



The tokenomics for Open Science



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BACKGROUND

The first signs that the financial structure of modern science is broken began to appear at the end of XX century, when scientific journals – the main vehicle for communicating ideas and new discoveries in research community – have stopped being accessible due to growing subscription costs ^{1,2}. This initiated a movement among researchers and librarians, advocating that access to articles published in academic journals should be open, that is free of charge ³. That was the primary focus; more generally, the movement embodied a culture of sharing and collaboration, touching on all aspects of research work, such as sharing of data ⁴. The Internet technologies were seen as the main driving force behind the change.

Most scientific studies conducted at the universities and research institutions are funded by government, therefore results of these studies published in academic journals should be made accessible to the general public without payment. That strong argument succeeded in changing the policy of government funders to some extent; in 2008 National Institute of Health mandated that all research funded by them should be publicly available ⁵.

OA movement gave birth to many different initiatives, but its main result was development of two standard open access models ⁶: green and gold.



**open
access**



open access that journals charge publication fee from the author while remaining free for reader



preprint repositories that enable researchers to upload draft version of their works are uploaded for public access

Growing up, I would pore over issues of Science in my high school library, exploring the latest ideas. Today's students don't have access to this same information for one reason: the subscription model of most for-profit journal publishers.

Randy Schekman
Nobel Laureate and
founder of open
access journal eLife



After two general pathways towards open access were specified in the Budapest Declaration of 2001, the number of papers published in open access and deposited in preprint repositories started to grow. However, the speed of transition was very slow, and ten years later most research publications still remained paywalled⁷. The problem with access persisted.

A major breakthrough came with Sci-Hub, a project launched in 2011⁸.

Sci-Hub is often mistaken for being a simple file-sharing platform allowing its users to share content without restrictions; such platforms existed for a long time. Contrary to that, Sci-Hub implemented a completely novel approach: it never included any functionality for the users to upload content, but instead it enabled website visitors to access research publications on the fly through different university libraries subscriptions, by using a number of proxies. The project was later updated to include a repository, where all papers accessed by users were stored. The next update enabled Sci-Hub to check for papers absent in its repository and download them automatically. Sci-Hub acted as an autonomous robot, capable of collecting massive amounts of research papers through different libraries at high speed.

As a result of these innovations, the project became highly successful, counting 200,000 users per day by 2016⁹; by 2018, the size of Sci-Hub repository achieved 72M research papers, and the project was estimated to have around 85% of all paywalled literature¹⁰, and for major academic publishers and top-cited journals the coverage was even higher, reaching 96%.

The success of Sci-Hub attracted a lot of controversy; the project was blamed for copyright violation¹¹ and labeled as black open access competing with traditional green and gold¹². Regardless of the opposition, the website succeeded to become a cultural phenomena and amassed a large fan base.

Today most authentication systems in libraries implement 2FA, preventing the original approach implemented in Sci-Hub from obtaining new papers; still the website continues to serve collected database, that was also decentralized – making the impact of Sci-Hub permanent.

Sci-Hub is a technology to unblock information access... about half a million users are coming to Sci-Hub every day, and the Sci-Hub database counts with 85 million research articles

Alexandra Elbakyan
Founder of the Sci-Hub project

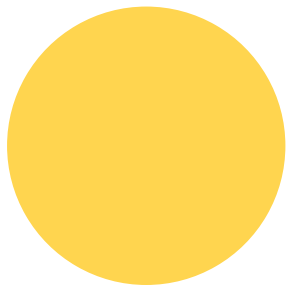


decentralized scientific

DeSci is a more recent movement that aims to transform science with blockchain technologies, for example by launching decentralized journals instead of traditional ones ¹³.

A large part of it is developing a new funding model for science, that will be based on decentralized cryptocurrencies. That could potentially fix major problems of the old scientific funding system, including but not limited to lack of transparency, topic, gender and affiliation biases: some areas of science always remain underfunded. Oligopoly of major publishers that resulted from the hyper-concentration of capital is another problem that could be potentially solved with new approach.

The funding mechanism of DeSci is based on cryptocurrencies and community investments into crypto tokens that are issued by specific research project.



Sci-Hub coins

Running on user donations, Sci-Hub was probably the first project in science to adopt cryptocurrency, namely Bitcoin, as a funding mechanism. While traditional donations channels such as PayPal were frozen, Bitcoin addresses remained safe. Even though the number of people donating with Bitcoin was small compared to PayPal, funds collected in Bitcoin tended to grow with time; it was estimated that by 2018 Sci-Hub received around 100K¹⁰. Thankfully to these donations the project was able to stay afloat and grow even under pressure.

The idea to launch a new crypto coin based on Sci-Hub was first considered in 2017, but then it would require a large amount of effort to be invested, so the project named SciCoin was postponed; in 2022 it was re-visited again, and the idea was to create a default currency for the «Republic of Science»¹⁴ that could be used to pay open access fees and fund research projects in general, but it was not implemented. In 2024 the idea of Sci-Hub coin was discussed again, but that time the purpose was to reward people for uploading new papers to a second project Sci-Net, since Sci-Hub automatic download was not operating anymore.

Shortly after that Sci-Hub project received a donation from the anonymous group, wrapped in a «Sci-Hub» meme coin. Few months later the price of the coin faded to almost zero, but the donation helped to start up Sci-Net project.

The Sci-Hub coin, SCI was re-launched by the project in June 2025. The coin is designed as a meme coin operating over Solana network. The next page provides details about the SCI coin and the tokenomics of Sci-Net project is described later.

2M
aF
sz
zC
mp
Jq
YP
jV
Xs
Ny
tm
iH
fg
ck
Wb
tB
Vq
4W
So
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VG
kf

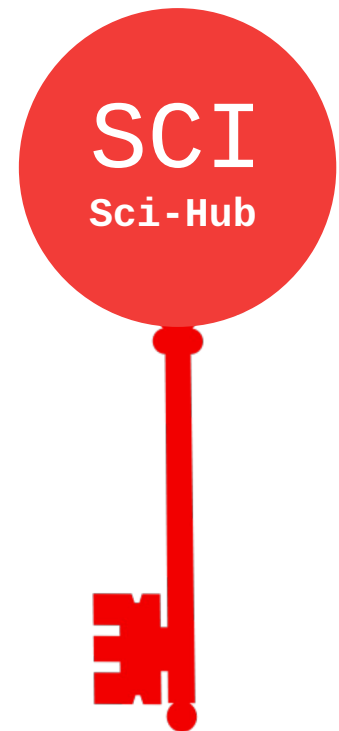
The coin launched by Sci-Hub is designed with a primary goal to accelerate transition of science towards Open Access, by rewarding knowledge sharing. The project is based on a legacy of Sci-Hub, a website that revolutionized access to academic literature. Each token will act as a small building block for a giant open knowledge database that will include any scientific article or book ever published, accessible for free to every person.

Total supply is 888,888 tokens. The limited supply means that with time Sci-Hub token will be treated as a rare collectible symbolizing one unit of open knowledge.

The initial liquidity pool is 314,159 tokens, permanently locked. 500,000 tokens or 56% of the supply are set to be gradually released to the market according to the famous scientists birthday calendar.

The primary usage of the SCI token will be as a virtual currency within Sci-Net platform to reward uploads of new articles and books, as well as a donation for supporting and further developing of technical infrastructure for open knowledge.

Note: Sci-Hub is a non-commercial non-profit project.



**Make
science
open
again**

SCI token vesting calendar

07	11	25	Marie Curie	16K
04	01	26	Isaac Netwon	16K
08	02	26	Mendeeleev	16K
14	03	26	Einstein	16K
05	09	26	Sci-Hub	60K

140 K

**World
Science
Day**

10 09 26

sci-net



tokens



building open access together

Sci-Net is a community of students, researchers and people interested in science who work together towards a common goal: **creating a openly accessible database of scientific knowledge.**

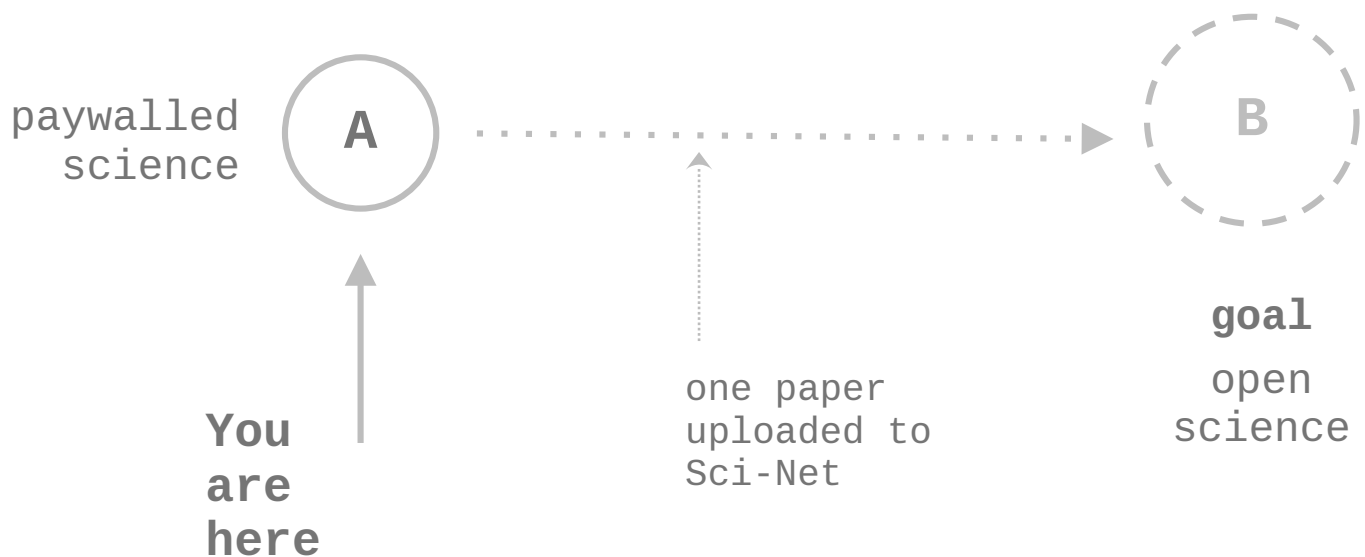
Members of Sci-Net can upload research articles and books to database, or request some document to be uploaded. The engine automatically checks if the document is already open access or available on Sci-Hub to avoid duplicates. Only published documents that already have a DOI can be uploaded and requested.

The important innovation implemented in Sci-Net is using decentralized Sci-Hub tokens to reward uploads. Classic file-sharing platforms create stimuli by using virtual reward points and ratings, that are confined to the platform and do not bear any sense outside of it, while Sci-Hub tokens exist independently of the platform and have a real value, can be easily withdrawn, collected and exchanged.

Furthermore, the rewards are not distributed by the platform, but are peer-to-peer and transferred from one user to another for helping to solve request. This enables some level of quality control for the uploaded files without centralized moderation: if the upload is wrong the reward will not be transferred.

Thus members of the platform can contribute their time or finances towards building a knowledge library that will be open to everyone. The current minimal reward for upload is set to 1 token, which means that every token bought equates to one more research paper uploaded. **Unlike donations, where an impact cannot be estimated, Sci-Hub tokens have a direct and measurable impact, resulting in more research papers gradually becoming open access.**

roadmap towards open science



As can be seen from the figure above, Sci-Net implements a gradual, step-by-step – or better say paper-by-paper – approach towards making science open: with each new upload there becomes one more research article available open access.

The primary focus thus will be developing functionality of Sci-Net and attracting more users. Currently Sci-Net counts a few thousands users registered and hundreds of research papers being uploaded every day.

The improved functionality will include, but not limited to: backup of all uploads to decentralized storage – currently it is ordinary server storage with many mirrors – support for research articles and books without DOI, extensive funding support for users from low-income countries, community voting and rewards on uploaded documents, automatization of uploads, smart distribution of requests among uploaders, extended instructions for users and more.

As Sci-Hub remains the most visited website to access papers published in paywalled journals. As such, the database of Sci-Hub and Sci-Net will be connected together, so papers uploaded by community will become widely accessible for everyone.

The design of Sci-Hub website will also be updated to have a more modern look.

contacts



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Sci-Net

sci-net.xyz

sci-net.ru

Sci-Hub

sci-hub.se

sci-hub.ru

sci-hub.box

t.me/freescience

Sci-Hub token address over Solana network

`2MaFszzCmpJqYPjVXsNytmiHfgckWbtBVq4WSoxjVGkf`

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