigation."



OPEN SCIENCE





Epistemic Justice

**"Open and Responsible Science
that seeks justice in access to
knowledge puts equity between
forms of knowledges and ways of
knowing at the very centre of
knowledge acquisition."**



OPEN SCIENCE





Democracy

"Knowledge that is created by public funding should be available to everyone and go beyond the walls of the academic system."



OPEN SCIENCE





Invisible Labour

"Open research practices represent a novel type of academic labour with high potential to be mismeasured or made invisible by workload models, raising expectations to even more unrealistic levels."



OPEN SCIENCE





Retraction Watch

A website and blog that monitors
and reports on retractions of
scientific research articles,
founded by Ivan Oransky and
Adam Marcus



OPEN SCIENCE





Storytelling

"Research in neuroscience has found that oral storytelling triggers different cognitive processes than facts, thus reducing the incidence of negative thoughts and feelings that are often generated when presented with new and challenging information."



OPEN SCIENCE





University Rankings

"Rankings put too much stress on scoring and competition... it is almost impossible to capture the quality of an entire university... Also, the makers of the rankings use data and methods that are highly questionable."



OPEN SCIENCE





Plan S

a consortium of research agencies and funders from 20 countries who state that "research funded by public or private grants must be published in open access journals or platforms"



OPEN SCIENCE





Open-Washing

"data publishers that are claiming their data is open, even when it's not – but rather just available under limiting terms"



OPEN SCIENCE





Spaghetti Code

"research is increasingly reliant on technology, so it's important that researchers have access to the support and education they need to develop and use high-quality code."



OPEN SCIENCE





Pirate Care

"increasingly present forms of activism at the intersection of care" and "piracy", which in new and interesting ways are trying to intervene in one of the most important challenges of our time, that is, the "crisis of care" in all its multiple and interconnected dimensions."""



OPEN SCIENCE





PIDs

"A persistent identifier is a long-lasting reference to a digital resource."



OPEN SCIENCE





APCs

"Article Processing Charges and
the new enclosure of research"



OPEN SCIENCE





Surveillance Publishing

"our behavior — once alienated from us and abstracted into predictive metrics — will double back onto our work lives. Existing biases, like male academics' propensity for self-citation, will receive a fresh coat of algorithmic legitimacy."



OPEN SCIENCE





Metadata

"data about data... to make data
findable [and] to make data citable"



OPEN SCIENCE





Privilege

"Failing to address structural inequalities directly means that the advantages of those who are already privileged will grow, especially given that they have the most influence over how open science is implemented."



OPEN SCIENCE





Alexandra Elbakyan

"she landed on an internet forum where a bunch of scientists were all looking for the same thing: access to academic journal articles that were behind paywalls. That's the moment the very simple, but enormously powerful, website called Sci-Hub was born."



OPEN SCIENCE





Climate Crisis

"Scientists Call out Publisher's
Ties to Fossil Fuel Industry"



OPEN SCIENCE





Globalisation

"Shifting from a local to a global viewpoint ought to mean multiplying viewpoints, registering a greater number of varieties, taking into account a larger number of beings, cultures, phenomena, organisms, and people."



OPEN SCIENCE





Data Management Plans

"much more than a formal requirement by funders or research institutions: they can be reflection tools to help researchers manage and plan their activities around data."



OPEN SCIENCE





Team Science

"we leverage the strengths of diverse research teams, recognising that we cannot solve the significant challenges of our time through isolated endeavours"



OPEN SCIENCE





Stochastic Parrots

"a system for haphazardly stitching together sequences of linguistic forms it has observed in its vast training data, according to probabilistic information about how they combine, but without any reference to meaning"



OPEN SCIENCE





Digital Competence Centers

"DCCs are still relatively unknown among researchers within universities and research institutions, even though many of them receive requests for support in the area of data, software and computing."



OPEN SCIENCE





Early Career Researchers

"The Future is Open!"



OPEN SCIENCE





University Governance

"the system by which faculty, administrators, the board, and sometimes — but rarely — students work together to accomplish the academic mission of the institution."



OPEN SCIENCE





Heroes

"Does science need heroes or does it need to reform? Idolizing heroes can worsen bias, inequality, and competition in science. Yet, it does require good leadership to ignite structural change."



OPEN SCIENCE





The Right To Research

"the capacity to systematically increase the horizons of one's current knowledge, in relation to some task, goal or aspiration"



OPEN SCIENCE





The Library

"Libraries as Open Innovators and Leaders"



OPEN SCIENCE





Research Software Engineer

"a professional who combines expertise in software development and methodology with deep knowledge of one or more research fields"



OPEN SCIENCE





Transformative Agreements

"Transformative agreements are also known as read-and-publish, publish-and-read, and offsetting agreements. It's a contract where an institution pays for (1) a subscription to a publisher's bundle of journals and (2) for their author's articles to be made open access in some of those journals."



OPEN SCIENCE





Testimony

"Research outputs are a form of testimony with researchers serving as expert testifiers. Research outputs align with philosophical understandings of testimony, as research represents an everyday, informal communicative act."



OPEN SCIENCE





The Commons

"a practice of cultivating and caring for the relationships that exist around the production of shared resources"



OPEN SCIENCE





Worms

"How a worm showed us the way
to open science



OPEN SCIENCE





Disruption

"Recent decades have witnessed exponential growth in the volume of new scientific and technological knowledge, thereby creating conditions that should be ripe for major advances. Yet contrary to this view, studies suggest that progress is slowing in several major fields."



OPEN SCIENCE





Aaron Swartz

"We need to take information, wherever it is stored, make our copies and share them with the world... But sharing isn't immoral — it's a moral imperative. Only those blinded by greed would refuse to let a friend make a copy."



OPEN SCIENCE





Gender

**"Undoing Gender in Academia:
Personal Reflections on Equal
Opportunity Schemes" by Susan
Täuber**



OPEN SCIENCE





Modular Publishing

"modules of research outputs are communicated along the way and are directly linked to each other to form a network of outputs that can facilitate research evaluation"



OPEN SCIENCE





Scaling Small

"the idea that scale can be nurtured through intentional collaborations between community-driven projects that promote a bibliodiverse ecosystem while providing resilience through resource sharing and other kinds of collaboration"



OPEN SCIENCE





Failure

**"academia should embrace failure:
It is a community built on the twin
pillars of education and research
using the scientific method, with
failure playing a vital role in both"**



OPEN SCIENCE





Scientific Reform

"reform foregrounds values that never were strangers to science such as honesty, transparency and accountability, yet seeks to embed them into changed or improved scientific processes and instruments"



OPEN SCIENCE





FOSS – Free and Open Source Software

"Developing software in the open enhances opportunities to improve transparency, security, and innovation, and even establish a competitive advantage."



OPEN SCIENCE





Independence

"The power that technology companies hold could damage the autonomy of science."



OPEN SCIENCE





Community

"Research and Knowledge Organisations are impactful primarily through their capacity to bring people together. Therefore, Community is crucial to the generative function and success of Research and Knowledge Organisations."



OPEN SCIENCE





Reclaiming The Internet

"We need alternative platforms that serve society instead of listed companies."



OPEN SCIENCE





Dual-Use

"Dual-use research of concern (DURC) describes research that is intended to provide a clear benefit, but which could easily be misapplied to do harm."



OPEN SCIENCE





Data Privacy

"We need to enact data privacy laws that require data companies to be more transparent about how they are collecting and using our data, and more accountable for it."



OPEN SCIENCE





Knowledge Security

"(1) the undesirable transfer of knowledge and technology that may pose a threat to national security, (2) covert influence and interference by or from other states, and (3) ethical and integrity issues"



OPEN SCIENCE





Creativity

"even though the creative act requires considerable effort, in the end you will be contributing to the vast network of love that supports human existence"



OPEN SCIENCE





JASP

"Unlike SPSS, which can appear cluttered and overwhelming to beginners, JASP's simplicity helps students focus on learning statistical concepts without being bogged down by complex menus and options. [...] JASP is open-source and free [...] There are no complicated installation issues or licensing costs."



OPEN SCIENCE





Papercheck

"[Papercheck] leverages text search, code, and large language models to extract and supplement information from scientific documents [...] and provides automated suggestions for improvement."



OPEN SCIENCE





Open Science Communities

**"We emphasize that, despite the
grassroot character of OSCs,
support from universities is critical
for OSCs to be viable, effective,
and sustainable."**



OPEN SCIENCE





PhD-Level AI

"[...] for better and for worse, we are far from seeing the end of AI advancement. What's remarkable isn't just the individual breakthroughs [...]. It's the pace and breadth of change."



OPEN SCIENCE



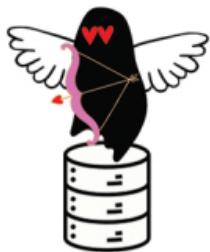


Vendor lock-in

"[...] we demonstrate that if 'lead' researchers are able to establish a norm of contribution to the public good, a better outcome can be achieved, and we show that the general public license (GPL) used in the provision of open source software is one such mechanism."



OPEN SCIENCE

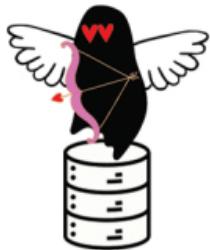




Open Science



OPEN SCIENCE

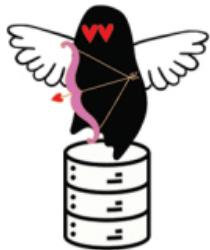




Open Access



OPEN SCIENCE

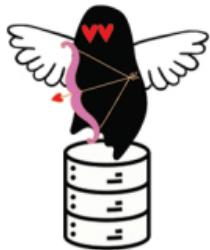




Research Software



OPEN SCIENCE

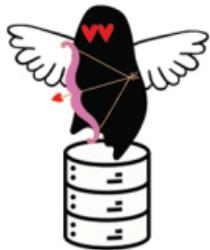




Research Data Management



OPEN SCIENCE

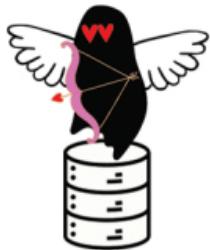




Recognition and Reward



OPEN SCIENCE





Reproducibility



OPEN SCIENCE

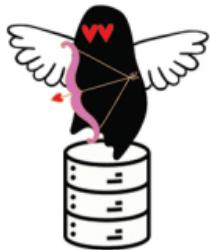




Science Communication



OPEN SCIENCE





Open Educational Resources



OPEN SCIENCE





Artificial Intelligence



OPEN SCIENCE





Open Infrastructure



OPEN SCIENCE

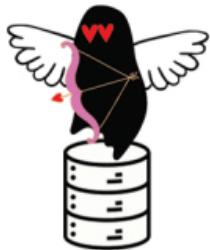




Peer Review



OPEN SCIENCE

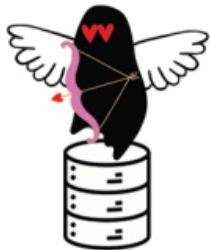




Academic Integrity



OPEN SCIENCE

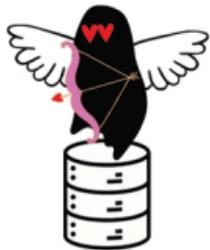




Research Ethics



OPEN SCIENCE

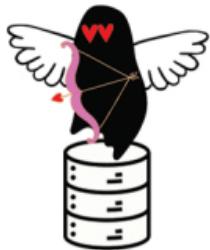




Data Stewardship



OPEN SCIENCE





Open Science Communities



OPEN SCIENCE

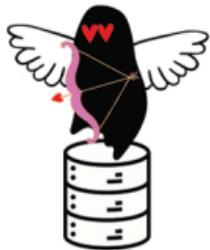




Citizen Science

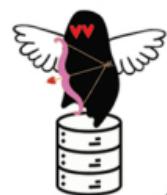


OPEN SCIENCE

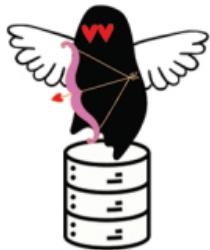




Digital Sovereignty



OPEN SCIENCE





Geopolitics

